Guide for Technical Authors

Vertical Lift Aircraft Design & Aeromechanics Specialist's Conference

Doubletree Tree Hotel
San Jose, California
Jan. 27-29, 2026

Sponsored by

Vertical Flight Society
San Francisco Bay Area Chapter

Visit the VFS website for the most current information regarding the TVF 2026 meeting at www.vtol.org/tvf2026

This information will help prepare for your:

- Attendance and other author pertinent author information
- Final written paper: **due January 16, 2026**
- Presentation: **refer to pages 8-9** for planned presentation day/time.

Important Dates and Links

The following documents are due by January 16, 2026:

- *Final Written Paper:* link and instructions for uploading your paper will be sent via email (from Julie Gibbs) prior to the January deadline.
- *Assignment of Copyright* form will be signed and completed when you upload your final paper.
    - Alternatively, email the form direct to Julie M. Gibbs at VFS HQ at jmgibbs@vtol.org.
- *Speaker Information* form must be emailed to the conference Technical Chair at meetings@sfbac.vtol.org

Registration: authors/speakers are expected to register and pay to attend the meeting and are eligible for discounted speaker registration rates.

- **Very discounted early bird rates** are available until **December 22, 2025**.
- Please register as soon as possible at www.vtol.org/tvf2026.

Hotel: authors/speakers must make their own hotel reservations. The meeting will take place at the Doubletree Hotel.

- Discounted rates ($219) are available at the Doubletree until the block sells out.
- All meeting activities will take place at the San Jose Doubletree hotel.
- Book early, you must use the following link to receive the $219 rate TVF 2026 Doubletree Hotel

Technical Papers

- **Final papers are due January 16, 2026: authors will receive an email (from Julie Gibbs) with link and password on how to upload their final paper on the TVF event page at** vtol.org/tvf2026
- Paper should be ideally 10 to 15 pages in length and **NOT exceed 30-pages in length.**
- The optimal file size is between 5 and 10 MB and **should NOT exceed 15 MB in size.**
- Please use the Microsoft Word template available for download on the event page.
- Your final paper submission format should be a PDF.

General Paper Guidelines

Templates

- **Use the Word template downloadable on the TVF 2026 event page and**
- **convert to Adobe PDF:** This is the file format in which papers will be made available as online Proceedings.
- Instructions and a link for uploading your completed PDF paper will be emailed directly to authors prior to the January deadline.

Clearance for Publication and Presentation – DO NOT DELAY

- Your final paper must be cleared by your organization by the submission **deadline of January 16, 2026.**
- It is the author's responsibility to determine and acquire the appropriate types and levels of clearances — internal and external such as co-author organizations — for the paper to be published.
- The Transformative Vertical Flight meeting is open to all interested parties of all nationalities and all organizations. *Therefore, no classified, sensitive, or otherwise restricted material may be published or presented in conjunction with the meeting.*

Source Footnote

A footnote should be placed at the bottom of the left column of the first page to show the source of the paper. *Please refer to Word template and see examples below*:

_____

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For US government agencies:

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Abstract

- Abstract of approximately 150-words and single paragraph only. The abstract will become part of the metadata for your paper in the online proceedings and other searchable databases, so make it an accurate and complete — but concise — summary of the paper.
- A summary, not an introduction, and be complete in itself.
- Should not contain any numerical references to figures or references contained in the paper.

- Should indicate the subject covered in the paper and state the objectives of the investigation.
- Newly observed facts and conclusions stated in summary form.
- Abstract centered across the width of the first page.

Assignment of Copyright Ownership

- **The Assignment of Copyright Ownership is part of the final paper upload process and should be accepted.**
- See sample copyright on page 5.
- In the case of multiple authors, only the main author is required to accept the release.
- The copyright laws require written transfer of copyright, which
  - ✓ *protects you from unauthorized use of your paper*
  - ✓ *you as the author retains copyright of the paper*
  - ✓ *gives VFS permission to publish your paper*
- If you are a U.S. government employee, you may still accept the release form because you are only signing ***to the extent transferable and appropriate language is included in the copyright form***.
- For those organizations using their own copyright release, you can email your organization's copyright form directly to VFS HQ at jmgibbs@vtol.org.

Policies

- No Paper, No Podium and No-Podium, No Paper: failure to submit a final paper or present in person will result in removal from publication.

Visa Letters of Invitation

If you require a Visa Letter of Invitation to travel to the conference, please email Julie M. Gibbs, Technical Programs Director, at jmgibbs@vtol.org and provide the following information:

- Full Name as it Appears on your Passport
- Organization Name
- Full Mailing Address of Organization
- Email Address
- Title of Technical paper

Journal Publication

Papers presented at the conference may be suitable for publication in the *Journal of the American Helicopter Society*. Authors are encourage to submit to the Journal at vtol.org/publications/journal-of-ahs/journal-guidelines.

Speaker Information Form: This form must be received by the Technical Chair at meetings@sfbac.vtol.org no later than **January 16, 2026.**

The Speaker Information Form must be completed for the individual who will be making the presentation at the meeting – a copy of this form can be found below.

- Only one copy of this form is needed for each paper regardless of the number of authors.
- If more than one person is presenting, information for all presenters should be included.
- The information on this form will be used to introduce presenter(s)

ASSIGNMENT OF COPYRIGHT OWNERSHIP
VFS – The Vertical Flight Society

Vertical Lift Design & Aeromechanics Specialists' Conference
January 27-29, 2026
San Jose, California, USA

I, _____, (hereinafter, "the author") as author(s) (or employer, in the case of work made for hire") of the article entitled:

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(hereinafter "the article") hereby grant and assign to the VFS (hereinafter, "the publisher") all rights of copyright ownership now and hereafter protected in the article *(for U.S. Government employees, to the extent transferable*) effective if and when the article is accepted for publication in the *VFS Aircraft Lift Design & Aeromechanics Specialists' Conference Proceedings*, including, but not limited to, derivation rights, the right to reproduce and distribute the article as part of the issue, and the right to grant or refuse permission to third parties to republish all or part of the article.

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Signature: _____

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TVF 2026 SPEAKER INFORMATION FORM

January 27-29, 2026 • San Jose, California

Please fill out this form completely and email to meetings@sfbac.vtol.org by **January 19, 2026**. The information on this form will be used to publicize your presentation.

Session: _____ Chair: _____

Title of Presentation/Paper: _____

_____

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Speaker/Presenter: _____

Email: _____ _____ Phone:_____

Brief speaker biography (will be used to introduce speaker):

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Technical Presentation Information

- **Technical Presentation Day/Time: refer to pages 8-9 below for the day and time of your presentation.**
- Presentation content needs to be non-classified and unrestricted as the conference is open to all people, nationalities, and organizations.
- **Speakers will be notified of where and how to upload their technical presentations**.
- Preference is for presentations to uploaded by **Jan 26, 2026 @ 8:00 pm US EST (GMT-5).**
- Presentations must be uploaded **the day before your presentation NLT 8:00 pm US EST (GMT -5)**.
- Each session room will be equipped with an LCD projector connected to a computer running Microsoft Windows.
- Presentations will be pre-loaded onto the meeting room computer and the speaker will have control of their presentation via the laptop on the podium.
- Speakers will **NOT** be allowed to run presentations from their own laptops.
- File types:
    - **Adobe PDF** or **Microsoft PowerPoint:** The video projectors at the conference will be optimized for 16:9 widescreen format.
    - **Maximum total file size is 100 MB.**
- **Videos should be MP4 format**
    - If you have videos attached to your presentation, you may bundle them with your presentation in a single zip file.
    - If you have embedded videos that need to stream from the web, we cannot guarantee that you will be able to stream them at a satisfactory resolution. Please ensure that you have the video files either embedded in your presentation or as separate file(s) with your presentation.
- If you have extra files (e.g., videos) that make your upload larger than the 100 MB limit, please upload just your presentation slides.
    - Bring any larger files on a USB drive and coordinate with your Session Chair no later than the evening before your presentation.
- The format and/or template of the presentation is at the discretion of the presenting author.
- VFS will not publish or share Forum technical presentations (only your technical paper will be published) hence copyright permission is not required.
- Invited presentations will be published with the conference proceedings. If an invited speaker does not want their presentation made available please inform the Technical Chair, Jeff Sinsay (meetings@sfbac.vtol.org).
- **Presentations will be scheduled in 30-minutes timeslots**
    - Brief speaker introduction
    - 20- to 25-minute presentation
    - 5-minute Q&A

Technical Presentation Schedule

Subject to Change

Aircraft Design & Aeromechanics Technical Paper Presentations

Tuesday, January 27, 2026		
Aeromechanics Track A: CEDAR Gateway Ballroom		**Aeromechanics Track B: PINE Gateway Ballroom**
Computational Aeromechanics I Chair: Dr. Sung Jung, Konkuk University		**Design & Optimization Chair: Dr. Chris Cameron, VFS Member**
1:30 – 2:00	*A Comparison of 2, 3, and 4 Bladed eVTOL Lift:* Syna Saberi, Matt Hasbun, Hossein-Ali Saberi, Advanced Rotorcraft Technology; Carlos Malpica, Christopher Silva. NASA Ames Research Ctr.	*Extending Aeroelastic-Informed Helicopter Rotor Blade Optimization to Include Vibration Reduction in Transitional Flight:* Muhammad Muneeb Safdar, James D. Baeder. University of Maryland
2:00 – 2:30	*Simulation of Higher Harmonic Vibration Control System Considering Actuator Amplitude Limit:* Do-Hyung Kim, Jae-Sang Park, Woo-Ram Kang, Korea Aerospace Research Institute	*Comparison of Dimensional Reduction Methods for Rotor Blade Parameterization:* Chad Hess, Adam Rozman, Phuriwat Anusonti-Inthra, Richard Healy, US Army
2:30 – 3:00	*RAVEN Proprotor Performance and Aeroelastic Stability Predictions:* Stephen J. Wright, Christopher Silva. NASA Ames Research Ctr.	*A Scalable Comprehensive Rotorcraft Design and Optimization Python Package:* Carlos Z. Pereyra, Esther C. Kung. NASA Ames Research Ctr.
Computational Aeromechanics I Chair: Dr. Mark Fulton, VFS Member		**Design & Optimization Chair: TBA**
3:30 – 4:00	*Comprehensive Rotorcraft Analysis of a Propeller Driven Rotor in Hover and Forward Flight:* Robert Brown, US Navy; Seyhan Gul, Inderjit Chopra. University of Maryland	*uam4x: A Python-based Framework for Multi-modal UAM Design Space Exploration:* Thomas Nascenzi, Nathan Lang, M4 Engineering; Christopher Silva, NASA Ames Research Ctr.; Jason Welstead, NASA Langley Research Ctr.
4:00 – 4:30	*Experimental and Numerical Investigation of Never-Exceed Speed Demonstration:* Mustafa Alperen Madenci, Murat Şenipek, Osman Güngör, Ahmet Alper Ezertaş, Turkish Aerospace Industries	*VAE-Based Surrogate Modeling of Fixed Pitch Rotor Airloads:* Jaeheon Jeong, Korea Aerospace Research Institute
4:30 – 5:00	*Multicyclic Control for Vibration Reduction of Coaxial Rotor System with High-Fidelity Fluid-Structure Coupling:* Seong Hyun Hong, Young Jin Kim, Sung Nam Jung, Konkuk Univ.	*Model-order Reduction using Operator Inference Approach for Aeromechanics Analysis of Rotorcraft:* Inho Jeong, Sehoon Chang, Sung Nam Jung, Haeseong Cho, Jeonbuk National University
Wednesday, January 28, 2026		
Aeromechanics Track A: CEDAR Gateway Ballroom		**Aeromechanics Track B: PINE Gateway Ballroom**
Computational Aeromechanics II Chair: Dr. Mark Fulton, VFS Member		**Public Good Chair: Ms. Sarah Conley, NASA Ames Research Ctr.**
8:00 – 8:30	*The Effect of Rotation on the Boundary Layer Transition over the Rotor Blades:* Viktoriya Morozova, Andrew Heletkanycz, James G. Coder. Pennsylvania State University	*Help is on the Way: Opportunities and Challenges of Novel Rotorcraft and Associated Systems for Disaster Relief and Emergency Response:* Larry Young, Kristen Kallstrom, Sarah Conley, Dorsa Shirazi, NASA Ames Research Ctr.
8:30 – 9:00	*Analysis of Oscillating Flow Over a 2D Airfoil with Flow Reversal:* Colter Couillard-Rodak, Dave Peters. Washington University St Louis	*Applications and Assessments of Autonomous Aerial Vehicles for Dual-Use Public Good and Military Missions:* Robert Scott, Sarah Conley, NASA Ames Research Ctr.
9:00 – 9:30		*Multiscale Design and Optimization of a VTOL Aircraft for Disaster Relief:* Rajan Bhandari, Imon Chakraborty, Auburn University
Computational Aeromechanics II Chair: Dr. Mark Fulton, VFS Member		**Public Good Chair: Ms. Sarah Conley, NASA Ames Research Ctr.**
10:00 – 10:30	*Computational Investigation of a Multirotor eVTOL Undergoing Hover, Forward, and Maneuvering Flight:* Chunhua Sheng, Qiuying Zhao, University of Toledo	*Design, Development, and Subscale Flight Testing of an Emergency Response eVTOL Aircraft:* Ripon C. Sarker, Anup Pudasaini, Anthony Comer, Zachary Atkinson, Zachary Miller, Pratibha Bhandari, Nabia Fardin, Pedram H. Dabaghian, Atanu Halder, Oklahoma State University
10:30 – 11:00	*Assessment of Nonlinear Beam Models for Rotorcraft Aeromechanics Analysis with Fluid-Structure Interface:* Se Hoon Chang, Jae Seong Bae, Si Hyun Park, Sung Nam Jung, Inho Jeong,	*Conceptual Design of Uninhabited Aircraft for Support of Wildfire Suppression:* Christopher Silva, Eduardo Solis. NASA Ames Research Ctr.

Technical Presentation Schedule

Subject to Change

	Haeseong Cho, Konkuk University	
11:00 – 11:30	*Roughness Tolerant Airfoil Design for Rotor and Propeller Applications:* Michelle Ku, Lakshmi Sankar. Georgia Institute of Technology.	*Group Discussion*
11:00 – 11:30	*Evaluation of Rotor Wake Models for Acoustic Predictions:* Brendan Smith, Phuriwat Anusonti-Inthra, Matthew Floros and Michael Muhlestein, DEVCOM Army Research Laboratory	
Experimental Aeromechanics Chair: Dr. Oliver Wong, US Army DEVCOM AvMC (Ret.)		**Vehicle Design Chair: Mr. Carl Russell, NASA Ames Research Ctr.**
1:00 – 1:30	*Experimental Investigation of Unsteady Tip Vortex in Plunging and Pitching Motions:* Andrew Glen Alm, Sicheng Kevin Li. Oklahoma State University	*Design and Development of Cyclorotor-Based Manned eVTOL:* Nabia Fardin, Cayden Brown, Moble Benedict, Atanu Halder. Oklahoma State University
1:30 – 2:00	*Experimental and Computational Evaluation of Rotor Induced and Profile Power*: Zachary Moore, Albert Abraham, Lokesh Silwal, Aditya Vijayaraj, Sven Schmitz, Vrishank Raghav, Auburn University	*Electromagnetic Noise Mitigation on an Electric Tiltrotor Rig and Hover Performance Testing:* William Ogle, Nathan O'Brien, Anubhav Datta. University of Maryland
2:00 – 2:30	*Recirculation-Delayed Anechoic Chamber (RDAC) for Propeller Acoustic Testing:* Grace E. Sian, Molly Dolan, Sicheng Kevin Li, Oklahoma State University	*A Comparison of Electric Powertrain Models for Conceptual Design of a Distributed Lift Aircraft*: Nathan Beals, J. Michael Vegh, Pierre-Marie Basset, DEVCOM Army Research Lab
2:30 – 3:00	*Experimental Investigation of Hover Performance and Acoustics of a Coaxial Counter-Rotating Rotor with Unequal Radii:* Vasha Sedlacek, Jayant Sirohi. University of Texas Austin	*Impact of Technology and Mission Variation on Aircraft Designed for Advanced Air Mobility:* Wayne Johnson, Christopher Silva. NASA Ames Research Ctr.
Experimental Aeromechanics Chair: Dr. Oliver Wong, US Army DEVCOM AvMC (Ret.)		**Vehicle Design Chair: Mr. Carl Russell, NASA Ames Research Ctr.**
3:30 – 4:00	*Design and Analysis of the ROAMX Hover Test Stand*: Haley Cummings, et al. NASA Ames Research Ctr.	*Gross Weight and CG Position Estimation for a UAM Lift+Cruise eVTOL:* Anubhav Halder, Farhan Gandhi, University of North Carolina
4:00 – 4:30	*An Experimental Study on the Detrimental Effects of Rainfall on the Performance of UAV Propellers:* Hui Hu. Iowa State.	*Direct Deposition of Nickel Abrasion Guards on to Carbon Filled Composite Rotor Blade Structures:* Luigi Cazzaniga, Alpha Metalcraft
4:30 – 5:00	*Whirl Flutter Mitigation via a Hingeless Hub on the Maryland Tiltrotor Rig:* Nathan O'Brien, Anubhav Datta. University of Maryland	
Thursday, January 29, 2026		
Aeromechanics Track A: CEDAR Gateway Ballroom		**Aeromechanics Track B: PINE Gateway Ballroom**
Flight Dynamics & Control Chair: Dr. Carlos Malpica, NASA Ames Research Ctr		**Safety & Certification Chair: TBA**
8:00 – 8:30	*Flight Dynamics Modeling of a Lift-Plus-Cruise UAV with Experimental Validation*: Reuben-Wayne Stewart, Cayden Brown, Moble Benedict. Texas A&M University	*Rotor Failure Analysis on Winged-eVTOL Aircraft in Hover and Low-Speed Operation*: Eve Fulton, Dakoda Lemelin, Farhan Ghandi, North Carolina State University
8:30 – 9:00	*Adaptive Reinforcement Learning Control for Robust Flight of VTOL UAVs:* Vishnu Saj, Dileep Kalathil, Moble Benedict. Texas A&M University	*Analysis of a Classical Octocopter with Single Rotor Failure:* Koda Lemelin, Eve Fulton, Farhan Ghandi, North Carolina State University
9:00 – 9:30	*Rotor-Rotor Interference Modeling for Flight Dynamics Analysis of a Mars Hexacopter Concept:* Tove Agren, Allen Ruan, Shannah Winthrow-Maser, NASA Ames; Juan Garcia-Bonilla, Vivian Steyert, Nuno Filipe, Laura Jones-Wilson, Jacob Izraelevitz, CA Institute of Tech.	*Fault Tolerance of RPM-Controlled Hexacopters with Reverse-Enabled Rotors:* Weston Fong, Farhan Ghandi. North Carolina State University

Technical Presentation Schedule

Subject to Change

Thursday, January 29, 2026		
Aeromechanics Track A: CEDAR Gateway Ballroom		**Aeromechanics Track B: PINE Gateway Ballroom**
Flight Dynamics & Control Chair: Dr. Carlos Malpica, NASA Ames Research Ctr.		**Safety & Certification Chair: TBA**
(10:00 – 10:30)	*Handling Qualities Analysis of an eVTOL Aircraft with Direct Side Force Control:* Soohyeon Lee, Joseph F. Horn, Pennsylvania State University; Todd Quackenbush, Jeffrey D. Keller, Continuum Dynamics	*eVTOL Type Certification Challenges:* Cesar Silva Fernandes Jr., Brazil National Civil Aviation Agency
10:30 – 11:00	*Closed-Loop Visual-Based UAS Landing on at Stochastic Ship-deck:* Kumardip Basak, Anubhav Datta. University of Maryland.	*Structural Analysis for Mars Science Helicopter Blade: Lessons Learned:* Dorcas V. Kaweesa, Gianmarco Sahragard-Monfared, NASA Ames Research Ctr.
11:00 – 11:3)	*Advanced Signal Domain Techniques for Real-Time Control and Prognostics in VTOL Systems:* David LaRue, FEV Group	*Physics Guided Machine Learning Framework for Fault Detection, Isolation, and Severity Prediction of Autonomous VTOL Aircraft:* Ripon C. Sarker, Pedram H. Dabaghian, Atanu Halder, Oklahoma State University,
11:30– 12:00	*Development of Control Equivalent Gust Input (CEGI) and Rotor Control Equivalent Gust Input (RCEGI)I:* Tanaya Sinha, J.V.R Prasad. Georgia Institute of Technology.	
Downwash/Outwash Chair: Dr. Jurgen Raulder, Georgia Institute of Technology		**Planetary Rotorcraft Chair: TBA**
1:00 – 1:30	*Experimental Investigation of Half-Ground Effects on Hovering Rotor Aerodynamics*: Steven Yon, Sicheng Kevin Li. Oklahoma State University	*Past, Present, and Future Conceptual Designs for Venus Aerial Explorers*: Larry Young, Michelle Dominguez, Natasha Schatzman. NASA Ames Research Ctr.
1:30 – 2:00	*Downwash Outwash Modeling of VTOL & eVTOL Aircraft:* Dan Wachspress, Continuum Dynamics	*LILI (Long-term Ice-field Levitating Investigator): A Mars Aerial and Ground Explorer for Glaciers & Polar Ice Fields:* Natasha Schatzman, Michelle Dominguez, Pascal Lee, David Caudle, Larry Young. NASA Ames Research Ctr.
2:00 – 2:30	*Impact of Aircraft Parameters on AAM Downwash/Outwash Characteristics:* Jagdeep Batther, Zoren Habana, Jan Goericke, Chengjian He, Advanced Rotorcraft Technology	*Capabilities of Mars Helicopters Using Optimized Rotor Blades:* Haley Cummings, et. al. NASA Ames Research Ctr.
2:30 – 3:00	*Computationally Efficient Lattice-Boltzmann Simulations of Multirotor Interactions in Boundary Effects:* Pyae Su, Juergen Rauleder, Georgia Institute	*Numerical Analysis of Surface Interactions and Sediment Transport for a Rotorcraft Lander on Titan*: Jackson Asiatico, Ralph Lorenz, Michael Kinzel, Michael Marques Goncalves, Embry-Riddle Aeronautical University.