FORUM 77
THE FUTURE OF VERTICAL FLIGHT
VIRTUAL | MAY 10-14, 2021
REGISTRATION KIT

The Future of Vertical Flight
www.vtol.org/forum

Current Forum 77 Sponsors
The world’s largest and longest-running vertical flight conference is virtual again this year: the Vertical Flight Society’s 77th Annual Forum & Technology Display takes place online, May 10 – 14, 2021.

The VFS Annual Forum is the leading international conference on vertical takeoff and landing (VTOL) technology. The five-day event will include nearly 250 technical paper presentations on every discipline from Acoustics to Unmanned Systems. In addition, invited presentations and panel discussions with more than 50 civil and military and industry vertical flight leaders will give insights into the latest developments, from advanced rotorcraft to advanced air mobility (AAM) / electric VTOL. The Technology Display, being held in conjunction with the Forum, will provide scheduled technical presentations on our exhibitors’ latest products and VTOL capabilities, plus ample opportunities to engage, ask questions and learn.

Billions of dollars are pouring into new civil and military vertical flight development programs, including Future Vertical Lift (FVL), Clean Sky 2 and AAM / electric VTOL. These development efforts promise to transform the vertical flight industry over the next several years. The Annual Forum is the only event in the world that gives deep insights into all of these efforts. Don’t miss this opportunity to improve your depth of understanding of “The Future of Vertical Flight.”

Forum 77 will explore emerging technologies and trends with executives from Airbus, Bell, Boeing, Leonardo and Sikorsky as part of our annual Straight Talk from the Top panel. Top-ranking US military officials will present their development plans and operational needs in the US Army and US Navy/Marine Corps Program Manager Briefings, and special sessions on FVL and the NATO Next Generation Rotorcraft. Other special sessions include Canadian AAM Innovations, Progress in Electric VTOL, Electric VTOL Certification, Electric VTOL Technologies, Civil VTOL R&D and System Safety.

Check out all the details on the Forum 77 website at www.vtol.org/forum.

We look forward to seeing you online!

Michael J. Hirschberg
Executive Director

FORUM 77 SPONSORS
The Vertical Flight Society gratefully thanks the following companies for their generous support of its 77th Annual Forum and Technology Display:

- **Airbus**
  - Registration Website
- **Sikorsky, A Lockheed Martin Company**
  - Virtual Grand Awards Ceremony
- **The Boeing Company**
  - Virtual Opening General Session
- **Bell**
  - Virtual Exhibit Hall Luncheons
- **Leonardo Helicopters**
  - Virtual Technical Sessions
- **Karem Aircraft**
  - Virtual Badge
- **Pratt & Whitney Canada**
  - Virtual Special Sessions
- **GE Aviation**
  - Virtual Nikolsky Lectureship
- **BAE Systems**
  - VFS Online Store
- **Toray**
  - Forum 77 Proceedings
- **L3Harris**
  - Virtual Technical Session
  - Refreshment Break
- **Continuum Dynamics, Inc.**
  - Virtual Technical Session
  - Refreshment Break
- **Rolls-Royce**
  - Virtual Technical Session
  - Refreshment Break
Preliminary Schedule of Events

All events will take place virtually on the event site.
All times are in EDT (UTC-4).
Visit www.vtol.org/forum for latest updates.

Wednesday, May 5, 2021

41st Annual Alexander A. Nikolsky Honorary Lectureship ........................................... 12:00 pm – 1:30 pm
“Rotorcraft Design: The Crucial Influence of Safety from Concept to Fleet Support”
Fabio Nannoni, SVP for Safety Management Governance, Leonardo
Sponsored by GE Aviation
Livestream at www.YouTube.com/VTOLsociety

Virtual Grand Awards Program .................................. 2:00 pm – 3:00 pm
Sponsored by Sikorsky, A Lockheed Martin Company
Video Premiere at www.YouTube.com/VTOLsociety

Monday, May 10, 2021

Registration Assistance ........................................... 7:00 am – 5:00 pm

Technical Session A .............................................. 9:00 am – 1:00 pm
Aerodynamics | Aircraft Design | Avionics & Systems | Crew Stations | History | HUMS 1 | Manufacturing & Technology | Systems Engineering
Sponsored by Leonardo

Special Session 1: NATO Next Gen Rotorcraft ................. 9:00 am – 10:30 am
Moderated by Dan Newman, The Boeing Company
Sponsored by Pratt & Whitney Canada

Technical Session A Refreshment Break ...................... 10:30 am – 11:00 am
Sponsored by Rolls-Royce

Special Session 2: USN/USMC Rotorcraft Program Briefings ........................................... 11:00 am – 1:00 pm
Moderated by Maj Gen Gregory L. Masiello, USMC, Program Executive Officer for Air Anti-Submarine Warfare, Assault & Special Mission Programs
Sponsored by Pratt & Whitney Canada

Lunch Break ......................................................... 1:00 pm – 2:00 pm
Sponsored by Bell

Opening General Session ..................................... 2:00 pm – 4:00 pm
Sponsored by The Boeing Company

Welcome
• Mike Hirschberg, Executive Director, Vertical Flight Society
• Edward Hoskin, Chair of the VFS Board of Directors and Vice President of Engineering, Pratt & Whitney Canada

Keynote Address
Lt Gen Thomas H. Todd, III, Deputy Commanding General for Acquisition and Systems Management, US Army Futures Commands

Straight Talk from the Top:
Moderated by Frank Colucci, Senior Editor, VFS Vertiflite magazine
• Tomasz Krysinski, VP Research & Innovation, Airbus
• Michael Thacker, Executive VP Technology & Innovation, Bell
• Mark Cherry, VP/GM, Boeing Vertical Lift
• Roberto Garavaglia, Senior VP Strategy & Innovation, Leonardo Helicopters
• Paul Lemmo, President, Sikorsky, a Lockheed Martin Co.

General Session Refreshment Break ...................... 3:30 pm – 4:00 pm
Sponsored by The Boeing Company

Tuesday, May 11, 2021

Registration Assistance ........................................... 7:00 am – 5:00 pm

Technical Session B .............................................. 9:00 am – 1:00 pm
Sponsored by Pratt & Whitney Canada

Special Session 3: Future Vertical Lift (FVL) .............. 9:00 am – 10:30 am
Moderated by Maj Gen Walter (Wally) Rugen, US Army, Director, Future Vertical Lift (FVL) Cross-Functional Team
Sponsored by Pratt & Whitney Canada

Technical Session B Refreshment Break ...................... 10:30 am – 11:00 am
Sponsored by Rolls-Royce

Special Session 4: US Army Program Briefings .......... 11:00 am – 1:00 pm
Moderated by Brig Gen Robert (Rob) Barrie, US Army, Program Executive Officer, Aviation
Sponsored by Pratt & Whitney Canada

Virtual Exhibit Hall ............................................. 1:00 pm – 5:00 pm
Technical Briefings

Lunch Break ......................................................... 1:00 pm – 1:30 pm
Sponsored by Bell

Wednesday, May 12, 2021

Registration Assistance ........................................... 7:00 am – 5:30 pm

Special Session 5: Canadian AAM Innovations .......... 9:00 am – 10:30 am
Moderated by: Nicolas Chabée, Pratt & Whitney Canada
Sponsored by Pratt & Whitney Canada

Technical Session C .............................................. 9:00 am – 1:00 pm
Acoustics | Advanced Vertical Flight | Aircraft Design | Crash Safety | Dynamics | Handling Qualities | HUMS | Test & Evaluation
Sponsored by Leonardo
Thursday, May 13, 2021

Registration Assistance ................................................................. 7:00 am – 5:00 pm

Special Session 7: Electric VTOL Certification ......................... 9:00 am – 10:30 am
Moderated by Charles Alcock, Aviation International News
Sponsored by Pratt & Whitney Canada

Technical Session D ................................................................. 9:00 am – 10:30 am
Acoustics II | Aerodynamics II | Crew Stations II |
Handling Qualities II | Modeling & Simulation II |
Propulsion II | Structures & Materials I | Unmanned II
Sponsored by Leonardo

Technical Session D Refreshment Break ......................... 10:30 am – 11:00 am
Sponsored by L3Harris Technologies

Networking chat rooms are available each morning, Monday through Friday at 8:00 am – 9:00 am,
as well as in the afternoons, Monday through Thursday at 4:00 pm – 5:00 pm.

Technology Display

Be sure to allocate ample time to visit the Forum 77 Technology Display in the virtual Exhibit Hall. Dozens of companies and organizations will be presenting the latest developments in vertical flight technology and showing the advancements in airframe, propulsion, avionics, systems integration, simulation technology and much more. The Forum 77 Technology Display is being held after the technical paper presentations each day to maximize the opportunity to view exhibits and attend the Exhibit Hall Technical Briefings. The technology display is open to all registrants.

Exhibit Hall Technical Briefings

Industry technical briefings from exhibiting companies will be presented during virtual expo hours. These briefings will provide attendees with a more comprehensive overview of the company’s capabilities and services. Exhibitors are invited to contact VFS to arrange briefings and have the announcement published in the VFS Forum 77 Final Program. This is a genuine value-added benefit offered to exhibiting companies and attendees.
Forum 77 Registration

All registration rates are shown in US Dollars.

All registrants must pay in full to access the virtual Forum. Registrants will receive email communications on virtual access information and guidelines prior to the event.

All attendees of the virtual Forum 77 & Technology Display must register at: [www.vtol.org/register](http://www.vtol.org/register)

You can register online at any time before or during the Forum week and gain access to the live virtual event. Registrants will receive email communications on virtual access information and guidelines prior to the event.

You can register online at anytime before or during the Forum week and gain access to the live virtual event. Registrants will receive email communications on virtual access information and guidelines.

What the registration fee includes:

- Access to all Forum 77 technical and special sessions, and the recordings until May 14, 2022
- Access to the virtual exhibits, including Exhibitor Technical Briefings
- Online Forum 77 Proceedings, containing the written technical papers presented during the Forum 77 technical sessions.

EXHIBIT HALL-ONLY REGISTRATION

Special: The exhibit hall is open to the public this year for free, but without any access to the Forum 77 technical and special sessions, recordings or proceedings. You must register in advance and only includes access to the virtual exhibits and Exhibitor Technical Briefings.

HOW TO REGISTER:

- Go to [https://ahs.portal.membersuite.com](https://ahs.portal.membersuite.com)
- If you are a member, you can log in and click the link for Forum 77.
- If you are not a VFS member, you do not need to join, but still need to create an account. Those who register at the non-member rate receive a complimentary 1-year VFS membership.
- You can also download a printable registration form at [www.vtol.org/register](http://www.vtol.org/register) and scan, fax or email to VFS headquarters – refer to the form for contact information.
- Registration questions, please contact Betty Chen at +1-703-684-6777 x102 or bchen@vtol.org.
- Exhibitors and Corporate members: please contact Valerie Sheehan for registration assistance at +1-703-684-6777 x107 or vsheehan@vtol.org.

Cancellation Policy: US$75 fee until April 12, then US$150 fee through May 7. No refunds after May 7, 2021.

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Forum 77 Virtual Exhibits

The Forum 77 Virtual Technology Display plays an essential role in advancing vertical flight technology by bringing together the industry’s most creative minds and visionaries with the world’s leading aerospace manufacturers and suppliers. Your company can be part of this dynamic technology showcase by joining VFS as a Forum 77 exhibitor. For more information, please contact David Renzi at VFS headquarters (see below).

EXHIBIT PACKAGE INCLUDES:

**Basic ($2,850 corporate member, $2,950 non-corporate member, $1,950 Ed/Gov’t)**

- Multifunctional virtual booth with four (4) video chat rooms
- Half-page Vertiflite magazine ad placement in 2021
- One (1) full conference registration
- Two (2) technical briefings to be included in event schedule per day

**Standard ($5,700 corporate member, $5,900 non-corporate member, $3,900 Ed/Gov’t)**

- Multifunctional virtual booth with four (4) video chat rooms
- One (1) full-page Vertiflite magazine ad placement in 2021
- Three (3) full conference registrations
- Two (2) technical briefings to be included in event schedule per day

**Deluxe ($8,500 corporate member, $8,800 non-corporate member, $5,800 Ed/Gov’t)**

- Multifunctional virtual booth with four (4) video chat rooms
- Two (2) full-page Vertiflite magazine ad placements in 2021
- Four (4) full conference registrations
- Two (2) technical briefings to be included in event schedule per day

**Premium ($20,000 corporate member, $24,000 non-corporate member)**

- Multifunctional virtual booth with four (4) video chat rooms
- Two (2) full-page Vertiflite magazine ad placements in 2021
- Five (5) full conference registrations
- Two (2) technical briefings to be included in event schedule per day
- Exhibitor may present one (1) 60-minute webinar with Q&A to the VFS global community. VFS will schedule and host the webinar post-event.

* The Society requests that full registration badges be issued only to personnel managing exhibit booths and not to VFS Forum speakers.

Showcasing the Most Advanced Vertical Flight Technology:

Airframes • Avionics and Sensors • Components • Design Capabilities • Display Systems • Electro-optics • Engine/Propulsion • Fabricators • Fuel and Utility Systems • Health and Usage Monitoring Systems • Mission Support • Research and Development • Safety Systems • Simulation and Training • Unmanned VTOL • Advanced Air Mobility/Electric VTOL

For exhibit information contact:

The Vertical Flight Society
2700 Prosperity Ave., Suite 275
Fairfax, VA 22031 USA
Phone: +1-703-684-6777 x105
Fax: +1-703-739-9279
Email: Exhibits@vtol.org Website: [www.vtol.org/exhibit](http://www.vtol.org/exhibit)
# Preliminary Technical Session-at-a-Glance

**All Times are US Eastern EDT (UTC-4)**

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<thead>
<tr>
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<td>Aerodynamics I</td>
<td>Advanced Vertical Flight I</td>
<td>Acoustics I</td>
<td>Acoustics II</td>
<td>Aerodynamics III</td>
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<td>Aircraft Design I</td>
<td>Dynamics I</td>
<td>Advanced Vertical Flight II</td>
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<td>Advanced Vertical Flight III</td>
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<td>eVTOL I</td>
<td>Aircraft Design II</td>
<td>Crew Stations II</td>
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<td>Crash Safety</td>
<td>Handling Qualities II</td>
<td>eVTOL II</td>
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<td>Operations</td>
<td>Dynamics II</td>
<td>Modeling &amp; Simulation II</td>
<td>Modeling &amp; Simulation III</td>
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<td>Product Support</td>
<td>Handling Qualities I</td>
<td>Propulsion II</td>
<td>Safety</td>
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<td>Propulsion I</td>
<td>HUMS II</td>
<td>Structures &amp; Materials I</td>
<td>Structures &amp; Materials II</td>
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<td>Test &amp; Evaluation I</td>
<td>Test &amp; Evaluation II</td>
<td>Unmanned I</td>
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