AHS International

The Vertical Flight Technical Society

Marking 70 Years of Service to Vertical Flight



Registration Kit

www.vtol.org/forum

Current Forum 70 Sponsors

























YOU'RE INVITED ... TO FORUM 70!

Don't miss our 70th Annual Forum and Technology Display!

For 70 years, the AHS Forum has been the premier event for government, industry and academia to exchange ideas, discuss the latest breakthroughs in theory and technology, and work together to tackle the toughest challenges in vertical flight. Since its inception, the Annual Forum has brought together the best technical minds with the world's leading vertical flight developers. This tradition and legacy is still unmatched today by any other event in the world.

AHS International's 70th Annual Forum and Technology Display will be held May 20-22, 2014 at the Palais des congrès de Montréal in Montréal, Québec. This year's theme is "Celebrating International Cooperation in Vertical Flight Technology" as we look at the productive partnerships both within North America and with industry, academia and governments around the world. With some 1200 attendees annually, Forum 70 offers you networking opportunities with leading researchers and the key representatives from the world's most important vertical flight technology organizations in industry, academia and government.



A full day of activities precedes the Forum on Monday, May 19. This year, AHS features two short courses, taught by industry experts: "The Aerodynamics of Helicopter Accidents," presented by Jack Cress, and "Rotorcraft Technology," presented by Dr. Dick Bennett. Alternatively, Monday morning also includes industry tours of **Bell Helicopter Canada** and **CAE**. Finally, the **2**nd **Annual Micro Air Vehicle Student Challenge** will see AHS student members compete in a head-to-head MAV fly-off for up to \$10,000 in prizes.

Forum 70 will be the biggest ever, featuring some 300 technical presentations on vertical flight research and advanced technology initiatives, in disciplines from acoustics to wind energy. The Forum also includes special panel sessions, the Exhibitor Reception, the Vertical Flight Foundation (VFF) Reception, the Grand Awards Banquet, and the Technology Display – the most extensive exposition of cutting-edge vertical flight technologies in the world.

Forum 70 will continue with its interactive CEO Panel with the chief executives of the international helicopter industry. Moderated by **Kenneth Swartz** – an award-winning communicator and contributing editor at Canada's *Vertical, Vertical 911* and *Canadian Skies* magazines – the panel will explore how to enhance continued "International Cooperation in Vertical Flight Technology."

The CEO Panel will be followed by this year's esteemed Alexander A. Nikolsky Honorary Lecture, delivered by **Prof. Dewey H. Hodges**, Georgia Institute of Technology. The title of his lecture is "Unified Approach for Accurate and Efficient Modeling of Composite Rotor Blade Dynamics."

In keeping with our long tradition, the US Navy and US Army Program Executive Officers (PEOs) for rotorcraft acquisition and their program managers will brief attendees on the latest developments and plans for modernization. Brigadier General Robert Marion, Army PEO for Aviation, will lead the US Army program manager briefings, and Rear Admiral Cindy "CJ" Jaynes, Navy PEO for Air ASW, Assault & Special Mission Programs, will moderate the US Navy/Marine Corps program manager panel. These sessions have always been found to be extremely insightful regarding future US military rotorcraft development needs.

In addition, two special session panels this year spotlight Canada's vertical flight capabilities and opportunities. The **Suppliers and Subsystems Technology Panel** features leaders in the Québec rotorcraft industry. **Canadian Rotorcraft: From Research to Operations** features leaders from Canadian agencies and associations covering rotorcraft. Québec represents 70% of Canada's aerospace R&D spending, produces more than \$12 billion in sales annually, 80% from exports. Collectively, Québec's aerospace community is comprised of 200+ firms employing more than 42,500 engineers, technicians and other skilled aerospace workers.

Please join us May 20-22, 2014 in Montréal, Québec. You don't want to miss *The Biggest and Best Vertical Flight Technology Conference in the World!*

Very sincerely,

Michael J. Hirschberg
AHS Executive Director

Vichael Lin

FORUM 70 Sponsors

AHS gratefully thanks the following companies for their generous support of the AHS 70th Annual Forum and Technology Display.

Airbus Helicopters

Registration Bags

AVX Aircraft

Hotel Key Card

Automated Dynamics

Technical Session Refreshment Break

Bell Helicopter Textron

Vertical Flight Foundation Reception & The Grand Awards Banquet

Boeing Company

Exhibit Hall Luncheons

CAE, Inc.

Technical Session Refreshment Break

Lord Corporation Lanyards

PIC Wire & Cable

Forum 70 Proceedings CD

Pratt & Whitney Canada

Badge Holders

Sikorsky Aircraft

Exhibitor/Industry Reception

TenCate

Technical Session Refreshment Break

Safran Turbomeca Canada

General Session Refreshment Break



Short Course on Aerodynamics of

Presented by John (Jack) Cress

Journal Editor's Meeting

Session Chair Meeting

Helicopter Accidents

Schedule of Events

All events will take place at the Palais des congrès de Montréal unless otherwise noted.					
Sunday, May 18, 2014		Student Volunteer Meeting	2:30 p.m. – 4:00 p.m.		
Exhibitor Move-In	9:00 a.m. – 5:00 p.m.	MAV Student Challenge	4:00 p.m. – 6:00 p.m.		
Exhibit Halls 210, 220A and 230 (Exhibitors Only)		Tuesday, May 20, 2014			
Exhibitor Registration Open Lobby	9:00 a.m. – 5:00 p.m.	Show Office	6:00 a.m. – 5:00 p.m.		
Attendee Registration Open Lobby	2:00 p.m. – 5:00 p.m.	Student Volunteer Office	6:00 a.m. – 5:00 p.m.		
Monday, May 19, 2014		Registration Open (Exhibitors and Registrants) Lobby	7:00 a.m. – 5:00 p.m.		
Show Office	6:00 a.m. – 5:00 p.m.	Speaker Ready Room	7:00 a.m. – 5:00 p.m.		
Student Volunteer Office	6:00 a.m. – 5:00 p.m.	Special Session	8:00 a.m. – 12 noon		
Registration Open (Exhibitors and Registrants) Lobby	7:00 a.m. – 5:00 p.m.	US Army Aviation Program Manager Briefings Moderated by Brigadier General Robert Marion, Army PEO for Aviation			
Speaker Ready Room	7:00 a.m. – 5:00 p.m.	Technical Session A Aerodynamics I	8:00 a.m. – 12 noon		
Exhibitor Move-In Exhibit Halls 210, 220A and 230 (Exhibitors O	8:00 a.m. – 5:30 p.m. inly)	Dynamics I Handling Qualities I Manufacturing Technology & Processing	l * _		
AHS Technical Council Meeting	8:00 a.m. – 12 noon	Operations I Product Support Systems Technology			
Rotorcraft Technology Short Course Presented by Dr. Richard (Dick) Bennett	9:00 a.m. – 4:00 p.m.	Test & Evaluation I Wind Energy I			
Short Course on Aerodynamics of		Technical Session A Refreshment Break	9:30 a.m. – 10:00 a.m.		

9:00 a.m. – 4:00 p.m.

12 noon – 1:30 p.m.

1:30 p.m. – 2:30 p.m.

Exhibit Hall Open 11:00 a.m. – 7:00 p.m.

Exhibit Halls 210, 220A and 230

Exhibit Hall Luncheon 12 noon – 1:30 p.m.

Sponsored by The Boeing Company

Tuesday, May 20, 2014 (Cont.)

Opening General Session

1:30 p.m. - 3:30 p.m

Welcome

Keynote Address

CEO Panel

"International Cooperation in Vertical Flight Technology"

Moderated by Kenneth Swartz, contributing editor at Canada's Vertical, Vertical 911 and Canadian Skies magazines

Refreshment Break 3:30 p.m. – 4:00 p.m.

Sponsored by Safran/Turbomeca Canada

Alexander A. Nikolsky

Honorary Lectureship 4:00 p.m. - 5:00 p.m.

Prof. Prof. Dewey Hodges, Georgia Institute of Technology, "Unified Approach for Accurate and Efficient Modeling of **Composite Rotor Blade Dynamics**"

Exhibitor/Industry Reception

5:00 p.m. - 7:00 p.m.

Sponsored by Sikorsky Aircraft Corp.

Wednesday, May 21, 2014

Show Office 6:00 a.m. - 5:00 p.m.

Student Volunteer Office 6:00 a.m. - 5:00 p.m.

Registration Open 7:00 a.m. - 5:30 p.m.

(Exhibitors and Registrants)

Lobby

Speaker Ready Room 7:00 a.m. – 5:00 p.m.

Special Session 8:00 a.m. – 12 noon

US Navy/Marine Corps Aviation Program Manager Briefings

Moderated by Rear Admiral Cindy "CJ" Jaynes, Navy PEO for Air

ASW, Assault & Special Mission Programs

Technical Session B

8:00 a.m. – 12:15 p.m.

Acoustics I

Joint Aerodynamics/Dynamics **Crew Stations & Human Factors**

Handling Qualities II

HUMS/CBM I

Modeling & Simulation I Structures & Materials I

Unmanned VTOL Aircraft & Rotorcraft I

Technical Session B Coffee Break 9:30 a.m. - 10:15 a.m.

Exhibit Hall

Exhibit Hall Open 9:00 a.m. – 5:00 p.m.

AHS Board of Directors Meeting 9:00 a.m. – 12 noon

Exhibit Hall Luncheon 12:15 p.m. – 1:45 p.m.

Sponsored by The Boeing Company

Special Session: Suppliers & Subsystems Technology Panel

Technical Session C

Acoustics II (1/2)/Operations II (1/2)

Avionics & Systems I

Crash Safety I Dynamics II

HUMS/CBM II

Modeling & Simulation II

Systems Engineering Tools/Processes

Test & Evaluation II

Technical Session C Refreshment Break

Exhibit Hall

Award Recipient Orientation

(By Invitation Only)

1:45 p.m. - 6:00 p.m.

1:45 p.m. – 6:30 p.m.

3:15 p.m. - 4:00 p.m.

3:00 p.m. - 4:00 p.m.

Vertical Flight Foundation Cocktail Reception

6:00 p.m. - 7:00 p.m. Sponsored by Bell Helicopter

Grand Awards Banquet

7:00 p.m. - 9:30 p.m. Sponsored by Bell Helicopter

Thursday, May 22, 2014

Show Office 6:00 a.m. - 5:00 p.m.

Student Volunteer Office 6:00 a.m. - 5:00 p.m.

Registration Open 7:30 a.m. - 1:00 p.m.

Lobby

Tech Committee Chair/Session Chair 7:30 a.m. – 9:00 a.m.

Meeting

Special Session: 10:15 a.m. – 12:15 p.m.

Canadian Rotorcraft: From Research to Operations

Technical Session D 8:00 a.m. – 12:15 p.m.

Advanced Vertical Flight I

Aerodynamics II

Aircraft Design I

Awards Presentations (1/2)/Manufacturing

Technology & Processing II (1/2)

Modeling & Simulation III

Propulsion I

Structures & Materials II



9:30 a.m. - 10:15 a.m.

Technical Session D Refreshment Break

Exhibit Hall

Exhibit Hall Open 9:00 a.m. - 12:00 noon

Thursday, May 22, 2014 (Cont.)

Technical Session E

Advanced Vertical Flight II
Aerodynamics III
Aircraft Design II
Dynamics III (1/2)/Wind Energy II (1/2)
HUMS/CBM III
Propulsion II
Test & Evaluation III
Unmanned VTOL Aircraft & Rotorcraft II



1:30 p.m. – 6:00 p.m.

Technical Session E Refreshment Break 3:30 p.m. – 4:00 p.m.

May 20-22, 2014
Wontréal, Québec
Canada

Celebrating
International
Cooperation in
Vertical Filght
Technology

General Information

Passport and Visa Information

Please visit **www.vtol.org/forum-travel** for Canadian travel requirements.

All Forum 70 attendees must register to receive a badge. Badges must be visibly displayed to gain admittance to both the Exhibit Hall and the technical sessions. FULL THREE-DAY REGISTRATION includes:

- Admittance to all sessions and coffee breaks
- Entry to the Exhibit Hall during scheduled hours
- Tickets to Luncheons, the Exhibitor/Industry Reception, Vertical Flight Foundation Reception and Grand Awards Banquet
- Forum 70 Proceedings CD-ROM

Registration Hours

Sunday, May 18, 2014	2:00 p.m. – 5:00 p.m.
Monday, May 19, 2014	7:00 a.m. – 5:00 p.m.
Tuesday, May 20, 2014	7:00 a.m. – 5:00 p.m.
Wednesday, May 21, 2014	7:00 a.m. – 5:30 p.m.
Thursday, May 22, 2014	7:00 a.m. – 1:00 p.m.

Forum 70 Proceedings

Proceedings will be available in two formats – printed or the CD-ROM version – and contain all papers presented at the technical sessions. Printed Proceedings will not be available until after the Forum.

Registration Fees

(member / non-member.

	Three Days (by April 16th)	Three Days (after April 16th)	Two Days	One Day
Regular Attendee	\$765 / \$865	\$835 / \$935	\$650 / \$750	\$475 / \$575
Speaker or Gov't Employee	\$715 / \$815	\$775 / \$875	\$600 / \$700	\$365/ \$465
Full-Time Student / Fully Retired /				
Uniformed Military	\$285 / \$335	\$340 / \$390	\$245 / \$295	\$170 / \$220
Accompanying Spouse	\$200	\$225	\$150	\$100

All attendees registering at the non-member rate will be given a complimentary 1-year membership in AHS International.

What registration includes:

- Admittance to all technical and special sessions and entry to the Exhibit Hall during scheduled hours
- Tickets to luncheon(s) and access to all refreshment breaks
- Tickets to the Vertical Flight Foundation Reception and the Grand Awards Banquet (3 Day Registrants Only! \$89 for all other attendees.)
- Forum 70 Proceedings CD-ROM (3 Day Registrants Only! \$205 for all other attendees.)
- · Discounted attendance at the Short Courses

How to register:

- If you are an AHS member, go to www.vtol.org/my-AHS. Log in and click the link for Forum 70 Online registration under "Register online for upcoming meetings and events!" As a way of saying thanks to our loyal members, and to help celebrate 70 years of being the world's premier professional vertical flight technical society, we're offering special registration discounts at this year's Forum. Log in to My AHS to get your individual coupon code and a 5% discount for every 5 years of membership. Been a member for 20 years? You'll get 20% off! The discount applies only to online registration.
- If you are not an AHS member, you may register online by visiting our membership portal **https://ahs.portal.daxko.com**. Select the link for "Forum 70" under "Register for Featured Events." If you have previously registered on this website, log in with your existing Login ID and Password. Those who register at the non-member rate receive a complimentary 1-year membership in AHS.
- You can also download the printable registration form at **www.vtol.org/forum** and fax it to AHS at +1-703-739-9279, ATTN: Holly Cafferelli or email it to Holly at **hcafferelli@vtol.org**.
- Should you have any questions about registration, please contact Holly Cafferelli (+1-703-684-6777 x100 or hcafferelli@vtol.org).
- Exhibitors have a separate registration site. If you have already applied for exhibit space and wish to register booth personnel, the link for this site will be sent to your booth's point of contact. For further information, please contact **Liz Malleck** (+1-703-684- 6777 x 107). Speakers may not register as exhibitors.

The CD-ROM is complimentary for all Full Three-Day Registrants! Other registrants may purchase it onsite at the reduced rate of \$205.00.

Publication Bins

Publication bins will be located in the registration area stocked with the May/June 2014 issue of Vertiflite and industry relevant periodicals and literature.

Speaker Ready Room

Speakers may organize and review their presentations in the Speaker Ready Room. Hours are from 7:00 a.m. – 5:00 p.m. on Monday, Tuesday, and Wednesday and from 7:00 a.m. – 3:00 p.m. on Thursday.

AHS Novelty Desk

AHS publications, shirts, hats, mugs, key chains, golf balls and other new novelty items will be available for purchase at the Novelty Desk located in the AHS Registration area.

Technology Display

Be sure to allocate ample time to visit the Forum 70 Technology Display in the Exhibit Hall. Scores 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.

To maximize the opportunity to view exhibits, the Exhibit Hall Technical Briefings and social events such as lunches on Tuesday and Wednesday and the Exhibitor/Industry Reception are held in the Exhibit Hall. The technology display is open to registrants. AHS reserves the right to make modest changes to the Exhibit Hall hours without advance notification to exhibitors or registrants.

Exhibit Hall Hours and Events

Tuesday, May 20, 2014

11:00 a.m. – 7:00 p.m. **Exhibit Hall Open Exhibit Hall Luncheon** 12 noon - 1:30 p.m. **Exhibitor/Industry Reception** 5:00 p.m. - 7:00 p.m.

Wednesday, May 21, 2014

Exhibit Hall Open 9:00 a.m. – 5:00 p.m. **Refreshment Break** 9:30 a.m. – 10:15 a.m. **Exhibit Hall Luncheon** 12:15 p.m. – 1:45 p.m. **Refreshment Break** 3:15 p.m. - 4:00 p.m.

Thursday, May 22, 2014

Exhibit Hall Open 9:00 a.m. - 12:00 noon **Refreshment Break** 9:30 a.m. - 10:15 a.m.

Exhibit Hall Technical Briefings

Industry technical briefings from exhibiting companies will be held at the company's booth in the Exhibit Hall. Some briefings will also be conducted in meeting rooms. These briefings will provide attendees with a more comprehensive overview of the company's capabilities and services. Exhibitors are invited to contact AHS International to arrange briefings and have the announcement published in the AHS International Forum 70 Final Program. This is a genuine value-added benefit offered to exhibiting companies and attendees.

Exhibitor/Industry Reception

automatically receive tickets to this event.

Tuesday, May 20, 2014

Exhibit Halls 210, 220A and 230

All exhibitors and Forum 70 attendees registered for Tuesday will

5:00 p.m. - 7:00 p.m.

Vertical Flight Foundation (VFF) Reception and Grand Awards Banquet

Wednesday, May 21, 2014

The VFF Reception will be held 6:00 p.m. – 7:00 p.m. and the Grand Awards Banquet 7:00 p.m. – 9:30 p.m. Distinguished guests from government agencies and military branches, as well as the international vertical flight industry, will be among the attendees. This exciting event will honor distinguished award recipients for their achievements. Attendees will enjoy an excellent dinner and entertainment. Full registration includes a ticket to this event; all others must purchase tickets in advance. The event is business attire and military uniforms.

Exhibit Hall Luncheons

Tuesday, May 20, 2014 Wednesday, May 21, 2014

12 noon – 1:30 p.m. 12:15 p.m. - 1:45 p.m.

Hotel Reservations

AHS International has negotiated exceptional rates with several hotels in Montréal.

ALL ROOM RESERVATIONS MUST BE MADE ONLINE AT www.vtol.org/forum-hotel - PLEASE DO NOT CONTACT HOTEL DIRECTLY. Please book through this link as it defrays the cost of Forum 70, keeping your costs to a minimum.

To receive a discounted Forum 70 room rate, you must confirm guest room reservations by **April 16, 2014**. After April 16, Forum 70 room reservations will be confirmed on a space-available basis at the prevailing room rate. All reservations must be guaranteed by a major credit card. Guest room rates are posted in Canadian dollars. Please read and make note of hotel cancellation policies before confirming a reservation.

NOTE: if you are eligible to receive a U.S. federal government per diem rate, a federal government photo I.D. is required upon checkin to verify eligibility.



Forum 70 Exhibits

The Forum 70 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 AHS as a Forum 70 exhibitor. For more information, please contact David Renzi at AHS Headquarters (see below).

Exhibit Package Includes:

- Quality backdrop draping and divider rails.
- Booth identification sign
- Company listing in the Forum 70 Final Program
- Complimentary guest passes for distribution to your customers.
- 24-hour security in the Exhibit Hall
- One Forum 70 "FULL" registration package* for each 10' X 10' space purchased (limited to a maximum of five badges). Badges provide access to technical sessions, exhibit hall lunches and receptions, the AHS Vertical Flight Foundation Reception and the Grand Awards Banquet.
- Two exhibitor badges for each 10' X 10' unit of display space (not to exceed a maximum of ten badges). This badge provides access to the exhibit hall during scheduled hours and includes exhibitor lunches and receptions.





* The Society requests that full registration badges be issued only to personnel manning exhibit booths and not to AHS 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 (FUS) • Health and Usage Monitoring Systems (HUMS) • Mission Support • Research and Development • Safety Systems • Simulation and Training • UAVs

Exhibitor Rates

AHS Corporate Member Non-Corporate Member Educational Member \$2,650 for each 10' X 10' Unit \$2,750 for each 10' X 10' Unit \$1,950 for each 10' X 10' Unit

For exhibit information contact:

AHS International The Vertical Flight Technical Society 217 N. Washington Street Alexandria, VA 22314-2538 USA Phone: 1-703-684-6777 Toll Free: 1-855-AHS-INTL

Fax: 1-703-739-9279
Email: AHSExhibits@vtol.org
Web Site: www.vtol.org





Gain access to a leading helicopter manufacturing market.

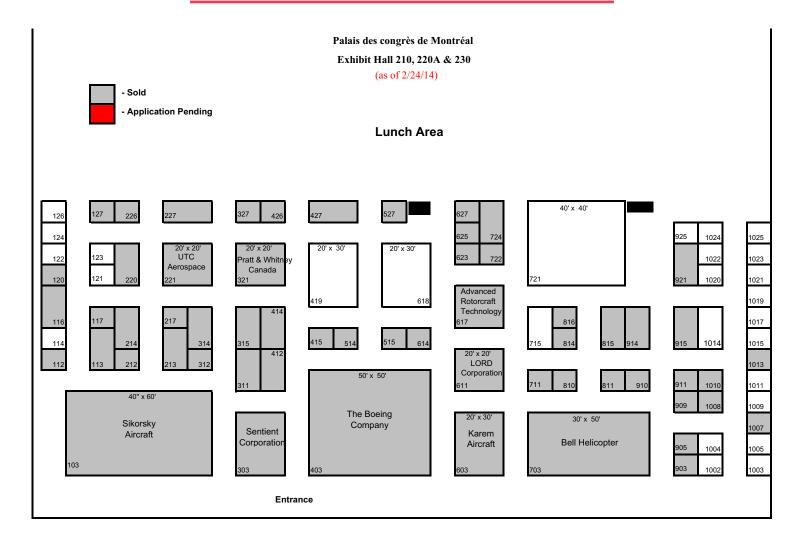
Exhibiting at FORUM 70 will introduce your company to the world's second-ranked aerospace industry center measured in terms of jobs per capita. Located in the Province of Québec, the region represents 70% of Canada's aerospace R&D spending. The Québec aerospace industry produces more than \$12 billion in sales annually, 80% from exports. Collectively, Québec's aerospace community is comprised of 200+ firms employing more than 42,500 engineers, technicians and other skilled aerospace workers. 98% of these workers are concentrated in greater Montréal.

Leading Vertical Lift Technology and Aerospace Corporations located in the region:

- Bell Helicopter Textron
- CAE
- Safran/Messier-Dowty Inc.
- Pratt & Whitney Canada
- Thales Avionics
- Esterline CMC Electronics
- Héroux-Devtek
- Bombardier Aerospace



AHS FORUM 70 Exhibitors - as of 2/24/2014



Exhibitor Booth #	Exhibitor Booth
Advanced Rotorcraft Technology, Inc	Georgia Institute of Technology100
Advanced Torque Products LLC903	Hutchinson Aerospace81
Advanced Turbine Engine Company (ATEC)427	ITT Enidine, Inc
AIAA426	Kamatics RWG90
Airbus Helicopters915	Karem Aircraft, Inc
Alcoa Fastening Systems212	Lord Corporation61
Altair Engineering, Inc217	MDS Coating Technologies Corporation31
Applied Composites Engineering (ACE)810	MicroTek Finishing, LLC61
Armoloy of Connecticut, Inc811	NSE Automatech90
Aurora Flight Sciences	Penn State University22
Automated Dynamics623	Placeteco Inc91
Avion Solutions, Inc	Pratt & Whitney Canada32
AVIOR Integrated Products1010	QuesTek Innovations LLC
BAE Systems	REM Surface Engineering100
Bell Helicopter Textron, Inc	RF System Lab32
Boeing Company403	Rotor & Wing Magazine12
CAE226	Rotorcraft Operations Ltd101
CD-adapco	RTI International Metals, Inc
Cobham	Saab Defense and Security ISA52
Continuum Dynamics, Inc314	Sentient Corporation30
Eagle Technologies LLC	Shimco North America12
East/West Industries, Inc414	Sikorsky Aircraft Corporation10
Esterline CMC Electronics	TenCate Advanced Composites72
Fatigue Technology, Inc	Triumph Aerospace Systems - Newport News
Flight Light Inc711	University of Maryland72
GARMIN USA	University of South Carolina (CBM)92
GasTOPS Ltd. 627	UTC Aerospace Systems22
GE Aviation	West Coast Industries



EXHIBIT SPACE APPLICATION AND CONTRACT

FORUM 70





Contact Information				
Exhibiting Company:				
Contact:				
Address:				
City: State: _			Country:	
Telephone:				
Email:	Web	site:		
Exhibit Space Information				
Booth Size:(N	Minimum – 10' x 1	.0')		
Booth Preference: 1 st Choice			hoice	
Early Bird Exhibit Rates (On or Before November			ates (After November 30, 2013)	
AHS Corporate Member Non-Corporate Member Education Member S2,550 per 10'x10' Un \$2,650 per 10'x10' Un \$1,850 per 10'x10' Un	it		mber \$2,650 per 10'x10' Unit nber \$2,750 per 10'x10' Unit \$1,950 per 10'x10' Unit	
List Companies you do not wish to be near: _				
List Companies you wish to be near:				
Payment Information	Cancellatio			
 ◆ Early Bird Payment due November 30, 2013 ◆ Regular Rate due December 1, 2013 ◆ 15% of total space cost through December 31, 2013 ◆ 100% of total space cost after December 31, 2013 				
Make Checks Payable to:Mail Payments to: AHS InternationalAHS International217 N. Washington Street ◆ Alexandria, VA 22314Tel: 703-684-6777 ◆ Fax: 703-739-9279 ◆ Email: AHSExhibits@vtol.org				
Credit Card Payment: Visa	MasterCard	American Expre	ess	
Card Number:		Amount: \$_		
Expiration Date:	Name on Card: _			
Card Signature:				
This application shall become a contract only upon acceptance by AH Exhibitor Prospectus, Exposition Rules and Registration Manual. This written consent of both parties.	S. If accepted, the undersign	gned agrees to abide with terms	and conditions described in the Forum 70	
Exhibitor Signature:				
AHS Signature:	Booth:	Size:	Date:	



FORUM 70 EXPOSITION RULES

1. SPACE RESERVATION

FORUM 70 exhibit space will be allocated on a first-come, first-served basis. Space requests will be accepted via mail, facsimile, and onsite at Forum 69. AHS International will make every effort to locate exhibits in accordance with exhibitor's space preferences. AHS International reserves the right to assign exhibit space subject to such parameters as booth space size, design and relationship to similar exhibits. AHS International retains the exclusive right to revise the exhibition hall floor plan and/or move assigned exhibitors as necessary.

2. SUBLEASING OF SPACE

Exhibitor may not sublet exhibit space, nor any part thereof, nor exhibit, offer for sale, or advertise articles not manufactured or sold by the exhibiting company, except where such articles are necessary for proper demonstration or operation of the exhibitor's display.

3. EXHIBIT SPACE PAYMENT

A signed exhibit application and contract with payment must be received on or before <u>November 30, 2013</u> to qualify for the "Early Bird Exhibit Rate." A signed exhibit application and contract with payment received after <u>December 1, 2013</u> will qualify for the Regular Exhibit Rate." Unpaid exhibit space may be released on **January 1, 2014** and made available for resale.

4. CANCELLATION BY EXHIBITOR

Exhibitors may reduce or cancel exhibit space by submitting written notice to AHS no later than <u>December 31, 2013</u>. If an exhibitor cancels exhibit space, AHS will charge an administrative fee of fifteen percent (15%) of the total display space cost up until <u>December 31, 2013</u>. No refunds will be made by AHS if the written cancellation notice is received at AHS Headquarters after <u>December 31, 2013</u>. All exhibit applications become a binding contract upon acceptance by AHS, including applications received without payment. An exhibitor is obligated to pay the fifteen percent (15%) administrative fee if exhibit space is canceled before <u>December 31, 2013</u>. After <u>December 31, 2013</u> the exhibiting company is obligated to pay a 100% administration fee and payment is due within 30 days from receipt of a cancellation invoice or five (5) business days prior to move-in of the show or which ever is soonest.

5. OCCUPANCY DEFAULT

Any exhibitor failing to occupy exhibit space shall not be relieved of the obligation of paying the full rental charge of such space. If not occupied by the time set for completion of the installation of the displays, such space shall be taken by AHS International, and re-located or reassigned for such purposes or use as AHS International may see fit.

6. CERTIFICATE OF INSURANCE

Upon signing the Exhibit Space Application and Contract, the exhibiting firm is asked to provide the AHS with a certificate of insurance or an affidavit that it carries \$500,000 in liability insurance applicable to its exhibiting at the AHS 70th Annual Forum and Technology Display by **March 29, 2014**

7. AGREEMENT TO RULES

An Exhibit Space Application and Contract signed by both the AHS and exhibitor representative, constitutes the complete agreement for the right to use the allocated space. AHS is not liable for resultant expenses or loss of revenue in the event that fire, flood, earthquake, strike, labor disorders, or other circumstances beyond the control of AHS prevent the use of the exhibitors' space inside the exhibit hall. The exhibitor, by accepting the allocated space, agrees to the terms and conditions and exhibit hall hours contained in this Exhibitor Prospectus, Forum regulations and subsequent bulletins. Any violation of AHS terms and conditions shall constitute a breach of this contract. AHS's remedy to any breach includes, but is not limited to, termination of any and all rights to the exhibit space assigned by AHS and the forfeiture of any fees paid.

AHS International Staff Members and Volunteers



The following AHS staff members and industry volunteers are available to assist you:

Forum 70 Programs and Events: Mike Hirschberg, Executive Director

Technical Sessions & Special Sessions:

Kay Brackins, Deputy Director

Exhibits & Sponsorships:

David M. Renzi, Director of Meetings & Advertising

Audio Visual Oversight:
Dr. Cliff Smith and Dr. Anita Tracy

Onsite Registration:

Randy Johnson, Director of Information Resources (Onsite Registrar);

and **Liz Malleck**, Director of Membership (Exhibitor Registration, Corporate Membership Contact, Awards POC)

AHS Novelty Desk:

Holly Cafferelli, Director of Administration (Pre-Forum Registrar, Novelty Sales, Proceedings, Speaker Briefing Drop-Off)

AHS International offers its sincere thanks to the Forum 70 Chairs:

Prof. Marilyn J. Smith, Georgia Institute of Technology – Forum Technical Chair

MMe. Blanche Demaret, ONERA – Deputy Forum Technical Chair

Dr. Marc Gervais, Airbus Helicopters – Acoustics Session Chair

Dr. Charles Tinney, The University of Texas at Austin – Acoustics Session Deputy Chair

Kit Borden, U.S. Army – Advanced Vertical Flight Session Chair

Michael Strauss, Sikorsky Aircraft Corporation – Advanced Vertical Flight Session Deputy Chair

Mark Potsdam, U.S. Army – Aerodynamics Session Chair

Edward Reed, Sikorsky Aircraft Corp. – Aerodynamics Session Deputy Chair

Dennis McGuire, Lord Corporation – Aircraft Design Session Chair

Dr. Richard Markiewicz, Defence Science and Technology Laboratory (DSTL) – Aircraft Design Session Deputy Chair

Dr. Melvin Johnson, U.S. Army Aviation Engineering Directorate – Avionics and Systems Session Chair

Dr. Walter Rawle, Ultra Electronics Flightline Systems – Avionics and Systems Session Deputy Chair

Dr. Akif Bolukbasi, The Boeing Company – Crash Safety Session Chair

Christof Kindervater, German Aerospace Research Center (DLR) – Crash Safety Session Deputy Chair

J. Kristin Little, The Boeing Company – Crew Stations Session Chair

Jeffery Erwin, Bell Helicopter Textron, Inc. – Crew Stations Session Deputy Chair

Dr. Matthew Floros, U.S. Army Research Lab – Dynamics Session Chair

Dr. Jinsong Bao, Sikorsky Aircraft Corp. – Dynamics Session Deputy Chair

Dr. Michael Jump, The University of Liverpool – Handling Qualities Session Chair

Joseph Driscoll, Sikorsky Aircraft Corporation – Handling Qualities Session Deputy Chair

Brian Tucker, Bell Helicopter Textron, Inc. – Health and Usage Monitoring Systems (HUMS) Session Chair

Eric-Paul Carney, NAVAIR – Health and Usage Monitoring Systems (HUMS) Session Deputy Chair

Dr. Bruce Charnov, Hofstra University – History Session Chair

Prof. Daniel Schrage, Georgia Institute of Technology – Manufacturing Technology & Processing Session Chair

William Harris, Sikorsky Aircraft Corp. – Manufacturing Technology & Processing Session Deputy Chair

Dr. Mark White, The University of Liverpool – Modeling and Simulation Session Chair

Daniel Spira, CAE Inc. – Modeling and Simulation Session Deputy Chair

John Barber, Bell Helicopter Textron, Inc. – Operations Session Chair

Terry Parisher, Northrop Grumman Corp. – Operations Session Deputy Chair

Treven Baker, U.S. Army AATD – Product Support Systems Technology Session Chair

Jason Johnson, Heli-One – Product Support Systems Technology Session Deputy Chair

Eric Sinusas, Bell Helicopter Textron, Inc. – Propulsion Session Chair

Michael Spratt, Rolls-Royce Corporation – Propulsion Session Deputy Chair

Jeffery Schaff, Sikorsky Aircraft Corporation – Structures & Materials Session Chair

Mark Gurvich, United Technologies Research Center – Structures & Materials Session Deputy Chair

Oxana Fedak, The Boeing Company – System Engineering Session Chair

Dr. Joan Pham, Sikorsky Aircraft Corp. – System Engineering Session Deputy Chair

Paul Taylor, QinetiQ Australia – Test & Evaluation Session Chair

Marc Alexander, National Research Council of Canada – Test & Evaluation Session Deputy Chair

Patrick Fabiani, ONERA – Unmanned VTOL Aircraft & Rotorcraft Session Chair

Chad Goerzen, San Jose State University – Unmanned VTOL Aircraft & Rotorcraft Session Deputy Chair

Glen Whitehouse, Continuum Dynamics, Inc. – Wind Energy Technology Session Chair

Prof. Jonathan Naughton, University of Wyoming – Wind Energy Technology Session Deputy Chair

FORUM 70 Short Courses

Short Course on Rotorcraft Technology

Monday, May 19, 2014 - 9:00 a.m. - 4:00 p.m.

Presented by Dick Bennett, Bell Helicopter Textron (Retired)

This 6-hour short course is designed to present the fundamental technology concepts associated with helicopters to professional personnel who have not had a formal introduction to rotorcraft. Upon completion of the lectures, the attendees will have a better appreciation of the helicopter complexities, a working knowledge of the helicopter terminology/vocabulary, and design practices. The lectures will focus on practical applications of the distinct classical engineering disciplines: dynamics, aerodynamics, mechanics of materials – and how these disciplines are interrelated in the modern helicopter.

The mathematical basis will be briefly covered, but the emphasis will be on the practical applications. Specific topics to be covered include: helicopter configurations, requirements for rotor blades and hubs, isolated rotor aerodynamics, fuselage vibrations, handling qualities, and the helicopter design process.

The lectures will be supplemented with actual helicopter hardware and video clips illustrating the lecture topics. Class handouts will include all PowerPoint files, video clips, and a copy of the text "Introduction to Helicopter Analysis" (as a pdf file).

Cost: \$350

Lecturer: Dr. Richard L. (Dick) Bennett.

Dr. Bennett retired from Bell Helicopter's research department in 2001, after thirty-five years of focusing primarily on the areas of rotor aeroelasticity, helicopter flight simulation, and active fuselage vibration control systems. Since retirement he has served as rotorcraft consultant to Lockheed Martin, Boeing Helicopters, Sikorsky, LORD Corporation, BAE, Moog, Bell Helicopter, and the National Research Council Canada. He has been a long-time lecturer at The Pennsylvania State University's "Rotary Wing Technology Short Course."

Short Course on the Aerodynamics of Helicopter Accidents

Monday, May 19, 2014 - 9:00 a.m. - 4:00 p.m. Presented by Jack Cress, Vortechs Helicopter Analytics

This course will cover hover performance, transition to forward flight, downwind effects, anti-torque issues, rotor system characteristics (articulated, teetering, bearingless, hybrids), turboshaft engine characteristics, high speed forward flight characteristics, descent phenomenon (VRS, autorotation), dynamic rollover and ground resonance.

The course is taught by Jack Cress, a former helicopter pilot and aeronautical engineer. He has 40 years of experience teaching short courses on related topics. The course would be beneficial to pilots, young engineers, prospective investigators and to experienced engineers interested in the interface of rotorcraft technology and common operational challenges. Participants will receive a notebook and a CD of the course material.

Cost: \$350

Lecturer: John P. (Jack) Cress

Mr. Cress was a career helicopter pilot in the U.S. Marine Corps (USMC), having flown nearly 4,000 hours during his near 25 years of military service. His non-flying duties included those of a NAVAIR Program Director, Depot Engineering and Quality Officer, and IMA Maintenance Officer. He also was twice assigned to the U.S. Navy's Aviation Safety School, where he initiated the course in helicopter aerodynamics and also taught elemental structural failure analysis. He has taught related courses for the University of Southern California, the NTSB, and at various international venues. Mr. Cress earned a B.S. in Aeronautical Engineering from the Ohio State University in 1967, and completed course work for the M.S. in Aeronautical Engineering at the Naval Postgraduate School in 1979. He also earned the Program Manager credential from the US Defense Systems Management College in 1991. Following military service, Mr. Cress was employed as a product manager with Simula Safety Systems, where he was closely involved in the development of crashworthy, energy-absorbing seating systems for numerous rotary wing aircraft. Mr. Cress is currently the proprietor of Vortechs Helicopter Analytics, where he serves in investigational, instructional, and consultancy roles relating to various domestic and international operations. He maintains active memberships in the International Society of Air Safety Investigators (ISASI), the ASM International and AHS International.



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