



# Canadian Aeronautics and Space Institute Institut aéronautique et spatial du Canada

Patron  
H.R.H. Prince Philip  
Duke of Edinburgh

**\*\*\* FOR IMMEDIATE RELEASE \*\*\***

**May 4, 2012**

## **CANADIAN AERONAUTICS AND SPACE INSTITUTE ANNOUNCES 2012 SENIOR AWARD HONOUREES**

Mr. Dave Muir, President of the Canadian Aeronautics and Space Institute for 2012-13, announced today the recipients of the 2012 CASI Senior Awards.

The Awards and the recipients are:

1. Trans-Canada (McKee) Trophy  
Mr. Dave Kroetsch and Mr. Mike Peasgood, Aeryon Labs Inc.
2. McCurdy Award  
Professor David Zingg, Institute for Aerospace Research, University of Toronto
3. C.D. Howe Award  
Mr. Clive Beddoe, Westjet Airlines (retired)
4. Alouette Award  
Neptec Design Group Ltd. (team award)
5. Roméo Vachon Award  
Mr. Gerald Sullivan, Department of National Defence

The criteria for each of the Senior Awards and the credentials of the recipients are found on the following pages. Presentation of the Senior Awards will take place during the Senior Awards Reception and Gala Dinner on the evening of Wednesday May 1, 2013 during the CASI 60<sup>th</sup> Aeronautics Conference that will be held at the Royal York Hotel in Toronto, Ontario.

For more information, please contact the headquarters of the Canadian Aeronautics and Space Institute at (613) 591-8787.

**... details on the following pages ...**



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## McCurdy Award

The McCurdy Award was introduced in 1954 by the Institute of Aircraft Technicians, one of the aeronautical groups that amalgamated to form the Canadian Aeronautics and Space Institute. The award commemorates the many engineering and other contributions made by John A.D. McCurdy during the first stages of the development of an aviation industry in North America.

The award is presented for outstanding achievement in the science and creative aspects of engineering relating to aeronautics and space research. The achievement must constitute the most significant contribution made in recent years toward the advancement of science and technology in aeronautics and space exploration, and must be worthy of special recognition. The contribution may be administrative in nature, but it must be directly related to science and technology, and have been sustained over a number of years at an imaginative and creative level above that which would normally be considered a competent and successful performance. The recipient shall have been a Canadian citizen at the time the contribution was made.

## Dr. David W. Zingg

In 1991 David Zingg, then a young assistant professor at the University of Toronto Institute for Aerospace Studies, obtained a contract to perform "Navier-Stokes Computations of Multi-Element Airfoils" from De Havilland Inc. The resulting work laid a solid foundation for the development of robust methods of aerodynamic analysis using a mathematical modelling approach called computational fluid dynamics, or CFD. Over the years, Prof. Zingg's research has focused on solving fluid dynamics problems with increasingly accurate physical modeling: inviscid flows, viscous flows, laminar and turbulent flows in the compressible realm.

Prof. Zingg has also developed strong competencies in numerical discretization and linear/non-linear systems of coupled equations, and has focussed much of his research on aerodynamic optimization using the discrete adjoint approach for multi-point airfoil design. Recently his research has explored multidisciplinary design optimization (MDO) approaches in the solution of coupled aero-elastic problems. Throughout his work, Prof. Zingg has repeatedly leveraged the knowledge acquired under various research contracts to foster a deeper understanding of the subjects he seeks to elucidate.

In parallel with his research efforts, Prof. Zingg also contributes to the advancement of science through a variety of leadership roles. These include his position as Director of the University of Toronto Institute for Aerospace Studies as well as his participation in various committees, including the supercomputing facility at the University of Toronto (SciNET). Prof. Zingg also is the recipient of the J.A. Bombardier Foundation Chair in Aerospace Flight.



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Dr. Zingg has collaborated with many outstanding organizations including Bombardier Aerospace, Pratt & Whitney, CRAY inc., the Defense Research Establishment and NASA on projects which have directly contributed to Canadian industry, as well as to the international scientific community. Professor Zingg has trained some 44 M.Sc.'s, 25 Ph.D.'s, and 4 Post-Doctoral fellows who are pursuing successful careers in Bombardier Aerospace, Pratt & Whitney Canada, MDA, NASA and several leading universities. His ability to carry out fundamental and applied research combined with his leadership skills earned him a position on the Board of Directors of the Green Aviation Research and Development Network (GARDN) that brings together government, academic, and industrial partners to foster the development of technologies to reduce aircraft noise and emissions.

David Zingg's impressive list of outstanding achievements and contributions includes scientific advances through algorithm developments, dissemination of results through highly-regarded publications and textbooks, and the development of highly qualified personnel, facilitating technology transfer to industry, national laboratories and academic institutions worldwide. These sustained contributions, which have increased in scope and breadth in recent years, make Prof. Zingg an ideal candidate for the Canadian Aeronautics and Space Institute McCurdy Award.