



## NEWS RELEASE

For Immediate Release

# Research Manitoba Announces New Partnership with Volatus Aerospace in Preparing High School Students for Careers in STEM and Aviation through the SEAR Program

February 8, 2023 – Winnipeg, Manitoba

[Research Manitoba](#) is proud to announce its new partnership with [Volatus Aerospace](#) with grant funding of \$500,000.00 committed over three years towards the expansion of its **Science Experiential Aerial Research (SEAR) Program** that will be offered in participating school divisions throughout Manitoba.

The SEAR Program is designed to partner high school students with industry to research unique alternatives to solving relevant community sustainability issues. For the two projects in Manitoba, Volatus Aerospace will provide drones equipped with remote sensors to gather aerial data in targeted areas and apply machine learning analytics tools to identify the possible presence of Dutch Elm disease—a significant threat to the health of their urban tree canopy—and crop disease in specific crop varieties local to the region such as canola, lentils, and wheat. A minimum of 195 high school students (grades 9-12) from Manitoba School Divisions will develop important STEM (science, technology, engineering, and mathematics) skills by working with Volatus Aerospace.

*“Our government is proud to support the brand-new SEAR program, a first for Manitoba” said Jeff Wharton, Minister for Economic Development, Investment and Trade. “This continues our commitment of supporting the development of exciting growth industries in Manitoba, investing in our youth, and paving the way for future economic growth in our province.”*

*“The SEAR Program is the first of its kind that Research Manitoba has ever funded in relation to aerial robotics research and how drones are advancing scientific research,” said Karen Dunlop, CEO of Research Manitoba. “We are thrilled to be a part of this important initiative that enables students to participate in research with industry as part of their high school education. STEM education not only teaches students how to think critically, solve problems and use creativity, but it also prepares students for further learning and careers in areas that are predicted to experience significant growth which is good for students, and our future economy.”*

Through a comprehensive year-long program, students will take part in almost every stage of the scientific discovery process, culminating in a “Data Collection Field Day,” which will apply the skills learned throughout the year. During the Data Collection Field Day, students will collect aerial and ground-based data samples alongside researchers from the University of Winnipeg to assess the growth and health conditions of the targeted areas.

*“The SEAR program is an exciting program that will provide Manitoba students an opportunity to develop important STEM skills and help motivate and inspire young people said, Education and Early Childhood Learning Minister Wayne Ewasko. I look forward to seeing students excel and further their learning within the SEAR program.”*

*“This is an exciting project on so many levels,” said Glen Lynch, CEO of Volatus Aerospace. “Not only does it represent an investment in our youth, but the result will facilitate the early detection of Dutch Elm disease, a costly, deadly disease affecting all species of elm trees allowing for early treatment. Similarly, early detection of crop disease will allow our producers to protect valuable food stocks and preserve their yield.”*

Students will be encouraged to continue with the SEAR Program, where they will be exposed to increasingly more complex aspects of drone and machine learning technologies. In addition, students will have the opportunity to work towards obtaining their Transport Canada Basic or Advanced RPAS pilot certificates throughout the program. The professional training and knowledge that students obtain from the program will enable them to pursue career opportunities in STEM as well as the drone industry, aviation, and aerospace. The program is currently open and accepting applications from Manitoba-based school divisions interested in taking part in either of the *Dutch Elm Disease*, or the *Crop Disease* projects, during the 2022-2023 school year.

*“The SEAR Program has been a personal passion since we first launched it in 2021 with Seven Oaks School Division in Winnipeg,” said Matthew Johnson, Regional Vice President, Prairies & Director, Education for Volatus Aerospace. “Through these programs, we are able to engage students in the process of solving real-world problems while providing them with a learning opportunity usually limited to funded university-level programs.”*

Leveraged funding for Volatus Aerospace’s SEAR Program is \$1,238,283 from project partners which include the funding provided by Research Manitoba and the Government of Manitoba, as well as contributions from Southport Aerospace, Winnipeg Airports Authority, Roquette, Integrated Crop Management Services, and additional support from the City of Winnipeg, and Manitoba Aerospace.

-30-

## **To learn more about Research Manitoba please contact:**

### **About Research Manitoba**

Research Manitoba is a provincial research agency funded by the government of Manitoba that promotes, supports, and coordinates the funding of research excellence and innovation in health, natural and social sciences, engineering, and the humanities. Research Manitoba supports local talent development by providing research support to early career researchers and graduate students, along with fostering strategic partnerships to strengthen research and innovation in Manitoba. Learn more at [www.researchmanitoba.ca](http://www.researchmanitoba.ca).

### **Tammy Hildebrand, Manager, Communications**

Research Manitoba

P: 204.797.3258

E: [tammy.hildebrand@researchmb.ca](mailto:tammy.hildebrand@researchmb.ca)

## **To learn more about Volatus Aerospace and how your high school can participate in the SEAR Program please contact:**

### **About Volatus Aerospace Corp.**

Volatus Aerospace Corp. is a leading provider of integrated drone solutions throughout North America and growing into Latin America and globally. Volatus serves civil, public safety, and defense markets with imaging and inspection, security and surveillance, equipment sales and support, training, as well as R&D, design, and manufacturing. Through our subsidiary, Volatus Aviation, we are introducing green and innovative drone solutions to supplement and replace traditional aircraft and helicopters for long-linear inspections such as pipeline, energy, rail, and cargo services. Volatus is committed to carbon neutrality; the fostering of a safe, equitable, and inclusive workplace; and responsible governance. Learn more at <https://volatusaerospace.com/>.

### **Danielle Gagne, Head of Marketing and Communication**

Volatus Aerospace

P: 579.977.5066

E: [danielle.gagne@volatusaerospace.com](mailto:danielle.gagne@volatusaerospace.com)