## Kevin R. Elwood

8257 County Rd 91, RR4, Stayner, ON L0M 1S0 Canada Tel: 705-444 9461 Email: kelwood@clearviewnursery.com

#### Kevin R Elwood

Corporate pilot, Business Owner and Operator, Southern Ontario Director Canadian Owners and Pilots Association 2018 - present. Elected Municipal Councillor 2014-2018.

Airline Transport Pilot. Aircraft Owner Cessna 150, Piper Cub, Cessna 206.

I have no person interest in the outcome of this appeal.

I have had a long-time love of flying. I began flying lessons on October 1, 1986 and have been flying ever since. I received my private pilot licence on May 1, 1987 and my commercial pilot licence on May 11, 1988. From there, I have improved my skills and certification, obtaining a seaplane rating (June 6, 1988), night rating (March 1, 1988), instrument rating group 1 (May 24, 2001) and Airline Transport Pilot Licence "ATPL". After 30 years of aviation I have a network of industry relationships from recreational pilots through to professional pilots, maintenance engineers and airport operators.

While flying is my passion, it is also my business and supports my family. I am a currently a Professional Pilot Captain flying the DeHavilland Turbo Beaver. Prior to this, I was a corporate pilot with Barrick Gold Corp from 1997 to 2006 piloting Gulfstream Aircraft. I have 5800 flight hours having flown in every province and Territory of Canada and most of the continental US and Europe.

In 1996 I established Clearview Aerodrome, Stayner, Ontario Canada CLV2 and have continued to develop and expand this rural aerodrome. In 2012 we constructed a large aircraft hangar at Collingwood Regional Airport to house many of the aircraft I pilot manage on behalf of others. See **Appendix #1** Kevin R Elwood Witness statement.

In early 2010, the Province of Ontario passed legislation known as The Green energy Bill 150 to facilitate the development of electricity from renewable sources.

A renewable energy developer wpd Canada proposed a wind turbine project in Clearview Township, Simcoe County with turbines adjacent to Clearview Aerodrome CLV2 and in close proximity to Collingwood Regional Airport CNY3.

Under the Provincial legislation Bill 150 there were no provision for appropriate setbacks from aerodromes to ensure continued safe airport operations.

This lack of aviation jurisdiction resulted in the project being approved by the Director of the MOECC.

[1] On February 11, 2016, Mohsen Keyvani, Director, Ministry of the Environment and Climate Change ("MOECC") issued Renewable Energy Approval No. 3948-9RDLRF ("REA") to wpd Fairview Wind Incorporated ("Approval Holder"), granting approval for the construction, installation, operation, use and retiring of a Class 4 wind facility with eight wind turbines and a total name plate capacity of 16.4 megawatts ("Project"). The Project is proposed to be located in Clearview Township, Simcoe County, Ontario ("Project site").

# Kevin R. Elwood

8257 County Rd 91, RR4, Stayner, ON L0M 1S0 Canada Tel: 705-444 9461 Email: kelwood@clearviewnursery.com

Shortly thereafter, within the file for appeal period, myself and my wife filed an appeal against the approval along with other parties.

[2] On February 19, 2016, John Wiggins, and on February 26, 2016, Gail Elwood, Kevin Elwood, Preserve Clearview Inc., the Corporation of the County of Simcoe ("Simcoe"), the Corporation of the Township of Clearview ("Township of Clearview"), and the Town of Collingwood ("Collingwood") (jointly "the Appellants") appealed the REA to the Environmental Review Tribunal (the "Tribunal") under s. 142.1(2) of the 3 16-36 *Environmental Protection Act* ("*EPA*"). Each Appellant appealed on the grounds that the Project will cause serious harm to human health and serious and irreversible harm to plant life, animal life and the natural environment.

As per the Environmental Protection Act an appeal hearing was carried out by an Environmental Review Tribunal in the Province of Ontario May 16 to 19, and May 30 to June 3, 2016 in Collingwood, Ontario.

With the resulting ruling being issued October 07<sup>th</sup> 2016 based upon the aviation evidence and expert testimony delivered.

### Appendix #2

[175] As the Tribunal has found that the Health Test has been met in respect of the current operations at CRA and Clearview, and that the Approval Holder's proposed mitigation measures in respect of both aerodromes will not significantly reduce the likelihood that such harm will occur, or, if there is some reduction in the likelihood of harm, the reduction is not to a degree that would result in the Health Test not being met, the Tribunal finds that the Appellants have met their onus to establish that the Health Test has been met in respect of the Project's effects on persons using both aerodromes.

Wind turbine location Connexions Clearview Aerodrome, Stayner, ON and Homan Aerodrome, Gray, SD USA.

Aviation Report Prepared by Aviation Systems Inc. Invenergy Deuel Harvest North Project ASI # 18-N-0437.030

Not relevant to Homan Aerodrome as it does not take into consideration this aerodrome's operations nor assess the negative impacts to flight operations as presented by the proposed wind turbines in close proximity to the aerodrome.

The proposed turbine locations 105,106,107,108,117,124,123,122 are all within 10 rotor diameters of the flight procedure airspace for light aircraft taking off and landing at Homan Aerodrome.

Paragraph 167 of the ruling states that although right hand circuits can be conducted to avoid obstacles when circuiting an aircraft for landing it is the industry standard procedure to conduct left pattern circuits. Any deviation from standard circuit procedures induces a greater degree of risk and error by a pilot. Also noted is that a third party cannot control the use of another's procedures. The use of standard procedures promotes safety. Proposed turbines located to the

# Kevin R. Elwood

8257 County Rd 91, RR4, Stayner, ON L0M 1S0 Canada Tel: 705-444 9461 Email: kelwood@clearviewnursery.com

west of Holman Aerodrome runway 36 will require a right-hand circuit for landing. This will raise the safety level of risk thru a non-standard procedure for a pilot conducting this maneuver.

Witness statement report prepared by Duncan, Hutton for the Fairview Wind Turbine project in Stayner ON Canada exemplifies the inherent high level of risk associated with General Aviation accidents occurring at private aerodromes like Homan Field.

#### Appendix #3

The Deuel Harvest North Project Wind Farm will present an increased risk to pilots in flight phases that already account for near to 70% of all GA accident types - takeoff, climb, descent, approach, landing and low energy (low speed & altitude) maneuvering.

When a pilot is challenged to keep an aircraft safely under control such, as during an overshoot maneuver, the pilot will be distracted from the primary task of flying the aircraft if distracted by the need to navigate and avoid wind turbine obstacles. With the added high probability of wake turbulence from the wind turbine rotors during this already critical phase of slow flight and the pilot may very well lose control of the aircraft resulting in a fatal accident.

The proposed wind turbines in close proximity to the runway are located upwind in the prevailing westerly winds from Homan runway 18/36. This will blanket the airspace to the west of the runway in wake vortices from the wind turbine rotors more frequently than other regions around the runway.

With a standard left-hand circuit procedure for runway 36 this will place the aircraft in danger throughout the circuiting procedure and landing.

Even if the operator of Homan Aerodrome adopted the non-standard procedure of right-hand circuits to runway 36 the aircraft would be exposed to wind turbine wake turbulence when turning from base to final for runway 36. The turn is also known in aviation as the "graveyard" turn as this is a critical slow phase of flight. If the added complication of invisible rotor vortices is introduced it will present the unsuspecting pilot with an unrecoverable aircraft upset close to the ground.

The evidence and expert testimony that has been accepted by the Courts in Canada, with respect to the negative effects and safety risks to aviation when locating wind turbines in close proximity to an aerodrome, is irrefutable. Those who choose to approve a wind project in similar proximity to an aerodrome are doing so with the explicit knowledge that they are accepting the safety risks and threat of irreversible harm to human life.

Appendix #4, Appendix #5, Appendix #6