

Is Agricultural Aviation Getting Blown Away With The Wind?

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Many Americans want to utilize renewable energy, including wind power, to reduce dependence on foreign energy and resources. Many of those same individuals would also like to keep enjoying a safe and abundant food supply they have become accustomed to eating. What they may not know is the conflict between the agricultural aviation industry and the wind energy industry raging right under their noses. Creation of wind turbines and meteorological towers are creating crowded airspace, dangerous for even the most skilled pilots trying to control pests on America's farmlands. Most of these towers are not marked and their locations are not disclosed to the pilots. Equally, wind turbines pose different problems that when operation, they are not stationary like conventional towers. This creates a dangerous and precarious dilemma that is not receiving the attention it deserves.

The most obvious concern is with pilots' safety. According to the National Agricultural Aviation Association (NAAA), 24% of agricultural aviation fatalities in the past ten years have been attributed to collisions with wires or towers. Most towers are constructed without consulting surrounding farmers, are not clearly marked, and most do not stand without an array of wires to hold them up. Both the towers and the wires present agricultural aviators with additional challenges when flying. In addition as noted by the NAAA, crowded airspace does not just affect agricultural aviators, but emergency helicopters, aerial firefighters, or any other aerial vehicle trying to access the space. Another concern would be a crop pest emergency – if the airspace is filled with towers and turbines, ground application would not be nearly as fast or could not respond as rapidly as aerial application could. Safety is obviously the primary concern for the agricultural

aviation industry, but the wind energy constituents have some of their own concerns to consider.

Renewable energy is a very popular issue in politics today – there is no right answer where the energy should come from. The United State Department of Energy estimates that 20% of the nation’s energy is expected to be supplied by wind by 2025 (NAAA, 2010). The wind turbine industry has its supporters, arguing that it creates new jobs, stimulates the economy, and provides an alternative solution to current energy sources. For instance, the Governor’s Wind Energy Coalition, a group made up of state governors, estimates that the wind energy plan in Colorado will create an initial 3,523 jobs, 560 long-term jobs, and will provide \$53 million to local economies (2009).

From the outside, these are impressive statistics. But examined more closely, the entire agricultural industry in the United States sustains an astronomical 181 million jobs (USDA, 2008). Of those, 3200 are agricultural aviation pilots, 90% of which own their own companies (NAAA). Many agricultural aviation companies are family-run, passing through many generations, and most pilots have years of experience. Agricultural aviators understand the risks associated with the emergence of more towers and turbines, but also understand the benefits of the towers and turbines and are working to provide solutions that could appease both groups.

Some steps have already been taken to try to address the growing safety concerns. A group called Wind Energy Aviation Safety Working Group developed in Minnesota works on developing “lighting and marking standards for met towers” as well as developing a “model zoning ordinance for met tower markings, painting and reporting (AgWeek, 2010). South Dakota recently passed a law stating that any tower 50 feet and above must be

marked, painted, or flagged to make them more visible in daylight hours. The top part of South Dakota's tall towers are required to be painted "aviation orange" and white and have marker balls on outside wires (Cajella, 2010). In addition, both Wyoming and Nebraska have passed legislation allowing met towers and wind turbines, but with the safety requirements making them visible and communicated to agricultural aviators. These are a few examples of what could be done to protect pilots without unduly burdening the process of installing future meteorological towers and wind turbines.

The future rests in public education of the importance of agricultural aviators' safety in relation to the trend in meteorological towers and wind turbines. Both industries are profitable and steady, but they are starting to share the same space. As the citizens of the United States move towards renewable energy, partially through wind power, they also need to remember the importance agricultural aviation plays within the agricultural industry. Cole Gustafson, a NDSU biofuels economist, reminds us that in addition to being unsightly, towers and turbines are noisy, can restrict certain communications, and can affect the limits of aerial crop protection with their continued growth. (2009). With a continued persistence to get their voice heard regarding aerial safety, agricultural aviators deserve to have their concerns brought to the forefront, rather than swept away with the wind.

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