

## **The Value of Ag Aviation in My Local Economy**

Economies all over the world benefit from the value of ag aviation, but the benefits on the local home front are greater than we often realize. For the eighteen years I have been alive, I have spent almost every summer in Jefferson, Iowa, where my dad and uncle are agricultural pilots, and my brother is an aviation ground crew member. Through this, I have had the opportunity to witness the process through which ag aviation increases the financial gains of the local economy, preserves soil integrity and nutrients for the economy of future generations, and serves as a small business networking center for the agricultural community.

The local economy of Jefferson, Iowa, is financially sustained by the crop industry surrounding it. Without the profits from the usual cash crops of corn and soybeans, the local economy would not be what it is today. Ag pilots are a necessary part of keeping these crops in pristine condition during the growing season. One of the most significant ways that my dad and other ag pilots keep these crops healthy and yield-increasing is through careful attention to appropriately applied fungicides and insecticides. These protective chemicals aid in raising yield percentages which help keep the local economy strong. From the ground up, ag pilots work hard to prevent soil compaction and eliminate crushed crops. A study done by Purdue University found that approximately 1.5 to 5 percent of soybean crops are damaged by ground rigs (Hanna, Shane et al.). This decreases overall crop yield, negatively affects the financial outcome for farmers, which leads to negative effects on the local economy. With ag aviation, farmers can

almost entirely eliminate ground rig damage. My dad and his fellow agricultural aviators give value to our local economy by helping to increase crop yields.

Without ag aviation, the value of our town's surrounding soil would decrease. The importance of maintaining and regenerating the soil of crop land cannot be overstated, as this land has been and will continue to be passed down through generations. According to the National Agricultural Aviation Association, cover crop is one of the most promising conservation methods in agriculture ("Environmental Benefits"). Through the aerial application of cover crop, ag aviators help increase "soil health and biodiversity," while also working to reduce soil erosion ("Environmental Benefits"). Agricultural aviation has been increasingly working with seed companies to apply cereal rye, oats, radish, turnip, and other crops to add nitrogen back into the soil. Farmers try to have their cover crop planted as soon as possible, and often this is right before harvest when the corn and beans are fully grown (Bader). To prevent ground rigs from trampling the harvest ready crops, farmers must hire ag aviators to effectively seed the fields for cover crop. The soil which produces the crops is the lifeblood of our economy and its maintenance should remain a top priority for future generations. With ag pilots at the forefront of this important task, the future of the crop industry is bright.

When looking at the value brought to the local economy through agricultural aviation, it is incredibly important to understand the local, small business side of the ag aviation office. Stott Aerial Spray Inc. is the business which my dad works for, and it is through this small, local business that we are able to see the community bringing value to the economy. Not only does the small business provide jobs for local students looking for summer work, but it also serves as a large consumer of fuel, chemicals, and food for crew and pilots. The small business works as a headquarters for many local farmers, pilots, fuel truck drivers, seed company ambassadors,

neighbors, and friends to come together, network, and create a community. This sense of community is at the heart of ag aviation and the agricultural community.

The value of a small ag aviation business is immense in a local economy. Hundreds of thousands of dollars come and go in an agricultural aviation office: hundreds of thousands in fuel, hundreds of thousands in insurance, hundreds of thousands in chemicals. This much money flow in our community strongly promotes a prosperous economy, and also allows for the growth and collaboration of other small businesses. Seed companies and chemical suppliers chose to locate in Jefferson, Iowa because of the available local collaboration. With the arrival of new businesses, taxes paid to the city of Jefferson increase. Some of these additional funds will go towards improvements in local transportation, education, law enforcement, and other areas that aid the economy. Each new collaboration in the agriculture business by ag aviators adds increasing value to our local economy.

As the soil is the essence of the crop commerce, small businesses are the essence of American industry. Without the competition and wage fluctuation that small businesses bring, monopoly can thrive and hurt local economies. If one ag aviation business owned every spray operation in the United States, farmers would have no choice of where to get their aerial application, thus there would be no competition and little improvement in technology, policy, and application. "...small companies generate 1.5 million jobs a year and account for 64% of new jobs in America. Small businesses also contribute 44% of the U.S. economic activity, so as the number of new businesses grows so does their economic contributions"("How Do Small Businesses"). Because my dad has the choice to work for the small, locally owned business of Stott Aerial Spray Inc., economies and individuals all over the U.S. can thrive.

As the demand for ag aviation increase, the job opportunities within the local economy increase as well. Often spray corporations receive requests for mosquitoes and other harmful insects to be eliminated from public areas like parks, walking trails, and campsites. This is vitally important as mosquitoes can carry horrible diseases such as West Nile, Zika viruses, and others (Helmer). Each year my dad eliminates the mosquito threat at a local boy scout camp, allowing these kids to enjoy their summer full of adventure and education, free from the fear of mosquitoes and potential disease. When the church camps and boy scout camps around our town lose business due to harmful bugs, our local economy loses money. Many people are driven inside during beautiful summer afternoons due to mosquitoes, yet the services of aerial applicators reopen these closed doors and allows for community activities to begin again and for the local economy to run prosperously.

With increases in job opportunities, work staff increases, and new jobs are created within the economy. Along with students at the local high school, farmers from the surrounding areas visit our airport. During peak spray season, many of these farmers work as ground crew for the pilots who are spraying their fields. This works very well with farm rotation, as farmers can transition to work with the ag aviators who are spraying their fields. Often local farmers will frequent the airport simply to network. They visit with the company staff, offer their assistance to the ground crew, and occasionally stop for dinner with the pilots. Not only are these two different jobs able to help each other in special ways, but they are also able to bring the community together with a common goal: to create a prospering and producing local agricultural economy. This symbiotic relationship between ag aviators and farmers keeps the farming spirit strong and brings incredible value to our local economy.

A well run, effective airport brings local jobs to the community, and promotes the business of aerial application. According to the article *Uses and Benefits of Aviation in Iowa*, “As a result of on-airport activity, additional induced employment is created. Induced impacts associated with the day-to-day operation of general aviation airports add 711 full-time jobs. When direct and induced airport-related employment impacts are combined, 1,713 jobs are attributable to the general aviation airports included in this study”(“Uses and Benefits”).

This increase in jobs is very important for a prosperous, local economy. I have had the opportunity to see local high school students take jobs at our airport to earn money for college. Many of these students go to study agriculture, and often come back to their hometown to assist in local agricultural businesses. Because they worked at our local airport, these students are able to contribute to supporting our local economy, while also improving their own lives through education.

Some of my earliest memories are of driving down dirt roads looking for my dad in his large, yellow airplane. It was thrilling to be the first to spot him, and as we watched the plane dip and dive across vast fields, I marveled at the skill of ag aviators. As I have grown, the implication, importance, and value of what my dad has been doing for our local economy has also grown. Financially, ag aviators save local farmers money and protect their investments; agronomically, these pilots protect the soil – the lifeblood of our economy – for future generations by providing cover crop; communally, local jobs are provided and people are brought together with a common goal. My local economy would be considerably weakened without the support and value which ag aviation brings, and the gratitude which my community and I have for this organization is inexpressible.

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