

PRO- AG

# Attachment A

## Business Plan

### Executive Summary:

Technology and precision application stand at the forefront of the Agricultural industry's future, and Jeff Johnson is dedicated to democratizing this technology for local producers across the Central City Area. We are looking at apply our own fungicide and foliar fertilizers to help promote research and development on our farm. With the support of this grant, our goal is to extend our reach to our 3000 acre farm and research 100 acres to provide data to our operations. We want to help others with developing nutrition and chemical application to benefit the future generations.

### Project Proposal:

Our Farm we will use one T 40 spray drone. Spray drones represent a transformative tool in agricultural research and application efficiency, offering unprecedented precision and cost-saving benefits. By utilizing spray drones, researchers can conduct targeted experiments with greater accuracy, delivering precise amounts of treatments to designated areas within large-scale fields. This capability enables researchers to assess the efficacy of various treatments, such as fertilizers, pesticides, and herbicides, with meticulous control over application rates and coverage. Moreover, the use of spray drones minimizes wastage of resources by precisely targeting treatment areas, reducing the overall amount of chemicals needed and subsequently lowering operational costs. This not only translates to significant savings for farmers but also contributes to environmental sustainability by minimizing chemical runoff and mitigating potential ecological impacts. Spray drones thus serve as invaluable assets in advancing agricultural research while simultaneously optimizing resource utilization and promoting sustainable farming practices.

### Timeline:

- i. Step 1: Obtain FAA Tracking Number - Obtaining currently
- ii. Step 2: Schedule appointment with testing center - By End of May
- iii. Step 3: Pass "Unmanned Aircraft General-Small (UAG)" exam
- iv. Step 4: Complete FAA Form 8710-13 for remote pilot certificate

Once above is confirmed and with the help of Ference agronomy LLC. We will set up research and trails on 100 acres across the operation. Also prepare to apply on our own acres, and neighboring operations to help during fungicide.

**Sustainability:**

Ensuring the sustainability of our spray drone project over the next five years is paramount, and our approach is underpinned by robust evidence and clear strategies. Firstly, we've conducted thorough research into the long-term viability of integrating spray drones into our agricultural operations, analyzing factors such as cost-effectiveness, environmental impact, and technological advancements. By leveraging data-driven insights and industry trends, we've developed a comprehensive plan that accounts for potential challenges and opportunities. Our strategy includes regular maintenance schedules to prolong the lifespan of the drones, continuous staff training to stay updated on the latest technologies and regulations, and ongoing partnerships with drone manufacturers and agritech experts for technical support and innovation. Additionally, we're committed to diversifying our revenue streams by offering drone services to neighboring farms and exploring opportunities for collaboration with research institutions and government agencies. By implementing these strategies and remaining adaptable to evolving market conditions, we're confident in the long-term success and sustainability of our spray drone project, ensuring its positive impact on our agricultural practices for years to come.

**Budget**

Cost

1 T 40 DJI Drones with Batteries, Spreaders, and accessory for agriculture application -	31,000
Generators for batteries	1,050
Plumbing for application	450

**Total-** 32,500

Funding

Pro Ag Grant - 55 % of the Drone cost	17,875
Jeff Johnson	14,625

Total- 32,500

## **Financial Projects**

We already have the labor and manpower to make this possible. We will be saving a potential 25,000 dollars to apply it ourselves. Also be able to spot treat weeds in a field instead of blanket treatments. This will save us thousands of dollars of chemicals from being applied on our fields.

### **Cost benefit analysis:**

By potentially saving up to \$30,000 on application costs through the implementation of efficient technologies like drones, Jeff Johnson gains additional financial resources to invest in research aimed at optimizing his entire operation. With these savings, Jeff can allocate funds towards conducting comprehensive analyses to identify areas where costs can be reduced by 10 percent across his farming practices. This research may involve exploring innovative cultivation techniques, adopting precision farming methods, or optimizing resource management strategies. By leveraging these additional funds for research and development, Jeff aims to enhance operational efficiency, minimize input costs, and maximize profitability across his entire farming enterprise. Ultimately, the savings realized from efficient application methods empower Jeff to invest in initiatives that drive long-term sustainability and prosperity for his farm.