Are you Making the Profit you Need?

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Motivation

- Increasing competition from various operators for spray jobs
  - Custom ground applicators, farmers, and undercutting
- Profit margin is set to cover costs and achieve desired profit to stay in the business
- What are your probabilities of getting that profit margin?
To get that profit margin..

- What is the best price to charge?
- Would there be a range of prices you can work with for a spray job?
- Is there a range of profit margins?
- Is your current profit margin enough
  - To cover the next big purchase?
  - To overcome unforeseen contingencies?
To get that profit margin..

- Does your current profit margin cover all of your expenses?
- How would you know when to go ahead with an application or just say no?
- What aircraft type is most profitable with minimum risk of getting that profit margin?
Revenue

- Pretty simple 😊
- Revenue
  - Price per job (in terms of aircraft time)
  - Price per acre (this is what farmer/client wants)
  - Area (in acres)
Cost

- **Fixed expenses**
  - Aircraft
  - Facilities (hanger, runway)
  - Other equipment (loader trucks, application equipment—booms and nozzles, guidance system)
  - Insurance

- **Variable expenses**
  - fuel
  - Aircraft repair and maintenance
  - Runway repair and maintenance
  - Labor (workman’s comp, pilot, mixer/loader and scheduler)
  - Taxes
  - Costs associated with distance to travel to the filed from hanger
Risks

- Risks associated with operation
  - Obstacles (cell tower, wind turbines, trees, power lines, center pivots)
  - Sensitive crops (organic farms, non-round up ready crops, home gardens)
  - Elementary schools, hospitals
  - Aircraft turnaround times
  - Unanticipated mechanical expenses
Recap from last year….

- We talked about custom pricing for custom applications
- Published in the Fall 2017 Ag Aviation

- This year we look at the profit margin
Assumptions

- Field Shape: Rectangle
- Product Application: 2 gal/ac liquid product
- Load Time: 20 minutes
- Turn Time: 45 seconds
- Distance to Base: 5 miles
- Fuel Price: $4/Gal
- Hopper sizes: Medium, Large
- Profit Margins: 5% and 20%
About 52% of the times getting the needed profit 5% or less
Comparison of Aircraft; 20% Profit

About 74% of the times getting the needed profit 20% or less
Risk Preference and Choice of Aircraft; 5% profit

Profit

Profit-MH-5  Profit-LH-5
Risk Preference and Choice of Aircraft; 20% profit

![Graph showing risk preference and choice of aircraft with 20% profit.](image)
What next?

- Transformational outcome of the work
  - Tool that can incorporate all scenarios that allows you to gain needed profit to stay in the business
  - Develop an application (App) to predict the probability of getting the needed profit margin for different jobs to stay in the business

- Encourage to start keeping good records, especially cost side to plug into the model to run scenarios for your operation
Questions, Comments…

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