IMPROVING UNDERSTANDING BETWEEN SPECIALTY CROP FARMERS AND PESTICIDE APPLICATORS

KLINKENBORG AERIAL SPRAYING AND SEEDING INC

Agrismart information systems
(c) Except in an emergency, landing and takeoffs are not made on ramps, taxiways, or other areas of the airport not intended for such use; and

(d) The aircraft at all times remains clear of, and gives way to, aircraft conforming to the traffic pattern for the airport.

Sec. 137.47 Operation without position lights.

Notwithstanding part 91 of this chapter, an aircraft may be operated without position lights if prominent unlighted objects are visible for at least 1 mile and takeoffs and landings at—

(a) Airports with a functioning control tower are made only as authorized by the control tower operator; and

(b) Other airports are made only with the permission of the airport management and no other aircraft operations requiring position lights are in progress at that airport.

Sec. 137.49 Operations over other than congested areas.

Notwithstanding part 91 of this chapter, during the actual dispensing operation, including approaches, departures, and turnarounds reasonably necessary for the operation, an aircraft may be operated over other than congested areas below 500 feet above the surface and closer than 500 feet to persons, vessels, vehicles, and structures, if the operations are conducted without creating a hazard to persons or property on the surface.

Sec. 137.51 Operation over congested areas: General.

(a) Notwithstanding part 91 of this chapter, an aircraft may be operated over a congested area at altitudes required for the proper accomplishment of the agricultural aircraft operation if the operation is conducted—

1. With the minimum safety to persons and property on the surface, consistent with the operation; and

2. In accordance with the requirements of paragraph (b) of this section.

(b) No person may operate an aircraft over a congested area except in accordance with the requirements of this paragraph.

1. Prior written approval must be obtained from the appropriate official or governing body of the political subdivision over which the operations are conducted.

2. Notice of the intended operation must be given to the public by some effective means, such as daily newspapers, radio, television, or door-to-door notice.

3. A plan for each complete operation must be submitted to, and approved by appropriate personnel of the FAA Flight Standards District Office having jurisdiction over the area where the operation is to be conducted. The plan must include consideration of obstructions to flight; the emergency landing capabilities of the aircraft to be used; and any necessary coordination with air traffic control.

4. Single engine aircraft must be operated as follows:

(i) Except for helicopters, no person may take off a loaded aircraft, or make a turnaround over a congested area.

(ii) No person may operate an aircraft over a congested area below the altitudes prescribed in part 91 of this chapter except during the actual dispensing operation, including the approaches and departures necessary for that operation.

the runway from any point on takeoff up to the time of attaining, with all engines operating at normal takeoff power, 105 percent of the minimum control speed with the critical engine inoperative in the takeoff configuration or 115 percent of the power-off stall speed in the takeoff configuration, whichever is greater, with the accelerations and data of takeoff distance data. In applying this requirement, takeoff data is based on wind and other conditions, and no correction is made for any uphill gradient of 1 percent or less when the percentage is measured as the difference between takeoff elevations at the end points of the runway divided by the total length. For uphill gradients greater than 1 percent, the effective takeoff length of the runway is reduced 20 percent for each 1-percent grade.

(ii) No person may operate a multiengine airplane at a weight greater than the weight that, with the critical engine inoperative, would permit a rate of climb of at least 50 feet per minute at an altitude of at least 1,000 feet above the elevation of the highest ground or obstruction within the area to be worked on or at an altitude of 5,000 feet, whichever is higher. For the purpose of this subdivision, it is assumed that the propeller of the inoperative engine is in the minimum drag position; that the wing flaps and landing gear are in the most favorable positions; and that the remaining engine or engines are operating at the maximum continuous power available.

(iii) No person may operate any multiengine aircraft over a congested area below the altitudes prescribed in part 91 of this chapter except during the actual dispensing operation, including the approaches, departures, and turnarounds necessary for that operation.

Sec. 137.53 Operation over congested areas: Pilots and aircraft.

(a) General. No person may operate an aircraft over a congested area except in accordance with the pilot and aircraft rules of this section.

(b) Pilots. Each pilot in command must have at least—

1. 25 hours of pilot-in-command flight time in the make and basic model of the aircraft, at least 10 hours of which must have been acquired within the preceding 12 calendar months; and

2. 100 hours of flight experience as pilot in command in dispensing agricultural materials or chemicals.

(c) Aircraft.

1. Each aircraft must—

   (i) If it is an aircraft not specified in paragraph (c)(1)(ii) of this section, have had within the preceding 100 hours of time in service a 100-hour or annual inspection by a person authorized by part 55 or 145 of this chapter, or have been inspected under a progressive inspection system; and

   (ii) If it is a large or turbine-powered multiengine civil airplane of U.S. registry, have been inspected in accordance with the applicable inspection program requirements of Sec. 91.409 of this chapter.

2. If other than a helicopter, it must be equipped with a device capable of jettisoning at least one-half of the aircraft's maximum authorized load of agricultural material within 45 seconds. If the aircraft is equipped with a device for releasing the tank or hopper as a unit, there must be a means to prevent inadvertent release by the pilot or other crewmember.
-24.0 with  2.26 GPA & VMD = 268

-16.0 with  4.87 GPA & VMD = 347

-8.0 with  5.31 GPA & VMD = 354

0.0 with  5.31 GPA & VMD = 308
Managing Risk with:

Flight Plan Online™
INFORMATION MANAGEMENT SYSTEM FOR AERIAL APPLICATIONS

Kevin Britten
Red Oak IA
Agenda

• Flight Plan Online software overview
• Sensitive Areas
• Obstructions
• Seed Corn Crews
• Data Sources
About Flight Plan Online

• Flight Plan Online is an information management system that provides a *standardized format* for two-way communication between aerial applicators and their customers.

• Flight Plan Online is a *complete system* that includes all the features the aerial applicator needs for the entire application process.

• Flight Plan Online is a *proven system* currently in use across a wide geography by a diverse customer base. It provides value to aerial applicators, their pilots, and their customers.
Complete System

• Forecasting & Planning
• Orders & Mapping
• Scheduling & Application
• **Risk Management Tools**
• Records & Reports
• Billing & Invoicing
• Inventory Management Tools
• Analysis and Marketing
• Customer Service
Key Features

• Standardized job order and mapping system
• Information is centralized and shared electronically
• Timely records and reports
• Sensitive area notification
• Adjacent crops identification
• Tools to manage partially sprayed jobs
• Automated process to provide as-applied information
• Complete, self-contained billing system
• Ease of use
Establishing Partnerships

Partnerships are created with each key account, identifying contact and billing information, preferred airports, ground support roles, and fee schedule. Each account is issued a login and password to Flight Plan Online, allowing them to place and track job orders.

Your network of customers can include growers, retail dealers, seed companies, processors, consultants, or anyone else that you work with directly. All jobs are created in an accurate and consistent manner that your staff and pilots can easily understand.
Easy, Accurate Mapping

• Mapping program is fully integrated within Flight Plan Online. No need to go from one program to another.
• Select fields as pre-defined FSA field borders (CLU’s) or draw field boundaries.
• You and your customers can create and save field boundaries pre-season or create them “on the fly” as jobs are created.
• Advanced search methods, including by section, township, range.
• Acres are automatically calculated.
• Color aerial imagery
• Displays lat/long and legal description.
Scheduling Tools
Filter jobs in a variety of ways to create batches of jobs...
• By Product Combination
• By Airport
• By Release Date
• By Customer
• By Crop...
Create Batches of Jobs
As efficiently and effectively as possible
Save time and fuel
Sensitive Areas Notification

Examples

- Bees
- Organic Crops
- Vineyards
- Orchards
- Acreages
- Livestock
- Municipalities
- Wind Farms
- Communication Towers

Aerial operators can map out sensitive areas for their entire trade area. These sensitive area can be displayed on master maps and pilot maps.
Adjacent Crops Identification

Fields adjacent to a job can be automatically displayed, allowing aerial operators or their customer to identify sensitive crops that are nearby. This information is displayed on the pilot maps. This feature is especially helpful for herbicide applications.
Pilot Reports
Integration with Guidance Systems

- Flight Plan Online creates the batch of job files
- Download files directly to spray card
- Once done, upload log files to Flight Plan Online
- Make “as-applied” reports available to customers in an amazingly easy fashion.
- Meets customer expectations
- Saves time = more sprayed acres
- Compatible with most Satloc, Ag-Nav, TracMap, DynaNav, and Trimble systems
Billing & Invoicing

- Automatically create invoices once jobs are marked as sprayed.
- Many aerial applicators using Flight Plan Online create invoices the same day the jobs are sprayed!
- You can choose to invoice at regular intervals (daily, weekly, monthly).
- Set payment terms
- Perform Split-billing
- Multiple formats available
- Interfaces with QuickBooks to supplement your accounting needs.
Exceptional Customer Service
We offer a high level of customer service so that you can too.

At AgriSmart we provide:
• Help menu with tutorials
• Call center, open 24/7 during spray season

100% of our time and energy is focused on delivering the best products and services to ag applicators and their customers
Thank You
Batch Map #1178 - 1,659 Acres
Batch Map #1178 – Zoomed In