

# 2006 Iowa Ag Aviation Summit

## Executive Summary

March, 2006

On March 17, 2006, a summit meeting was held in Ankeny, Iowa to discuss issues involving ag aviation in Iowa. Those attending the meeting represented a wide cross section of ag aviation stakeholders and included representatives from the Iowa Ag Aviation Association (IAAA), the National Ag Aviation Association (NAAA), the Iowa Public Airports Association (IPAA), the Iowa DOT's Office of Aviation, the Iowa Department of Agriculture, and the Federal Aviation Administration (FAA).

The goal of the meeting was to open lines of communications between different groups with an interest in ag aviation, identify issues, and address needed steps for improvements. The meeting was facilitated by the Iowa DOT Office of Aviation.

Those in attendance included:

Quentin Childs- Altoona, Insurance Management Group (IAAA Director)  
Vance Linden- Whiting, Linden Aerial Applicating (State NAAA Rep)  
Terry Sharp- Indianola, Agri-Tech Aviation, Inc.  
Mike Bartholomew- Storm Lake, Bart's Flying Svc  
Randy Vander Weide- Sioux Center airport manager, R & M Spraying Svc  
Ralph Storm- Webster City airport manager, Storm Flying Svc  
Bob Pettis- Atlantic/Shenandoah Spraying Svc  
Pat Pettis- Atlantic Airport Manager  
Dan Smith- IPAA President, Council Bluff Municipal Airport Manager  
Bill Smothers- Marshalltown Airport Manager, Marshalltown Aviation  
Michael Nass- Clinton Airport Manager  
Steve Salvo- Ames Airport Manager  
Ethan Nasalroad, Newton Airport Manger, Johnson Aviation  
Tim McClung- Iowa DOT Office of Aviation Marketing Manager  
Kay Thede- Iowa DOT Office of Aviation Program Manager  
Chuck Eckerman- Iowa Department of Agriculture Pesticide Bureau Chief  
John Whipple- Iowa Department of Agriculture Director of Plant Management  
and Technology  
Ken Rieger- Des Moines FSDO Manager  
Roger Clark- Des Moines FSDO Program Safety Manager  
Lorna Sandridge- FAA Central Region Airports Program Specialist

## Overview

Following introductions, three presentations were given:

- 1) **Quentin Childs from IAAA** provided an overview of ag aviation. Aerial application originated in Iowa in 1947 and IAAA was established in 1966. Iowa currently has more than 190 licensed aerial applicators. Many licensed operators are based outside of Iowa. There are more than 50 Iowa-based aerial applicators. The IAAA offers annual and biennial professional development training programs for its members.

An example of Aphid treatment was provided to highlight the economic impact of ag aviation in Iowa.

### Treatment of Aphids

1,000 acres treated/day/aircraft  
= Improved yields of 8 bushel/acre  
@ \$5 per bushel  
= \$40,000/day/aircraft  
= \$1,680,000/day with 42 aircraft

In addition, ag operators spend money to support air and ground vehicles, hangar rents, lodging and food. Ag operations also increase utilization of Iowa airports.

- 2) **Chuck Eckerman from the Iowa Department of Agriculture** provided an overview of licensing and containment requirements. All aerial applicators are required to be certified to operate in the state of Iowa. In addition, each aerial application business must be licensed and provide proof of financial responsibility.

The mixing loading area of a permanent mixing loading site is required to be contained. Ag operators that continuously operate from a single airport are required to have containment.

For airports where operations are temporary, the following rules apply: Any airport where pesticides are stored for more than 30 days **AND** where more than 300 gallons or pounds of formulated pesticide are mixed/loaded would meet the definition of a permanent mixing loading site and require containment. In general, if operations are not conducted for more than 30 days, containment is not required by law. It was noted that part of the reason the law was written this way was to provide needed mobility for aerial applicators. For some types of aerial applications, mobility and access to airports close to the area where applications are taking place is critical. It was also noted that any containment requirements on pesticide labels supersede Iowa containment laws.

By rule, any containment facility (portable or stationary) is required to be designed by an Iowa registered engineer and certified that the containment was constructed according to the engineer's design plans.

- 3) ***Lorna Sandridge from the FAA Central Region*** discussed grant assurances for airports that receive funding through the FAA's Airport Improvement Program.

Airports may exclude an activity if it cannot be conducted safely or if there are special environmental considerations. A denial based on safety must be based on sound reasoning and the airport sponsor should have firm evidence demonstrating safety would be compromised. The FAA is the final authority in determining what constitutes a compromise in safety.

FAA Advisory Circular 150/5190-5 provides information pertaining to the FAA's exclusive rights and minimum standards policies. The FAA suggests that airport sponsors establish reasonable minimum standards for ag operations and applies them objectively and uniformly. There is no "one size fits all" standard for ag operations. Requirements in the minimum standards should be reasonable and attainable. Minimum standards adopted by an airport sponsor do not receive FAA approval, however, they are used if there is ever a question regarding exclusion of an activity.

## **Issues & Action Steps for Improvement**

Several issues involving ag aviation were identified and discussed. Attendees identified issues and then addressed possible action steps that could lead to improvement.

### **Traffic Pattern Operations**

**Issue:** Some airports and pilots have expressed a desire for aerial ag applicators to have pilots fly standard traffic patterns and to use radios when operating in the vicinity of an airport. It was noted that most IAAA members do use radios. Federal Aviation Regulations do not require the use of radios. Recommended standard traffic patterns and practices for aeronautical operations at airports without control towers are covered in FAA Advisory Circular AC90-66A.

**Improvement steps:** For safety reasons, radio usage should be encouraged at busy airports. All pilots should be reminded that radio usage is not required at non-towered airports and the primary method for avoiding traffic conflict is to see and avoid. Ag pilots and airport managers should work together to determine a plan to minimize traffic conflicts in an airport traffic pattern based on needs for a particular airport. Airport managers might want to consider issuing NOTAM's and recording a message on AWOS systems (if available) to alert airport users that ag operations are being conducted in the vicinity of an airport.

### **Nuisance Complaints**

**Issue:** Airport managers and the FAA sometimes receive complaints of low flying aircraft as a result of ag aviation operations. The Des Moines FSDO tries to diffuse complaints by explaining that ag operators are allowed to deviate from normal altitude and clearance requirements to the extent necessary to perform aerial applications. A couple of factors cited in complaints include 1) post-9/11 concern by the general public regarding potential terrorist activity and 2) the transformation of rural living to include many homes and acreages that are not farmsteads. It was noted that Iowa-based pilots do have an idea of some of the "hot spots" for nuisance complaints. The Iowa Department of Agriculture does not respond to complaints on flight patterns, but does get involved with drift issues.

**Improvement steps:** It is a good idea for ag operators to communicate spraying activity with airport managers and cities. It may be desirable to notify the public through local media that ag aviation activity is occurring in an area.

### **Communication Between Airports and Ag Operators**

**Issue:** Communication between airports and ag operators is essential. Airports want to know when ag operations are going to take place, while ag operators need to know where to operate on an airport and need to know water and fuel availability. Some airport sponsors that do not have full-time airport managers have complained when they are not notified prior to ag operations being conducted.

**Improvement steps:** In order to notify airport representatives of planned ag aviation activity, contact information must be readily available for the airport representatives, including after hours contact. It is important that contact information located in airport directories and posted in airport terminals is accurate and provides information to contact an airport representative after hours. Ag aviation operators are encouraged to share the Ag Aviation form from the Iowa DOT Office of Aviation and IAAA to the proper airport representatives. The form includes primary and secondary contact information for the ag operators. Ag aviation operators should check with airports prior to operating to see if the airport has minimum standards for ag aviation operations and discuss airport issues regarding security, ramp access, and traffic pattern operations.

### **Access to Airports and Airport Minimum Standards**

**Issue:** Access to airports is crucial for ag operators to efficiently conduct their services. Meeting attendees agreed that access is not a huge issue in Iowa and that most airports work very well with ag aviation operations. There are some isolated cases where airports have been reluctant to allow ag aviation operations. Many airports in Iowa are required to comply with state and federal grant assurances that require airports to make the airport available for all types, kinds, and classes of aeronautical activity.

**Improvement steps:** Airports should establish reasonable minimum standards for ag operations and apply them objectively and uniformly.

### **Containment Requirements**

**Issue:** Some airports are not sure if containment is required when mixing and loading is done on an airport. If operations are not conducted for more than 30 days, containment is not required by law unless the product label requires containment. The mixing loading area of a permanent mixing loading site is required to be contained. Ag operators that continuously operate from a single airport are required to have containment. Any airport where pesticides are stored for more than 30 days **AND** where more than 300 gallons or pounds of formulated pesticide are mixed/loaded would meet the definition of a permanent mixing loading site and require containment. Portable containment systems could provide added protection even if the airport didn't meet the definition of a permanent mixing loading site.

**Improvement steps:** Airports should become familiar with Chapter 21-44 of the Iowa Administrative Code ([http://www.legis.state.ia.us/ACO/IAChhtml/021.htm#chapter\\_21\\_44](http://www.legis.state.ia.us/ACO/IAChhtml/021.htm#chapter_21_44)) governing on-site containment of pesticides, fertilizers and soil conditioners. Ag aviation operators should

check with airports prior to operating to see if the airport has minimum standards for ag aviation operations.

### **Ramp Access and other Security Issues**

**Issue:** General aviation security awareness has increased since 9/11. Guidelines for general aviation security have been released by TSA that include facility enhancements and uses the AOPA Watch program. The Iowa DOT Office of Aviation has worked with public-owned airports to develop and implement security plans. The FBI has had conversations with all licensed ag aviation operations in the state. And, the National Ag Aviation Association has developed a security program specific to ag aviation. Ag aviation operations bring farmers, coops, and others to an airport. Access to operating areas of an airport should be consistent with an airports security plan.

**Improvement steps:** Ag aviation operations should continue to use the NAAA ag aviation security program and work with the airport manager/sponsor to keep access to operating areas of an airport in line with the airport's security plan. Ag aviation operators are encouraged to share the Ag Aviation form from the Iowa DOT Office of Aviation and IAAA to the proper airport representatives. The form includes emergency contact information for ag operators in case of a security-related incident when the operator is away from the airport.

### **First Responders**

**Issue:** Some first responders have inquired with the Des Moines FSDO about responses to ag aviation accidents. Ag aviation operators are encouraged to share the Ag Aviation form from the Iowa DOT Office of Aviation and IAAA to the proper airport representatives. The form includes basic information on the type of products that are being used, as well as emergency contact information for ag operators. Though use of the form is voluntary, IAAA has agreed to encourage its use by pilots throughout the state.

**Improvement steps:** In the case of an accident, it is very helpful if the airport manager/sponsor has a current copy of the Ag Aviation form on file. The Iowa DOT Office of Aviation will work with the IAAA to notify local first responders around the state about the ag aviation form, and to encourage airports and first responders to hold local familiarity training for airport, ag aviation, and other aircraft operations. NAAA has developed a first responder video tape for ag aviation. Vance Linden, the Iowa NAAA representative will check with NAAA to see if the Iowa DOT can receive permission to duplicate and distribute the tape in Iowa. If there is an accident involving an ag aviation aircraft, media may be directed to Quentin Childs at the IAAA.

## **Fuel**

**Issue:** Some airports have complained that ag aviation operators use an airport's facilities and bring their own fuel on the field. This can be particularly bothersome if the airport charges fixed base operators a flowage fee, setting up a scenario where ag pilots are not paying the same fees as other aircraft do to support the cost of operations of the airport. There are no regulations that require any aircraft to purchase fuel to use a public-owned airport. IAAA members reported that they do buy fuel from the airport whenever they can, but at some airports, they need to bring their own fuel so they can be assured of having enough fuel on hand.

**Improvement steps:** None

## **Aircraft Registration**

**Issue:** Iowa-based applicators are required to register their aircraft, but out-of-state applicators are not required to be registered if they operate less than 30 days. This puts the Iowa-based applicators at a competitive disadvantage since out-of-state operators come in to the state and leave without paying. Minnesota requires all aircraft operating in the state to be registered, regardless of the time operated (although ag applicators are at a reduced rate.) It was noted that the Iowa DOT Office of Aviation is planning on taking over the aircraft registration process sometime in 2006 and would not be likely to support changes in aircraft registration laws until the transition is complete. It was also noted that aircraft registration laws are in the Iowa Code and any changes would have to occur through legislative action.

**Improvement steps:** None at this time.

## **Next Steps**

Questions regarding the ag aviation summit may be addressed to Tim McClung at the Iowa DOT Office of Aviation at 515-239-1689, or Quentin Childs at the Iowa Ag Aviation Association at 515-967-3761.

Iowa DOT has created a web page specifically for ag aviation information on its web site at [www.iawings.com](http://www.iawings.com) (Click on Publications and Education/Ag Aviation). This report and other supporting information will be posted on that page.

All parties will work to keep lines of communication open and may have a follow-up meeting again in 2007 if there is a need.

***This report summarizes issues and discussions that were addressed at the 2006 Iowa Ag Aviation Summit. The report is intended to be an educational tool for airports, aerial ag applicators, and other interested parties. In no way should the contents of this report be construed to supersede state or federal laws and regulations governing ag aviation issues.***