

# The Importance of Foreign Object Damage (FOD) & Wildlife Hazard Prevention

Presented to: 2009 NAFPI Conference

By: Ken Langert, Airport Certification Safety Specialist

Date: 11 August 2009



Federal Aviation  
Administration



# Agenda

- **FAA Organizational Introduction & Differences**
- **FOD Prevention**
- **Wildlife Prevention**



# FAA...Who Are We

## ➤ 4 Lines of Business

➤ Airports (ARP)

➤ Air Traffic Organization (ATO)

➤ Aviation Safety (AVS)

➤ Commercial Space Transportation (AST)

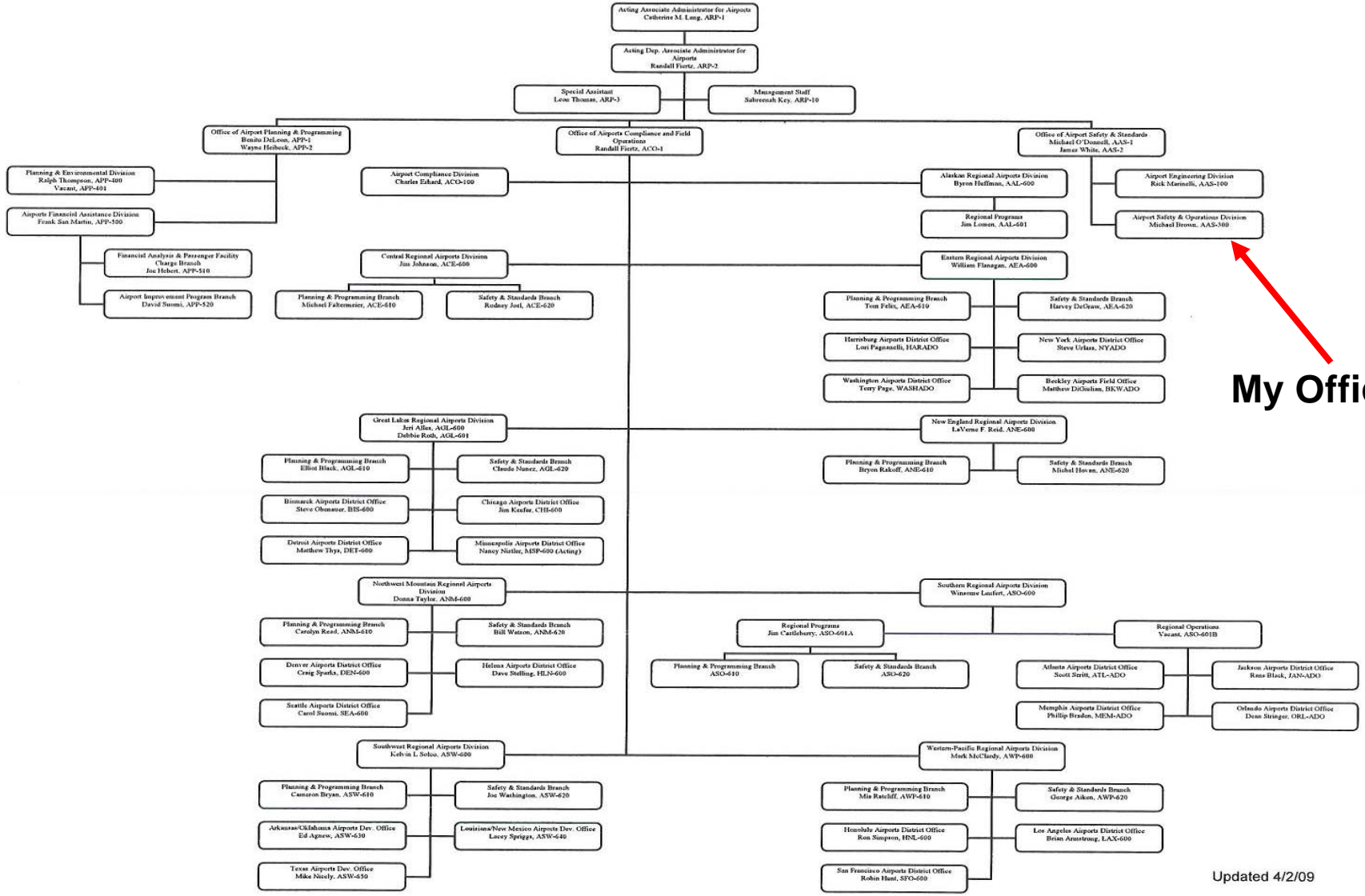


# My Background

- **Ken Langert – Airport Certification Safety Specialist**
  - Active Duty Air Force – C21A & KC-135R/T Instructor Pilot
  - Wing Flight Safety Officer (BASH & Accident Investigation) & Acting Chief of Safety
  
- **FAA Office of Airports HQ Division**
  - Airport Safety & Standards
    - **AAS-300 (Safety & Operations)**
  
  - Airport Planning & Programming
    - **Grants, AIP, PFC**
  
  - Airport Compliance & Field Operations
    - **9 Regional Offices**



# Office of the Associate Administrator for Airports



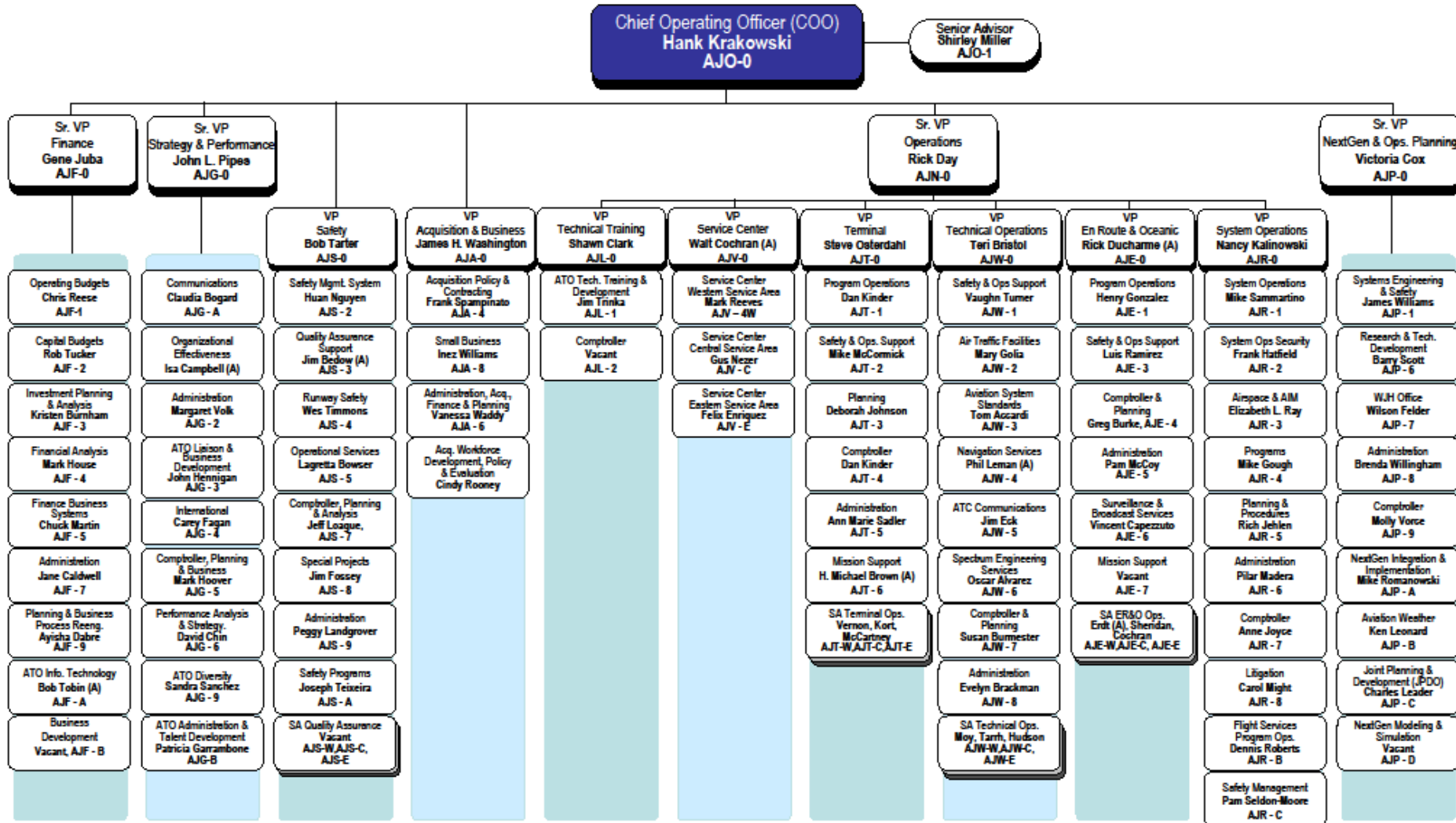
**My Office**

Updated 4/2/09



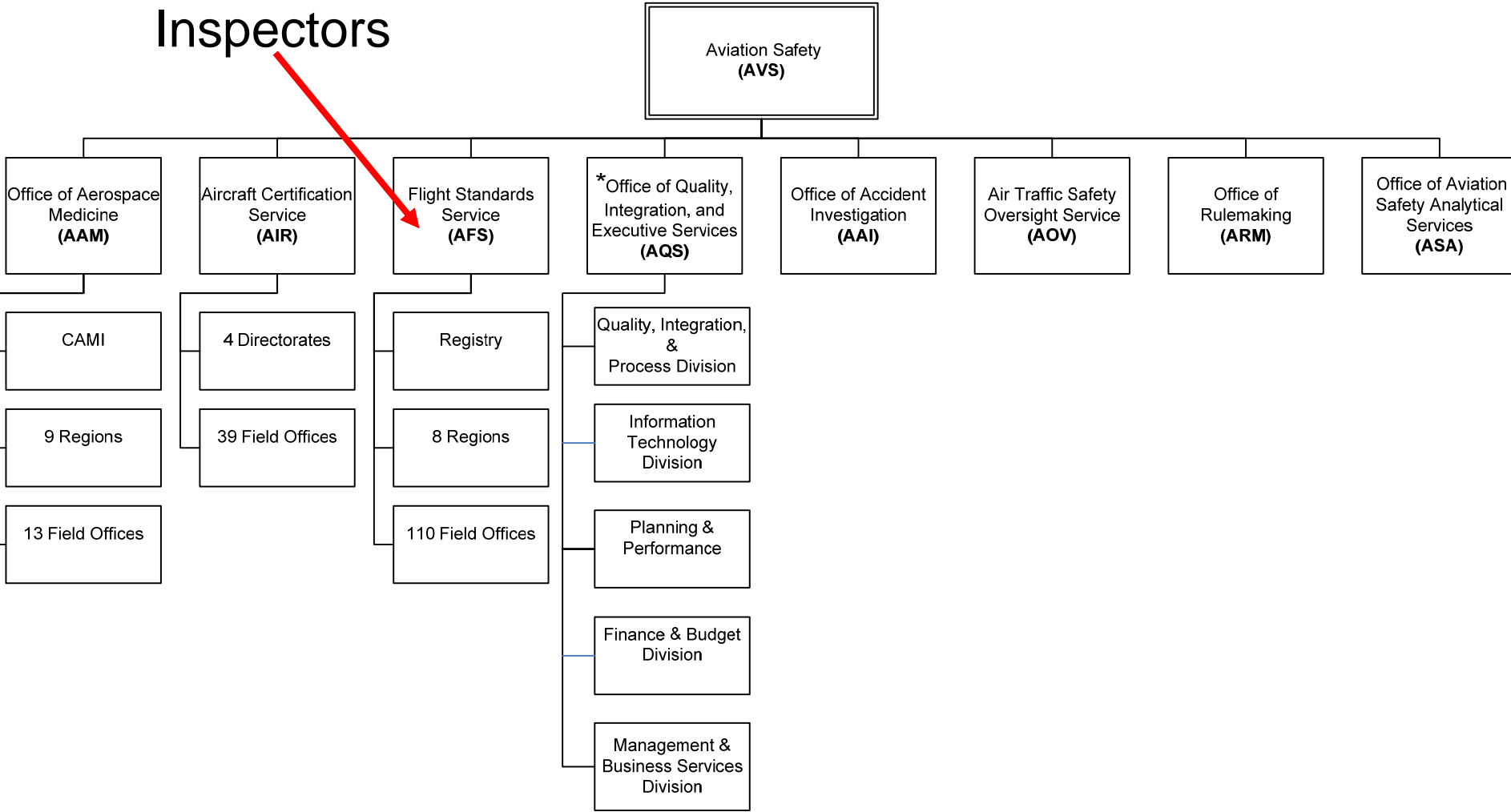
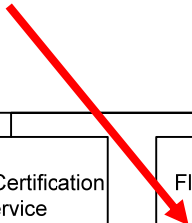
# AIR TRAFFIC ORGANIZATION

March 25, 2009



# AVS Organization

Safety Inspectors



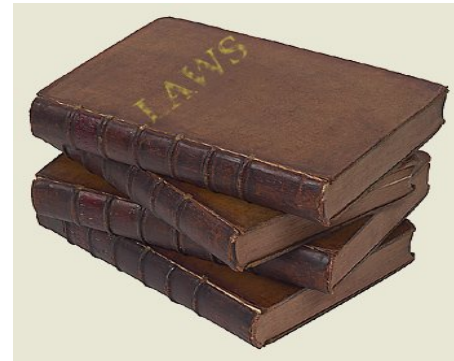
# How ARP Is Different From Flight Standards

- **Airports Division - Certification and Safety on Airfields – FAA we're here to help**
  - 43 Airport Certification Safety Inspectors (ACSI's) for 562 Part 139 Airports – Visit once per year in most cases
- **Flight Standards – Enforcement on Aircraft**
  - ~ 3,700 Inspectors for about 750,000 pilots and over 6,000 airlines/operators in the US
    - 6,000 "small" investigations / year & 1600 -1700 accidents / year



# Regulation – Part 139 Certification of Airports

- **§ 139.305(a)(4) states, "except as provided in paragraph (b) of this section, mud, dirt, sand, loose aggregate, debris, foreign objects, rubber deposits and other contaminants shall be removed promptly and as completely as practicable."**



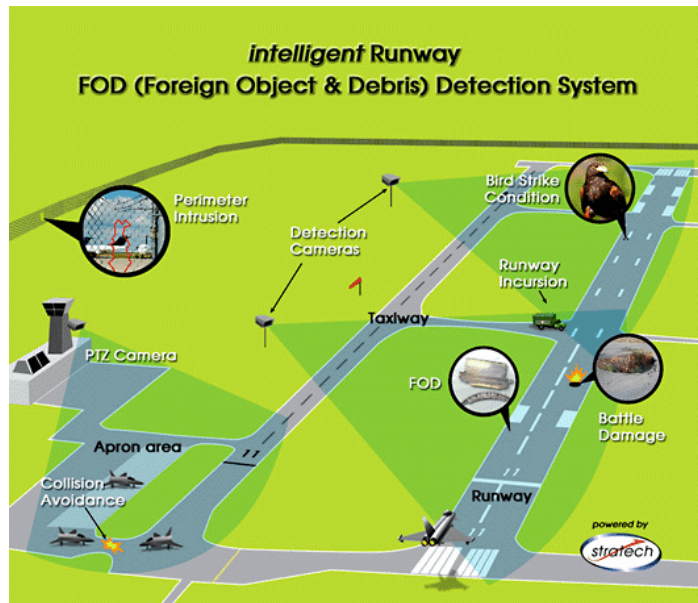
- **§139.327 Self-inspection program. An effective program enables an airport operator to identify and eliminate unsafe conditions.**



# What do FOD & Wildlife Hazard prevention have in common???

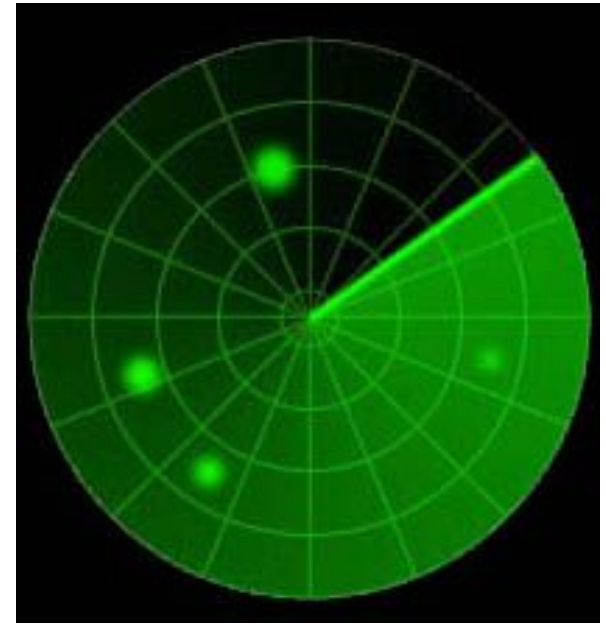
## ➤ RADAR

➤ Not one tool can do the job—No Silver Bullet, but you can have a great toolkit.



# FOD Radar

- **FAA currently researching various systems**
  - **Fixed Radar system**
  - **Camera (Optical) systems**
  - **Hybrid system (both radar and optical)**
  - **Mobile unit**

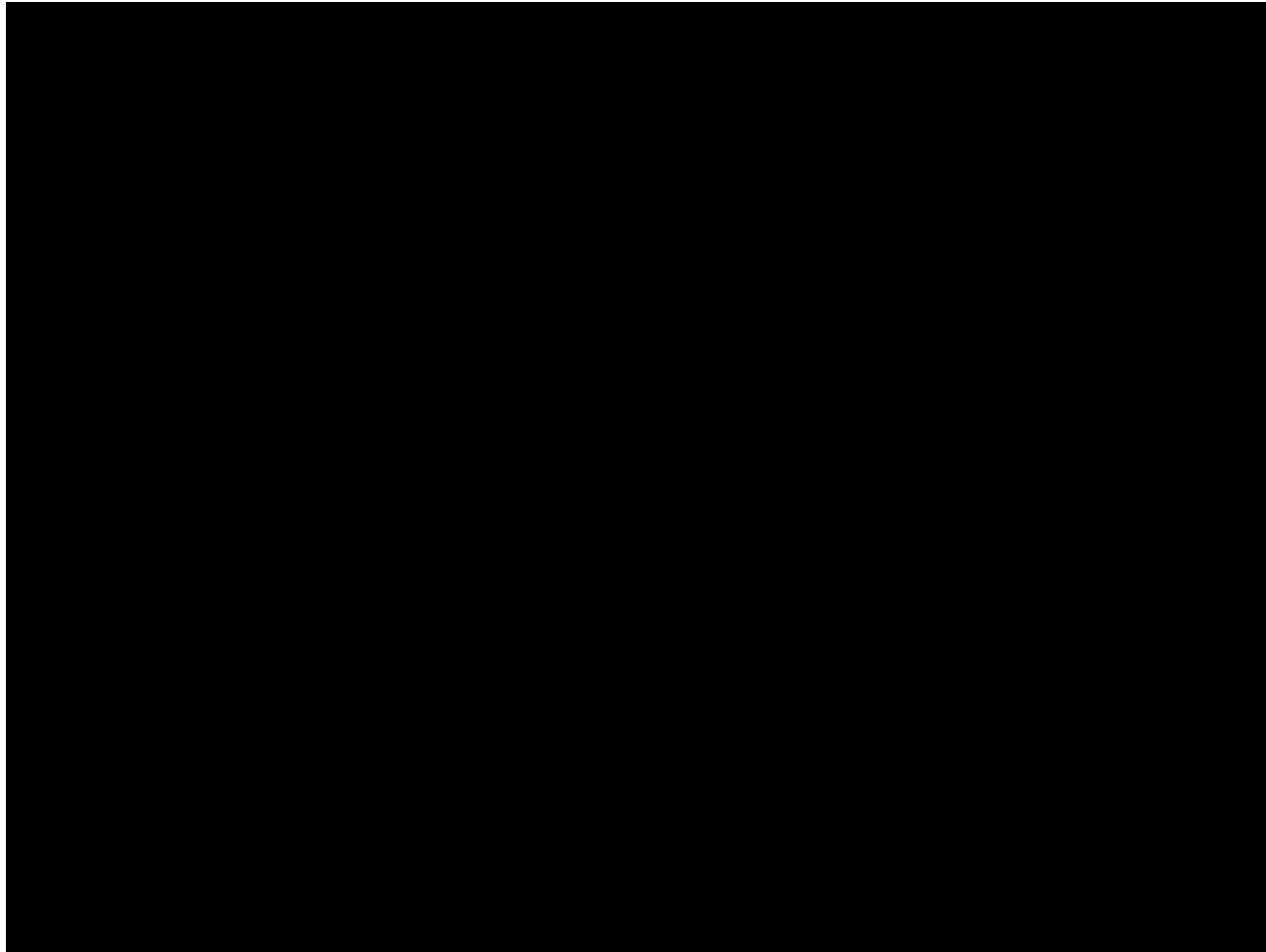


# FOD Radar Con't

- **Possible Limitations:**
  - Background reflectivity or clutter
  - Heavy rainfall or snow
  - Variable lighting conditions of dawn or dusk
  
- **Other Effective FOD Prevention Methods**
  - Training/Reporting/Documenting
  - Inspections are key
  
- **Challenge – How to balance Airfield Operations and FOD Control (Safety)**



# Concorde Flight 4590 – FOD Control



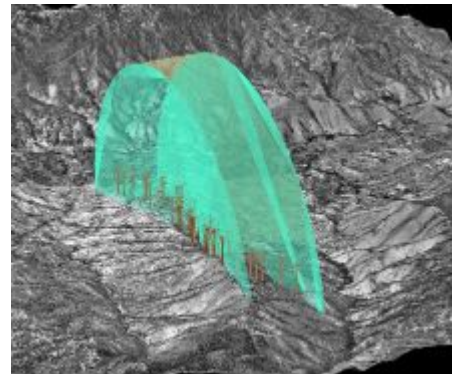
# Wildlife Prevention



# Wildlife Prevention Efforts

## ➤ AVIAN RADAR – Developmental/Testing Stage

- Would NOT have prevented US Airways Flight 1549
- State-of-the-art radar and computer techniques developed specifically for detecting and tracking the unique behavioral characteristics of birds and bats



# Wildlife Prevention

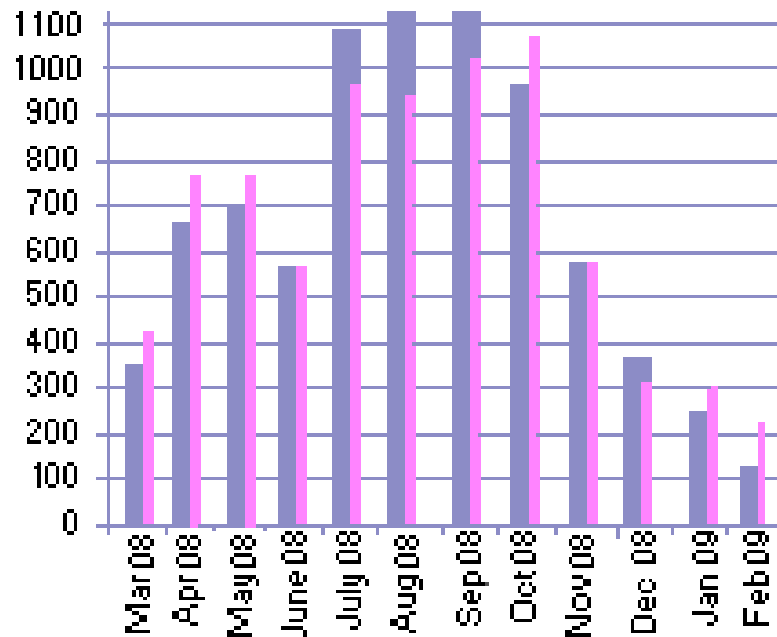
- **Keep vegetation at correct height**
- **Wildlife assessment by qualified biologist**
- **Daily Inspection**



# Wildlife Prevention Con't

- **National Wildlife Strike Database Now Public**
  - <http://wildlife.pr.erau.edu/public/index.html>

**Latest 12 Months of Wildlife Strike Reports**  
(with Previous Year) —



Although strike reports can be reported in real time, this graph is presented with a 3-month delay to permit verification of reported data.

- **Lookup summary/detailed strike reports by:**
- **Date, airport, state, operator, aircraft, and/or species.**



# Questions???

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**FAA Airports Website -**  
**<http://www.faa.gov/airports>**



The next big thing – Are you prepared ??? [flu.gov](http://flu.gov)

