

# TECHNICAL SERVICES

## Wildlife Hazard Assessments (WHA) US FAA part 139



### The Scope of services included in a DeTect part 139 airport Wildlife Hazard Assessment includes:

- **Review of the event(s) that initiated the wildlife hazard assessment process.** Thorough review of reported bird strikes and interviews with air carriers and FBOs.
- **Wildlife population monitoring.** Determine species, numbers, locations, local movements, daily and seasonal occurrences by seasonal survey.
- **Bird Radar Surveys.** Includes analysis of 3 years of archived national weather radar data to supplement surveys and to define daily bird activity and seasonal patterns (can be expanded if required by on-site survey with a MERLIN Avian Radar System).
- **Identification of wildlife attractants.** Identify on and off airport wildlife attractions to a radius of 5 nautical miles around the airport and plot into GIS for analysis.
- **Description of potential hazards.** Report integrates visual field observations, night surveys, radar data, and area surveys and describes potential hazards. Any immediate hazard is reported to the airport as it is noted.
- **Recommendations.** The final wildlife hazard assessment includes detailed recommendations for reducing bird and wildlife risk at the airport.
- **Wildlife Management Measures.** Wildlife management measures are included as recommendations and are included in each seasonal interim report.
- **Training.** A training program is developed and coordinated with the airport staff. The timing of training is flexible, however if serious safety risks are noted during the assessment, then training of staff may be recommended prior to completion of the full assessment.
- **Liaison with State and Federal agencies.** DeTect assists the airport authority in obtaining all necessary permits for wildlife control, including depredation if required, as well as provides representation support in agency meetings and hearings as needed.
- **Formal Report.** A draft Wildlife Hazard Assessment is prepared for review by airport officials.
- **Wildlife Management Plan.** DeTect prepares, in coordination with the airport, and submits a Wildlife Management Plan for FAA approval. This plan implements the final recommendations from the WHA.



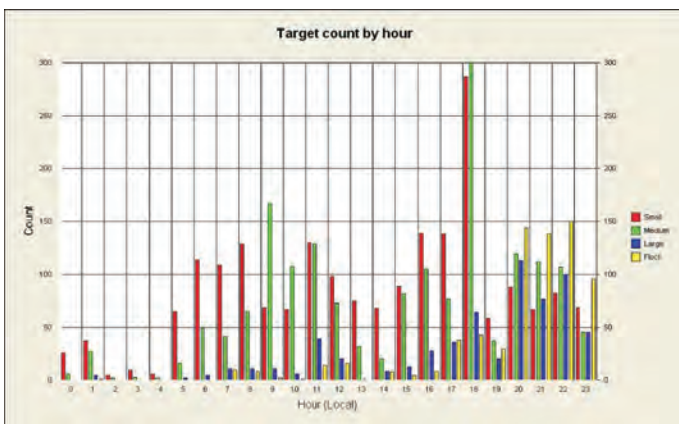
*DeTect, Inc. has a uniquely qualified and internationally recognized staff of expert scientists and engineers that specialize in conducting airport and airfield Wildlife Hazard Assessments (WHA) in accordance with the US FAA part 139 and international requirements. Capabilities include all required expertise and resources to effectively and accurately assess bird and other wildlife hazards to aircraft operations and to deliver workable, comprehensive management solutions and tools for airports. DeTect staff have conducted wildlife hazard assessments at over 200 airports and airfields around the world and can stand by the results and conclusions through any review process.*



# BIRD & WILDLIFE HAZARD MANAGEMENT

Bird-aircraft strikes pose a significant hazard to military and commercial aircraft causing over \$2 billion in estimated costs annually worldwide from airframe damage, out-of-service delays, and lost aircraft. Even more important are the more than 400 lives that have been lost in strike related crashes. Over 5,000 strikes are reported annually in the U.S., however the FAA estimates that this represents only about 20% of the strikes that actually occur. The hazard level is increasing due to increased air traffic and increased bird populations as a result of environmental conservation efforts necessitating increased and improved control measures. DeTect offers a full range of professional Bird-Aircraft Strike Hazard (BASH) consulting and support services to airports, airport planners and consultants:

- Airfield bird & wildlife risk assessment
- Airport Wildlife Hazard Assessments
- BASH/Wildlife plan development
- Regulatory compliance
- Mishap investigation
- Bird radar surveys
- MERLIN aircraft-birdstrike avoidance radar systems
- Wildlife control program design
- BASH management training
- Expert consulting & testimony



## Bird Radar Survey & Integration

Specific survey expertise includes short- and long-term avian radar studies for new airports and airport expansions to assess bird and wildlife hazard risk, develop management plans and provide real-time operational bird-aircraft strike risk avoidance with the MERLIN Aircraft Birdstrike Avoidance



Radar system. MERLIN is the most advanced, proven and widely used bird radar technology available for bird-aircraft strike hazard (BASH) management and for real-time detection and tracking of hazardous bird activity at commercial airports, military airfields, and military training and bombing ranges. The MERLIN bird radar is proven, production model technology with over 50 bird radar systems currently operating at sites worldwide in aviation safety and environmental applications with documented results in reducing bird strikes, increasing safety and reducing aircraft damage and delay costs. MERLIN is the most widely used bird radar system in the world and is the only production-model bird radar in operational use for real-time, tactical bird-aircraft strike avoidance at commercial airports and military airfields.

## DeTect's Bird Aircraft Strike Hazard (BASH) Group

DeTect's BASH group is headed by a former Chief of the U.S. Air Force BASH Team and includes highly experienced US FAA-qualified BASH specialists, biologists, radar ornithologists, engineers and programmers. DeTect's staff have completed BASH projects at over 200 airports and airfields in over 80 countries and are the most experienced team of specialists in BASH and remote sensing of birds in the world. Bird and wildlife control experience additionally includes over 80 solid waste landfills facilities worldwide. Staff have extensive background and experience in successfully resolving airport-landfill conflicts and in supporting public hearings and legal proceedings.

