



BIRD STRIKE ASSOCIATION OF CANADA
ASSOCIATION CANADIENNE SUR LE PÉRIL AVIAIRE

2024 CONFERENCE

THE CANADIAN VOICE OF WILDLIFE
STRIKE PREVENTION

October 2nd to 3rd, 2024
Montreal, Quebec



2024 CONFERENCE OF THE BIRD STRIKE ASSOCIATION OF CANADA

October 2nd, 2024

TIME	TITLE	SPEAKER
8 : 30	Registration and doors opening	
9 : 00	PRE-CONFERENCE NETWORKING	
9 : 30	CONFERENCE OPENING : Re-imagining BSAC	David Bradbeer, Cochair Pierre Molina, Cochair
10 : 00	WEBINAR CONFERENCE : Due diligence in analyzing wildlife strike data to pinpoint gaps in mitigation efforts: a 35-year perspective	Richard Dolbeer US Department of Agriculture
10 : 30	Health break	
11 : 00	TECHNICAL WORKSHOP : Balancing wildlife management and biodiversity preservation at airport – ADM’s perspective	Julie Boissonneau & Laurie Talluto, ADM Aéroports de Montréal
11 : 30	PRESENTATION AND WORKSHOP : Airfield habitat management	
12 : 00	Lunch	
13 : 00	CONFERENCE : Balancing act: Federal Wildlife Regulations and Airport Wildlife Management in Canada	Sarah Gagnon, Falcon Environmental
13 : 30	TECHNICAL WORKSHOP : Understanding federal and provincial species protections	
14 : 30	Health break	
15 : 00	TECHNICAL WORKSHOP : Balancing resources & risk	
16 : 00	CONFERENCE : Really big guns - Home of the world’s fastest chicken <i>Airframe worthiness testing</i>	Ron Gould NRC/NAE/Structures Lab, FISF
16 : 30	BSAC AGM	
17 : 30	COCKTAIL	

2024 CONFERENCE OF THE BIRD STRIKE ASSOCIATION OF CANADA

October 3rd, 2024

TIME	TITLE	SPEAKER
8 : 30	Doors opening & networking	
9 : 00	CONFERENCE : Recent improvements pertaining to the automatic assessment of loss of separation between aircraft and birds using avian radar	Sara Handrigan, Accipiter Radar Technologies
9 : 30	TECHNICAL WORKSHOP : Mammal exclusion at airports	
10 : 30	Health break	
11 : 00	WEBINAR CONFERENCE : Airport use of aircraft fleet data to analytics to model bird strike threat	Beatriz Angulo-Ibanez, Antoine Pilon, Airbus
11 : 30	Transports Canada industry update	Devon Harris, Wildlife Specialist Transports Canada
12 : 00	Lunch	
13 : 00	CONFERENCE : Flight safety first	Andrea Brown, Falcon Environmental
13 : 30	TECHNICAL WORKSHOP : Airport zoning regulations at Canadian airports	
14 : 30	Coffee break	
15 : 00	Building up Bird Strike Association of Canada	
15 : 30	CLOSING REMARKS	

October 2nd, 2024
10 : 00

CONFERENCE

DUE DILIGENCE IN ANALYZING WILDLIFE STRIKE DATA TO PINPOINT GAPS IN MITIGATION EFFORTS: A 35-YEAR PERSPECTIVE



Richard Dolbeer

Scientist
US Department of Agriculture

Richard Dolbeer was a scientist with the U.S. Department of Agriculture from 1972-2008 where he led research projects to resolve conflicts between humans and wildlife in North America, Africa, and Asia. He has over 230 scientific publications. Richard was a founding member of Bird Strike Committee-USA and served as chairperson from 1997-2008. Richard was the first recipient of The Wildlife Society's Caesar Kleberg award for Excellence in Applied Wildlife Research. He was publicly elected to two 4-year terms on the Board of Education in Huron, Ohio, serving as President for 2 years. A native of Tennessee, Richard received his PhD degree from Colorado State University in 1972. Richard currently manages his 60-acre farm "Bluebird Haven" in Ohio dedicated to environmental education and Alzheimer's awareness and works as a science adviser to the USDA. He has 2 children and 6 grandchildren.

October 2nd, 2024
13 : 00

CONFERENCE

BALANCING ACT : FEDERAL WILDLIFE REGULATIONS AND AIRPORT WILDLIFE MANAGEMENT IN CANADA

Wildlife control is well regulated in Canada. While provincial regulations are not always uniform across the country, federal regulation for wildlife control is common to all provinces. Since most birds fall under federal regulation, even species without special status, it directly impacts the way wildlife control is done on the airfield and can even have major impacts on how airfield maintenance and airport development is conducted. This presentation aims to highlight airports' obligations towards federal legislation on migratory birds and species-at-risk while offering insights on how to respect the regulations through good practices and case studies.



Sarah Gagnon

Project Manager - Biologist
Falcon Environmental

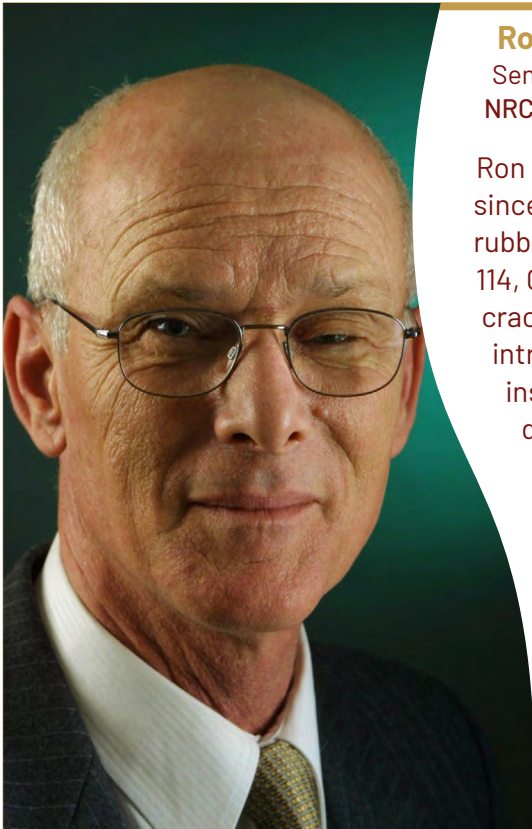
Sarah Gagnon holds a bachelor's degree in biology and a master's degree in veterinary sciences, with a focus on veterinary public health. As a biologist, she has been working at Falcon Environmental since 2015. Passionate about birds, particularly birds of prey, she has been conducting behavioral monitoring and avian inventories of protected species for several years while also being involved in airport research and the creation of wildlife management plans for various airports in Canada.

October 2nd, 2024
16 : 00

CONFERENCE

REALLY BIG GUNS - "HOME OF THE WORLD'S FASTEST CHICKENS"

NRC's Associate Committee on Bird Hazards to Aircraft called for two streams of action - it has been decades since we last talked - so this is a review of the last 56 years from the dark side - when bird avoidance has failed and certification for impact resistance provides for one more controlled landing.



Ron Gould

Senior Technical Officer, retired
NRC/NAE/Structures Lab, FISF

Ron has been involved in aviation-related research at TC and NRC since 1972. His work includes: runway traction measurement, rubber and snow removal, full-scale aircraft fatigue tests (CT-114, CF-18), accelerated corrosion and the discovery of pillow cracking, composite materials fabrication and controlled damage introduction, materials performance testing, non-destructive inspection equipment and technique development, explosives detection and threats against aircraft, aircraft accident investigations, full-scale on-aircraft fires, evaluation of new ARFF tools and techniques, pneumatic cannon development to advance capabilities to perform bird, hail, bullet and drone impacts against aircraft structure and engines.

Ron is an AVRO Arrow and Jetliner enthusiast. He brought together and secured both documents and artifacts at NRC and facilitated their transfer to the CA&SM.

October 2nd, 2024
16 : 30

ANNUAL GENERAL MEETING AGENDA

1. Welcome
2. Confirmation of Quorum
3. Approval of Agenda
4. Approval of Minutes from the 2023 AGM
5. Director's Reports
 - Report of the president of BSAC
6. Financial Report presentation
7. Steering Committee (SC) of BSAC
 - SC Current Positions
 - Board of Directors (BOD)
 - New management support for the BOD
8. Members questions and comments
9. Closing

October 3rd, 2024

09 : 00

CONFERENCE

RECENT IMPROVEMENTS PERTAINING TO THE AUTOMATIC ASSESSMENT OF LOSS OF SEPARATION BETWEEN AIRCRAFT AND BIRDS USING AVIAN RADAR

When an airport is equipped with a 3D avian radar system with an ADS-B subsystem, real-time trajectories (latitude, longitude, altitude, versus time) are available for birds and aircraft in the airspace. These two data sources can be compared to automatically look for situations where there is a loss of separation between the two. When this loss of separation occurs, meaning that a bird trajectory and an aircraft trajectory are in proximity to each other, it represents a risk to aviation safety and can be considered a possible near miss situation. This capability was originally demonstrated at Canadian Bird Strike in 2022 showing how these situations were automatically detected 24/7, 365. Since then, improvements have been made to the methodology used to identify loss of separation and further refinements have been made to identify situations of concern to airports. Loss of separation can be used both tactically and through analysis to support safety awareness and risk assessments, providing necessary decision support to stakeholders including pilots, airlines, ATC and airport operations to help mitigate the risk of bird strikes. This presentation aims to present the progress made in this area featuring data collected from a Canadian airport.



Sara Handrigan

Client Services Coordinator
Accipiter Radar Cooperation

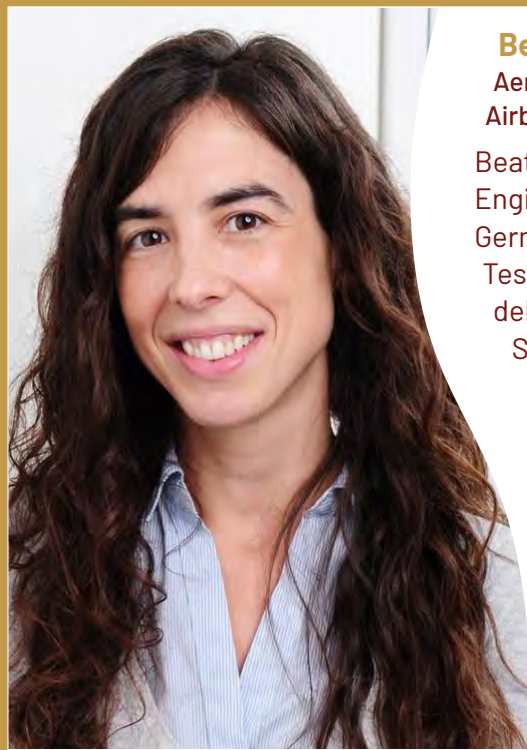
Sara Handrigan is Client Services Coordinator at Accipiter Radar. Since 2016, she has supported Accipiter's aviation safety and environmental protection customers by helping them understand and operationalize avian radar and information systems to address wildlife management concerns. She received her B.Sc in animal behaviour from Western University where her honours thesis and subsequent publication involved the study of bird migration and range expansion. Her current research interests are in radar ornithology, and the application of avian radar as a tool for wildlife management. She has worked for various government, non-government, and private organizations in the field of wildlife management, conservation, and habitat restoration. She volunteers her time for several conservation organizations by assisting with species surveys, bird banding and tagging, student education, public outreach, research initiatives, and habitat restoration.

October 3rd, 2024

11 : 00

CONFERENCE

AIRPORT USE OF AIRCRAFT FLEET DATA TO ANALYTICS TO MODEL BIRD STRIKE THREAT



Beatriz Angulo-Ibanez

Aeronautical engineer

Airbus

Beatriz Angulo-Ibanez has worked for Airbus Commercial Engineering for the past 20 years. During her career in Spain, Germany and France, she has supported the Certification Flight Test Campaign of the A380 program and the first customer deliveries of the A380 and A350. In her current role for Propulsion Safety Enhancement, she is in charge of bringing forward projects to enhance the safety level of the fleet beyond the certification standards. Protection and prevention against bird strikes is one of her lines of work. She was a presenter during the 2023 North American Bird Strike conference, with a paper titled "Bird Strike threat on jet airliners: Current protection and prevention techniques, focus on Certification Requirements". Additionally, Beatriz Angulo Ibanez is a published author of novels and travel chronicles.



Antoine Pilon

Powerplant Safety and Certification engineer

Airbus

Antoine Pilon is a Powerplant Safety and Certification engineer at Airbus Commercial Aircraft. He's the Airbus rotor burst expert but also covers all major engine failure issues such as FBO or Bird Strike. Antoine has responsibility to design and certify safe aircraft against rotor burst and is involved in all stages of the design process, from R&D to certification and accident / incident investigations. He took part in a major investigation related to a bird strike that occurred in 2019. Antoine is a member of several industry / Airworthiness authorities committees related to aviation safety (Bird Strike / FBO / Rotorburst) and was an Airbus representative in the EASA Open Rotor Bird Strike rulemaking.

October 3rd, 2024
13 : 00

CONFERENCE

FLIGHT SAFETY FIRST : NAVIGATING LAND USE NEAR AIRPORTS.

Land uses surrounding airports directly and indirectly impact wildlife abundance, airport safety and operations. The Canadian Aviation Regulations (CARs) and Standards do not restrict specific land use types surrounding an airport, while Transports Canada's TP1247 and TP8240 only provide guidelines on which land uses are not recommended near an airport. Consequently, prior to 2017, there were no land use types that were explicitly prohibited in the vicinity of airports even though they may attract wildlife and increase the potential for bird strikes. In 2017, Airport Zoning Regulations (AZR) were implemented to restrict certain land uses and activities that attract wildlife. The aim of these regulations are to protect aircraft from hazards and protect existing airport operations to ensure future developments are compatible with safe airport operations. Initially, just a few airports had AZRs, now over 150 airports have them. However, despite these regulations being much more widespread across Canada, several municipalities located within these zones remain unaware of the regulations and continue with developments that can present a risk to airport safety and operations. Here, FALCON presents a procedure for advancing development projects within an airports' AZR while remaining compatible with safe airport operations. Open communication between airport management, airport biologists and project management is key in determining how a risk assessment will be performed and by whom, should one be required. FALCON has worked with several airports, municipalities as well as cities to perform risk assessments and has developed a baseline procedure which will be presented along with a few case studies.



Andrea Brown

Biologist - Data Analyst
Falcon Environmental

Andrea Brown holds a bachelor's degree in wildlife biology and a master's degree in quantitative biology from McGill University, where she focused her research on developing species distribution models to assess how climate change will impact Canadian birds. Since she started working for Falcon Environmental Inc. in March of 2023, she has been involved in behavioural surveys for protected species, data analysis for airport research projects and several Airport Wildlife Management Plans.

THANKS TO OUR VALUED PARTNERS

