



AVIATION DEPARTMENT - Fort Lauderdale-Hollywood International Airport
320 Terminal Drive, Suite 200 • Fort Lauderdale, Florida 33315 • 954-359-6100

May 31, 2024

**SUBJECT: THE BROWARD COUNTY AVIATION DEPARTMENT
AIRPORT NOISE ABATEMENT COMMITTEE (ANAC) MEETING**

Dear County Commissioners / City Officials / ANAC Members / Airport Community,

Enclosed please find a copy of the meeting minutes from the last ANAC meeting held on March 11, 2024, along with an agenda for the next ANAC meeting scheduled for **June 10, 2024, at 6:00 p.m.**

The Broward County Aviation Department will be hosting the June 10 meeting via the Webex Conference System. The meeting details are as follows.

VIA WEBEX

Click [here](#) to register for the meeting or go to
<https://questcorporationofamericainc.my.webex.com/questcorporationofamericainc.my/j.php?MTID=mf6a53c38200e8ef369b0c52bf95edc6f>

Early registration is available but not required. After registering, attendees will receive an email with instructions to join the webinar, including call-in options.

Please feel free to contact me at (954) 359-6181 or at wcannicle@broward.org should you have any questions, or visit the Aviation Department's website at www.fll.net for more information.

Sincerely,

A handwritten signature in black ink, appearing to read "W. Cannicle", is written over a light blue circular stamp.

Winston B. Cannicle
Environmental Program Manager
Broward County Aviation Department



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A G E N D A

FORT LAUDERDALE - HOLLYWOOD INTERNATIONAL AIRPORT AIRPORT NOISE ABATEMENT COMMITTEE

**June 10, 2024
6:00 p.m.**

VIA WEBEX

**Click [here](https://questcorporationofamericainc.my.webex.com/questcorporationofamericainc.my/j.php?MTID=mf6a53c38200e8ef369b0c52bf95edc6f) to register for the meeting or go to
<https://questcorporationofamericainc.my.webex.com/questcorporationofamericainc.my/j.php?MTID=mf6a53c38200e8ef369b0c52bf95edc6f>
Early registration is available but not required. After registering, attendees will receive an email with instructions to join the webinar, including call-in options.**

1. Welcome
BCAD Staff
2. Approval of Minutes – March 11, 2024, Meeting
ANAC Chairperson
3. Noise Office & ANAC Update
BCAD Staff
4. South Runway Nighttime Quarterly Report, First Quarter 2024
HMMH
5. FLL North Runway EMAS (Engineered Material Arresting System)
Repair Update
BCAD
6. Update on FAA Noise Abatement Information for Pilots
HMMH
7. Committee /Citizen Comments
8. Next meeting – September 9, 2024

**To register over the phone, please contact Quest Corporation of America, Inc.
(Communications) at (786) 535-5694 and provide your full name and email.**

Broward County Board of County Commissioners
Mark D. Bogen • Lamar P. Fisher • Beam Furr • Steve Geller • Robert McKinzie • Nan H. Rich • Hazelle P. Rogers • Tim Ryan • Michael Udine
www.broward.org
www.fll.net

FORT LAUDERDALE - HOLLYWOOD INTERNATIONAL AIRPORT
 AIRPORT NOISE ABATEMENT COMMITTEE
 Meeting Minutes – March 11, 2024

DATE: Monday, March 11, 2024
LOCATION: WebEx

CUMULATIVE MEETING ATTENDANCE (10/01/2008 – 03/11/2024)

Committee Member (Organization Represented):	Present/Absent:	Present:	Absent:
Carlos Jose (RMT#1)	A	1	11
Gary Luedtke (RMT#2)	A	51	9
Randy Wright (RMT#2 Alt.) Appointed December 2013	A	16	24
Patricia Wright (RMT#3) Appointed December 2013	A	16	24
Micheline Peacock (RMT#4) Appointed June 2015	A	16	18
Tom Gongola (RMT#6) Appointed Mar 2017	A	3	23
Alan Scharf (RMT#6 Alt.) Appointed December 2016	A	2	26
Richard “Dick” Cahoon (RMT #8) Appointed June 2017	P	23	4
Geoff Rames (RMT#8 Alt.) Appointed June 2019	P	19	0
Arthur Joseph (RMT#9)	A	2	10
Debra Van Valkenburgh (RMT#10)	A	30	29
Eric Ram (RMT#11) Appointed Mar 2017	A	22	6
Frank Derisi (RMT#11 Alt.) Appointed March 2015	A	13	22
Jet Blue Representative (Michael Miles, 9/18)	A	10	47
Spirit Airlines Representative (Matt Nelson, 12/13) (Richard Sack, 6/12)	P	14	43
FBO Representative	A	4	55
Southwest Airlines Representative	A	4	56
Delta Airlines Representative	A	5	52
FAA ATCT Representative (Don Ellington, Amanda Shapiro)	P	17	47

RMT = Representative for neighborhood containing the identified Remote Monitoring Terminal

Alt. = Alternative RMT representative

*Designates newly appointed representative

Airport/County Staff

- Winston Cannicle, BCAD
- Steve Kirkpatrick, BCAD

Visitors

Visitors Name	Agency/Affiliation
Rhea Hanrahan	Harris Miller Miller & Hanson (HMMH)
Bryan Rand	Harris Miller Miller & Hanson (HMMH)
Gautam Shah	NASA
Dr. Alexandra Cook	Quest Corporation of America
Maria Corbeira	Quest Corporation of America
Josh Pierce	Quest Corporation of America
Chris Wilkins	Quest Corporation of America
Terry Cure	Quest Corporation of America

Visitors Name	Agency/Affiliation
Raul Remigi	Community member, Davie
Nicole Vernon	Community member, Villas Harbor Isles/Dania Beach
David Stout	Community member, Poinsettia Heights, Fort Lauderdale

1. WELCOME (BCAD STAFF)

Broward County Aviation Department (BCAD) Environmental Program Manager Mr. Winston Cannicle called the meeting to order at 6:06 p.m.

2. APPROVAL OF MINUTES – DECEMBER 11, 2023, MEETING (ANAC CHAIRPERSON)

Airport Noise Abatement Committee (ANAC) Geoff Rames (RMT #8 Alt.) motioned to approve the September meeting minutes, seconded by Mr. Richard Cahoon (RMT #8). The December meeting minutes were unanimously approved.

3. NOISE OFFICE & ANAC UPDATE (BCAD STAFF)

Mr. Cannicle explained the roles and responsibilities of the Noise Office and Federal Aviation Administration (FAA) Air Traffic Control Tower (ATCT). He stated BCAD collects information from the community and shares pertinent data with Air Traffic Control (ATC) and noted that the FAA ATC primarily focuses on aircraft sequencing and airspace separation. He provided BCAD's contact information for public records requests, shared the Part 150 project website, and discussed options for submitting noise comments through the website, application, or hotline. He also stated that contact information for ANAC members needed to be updated. Mr. Cannicle shared a brief synopsis of noise comments BCAD has received, highlighting an increase during December of last year, likely linked to an increase in west departures, due to the cold fronts. He compared the comments received in December 2022 with the new comments in December 2023, and there was a significant increase in a year. Mr. Cannicle provided an overview of Aircraft Operations from December 2022 to February 2024 emphasizing that during the winter months, the airport experiences heightened activity. March 2023 marked the peak activity for the year and expects an increase in March 2024 due to Spring Break. March 2023 was the highest activity the airport had throughout the year and expects an increase in March 2024, due to Spring Break. Mr. Cannicle compared the noise comments received and the FLL Aircraft Operations using a bar chart from December 2022 to February 2024. He explained that when there is an increase in operations typically you can expect noise comments to increase. This also depends on which direction flow operations are from the airport. West flow typically has more comments since there is a larger community to the west of the airport. Mr. Cannicle shared with the public the FAA Noise Portal QR code and website and explained the process of receiving comments from the public in the FAA.

4. NASA QUESST MISSION OVERVIEW

Gautam Shah is the Manager for the Supersonic Overflight and Community Response Commercial Supersonic Technology Project, at NASA Advanced Air Vehicles Program. Mr. Shah gave a summary of the history of Commercial Supersonic Flight. He explained in detail what makes a sonic boom. It is produced from a conical shock wave that produces a sonic boom that reaches the ground which moves with the airplane. Mr. Shah compared the typical airplane noise to the supersonic flight-generated

sound. Typical Airplane Noise is generated by the engine and aerodynamics, happens predominantly at low altitudes, and is a long-duration sound. Whereas the Supersonic Flight-Generated Sound is due to shockwave, happens normally at high altitudes, and is a short-duration sound. Supersonic is prohibited for commercial operations due to the loud sound it creates. Mr. Shah shared the purpose of the NASA Quesst Mission, which is to generate data that they can provide to regulators on the relationship between sonic boom sound levels and public annoyance. The mission is divided into three phases.

Phase 1 is Aircraft Development of the specialized X-59 aircraft. It is being developed and designed to generate a quiet sonic thump softer than a conventional sonic boom. This started in 2018 and is currently ongoing and the first flight is expected later this year. There will also be a year of checkouts and validation of the aircraft. The single-seat research aircraft X-59 was built by Lockheed Martin. It is expected to fly at Mach 1.4, which is 925 miles per hour, and reach an altitude of 55,000 feet. The X-59 uses components from existing aircraft to reduce costs and design studies.

Phase 2 is Acoustic Validation. Preparation is in progress and execution begins in 2024. This phase is to research and study the characteristics of the aircraft. Does it generate the quiet sonic boom signature it was designed to do? This phase will also involve detailed in-flight and ground measurements and validation of X-59 acoustic signature and prediction tools. Also, they will develop acoustic prediction tools for Phase 3. The first test flight is expected to happen later this year.

Phase 3 is Community Response Testing. Preparation is in progress and execution begins in 2026. The aircraft will be flown in research studies over different parts of the United States to measure the sound levels on the ground under different climate conditions and obtain public responses to the sound levels. This information will be used to compare the sound level to public annoyance. The X-59 is expected to make some sound over the 4-6 different communities across the United States. Surveys will be conducted through the tested communities about the noise exposure level generated by X-59 and hear their opinion about supersonic flights. Currently, they are in the planning stage of selecting the location of the communities where the response testing will occur. These locations will be selected based on variations in climate zones, population demographics, and urbanization levels. The execution stage is estimated to take place between 2026-2028, and later in 2027, the data will be delivered to regulators.

Further details for Phase 3 included a diagram called the Perceived Level Scale which uses units of decibels. The X-59 aircraft on the scale showed a level of 75 (dB) which could be compared to distant thunder or a car door slamming from 20 feet away. In contrast, the sonic boom from The Concorde is a level between 105 and higher. This could be compared to a car door slamming if you are inside the car or nearby thunder. Mr. Cannicle asked how the community would be notified. Mr. Shah responded that the communities would be notified in advance and would ask for participants to gather information.

5. SOUTH RUNWAY NIGHTTIME USAGE REPORT AND RNAV WAYPOINT PERCENTAGES

Ms. Rhea Hanrahan presented the South Runway Nighttime Use Report for the fourth quarter of 2023 (October-December). She provided an overview of the Voluntary Runway User Program, established through an interlocal agreement between Dania Beach and Broward County. She said the program involves voluntarily limiting nighttime use (10:30 p.m. – 6:00 a.m.) of the South Runway (10R-28L). The report tracks nighttime operations and is structured with a breakdown of nighttime operations for each month, categorizing them into arrivals and departures.

For the South Runway usage during the third quarter of 2023, Ms. Hanrahan provided the following operations summary:

- October:
 - There was increased use of the South Runway, especially during the latter half of the month, primarily on arrivals.
- November:
 - It was a quiet month for arrivals and departures in November, except for 2 days that the runway was used for arrivals, between the 16th and 17th.
- December:
 - South Runway was used here and there in December for arrivals and departures.

Ms. Hanrahan also presented a distribution chart for each month, illustrating the hourly distribution of nighttime operations. For October, the most usage of the South Runway is spread out from 10:30 p.m. and midnight, and at 5:00 a.m. For November, the graph shows that the South Runway was barely used during the curfew hours. And lastly, for December, there was a spike at 11:00 p.m., 12:00 a.m., and 5:00 a.m. hours. Ms. Hanrahan presented a graph of the Fourth Quarter with the Cumulative South Runway Nighttime Hourly Usage with arrivals and departures in the first and last five minutes of the curfew hours displayed. She also displayed a breakdown of the South Runway nighttime operations by airline. The data revealed that Spirit Airlines was the most significant contributor to nighttime operations, especially the South Runway, and consistent with their overall high presence at the airport during the nighttime hours. She displayed the breakdown of the reason behind using the South Runway during nighttime, due to North Runway close out, routine aircraft maintenance, drainage work, medical emergency on board, and other explanations that were tracked down. Mr. Cannicle added that sometimes due to weather changes, the South Runway needs to be used during nighttime. Mr. Ellington added that sometimes the airport closes for 2-3 hours due to weather changes and most flights are delayed.

Ms. Hanrahan provided an additional presentation on the Update on Nighttime Runway Percentages. She presented charts of the use of all runways at night by airline and compared it to the use of the South Runway at night by airline; for all quarters of 2023. The data revealed that the percentage of South Runway is proportional to the overall use of all runways. Previously, it was elucidated that Spirit Airlines predominates runway usage during nighttime hours due to the majority of their flights being scheduled during this period. Following a previous request by Mr. Ellington, Ms. Hanrahan presented the data on the usage of the South Runway excluding the days of maintenance and emergencies. Mr. Ellington suggested that the data can be presented as the total runway operation count of arrivals and departures, during the nighttime hours for the North and South Runway. Following up from the previous meeting, about the RNAV use and the initial fix and waypoint analysis, Ms. Hanrahan presented the departure tracks of west and east flow using a heat map and presented Broward County Initial Fix RNAV percentages for departures. From October 2022 to December 2023, the data shows that most west and east flow first fix were within the range of 80-90%, except for April 2023. Mr. Rames brought up that in December 2023, there were a lot of noise comments and the first fix for the west flow is shown in the graph at 90%. Mr. Cannicle explained that they had a lot of west departures due to the cold fronts and the community will comment about the noise. Mr. Rames further emphasized that the chart effectively illustrates the higher volume of departures on the east compared to the west.

6. COMMITTEE / CITIZEN COMMENTS

Multiple residents in Plantation complained about the noise of airplanes approaching the airport. Ms. Vernon spoke about this time of the year being the busiest and mentioned that this runway is supposedly used as a last resort. However, as a resident living near the airport, the loud planes have a significant impact on the community. Mr. Ellington clarified that there is too much traffic for one runway to handle, and that's the reason why the South Runway is used. Geoff Rames asked about the usage of the runway at 5:00 a.m. for arrivals, Mr. Cannicle and Mr. Ellington explained that it could be because of the shutdown of the North Runway on December 5th – 7th and December 30th. Mr. Ellington suggested removing the dates where the North Runway was closed due to maintenance or other reasons. Mr. Remigi, a community member in Davie stated a lot of planes pass by his house and wanted to find out from the team if there are any tax breaks he could use since his property values are being affected by noise pollution. Mr. Cannicle responded to his question by saying that there is nothing that can be afforded to the community in that aspect and that the local government has no authority over tax breaks. Ms. Hanrahan explained that most houses in Florida are built with new noise standards due to the hurricanes, but she is not aware of any tax breaks.

7. NEXT MEETING – JUNE 10, 2024, AT 6 PM

Mr. Cannicle adjourned the meeting at 7:35 p.m. The next meeting is scheduled for June 10, 2024, at 6:00 p.m.