May 20, 2019

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

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

Enclosed is a copy of the meeting minutes for the ANAC Meeting held on March 10, 2019, along with an Agenda for the next ANAC meeting to be held on June 11, 2019, at 6:00 p.m.

The meeting will be held in Conference Room “D” located in the BCAD Offices at the Airport Commerce Park (Suite 404) - 4101 Ravenswood Road, Fort Lauderdale FL, 33312.

Please note that the North Runway (10L/28R) will be closed for major reconstruction beginning June 3, 2019 at midnight for 4 months as part of a $90 million rehabilitation project that will include rebuilding and resurfacing the runway and associated taxiways.

For more information and updates on this project, please visit the project dedicated page on the airport’s website at the link below:

North Runway Updates

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,

Winston B. Cannicle
BCAD Noise Information Officer

WBC/
AGENDA

FORT LAUDERDALE - HOLLYWOOD INTERNATIONAL AIRPORT
AIRPORT NOISE ABATEMENT COMMITTEE

June 10, 2019
6:00 p.m.
BCAD Conference Room “D”
Suite 404
4101 Ravenswood Road, Fort Lauderdale, FL 33312

1. Welcome
   BCAD Staff

2. Approval of Minutes – March 11, 2018 Meeting
   ANAC Chairperson

3. Old Business /Noise Office Update
   BCAD Staff

4. FLL North Runway Rehabilitation Update
   Kimley-Horn

5. Presentation –
   HMMH.

6. Committee Member Comments

7. Citizen Comments

8. Next meeting – Sep 16, 2019 at 6:00 p.m.

Please contact Dickey Consulting - (954)467-6822 to RSVP
DATE: Monday, March 11, 2019 6:00 P.M.

LOCATION: Fort Lauderdale-Hollywood International Airport
BCAD Administrative Offices
Airport Commerce Park - Conference Room D
4101 Ravenswood Road, Suite 404
Fort Lauderdale, FL 33312


<table>
<thead>
<tr>
<th>Committee Member (Organization Represented):</th>
<th>Present/Absent:</th>
<th>Present:</th>
<th>Absent:</th>
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<tr>
<td>Ernie Siegrist (RMT#1)</td>
<td>A</td>
<td>32</td>
<td>9</td>
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<tr>
<td>Gary Luedtke (RMT#2)</td>
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<td>Randy Wright (RMT#2 Alt.) _Appointed: December 2013</td>
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<td>Patricia Wright (RMT#3) _Appointed: December 2013</td>
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<td>Rae Sandler (RMT#5)</td>
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<td>Debra Van Valkenburgh (RMT#10)</td>
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<td>Richard Reasoner (RMT#10 Alt.)</td>
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<td>Jet Blue Representative (*Michael Miles, 9/18)</td>
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<td>US Airways Representative</td>
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<td>Spirit Airlines Representative (*Matt Nelson, 9/18)</td>
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RMT = Representative for neighborhood containing the identified Remote Monitoring Terminal
Alt. = Alternate RMT representative
*Designates newly appointed representative

Airport/County Staff
Winston Cannicle – BCAD, Trevor Fisher – BCAD, Mike Pacitto – BCAD, Ryan Godman – BCAD, Gasser Douge (BCAD), Jason Kruszka – BC Board of Commissioners,

Acoustical Consulting Team Members
Rhea Gundry (HMMH), Robert Mentzer (HMMH), Sheryl A. Dickey (DCS) and I. David Byrd (DCS)

Visitors/Residents:
Dan McNalty (Dania Beach), Mike Carol (Davie), James Patterson (Lauderdale Isles), Richard Ramcharitar (Southwest Ranches), Geoff Rames (Lauderdale Isles), Mike Carey (Kimley Horne Associates)
1. WELCOME

Mr. Winston Cannicle informed the committee that Mr. Bossle and Ernie Siegrist would not be in attendance, welcomed all guests, requested all attendees to sign in and verify their contact information, and began introductions. Mr. Winston also informed the committee that the FAA Tower Manager would not be able to attend the meeting due to a family emergency and that a teleconference was set up in case he was able to participate via phone.

2. APPROVAL OF DECEMBER 2018 MINUTES

Mr. Winston Cannicle called for approval of the minutes after there were no ANAC requested comments or changes. Mr. Gary Luedtke moved and Ms. Sandler seconded the motion to approve the December minutes. The minutes were passed as stated.

3. OLD BUSINESS

Roles and Responsibilities

Mr. Winston Cannicle gave a brief overview of the roles and responsibilities as it related to the Noise Office functions and other areas such as the FAA Air Traffic Control Tower, Noise Mitigation and Public Requests.

New Noise Monitor Installation:

Mr. Winston Cannicle gave an update on the status of the two new noise monitors to be installed. He advised that the Aviation Department received delivery of some equipment from the vendor. This included the pole for noise site in Davie and the two foundations (pre-cast bases – weighing 500lb each). He also advised that Airport Development Engineering section completed the negotiations for the site designs and installation and are currently waiting for the purchase order to be issued. There was a question regarding the cost of the equipment and how long it would take for installation. Mr. Winston Cannicle advised that the cost for the noise monitoring equipment was about $35,000 for each site and that there are additional costs for the physical installation to be done. He also advised that once all the permitting is completed at each location, it should not take long for the equipment to be physically installed. Mr. Luedtke expressed concerns about issues with the functionality at Noise Site 3 and Mr. Winston informed that the new equipment is different from the equipment at Noise Site 3. Mr. Eric Ram inquired if the Aviation Department is still pursuing to have enhanced user interface. Mr. Winston Cannicle stated that through another agreement, currently in procurement, they are looking to have a public portal installed. Mr. Winston Cannicle also mentioned that Noise Site 8 was back online as of January 8, 2019.

Part 150 Update:

Mr. Winston Cannicle gave an update on the Part 150 Study. He advised that Public Workshops were held in January 2019 for the Noise Exposure Maps (NEMs) that were developed for the Study. He advised the Part 150 Project Team are currently reviewing all the comments received and will prepare a final NEM report that will be submitted to the FAA approval. Mr. Luedtke asked if flight track information are being sent to the FAA as part of the 65 DNL Cone. Winston informed that there are 2 Phases for Part 150 Study; the first phase is related to the NEM, which shows noise exposure (noise contours) based on flight track information. The second phase is the development a Noise Compatibility Program (NCP). During this phase, there will be a set of recommendations developed for submittal to the FAA. Mr. Luedtke asked if the 60 DNL cone can be included in NEM. Winston stated that NEM submittals to the FAA did not include the 60 DNL contour; the 65 DNL contour is included. Mr. Robert Mentzer, HMMH added that the 60 DNL contour is typical shown if this is an approved measure by the FAA through the NCP phase of the project. Mr. Luedtke stated that 60 DNL contours have been included in past maps developed and asked that this be included in the current maps. Mr. Marc Gambrill advised that he would follow up on this request to have the 60 DNL contour depicted on the maps.

For more information on the Part 150 Noise Compatibility Planning Study please, visit: http://www.fllpart150.com/
Runway Closures:
Mr. Winston Cannicle gave an update on the current runway closures for rubber removal. He advised that the north runway is scheduled closed Mar 4 – March 8, 2019 and south runway is scheduled to be closed Mar 12 – 15, 2019.

Noise Complaints:
Mr. Winston Cannicle presented a 90-day snap shot of the noise comments received through February 2019 and advised that the most of the noise comments received were from areas in SW Fort Lauderdale and Plantation.

Mr. Geoff Rames inquired about the status of the ANAC recommendations. Mr. Winston Cannicle confirmed that the list of ANAC recommendations were submitted to the Part 150 Team and the Aviation Department. He stated that the information ANAC submitted is being reviewed by the Part 150 Team to determine the items that can be addressed through Part 150 process and/or by the Aviation Department. ANAC requested that Aviation Department CEO be invited to next meeting to have a discussion on the ANAC recommendations.

Mr. Jason Kruszka, representing Commissioner Ryan’s Office, informed that the Commissioner’s Office has received an increase in noise complaints from area residents in Poinsettia Heights which is east of I-95 in NE Fort Lauderdale. He wanted to know if the Aviation Department provide responses to these complaints. Mr. Winston Cannicle advised that he has received comments from residents in the Oakland Park area and needed to verify if the comments received were from the same location. He advised that he would get back to Mr. Kruszka on this later in the week. Mr. Winston Cannicle went on to explain that areas NE Fort Lauderdale, particularly in the Oakland Park area will observe aircraft overflights from FLL he stated that area residents may observe both arrivals and departures from the airport.

Mr. Eric Ram requested that data from noise monitors be added to the monthly slides.

4. PRESENTATION: FLL NORTH RUNWAY REHABILITATION UPDATE
Mr. Mike Carey, P.E. of Kimley Horn gave an update on the North Runway Rehabilitation Project for the Airport. Below are of the highlights of his presentation:

- The overall project will last one year and cost $68M
- The project has been subdivided into phases to minimize closure of the north runway and will include work on the runway, taxiways, apron areas and the replacement of the Engineered Materials Arresting System (EMAS) at both ends of the north runway
- The project will begin on March 25, 2019 with work on Taxiway “C”
- The main phase of project will begin on June 3, 2019, with the closure of the north runway for 120 consecutive days, through September 11, 2019. This includes converting middle section of the runway from asphalt to concrete.
- There are incentives for finishing the runway work early and liquidated damages for not finishing on time
- A public outreach program was developed for this project which includes newsletters, HOA/City briefings, and website and media information
- Final completion of all airfield work is estimated to be in February of 2020.

Mr. Ram requested that Mr. Carey give another update to the ANAC at next meeting in June, 2019. Mr. Luedtke pointed that when the north runway is closed all the traffic would be moved to the south runway.

5. PRESENTATION: HMMH SOUND PROPAGATION THROUGH THE ATMOSPHERE
Ms. Rhea Gundry (HMMH) gave a presentation that was focused on, “Why on Some Days Aircraft Noise is Louder.” She presented information on Fundamentals of Sound – what is sound and how different engines/aircraft types sound differently as well as human perception of sound, the different characteristics humans used to define sound (i.e. speed,
Discussions ensued involving the ANAC Members and the public about normal range of speech, aircraft overflight levels, and difference of perceived sound levels during daytime versus nighttime. There was also discussion on the sound effects of aircraft noise in animals in areas west of the airport that are equestrian communities with livestock. Ms. Gundry mentioned that there were not many studies conducted on this topic. It was noted that the presentation would be available via the Aviation website.

Mr. Gary Luedtke inquired about Day/Night Sound Level (DNL) averages and a multiplier that is used to account for the difference between aircraft departures to the east and the west. Ms. Gundry advised that the DNL metric takes flight frequency into consideration when producing the DNL contour maps.

Mr. Dan McNaulty stated that he is located in the 65 DNL contour area for the FLL and feels that aircraft flights at night are quieter and daytime flights are louder. While his home is sound insulated, he feels that this is not fair. He inquired as to why pilots cannot operate these quieter aircraft all the time and not just at night. He stated the airport should reduce the DNL of consideration to 60 DNL. It was stated the 65 DNL contour is used by the FAA to determine the areas that would eligible to get federal funding for noise mitigation.

Discussion ensued regarding aircraft descents, engine power and airframe noise. It was noted that as aircraft engines have gotten quieter, the airframe noise is becoming more noticeable, especially for aircraft on arrival. Aircraft manufacturers are working to address this issue of airframe noise.

6. COMMITTEE MEMBER COMMENTS AND QUESTIONS (“ISSUES”) AND ANSWERS:

Mr. Ram inquired about the Metroplex process. Mr. Winston Cannicle indicated that the FAA is in the process of beginning their community engagement process related to Metroplex. The FAA have reached out to the BCAD to discuss setting up meetings, which would include briefings to the County Commission, other elected officials, ANAC, and the public. During preliminary discussions, the FAA also indicated that will do similar briefings at other airports like Miami. There was discussion regarding the ANAC list of recommendations that was submitted to the Part 150 Study Team and to BCAD. The ANAC discussed that there were some recommendations listed that they felt were not dependent on the airport. Members wanted to know how the airlines can be approached to have voluntary restrictions implemented similar to what was done in Tampa. Mr. Matt Nelson indicated the Spirit Airlines does abide by the voluntary procedures at Tampa. He stated that the runway uses for the runways at Tampa and Fort Lauderdale are different and used differently. Ultimately, the FAA Air Traffic Control manages the airspace and procedures for aircraft operations at airports.

Mr. Richard Ramcharitar commented that aircraft arrivals for the airport, 10-15 miles west of the airport in Southwest Ranches, seems to be lower than normal, particularly in the evenings and early mornings. Mr. Nelson pointed out that the FAA Air Traffic Control clearance for altitudes can vary depending on air traffic spacing and separation. Aircraft are sequenced based on air traffic arriving from the north and south. Winston also pointed out that through the ongoing Part 150 process all arrival procedures for the airport will be evaluated to see where changes can be implemented.

Mr. Luedtke asked if noise contours can be developed for the upcoming runway closure. He pointed out that there is a company called Aviation Development Design and that they have a tool AEDT 2D (an FAA program) that can be purchased for $1,200. Mr. Luedtke indicated that contours should be developed for the one runway use for June through September. Mr. Luedtke also provided several handouts which included information on Minneapolis St. Paul noise mitigation in 2008, and statistics on when aircraft accidents occur.
7. CITIZEN COMMENTS AND QUESTIONS (“ISSUES”) AND ANSWERS:

Other areas of discussion included:

- How aircraft are assigned departure headings and on the importance of having the FAA Tower Manager attend future ANAC meetings to aid in discussion; Mr. Winston will continue to make this request to the FAA;
- Concerns from concentration of flights due to upcoming north runway closure for rehabilitation;
- Noise Abatement Departure Procedures at other airports and recommendations for FLL; comments of this nature are encouraged to be included in the Part 150 Study.

8. ADJOURNMENT:

Mr. Trevor Fishers expressed gratitude and appreciation or all those in attendance. The meeting adjourned with no additional questions or comments. The next meeting is June 10, 2019.