# BOCA RATON AIRPORT AUTHORITY MEETING AGENDA

# Wednesday, December 13, 2017 Council Chambers – City Hall 201 W. Palmetto Park Road, Boca Raton, Florida

The Boca Raton Airport Authority Agenda will be considered by the Chair and Authority Members Wednesday, December 13, 2017 at 2 p.m. All requests to be placed on the agenda by the public must be submitted to the Executive Director, in writing, via the Agenda Request Form, at least twenty (20) days before the Authority meeting. Such written requests must be in sufficient detail to identify the subject matter as well as the contact person who will represent the matter before the Authority. The Boca Raton Airport Authority reserves the right to not consider matters over which the Authority has no jurisdiction.

This meeting will be televised on Comcast channel 20 in the City of Boca Raton, and on AT&T U-Verse channel 99 throughout Palm Beach County and will be videotaped for broadcast at a later date. The meeting will also be streamed live to the Boca Raton Airport Authority Website, <u>www.bocaairport.com</u> and may also be heard on the radio on 1650 AM.

# I. <u>ROLL CALL</u>

MITCHELL FOGEL	CHAIR
CHERYL BUDD	VICE-CHAIR
RANDY NOBLES	SECRETARY/TREASURER
GENE FOLDEN	BOARD MEMBER
JACK FOX	BOARD MEMBER
JAMES R. NAU	BOARD MEMBER
MELVIN POLLACK	BOARD MEMBER

# II. APPROVAL OF MINUTES

- A. Consider approval of Minutes for the Board Workshop of November 9, 2017.
- B. Consider approval of Minutes from the Board Meeting of November 15, 2017.

## III. AGENDA CHANGES

# IV. PUBLIC REQUESTS

If any member of the public wishes to provide comment on any item, the time to do so is now. Please complete a public comment card identifying the item upon which you wish to be heard and provide it to Ms. Landers. The public comment cards are located in the lobby. Each member of the public wishing to comment will be provided with 5 minutes to do so. The Chair reserves the right to move the public comment opportunity on a specific agenda item to the point in the agenda when that item is to be considered and /or to extend the allotted time per speaker.

## V. CONSENT AGENDA

# VI. FEDERAL, STATE AND MUNICIPAL INPUT

## VII. FINANCIAL REPORT

A. Presentation of the November 2017 Financial Report.

Consider a Motion for approval of the Financial Report for November 2017.

# VIII. TENANT REPORTS AND REQUESTS

A. Request from Atlantic Aviation to hold a special event on February 23, 2018.

Consider Resolution No. 12-36-17 of the Boca Raton Airport Authority conditionally approving Atlantic Aviation's request to host a special event on their leasehold premises for the Concours D'Elegance/DuPont Registry, scheduled for February 23, 2018.

## IX. EXECUTIVE DIRECTOR AND STAFF REPORTS

- A. Noise Abatement/Operations Summary for the month of November 2017.
- B. Request to award Harris Corporation the Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance contract.

Consider Resolution No. 12-37-17 of the Boca Raton Airport Authority awarding the contract for Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance to Harris Corporation.

C. Airport Projects Update.

# X. <u>AUTHORITY BOARD MEMBER REQUESTS AND REPORTS</u>

A. Report on Management Team Compensation Study.

# XI. PUBLIC COMMENT

# XII. OTHER BUSINESS

# XIII. MISCELLANEOUS

The next meeting is scheduled for January 17, 2018 at 6:00 p.m. in the Boca Raton Council Chambers at City Hall.

# XIV. ADJOURNMENT

Respectfully Submitted, Clara Bennett Executive Director

#### Boca Raton Airport Authority Workshop Minutes November 9, 2017 903 NW 35<sup>th</sup> Ave Boca Raton, FL 33531 Boca Raton Airport Administration Building

The Boca Raton Airport Authority held a Board Workshop on November 9, 2017 at 2:00 P.M. The workshop was open to the public.

#### **MEMBERS IN ATTENDACE**

Mitchell Fogel Cheryl Budd Randy Nobles Gene Folden Jack Fox James Nau Melvin Pollack Chair Vice-Chair – Arrived at 2:06 p.m. Secretary/Treasurer Board Member Board Member Board Member Board Member

# **<u>COUNSEL</u>** Amy Petrick, Esquire – Lewis Longman & Walker

# **STAFF IN ATTENDANCE**

Clara Bennett, Executive Director Scott Kohut, Deputy Director Ariadna Camilo, Finance and Administration Manager Christine Landers, Business Manager Travis Bryan, Operations Manager Robert Abbott, Operations Coordinator

## Welcome and Introduction

Mr. Fogel called the meeting to order at 2:02 p.m. and welcomed the attendees.

## I. Update on Minimum Standards and Requirements for Aeronautical Activities Pertaining to Independent Operators

Ms. Bennett gave an overview of the meeting held on Saturday, November 4, 2017 between Airport Management, Mr. Fox, representing the Board and representatives of the pilot community. Ms. Bennett advised they are exploring options for insurance requirements based on aircraft size and type.

Mr. Martin Heise, President of Runway 5-23 Hangar Condominium, spoke regarding the meeting on the 4<sup>th</sup> of November and stated that he would be working with Airport Management regarding new recommendations for Minimum Standards.

Mr. Fox confirmed that the meeting went well and that he has spoken with others regarding the tiered insurance option.

Mr. Pollack asked if the security on the Airport will change once the Customs facility opens. Ms. Bennett advised that activity around the Customs facility and in the facility itself will be affected.

A discussion ensued.

# II. Discussion on Lease Provisions Requiring Disclosure of Change of Corporate Ownership of Lessees

Mr. Nau spoke regarding possible concerns with change in ownership.

Ms. Petrick gave a legal overview on lease provisions.

A discussion ensued.

Mr. Fox expressed concerns of the security aspect involved when there is a change in corporate ownership.

Mr. Fogel recommended pursing a policy for when there is a change in corporate ownership and having a vetting process in place.

Ms. Petrick will research some options regarding a vetting process.

# III. Discussion on Drug and Alcohol Free Workplace Policy

Ms. Petrick made a presentation on the proposed options for the Boca Raton Drug and Alcohol Free Workplace Policy.

A discussion ensued regarding safety sensitive positions at the Airport.

Mr. Folden stated he does not believe there is concern currently at the Airport, but all Airport Management staff should have the protection to work in a drug free workplace.

Mr. Nobles believes there is too much risk involved in random testing.

Ms. Budd inquired about current training that the Airport currently has in place.

Ms. Budd provided an overview of current training and procedures.

# IV. Presentation on Salary Survey Findings

Ms. Gale LaRache, Project Manager with ADK Consulting & Executive Search, provided her findings for the Boca Raton Airport Authority Management Team Compensation

Study. Ms. LaRache gave an overview of the methodology, finding and recommendations.

Mr. Fox recommended that the highest and lowest responses be eliminated.

A discussion ensued.

Ms. LaRache was asked to recalculate her findings.

# V. Discussion on Employee Benefits

Ms. Bennett provided an overview of the current benefits being offered to Airport Management.

Ms. Camilo provided options to offer Airport Management a wider selection of benefits without any additional cost to the Airport.

# VI. Public Comment

There was no public comment.

# ADJOURNMENT

Meeting adjourned at 5:13 p.m.

Mitchell Fogel, Chair

Date

#### **Boca Raton Airport Authority Meeting Minutes** November 15, 2017 **Boca Raton City Hall – Council Chambers**

Chair Mitchell Fogel called the meeting to order at 6:00 P.M.

#### **BOARD MEMBERS**

Chair
Vice-Chair
Secretary/Treasurer
Board Member
Board Member
Board Member
Board Member – Participated by phone

Amy Petrick, Esquire – Lewis Longman Walker COUNSEL

STAFF Clara Bennett, Executive Director Scott Kohut, Deputy Director Ariadna Camilo, Finance and Administration Manager Travis Bryan, Operations Manager Christine Landers, Business Manager Robert Abbott, Operations Coordinator

The meeting was televised live and videotaped for broadcast at a later date. The meeting was also streamed live to the Boca Raton Airport Authority Website, www.bocaairport.com and aired on the radio at 1650 AM.

## **APPROVAL OF MINUTES**

A MOTION to approve the minutes of the October 19, 2017 Regular Meeting was made by Mr. Nobles and seconded by Ms. Budd. The Motion was carried unanimously.

#### AGENDA CHANGES

There were no agenda changes.

## CONSENT AGENDA

There were no items on the consent agenda.

# FEDERAL, STATE AND MUNICIPAL INPUT

There was no Federal, State or Municipal Input.

# PUBLIC REQUESTS

There were no public requests.

# FINANCIAL REPORT

Mr. Nobles and Ms. Camilo presented the Financial Report for October 2017.

A MOTION to approve the Financial Report for October 2017 was made by Ms. Budd and seconded by Mr. Nobles. The Motion carried unanimously.

# TENANT REPORTS AND REQUESTS

Mr. Kohut provided information on the sign request from Lynn University.

Mr. Matthew Chaloux, Director of Auxiliary Services Lynn University answered questions regarding the sign.

A MOTION to approve Resolution No. 11-31-17 of the Boca Raton Airport Authority conditionally approving Atlantic Aviation – Boca Raton, LLC's request of exterior roadway signage improvements for Lynn University was made by Mr. Budd and seconded by Mr. Nobles. The Motion carried unanimously.

Mr. Abbott provided information on the special events request from Signature Flight Support.

Mr. Garry Madolid, General Manager, Signature Flight Support answered questions regarding the event.

A MOTION to approve Resolution No. 11-32-17 of the Boca Raton Airport Authority conditionally approving the request of Signature Flight Support Corporation to host the Boca Chamber of Professionals under Forty Meets the Boca Chamber Board of Directors after hours network event on January 16, 2018 was made by Mr. Folden and seconded by Ms. Budd. The Motion carried unanimously.

## EXECUTIVE DIRECTOR AND STAFF REPORTS

Mr. Abbott presented the Noise Abatement/Operations Summary for the month of October 2017.

Mr. Fox complimented Atlantic Aviation for their AvGas fuel promotion.

Mr. Kohut presented the Supplemental Joint Participation Agreement with FDOT for Access Road Development.

A MOTION to approve Resolution No. 11-33-17 of the Boca Raton Airport Authority approving the Supplemental Joint Participation Agreement with the State of Florida Department of Transportation for Access Road Development at the Boca Raton Airport was made by Mr. Fox and seconded by Mr. Folden. The Motion carried unanimously.

Mr. Kohut presented the Joint Participation Agreement with FDOT for Landside Access Pavement Rehabilitation.

Ms. Budd asked if this project would include the fence line along Airport Road.

Ms. Bennett replied that the fence line was owned by the Department of Transportation and that Airport Management would be reaching out to the Department to determine if that area could be incorporated into the Airport's project.

A MOTION to approve Resolution No. 11-34-17 of the Boca Raton Airport Authority approving the Joint Participation Agreement with the State of Florida Department of Transportation for Landside Access Pavement Rehabilitation at the Boca Raton Airport was made by Ms. Budd and seconded by Ms. Fox. The Motion carried unanimously.

Mr. Kohut presented the Joint Participation Agreement with FDOT for Taxiways P4, C and F Widening at the Boca Raton Airport Authority.

A MOTION to approve Resolution No. 11-35-17 of the Boca Raton Airport Authority approving the Joint Participation Agreement with the State of Florida for Taxiways P4, C and F Widening at the Boca Raton Airport was made by Mr. Nobles and seconded by Ms. Budd. The Motion carried unanimously.

Mr. Bryan provided an update on the EMAS Project, Airfield Lighting and Customs and Border Protection Facility.

Mr. Bryce Wagner, Resident Project Engineer for Ricondo and Associates, Inc. spoke regarding the construction status of the Customs and Border Protection Facility.

Mr. Michael Schneider, Pace Advertising gave a quarterly update on the Boca Raton Airport Authority Community Engagement and Corporate Identity Program.

## AUTHORITY MEMBERS REQUESTS AND REPORTS

Ms. Petrick gave an overview of the proposed Drug and Alcohol Free Workplace Policy and the recommended changes.

A discussion ensued.

Mr. Folden requested that Ms. Petrick confirm that the Policy follows the federal guidelines.

A MOTION was made to incorporate the proposed Drug and Alcohol Free Workplace Policy into the current Boca Raton Airport Authority Employee Handbook was made by Ms. Budd and seconded by Mr. Nobles. The Motion carried unanimously.

Ms. Petrick provided a presentation on lease reversion provisions in Airport ground leases.

Mr. Folden inquired about the length of the Airport's current leases.

Ms. Budd summarized that there is no solid legal basis for a claim that the Authority is doing anything illegal or unethical by incorporating these provisions in the Airport ground leases.

#### PUBLIC INPUT

There was no public input.

#### **OTHER BUSINESS**

Mr. Fox advised the Board that he recently visited the Air Traffic Control Tower and was very pleased with the condition of the facility.

Mr. Folden inquired about the sign on the Customs building and whether it could be altered if needed. Mr. Kohut responded that it could be changed if needed at a future date.

Mr. Fogel reminded the Board that the next meeting would be on the 13<sup>th</sup> of December at 2 p.m. Ms. Bennett invited the Board Members to go to the Airport after the meeting for a photo at the Customs and Border Protection Facility.

Ms. Budd wished everyone happy holidays.

#### MISCELLANEOUS

The next regularly scheduled meeting is Wednesday, December 13, 2017 at 2:00 p.m. in the Boca Raton Council Chambers at City Hall.

# **ADJOURNMENT**

Meeting adjourned at 7:37 p.m.

Mitchell Fogel, Chair

Date



# Memo

To: Mitchell Fogel, Chair and Board Members

From: Ariadna Camilo, Finance and Administration Manager

Date: December 13, 2017

RE: Financial Report – November 2017

# AGENDA ITEM – VII – A

Airport Management will provide an overview of the Financial Report for the two months ending November 30, 2017.

Total Operating Revenues as of November 30, 2017 were \$620,842, an increase of \$4,269 or 0.7% to budget. This increase in revenue year to date is attributable to increased Fuel Flowage revenue during the presidential visit.

Total Non-Operating Revenues and Capital Contributions as of November 30, 2017 were \$0.

Total Operating Expenses as of November 30, 2017 were \$357,985 a decrease of \$150,171 or 29.6% compared to budget. Significant variances in expenses compared to budget for the two months ending November 30, 2017 are as follows:

- Project expenditures are down \$74,807 or 100.0% to budget, primarily due to pending professional consulting service invoices.
- Marketing and Special Event expenditures are down \$14,368 or 47.6% to budget, primarily due to special events anticipated to occur in the second quarter.
- Legal Service expenditures year to date are detailed below, including a breakdown of costs for board member related matters and capital projects.

	ОСТ		OCT		ОСТ		OCT		ОСТ		ОСТ		ОСТ		ОСТ		ОСТ		OCT		NOV	DEC	JAN	FEB	 MAR	APR	]	MAY	J	UNE	J	ULY	A	UG	S	EPT	T	OTAL
GENERAL	\$	6,914	\$ 11,408	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	18,322																		
BOARD	\$	936	\$ 7,854	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	8,790																		
CUSTO MS	\$	208	\$ 208	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	416																		

Total Capital Expenditures as of November 30, 2017 were \$56,626. The majority of Capital Expenditures were attributable to Task 42 – EMAS and Task 47 – Access Road Development of the Capital Improvement Program. Of the total \$56,626 in Capital Expenditures, \$416 were attributable to project-related legal fees, while \$0 were attributable to Capital Outlay.



# Boca Raton Airport Authority Income Statement: Budget Variance Summary For the Two Months Ending November 30, 2017 (unaudited)

#### **Summary Results**

	FY 2018	FY 2018	FY 2018	Variance
	Annual	November	November	FY 2018 Actual vs. Budget
	Budget	Actual	Budget	Dollars Percent
Operating Revenues	\$ 3,699,435	\$ 620,842	\$ 616,572	\$ 4,269 0.7%
Operating Expenses	\$ 3,048,934	\$ 357,985	\$ 508,156	\$ (150,171) -29.6%
Operating Income/(Loss)	\$ 650,500	\$ 262,857	\$ 108,417	\$ 154,440 142.5%
before Depreciation				
Depreciation	\$ 1,486,832	\$ 247,805	\$ 247,805	\$ - 0.0%
Net Operating Income/(Loss)	\$ (836,332)	\$ 15,051	\$ (139,389)	\$ 154,440 -110.8%
Non-Operating Revenues	\$ 359,071	\$ -		
Income/(Loss)	\$ (477,261)	\$ 15,051		
before Capital Contributions				
Capital Contributions from State and Federal Grants	\$ 3,648,160	\$ -		
Change in Net Position	\$ 3,170,899	\$ 15,051		



# Boca Raton Airport Authority Actual Revenue Results Versus Budget For the Two Months Ending November 30, 2017 (unaudited)

#### **Revenue Summary**

	FY 2018 Annual		FY 2018 November		FY 2018 November			FY	Variar 2018 Actua	
		Budget	Actual			Budget			Dollars	Percent
Rent Revenue	\$	2,985,111	\$ 500,208		\$	497,518		\$	2,690	0.5%
Fuel Flowage Fees	\$	475,000	\$ 106,424		\$	79,167		\$	27,258	34.4%
Customs Facility Revenue	\$	108,000	\$ -		\$	18,000		\$	(18,000)	-100.0%
Interest Income	\$	58,500	\$ 7,094		\$	9,750		\$	(2,656)	-27.2%
Other Revenue	\$	72,824	\$ 7,115		\$	12,137		\$	(5,022)	-41.4%
Total Operating Revenues	\$	3,699,435	\$ 620,842		\$	616,572		\$	4,269	0.7%
FDOT Grants	\$	359,071	\$ -							
Non-Operating Revenues	\$	359,071	\$ -							
FDOT Grants	\$	2,514,615	\$ -							
FAA Grants	\$	286,480	\$ -							
Capital Contributions from State and Federal Grants	\$	2,801,095	\$ -							

from State and Federal Grants



# Boca Raton Airport Authority Actual Expense Results Versus Budget For the Two Months Ending November 30, 2017 (unaudited)

#### Expense Summary

	FY 2018 Annual		FY 2018 November		FY 2018 November		Variance FY 2018 Actual vs. Budget				
		Budget	Actual		Budget		Dollars	Percent			
Personnel Expenses	\$	996,778	\$ 155,083	\$	166,130	\$	(11,047)	-6.6%			
Professional Services	\$	219,800	\$ 27,148	\$	36,633	\$	(9 <i>,</i> 485)	-25.9%			
Office Operating Expenses	\$	241,679	\$ 40,547	\$	40,280	\$	267	0.7%			
Airport Operations	\$	474,820	\$ 84,344	\$	79,137	\$	5,208	6.6%			
Insurance Expense	\$	183,128	\$ 20,770	\$	30,521	\$	(9,752)	-32.0%			
ATCT Facility	\$	54,432	\$ 10,738	\$	9,072	\$	1,666	18.4%			
Customs Facility	\$	248,478	\$ 3,561	\$	41,413	\$	(37,852)	-91.4%			
Marketing & Special Events	\$	180,980	\$ 15,796	\$	30,163	\$	(14,368)	-47.6%			
Projects	\$	448,839	\$ -	\$	74,807	\$	(74,807)	-100.0%			
Total Operating Expenses	\$	3,048,934	\$ 357,985	\$	508,156	\$	(150,171)	-29.6%			
Capital Outlay	\$	35,000	\$ -								
Capital Improvement Program	\$	3,661,644	\$ 56,626								
Total Capital Expenditures	\$	3,696,644	\$ 56,626								



#### Summary Results

#### ASSETS

Non-Current AssetsRent Receivable\$ 494,644Capital AssetsLand\$ 1,791,886Avigation Easements\$ 4,835,961Project in Progress\$ 20,777,509Buildings\$ 2,854,224Land Procurement\$ 955,070Leasehold Improvements\$ 8,220,981Furniture, Fixtures, and Equipment\$ 2,777,781Infrastructure\$ 13,646,351Less Accumulated Depreciation\$ (18,606,370)	Current Assets Cash and Cash Equivalents Receivables Due From Other Governments Money Markets Certificates of Deposit Certificates of Deposit, Restricted Other Assets	\$ \$ \$ \$ \$ \$ \$	311,606 133,390 523,828 1,587 3,617,933 182,970 142,352	
Rent Receivable\$ 494,644Capital Assets\$ 1,791,886Land\$ 1,791,886Avigation Easements\$ 4,835,961Project in Progress\$ 20,777,509Buildings\$ 2,854,224Land Procurement\$ 955,070Leasehold Improvements\$ 8,220,981Furniture, Fixtures, and Equipment\$ 2,777,781Infrastructure\$ 13,646,351Less Accumulated Depreciation\$ (18,606,370)	Total Current Assets			\$ 4,913,666
	Rent Receivable Capital Assets Land Avigation Easements Project in Progress Buildings Land Procurement Leasehold Improvements Furniture, Fixtures, and Equipment	\$ \$ \$ \$ \$ \$ \$ \$	1,791,886 4,835,961 20,777,509 2,854,224 955,070 8,220,981 2,777,781	
Total Non-Current Assets \$ 37,748,03	Less Accumulated Depreciation	\$	(18,606,370)	
	Total Non-Current Assets			\$ 37,748,039
Total Assets         \$ 42,661,70	Total Assets			\$ 42,661,705

#### Boca Raton Airport Authority Balance Sheet Summary November 30, 2017 (unaudited)

#### LIABILITIES AND CAPITAL

Accounts Payable	\$	522,242		
Due to Other Governments	\$	338,621		
Compensated Absences, short-term	\$	17,857		
Deferred Rent Income	\$	109,189	-	
Total Current Liabilities			\$	987,908
Non-Current Liabilities				
Security Deposits	\$	167,879		
Compensated Absences, long-term	\$	-	-	
Total Non-Current Liabilities			\$	167,879
Total Liabilities			\$	1,155,788
Capital				
•	\$	267,950		
Capital Florida Operations Trust Fund Retained Earnings	\$ \$	267,950 34,475,606		
Florida Operations Trust Fund	\$	,		
Florida Operations Trust Fund Retained Earnings		34,475,606		
Florida Operations Trust Fund Retained Earnings Contributed Capital - Federal	\$ \$	34,475,606 317,029	<u>.</u>	
Florida Operations Trust Fund Retained Earnings Contributed Capital - Federal Contributed Capital - State	\$ \$ \$	34,475,606 317,029 6,430,281	-	
Florida Operations Trust Fund Retained Earnings Contributed Capital - Federal Contributed Capital - State	\$ \$ \$	34,475,606 317,029 6,430,281	\$	41,505,917



# Memo

- To: Mitchell Fogel, Chair and Board Members
- From: Travis Bryan, Operations Manager
- Date: December 13, 2017
- RE: Atlantic Aviation Special Event Concours d'Elegance Du Pont Registry Hangar Party

# AGENDA ITEM – VIII – A

Airport Management has received a request from Atlantic Aviation to hold a Special Event on February 23, 2018 on their leasehold.

Atlantic Aviation is seeking Authority approval to host the 12th Annual Concours d'Elegance/DuPont Registry on Friday, February 23, 2018. This is part of a weekend event (February 23-25, 2018) at the Boca Resort and Club held each year in support of the Boys and Girls Club.

The event will feature a variety of aircraft and quality automobiles on static displays of varying sizes. Atlantic Aviation estimates approximately 2,000 guests will attend the event, which will be limited to the FBO building, Hangar 3 and the ramp in front of the hangar. Atlantic is currently exploring parking options, including off-site parking to eliminate the need for parking on the ramp, and will submit to final parking plans to Airport Management prior to the event.

Airport Management recommends approval of Resolution No. 12-36-17 authorizing the Authority's issuance of "Conditional Approval" to Atlantic Aviation to hold this event on Friday, February 23, 2018. This approval is contingent upon receipt of a Certificate of Insurance naming the Authority as additional insured in accordance with the Authority's Insurance Standards and submission of applicable safety, security and barricade plans.

#### BOCA RATON AIRPORT AUTHORITY

#### RESOLUTION NO. 12-36-17

# Resolution of the Boca Raton Airport Authority conditionally approving Atlantic Aviation's request to host a Special Event on their leasehold premises for the Concours d'Elegance/DuPont Registry, scheduled for February 23, 2018

**WHEREAS**, The Boca Raton Airport Authority Act, Laws of Florida, provides that the Boca Raton Airport Authority (the "Authority") shall have jurisdiction over the operation, maintenance of, and improvements to the Boca Raton Airport (the "Airport");

**WHEREAS**, on November 28, 1984, the Authority entered into a Lease and Operating Agreement with Boca Airport Inc. d/b/a Boca Aviation ("Boca Aviation"), and the Lease and Operating Agreement has been amended throughout the years (the "Boca Aviation Lease");

**WHEREAS**, with the Authority's consent and subject to conditions, Boca Aviation assigned the Boca Aviation Lease, to Atlantic Aviation – Boca Raton, LLC, a Delaware limited liability company ("Atlantic"); and

**WHEREAS**, the Authority has received a request from Atlantic Aviation to host a Special Event on their leasehold premises for the annual Concours d'Elegance/DuPont Registry, scheduled for February 23, 2018 (the "Request");

WHEREAS, the Request and the Special Event are consistent with the Atlantic Aviation Lease; and

WHEREAS, the Authority desires to conditionally approve the Request, subject to:

- The delivery to the Executive Director of a Certificate of Insurance and endorsements evidencing the appropriate coverage for the Event, as set forth in the Authority's Minimum Standards and Requirements for Aeronautical Activities; and
- Safety, Security and Barricade Plans for the Event (collectively, the "Conditions").

NOW THEREFORE BE IT RESOLVED BY THE BOCA RATON AIRPORT AUTHORITY, BOCA RATON, FLORIDA, IN PUBLIC MEETING DULY ASSEMBLED, THIS 13<sup>th</sup> DAY OF DECEMBER 2017, AS FOLLOWS:

- 1. The foregoing recitals are hereby incorporated as the legislative intent of the Authority.
- 2. The Authority hereby approves the Request, subject to Atlantic Aviation's fulfillment of the Conditions.
- 3. The Authority hereby authorizes the Airport Manager and Airport Legal Counsel to do all things necessary or prudent to effectuate the intent of this Resolution Number 12-36-17.
- 4. The Authority hereby authorizes the Chair or Vice-Chair to execute Resolution Number 12-36-17.

ADOPTED by the Boca Raton Airport Authority this 13<sup>th</sup> day of December 2017.

ATTEST:

BOCA RATON AIRPORT AUTHORITY

Letter of Request for Approval of Concours d'Elegance Event 12/04/2017

Clara Bennett, Executive Director Boca Raton Airport Authority 903 NW 35<sup>th</sup> Street

Boca Raton Florida 33431

Clara,

I would like to formally request approval for the 12<sup>th</sup> annual Concours d'Elegance/DuPont Registry event on February 23<sup>rd</sup>, 2018. The event will be in Hagar 3 and a portion of the ramp in front of the hangar. There will be aircraft and automobiles on display. Turnout is estimated to be 2000 people. Most aspects of the event will be similar to previous years, but one change will be that parking will likely not be on our ramp. Insurance requirements will be verified for all involved.

Thank you for the consideration and let me know if I can be of any other assistance,

Devin Lawrence General Manager – Boca Raton -BCT

T : 561.368.1110 E : <u>Devin.Lawrence@AtlanticAviation.com</u>





# Memo

To: Mitchell Fogel, Chair and Authority Members

From: Robert Abbott, Operations Coordinator

Date: December 13, 2017

RE: Operations and Noise Abatement Report, November 2017

# AGENDA ITEM – IX - A

Airport Management provides an overview of the Noise Abatement/Operations Summary for the month of November. This report is derived from the Air Traffic Control Tower operations report. These operations do not include night time flights, as the Air Traffic Control Tower is closed from 11:00 pm - 7:00 am.

During the month of November there were 6,828 operations reported by the Tower, which is thirteen (13%) more than the operations reported in November 2016.

There were twenty (20) noise calls received on the Airport Authority Noise Hotline during the month, mostly related to the Temporary Flight Restriction associated with the Presidential visit during the Thanksgiving holiday.

Due to the earlier meeting date, the November fuel report for Signature Flight Support was not yet available. The fuel report will be updated when these numbers are received. Currently, deliveries of Jet A fuel to the airport in November were eight percent (8%) less than November of the previous year. Avgas deliveries were five-point six percent (5.6%) less than November of the previous year.

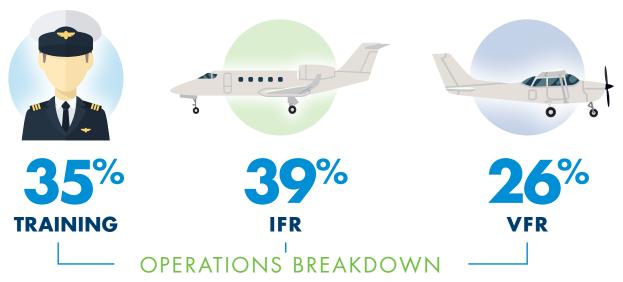
**BOCA RATON AIRPORT AUTHORITY** 

OPERATIONS AND NOISE ABATEMENT REPORT



NOVEMBER 2017

# OPERATIONS REPORT



**Chart 1:** Breakdown of last month's operations based on type of operation (ex. Training, Instrument Flight Rules, Visual Flight Rules). An operation is counted as an arrival or a departure, a touch-and-go operation counts as two operations.



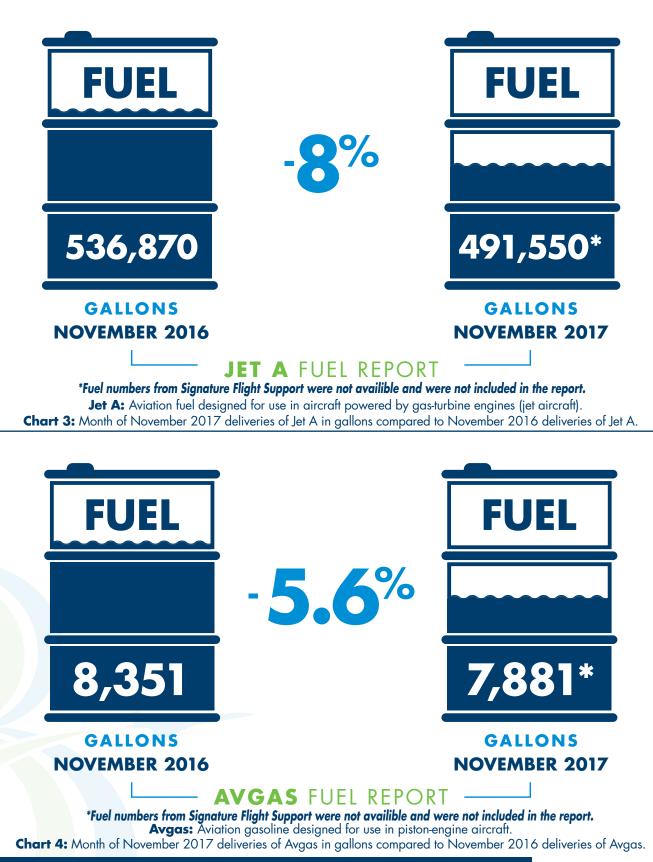
Chart 2: November 2017 operations compared to November 2016 tower operations.

ABBREVIATIONS:

IFR (Instrument Flight Rules): Planes flying on an instrument flight plan - Primarily jets. VFR (Visual Flight Rules): - Primarily propeller aircraft. TFR (Temporary Flight Restriction): Airspace flight restriction imposed by the Federal Aviation Administration (FAA) when there is a government VIP or special event in the area.

#### BOCA RATON AIRPORT - OPERATIONS REPORT

# OPERATIONS REPORT

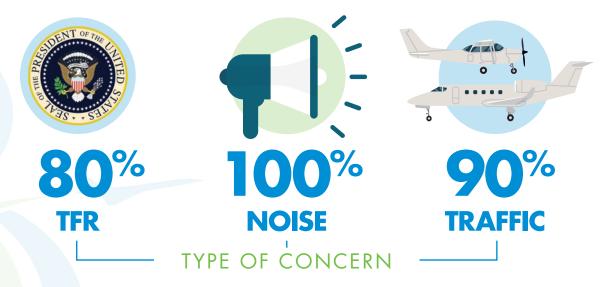


BOCA RATON AIRPORT - OPERATIONS REPORT

# NOISE CONCERNS PER QUADRANT



**Chart 5:** Noise concerns submitted via telephone, email, or on our website are tracked by quadrant where the noise concern occurred in relation to the airport.



**Chart 6:** Type of noise concern and/or if it occurred during a Temporary Flight Restriction (TFR).

# **VOLUNTARY** CURFEW VIOLATIONS



**Chart 7:** A voluntary curfew violation is an operation that occurred during our voluntary night curfew from 22:00 – 07:00 without prior notification to the airport. Voluntary curfew violators are notified of their violation via letter, email, or phone to inform them of the noise sensitivity of our community and to encourage them to operate outside our voluntary night curfew hours. Voluntary curfew operations that occurred during a TFR is also tracked.

# VOLUNTARY CURFEW OPERATIONS BY HOUR



**Chart 8:** A voluntary curfew operation is an operation that occurred during our voluntary night curfew from 22:00 – 07:00. Chart breaks down the number of operations per hour during the voluntary curfew period in November 2017.

# RUNWAY DEPARTURE HEADING BY DIRECTION



**Chart 9:** Departure heading is the direction an aircraft flies after taking off. Departure headings are assigned by the Tower to aircraft prior to departure. This chart does not include helicopter operations.

# **NOISE ABATEMENT CALLS**

First Name	Last Name	Community	Quadrant	A/D/O/T	Runway	Aircraft Category	Tail/Flight Number	Aircraft Type	Concern	TFR Related?	Calls Received
Jerry	Deiso	Millpond	A	0	N/A	Helicopter	N158DB	B429	Noise	No	1
Kimberly	Gardner	Wimbledon Villas	C	А	5	N/A	N/A	N/A	Noise, Traffic	No	1
Kathryn	Kearney	N/A	В	D	5	N/A	N/A	N/A	Noise, Traffic	Yes	1
Karen	Haze	Majorica	C	А	5	N/A	N/A	N/A	Noise, Traffic	Yes	1
Ross	Rosenburg	Wimbledon Villas	C	А	5	N/A	N/A	N/A	Noise, Traffic, VC	Yes	13
Nancy	Parent	Boca Barwood	C	А	5	N/A	N/A	N/A	Noise, Traffic	Yes	1
Freddy	Benitez	Boca Raton Hills	В	D	5	N/A	N/A	N/A	Noise, Traffic	Yes	1
Sussan	Besse	Boca Raton Hills	В	D	5	Jet	N80EJ	E50P	Noise	No	1

# **VOLUNTARY CURFEW VIOLATORS**

Date	Time	N#	Туре	Operation (A/D/T)	RWY	Owner	Address	City	State
11/2/2017	6:18/6:35	N300JZ	GLF3	A/D	5	Nonstop Aviation INC.	3700 Airport Road	Boca Raton	FL
11/2/2017	22:01	N234FJ	F2TH	A	5	La gniappe Aviation LLC	8350 S. Durango Dr. Ste 210	Las Vegas	NE
11/3/2017	2:08/5:34	N202BC	BE35	D	23	SIGMA DEVELOPMENT COMPANY LLC	7516 Quail Ridge Dr	Dexter	MI
11/3/2017	6:32	N615KZ	BE40	D	5	Privaira	3690 Ai rport Road, Hangar 9	Boca Raton	FL
11/3/2017	6:46	N301AZ	E55P	D	5	Gold Aviation Services, Inc.	1420 Lee Wagener Boulevard	Fort Lauderdale	FL
11/4/2017	3:12	Unknown	C172	D	5	UNKNOWN	UNKNOWN	UNKNOWN	UNK
11/4/2017	3:34/3:52	Unknown	C172	T	23	UNKNOWN	UNKNOWN	UNKNOWN	UNK
11/4/2017	23:49	N101PV	F2TH	A	5	Vegs o Aviation, Inc.	3700 Airport Road, Floor 1	Boca Raton	FL
11/5/2017	0:31	Unknown	C172	A	н	UNKNOWN	UNKNOWN	UNKNOWN	UNK
11/5/2017	23:22	Unknown	C172	D	5	UNKNOWN	UNKNOWN	UNKNOWN	UNK
11/6/2017	6:24	N302AZ	E55P	A	5	Gold Aviation Services, Inc.	10 South New River Drive	Fort Lauderdlae	FL
11/6/2017	22:43	N781BG	C172	D	5	VAN ANDA AVIATION LLC	4149 ROCK HILL LOOP	Apopka	FL
11/7/2017	0:31	N673QS	C56X	А	5	NETJETS AVIATION, INC. (COLUMBUS, OH)	4556 Airport Road	Cincinnati	ОН
11/7/2017	5:55	N444FX	LJ45	D	5	Flexjet, LLC	26180 Curtiss Wright Parkway	Cleveland	ОН
11/8/2017	22:31	N196AP	GLF5	A	5	Pegasus Elite Aviation	7943 Woodley Avenue	Van Nuys	CA
11/8/2017	22:50	N170TU	POGT	D	5	TECNAM US INC	6 FLYING FORTRESS LANE	Sebring	FL
11/9/2017	6:04	N99KW	CL60	D	5	Florida Wings INC.	3700 Ai rport Road Suite 209	Boca Raton	FL
11/9/2017	22:19	N885AR	GLF4	D	5	Priester Aviation, LLC	1061 South Wolf Road, Hangar 9-2A	Wheeling	IL
11/9/2017	23:23	N489TM	BE40	A	5	Aircraft Holding Company One LLC.	2101 County Road 6 West	Elkhart	IN
11/10/2017	5:35	N428K5	GLF4	D	5	FBO Professionals Group, Inc.	2808 NE 1st Avenue	Wilton Manors	FL
11/10/2017	5:49	N542QS	C68A	D	5	NETJETS AVIATION, INC. (COLUMBUS, OH)	4556 Airport Road	Cincinnati	ОН
11/11/2017	22:56	N984DV	CL60	A	5	Delta Private Jets, Inc.	82 Comair Boulevard	Erlanger	KY
11/12/2017	0:14	N1013	CL30	A	5	CTP Aviation, LLC	19995 Skywest Drive, Hangar C	Hayward	CA
11/12/2017	6:20	N655MM	C680	D	5	Delta Private Jets, Inc.	82 Comair Boulevard	Erlanger	KY
11/12/2017	6:43	N92CJ	FA50	A	5	Club Jet	17957 Be a rpath Trail	Eden Prairie	MN
11/12/2017	22:10	N505EH	LJ55	D	5	Lear Sky Aviation Corp	7750 Northwest 46th St.	Miami	FL
11/12/2017	6:44	N861MA	C208	A	5	Tropic Ocean Airways, LLC	1100 Lee Wagener Blvd, Suite 207A	Fort La uderdale	FL
	22:45	N743Q5	GALX	A	5	NETJETS AVIATION, INC. (COLUMBUS, OH)	4556 Airport Road	Gincinnati	ОН
11/14/2017					5				FL
11/15/2017	4:23/5:24	N360DA	PC12	A/D		Boomerang, LLC	PV Aviation, LLC	Jacksonville Beach	
11/15/2017	23:16	N4317D	P28A	D	5	PARIS AIR INC	3300 AIRPORT WEST DR	Vero Beach	FL
11/16/2017	0:36	N716WW	CL30	A	5	A-OK Jets	2011 S. Perimeter Road Suite F	Fort La ud erdale	FL
11/16/2017	22:11	N58AW	C414	A	5	FI 414, LLC.	7171 N Federal Highway	Boca Raton	FL
11/17/2017	6:21	N919CW	C206	D	5	SLB ENTERPRISES LLC	117 SALEM CHURCH RD	Newark	DE
11/18/2017	22:03	N394AK	GLF4	A	5	Talon Air, Inc.	7110 Republic Airport, Suite 300	Farmingdale	NY
11/18/2017	22:08	N80EJ	E50P	A	5	Richbuilt Construction, LLC	998 South East Town Place	Port St Lucie	FL
11/18/2017	23:20	N437JW	AC11	A	5	PARKER BRUCE J	12352 SAINT SIMON DR	Boca Raton	FL
11/19/2017	2:55	N716WW	CL30	A	5	A-OK Jets	2011 S. Perimeter Road Suite F	Fort La uderdale	FL
11/19/2017	22:10/22:28	N71M	FA10	A/D	5	SKYVIEW LLC	3511 SILVERSIDE RD STE 105	WILMINGTON	DE
11/20/2017	5:50	N623QS	C56X	D	5	NETJETS AVIATION, INC. (COLUMBUS, OH)	4556 Airport Road	Cincinnati	ОН
11/21/2017	5:48/645	N802AF	PC12	A	5	PlaneSense, Inc.	115 Flightline Road	Portsmouth	NH
11/21/2017	22:06	N6341X	C340	A	5	HARTLEY/DE RENZO LLC	6500 NW HIGHWAY 225A	Ocala	Marion
11/21/2017	22:18	N570TM	BE40	D	5	Travel Management Company, LLC	2101 County Road 6 West	Elkhart	IN
11/21/2017	22:22	N560TA	C560	A	5	CITCON INC	9 Commercial Street	Hudson	NH
11/21/2017	22:30	N501CV	GLF5	A	5	Jet Aviation Flight Services, Inc.	112 Charles A. Lindbergh Drive	Teterboro	NJ
11/21/2017	23:04/0:01	N99NJ	⊔45	A/D	5	National Jets, Inc.	3495 Southwest 9th Ave nue	Fort La uderdale	FL
11/21/2017	23:12	N200CG	C500	A	5	Journe y Aviation, LLC	3700 Airport Road Suite 206	Boca Raton	FL
11/22/2017	22:45	N71M	FA10	D	5	SKYVIEW LLC	3511 SILVERSIDE RD STE 105	WILMINGTON	DE
11/22/2017	23:56	N101KP	C560	A	5	MS MANAGEMENT SERVICES INC	43 Girillo Drive	Colchester	ст
11/23/2017	0:28	N850TR	GLEX	A	5	Tony Robbins Productions, Inc.	6160 Cornerstone Court East, Suite 200	San Diego	CA
11/24/2017	0:24	N699RK	SW3	A	5	DYNAMIC AIRCRAFT CONSORTIUM LLC	6026 Melrose Avenue	San Angelo	тх
11/24/2017	22:19	N635QS	C56X	D	5	NETJETS AVIATION, INC. (COLUMBUS, OH)	4556 Airport Road	Cincinnati	ОН
11/24/2017	22:34	N788QS	CL35	A	5	NETJETS AVIATION, INC. (COLUMBUS, OH)	4556 Airport Road	Cincinnati	ОН
11/25/2017	22:03	N197JS	CL30	A	5	JetSelect Aviation, LLC	4130 East 5th Avenue	Columbus	ОН
11/25/2017	22:14	N37PM	P46T	A	5	Mid*Star, Inc.	3511 Silverside Road, Suite 105	Wilmington	DE
11/25/2017	23:18	N743Q5	GALX	A	5	NETJETS AVIATION, INC. (COLUMBUS, OH)	4556 Airport Road	Cincinnati	ОН
11/26/2017	22:25	N507DM	C172	A	5	AIR MONACO LLC	1783 EARHART CT	PORT ORANGE	FI
11/26/2017	22:23	N699RK	SW3	D	5	DYNAMICAIRCRAFT CONSORTIUM LLC	6026 Melrose Avenue	San Angelo	TX
11/26/2017	22:37	N758XJ	C750	D	5	Windsor Jet Management	1815 Northwest 51st Place	Ft. Lauderdale	FL
11/26/2017	23:16	N975RG	GLF3	A	5	Exe cuflight, Inc.	1621 South Perimeter Road, Hangar 35B	Ft. Lauderdale	FL
11/26/2017	23:23	N975RG N615KZ	GLF3 BE40	A	5				FL
						Privaira	3690 Airport Road, Hangar 9	Boca Raton	
11/27/2017	0:37	N603GR	LI60	A	5	Southern Jet, Inc.	3700 Airport Road, FL 1	Boca Raton	FL
11/27/2017	5:40	N623HD	F2TH	D	5	Camelot SI Leasing, LLC	27725 Stansbury Boulevard, Suite 175	Farmington Hills	MI
11/27/2017	6:09	N539CA	F900	D	5	Braxton Acquisitions	5955 T G Lee Blvd. Ste 200	Orlando	FL
11/27/2017	6:47	N302EA	H25B	D	5	Southern Jet, Inc.	3700 Airport Road, FL 1	Boca Raton	FL
11/28/2017	6:43	N1DK	\$22T	D	5	ATLANTIC TRADERS LLC	2890 GRUMMAN CT	PORTORANGE	FL
	6:52	N305KP	SR22	A	5	N258WT LLC	101 PUGLIESES WAY FL 1ST	Delrey Beach	FL
11/30/2017									
11/30/2017 11/30/2017 11/30/2017	22:30 23:56	N109LU N328QS	C172 E55P	A	5	LYNN UNIVERSITY NETJETS AVIATION, INC. (COLUMBUS, OH)	3960 Airport Rd	Boca Raton	FL



# Memo

To: Mitchell Fogel, Chair and Authority Members

From: Robert Abbott, Operations Coordinator

Date: December 13, 2017

RE: Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance

# AGENDA ITEM – IX - B

A request for proposals for Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance was issued on September 15, 2017. In accordance with the Authority's Procurement Code, the Qualifications Evaluation Committee (QEC) met on November 17, 2017 to review the proposals, receive presentations from, and interview the three respondents. The QEC ranked the firms as follows:

- 1. Harris Corporation
- 2. Casper Airport Solutions, Inc.
- 3. Brüel & Kjær EMS, Inc.

Airport Management has negotiated the attached contract with the top ranked firm. Airport Management recommends approval of Resolution No. 12-37-17 awarding the contract for Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance to Harris Corporation.

#### BOCA RATON AIRPORT AUTHORITY

#### RESOLUTION 12-37-17

#### A Resolution of the Boca Raton Airport Authority Authorizing a Contract with Harris Corporation for Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance.

**WHEREAS**, The Boca Raton Airport Act, Laws of Florida, provides that the Boca Raton Airport Authority (the "Authority") shall have jurisdiction over the operation, maintenance of, and improvements to the Boca Raton Airport (the "Airport");

**WHEREAS**, the Authority utilizes a noise monitoring and flight tracking system along with noise monitor service and maintenance for aircraft noise and operations monitoring, and maintenance and repair of noise monitoring terminals and flight tracking software;

**WHEREAS**, on September 15, 2017, the Authority issued Request for Proposals Number 2017-BRAA-02 Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance;

**WHEREAS**, in accordance with the Procurement Code, the Qualifications Evaluation Committee (the "QEC"), met on November 17, 2017, and interviewed responsive firms ranking them as follows:

- 1. Harris Corporation
- 2. Casper Airport Solutions, Inc.
- 3. Brüel & Kjær EMS, Inc.;

**WHEREAS**, thereafter, the Executive Director and Airport Legal Counsel negotiated the Contract for Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance (the "Contract"), attached hereto as Exhibit "A," with Harris Corporation for consideration by the Authority.

NOW THEREFORE BE IT RESOLVED BY THE BOCA RATON AIRPORT AUTHORITY, BOCA RATON, FLORIDA, IN PUBLIC MEETING DULY ASSEMBLED, THIS 13th DAY OF DECEMBER 2017, AS FOLLOWS:

- 1. The foregoing recitals are hereby incorporated into this resolution as the legislative intent of the Authority.
- 2. The Authority hereby approves the Contract, and authorizes the Chair to execute it on the Authority's behalf.
- 3. The Authority hereby authorizes the Executive Director and Airport Legal Counsel to do all things necessary or prudent to effectuate the intent of this Resolution Number 12-37-17.
- 7. The Authority hereby authorizes the Chair or Vice-Chair to execute this Resolution Number 12-37-17.

ADOPTED by the Boca Raton Airport Authority, this 13<sup>th</sup> day of December 2017.

ATTEST:

BOCA RATON AIRPORT AUTHORITY

Randy Nobles Secretary & Treasurer Mitchell Fogel Chair

#### AGREEMENT FOR BOCA RATON AIRPORT AUTHORITY NOISE MONITORING AND FLIGHT TRACKING SYSTEM, AND NOISE MONITOR SERVICE AND MAINTENANCE

This Agreement for Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance is entered into this \_\_\_\_\_\_ day of December, 2017, by and between the Boca Raton Airport Authority, an independent special district and body politic, whose main place of business is located at 903 NW 35<sup>th</sup> Street, Boca Raton, Florida, 33431, and the Harris Corporation, a corporation authorized to do business in the State of Florida, whose main place of business is Hemdon, VA 20171, for the provision of goods and services in response to and conformance with BRAA's RFP #2017-BRAA-02, Noise Monitoring, a Flight Tracking System, and Noise Monitor Service and Maintenance and Addenda thereto, and provides as follows:

#### 1. Definitions

- 1.1 <u>The Agreement</u> means this Agreement for Boca Raton Airport Authority Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance.
- 1.2 <u>Airport</u> means the Boca Raton Airport Authority facilities and operations, located at 903 NW35th Street, Boca Raton, Florida, 33431, as described in the Airport Layout Plan.
- 1.3 <u>The Board</u> means the Board of members appointed, pursuant to Section 4, Ch. 2004-468, Laws of Florida, the "Boca Raton Airport Authority Act."
- 1.4 <u>BRAA</u> or <u>The</u> Authority means the Boca Raton Airport Authority, means the independent special district, created pursuant to Chapter 82-259, Laws of Florida, but which currently exists and is empowered by Chapter 2004-468, Laws of Florida (the "Enabling Legislation" or "Boca Raton Airport Authority Act")
- 1.5 <u>CONTRACTOR</u> means the Harrison Corporation, a corporation authorized to do business in the State of Florida, whose main place of business is Hemdon, VA 20171.
- 1.6 <u>Contractor's Response</u> means Contractor's October 27, 2017 Request for Proposal Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance Response, a true and correct copy of which is attached hereto as Exhibit B.
- 1.7 <u>Grant Assurances</u> means the required assurances provided by airport sponsors as a condition of accepting FAA-administered airport financial assistance.
- 1.8 <u>The RFP</u> refers to BRAA's request for proposal, RFP # 2017-BRAA-02, for Noise Monitoring and Flight Tracking System and Noise Monitoring Service and

Maintenance Response. A true and correct copy of the RFP is attached hereto as Exhibit A.

# 2. Goods and Services.

a. CONTRACTOR agrees to provide the Noise Monitoring and Flight Tracking System and related goods and equipment identified and described in its October 27, 2017, Request for Proposal Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance Response ("Contractor's Response"), and as requested in the RFP, except for system elements that are clearly identified as optional goods in Contractor's Response.

b. CONTRACTOR agrees to provide the Noise Monitor Service and Maintenance services, as identified and described in its October 27, 2017, Request for Proposal Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance Response ("Contractor's Response"), and as requested in the RFP, except for services that are clearly identified as optional services in Contractor's Response.

# 3. Compensation and/or Price.

BRAA shall pay for such goods and services at the rate and the prices quoted in the Contractor's Response.

# 4. Construction of Agreement

A true and correct copy of Contractor's Response is attached hereto as Exhibit B and incorporated herein. Should any of the terms in this Agreement, Exhibit A, and/or Exhibit B conflict, the provisions of this Agreement shall be controlling and take precedence, followed by the terms of the RFP, as reflected in Exhibit A, and then the terms of the Contractor's Response, as reflected in Exhibit B.

# 5. Optional Goods and Services

If BRAA chooses to purchase the goods and/or services identified as optional within the Contractor's Response, the parties will execute an Amendment to this Agreement identifying what goods and/or services have been added to the contract and specifying the price and/or rate. If a price and/or rate was quoted within the Contractor's Response, the optional goods and services shall be provided by the CONTRACTOR at the quoted price. Unless otherwise specified in the Amendment, the Term for services provided under this Section shall be the same term as this Agreement.

# 6. Equipment, Etc.

All equipment, transportation, set-up, and break-down, and anything else necessary to provide the Contractor Services shall be provided by and at the expense of the CONTRACTOR. CONTRACTOR shall leave the Airport property in such condition that it is immediately usable by the intended user and/or the public. BRAA shall not be responsible for any equipment or other property of the CONTRACTOR brought to or left on BRAA property.

# 7. Duty of Care.

The Contractor's Response identifies CONTRACTOR as a national service provider with a long and superlative track record in its field. BRAA has relied on CONTRACTOR'S representations as to its expertise in awarding this Agreement to CONTRACTOR. Therefore, the parties acknowledge and agree that CONTRACTOR shall exercise a degree of care and diligence in the performance of these services in accordance with the customary professional standards currently practiced by national firms, and in compliance with any and all applicable codes, ordinances, statutes, and regulations, whether local, state, or federal. CONTRACTOR also agrees that it shall perform and/or cause all services provided hereunder to be performed consistent with BRAA's Rules and Regulations, as may be amended.

## 8. Term

The term of this Agreement shall commence on January 1, 2018, and end at 11:59:59 p.m., (EDT) on December 31, 2020. The BRAA may renew this agreement on the same terms and conditions for up to two (2) one-year terms upon written notice to CONTRACTOR given at least thirty (30) days before the end of the expiring term.

# 9. Termination

Either party may terminate this Agreement with thirty (30) calendar days' prior notice.

## 10. Payment

CONTRACTOR shall invoice the BRAA at the beginning of each calendar month for all Work performed during the previous month. The BRAA shall pay the monthly invoiced amount within fifteen (15) business days of receipt of the monthly invoice.

## **11.** Insurance Requirements.

CONTRACTOR must carry the insurance types and coverage levels required by the Minimum Standards for Vendors, a true and correct copy of the current iteration of which is attached hereto as Attachment C.

## 12. Public Records Law

The BRAA is subject to Chapter 119, Florida Statutes ("the Public Records Law"), which makes all information created or received by the BRAA in connection with the BRAA's official business a public record. No claim of confidentiality or proprietary information will be honored unless a specific exemption from the Public Records Law exists and is identified to the BRAA at the time the information is received. Any claimed exemption must be specifically identified by page(s) and paragraph numbers(s), where applicable.

CONTRACTOR shall comply with Florida's Public Records Law. Specifically, CONTRACTOR shall:

Keep and maintain public records required by the BRAA to perform the services described in this Agreement.

Upon request from the BRAA's custodian of public records, provide the BRAA with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the BRAA.

Upon completion of the contract, transfer, at no cost, to the BRAA all public records in possession of CONTRACTOR or keep and maintain public records required by the BRAA to perform the service. If CONTRACTOR transfers all public records to the BRAA upon completion of the Agreement, CONTRACTOR shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If CONTRACTOR keeps and maintains public records upon completion of the Agreement, CONTRACTOR shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the BRAA, upon request from the BRAA's custodian of public records, in a format that is compatible with the information technology systems of the BRAA.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

Public Records Custodian Boca Raton Airport Authority 903 NW 35<sup>th</sup> Street Boca Raton, FL 33431

# 13. Governing Law

The terms and provisions of this Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of Florida and the United States of America, without regard to conflict of law principles. Venue and jurisdiction shall be Palm Beach County, Florida, for all purposes, to which the Parties expressly agree and submit.

## 14. Notices

Any notices required under this Agreement shall be made in writing to the party representatives and addresses listed below:

BRAA: Executive Director Boca Raton Airport Authority 903 NW 35<sup>th</sup> Street Boca Raton, FL 33431

CONTRACTOR:

15. Default.

The failure of CONTRACTOR to comply with the provisions set forth in this Agreement shall constitute a default and breach of this Agreement. If CONTRACTOR fails to cure the default within ten (10) days of notice from the BRAA, the BRAA may terminate this Agreement and refuse payment for any goods and services not delivered or performed by the date of the notice of default. Nothing in this paragraph shall be construed as a limitation on any damages the BRAA may incur or is entitled to as a result of CONTRACTOR'S breach or default.

# 16. Waiver.

The BRAA shall not be responsible for any property damages or personal injury sustained by CONTRACTOR from any cause whatsoever related to the performance of this Agreement. The CONTRACTOR hereby forever waives, discharges, and releases the BRAA, its agents, and its employees, to the fullest extent the law allows, from any liability for any damage or injury sustained by CONTRACTOR. This waiver, discharge, and release specifically include negligence by the BRAA, its agents, or its employees, to the fullest extent the law allows.

# **17.** Indemnification.

CONTRACTOR shall indemnify, save, and hold harmless the BRAA, its agents, and its employees from any liability, claim, demand, suit, loss, cost, expense or damage which may be asserted, claimed, or recovered against or from the BRAA, its agents, or its employees, by reason of any property damages or personal injury, including death, sustained by any person whomsoever, which damage is incidental to, occurs as a result of, arises out of, or is otherwise related to the negligent or wrongful conduct or the faulty equipment (including equipment installation and removal) of the CONTRACTOR. Nothing in this Agreement shall be deemed to affect the rights, privileges, and sovereign immunities of the BRAA as set forth in Section 768.28, Florida Statutes. This paragraph shall not be construed to require CONTRACTOR to indemnify the BRAA for its own negligence, or intentional acts of the BRAA, its agents or employees. Each party assumes the risk of personal injury and property damage attributable to the acts or omissions of that party and its officers, employees and agents.

# 18. No Transfer.

CONTRACTOR shall not subcontract, assign, or otherwise transfer this Agreement to any individual, group, agency, government, non-profit or for-profit corporation, or other entity without express, written, prior permission from the BRAA which may be withheld for any reason or no reason.

# **19. Personnel**

CONTRACTOR represents that CONTRACTOR has, or will secure, all necessary personnel required to perform the services under this Agreement. Such personnel shall not be employees of, or have any contractual relationship with, the BRAA. All of the services performed under this Agreement shall be performed by the CONTRACTOR, or under CONTRACTOR'S supervision, and all personnel engaged in performing the services shall be fully qualified and, if required, licensed or permitted under state and local law to perform such services.

# 20. No Discrimination.

CONTRACTOR shall not discriminate against any person on the basis of race, color, religion, ancestry, national origin, age, sex, marital status, sexual orientation or disability for any reason in its hiring or contracting practices associated with this Agreement.

# 21. Entire Agreement.

This Agreement and incorporated attachments hereto represent the entire and sole agreement and understanding between the Parties concerning the subject matter expressed herein. No terms herein may be altered, except in writing and then only if signed by all the parties hereto. All prior and contemporaneous agreements, understandings, communications, conditions or representations, of any kind or nature, oral or written, concerning the subject matter expressed herein, are merged into this Agreement and the terms of this Agreement supersede all such other agreements. No extraneous information may be used to alter the terms of this Agreement.

# 22. Counterparts and Transmission.

To facilitate execution, this Agreement may be executed in as many counterparts as may be convenient or required, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. The executed signature page(s) from each original may be joined together and attached to one such original and it shall constitute one and the same instrument. In addition, said counterparts may be transmitted electronically (i.e., via facsimile or .pdf format document sent via electronic mail), which transmitted document shall be deemed an original document for all purposes hereunder.

# 23. Agreement Deemed to be Drafted Jointly.

This Agreement shall be deemed to be drafted jointly and shall not be construed more or less favorably towards any of the parties by virtue of the fact that one party or its attorney drafted all or any part thereof. Any ambiguity found to exist shall be resolved by construing the terms of this Agreement fairly and reasonably in accordance with the purpose of this Agreement.

# 24. Independent Advice.

The Parties declare that the terms of this Agreement have been read and are fully understood. The Parties understand that this is a binding legal document, and each Party is advised to seek independent legal advice in connection with the matters referenced herein.

# 25. Severability.

If any part of this Agreement shall be declared unlawful or invalid, the remainder of the Agreement will continue to be binding upon the parties.

# 26. Voluntary Waiver of Provisions.

The BRAA may, in its sole and absolute discretion, waive any requirement of the CONTRACTOR contained in this Agreement, except for requirements related to compliance with federal Grant Assurances, or local, state, or federal law requirements. Waiver of any requirement of the CONTRACTOR on a single instance does not constitute waiver of the same requirement for any other instance. Waiver of any requirement of the CONTRACTOR does not constitute a waiver of any other requirement set forth in this Agreement or the attachments thereto.

# 27. Agent.

If this Agreement is signed by the CONTRACTOR's agent, the agent warrants that he/she is duly authorized to act on behalf of the CONTRACTOR, and that he/she is authorized to enter into this Agreement.

# **28.** Time is of the Essence.

The parties acknowledge that time is of the essence in the performance of the provisions in this Agreement.

## 29. Attorney's Fees.

If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney fees, expenses, and costs, including those at the appellate level, in addition to any other relief to which it may be entitled.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed

on the day and year written below.

By: \_\_\_\_\_

Date:

Authorized Representative for Contractor

Print Name: \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

Authorized Representative for Boca Raton Airport Authority

Reviewed for Legal Sufficiency:

By: \_\_\_\_\_

Date: \_\_\_\_\_

# REQUEST FOR PROPOSALS Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance

In accordance with provisions of the Boca Raton Airport Authority Procurement Code (the "Procurement Code"), the Boca Raton Airport Authority (the "BRAA") is seeking proposals from vendors with the following capabilities and qualifications. The BRAA has divided the services needed to carry out its noise and operations monitoring program into three contract awards, (1) Flight Tracking and Noise Monitoring Software; (2)Public Flight Tracking Web Portal; and (3) Noise Monitor Service, Repair, Maintenance, and Calibration. A vendor may be awarded one, two, all, or none of the contracts dependent on the results of the evaluation criteria found in this RFP.

## 1. Flight Tracking and Noise Monitoring Software

- 1) Experience in providing airport software solutions for noise and operational data tracking. Ability to provide an airport specific noise and operations monitoring, reporting and data analysis hosted software which can be accessed from any location with the following capabilities:
  - i) Flight data reporting such as type of operation, date/time of operation, runway, operator information, flight number, tail number, beacon code, origin or destination airport, and aircraft type. System must also be able to provide aircraft speed and altitude data throughout the whole flight track. Custom sorting and reporting shall be possible with ability to be exported to word and excel formats, along with ability to display data in easy to read graphical format.
  - ii) Flight track display with colored satellite map that cover's greater Boca Raton region (30 nm, range) with map layers including but not limited to airports, noise monitors, roads, zones, parks, water ways, municipal boundaries. User must be able to add layers like gates and zones to analyze flight tracks. Flight track data must be able to be exported to other formats like AutoCAD, GIS, JPEG, etc.
  - Software must be able to pull noise data from noise monitors and provide reporting capabilities like noise events linked to flight data and noise reporting formats like DNL, LMax, and Leq, etc. Software must have the ability to perform noise event audio playback.
  - iv) System shall be secure, reliable, and user friendly.
- 2) Experience and knowledge with transforming raw radar data from radar vendor into useable data for viewing, data analysis, and use with flight tracking system. Previous noise and operations data from existing system must be imported into new system. New data must be imported into flight tracking system in real-time, or near real-time.
- 3) Phone and email support for any downtime, software issues, help, or modifications to system including:
  - i) Automatic system in place to create tickets for missing data and errors.
  - ii) Troubleshooting with radar vendors to solve radar data gaps and problems.
- 4) Ability to host software at vendor location with 24-hour data backup and provide a secure platform to access the software.

5) Vendor must provide training on how to use the proposed Flight Tracking and Noise Monitoring Software.

#### 2. Public Flight Tracking Web Portal

- Experience and ability to provide a web based solution that can integrate noise and flight data in near real-time (just above FAA and TSA requirements) to be accessed by the public with the following capabilities:
  - i) Ability to provide a public portal to view flight tracks and data in near real-time hosted in the cloud.
  - ii) Online flight tracker must display aircraft type, altitude, tail or flight number, and operation type over a geographic map of the Greater Boca Raton area.
  - iii) Online flight tracker must be able to show each noise monitors current noise reading in real-time displayed on the geographic map.
  - iv) Users must be able to go back in time to view real-time data for a specified time.
  - v) Software must be able be added or linked on our website.
  - vi) Software must be compatible with the most common internet browsers including but not limited to Internet Explorer, Chrome, Firefox and Safari.
- 2) Vendor must provide training on how to use the proposed Flight Tracking Web Portal.

#### 3. Noise Monitor Service, Repair, Maintenance, and Calibration

- 1) Experience with service, repair and maintenance of noise monitors.
  - i) Onsite service, repair, and maintenance of airport noise monitors.
  - ii) Yearly noise monitor microphone calibration to meet international IEC standards.
  - iii) Ability to provide or obtain replacement parts for noise monitors and temporary solutions to monitor noise.
- 2) Noise monitor solution must integrate with existing airport noise monitors and have the ability to provide noise data in near real-time to flight tracking software and portal.
- 3) Automatic alerts for noise monitor communication problems and failures.

#### **Respondent Profile**

In submitting a response to this RFP (the "Proposal"), the Respondent shall be the person or legal entity who will be entering into the Agreement with the BRAA. Respondent may consist of any formal business entity authorized to do business in the State of Florida (i.e., Partnership, Corporation, Limited Liability, Company, Joint Venture, Sole Proprietorship). Respondent shall provide the BRAA with the following information:

1) The Respondent's legal name(s), headquarters address, local office address, state of incorporation, and key firm contact names.

- 2) A complete corporate or entity history of the Respondent, including date of incorporation or creation, name changes, dissolutions, reinstatements, etc.
- 3) The Respondent's federal ID number.
- 4) Whether the Respondent is legally authorized, pursuant to the requirements of the Florida Statutes, to do business in the State of Florida.

#### **Proposal Requirements**

Failure to provide the information required by Items 1 through 8 below by the deadline for submission may result in a finding of non-responsiveness by the BRAA. The BRAA will determine whether the Respondent and the Respondent's Proposal is responsive to the requirements specified herein. The BRAA reserves the right to waive minor technicalities or irregularities when it is in its best interest.

Each Proposal shall include (for requirement nos. 2, 3, 4, 5, & 6, "Respondent" includes the principals of Respondent if Respondent is a joint venture, limited liability company or partnership, and the Respondent's shareholders owning greater than 10% of Respondent's stock if Respondent is a corporation):

- Summary of Experience and Qualifications A detailed summary of experience and qualifications to perform the Work, including any equipment, licenses, permits or training certifications necessary for the performance of the Work or indicative of the Respondents qualifications to perform the Work.
- 2) Bankruptcy, Litigation & Contract Dispute Information Respondent is required to provide the BRAA with a complete list and description of all lawsuits, litigation, claims, arbitrations, and administrative hearings brought by or against the Respondent, its parent or subsidiaries, predecessor organizations, any of its wholly-owned subsidiaries, or any of its owners or officers during the last (5) years. The list shall include all case names; case, arbitration, or hearing identification numbers; the name of the project over which the dispute arose; a description of the subject matter of the dispute; and the final outcome of the matter or the current status if the matter is not final.
- 3) Criminal History Information A complete list and description of all criminal proceedings or hearings concerning offenses in which the Respondent, its owners, officers, predecessor organization(s), or wholly owned subsidiaries were defendants. Respondent shall include in this list any criminal proceedings or records that have been sealed by a court.
- 4) Negative Contract Performance Information A complete list and description of all terminated or rescinded contracts to which Respondent was a party. This list must also include the circumstances under which the contract was terminated or rescinded. In addition to contracts that were terminated or rescinded, the list must include contracts pursuant to which Respondent was assessed liquidated damages or any other contractual monetary penalty as a result of delay or any other reason.
- 5) **Financial Terms** Respondent must provide the BRAA with the financial terms of its proposal for each of the RFP contract sections using Attachment A, including a description of all services

included within lump sums, any applicable hourly rates for performance of the Work or some portion of the Work, estimates of the number of hours likely to be incurred per year (for each element of the Work for which it lists an hourly rate), an explanation of whether and how products, parts and equipment will be paid for by the Authority (and whether the Respondent will charge a mark-up on such products, parts and equipment), and any other aspect of the financial terms necessary for a full understanding of the financial proposal.

6) **Statement of Offer -** The Proposal must contain the following statement:

Signature

Name

Title

#### **Proposal Instructions**

Written Proposals shall be limited to a maximum of fifteen (15) pages, excluding financial information and litigation and other contract dispute information.

Submit five (5) complete copies of all requested material to:

Boca Raton Airport Authority 903 NW 35<sup>th</sup> St Boca Raton, FL 33431

RE: RFP #2017-BRAA-02

# BRAA MUST RECEIVE PROPOSALS NO LATER THAN 3:00 P.M., EASTERN STANDARD TIME ("EST"), ON October 27, 2017.

BRAA will not accept electronically transmitted, late, or misdirected proposals. Respondents are cautioned that they are responsible for delivery to the specific location cited above. Therefore, if your Proposal is delivered by an express mail carrier or by any other means, it is your responsibility to ensure delivery to the above address. The time and date for receipt of Proposals will be strictly observed. The BRAA will not be responsible for late deliveries or mail delays. Each Proposal will be time/date stamped upon receipt. Proposals received after the specified time and date shall be returned unopened.

#### Cone of Silence

As provided in the Procurement Code, the Cone of Silence, which restricts communications with

the BRAA or any of its members, the Executive Director or any of the Executive Director's staff, consultants or agents, is in effect as of the time of advertisement. VIOLATION OF THE CONE OF SILENCE IMMEDIATELY AND PERMANENTLY DISQUALIFIES RESPONDENTS OR POTENTIAL RESPONDENTS FROM CONSIDERATION IN THIS RFP. Please review the Procurement Code for further details. It is the responsibility of the Respondent and potential Respondents to become familiar with the Cone of Silence. The Cone of Silence terminates when the Executive Director takes action that ends the solicitation. The Procurement Code can be found online at www.bocaairport.com.

#### Selection Process

The BRAA will be responsible for selecting from among the Proposals received. It is anticipated, but not required, that the process of evaluation for this RFP proceed in the following manner:

**Review of Proposals:** The Executive Director will first review each Proposal for responsiveness to the terms and conditions of the RFP. The Executive Director reserves the right to reject any and all Proposals and to waive any minor irregularities or technicalities. The Executive Director shall have the right to inspect the facilities and organization of any Respondent, to make inquiries, to ask for further information, or to take any other action to determine the best Respondent and Proposal for the performance of the Work. The Executive Director shall have the right to extend the date for the receipt of Proposals and all other dates set forth in this RFP. The Executive Director has the right to increase, decrease and adjust the Proposal Requirements hereunder.

**Interviews/Selection:** Each responsive Respondent will be interviewed by the Procurement Committee and shall provide a demonstration of the software being proposed along with a demo account. The demonstration of the software must resemble closely the proposed solution. Respondent must also disclose the features that are to be included and excluded with the software solution proposed as it relates to what's provided/shown in the demonstration. After interviews and demonstrations have been conducted, the Procurement Committee will then select a vendor for all or each section of the bid dependent on the evaluation criteria below.

#### **Evaluation Criteria**

The Procurement Committee will select from among the responsive Respondents based upon the following weighted evaluation criteria: points maximum 100.

- 0-25 pts Financial Terms
- 0-25 pts Airport Specific Experience
- 0-25 pts Capability, Reliability and Ease of Use of proposed system
- **0-25 pts** Integration with existing BRAA equipment of proposed system

#### Instructions and Information for Respondents

Proposals are at Respondent's expense. Each Respondent is responsible for the costs incurred in preparing their Proposal. The BRAA will not reimburse for any of these costs.

Potential Respondents may submit written requests for clarification or additional information to the BRAA. by email to <u>travis@bocaairport.com</u> on or before October 6, 2017. BRAA may, at its sole discretion publish addenda addressing issues raised in the requests for clarification or additional information. All Respondents shall carefully examine the RFP documents. Any ambiguities or inconsistencies shall be brought to the attention of the BRAA in writing prior to October 6, 2017, as set forth above. Failure to do so, on the part of the Respondent, will constitute an acceptance by the Respondent of any reasonable interpretation of the RFP requirements by the BRAA. Any questions concerning the intent, meaning and interpretations of the RFP documents shall be requested in writing, and received by the Executive Director by close of business on October 6, 2017. The BRAA will not be responsible for any oral instructions made by any employee(s) of the BRAA in regard to the RFP.

#### Addenda:

Should revisions to the RFP documents become necessary, the Executive Director will issue an addendum and notify each potential Respondent in writing.

#### Accuracy of Proposal Information:

By responding and signing the Proposal, the Respondent attests that the information submitted to the BRAA in its Proposal is true, correct and accurate. The Respondent also agrees that any false, inaccurate, misleading, exaggerated, or incorrect information provided as part of their Proposal may be deemed inappropriate and/or non- responsive and shall be disqualified from further consideration.

#### **Insurance Requirements:**

The Respondent must carry the insurance types and coverage levels required by the Minimum Standards available at <u>www.bocaairport.com</u>.

#### Protest:

Protests arising from the terms of the RFP and/or from the decisions of the Executive Director shall be made in accordance with the procedures set forth in the Procurement Code, The Procurement Code sets forth administrative procedures that must be exhausted prior to the initiation of any claim in a court of law.

#### Rejection of All Proposals; Cancellation of the RFP:

In accordance with the Procurement Code, the Executive Director may, at any time prior to award, reject all Proposals or cancel the RFP. The decision to reject all Proposals or cancel the RFP may be made for any reason.

#### **Confidential and Proprietary Information:**

The BRAA is subject to Chapter 119, Florida Statutes (the "Public Records Laws"), which makes all Proposals and other information provided by Respondents a matter of public record. No claim of confidentiality or proprietary information in all or any portion of a Proposal will be honored unless a specific exemption from the Public Records Laws exists and it is cited in the Proposal. A blanket statement that the entire Proposal is exempt from the Public Records Law is not acceptable and will not be honored. Any claimed exemption must be specifically identified by page(s) and paragraph number(s). An incorrectly claimed exemption does not disqualify the Respondent, only the exemption claim.

#### Governing Law:

This RFP shall be governed by the laws of the State of Florida, and the venue for any legal action will be in Palm Beach County, Florida.

#### **General Conditions:**

By Responding to this RFP, Respondents agree to the following general terms and conditions governing the Respondent's performance of the Scope of Services:

Term:

The term of the agreement for performance of the Work shall commence on January 1, 2018, and end at 11:59:59 p.m. (EDT) on December 31, 2020. The BRAA may renew this agreement on the same terms and conditions for up to two (2) one-year terms upon written notice to the selected Respondent given at least thirty (30) days before the end of the expiring term.

#### **Termination for Convenience:**

The agreement may be terminated for convenience by the BRAA upon thirty (30) days written notice to the Respondent. Respondent shall be compensated for all Work up to the date of termination for convenience.

#### Payment:

Respondent shall invoice the BRAA at the beginning of each calendar month for all Work performed during the previous month. The BRAA shall pay the monthly invoiced amount within fifteen (15) business days of receipt of the monthly invoice.

#### Assignment:

This agreement may not be assigned without the written consent of the Executive Director. Such consent to assignment may be withheld for any or no reason.

# ATTACHMENT A – Pricing Table\*

RFP	Description	Year One Lump Sum Amount	Year Two Lump Sum Amount	Year Three Lump Sum Amount
1 - Flight Tracking & Noise Monitoring Software	Implementation – Installation, Setup, Testing	\$		
	Training	\$	\$	\$
	Software Hosting and Updates	\$	\$	\$
	User Support and Maintenance Support	\$	\$	\$
	Data Backup & Archiving	\$	\$	\$
	1 - Total	\$	\$	\$
2 - Public Flight Tracking Web Portal	Implementation – Installation, Setup, Testing	\$		
	Training	\$	\$	\$
	Software Hosting and Updates	\$	\$	\$
	User Support and Maintenance Support	\$	\$	\$
	Data Backup & Archiving	\$	\$	\$
	2 - Total	\$	\$	\$
<b>3 -</b> Noise Monitor Service, Repair, Maintenance, and Calibration	Implementation – Installation, Setup, Testing	\$		
	Service, Repair, and Maintenance	\$	\$	\$
	Yearly Calibration	\$	\$	\$
	3- Total	\$	\$	\$

\*If you are not bidding on a particular RFP please write NA under each year in the Total Row.

#### Exhibit "B"

ARRIS

2235 Monroe Street Hemdon, VA 20171 phone 1-703-245-4289

ktaylo15@harris.com

harris.com

OCT 2 7 2011

October 20, 2017

Boca Raton Airport Authority 903 NW 35<sup>th</sup> Street Boca Raton, FL 33431

- Subject: Harris Corporation Proposal for Boca Raton Airport Authority, Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance
- Reference: Boca Raton Airport Authority, Request for Proposal, Noise Monitoring and Flight Tracking System and Noise Monitor Service and Maintenance

Dear Boca Raton Airport Authority:

Harris Corporation (Harris) is pleased to submit the enclosed proposal in response to the referenced solicitation.

The subject proposal is valid for 90 days from date of offer, or if the proposal is accepted, validity is extended throughout the entire term of the contract.

A Harris Corporation Incumbency Certificate has also been provided. This certificate provides Kathleen W. Taylor signature authorization of up to \$1M for this proposal.

Harris looks forward to working with the City of Boise on this important project.

Should you have any questions or require additional information, please contact me directly by email at <u>ktaylo15@harris.com</u> or phone at 703-245-4289.

Sincerely,

Hutton byta

Kathleen W. Taylor Contracts Manager



27 October 2017

# **Boca Raton Airport Authority**

# **Request for Proposal Noise Monitoring and Flight Tracking System and Noise Monitor Service** and Maintenance

SUBMITTED TO: Boca Raton Airport Authority 903 NW 35th St. Boca Raton, FL 33431

> SUBMITTED BY: Harris Corporation 2235 Monroe Street Herndon, VA 20171

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HARRIS CONFIDENTIAL/PROPRIETARY - This information is provided solely for the recipient's use in evaluating Harris for award of the services/supplies stated herein. Recipient shall not disclose or otherwise use the information contained herein without the express written consent of Harris.



# **TABLE OF CONTENTS**

1.	INT	RODUC	CTION/EXECUTIVE SUMMARY	1
2.	SUN	/IMARY	Y OF EXPERIENCE AND QUALIFICATIONS	2
	2.1	Detail	led Summary of Experience and Qualifications to Perform the	
		2.1.1	Migration from Legacy FTS Systems	
			Key Personnel Responsibilities and Experience	
	2.2		Tracking and Noise Monitoring Software	
		2.2.1	Symphony EnvironmentalVue	
			2.2.1.1 Aircraft Operations, Selection, Sorting, and Reporting Capabilities	
			2.2.1.2 Flight Track Monitoring and Flight Identification	
			2.2.1.3 Replay Capability	
			2.2.1.4 Point of Closest Approach Analysis	
			2.2.1.5 Gate Analysis	
			2.2.1.6 Corridor Analysis	14
			2.2.1.7 Complaint Handling	15
			2.2.1.8 Data Processing	
			2.2.1.9 System Availability	16
			2.2.1.10 Problem Reporting	16
			2.2.1.11 Database Administration	18
			2.2.1.12 User Account Management	18
			2.2.1.13 Configuration & Software Management	18
			2.2.1.14 User LAN/WAN Management	18
		•	2.2.1.15 Capacity Planning/Performance Management	18
			2.2.1.16 Redundancy and Disaster Avoidance	18
	2.3	Public	c Flight Tracking Web Portal	18
	2.4		Monitor Service, Repair, Maintenance and Calibration	
			Larson Davis 831C Units	
			Electronics Enclosures	
			Power, Communication and Network Service	
			Unattended Operation	
			Clock Accuracy and Time Standard	
			Automatic Data Transfer	
			Audio Monitoring and Recording	
			Sound Level Display (5.1.5.11)	
			Acoustic Signal Processing	
-			) Noise-Event Discrimination Parameters	
3.	BAN	IKRUP	PTCY, LITIGATION AND CONTRACT DISPUTE INFORMATION	29

Use or disclosure of data contained on this sheet is subject to restriction on the title page of this proposal.

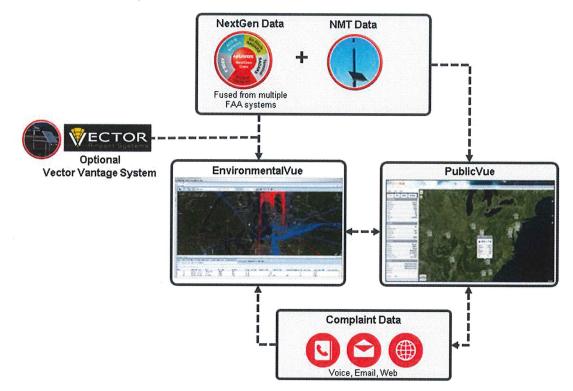


4.	CRIMINAL HISTORY INFORMATION	29
5.	NEGATIVE CONTRACT PERFORMANCE INFORMATION	29
6.	FINANCIAL TERMS	30
7.	STATEMENT OF OFFER	.31

**Request for Proposal** 

## 1. INTRODUCTION/EXECUTIVE SUMMARY

Harris Corporation (Harris) is pleased to offer a comprehensive, integrated and turn-key solution to the Boca Raton Airport Authority (BRAA) for the Request for Proposal (RFP) for Noise Monitoring and Flight Tracking System (FTS) and Noise Monitor Service and Maintenance. The Harris team offers the BRAA a state-of-the-art, all-inclusive FTS solution via our Symphony® product suite (see Figure 1) integrated with the Larson Davis next generation Model 831c Noise Monitoring Terminals (NMTs) that delivers to the BRAA the best value and lowest risk solution in meeting and exceeding the FTS technical, operations and maintenance qualifications/requirements.



#### Figure 1: Harris State-of-the-Art FTS via our Symphony® product suite integrated with the Larson Davis next generation Model 831CNoise Monitoring Terminals (NMTs)

As a Florida based company, Harris is proud to be a corporate member of the Florida Airports Council (FAC). Harris is committed to being a trusted partner to FAC, BRAA, and the entire aviation community by providing reliable state-of-the-art solutions and support. Harris is also committed to providing the most professional and outstanding project management, project delivery, account management, customer support, and product development to deliver a state-of-the-art and cost effective FTS to BRAA. It should be noted that the Harris team is made up of all U.S based companies and leverages technology that is manufactured and fully-hosted in the United States. Our competition on this project cannot come close in meeting this same U.S. based standard.

As the BRAA's current Bruel & Kjaer (B&K) EMU2100 Units are 100% proprietary, Harris will replace these six (6) B&K NMTs with new Larson Davis (LD) 831C Noise Monitors as part of the NMT Maintenance Services we provide BRAA. Harris has the capability to communicate with the single B&K 3639-A-200 deployed at BRAA. LD is an industry leader in U.S. based noise equipment manufacturing with an impressive record for supplying equipment in the airport NOMS market. The LD equipment also has the following advantages:

27 October 2017

- Lower Risk: LD noise monitoring equipment is non-proprietary and they offer a standard two-year warranty, backed by a Total Customer Satisfaction policy. If BRAA is not completely satisfied with any LD product, Harris will repair, replace or exchange it at no charge, with very few exceptions.
- Modern Options. LD offers all the modern options users expect including 1/2 second logging, noise
  recording, remote control, on-board GPS, solar power and communications options including
  standard telephone modems, wireless modems, and hard-wired broadband communications. The
  Harris NOMS solution seamlessly integrates with the LD monitoring units, providing airport users
  with state-of-the-art and highly reliable noise monitors. The combination of Harris' patented noise
  and operations processing technologies, coupled with high-fidelity noise data, allows the user to
  perform a wide variety of monitoring, reporting, modeling, and validation functions, effectively and
  efficiently.
- Convenience. LD also offers a convenient "mail-in" service arrangement that results in lower cost
  of ownership and USA factory service. Each delivered Noise Monitoring Terminal (NMT) includes
  a special shipping case for analyzer and microphone components for convenience and the safety
  of the contents.

As an option, the Harris team is also proposing the Vector Vantage system. Harris has partnered with Vector Airport Systems to incorporate their aircraft identification capabilities into our applications. A critical part of a flight tracking system is the ability to identify aircraft. This requirement is most apparent at airports with general aviation aircraft, VFR operations, and block list aircraft. The aircraft identification data provided by Vantage helps to eliminate the unknowns that are unavoidable in-flight tracking data and provides the most complete and accurate data set possible today.

- Captures 99% of Aircraft IDs
- Camera Data Fused with Radar Flight Tracks
- Day/Night & All Weather
- All Aircraft Types
- All Airport Sizes
- Proven Effective over 11 years at 40+ airports

The key personnel in the proposed FTS project team have worked together for over 15+ years in the implementation and support of Harris solutions on similar FTS projects. Additionally, Harris personnel, including our noise applications Subject Matter Expert (SME), Samuel Carter, are located within the state of Florida and can be onsite within hours to support any potential needs or requirements at the BRAA. Harris will deliver a fully functional FTS that meets or exceeds all stated and future project requirements of BRAA.

#### 2. SUMMARY OF EXPERIENCE AND QUALIFICATIONS

The Harris Automatic Press Company incorporated on Dec. 23, 1895. The company went on to produce many printing innovations during the early 1900s. By midcentury, the company grew into one of the world's largest and most successful manufacturers of printing equipment under a new name: Harris-Seybold.

In 1974, the company changed its name to Harris Corporation. Four years later, Harris moved its headquarters from Cleveland, Ohio, to Melbourne, Florida. By the time of its centennial celebration in 1995, Harris had emerged as a global company serving a broad base of communications and information technology markets.

In 2015, Harris Corporation acquired Harris Inc. The acquisition transformed Harris into a company with greater scale, capabilities, core franchises and a more balanced business portfolio.

Today, Harris is one of the only companies concentrated exclusively on developing the trusted solutions that solve the toughest technology challenges faced by businesses and governments around the world. Its innovative solutions are delivered through three business segments: Communication Systems, Electronic Systems, and Space and Intelligence Systems.



Harris is headquartered in Melbourne, Florida and the Symphony team is located in Herndon, Virginia. Harris was incorporated in the state of Delaware in 1926 and the Federal ID number is 34-0276860. Harris is registered to do business in the State of Florida and the key firm Points of Contact (POCs) include Mr. Gregory P. Hughes, Sr. Contracts Manager and Ms. Kathy W. Taylor, Contracts Manager.

#### Table 1: Harris Corporate and Local Addresses and POCs

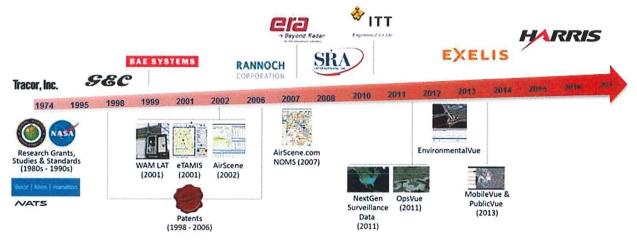
Corporate Headquarters	Local Address	Points of Contact
Harris Corporation	Harris Corporation	Sr. Contracts Manager:
1025 West NASA Blvd	2235 Monroe Street	Gregory P. Hughes
MS: A-12A	Herndon, VA 20171	6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6
Melbourne, FL 32919		Contracts Manager:
		Kathleen W. Taylor

## 2.1 DETAILED SUMMARY OF EXPERIENCE AND QUALIFICATIONS TO PERFORM THE WORK

Harris is one of the largest suppliers of noise and operations monitoring programs in the U.S. covering 30+ airports today and the Harris team has over 40 years of continuous experience deploying and supporting Flight Tracking and Noise Monitoring Software clients in the U.S. Harris is focused on providing software and installation services that are designed, deployed and serviced in the U.S.

Since 1974, the Symphony group (www.symphonycdm.com) has developed, installed, managed, maintained and supported numerous Flight Tracking and Noise Monitoring Software focused solutions and projects (see

Figure 2).





Harris deployed their first public portal in 2000, followed by their first Contours with Virtual Noise Monitors (VNMs) in 2009. Today, Harris supports 30+ flight tracking and noise monitoring systems, 15+ of which have public portals, 10+ have Contours with VNMs, 20 have NMTs that were deployed and are maintained by Harris, and 30+ have Harris' NextGen Surveillance Data. Harris' NextGen Surveillance Data is the most widely used surveillance source for Noise and Operations Management System (NOMS) in the US. Harris has a rich history of innovation in the flight tracking and noise monitoring industry. See Table 2 below for some additional milestone accomplishments, as evidence of Harris' experience and qualifications to perform the work.

27 October 2017

3

HARRIS	TECHNOLOGY TO CONNECT, INFORM AND PROTECT?
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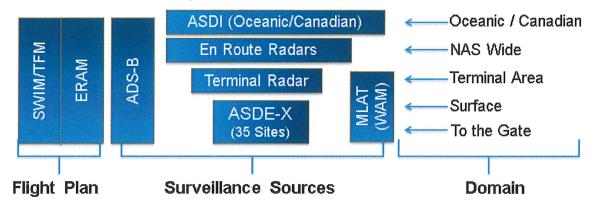
#### Table 2: Harris Innovation and Milestone Accomplishments

YEAR	HARRIS INDUSTRY FIRSTS
1974	First real-time, integrated Noise and Flight Track Monitoring System – Tracor
1985	First independent flight tracking capability – Tracor
1988	First Personal Computer (PC)-based system (Disk Operating System (DOS), Windows 3.1)
1989	First PC-based FAA Automated Radar Terminal System (ARTS) diskpack reader – Tracor
1996	First Windows PC FTS software – Tracor
1998	First to develop and install ARTS IIIE Gateway reader – Tracor
2001	First Web-based FTS software – British Aerospace (BAE) Systems
2002	First to integrate Multilateration in FTS – Rannoch
2004	First to fully integrate automated Integrated Noise Model (INM) contour processing BAE
2004	First integrated Digital Automatic Terminal Information Service (D-ATIS) in NFTMS – Rannoch
2004	First to develop a Multilateration-based airport billing application – Rannoch
2007	First airport operations solution hosted in a professional hosting facility – Era
2008	First to develop a Multilateration-based Flight Information Display System (FIDS) – Era
2008	Implemented the World's most advanced Landing Fee Billing System – Era
2009	First Virtual Noise Monitoring Software – Era
2009	First Surveillance-as –a Service provider to FAA – International Telephone & Telegraph (ITT)
2011	First single, integrated, real time updated nationwide surveillance database and commercially available data feed - ITT
2012	First NOMS on an advanced geospatial information system (GIS) platform with integrated 2D/3D mapping capabilities (compatible with Esri's ArcGIS software) and fused Air Traffic Control (ATC) quality surveillance data – Harris
2013	First tablet/mobile accessible public FTS portal – Harris

In 2011 Harris contracted with the FAA and is currently responsible for providing "surveillance as a service" to the FAA. Under this Surveillance Broadcast System (SBS) contract, Harris developed, deployed, and is now operating and maintaining the NextGen ADS-B system, which is the largest ADS-B surveillance network in the world. The Harris contract performance is fully delivering on the engineering specifications and completing every milestone on time and within the forecasted budget.

The Harris team is responsible for providing a commercialized version of the FAA's NextGen ADS-B surveillance data. The NextGen Data is the most complete, accurate, single source of aircraft surveillance that is available throughout the entire U.S. National Airspace System (NAS) and is used to power our suite of Symphony software applications. The Harris NextGen Data fuses the FAA's Airport Surface Detection System – Model X (ASDE-X) and Airport Surface Surveillance Capability (ASSC) data, the FAA's Airport Surveillance Radar (ASR) and the FAA's ADS-B data (via Harris), and the FAA's Host flight plan data into a single, integrated feed. This makes our NextGen surveillance data feed a highly robust and accurate data source. The use of the FAA's ADS-B data permits Harris to fine-tune terminal area radar feeds as they are fused and georeferenced, thereby improving positional accuracy for radar-only based aircraft.

Harris NextGen flight tracking and operations data is Air Traffic Control (ATC) quality. It is the most accurate and cost-effective flight tracking and operations data commercially available in the U.S. Figure 3 identifies the various surveillance and data inputs that are exclusive to the Harris NextGen Data.



# One Aircraft Target...One Track...One Point of Contact....Nationwide

	Sur	veillance E	)ata	a Fused fr	om	Multiple F	<b>4</b> A	ATC Syste	ms	;
ASDE-X		Terminal Radars		En-Route Radars		ADS-B Network		Multilateration Systems	Ð	Flight Plan Data
<ul> <li>Airport surface data</li> <li>1 second up date</li> </ul>		<ul> <li>Terminal area data</li> <li>5 second up date</li> </ul>	Ŧ	<ul> <li>En-route radar data</li> <li>12 second update</li> </ul>		<ul> <li>ADS-B network data</li> <li>1 se cond update</li> </ul>		<ul> <li>MLAT network data</li> <li>1 second update</li> </ul>		<ul> <li>Flight plandata from FAA Host Com puter System</li> </ul>

Figure 3: Harris Integrated "High Fidelity" NextGen Flight Tracking Feed

BRAA is currently hosting one of Harris' Automatic Dependent Surveillance Broadcast (ADS-B) radio towers at its Boca Raton Airport (BCT) facility and is receiving complimentary Harris NextGen Data. Harris is extremely appreciative of the work put forth by the BRAA to secure and maintain this resident ADS-B system. In addition to the ADS-B tower at BCT, Harris also maintains four other ADS-B radio towers as well as having access to several FAA Radar systems within 50 nautical miles (nm) of BCT (Table 3). This insures that the Harris NextGen Data provided to BRAA through our proposed applications will allow for the most complete and accurate data available.

#### Table 3: ADS-B Radio Sensors and FAA Radars provided with NextGen Data within 50 NM of BCT

Boca	ADS-B	RS168-03	~50 nm away from Boca Raton Airport		
Raton	Raton SBS RS168-05 Radios RS168-06	K3100-03	RS168-05	~40 nm away from Boca Raton Airport	
		RS168-06	This radio is at Boca Raton Airport		
		RS191-01/02	FLL Surface Radios ~17 nm away		
				RS203-01/02/03/04	MIA Surface Radios ~36 nm away
	FAA	PBI	~18 nm away		
	Radars	FLL	~18 nm away		
		MIA	~36 nm away		
	QM8/QN	QM8/QMA	~48 nm away		

27 October 2017

Request for Proposal

5

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## 2.1.1 MIGRATION FROM LEGACY FTS SYSTEMS

Harris has been awarded several contracts within the last two years migrating customers who had previously been using Bruel & Kjaer Airport Noise Monitoring Systems (ANOMS) to our Symphony Suite applications. These airports include the following:

- Denver International Airport (DEN)
- Seattle Tacoma International Airport (SEATAC)
- Charlotte Douglas International Airport (CLT)

Each airport was able to maintain their legacy flight tracking information along with having superior data and reporting capabilities. References can be provided upon request by BRAA.

#### 2.1.2 Key Personnel Responsibilities and Experience

Harris proposes the following key personnel for the BRAA effort. Responsibilities and experience for each individual selected are provided in Table 4 below.

#### Table 4: Harris BRAA Project Management Team and Support Staff Roles and Responsibilities

KEY PERSONNEL	RESPONSIBILITIES	EXPERIENC E
<b>Chris Zanardi</b> General Manager	Responsible for the day-to-day management of the Symphony Group's commercial operations	Over 15 years of experience in the executive management of flight surveillance, airline/airport
Symphony	and financial performance. Works with the broader Harris organization to ensure that the Symphony team has the required resources to meet project and ongoing service deliverables.	operations, and NOMS solutions providers in the commercial aviation market.
Justin Smith		Project Management Professional (PMP) certified. Over
Overall Installation Project Manager	point of contact between the BRAA and Harris. The Project Manager will provide task leadership to the project including overall scheduling, assignment of unit resources, budget review/adherence, quality control, and day-to- day coordination of staff activities and subcontractors.	
Samuel Carter Locally based SME & Training Manager	,	
Greg Maxwell Software Installation/ Customization Manager	installation and customization, including existing software that is proprietary to the Harris and/or its subcontractors, commercial over-the-counter ("COTS") third-party software, and custom	Experience includes six years as a senior noise analyst and two as a noise program manager. Extensive experience operating and customizing NOMS systems at PDX and PHL airports. Works with airport customers to ensure the NOMS system meets their evolving needs

KEY PERSONNEL	RESPONSIBILITIES	EXPERIENCE
Chris Rossano Chief Engineer	SME oversight of the BCT project and work with the Software Installation/Customization Manager	Over 20 years of experience designing, developing, and delivering airport and airline systems that include both noise monitoring and operations management components. Mr. Rossano has overseen complex NOMS replacement projects like Massport, SEATAC, and Santa Barbara as well as a number of new NOMS installation s. He has extensive experience in acoustics, developing the acoustic engine for the Federal Highway Administration's (FHWA) Traffic Noise Model and contributing to the FAA's Integrated Noise Model. He also developed ARTSMAP and RealContours.
Jessica Martell Customer Relationship Management (CRM) Director Henry Smith Support Manager	the BRAA account. This includes serving as the main point-of-contact for the BRAA on all contractual, product roadmap, training and service delivery matters.	program management experience in data
Jack Gregg Customer Software Support Engineer	Manages the Hosted Web-Based Flight Tracking system software. Provides quality assurance on all flight track quality testing and monitoring. Conducts internal and external acceptance testing and validation. Provides ongoing customer support.	
<b>Kevin Perry</b> Customer Software Support Engineer		Over 35 years of experience developing, deploying and supporting airport and airline systems with a focus on noise and operations.

## 2.2 FLIGHT TRACKING AND NOISE MONITORING SOFTWARE

Harris will deliver its commercial-off-the-shelf (COTS) integrated Harris Symphony® EnvironmentalVue® solution powered by Harris' NextGen Surveillance Data and Symphony® PublicVue<sup>™</sup> public flight tracking portal along with an option for Vector's Vantage Aircraft Identification System are also provided as part of this proposal to meet the FTS needs of BRAA. Harris' FTS solution is an existing COTS software that will operate on any Internet enabled Windows based PC that is running the most current version of Java (preferably 64-bit) and meets the following minimum requirements as shown in the Table 5 andTable 6 below.

#### **Table 5: Minimum Configuration**

Minimum Configuration				
Operating System	Windows 7 32 bit or later OS			
Hardware	<ul> <li>X86, 2.4 GHz dual-core microprocessor</li> <li>3.5 GB of available system memory</li> <li>512 MB on card graphics memory</li> <li>Mouse or similar pointing device</li> <li>1024x768 monitor display</li> </ul>			
Browser	Internet Explorer version 8 or higher			

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#### Table 6: Minimum Suggested Configuration

Minimum Suggested Configuration					
Operating System	Windows 7 64 bit or later OS				
Hardware	<ul> <li>X86, 2.4 GHz quad-core microprocessor</li> <li>4 GB of available system memory</li> <li>1 GB on card graphics memory</li> <li>Mouse or similar pointing device</li> <li>Dual 1920X1280 monitor displays</li> </ul>				
Browser	Internet Explorer version 11 Browser, and the application must be launched from IE64 to run in 64 bit mode)				

#### 2.2.1 SYMPHONY ENVIRONMENTAL VUE

EnvironmentalVue is a widely used airport web-based environmental monitoring NOMS and FTS solution in the U.S.; currently utilized at 30+ airports. It is the only system of its kind built on a true Geographic Information System (GIS), which allows it to provide the most accurate representation of real-time and historical flight track data. EnvironmentalVue allows BRAA to visually display in 2D and 3D (Figure 4 and

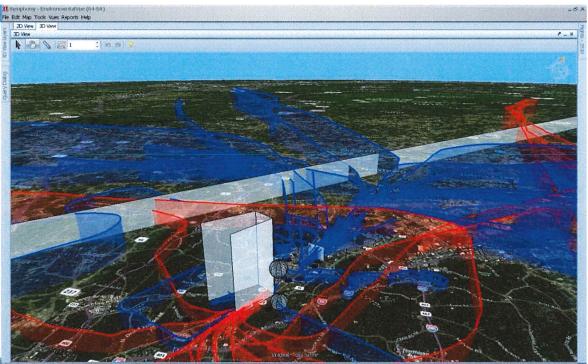
Figure 5) real-time and historical NextGen surveillance data, view measured aircraft noise emissions, manage community complaints, and improve community relations by presenting information to the public. This is accomplished through published graphical and tabular reports. EnvironmentalVue also helps BRAA improve environmental compliance, displays precise flight tracks and reduces litigation exposure for BRAA.

#### Key EnvironmentalVue capabilities include:

- A powerful underlying GIS engine that permits users to confidently create the most accurate and robust maps and exhibits
- Access to real-time and historic flight track data powered by Harris' NextGen Surveillance Data
- Provides reporting of flight data such as type of operation, date/time of operation, runway, operator information, flight number, tail number, beacon code, origin or destination airport, and aircraft type
- Comes standard with the ability for five (5) user logins with expandability for additional users
- 3D display is the FTS industry's most dynamic and realistic, including highly accurate aircraft depictions and aircraft liveries (if available with flight plan data)
- Provides aircraft speed and altitude data throughout the whole flight track
- 3D view of gates, corridors and points-of-closest approach (PCA) result in powerful graphical exhibits for either industry experts or laypersons
- Variety of compatible platforms including Internet Explorer (IE), Mozilla Firefox
- User configurable Vues (workspaces) consisting of tables, maps, and charting data displays
- A variety of map configurations (Road, Aerial, Aerial Labeled, etc.) as well as the ability to easily load your own or customized Georeferenced Maps
- Flight tracks are displayed through a colored satellite map that cover's greater Boca Raton region (30 nm, range) with map layers including but not limited to airports, noise monitors, roads, zones, parks, water ways, municipal boundaries.



- Users may add layers like gates and zones to analyze flight tracks. Flight track data can be able to be exported to other formats like AutoCAD, GIS, JPEG, etc.
- Ability to easily create gates, domes, and cylinders around specific points of interest on the map
- Smart Tables are directly connected to map displays and may be configured to report via a tabular output or map display (32 data fields may be filtered)
- Historical replay, reporting and storage of flight data
- Flight track data can be exported to other formats like AutoCAD, GIS, JPEG, etc.
- Incorporates Noise Monitoring Terminal (NMT) data to provide reporting capabilities like noise events linked to flight data and noise reporting formats like DNL, LMax, and Leq, etc.
- The ability to perform noise event audio playback (through the provided Larson Davis G4 software)
- The ReportVue module represents the industry's most modern FTS report-generation system including custom reports, standard reports and standard outputs to PDF, Word, Excel and CSV files, and dynamical and interactive previews of the reports
- Customized sorting on the reported data along with ability to display data in easy to read graphical format



• The ReportVue module has built in pivot table capabilities for enhanced analytical output

ack Time Range:10/02/17 23:49:15 to 10/04/17 00:12:21 Flights: 3510 : Complaints: 0 Noise Events: 289 System: PDK

Figure 4: EnvironmentalVue 3D Flight Tracks





#### Figure 5: EnvironmentalVue 2D Flight Tracks

#### 2.2.1.1 Aircraft Operations, Selection, Sorting, and Reporting Capabilities

EnvironmentalVue provides users the ability to select, filter, sort and report on historic counts of aircraft operations using any of the fields existing in the database. In addition, users can use the EnvironmentalVue Portal to build data queries and create custom reports of any data field(s) in the database. These reports can be displayed in table format, or exported to pdf or an Excel file for further analysis.

Harris' FTS allows for selecting, sorting, and reporting historic counts or listings of aircraft operations using any fields in the database including but not limited to the following when the data is available:

- Aircraft Type
- Type of operation (departure, arrival or overflight)
- Runway used
- Origin and destination airports
- Aircraft operator or airline
- Aircraft registration number
- Specific airframe and engine information
- Penetration or non-penetration of definable gates
- Penetration or non-penetration of definable corridors
- Maximum and minimum PCA limits
- Maximum and minimum altitude limits
- Beacon code

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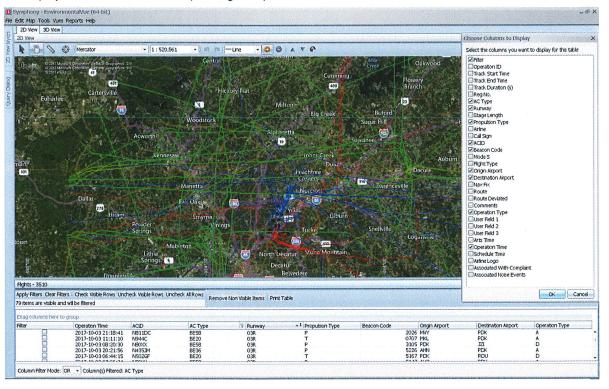
Additionally, the user can combine or group records based on values in the same field of data such as combining similar aircraft types such as Gulfstream IV and V or records that may otherwise be related for reporting purposes. Harris' NOMS also allows the operator to present tabular and graphic reports of the operations (or other data) sorted by these or any other categories.

#### 2.2.1.2 Flight Track Monitoring and Flight Identification

The NextGen flight tracking data included in the Harris FTS solution identifies at a minimum each flight track in the following ways:

- Type of operation for Airport operations. Each track is labeled as an arrival, departure, overflight, or touch-and-go. Harris offers an optional capability to identify ground run-up operations as well.
- Airport runway used. Each operation determined to have used the Airport will have the specific runway it used as a part of its identification in the database.
- Major operator category including but not limited to passenger, cargo, and military.
- Major aircraft type categories or propulsion. The Harris FTS will populate the operations table of the database with a value identifying jets, turboprops, piston engines, and helicopters regardless of their engine design.
- Aircraft type. The proposed database will identify the type of aircraft as well as the series number where possible (i.e. B737 is a Boeing 737 700 series).
- Harris' FTS also provides navigational fix information for departing aircraft where it can be determined from flight plan information.

For all Instrument Flight Rules (IFR) operations, EnvironmentalVue identifies the time of the operation, type of operation, the airport of origin and destination, the runway of arrival/departure at BCT, operator category, aircraft type category, aircraft registration and or airline flight number, aircraft type, beacon code and origin and destination airport. In total, there are 32 user selectable fields in the Flight operations table that can be displayed, sorted and filtered (see Figure 6).



#### Figure 6: Flight Operations Table



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## 2.2.1.3 Replay Capability

EnvironmentalVue allows users to query flight track data, complaints, noise events and weather information for any time period. The flight track replay then allows user to playback the flight track and noise data queried to see all aircraft in the airspace at a given time and their movements within the coverage boundary limits (see Figure 7). The speed of the replay can be adjusted from 1x to 120x by clicking on either the forward or rewind buttons in the Playback Control window. Hitting the Play/Pause button returns the playback speed to the default value of 1x (real time). The time of the replay can also be manually adjusted by sliding the replay marker left or right to the desired time. Playback Control

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00:00:41 1/1/2017				10/2017 00:05:37

#### Figure 7: Flight Track Replay

Harris' FTS provides the capability to replay airport activity in an animated fashion for an ATC-like perspective. The user may specify time periods and speed at which the replay will be conducted. DVR-like controls allow the user to easily play, pause, stop, reverse, or skip to a specific time during the selected playback period. The user may also choose to display real-time noise levels as collected from the NMTs on the base map at the NMT locations (assuming noise data exists for the playback time period selected).

## 2.2.1.4 Point of Closest Approach Analysis

Environmental/ue allows users the ability to point and right click anywhere on the map to create a new PCA location. The name, latitude, longitude height and radius of the PCA can be defined and edited according to the user's requirements for analysis (see Figure 8). The user also has the ability to save the PCA to the cloud and activate it for nightly processing so that data can be continuously collected from the date of creation. Users can also run a PCA calculation on the current data selection as either a sphere or cylinder. Within the PCA Results smart table the user can customize the fields to be displayed and or exported to Excel. The available fields include PCA Time, Range, Ground Distance, Altitude and Azimuth.

PCA Properties		×
Name:	Test	
Latutude:	39.159897	
Longitude:	-76.56899	
Sphere Center/ Cylinder Height (ft):	10000.0	
Radius (ft):	5280.0	
Save to	Cloud	
Activat	e for nightly calculation	
0	k Cancel	

#### **Figure 8: PCA Properties**

The proposed FTS will compute the point of closest approach (PCA) from user queried flight tracks to userdefined ground points and export the results to an analysis spreadsheet with a simple command (see Figure 9). The software allows the user to define the ground points by entering the latitude and longitude coordinates the address, or using the cursor or tracking device to point to the ground point. For any means the PCA ground point is entered, the proposed NOMS determines the coordinates and populates that field in the database. The system allows the user to define, name, store, recall, and delete PCA ground points. The database query to select tracks for PCA analysis will include the center point (ground point), the radius about the center, and whether it is a semi-sphere or cylinder above the ground point (PCA origin).

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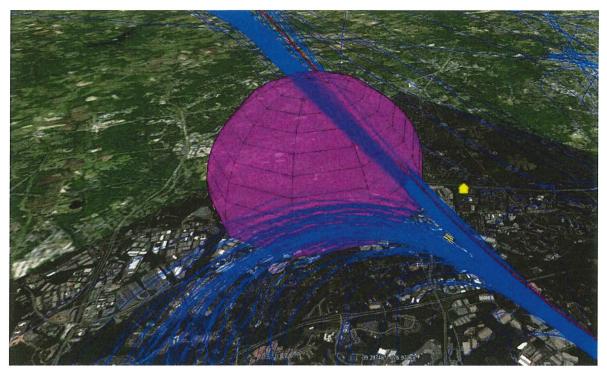


Figure 9: PCA in EnvironmentalVue

Additionally, the system provides the means for users to define PCA origin locations including elevation above airport field elevation that the system will automatically analyze for all tracks and store in a database as a part of the daily flight operations processing. System users may also select tracks on an individual basis for PCA analysis if they were not otherwise included in the regular flight track processing. Such may be the case for flight tracks collected before the PCA origin was created. All PCA analysis results may be easily exported to a spreadsheet for further analysis.

- The PCA analysis includes the following:
- Slant distance (line-of-sight) from PCA analysis location to each aircraft
- Ground distance from PCA origin to ground projection of aircraft at PCA
- Aircraft altitude at PCA in both MSL and AGL
- Date and Time of PCA
- Elevation angle above the horizontal plane of the line-of-sight from the airport reference point to the PCA

#### 2.2.1.5 Gate Analysis

EnvironmentalVue users can create a new gate on the map simply by pointing and dragging the mouse across the map. The minimum and maximum altitude and coordinates of the lower left and upper right corners of the gate can be manually edited by the user. In addition, the user can choose to save the gate to the cloud and activate it for nightly processing. This activates the gate for automatic processing of flight tracks from the date of creation. Users can also run a Gate calculation on the current data selection and display the results on the map or export them to Excel for further analysis.

The Harris FTS allows the user to create and remove virtual gates on the base map in a point-and-click fashion, specify their altitude, name them, and store them in the database (see Figure 10). The user may specify that flight tracks are to be processed through the gates automatically or, simply conduct on-the-spot analysis as desired.

Analysis of gate activity produces the dates and times flight tracks penetrated the gate, the altitude at which the tracks penetrated the gate, the horizontal distance from one side of the gate at which the penetration occurred, and other data. These data may be stored in the database and accessed for reporting and analysis as well as exported to an Excel spreadsheet.

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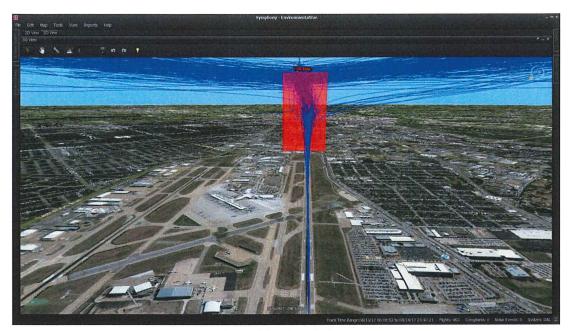


Figure 10: Virtual Gates

## 2.2.1.6 Corridor Analysis

The Harris FTS allows the user to create and remove virtual corridors on the base map in a point-and-click fashion, specifying the altitude floor and ceiling at either end of the corridor, name them, and store them in the database. A corridor can consist of a minimum of two gate pairs but there is no upper limit to the number of gates allowed to create the corridor. The user may specify that flight tracks are to be processed through the corridors automatically or, simply conduct on-the-spot analysis as desired. Analysis of corridor activity produces the dates and times flight tracks entered the corridor, the dates and times the flight tracks exited the corridor, as well as whether the flight tracks successfully transitioned through the entire corridor without deviating from its boundaries. Corridor deviation locations are also noted and stored. This data may be stored in the database and accessed for reporting and analysis as well as exported to an Excel spreadsheet. Corridors track penetrations can be displayed on the screen as well as on hard-copy plots (see Figure 11).

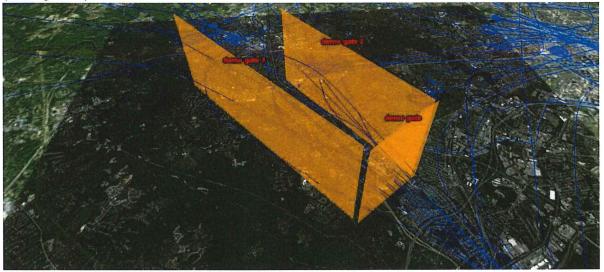


Figure 11: Corridor Analysis

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# 2.2.1.7 Complaint Handling

EnvironmentalVue includes an effective proven complaint handling database (see Figure 10).

- Complainant name
- Street address/community
- City/County/State/Zip code
- Phone/Email
- Detailed GIS Maps of complainant locations (2D/3D)
- Complaints can be directly entered by the community using a public portal or manually entered by Airport personnel.

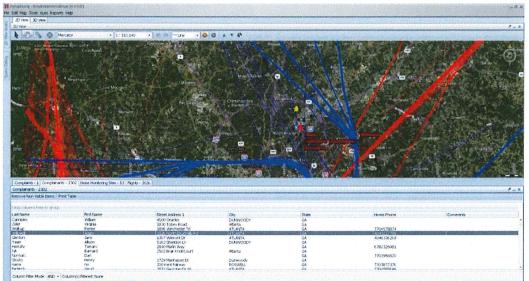


Figure 12: Complaint Entry Database



Figure 13: Complaint Map Locations (2D/3D)

27 October 2017	15	Request for Proposal

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## 2.2.1.8 Data Processing

Harris is the only FTS supplier who provides both the radar data and the software solution, thus alleviating the risk of troubleshooting any radar coverage caps or problems. All available Traffic Information Service-Broadcast (TIS-B), ASDE-X, ADS-B, Multilateration (MLAT), and Aircraft Situational Display to Industry (ASDI) flight track data is collected using the NextGen Data Collector, located at Harris' hosting facility. ADS-B data is provided by Harris, and TIS-B/ASDE-X data is provided by the FAA, supplied to Harris and merged into a single data stream.

This stream is securely transmitted directly to the EnvironmentalVue system. Harris provides a 99.5%, per year, capture of data from this merged stream, as measured from existence of data at the NAS boundary to delivery through the NextGen Gateway Services. Availability shall be measured over a monthly period. Coordinated interruptions of service for system maintenance or interruption by the FAA shall not count against data availability.

METAR weather data is collected through the Internet from an online service. The data is collected at the Harris hosting facilities and Harris completes the data transfer within the first day after the data is received. Harris provides a 99.5%, per year, capture of data from this internet source based on the weather data being available for collection from the source.

Data is gathered at Harris' hosting facility. There, on a nightly basis, the data is processed from raw data into correlated information, matching complaints with flight operations, and subsequently stored in the EnvironmentalVue database where it is available for customer use.

#### 2.2.1.9 System Availability

Software Availability is measured by the presence of the Software web site for use by the customer. The system is available over 99.5% of the time for customer utilization. Harris coordinates with the customer to notify and address regular system maintenance and upgrades. Scheduled backups and data processing occur during off-hours to minimize the impact of the systems' outages or response times.

## 2.2.1.10 Problem Reporting

Harris uses a cloud-based, Symphony Trouble Tracking System (STTS) to monitor customer problems. This system is used to measure issue status, resolution and response timeliness. The system is available at https://secure.symphonycdm.com/support/ and requires airport name, user and password for authentication. The STTS allows BRAA staff to monitor the progress of the trouble ticket as it is addressed, escalated if necessary, and closed.

Harris also provides a user hot-line support number at (877) 448-2647, answered between the hours of 08:00 to 18:00 Eastern Standard Time, Monday through Friday. Calls to this hot-line are entered into the STTS for monitoring and reporting. The support team is reachable via the SymphonySupport@harris.com email address, or by a chat function during business hours which is available from application login screens and help menus.

Issues reported outside of normal business hours (08:00 to 18:00 Eastern Standard Time, Monday through Friday) are considered entered at 08:00 the next business day. Harris responds either by e-mail, telephone, or through the web-based STTS within two (2) working days to any entries into the STTS by the customer. Harris endeavors to resolve maintenance issues in accordance with the goals provided in our Service Response Goals. Table 7describes the service response goals for system faults or system upgrades.

27 October 2017



Fault Level	Description of Fault	Examples	Response Goals
Level 1	Fault resulting in or Causing loss or Corruption of data	Examples of Level 1 faults include complete failure of data collection devices, servers, etc. which prohibit the ability to collect required data for use, or corruption of such data.	Response within 5 business hours; Remediation plan communicated to the customer within 1 working day; data capture effected within 3 working days; return to service within 5 working days
Level 2	System/data not accessible but data still being stored	Examples of Level 2 faults include website or application inaccessibility, but data continues to be collected and stored.	Response confirming data still being collected within 1 working day; response providing corrective action plan within 2 working days; return to service within 5 working days
Level 3	Loss of functionality	Examples of Level 3 faults include major losses of functionality or modules which are usually present, with no available workaround, such as loss of report generating functionality.	Response providing corrective action plan within 2 working days; return to service within 5 working days
Level 4	Minor faults that do not affect day to day use of the system	Examples of Level 4 faults include minor items which do not prohibit use of the system or obtain intended utility of the system as a whole, either with or without a workaround.	Level 4 issues are collected from all customers and prioritized for completion or correction in subsequent releases. Customers are notified via the STTS system when scheduled for inclusion in an upcoming release, and the ticket remains open until corrected in the scheduled release.
Programmed Release/ Planned Maintenance	Programmed releases to fix minor faults and also planned maintenance of noise monitors		Subject to internal developmental and roadmap priorities. Schedules are communicated to customers.
General Support	Response to contacts via STTS or Toll-free Helpdesk		Response in two working days

#### Table 7: Service Response Goals

The fault level is associated with a field in the STTS that identifies the criticality of the fault. The default setting in the STTS is Level 3 and can be changed by the support team if needed. This additional information enables the customer and the customer support team to track severity of, the status of resolution efforts, and the associated response times. Harris' web-based STTS enables the customer to monitor and review system status issues.

27 October 2017

17

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## 2.2.1.11 Database Administration

Database administration is performed by Harris on shared servers at its professionally-hosted facility. Access to the database, for maintenance purposes, is by authorized Harris personnel using Username and Password protection.

## 2.2.1.12 User Account Management

For EnvironmentalVue, user login accounts are managed by customer designated "Power Users". An EnvironmentalVue web module, available only to Power Users, allows for the addition, modification or deletion of particular users. User login modifications allow the Power User to restrict a given user to a set of EnvironmentalVue tools. EnvironmentalVue logins also work in ReportVue.

As necessary, Harris staff coordinates with customers' IT staff. The IT staff is responsible for configuring workstations, firewalls, networks, etc. in accordance with the recommended configurations. All data traffic for the FTS is encrypted. Harris ensures the confidentiality of the data and does not release data to a third party without written consent from Licensee.

## 2.2.1.13 Configuration & Software Management

Harris is responsible for system configuration management, as well as the software management in general.

## 2.2.1.14 User LAN/WAN Management

The customer is responsible for providing the user workstations with high-speed Internet connectivity to authorized licensed applications.

## 2.2.1.15 Capacity Planning/Performance Management

Harris is responsible for all capacity and performance management for the servers in Harris hosting facilities. The FTS raw data files are backed up daily in a datacenter and are cycled on a weekly basis to an offsite location. A backup database provides additional redundancy.

## 2.2.1.16 Redundancy and Disaster Avoidance

EnvironmentalVue is a remotely hosted, web-based application. The application is compatible with Microsoft Internet Explorer, Google Chrome and Mozilla Firefox Browsers in both 32 and 64 bit. EnvironmentalVue is powered by JAVA and requires only minimal file installations on the client machine to run. Harris's data center is hosted at CenturyLink, a world class provider of data services. Century link follows strict standards for maintenance and access control to prevent unauthorized access or unexpected failures.

As a part of disaster avoidance, Harris maintains data centers at our Herndon, VA offices and one in Sterling, VA. Our procedures include daily backups. Our CenturyLink data center in Sterling, VA provides all daily back up requirements for the NMS and FTS and an additional backup is kept at our Herndon, VA office as well. Harris can rebuild the database if needed from any of the data backups. Harris data does not include State data or confidential information.

## 2.3 PUBLIC FLIGHT TRACKING WEB PORTAL

Symphony®, PublicVue™ is a web enabled centrally hosted solution that delivers an advanced state-ofthe-art Public Flight Tracking System for the user community. The PublicVue solution with its high-quality flight tracking capabilities provides vivid visualizations and extensive analytical capabilities to the public.

As the most publicly visible element of an airport's noise abatement program, citizens can access PublicVue via a hyperlink placed on the Airport website database (see Figure 14) and locate their homes on the base map by inputting their address. This allows the user to then observe historical and near real-time flight operations near their residence. The PublicVue Portal also allows the user to directly input noise complaints via the Internet. PublicVue can also be fully branded with desired logos and color schemes. Harris shall provide onsite training on how to use PublicVue to the relevant BRAA personnel. In addition, our locally

based SME, Sam Carter, is within an hour's drive from BCT and can be available for any potential issues that may arise.

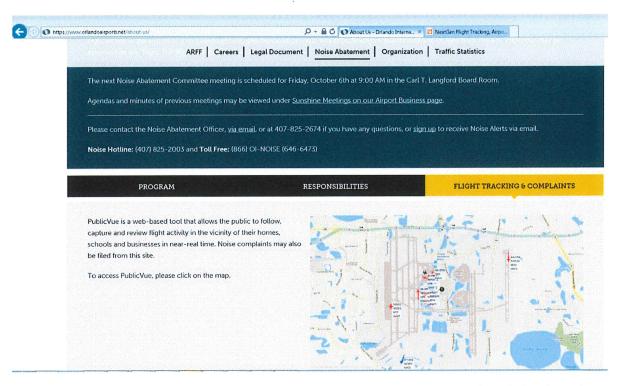
Harris' PublicVue NOMS portal is currently utilized by 13 medium and large hub airports across North America. It is a web enabled centrally hosted solution that delivers an advanced state-of the- art Interactive Public Website for use by the community. The PublicVue solution with its high-quality flight tracking capabilities provides vivid visualizations and extensive analytical capabilities to the public. As the most publicly visible element of an airport's NOMS, citizens can access PublicVue via the Internet and locate their homes on the base map by inputting their address. This allows the user to then observe historical and near real-time flight operations near their residence. The PublicVue Portal also allows the user to directly input noise complaints via the Internet, which are accessible by BRAA users through EnvironmentalVue. Training shall be provided to BRAA personnel on all functions and features of the PublicVue application.

#### Key PublicVue features include:

- High definition, configurable displays that run on a number of standard Web browsers (IE, Safari, Firefox, Chrome) and are accessible on tablets and smart phones (iOS, Windows, and Android).
- The Public has the ability to use the smartphone or tablet location to center the map display and show relative aircraft position, bearing and altitude.
- Mobile devices such as tablets and smart phones integrate GPS-based position/location which allows for precise pin-pointing of user's location versus the aircraft in question
- Fully integrated complaint creation auto-populates flight information
- Integration with EnvironmentalVue enables the public to submit complaints via PublicVue that will directly populate into the FTS complaint database.
- Data accuracy, transparency and consistency in what the public sees through PublicVue and what the Noise office analyzes and reports through EnvironmentalVue.
- Intuitive, user customizable displays, including seven (7) different map overlays and real-time weather overlays.
- Tabular data supports map filtering (arrivals, departures and over-flights) for public users who are interested in analyzing particular operations. Flight data includes, but is not limited to, Flight ID, tail number, aircraft type, operation type, altitude, and local origin, or destination. (See Figure 15)
- User configurable flight data tags, pop-up labels, icon sizing and colorization. (See Figure 16)
- Near Real-time and historical replay flight tracking options are available.
- Harris' NMT partner Larson Davis, an industry leader in acoustic analysis will provide BRAA with state of solar powered noise monitoring terminals that will allow the airport to display aircraft noise in real time on the public portal via any internet enabled mobile device or PC.
- Address Lookup and Locate Me tools enable public to define location and show the relative position of the aircraft to that location. (See Figure 17)
- Flight following with optional display of the full flight path and slant angle feature shows homeowners the exact route and profile of a flight in the vicinity of their location.

Boca Raton Airport Authority RFP#2017-BRAA-02





### Figure 14: PublicVue can be accessed through the Airport's website (MCO website shown)

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Figure 15: Customizable Display with Weather

27 October 2017	20	Request for Proposal
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Figure 16: User Configurable Flight Data

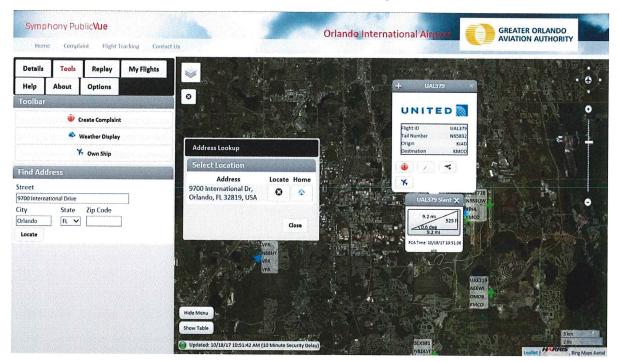


Figure 17: Address Lookup and Location Tools

### 2.4 NOISE MONITOR SERVICE, REPAIR, MAINTENANCE AND CALIBRATION

BRAA currently has six (6) Lochard EMU2100s that were installed in 2005, and one (1) Bruel & Kjaer Type 3639-A-200 Noise Monitoring Terminal (NMT) with 4952 microphone that was installed in 2017. Given the age and limited capabilities of the Lochard/Bruel & Kjaer units, Harris, partnered with respected acoustic industry leader Larson Davis (LD) offers the BRAA the most technologically advanced NMT on the market, the LD Model 831C (Figure 18).



Item	LD Part Number
Adapter	ADP100
Battery	BAT019
Cable	CBL218
Connecting Cable	CBL208-20
Environmental Protection	EPS2116
High Gain Antenna	COM-ANT-HG
Model 831C	831C
Permanent Outdoor Pre-Amp	PRM2103-FF
Power Distribution	RigRunner4005H
Self-powered USB Hub	DVX015
Sierra Wireless RV50 CAT5	COM-RV50-DC-U
Upgrade for Model 831C	831C-ELA
	831C-LOG
	831C-SWG
32G Removable USB	831-MEM32G
Factory Setup & Testing	NMS-INST

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### Figure 18: Larson Davis 831C

Noise monitoring equipment represents significant capital improvement costs over the average lifespan including total cost of ownership. Since Larson Davis noise monitors are non-proprietary, it allows for other systems to interface with the noise data output. This is not possible with proprietary or closed noise monitoring systems. Harris is sensitive to environmental and ownership costs, which is why we are proposing to offer BRAA the LD-831C units under a "NMT as a Service" solution. BRAA would only pay an annual maintenance and service cost under this proposed solution. Features of the proposed solution include:

### **NMT AS A SERVICE**

"BRAA would only pay an annual maintenance and service cost under this proposed solution."

- Installation of the Six (6) LD-831C NMTs at BRAA's current locations
  - o Existing poles will be used
  - o Installation to be completed and tested within <u>90</u> days of contract award.
- Harris shall be responsible for all NMT repair, maintenance and calibration during the term of the agreement.
- BRAA shall have the option to either extend the LD-831C service or purchase the NMTs upon each renewal period.
- Harris will integrate, maintain and calibrate the existing B&K 3639-A-200 NMT

27 October 2017 22

Request for Proposal

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### 2.4.1 LARSON DAVIS 831C UNITS

The Model 831C represents the latest cutting-edge technology in the NOMS industry and is 100% made in the U.S. Harris unlike certain competitors offers noise monitors like the Model 831C which utilizes an open architecture and standard data formats allowing it to interface with any FTS software. The noise monitor is new, state of the art, Larson Davis SoundAdvisor Model 831C that is designed to be networked and open to any software vendor.

Larson Davis offers an SDK (Software Development Kit) to support open integration. This open architecture provides the BRAA with the flexibility to meet their evolving needs should they decide to switch to another FTS software vendor in the future. Harris doesn't force its customers to buy proprietary NMT hardware like some competitors, which don't interface with other FTS systems and make it nearly impossible to change FTS providers without replacing all the existing NMTs.

Larson Davis has designed the 831C to take advantage of the optional solar power module, and the unit's low power consumption and energy efficiency make it ideally suited for this mode of operation. The Model 831C supports remote administration and internet based data communication via wireless cellular technology which minimizes maintenance and service costs. The batteries in the monitor take advantage of new LiFePo technology which have an expected service life of 20 years. In addition, Larson Davis backs all its noise monitoring equipment with a two (2) year manufacture's hardware warranty, a 100% customer satisfaction guarantee.

Larson Davis noise monitors include auto calibration and system health reporting features, and a software utility that complements Harris' Symphony EnvironmentalVue software integration.

### 2.4.2 ELECTRONICS ENCLOSURES

Each site will have a new Larson Davis EPS043 (Figure 19) weatherproof fiberglass enclosure that includes mounting brackets, secure locks and a surge suppressor all at a reasonable height for access.



Figure 19: Larson Davis EPS043 Weatherproof Fiberglass Enclosure

The system is designed so the monitor can be easily operated from the enclosure and it is modular for easy maintenance. The enclosure houses the modem antennas, noise monitor, battery, and solar controller. It is approximately  $18 \times 20 \times 10$  inches (W x H x d) and securely mounted to the aluminum pole. The enclosure is a NEMA 4X fiberglass enclosure with the door secured by both specially keyed screws (2) and a stainless-steel belt with a keyed lock.

### 2.4.3 POWER, COMMUNICATION AND NETWORK SERVICE

Each NMT stores data in the event of a communications issue. Once communications are reestablished, missing data can be downloaded and processed. Each site has backup batteries to avoid a power interruption when there is little or no sunlight. If in the event the power is lost for an extended period of time, once power is restored the NMT will automatically come back up, begin collecting data, and any available missing data will be downloaded.

27 October 2017	23	Request for Proposal

Direct Attached Storage (DAS) devices are virtual machines with backups. Harris keeps a server cluster at our CenturyLink colocation. Virtual Machines (VM) are backed up and Harris can quickly launch a new VM if needed. Each NMT can store over 96 hours of continuous data. In this situation, communication is reestablished missing data can be downloaded and processed.

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Each NMT includes surge and static protection to ensure reliable and safe operation and compliance. The LD831C is a separate and stand-alone unit and is configured with 32GB of user replaceable flash memory, which is capable of storing much more than 4 days data without overwriting any existing data or altering data collected prior to service interruption.

The noise monitors are completely wireless with solar power and cellular internet so there is no need for surge protection. The noise monitor itself is designed to prevent damage from ESD (Electro-Static Discharge or just static) in compliance with international standards for ESD protection.

The noise monitor is solar powered and thereby isolated from problems due to public power interruption. With solar power, common problems are long periods of bad weather than block the sun and batteries that wear out after a few years. To overcome these problems the Larson Davis noise monitor does the following:

- Designed with excess solar capacity so the system will charge on cloudy days
- Uses new LiFePo battery technology that has an expected battery lifetime of 20 years
- In the unlikely event that there is inadequate sun for a long period of time the noise monitor will
  automatically turn off and then automatically turn back on when there is sufficient power

If there is a network interruption, the noise monitor will log data to internal memory. That data will be automatically downloaded when the network is restored and it can also be manually downloaded and transferred to the FTS.

Every morning Harris Technicians review data downloads from all NMTs. If a power or data issue is observed Harris will create a ticket on the issue and track it to resolution. In the event of a network/communications failure the NMT will store noise data until Harris is able to re-establish communications. Once communications is re-established Harris will download and process the missing noise data into the database. BRAA will be notified via email once the missing data is processed.

In the event that the interruption is a hardware issue, Harris will dispatch a local technician for repair of the NMT. BRAA is not responsible for this effort. Harris will notify BRAA via our ticketing system of any actions taken to resolve the NMT issue. This allows BRAA to spend less time in the field dealing with potential noise monitoring issues.

### 2.4.4 UNATTENDED OPERATION

The system will run without any interruptions unless an issue is present. Each NMT site has sufficient battery power to last over 96 continuous hours. All storage for NMTs is managed on a daily basis during each nightly download. The Harris database is managed to expand on command for additional storage needs.

### 2.4.5 CLOCK ACCURACY AND TIME STANDARD

The noise monitor includes software Network Time Protocol (NTP) that automatically synchronizes the internal clock to highly accurate network time sources. When using cellular network connections, NTP will typically keep the clock synchronized to absolute time +/- 300 ms. Harris uses NTP on all hosted servers. The four (4) noise sites each have a GPS unit that sets the time for each NMT. Data will be adjusted to local Mountain Time. Additionally, during each nightly noise monitor download Harris checks and updates time if needed.

### 2.4.6 AUTOMATIC DATA TRANSFER

The proposed Harris EnvironmentalVue solution includes the Larson Davis 831c plus the RV50 Sierra wireless modem. The wireless modem enables the EnvironmentalVue hosted servers to be, cost effectively, in continual and reliable contact with the noise monitors to not just stream data but also monitor their health. Similarly, the EnvironmentalVue hosted servers are continually collecting and monitoring flight track data from the NextGen data feed. In both cases, the data feeds have automated alerts to notify the Symphony

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support team of failures if they occur. Data can be manually transferred to a PC using a USB cable and the Larson Davis G4 Utility software. The G4 Utility software can be freely downloaded from the Larson Davis website and installed on as many computers as needed.

### 2.4.7 AUDIO MONITORING AND RECORDING

Each site is available via G4 software from cellular, WIFI, ethernet or USB via a laptop, smartphone or tablet. Each site will have live streaming audio as well as 1 second samples from each site. The noise monitors can provide audio in a raw, .wav, format or a compressed format. The live audio can be monitored using the free G4 Utility software and the NMT can also record and store audio for events.

### 2.4.8 SOUND LEVEL DISPLAY (5.1.5.11)

LD831C has a display that is visible not only remotely but also while inside the enclosure (see Figure 2020). The fixed NMT has a color TFT LCD display that faces forward when the door of the enclosure is opened and it can be read by a person standing on the ground in sunlight. The noise monitor also provides functionality to show the noise monitor display in a web browser on a mobile device such as a smart phone.



### Figure 20: LD Sound Level Display

### 2.4.9 ACOUSTIC SIGNAL PROCESSING

Harris collects one (1) second samples from each of the LD831C noise monitor sites. This data is then processed into different parameters at Harris hosted facility. This allows Harris to always have the original sample files and parameter changes can be made and reprocessed it needed.

27 October 2017	
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### 2.4.10 NOISE-EVENT DISCRIMINATION PARAMETERS

With Larson Davis G4 utility it is easy to access any NMT remotely to change parameters. BRAA can also submit a request to Harris support for any parameter change. The unit can be controlled as if one is present in front of it via the G4 interface.

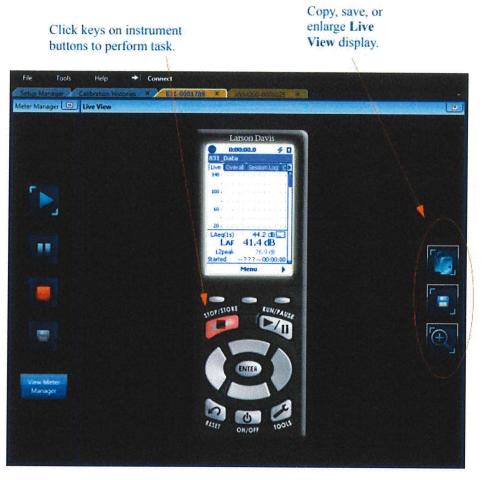


Figure 21: Noise Event Display

## HARRIS TECHNOLOGY TO CONNECT.

### Option: Automated Aircraft Identification System

Although not called out within this Solicitation, Harris would like to offer BRAA an option for an automated aircraft identification system. Harris can provide separate pricing on this option if desired by BRAA.

Harris has partnered with Vector Airport Systems to incorporate their aircraft identification capabilities into our applications. A critical part of a flight tracking system is the ability to identify aircraft. This requirement is most apparent at airports with general aviation aircraft, VFR operations, and block list aircraft. Vector's Vantage system uses low-impact wireless solar-powered cameras to capture images of aircraft on the runways and taxiways under all lighting and weather conditions. (Figure 22)

These images are processed, the aircraft registration numbers are extracted, and the aircraft type and engine type are determined using Vector's proprietary database. This data is then fused with the appropriate flight track and uploaded automatically into EnvironmentalVue. The aircraft identification data provided by Vantage helps to eliminate the unknowns that are unavoidable in-flight tracking data and provides the most complete and accurate data set possible today. Based on the runway configuration at BCT, we recommend deploying two Vantage camera systems as shown in Figure 23.



Figure 22: Vector Vantage System for aircraft identification



Figure 23: Vector Vantage System Camera Locations for BCT



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Airport staff can view VANTAGE-generated Ops data via Vector's intuitive Airport Portal where data can be easily queried, sorted, and exported (i.e., excel) at the click of a button. VANTAGE Airport Portal data includes date/time of operation, operation type, tail number, flight number, runway used, aircraft operator information, and more.

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Figure 24: Vector Vantage System Airport Portal

**Optional Pricing - Automated Aircraft Identification System** 

Vector Vantage Pricing - Optional	Year 1	Year 2	Year 3
One-time Hardware and Installation	\$60,000		
Annual Maintenance	<u>\$16,800</u>	<u>\$16,800</u>	<u>\$16,800</u>
Total	\$76,800	\$16,800	\$16,800

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### 3. BANKRUPTCY, LITIGATION AND CONTRACT DISPUTE INFORMATION

Harris, its parent, subsidiaries, predecessor organization, any wholly-owned subsidiary or owners or officers have not been involved in any lawsuits, litigation, claims, arbitration or administrative hearings in the last (5) years.

### 4. CRIMINAL HISTORY INFORMATION

Harris has no Criminal History Information to disclose.

### 5. NEGATIVE CONTRACT PERFORMANCE INFORMATION

Harris has no Negative Contract Performance Information to disclose.

Boca Raton Airport Authority RFP#2017-BRAA-02



### 6. FINANCIAL TERMS

Please see Attachment A below for the financial terms of this offer. Harris will work with BRRA to define mutually agreed upon terms of payment.

**Request for Proposal** 

### ATTACHMENT A – Pricing Table\*

(

RFP	Description	Year One Lump Sum Amount	Year Two Lump Sum Amount	Year Three Lump Sum Amount
1 - Flight Tracking & Noise Monitoring Software	Implementation – Installation, Setup, Testing	\$ No Charge		
	Training	\$ No Charge	\$ No Charge	\$ No Charge
	Software Hosting and Updates	\$ 35,000	\$ 35,000	\$ 35,000
	User Support and Maintenance Support	\$ 10,000	\$ 10,000	\$ 10,000
	Data Backup & Archiving	\$ 4,000	\$ 4,000	\$4,000
	1 - Total	\$ 49,000	\$ 49,000	\$ 49,000
2 - Public Flight Tracking Web Portal	Implementation – Installation, Setup, Testing	\$ No Charge		
	Training	\$ No Charge	\$ No Charge	\$ No Charge
	Software Hosting and Updates	\$ 14,000	\$ 14,000	\$ 14,000
	User Support and Maintenance Support	\$ Included	\$ Included	\$ Included
	Data Backup & Archiving	\$ Included	\$ Included	\$ Included
	2 - Total	\$ 14,000	\$ 14,000	\$ 14,000
3 - Noise Monitor Service, Repair, Maintenance, and Calibration	Implementation – Installation, Setup, Testing	\$ No Charge		
Cambration	Service, Repair, and Maintenance	\$ 20,000	\$ 20,000	\$ 20,000
	Yearly Calibration	\$ 5,000	\$ 5,000	\$ 5,000
	3- Total	\$ 25,000	\$ 25,000	\$ 25,000

\*If you are not bidding on a particular RFP please write NA under each year in the Total Row.



### 7. STATEMENT OF OFFER

Kathleen W. Taylor, as principal or agent\* (see attached Incumbency Certificate) of Harris Corporation hereby agree and certify that this Proposal constitutes an offer to the BRAA to perform the Work set forth in the RFP in accordance with the General Conditions and industry standards. This offer shall remain open until January 1, 2018, or until the RFP is awarded, whichever occurs first.

Katter W, Ligh

Kathleen W. Taylor Name

Contracts Manager Title

### HARRIS CORPORATION INCUMBENCY CERTIFICATE

I, **Todd Taylor**, do hereby certify that I am the duly elected and qualified Vice President, Principal Accounting Officer of Harris Corporation, a Delaware corporation (the "Corporation"). Further, I hereby certify that:

1. The person listed below is authorized to provide direction or requests and execute documents for the Global Aviation Solutions Group on behalf of the Corporation, with signature authority of up to \$1M for contractual documents, leases, agreements, and other written instruments required for normal day-today-operations of the Program.

2. The signature set forth opposite her name is her respective genuine signature:

Name

Kathleen W. Taylor

Contracts Manager

Title

Signature hatte to bayla

IN WITNESS WHEREOF, I have signed this Certificate as of the 10th day of March, 2017.

Man

Todd Taylor, Vice President, Principal Accounting Officer

# EXHIBIT "C"

# MINIMUM INSURANCE STANDARDS

### 1. Insurance Certificate

- Depicting Commercial General Liability of \$1,000,000 per occurrence and \$2,000,000 aggregate, including premises liability, personal injury and death
- Depicting Workers Compensation of \$500,000; if required
- Depicting Automobile Liability of \$1,000,000\*
- Certificate of Insurance must list the Boca Raton Airport Authority as a Certificate Holder with our address 903 N.W 35<sup>th</sup> St. Boca Raton, FL 33431
- Required language, "The Boca Raton Airport Authority including its Members, Officers, Employees, and Agents" must be listed in the Description Box.

2. <u>Commercial General Liability Endorsements\*\*</u> – Additional Insured and Waiver of Subrogation Endorsements are required.

- <u>Additional Insured Endorsement</u>
   Endorsement must list the required language, "The Boca Raton Airport Authority including its Members, Officers, Employees, and Agents." As required
- <u>Waiver Of Subrogation Endorsement</u>
   Endorsement must have the required language, "The Boca Raton Airport
   Authority including its Members, Officers, Employees, and Agents." As required
- 3. <u>Workers Compensation Endorsement\*\*</u> A Waiver of Subrogation Endorsement is required.
  - <u>Waiver of Subrogation Endorsement</u>
     Endorsement must have the required language, "The Boca Raton Airport
     Authority including its Members, Officers, Employees, and Agents." As required

\*Automobile Liability is required only on vehicles operated on the airfield.

\*\* If vendor is doing work on airfield endorsements are required. If vendor is not doing work on airfield, endorsement requirements are subject to the type of work being performed.



# Memo

- To: Mitchell Fogel, Chair and Board Members
- From: Travis Bryan, Operations Manager

Date: December 13, 2017

RE: Airport Projects Update

# AGENDA ITEM – IX – C

### **Pilot Controlled Lighting:**

A Pilot Controlled Lighting system installation was recently completed as part of the electrical enhancement portion of the Runway 23 EMAS project. The lighting system gives pilots control of the airfield lights during the hours that the ATCT is closed. Giving the pilot community control of the airfield lights enhances safety as arriving/departing aircraft may vary the brightness to suit their operational needs. This system will also provide a cost and efficiency benefit to the airport as the airfield lights will be off when not needed.

### **Customs Facility Construction:**

Graphic wall installation has been completed. The contractor is working to close out permits with the City in anticipation of obtaining Certificate of Occupancy. An update will be provided at meeting.



# Memo

- To: Mitchell Fogel, Chair and Board Members
- From: Clara Bennett, Executive Director
- Date: December 13, 2017

### **RE:** Boca Raton Airport Authority Management Team Compensation Study

# AGENDA ITEM – X - A

The final report of the Management Team Compensation Study prepared by ADK Consulting and Executive Search (ADK) is submitted by Mr. Randy Nobles, Secretary Treasurer and Ms. Cheryl Budd, Vice-Chair.



# BOCA RATON AIRPORT AUTHORITY MANAGEMENT TEAM COMPENSATION STUDY



November 2017

November 12, 2017

Boca Raton Airport Authority Board Members Boca Raton Airport Authority 903 NW 35<sup>th</sup> Street Boca Raton, FL 33431

Dear Board Members:

This report contains an internal and external market assessment for the management team of the Boca Raton Airport. A point factor job ranking analysis as well as an external salary market study was conducted as part of this study, and focused on U.S. airports with similar operational expectations.

In evaluating the aggregate external market data, for the most part, the findings were that the Boca Raton Airport's current pay ranges as lower in comparison to those in other airport management staff performing the same types of duties.

The study is focused on wage data and did not include an evaluation of benefits: i.e., healthcare, dental, short-and-long term disability, vision insurance, or other types of benefits programs.

I appreciated the opportunity of working with the Boca Raton Airport Authority Board and Executive Director at the November 2017 board study session regarding this report's findings.

Sincerely,

Gale LaRoche, Ph.D., J.D., SHRM-SCP Vice President/Chief Human Resources Officer ADK Consulting & Executive Search



# **Table of Contents**

I.	Introduction
	Executive Summary
	Methodology
	Participating Airport Organizations
	Participating Airport Operational Information
	Objectives
II.	Description of Business7
	Management Staff
	Job Summaries
III.	Results of the Internal Point Factor Study12
	Role Responsibilities
IV.	Results of the Market Study14
V.	Salary Adjustment Recommendations 32
	Incentive Bonus Program

# Introduction

ADK Consulting and Executive Search was engaged by the Boca Raton Airport Authority (the Authority) to research and review salary information and compensation structure for the Authority's leadership staff. The airport industry and airport administration is a dynamic, complex and continuously evolving discipline, with multi-faceted requirements that necessitate a high degree of technical and strategic expertise. For optimal effectiveness of an airport organization, an entity that operates like an independent business, a fair and market-competitive compensation model for the leadership staff is prudent to retain the Authority's talent. Compensation programs should be tailored to meet the specific needs of the organization. The survey was conducted specifically to evaluate the leadership group's compensation program. Although various airports may title these positions differently, as detailed in the study, roles were compared to roles with similar duties and responsibilities. For the purposes of this report we referred to the leadership in the organization by the title currently used by the Authority. To maintain anonymity of the airport participants and to comply with the Sherman Antitrust Act of 1890, specific information provided by the participants are not identified in this report, other than to disclose the names of the airports that participated in the study.

### **Executive Summary**

It should be noted that each airport is unique, with different governance, financial, and operational structure as well as allocation of duties. Although all the operations and duties may not be exactly like those of the Authority, many are and we are confident the survey results represent an impartial, objective, and reasonable comparison to the airport market.

This report provides a detailed analysis of the market data and specific recommendations for salary adjustments and a new grade compensation structure. Of course, our recommendations are just that; the Authority board members and Executive Director are ultimately responsible for determining the best course of action for the Authority. Our objective is to provide this research to facilitate the decision-making process.

### Key Findings

The duties of an Executive Director in an airport authority are considerably different than if the airport is operated by a governmental entity. In an airport operated by a governmental entity, the airport is one of several departments; the administrative functions such as finance, human resources, procurement, etc. are managed by the government entity and these services are provided to the airport. In an airport authority, all administrative functions are typically housed within and exclusively managed by the airport's Executive Director. In addition, an airport authority can issue their own debt for capital investments and are responsible for revenue generation to sustain the airport. These responsibilities make the role of the Executive Director in an airport authority governance structure significantly greater and different than when supported by a governmental entity. This factor should be considered in evaluating appropriate compensation for this position.

Similarly, the roles and responsibilities of the staff of an airport authority require greater and broader skillsets than is required by an airport that is supported by a governmental entity. In addition, smaller airports, such as the Boca Raton Airport, do not have the amount of staff members with varying specialty skillsets that a larger airport can maintain. The Authority's staff members are required to "wear many hats," to do more with less, and to take on greater responsibility, which every Authority staff member does (and are happy to do).

Because the role of each staff member is so varied and broad, each staff member fills a vital position at the Authority and each one is critical to the success of the airport. If any one of the leadership positions at the Authority are not filled, the operational effectiveness of the organization may degrade. Although staffing capacity analysis is not within the scope of this study, it is our opinion that the leadership staff

for the airport is at the minimum, and perhaps optimal, staffing level. The human capital of the airport is leveraged to its best and highest capacity.

The results of the study demonstrate that generally, except for the Executive Director position, the salary for the Authority's staff is low in comparison to the surveyed airports.

<u>Incentive Bonus Program</u>: The provisions of the Authority's incentive bonus program are that if the annual goals and objectives are met, the staff receives up to a four percent (4%) incentive bonus; the Deputy Director receives up to a ten percent (10%) incentive bonus; and the Executive Director (contract position) receives up to fifteen percent (15%) incentive bonus.

Incentive bonus programs are prevalent in the corporate world; an estimated \$38 billion are spent annually on bonus programs. Similarly, many U.S. airports have followed this trend and have structured incentive bonus programs for their staff members, to encourage positive behaviors from staff that are aligned to achieving organizational goals and objectives. When incentive bonus programs are well designed and are tied to the achievement of organizational goals, as the Authority's incentive bonus program is designed to do, they can be very effective motivational tools to encourage and align positive staff behavior and are considered current best practice to reward employees.

### Methodology

We have selected U.S. airports of different sizes, structure, geography and business objectives to ensure external market compensation competitiveness. Thirty-seven (37) airports were invited to participate, fifteen (15) responded. This is a typical sample size for an airport compensation study. To put this in context, the large annual survey conducted by the Airports Council International-North America received one-hundred-thirty-two (132) responses from all airports in the United States and Canada in 2017. It should be noted that they are surveying all airport sizes – large, medium, small, and smallest hub airports.

It should be noted that data was collected concerning bonus incentive programs, however, the amount of the bonus stipend *is not* included in the annual base wages, and no adjustments were made to include those amounts in the annual base wages, either by percentage or dollar amount.

A point factor analysis was conducted to gauge internal equity for the current pay structure.

The data collected is displayed in the report in several different formats: pie charts, bar charts, scatter charts, and pareto charts. The types of data analyses performed were averages or means, medians, percentiles, and ratios. These different types of analyses assist in reviewing the data in various ways to ensure a thorough review of the information.

Cost of living factors were not detailed per participant, however, the current cost-of-living indexes for mid-2017 for all participants were averaged to 79.24, just slightly higher to the Fort Lauderdale area's cost-of-living index of 77.71.

A focus on the *role* of each staff member, rather than a comparison of operational activity was the foundation for this study.

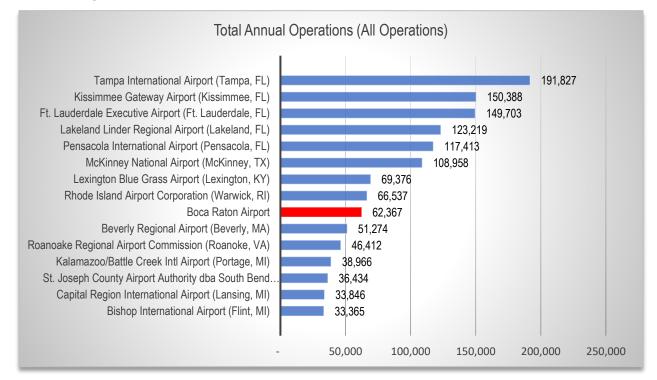
### **Participating Airport Organizations**

Listed by Name, Location, and Governance Structure

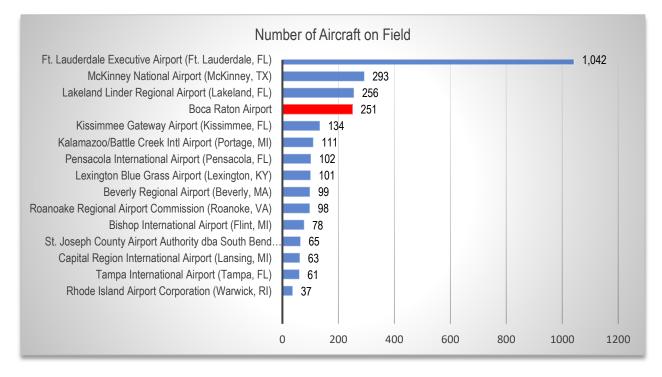
(See appendix for list of non-participating airports)

- Beverly Regional Airport (Beverly, MA) City of Beverly
- Bishop International Airport Authority (Flint, MI) Bishop International Airport Authority Board
- Blue Grass Airport (Lexington, KY) Lexington-Fayette Urban County Airport Authority
- Capital Region Airport Commission (Lansing, MI) Capital Regional Airport Authority
- Fort Lauderdale Executive Airport (Fort Lauderdale, FL) City of Fort Lauderdale
- Hillsborough County Aviation Authority -Tampa International Airport (Tampa, FL) – Hillsborough County Aviation Authority
- Kalamazoo/Battle Creek International Airport (Portage, MI) Kalamazoo County
- Kissimmee Gateway Airport (Kissimmee, FL) City of Kissimmee
- Lakeland Linder Regional Airport (Lakeland, FL) City of Lakeland
- McKinney National Airport (McKinney, TX) City of McKinney
- Pensacola International Airport (Pensacola, FL) City of Pensacola
- Rhode Island Airport Corporation (Warwick, RI) Airport Corporation (Board)
- Roanoke-Blacksburg Regional Airport (Roanoke, VA) Roanoke Regional Airport Commission
- St. Joseph County Airport Authority dba South Bend International Airport (South Bend, IN) – St. Joseph County Airport Authority

### **Participating Airport Operational Information**



Total Annual Operations All Participants



NumberAircraft on Field All Participants

### **Objectives**

The Boca Raton Airport Authority wants to attract and retain high performing talent to reflect the Authority's unique role in the community and the aviation industry. It is equally important that Authority provide incentives to motivate airport management staff for the long-term success of the airport and to tie those incentives to achieving its strategic objectives.

The key question that should be asked is: "how does this compensation framework drive results for the Authority?" The Authority needs to ensure that the airport has in place a fair compensation system to retain management staff and ensure that staff are appropriately compensated for the work they perform.

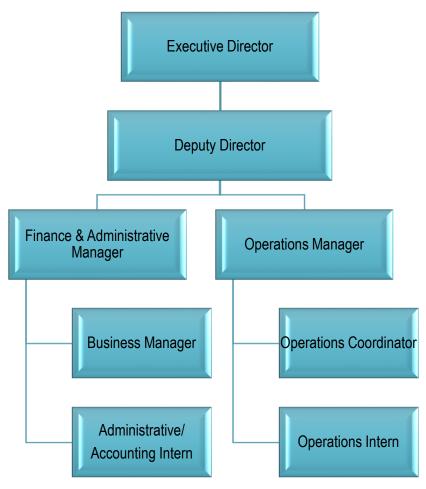
## **Description of Business**

The Boca Raton Airport is considered one of the premier general aviation facilities in the southeast geographic area. The Airport averages over 60,000 operations annually and serves corporate travel, private aviation, and air taxi services. Nearly 300 aircraft are based at the airport.

The Boca Raton Airport Authority is responsible to operate the Boca Raton Airport, a state-owned, public-use airport located approximately two miles northwest of the central business district of Boca Raton. The greater Boca Raton area contains some of the finest manufacturers and service providers in the world. Nearly half of Palm Beach County's corporate headquarters are in Boca Raton. In addition, cost of real estate and rent in Boca Raton is a great deal higher than the U.S. average and in general, Boca Raton serves an upscale community.

The future of the airport is bright. The Boca Raton Airport Authority practices and operations are bestin-class, in alignment with the surrounding community. One example of this is that a Customs and Border facility is currently under construction on the airport property. The addition of this facility will allow international flights to land at the airport without going through another airport that has customs screening capability before arriving in Boca Raton. The construction of a Customs and Border facility on the Airport property will also help alleviate traffic through other airports and contributes to increased safety for the entire airport system.

### **Management Staff**



BRAA Leadership Organizational Chart

### **Job Summaries**

### **Executive Director Position Summary**

Responsible for the implementation of strategic policy and financial direction to ensure the safe, efficient, fiscally and socially responsible administration of the airport as an economic engine for the Boca Raton community. This position is responsible for leadership, coordination, direction, prioritization, development and accomplishment of the airport goals as set forth by the airport's strategic plan, development plans, financial plans, adopted policies and procedures. The individual will lead and represent the airport in negotiations with tenants, businesses, contractors, consultants and other aviation services to provide the best service in the growth and development of the airport. The Executive Director is also responsible for setting strategic priorities for internal staff work, culture and performance. The Executive Director manages the performance of the staff in alignment with the strategic plan, job role expectations and current projects in progress. This position is responsible for establishing consistent business practices, a culture of productivity, and a climate of teamwork, trust and loyalty. The Executive Director communicates appropriate level information timely and creates a planned and predictable workforce capable of responding to environmental influences.

### **Functional Responsibilities**

- Strategy and goal setting
- Financial management and oversight
- Compliance with applicable laws, rules and regulations
- Workforce planning and development including succession planning
- Performance management

- Business development
- Operations management
- Collaboration with businesses and governments
- Stakeholder relations and community engagement
- Negotiation of leases and agreements

### **Deputy Director Position Summary**

Manages, directs, and supports the day-to-day administrative and operating functions of the airport. This position assists the Executive Director in formulating business strategy and leads efforts to execute goals and objectives through airport staff. The Deputy Director identifies, analyzes, and executes policies, programs, and procedures to enhance the operation and efficiency of the airport and assumes the responsibilities of the Executive Director during his/her absence. The Deputy Director is responsible for the safe, secure, and efficient operations of the airport including managing projects, construction activity, contract staff and tenant relations. This role is accountable for ensuring emergency preparedness of the entire staff as well as operational safety compliance. The Deputy Director manages the contract administration process, project management process, and capital project procurement procedures. The Deputy Director is the liaison with consultants, contractors, FAA, FDOT, tenants and other stakeholders to ensure compliance in operating a safe and secure airport. The Deputy Director is also responsible for the fiscal oversight of the budget, the budgeting process, compensation, benefits administration, grants administration and the accounting practices that encompass the administrative functions of the airport, which includes ensuring compliance with standards and practices that regulate the financial aspects of the business of the airport.

### **Functional Responsibilities**

- Executing strategy and goals
- Budget oversight and reporting
- Contract management and lease negotiation
- Stakeholder liaison
- Workforce management

- Regulatory compliance and oversight
- Capital program management
- Internal policy and procedure management
- Emergency preparedness
- Facilities maintenance oversight

### **Operations Manager Position Summary**

Manages the day-to-day operations, safety, security and maintenance functions of the airport. The Operations Manager is responsible for oversight of construction projects in progress on the airport, participates in RFP development, and manages the JCIP project portfolio. This position oversees inspection programs and ensures compliance with all public airport license requirements. The Operations Manager inspect tenant areas to ensure compliance with Airport Rules and Regulations and Minimum Business Standard. This role is responsible for the development, implementation and monitoring of the Environmental and Wildlife Plans and Programs. The Operations Manager coordinates with local fire and police departments and establishes training programs as part of the emergency preparedness process. This position is responsible for oversight and management of the operations budget.

### **Functional Responsibilities**

- Execution of operational strategies
- Daily operation of a safe and secure airport
- Management of Environmental and Wildlife
   Program and Compliance
- Construction project management
- Tenant liaison
- JACIP management and reporting

- Identify improvements to airport operations plans, policies and programs
- RFP development participation
- Management and development of staff
- Management of airport security plans
- Fire and police department liaison
- Facilities maintenance support

### Finance and Administrative Manager Position Summary

Responsible for all financial reporting, accounting practices and budgeting processes on behalf of the organization. Oversees and manages the audit process, monthly financials, accounting record keeping, vendor contract compliance, accounts receivable, accounts payable, grants management, and payroll. Responsible to identify and implement best business practices for personnel administration, lease administration, insurance and risk protection, community outreach and communication, and business development. The Finance and Administrative Manager will also be responsible for the human services and human relations activities including compensation and benefits, performance management process, onboarding, employee handbook compliance, and training and development of all staff.

### **Functional Responsibilities**

- Financial management and reporting
- Budget program management
- General accounting practices
- Internal audit oversight
- Contract management and oversight
- Insurance coverage compliance
- Grant management

- Employee compensation and benefits
- Employee relations
- Onboarding of staff
- Performance management and development program oversight
- Employee handbook compliance
- Management of staff

### **Business Manager Position Summary**

Responsible for administering the ongoing administrative and business functions of the airport including Board Management, preparing the Board Meeting packet, record retention and compliance with Sunshine Law to ensure seamless Board meeting delivery. Performs the day-to-day transactions of the accounting and finance processes for the organization in accordance with Accounting Policies and Standards. Activities include reconciliation of accounts, payroll activities, benefits transactions, and other data entry functions. Ensures communication of the Authority's noise monitoring and management efforts to citizens and airport tenants and users. This position is also responsible for supporting the human resource programs of the airport and provides administrative support to the staff. Ensures compliance of certain lease provisions including, Minimum Business Standards and insurance requirements. Confirms compliance, proper scheduling and disposition of the Authority's public records. Serves as the central point of contact for all external callers as well as visitors and will direct inquiries to the appropriate staff for resolution, which includes managing noise inquiries.

### **Functional Responsibilities**

- Office management
- Management of administrative intern
- Accounting reconciliations
- Human resources tasks and activities
- Risk Management

- General administrative support
- Supports noise program
- Management of internal calendars and administrative processes
- Minimum Standards compliance

### **Operations Coordinator Position Summary**

Ensures the day-to-day safety and security of the airport operations through inspections of the airfield, security badging, escorting on the airfield and monitoring the noise program. This role is also responsible for executing the environmental and wildlife plans and program. Works at the direction of the Operations Manager based on current priorities of projects. Collects data on project progress, noise issues, and tenant requests for evaluation to identify trends, issues, and opportunities. Performs project management functions to ensure compliance, safety and security of airport projects.

### **Functional Responsibilities**

- Daily airfield inspections
- Tenant liaison
- Regulatory compliance
- Security compliance
- Airfield maintenance management

- Environmental and Wildlife Program
- Escorting on airfield
- Noise program management
- Project task execution
- Assist oversight of operations intern

### **Operations Intern Position Summary**

Assists the operations department in conducting inspections of the airfield, data collection of noise issues and trend analysis reporting of operational data. Supports the operations department and tasks will be prioritized by the Operations Manager.

### **Functional Responsibilities**

- Support of operational tasks
- Noise issue resolution
- Specialized research

- Safety and security tasks and activities
- Data logging and reporting

# Results of the Internal Point Factor Study Analysis

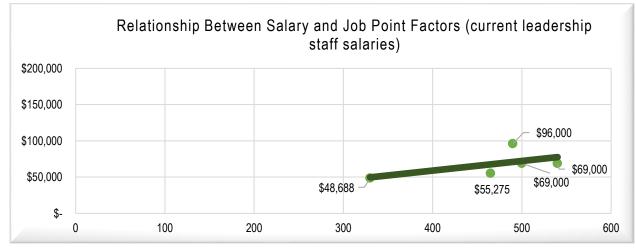
The point factor evaluation was used to determine each job role's value to the Authority. The factors used in this study were: Experience, Responsibility, Technical Knowledge, Strategic Thinking, Financial Responsibility, Supervisory Responsibility, and Significant Responsibilities Outside or Normal Job Duties. All the factors except "Significant Duties Outside..." are standard benchmarks for leadership roles. The "Significant Duties Outside..." factor was added to the analysis to give value to those roles or positions that perform duties that are separate and distinct from the standard job role.

	Executive Director	Deputy Director	Finance & Administration Manager	Business Manager	Operations Manager	Operations Coordinator
Experience	100	40	40	80	80	60
Responsibility	100	70	70	65	70	40
Technical Knowledge	100	100	90	60	90	40
Strategic Thinking	100	60	60	60	60	40
Financial Responsibility	100	80	80	60	80	40
Supervisory Responsibility	100	80	80	40	80	30
Significant Responsibilities Outside of Normal Job						
Duties	20	60	80	100	80	80
Totals:	620	490	500	465	540	330
Percentage:	89%	70%	71%	66%	77%	47%
Annual Salary	\$191,008	\$96,000	\$69,000	\$55,275	\$69,000	\$48,688

### Point Factor Analysis Chart

<u>Point Factor Analysis</u>: The point factor analysis demonstrates the relative internal value of the leadership roles within the Authority. The tables used to rate the job factors are contained in the appendix.

This analysis allows a comparison between current salary and value of the job to the Authority, as demonstrated in the scatter chart below. This chart demonstrates the comparison of the point factors with the current annual salary.



Salary-Point Factor Scatter Chart 1

In the scatter chart, the values of both the point factors and respective salaries increase, based on the job position. The trend line suggests a positive trend; generally, the indication is that the data is positively correlated (i.e., as the salary amount and points assigned to the role increase, they increase together). The scatter chart is focused on the staff salaries, and does not include the Executive Director's salary. The Executive Director's job role and responsibilities are significantly different than staff member's scope of responsibilities and are not comparable to the staff duties for purposes of displaying this data.

### **Role Responsibilities**

Aside from the Executive Director role, the management team for the airport perform a variety of duties that are outside the typical scope of duties for those positions. One of the internal equity factor analysis conducted, "Performing Duties Outside the Scope of Normal Job Role," indicate that several people on the management team are performing multiple stand-alone roles as part of their normal job duties. Below are charts containing information related to this analysis. This is a factor that should be taken into consideration when setting compensation.

Performing Duties Outside the Scope of Normal Job Role	Points	Description
Level 1	20	No extra duties
Level 2	40	One extra duty
Level 3	60	Two-three extra duties
Level 4	80	Three or more extra duties
Level 5	100	Performing multiple stand-alone roles

Point Factor Analysis Chart Other Duties

	Executive Director	Deputy Director	Finance & Administration Manager	Business Manager	Operations Manager	Operations Coordinator
Performing Duties						
Outside the Scope of						
Normal Job Role	20	60	80	100	80	80

Staff Point Factor Analysis

The roles of the Finance & Administration Manager, the Business Manager, the Operations Manager, and the Operations Coordinator have all taken on significant duties that are outside the normal scope of their regular jobs.

<u>Finance & Administration Manager</u>: performs functions such as project follow up with contractors, engineers, and other vendors; community outreach and communication, and business development. These duties are outside the scope of typical duties for this role, some of which are stand-alone functions at other airports.

<u>Business Manager</u>: performs functions such as communicating noise issues, managing airport-related lease provisions and minimum standards requirements, manages the badging process, community outreach, and procurement functions. These duties are outside the scope of typical duties for this type of position, some of which are stand-alone functions at other airports.

<u>Operations Manager</u>: performs functions such as managing construction projects (CIP), manages the information technology function, and manages the environmental and wildlife functions. These duties are outside the scope of typical duties for this type of position, some of which are stand-alone functions at other airports.

<u>Operations Coordinator</u>: performs function such as information systems help desk tasks, troubleshooting computer issues, also participates in community outreach events. These duties are outside the scope of typical duties for this type of position, some of which are stand-alone functions at other airports.

Although these positions have been identified as those that are taking on duties outside of the normal job scope for those types of positions, each person in those roles expressed a positive attitude about performing those roles. The staff is willing, able, and happy to take on these responsibilities.

### Results of the Market Study EXECUTIVE DIRECTOR



Pie Chart - Exec Dir Title

<u>Title</u>: Most of the participants, at 53%, responded that the title Airport Director was the one used to describe the top leadership position at their airport organization. This was followed by 27% using the title Chief Executive Officer, then Executive Director at 13% and Airport Manager at 7%.



Bar Chart Participant Exec Dir Salaries

<u>Annual Salary</u>: The annual salary for Executive Director role ranged from a low of \$85,000 to a high of \$393,824. The average salary is \$183,862 and the median of the reported salaries was \$151,050. The current annual salary of the Authority's Executive Director is \$191,008, which is slightly above the average

of all salaries and approximately 25% above the median salary. The average 2017 ACI Wage data for CEOairports only salary is \$204,214.

Of fifteen (15) participants, one (1) indicated that the last salary adjustment for their Executive Director was made in 2014; six (6) reported that the last adjustment made to the Executive Director salary was made in 2016; and seven (7) reported that adjustments to the Executive Director salary occurred in 2017.



Pareto Chart Exec Dir Salaries

<u>Salary Distribution</u>: A majority of the reported annual salaries eleven (11) fell within the salary grouping of \$85,000 - \$235,000; three (3) fell within the salary grouping of \$235,000 - \$385,000; and one (1) is in the salary grouping of \$385,000 - \$535,000. The Authority's Executive Director's salary percentile rank is thirty-four percent (34%) higher and sixty-six percent (66%) lower than other Executive Director salaries in this study.

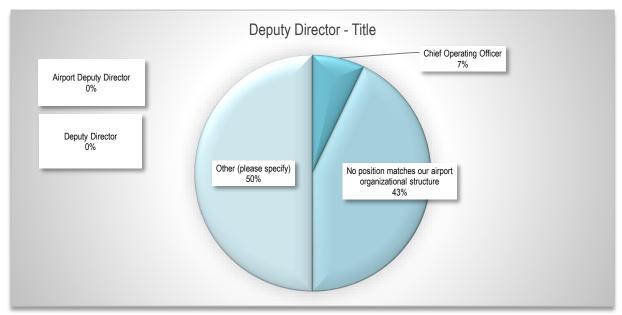


Pie Chart Exec Dir Bonus Plans

Executive Director Annual Bonus Compensation:			
Two-thousand dollars (\$2,000)			
At Board's discretion, generally around \$10,000			
Twenty-thousand dollars (\$20,000)			
Two percent (2%) of annual compensation			
Twenty percent (20%) of annual compensation			

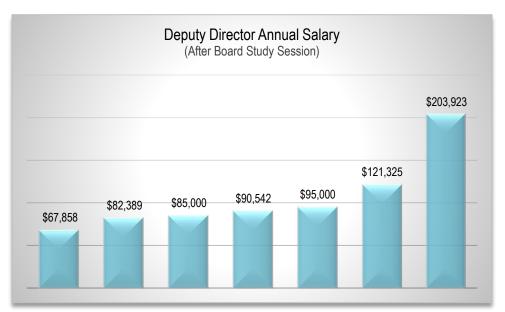
Chart - Exec Dir Bonus Details

<u>Annual Bonus Compensation</u>: Sixty-seven percent (67%) of the participants indicated that they did not provide a bonus or incentive program for the Executive Director position. Thirty-three percent (33%) stated that they did provide some type of incentive or bonus program. Sixty percent (60%) of the bonus or incentive programs are based on performance measures and forty percent (40%) stated that the bonus or incentive programs were discretionary or based on goal or objective achievement. The Authority's Executive Director received a fifteen percent (15%) bonus last year.



Pie Chart - Deputy Dir Title

<u>Title</u>: Most of the participants, fifty percent (50%) use the titles Airport Deputy Director and Deputy Director (in the "Other" category). Forty-three percent (43%) of the participants responded that they had no position match for this role in their airport organization. Seven percent (7%) of participants use the title Chief Operating Officer.



Bar Chart Participant Dep Dir Salaries

<u>Annual Salary</u>: The annual salary for Deputy Director role ranged from a low of \$67,858 to a high of \$203,923. The average salary is \$106,577 and the median of the reported salaries was \$90,542. The current annual

salary of the Authority's Deputy Director is \$96,000, which is below the average of all salaries and approximately six percent (6%) above the median salary. The average 2017 ACI Wage data for Chief Operating Officer salary is \$159,566.

One (1) participant reported that the last salary adjustment made for the Deputy Director position was in 2003; one (1) was last adjusted in 2015; two (2) were adjusted in 2015 and 2016 (respectively); and three (3) reported adjustments made in 2017.



Pareto Chart Deputy Dir Salaries

<u>Salary Distribution</u>: A majority of the reported annual salaries nine (9) fell within the salary group of \$0 - \$150,000; one (1) fell within the salary group of \$150,000 - \$300,000; and one (1) is in the salary group of \$300,000 - \$450,000. The Authority's Deputy Director's salary percentile rank is twenty-one percent (21%) higher and seventy-nine percent (79%) lower than other Deputy Director salaries in this study.



Pie Chart Deputy Dir Bonus Plans

#### Deputy Director Annual Bonus Compensation:

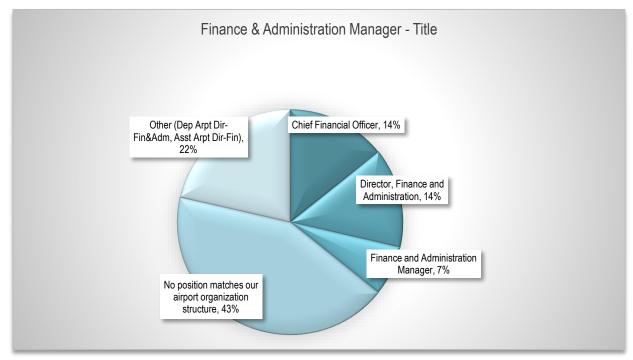
Varies

Two percent (2%) of annual compensation

Chart - Deputy Dir Bonus Details

<u>Incentive or Bonus Plan Program</u>: Eighty-two percent (82%) responded that their airport organization did not provide an incentive or bonus program. Eighteen percent (18%) do provide some type of incentive or bonus program; fifty percent (50%) of which are based on achievement of performance measures and fifty percent (50%) indicated that bonuses or incentives were based on "other" factors.

#### **FINANCE & ADMINISTRATION MANAGER**



Pie Chart - Fin&Admin Mgr Title

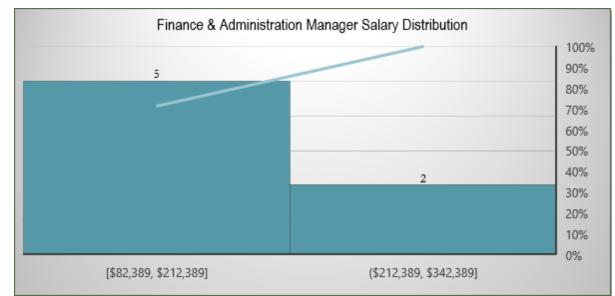
<u>Title</u>: Most of the participants, at forty-three percent (43%), responded that they had no position match for this role in their airport organization. Twenty-two percent (22%) of participants use the title Deputy Airport Director – Finance & Administration or Assistant Airport Director - Finance. Fourteen percent (14%) use the title Chief Financial Officer and seven percent (7%) use the title Finance and Administration Manager.



Bar Chart Participant FinAdmn Salaries

<u>Annual Salary</u>: The annual salary for the Finance & Administration Manger role ranged from a low of \$82,389 to a high of \$245,000. The average salary is \$126,476 and the median of the reported salaries was \$93,291. The current annual salary of the Authority's Finance & Administration Manager is \$69,000, which is significantly below the average of all salaries and approximately thirty-five percent (35%) lower than the median salary. The average 2017 ACI Wage data for Chief Financial Officer salary is \$159,594.

One (1) participant reported the last salary adjustment was made in 2015; two (2) reported that the last adjustment was made in 2016; and four (4) participants reported the last adjustment made in 2017.

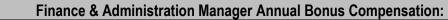


Pareto Chart FinAdminMgr Salaries

<u>Salary Distribution</u>: A majority of the reported annual salaries five (5) fell within the salary group of \$82,389 - \$212,389; two (2) fell within the salary group of \$212,389 - \$342,389. The Authority's Finance & Administration Manager's salary percentile rank is very low at -8.23 percent (-8.23%) than the other reported salaries and more than one hundred percent (100%) lower than other Deputy Director salaries in this group.



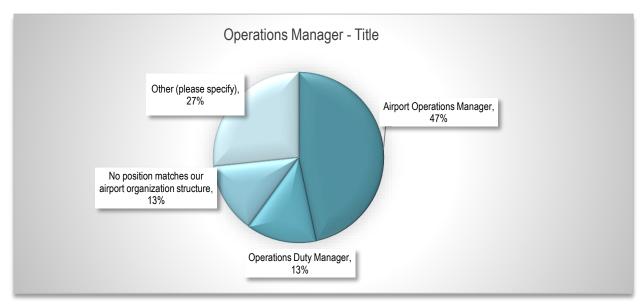
Pie Chart FinAdmMgr Bonus Plans



Five percent (5%) of annual compensation

Chart - FinAdmMgr Bonus Details

<u>Incentive or Bonus Plan Program</u>: Ninety percent (90%) responded that their airport organization did not provide an incentive or bonus program. Ten percent (10%) do provide some type of incentive or bonus program; based on achievement of performance measures.



Pie Chart - Operations Mgr Title

<u>Title</u>: Most of the participants, at forty-seven percent (47%), responded that they used the title Airport Operations Manager. Twenty-seven percent (27%) of participants use the title Operations Manager or Operations Supervisor. Thirteen percent (13%) reported that no position matches the title in their airport organization and thirteen percent (13%) reported the use of the title Operations Duty Manager.



Bar Chart Participant Ops Mgr Salaries

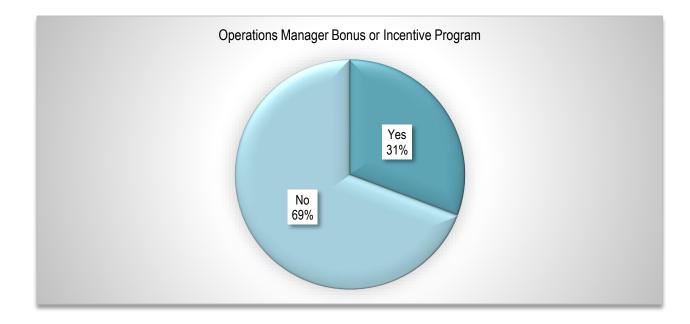
<u>Annual Salary</u>: The annual salary for the Operations Mangers ranged from a low of \$43,909 to a high of \$77,713. The average salary is \$63,583 and the median of the reported salaries was \$64,000. The current annual salary of the Boca Raton Airport Authority's Operations Manager is \$69,000, which is approximately slightly higher than the average of all salaries and slightly above the median salary. The average 2017 ACI Wage data for Operations Officer salary is \$78,393.

Four (4) participants reported that the last time a salary adjustment was made, it was in 2016. Seven (7) participants reported that the last salary adjustment was made in 2017.



Pareto Chart Operations Mgr Salaries

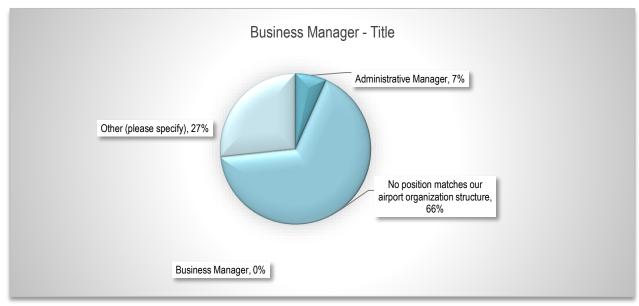
<u>Salary Distribution</u>: A majority of the reported annual salaries eleven (11) fell within the salary group of \$43,909 - \$105,909; one (1) fell within the salary group of \$167,909 - \$229,909. The Authority's Operations Manager's salary percentile rank is seventy-four percent (74%) higher than the other reported salaries and twenty-six percent (26%) lower than other Operations Managers salaries in this group.



Pie Chart Operations Mgr Bonus Plans 1

Deputy Director Annual Bonus Compensation:	
Two thousand dollars (\$2,000)	
Two percent (2%) of annual compensation	
Chart - Operations Mar Bonus Details	

Incentive or Bonus Plan Program: Sixty-nine percent (69%) responded that their airport organization did not provide an incentive or bonus program. Thirty-one percent (31%) do provide some type of incentive or bonus program. Two (2) participants reported that the bonus or incentive program was based on achieving performance measures; one (1) reported that the bonus or incentive program was discretionary and one (1) other participant responded that the bonus or incentive program was based on achieving stated goals or objectives.



Pie Chart - Business Mgr Title

<u>Title</u>: Most of the participants, at sixty-six percent (66%), responded that they have no position that matches at their airport organization. Twenty-seven percent (27%) of participants use the titles Administrative Assistant II, Departmental Chief Accountant, or Executive Services Coordinator. One participant reported that these job duties were performance by the Deputy Airport Director – Finance.



Bar Chart Participant Bus Mgr Salaries

<u>Annual Salary</u>: The annual salary for the Business Mangers ranged from a low of \$65,000 to a high of \$85,613. The average salary is \$75,204 and the median of the reported salaries was \$75,000. The current annual salary of the Boca Raton Airport Authority's Business Manager is \$55,275, which is approximately thirty-six percent (36%) below the average of all reported salaries and thirty-six percent (36%) below the median salary.

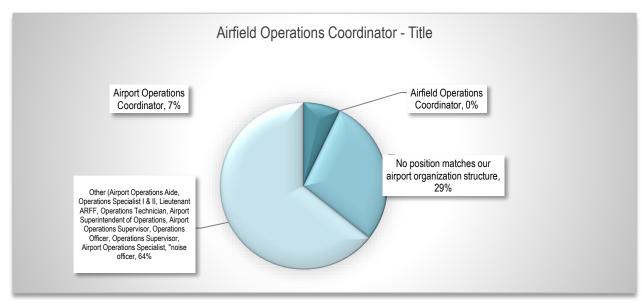
One (1) participant reported that the last salary adjustment occurred in 2015; two (2) participants reported that the last salary adjustment occurred in 2017.



Pareto Chart Business Mgr Salaries

<u>Salary Distribution</u>: A pareto chart analysis could not be performed with this limited data set, however, the current salary of the Business Manager falls below the low salary of \$65,000. The Authority's Business Manager's salary percentile rank is very low at negative nine-point twenty-two percent (-9.22%) than the other reported salaries and more than one hundred percent (100%) lower than other Business Manager salaries in this group.

<u>Incentive or Bonus Plan Program</u>: No incentive or bonus plan program information was reported for this position by any participant.



Pie Chart - Operations Coord Title

<u>Title</u>: Most of the participants, at sixty-four percent (64%), responded with many different titles, as detailed above. Twenty-nine percent (29%) responded that they have no position that matches at their airport organization. Seven percent (7%) use the title of Airport Operations Coordinator.



Bar Chart Participant OpCoor Salaries

<u>Annual Salary</u>: The annual salary for the Airfield Operations Coordinator ranged from a low of \$31,450 to a high of \$56,000. The average salary is \$43,576 and the median of the reported salaries was \$44,317. The current annual salary of the Authority's Airfield Operations Coordinator is \$47,738, which is approximately

eight percent (8%) above the average of all reported salaries and seven percent (7%) higher than the median salary. The average 2017 ACI Wage data for Airfield Operations Coordinator salary is \$67,092.

One (1) participant reported that the salary adjust is made annually on the hire date; one (1) reported that salary is adjusted annually. One (1) participant stated that the last salary adjustment made was in 2016; and five (5) participants stated that the last salary adjustment was made in 2017.



Pareto Chart Ops Coor Salaries

<u>Salary Distribution</u>: A majority of the reported annual salaries eight (8) fell within the salary group of \$31,450 - \$84,450; one (1) fell within the salary group of \$84,450 - \$137,450. The Authority's Airfield Operations Coordinator's salary percentile rank is sixty-six percent (66%) higher than the other reported salaries and thirty-four percent (34%) lower than other Airfield Operations Coordinator's salaries in this group.



Pie Chart Operations Coor Bonus Plans

Operations Coordinator Annual Bonus Compensation:
Two thousand dollars (\$2,000)
Five percent (5%) of annual compensation
Chart - Operations Coor Bonus Details

Incentive or Bonus Plan Program: Seventy-eight percent (78%) responded that their airport organization did not provide an incentive or bonus program. Twenty-two percent (22%) do provide some type of incentive or bonus program. One (1) participant reported that the bonus or incentive program was based on achieving performance measures; and one (1) reported that the bonus or incentive program was based on achieving stated goals or objectives.

### **OPERATIONS INTERN**



Bar Chart - Operations Intern Hrly Rate

<u>Hourly Rate</u>: The hourly rates for the Operations Intern ranged from a low of \$10.00 per hour to a high of \$15.94 per hour. The average hourly rate is \$11.69 and the median of the reported salaries was \$10.50 per hour. The current hourly rate of the Authority's Operations Intern is \$10.00, which is approximately sixteen percent (16%) below the average of all reported hourly rates and about five percent (5%) lower than the median salary.

# Salary Adjustment Recommendations

Current Staff Salaries - Grades & Compa-Ratios									
Position	Current Salary	Minimum			Midpoint		Maximum	Compa-Ratio	
Executive Director	\$191,008	\$	153,251	\$	191,564	\$	229,877	99.71%	
Deputy Director	\$96,000	\$	96,000	\$	125,000	\$	154,000	76.80%	
Finance & Administration									
Manager	\$69,000	\$	65,000	\$	72,199	\$	96,000	95.57%	
Operations Manager	\$69,000	\$	69,000	\$	72,199	\$	96,000	95.57%	
Business Manager	\$55,275	\$	47,500	\$	56,569	\$	67,000	97.71%	
Operations Coordinator	\$47,738	\$	47,500	\$	48,867	\$	67,000	97.69%	

Current Staff Salaries

<u>Executive Director</u>: The current annual salary of the Authority's Executive Director is \$191,008, which is slightly above the average of all salaries and approximately 25% above the median salary. The recommendation for the Executive Director salary is to keep the position in the grade band 39 and to give the normal annual adjustment, when it is due.

<u>Deputy Director</u>: The current annual salary of the Authority's Deputy Director is \$96,000. The market study demonstrated that the average annual salary of this role is approximately \$106,577 and the median salary was approximately \$90,542. Given the scope of duties and market data for this position, the recommendation is to move the grade to 29 and adjust the annual salary within the range of \$94,083 – \$141,125.

<u>Finance & Administration Manager</u>: The current annual salary of the Authority's Finance & Administration Manager is \$69,000. The market study revealed an average salary of approximately \$126,476 and a median salary of approximately \$93,291. Given the scope of duties and market data information, the recommendation is to move the grade to 24, with a salary range from \$73,717 - \$110,575.

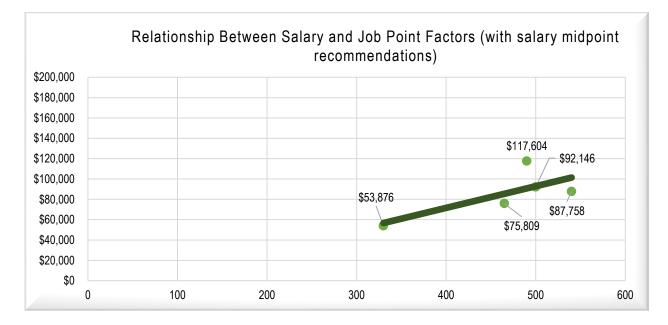
<u>Operations Manager</u>: The current annual salary of the Authority's Operations Manager is \$69,000. The market study showed that the average salary of \$63,583 and a median salary of \$64,000. Although the current salary is in line with the market study, the Authority's Operations Manager is responsible for duties that are significantly outside the normal scope of duties for this type of role. The recommendation is to move grade to 23 with a salary range of \$70,206 - \$105,309.

<u>Business Manager</u>: The current annual salary of the Authority's Business Manager is \$55,275. The market study returned information that the average salary for this position was \$75,204, and the median salary was \$75,000. This position is unique and was difficult to find specific comparators for; the job titles ranged from chief accountant to executive services coordinator. Nevertheless, this role encompasses a broad range of duties performed as stand-alone responsibilities in other airports. The recommendation is to move this position to a grade 20 with a salary range of \$60,647 - \$90,970.

<u>Operations Coordinator</u>: The current annual salary of the Authority's Operations Coordinator is \$47,738. The information gathered from the salary study indicated that the average annual salary for this position is approximately \$43,576 and the median salary is approximately \$44,317. Due to the market survey data and the fact that this role has taken on additional responsibilities outside the normal scope of duties, the recommendation is to move this position to a grade 13 with a salary range of \$43,101 - \$64,651.

Proposed Staff Salary Grades							
Position	Grade	Minimum	Midpoint	Maximum			
Executive Director	39	\$ 153,251	\$ 191,564	\$ 229,877			
Deputy Director	29	\$ 94,083	\$ 117,604	\$ 141,125			
Finance & Administration Manager	24	\$ 73,717	\$ 92,146	\$ 110,575			
Operations Manager	23	\$ 70,206	\$ 87,758	\$ 105,309			
Business Manager	20	\$ 60,647	\$ 75,809	\$ 90,970			
Operations Coordinator	13	\$ 43,101	\$ 53,876	\$ 64,651			

Proposed Staff Salaries



Salary-Point Factor Scatter Chart 2

In the scatter chart graph, again, generally there is a positive trend between the proposed staff midpoint salaries and the job point factors.

#### **Incentive Bonus Program**

The impact of the Authority's incentive bonus program costs should not be considered in making salary adjustments.

A survey conducted by WorldatWork, in conjunction with Deloitte and Vivient Consulting (2014) demonstrates that many private-sector organizations rely on incentive-based pay practices to compete for top talent and to motivate employees. Although incentive bonus programs are not as prevalent in the airport sector as they are in private sector businesses, many airports are now offering incentive bonus pay to their Executive Directors and staff.

An incentive bonus program should not be viewed as an entitlement, and should be tied to performance achievements or objectives. The Authority has structured their incentive bonus program to be tied to performance as a best practice for achieving stated airport goals and objectives.

The provisions of the Authority's incentive bonus program are that if the annual goals and objectives are met, the staff receives up to a four percent (4%) incentive bonus; the Deputy Director receives up to a ten percent (10%) incentive bonus; and the Executive Director (contract position) receives up to a fifteen percent (15%) incentive bonus.

# APPENDIX Point Factor Tables

## The points for each level of each factor are shown in the table below:

Factor Name	Level:	1	2	3	4	5
Experience Level		20	40	60	80	100
Scope of Responsibility		20	40	60	80	100
Physical Effort		20	40	60	80	100
Mental Effort		20	40	60	80	100
Financial Responsibility		20	40	60	80	100
Supervisory Responsibility		20	40	60	80	100

Experience*	Points	Description
Level 1	20	Entry level
Level 2	40	2-3 years' experience
Level 3	60	4-6 years' experience
Level 4	80	7-10 years' experience
Level 5	100	11+ years' experience

\*In current role

Scope of Responsibility	Points	Description
Level 1	20	Responsible for own daily duties, applies basic skills
Level 2	40	Responsible for own daily duties, applies specialized or technical skills
Level 3	60	Responsible for own daily duties, works on non-routine tasks, has some decision-making authority
Level 4	80	Responsible for department or multiple departments; has broad decision-making authority in area of specialization
Level 5	100	Responsible for entire organization; has decision making authority on behalf of the entire organization

Technical Knowledge	Points	Description
Level 1	20	Has fundamental technical awareness or basic knowledge
Level 2	40	Has limited technical experience in area of job duties
Level 3	60	Has intermediate technical knowledge; able to perform the skill independently
Level 4	80	Has advanced technical knowledge; able to perform the skill easily and is considered a knowledge resource to others
Level 5	100	Expert technical skills; recognized authority in the organization

Strategic Thinking	Points	Description
Level 1	20	Compares, copies, enters prescribed data or information
Level 2	40	Computes and compiles information
Level 3	60	Analyzes, examines and presents data or information; presents alternative conclusions
Level 4	80	Determines actions to be taken based on data or information analysis; prioritizing multiple responsibilities
		Synthesizes information, analyzes various options, combines & integrates data to discover facts, scenario development, and
Level 5	100	manages outcomes

Financial Responsibility	Points	Description
Level 1	20	Little to no financial responsibility
Level 2	40	Financial responsibility for own job role
Level 3	60	Financial operational and strategic responsibility for department
Level 4	80	Financial operational and strategic responsibility for multiple departments
Level 5	100	Financial strategic and operational responsibility for entire organization

Supervisory Responsibility	Points	Description
Level 1	20	No supervisory responsibility
Level 2	40	Periodic supervisory responsibility
Level 3	60	Supervises one to two staff members
Level 4	80	Supervises multiple departments
	00	
Level 5	100	Supervisory responsibility for entire organization

Performing Duties Outside the Scope of Normal Job Role	Points	Description
	00	
Level 1	20	No extra duties
Level 2	40	One extra duty
Level 3	60	Two-three extra duties
Level 4	80	Three or more extra duties
Level 5	100	Performing multiple stand-alone roles

# Grade Range Table

Grade Range	Minimum	Midpoint	Maximum
1	\$24,000	\$30,000	\$36,000
2	\$25,200	\$31,500	\$37,800
3	\$26,460	\$33,075	\$39,690
4	\$27,783	\$34,729	\$41,675
5	\$29,172	\$36,465	\$43,758
6	\$30,631	\$38,288	\$45,946
7	\$32,162	\$40,203	\$48,243
8	\$33,770	\$42,213	\$50,656
9	\$35,459	\$44,324	\$53,188
10	\$37,232	\$46,540	\$55,848
11	\$39,093	\$48,867	\$58,640
12	\$41,048	\$51,310	\$61,572
13	\$43,101	\$53,876	\$64,651
14	\$45,256	\$56,569	\$67,883
15	\$47,518	\$59,398	\$71,278
16	\$49,894	\$62,368	\$74,841
17	\$52,389	\$65,486	\$78,583
18	\$55,008	\$68,761	\$82,513
19	\$57,759	\$72,199	\$86,638
20	\$60,647	\$75,809	\$90,970
21	\$63,679	\$79,599	\$95,519
22	\$66,863	\$83,579	\$100,295
23	\$70,206	\$87,758	\$105,309
24	\$73,717	\$92,146	\$110,575
25	\$77,402	\$96,753	\$116,104
26	\$81,273	\$101,591	\$121,909
27	\$85,336	\$106,670	\$128,004
28	\$89,603	\$112,004	\$134,404
29	\$94,083	\$117,604	\$141,125
30	\$98,787	\$123,484	\$148,181
31	\$103,727	\$129,658	\$155,590
32	\$108,913	\$136,141	\$163,369
33	\$114,359	\$142,948	\$171,538
34	\$120,077	\$150,096	\$180,115
35	\$126,080	\$157,600	\$189,121
36	\$132,384	\$165,480	\$198,577
37	\$139,004	\$173,754	\$208,505
38	\$145,954	\$182,442	\$218,931
39	\$153,251	\$191,564	\$229,877
40	\$160,914	\$201,143	\$241,371

Grade Range	Minimum	Midpoint	Maximum
41	\$168,960	\$211,200	\$253,440
42	\$177,408	\$221,760	\$266,112
43	\$186,278	\$232,848	\$279,417
44	\$195,592	\$244,490	\$293,388
45	\$205,372	\$256,715	\$308,057
46	\$215,640	\$269,550	\$323,460
47	\$226,422	\$283,028	\$339,633
48	\$237,743	\$297,179	\$356,615
49	\$249,630	\$312,038	\$374,446
50	\$262,112	\$327,640	\$393,168

Grade Range 2017

#### List of airports that did not respond to the survey:

Brunswick Golden Isles Airport, Brunswick, GA – City of Golden Isles Centennial Airport, Englewood, CO – Arapahoe County Public Airport Authority Chicago Executive Airport, Wheeling, IL - Intergovernmental Cooperative of the City of Prospect Heights and the Village of Wheeling Dade-Collier Transition and Training Airport, Miami, FL – Miami Dade County Fort Lauderdale International Airport, Fort Lauderdale, FL – Broward County Houston Airport, Houston, TX – Houston Airport System Huntsville International Airport, Huntsville, AL – Huntsville-Madison County Airport Authority Jacksonville International Airport, FL – Jacksonville Aviation Authority John Glenn Columbus International Airport, Columbus, OH – Columbus **Regional Airport Authority** Lexington Blue Grass, Lexington, KY - Lexington-Fayette Urban County Airport Board Miami International Airport, Miami, FL – Miami-Dade County Morristown Municipal Airport, Morristown, NJ – DM Airports, Ltd. Naples Municipal Airport, Naples, FL – Naples Airport Authority Northwest Florida Beaches International Airport, Panama City, FL – Panama City -Bay County Airport and Industrial District (The Airport Authority) Palm Beach International Airport, Palm Beach, FL – Palm Beach County Reno Tahoe Airport Authority, Reno, NV – Reno Tahoe Airport Authority Richmond International Airport, Richmond, VA – Capital Region Airport Commission San Diego International Airport, San Diego, CA – San Diego County Regional Airport Authority Scottsdale Airport, Scottsdale, AZ – City of Scottsdale Sebring Regional Airport, Sebring, FL – Sebring Airport Authority Truckee Tahoe Airport, Truckee, CA – Truckee Tahoe Airport District