ARLINGTON COUNTY, VIRGINIA

AGREEMENT NO. 20-042-RFP AMENDMENT NUMBER 1

This Amendment Number 1 is made on the date of execution by the County and amends Agreement Number 20-042-RFP ("Main Agreement") dated March 24, 2020 between ABCx2, LLC ("Contractor") and the County Board of Arlington County, Virginia ("County").

The County and the Contractor agree to amend the Main Agreement as follows:

- UPDATE EXHIBIT A: SCOPE OF WORK TO INCLUDE A PHASE II SCOPE OF WORK AS IDENTIFIED IN ATTACHMENT I (ATTACHED).
- UPDATE EXHIBIT B: CONTRACTOR PRICING TO INCLUDE THE PHASE II CONTRACTOR PRICING AS IDENTIFIED IN ATTACHMENT II (ATTACHED).

All other terms and conditions of the Main Agreement remain in effect.

WITNESS these signatures:

THE COUNTY BOARD OF ARLINGTON ABCX	2,LLC
COUNTY, VIRGINIA	
PRINT: Meloni Hurley PRIN	James K. Allerdice, Jr. T:
DocuSigned by:	DocuSigned by:
SIGNATURE: Meloni Hurley SIGN	IATURE: James & Merdice, Jr.
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TITLE: TITLE: TITLE	Managing Partner E:
DATE: DATE	E:

PHASE II SCOPE OF WORK

The Project includes the following components shown below. Although this Agreement is executed between Arlington County and the Contractor, the Contractor's work will be completed on behalf of and in cooperation with both Arlington County and Montgomery County, Maryland.

Component I: Analysis of DCA Noise and Operational Data- History and Existing Conditions

Component II: Identification and Evaluation of Alternatives to Reduce Aircraft Noise

Component III: Community Engagement

Component IV: Advocacy and Implementation Assistance

Component I was completed under the initial contract, as were specific tasks and deliverables under Components II, III, and IV. The Phase II scope of work continues progress on Components II, III, and IV and adds work tasks that are extensions of items completed under the initial contract where it was determined that further investigation was required in order to bring noise mitigation alternatives before the North of Airport Committee (NOA) of the MWAA DCA Reagan National Community Working Group (CWG) and the CWG itself for approval and transmittal to the Federal Aviation Administration (FAA).

Phase II Work Tasks and Deliverables

Component II:

A. Terminal Arrival Area Test Evaluation and Reporting

The two notional arrival procedures described in the completed draft Component II Technical Report Volumes 1 and 2 include random dispersal of south-flow (landing on Runway [RWY] 19) approaching flights to the relocated DARIC-ABCx2 waypoint under the Terminal Arrival Area (TAA) Concept to introduce flight track variability as an alternative to the currently published FERGI to DARIC segment that concentrates arrivals over dense residential neighborhoods within Montgomery County. A 180-day testing period for the TAA began on March 1, 2021, and formal presentation of the notional arrival procedures for approval by the CWG was postponed beyond the April 22, 2021 CWG meeting to allow for an evaluation of the TAA test after 90 days.

This work task includes obtaining the flight track data for the TAA test evaluation through a recorded data stream, setting up and maintaining a TAA test dashboard (including data cleaning and analysis) identifying and finalized TAA test metrics with the NOA, performing noise modeling, noise metrics analysis, and flight track analysis of the TAA test data, preparing TAA test summary graphics, technical documents, reports, and engagement materials for meetings, and coordination and meetings to present the results of the TAA test to the NOA and CWG, as well as additional coordination with the FAA, airline representatives to the CWG, and MWAA staff.

Deliverables: TAA evaluation data, TAA evaluation reports, TAA evaluation meeting materials for up to two NOA meetings and one CWG meeting.

B. Complete NOA and CWG Approval of Notional Arrivals

Following completion of the TAA test evaluation, the Contractor will update and finalize the draft Component II Technical Reports Volumes 1 and 2 to include the results of the TAA test, and then present the final recommendations for the two notional arrival procedures described in those reports to the NOA and CWG for formal CWG approval and transmittal to the FAA. Pending availability of CWG members and approval from the MWAA staff coordinators for the CWG, CWG approval of the notional arrivals shall be completed via a special meeting of the CWG to be held prior to the next regularly scheduled CWG meeting on July 22, 2021.

Deliverables: Final Component II Technical Reports Volumes 1 and 2, presentation materials for NOA and CWG, CWG approval.

C. Complete Notional Standard Instrument Departures (SIDs)

The Contractor completed preliminary work with the NOA on updates to north flow SIDs taking off from RWY 1 during the five design sessions conducted under the initial contract. In order to more effectively manage both information flow to the community and Contractor resources, the study team elected to split the balance of the technical work and community engagement into two focus areas on arrivals (presented first), followed by departures. This split also allowed time for the Contractor to receive (along with the CWG) feedback and observed flight path information from the FAA on the impact of the AMEEE ONE (RNAV) departure and the other eight RNAV SIDs implemented by the FAA (at the directive of the Secret Service) on January 1, 2021 to reduce flight incursions into Prohibited Area 56 Alpha (P-56A) surrounding the monumental core of the District of Columbia. The initial fix of those SIDs to waypoint REVGE (relocated waypoint ADAXE) inland from over the Potomac River to over Rosslyn has resulted in an open but more complex set of limitations in which to recommend flight path adjustments for the north flow SIDs taking off from RWY 1 in areas close to the airport. Further from the airport, additional work remains for potential flight path adjustments for aircraft turning to the east, west, and south beyond the BEBLE waypoint.

The Contractor will analyze the track data from January 1, 2021 forward to near current conditions and conduct two additional design sessions with the NOA to develop recommended changes to the RNAV SIDs to mitigate noise exposure for communities located north of DCA. The Contractor will prepare a draft Component II Technical Report for Departures in two volumes (Volume 1: Narrative Report and Volume 2: Technical Report) following the same format as the Component II Technical Report for Arrivals. The Contractor will participate in the study Community Meeting #3 (see below under Component III) to present the findings and recommendations of the draft Component II Technical Report for Departures. Following a 30-day comment period on the draft report, the Contractor will finalize the report and present it to the NOA and CWG for approval and transmittal of the recommendations to the FAA.

Deliverables: Two SID design sessions, materials for design sessions, off-line SID design work, Component II Technical Report for Departures Volumes 1 and 2, draft and final versions, presentation materials for study Community Meeting #3, participation in study Community Meeting #3, presentation materials for NOA and CWG meeting, participation in NOA and CWG meeting, CWG approval.

D. Develop Strategy for Fly Quiet Program

Fly Quiet Programs are voluntary initiatives undertaken jointly by airport operators, the FAA, airlines, and designated airport community roundtables (like the CWG) to reduce both single event noise levels and total noise levels in the vicinity of an airport. Perhaps the best well-known Fly Quiet Program is in place at San Francisco International Airport (SFO), but they also exist at airports such as Chicago O'Hare International Airport (ORD), Seattle-Tacoma International Airport (SEA), Oakland International Airport (OAK), and Los Angeles International Airport (LAX), among others. DCA does not currently have a Fly Quiet Program. The Fairfax County Board of Supervisors recommended that MWAA implement a DCA Fly Quiet Program in 2016. Under this task, the Contractor will develop a short white paper describing common elements of implemented Fly Quiet Programs at airports across the United States and recommending a strategy to develop a Fly Quiet Program at DCA.

Deliverable: Fly Quiet white paper.

E. Long-Term Staffing and Committee Recommendations

Aircraft noise (both fixed-wing and rotary aircraft) as a subject matter area within both Arlington County and Montgomery County, which includes the management of this study as well as day-to-day management of responses to community concerns about aircraft noise and jurisdictional representation on the CWG, is currently handled by staff redeployed from other departments in county government. This arrangement is not sustainable in the long-term and must be re-evaluated to determine a more efficient, effective, and sustainable staff complement. In addition, in both counties, there is no official County advisory group or commission that is responsible for aircraft noise and DCA.¹

Under this task, the Contractor will develop a white paper with options and recommendations for long-term staffing and advisory groups or commission for continued county government engagement in aircraft noise and aviation / airport relations. These recommendations must consider the location of Arlington County and Montgomery County as either immediately adjacent to or within a short distance of a major commercial service airport that served 23.9 million passengers in 2019, the last full year of pre-pandemic conditions. Staffing options to be considered shall include a full-time director of airport affairs or other local government full-time equivalent (FTE), on-call consulting services, or arrangements reviewed by the Contractor as part of their research.

Deliverable: Long-term staffing and committee recommendations white paper.

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¹ Montgomery County has a general aviation airport, the Montgomery County Airpark (GAI), located in the County near the City of Gaithersburg. That facility is managed and operated by the Montgomery County Revenue Authority (MCRA), an instrumentality of the County and a public corporation. MCRA handles noise complaints within six miles of GAI. The Montgomery Quiet Skies Coalition (MCQSC) is a non-governmental 501(c)(3) community advocacy organization actively engaged on aircraft noise issues on DCA. There is no comparable organization to MCQSC in Arlington County.

Component III: Community Engagement

The Contractor will participate in study Community Meeting #3, focused on notional SIDs from RWY 1. As with the two other study community meetings, the meeting logistics will be arranged by the host local jurisdiction. The Contractor will prepare presentation materials in advance of the meeting for review by the Arlington County and Montgomery County study managers. The Contractor will respond to community questions both during the meeting and for a period following the meeting until the notional SIDs are approved by the CWG. In order to maximize community engagement, it is recommended that Community Meeting #3 be held after Labor Day. While it is possible that public health conditions by that time may allow for an in-person community meeting, participation of non-local Contractor staff shall be remote, as travel is not included in this scope of work and budget. Contractor shall also assist County study managers in preparing responses to community questions about the study and its recommendations over the course of the contract. The Contractor shall continue to maintain the study website and post periodic content updates for key study milestones and study deliverables on the website.

Deliverables: Community Meeting #3 participation and materials, responses to community questions, study website.

Component IV: Federal and Local Advocacy

Under this task the Contractor shall actively engage with members of Congress, state and local government officials, representatives of the FAA, and members of the NextGen Advisory Committee (NAC) to keep them apprised on the status of this study and its recommendations to the CWG. Contractor shall report back to the study managers any information relevant to the study gleaned as a result of said active engagement. Contractor shall make final study presentations to the Arlington County Board and the Montgomery County Council.

Deliverables: Engagement, new study information, final study presentations.

ATTACHMENT II PHASE II CONTRACTOR PRICING

	M		Hours	Hours	Hours PSG		ost of	Cost of			Cost of		
	Major Work Task	Subtask	ABCx2 @	Vianair @	@250/hr		rvices -	Services -		Services -		Т	otal Cost
			250/hr	350/hr			ABCx2	-	Vianair		PSG	_	
		Noise Modeling	20	20	0	\$	5,000	<u> </u>	7,000	\$		\$	12,000
	TAA Test Technical Analysis	Noise Metrics Analysis Flight Track Analysis	19	20	0	\$	5,000 4,750		7,000 8,400	\$	<u>-</u> -	\$	12,000 13,150
Component II Task A		Graphics Production	5	10	0	\$	1,250	\$	3,500	\$		\$	4,750
Τä		Reporting	0	10	0	\$	-,250	\$	3,500	\$		\$	3,500
Ħ Ħ		Technical Documents	10	20	0	\$	2,500		7,000	\$		\$	9,500
ner	TAA Technical Documentation	Engagement Materials for Meetings	10	0	0	\$	2,500	_	- 7,000	\$		\$	2,500
od		Set-up & Maintenance	5	12	0	\$	1,250	_	4,200	\$		\$	5,450
, or	TAA Test Dashboard	Data Cleaning	5	0	0	\$	1,250	_	7,200	\$		\$	1,250
		Data Analysis	6	0	0	\$	1,500	_		\$		\$	1,500
		NOA (2)	8	0	4	\$	2,000	+ ·		\$	1,000	\$	3,000
		CWG (1)	4	0	4	\$	1,000	<u> </u>		\$	1,000	\$	2,000
	TAA Meeting Participation	Coordination with FAA, airlines & MWAA	16	0	0	\$	4,000	Ė	-	\$	-	\$	4,000
	TAA Data	SWIM Data Recording	6 mont	hs @\$500/moi	nth	\$	_	\$	3,000	\$	_	\$	3,000
	TAA Subtotal	Subtotal	128	116	8	\$	32,000	\$	43,600	\$	2,000	\$	77,600
Component IV		Congressional Engagement	0	0	12	\$	-	\$	-	\$	3,000		3,000
one	Federal & Local Advocacy	State/Local Engagement	0	0	12	\$	-	\$	-	\$	3,000	\$	3,000
g G		FAA Community Engagement	0	0	12	Ś	-	Ś	-	\$	3,000		3,000
Ŝ		NAC Engagement	0	0	8	\$	-	\$	_	\$	2,000	_	2,000
ask B	Complete NOA and CWG Approval of Notional Arrivals	Finalize Component 2 Technical Report (Arrivals) Volumes 1 and 2				Ċ		ĺ			,,,,,,		
=		NOA Meeting (1)	4	0	2	\$	1,000	\$	-	\$	500	\$	1,500
Component II Task		CWG Meeting (1)	4	0	2	\$	1,000	\$	-	\$	500	\$	1,500
		Report drafting / finalizing	8	0	4	\$	2,000	\$	-	\$	1,000		3,000
Č	Complete Notional SIDs	Analysis of track data since 1/1/2021	16	16	0	\$	4,000	\$	5,600	\$	-	\$	9,600
Tas		Design Sessions (2)	8	8	0	\$	2,000	_	2,800	\$	-	\$	4,800
=		Off-Line Design	8	8	0	\$	2,000	\$	2,800	\$	-	\$	4,800
Component II Task C		Component 2 Technical Report (Departures) Volumes 1 and 2 (Draft)	24	8	12	\$	6,000	\$	2,800	\$	3,000	\$	11,800
Com		Component 2 Technical Report (Departures) Volumes 1 and 2 (Final)	12	4	8	\$	3,000	\$	1,400	\$	2,000	\$	6,400
Component III		Community Meeting (#3 of Overall Study)	8	0	8	\$	2,000	\$	-	\$	2,000	\$	4,000
Component II Task C		NOA Meeting (1)	4	0	4	\$	1,000	\$	-	\$	1,000	\$	2,000
Component II Task C		CWG Meeting (1)	4	0	4	\$	1,000	\$	-	\$	1,000	\$	2,000
Component II Task E	Long-Term Staffing and Committee Recommendations	Produce Short White Paper on County Staffing for "Aviation Relations and Policy"	10	0	10	\$	2,500	\$		\$	2,500	\$	5,000
Component II Task D	Fly Quiet Program	Develop Strategy for Fly Quiet Program	6	0	0	\$	1,500	\$	-	\$	-	\$	1,500
Component III	Website Maintenance	Post-project updates to website	0	0	6	\$	-	\$		\$	1,500	\$	1,500
		Non-TAA Subtotal	116	44	104	\$	29,000	\$	15,400	\$	26,000	\$	70,400
		Grand Total Hours and Costs	244	160	112	\$	61,000	\$	59,000	\$	28,000	\$	148,000

Note: \$2,000 of the \$150,000 budget specified in Amendment 2 to Contract #1102987 between Montgomery County and Arlington County is being held for contingency. Contractor shall request written (email) authorization from the Arlington Project Officer prior to expending the contingency funds. The request shall specify which task on which the funds will be expended.