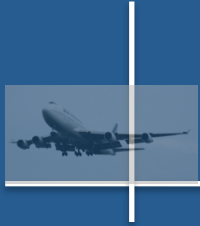


Mitigating Aircraft Noise Impact on Communities



N.O.I.S.E. National Summit – Seattle, WA
Ambrose W. Clay, Councilman, College Park, GA



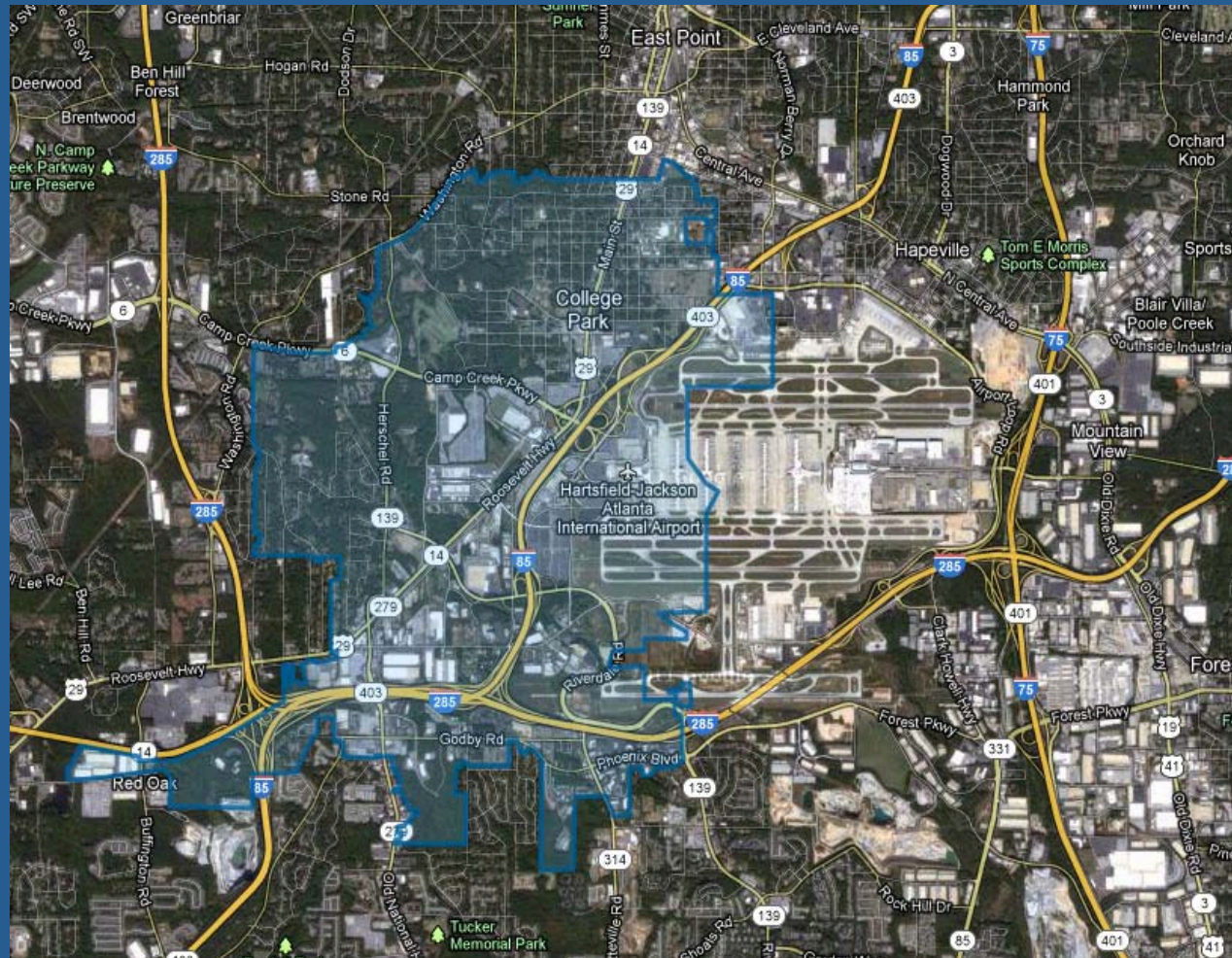
Agenda



- Where is College Park, GA?
- College Park's Noise Cases
- Mitigation Approaches
- How College Park "Does It"
- New Noise Mitigation Challenges
- Conclusions



Where is College Park?

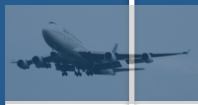




College Park's Noise Cases



- Over-flight Noise from Westward Take Offs
- Over-flight Noise from Eastward Landings
- Ground Noise from Eastward Landings
- Ground Noise from Aircraft Taxiing
- Ground Noise from Eastward Take Offs

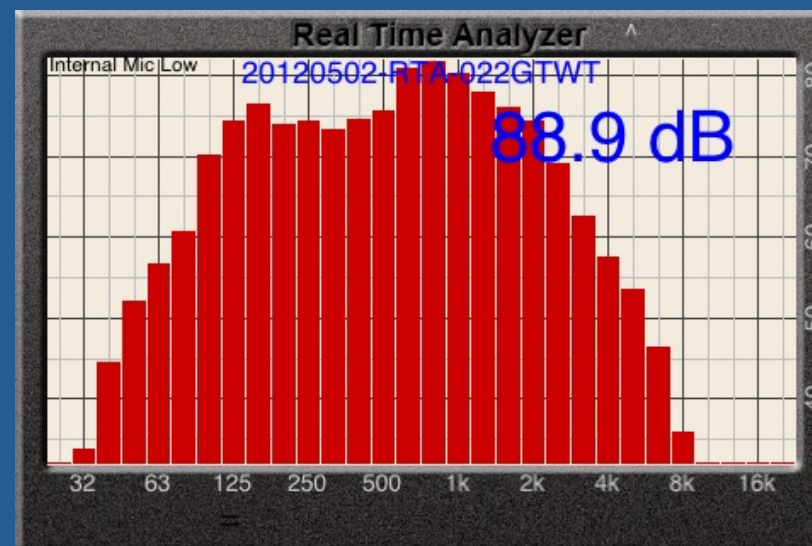


Over-flight Noise - Westward Takeoffs



- Noise Profile

(Produced by iPhone 4 “Audio Tools” App using un-calibrated internal microphone with no weighting – for rough comparison only)



- Mitigation Approach

- Participate in departure track planning
- Foster adherence to planned tracks
- Attenuate Lower frequencies

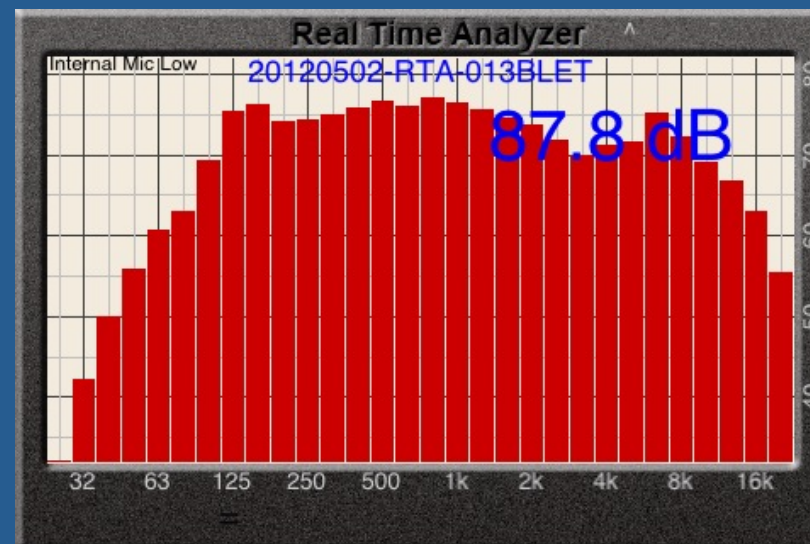


Over-flight Noise – Eastward Landings



- Noise Profile

(Produced by iPhone 4 “Audio Tools” App using un-calibrated internal microphone with no weighting – for rough comparison only)



- Mitigation Approach
 - Attenuate a wide frequency range

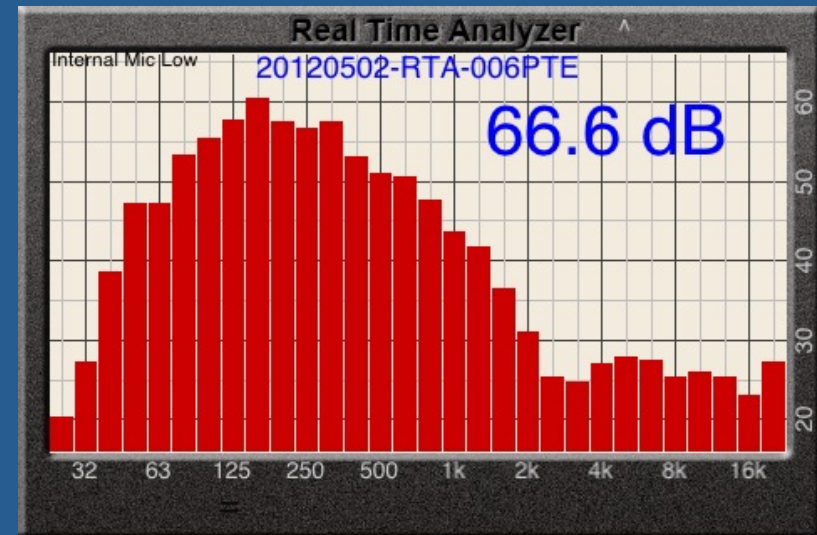


Ground Noise



- Noise Profile

(Produced by iPhone 4 “Audio Tools” App using un-calibrated internal microphone with no weighting – for rough comparison only)



- Mitigation Approach

- Use idle thrust reversal when landing
- Use gate holds to limit number of planes taxiing
- Attenuate Low frequencies



How College Park “Does It”



- Foster Trust Through Credible, Continuing, Communication
 - Learning the language – Developing Technical Expertise
 - Maintaining Continuing Contact – Director of Airport Affairs
 - Monitoring aircraft operations – ASDI data, ADS-B data, Tower radio transmissions
 - Maintaining a presence in Washington – Legal and Lobby (member of N.O.I.S.E.)

ASDI Data Used By College Park (flightwise.com)



Ident	Type	Dept	Dest	Departure Time (GMT)	Arrival Time (GMT)	Elapsed	Disposition
TRS454	B712	ATL	MSY	1/27/2012 12:00:00 AM	1/27/2012 1:11:00 AM	1h 11m	Arrived
TRS372	B712	ATL	LGA	1/26/2012 11:59:00 PM	1/27/2012 1:26:00 AM	1h 27m	Arrived
ASQ5378	CRJ2	ATL	AEX	1/26/2012 11:59:00 PM	1/27/2012 1:34:00 AM	2h 35m	Arrived
ASQ4958	CRJ2	ATL	ECP	1/26/2012 11:58:00 PM	1/27/2012 12:48:00 AM	50m	Arrived
TRS93	B712	ATL	RDU	1/26/2012 11:58:00 PM	1/27/2012 12:47:00 AM	49m	Arrived
RBY304	D328	ATL	SDF	1/26/2012 11:57:00 PM	1/27/2012 12:52:00 AM	55m	Arrived
DAL900	A320	ATL	BOS	1/26/2012 11:57:00 PM	1/27/2012 1:43:00 AM	2h 46m	Arrived
FLG3752	CRJ2	ATL	FWA	1/26/2012 11:55:00 PM	1/27/2012 12:52:00 AM	57m	Arrived
DAL691	A320	ATL	MMGL	1/26/2012 11:55:00 PM	1/27/2012 2:34:44 AM	3h 39m	Tracking Terminated Early
DAL1124	MD88	ATL	RIC	1/26/2012 11:55:00 PM	1/27/2012 12:56:00 AM	1h 1m	Arrived
TRS36	B712	ATL	MDW	1/26/2012 11:54:00 PM	1/27/2012 1:15:00 AM	1h 21m	Arrived
AFR681	B772	ATL	LFPG	1/26/2012 11:52:00 PM	1/27/2012 3:09:16 AM	3h 17m	Tracking Terminated Early

Flight: TRS372 departed ATL for LGA at 01/26/2012 6:59 PM EST (2359Z) (Z)

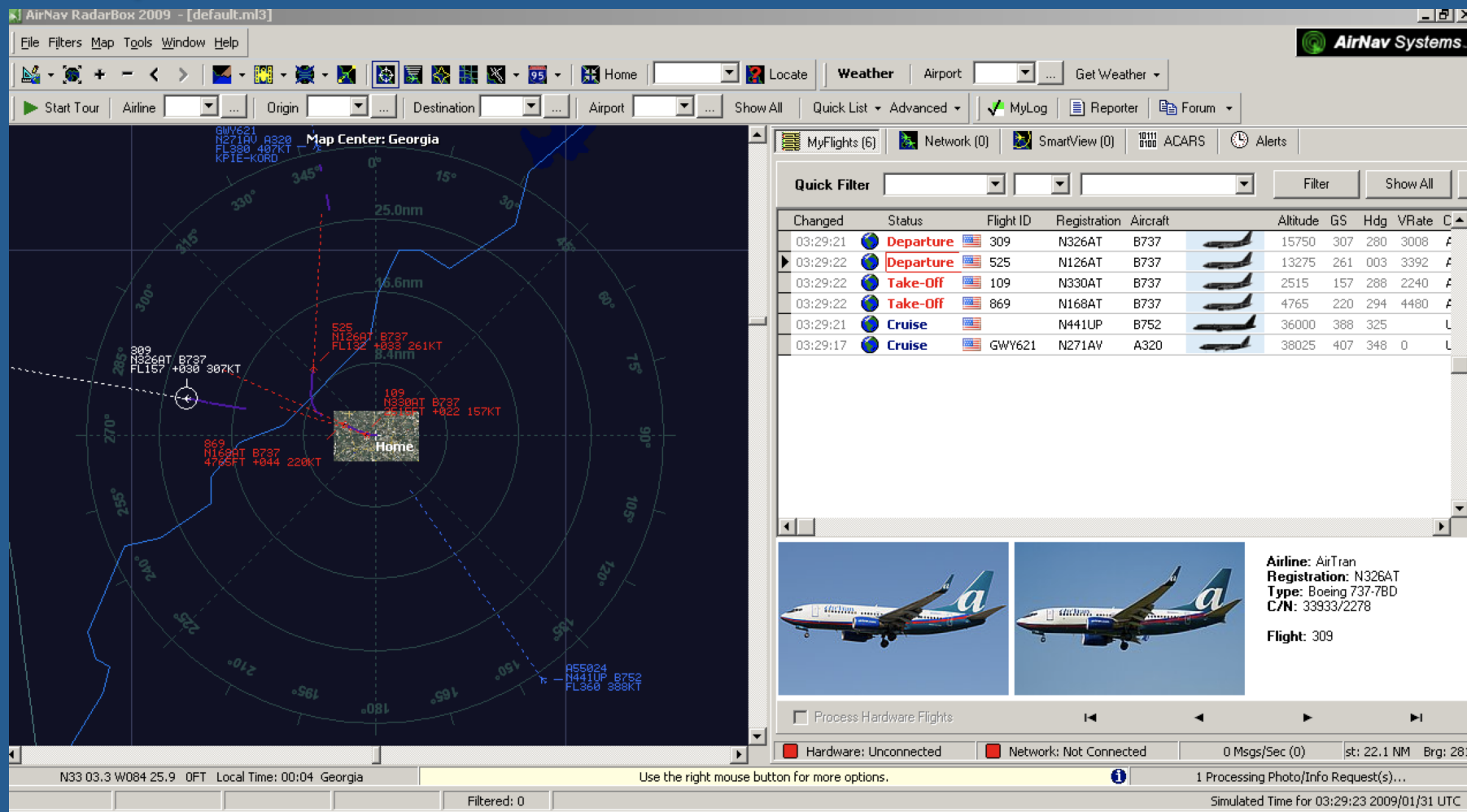
Date/Time	Center	GS (kts)	Altitude (ft)	Lat	Lon
1/26/2012 11:59:29 PM	KA80	193	2,500	33.63334	-84.48333
1/27/2012 12:00:43 AM	KZTL	446	3,100	33.63278	-84.47611
1/27/2012 12:00:23 AM	KA80	199	3,600	33.61666	-84.53333
1/27/2012 12:01:43 AM	KZTL	268	4,200	33.60111	-84.51917
1/27/2012 12:01:17 AM	KA80	241	5,300	33.58333	-84.58334
1/27/2012 12:02:43 AM	KZTL	245	6,100	33.56139	-84.57694
1/27/2012 12:02:17 AM	KA80	247	7,600	33.51667	-84.58334
1/27/2012 12:03:43 AM	KZTL	263	8,400	33.49028	-84.55139
1/27/2012 12:04:43 AM	KZTL	271	10,100	33.45111	-84.46972
1/27/2012 12:05:43 AM	KZTL	304	11,900	33.45361	-84.35833
1/27/2012 12:06:43 AM	KZTL	381	14,000	33.47889	-84.24695



ADS-B Tracking Equipment (www.airnavsystems.com)



ADS-B Display Used by College Park (www.airnavsystems.com)

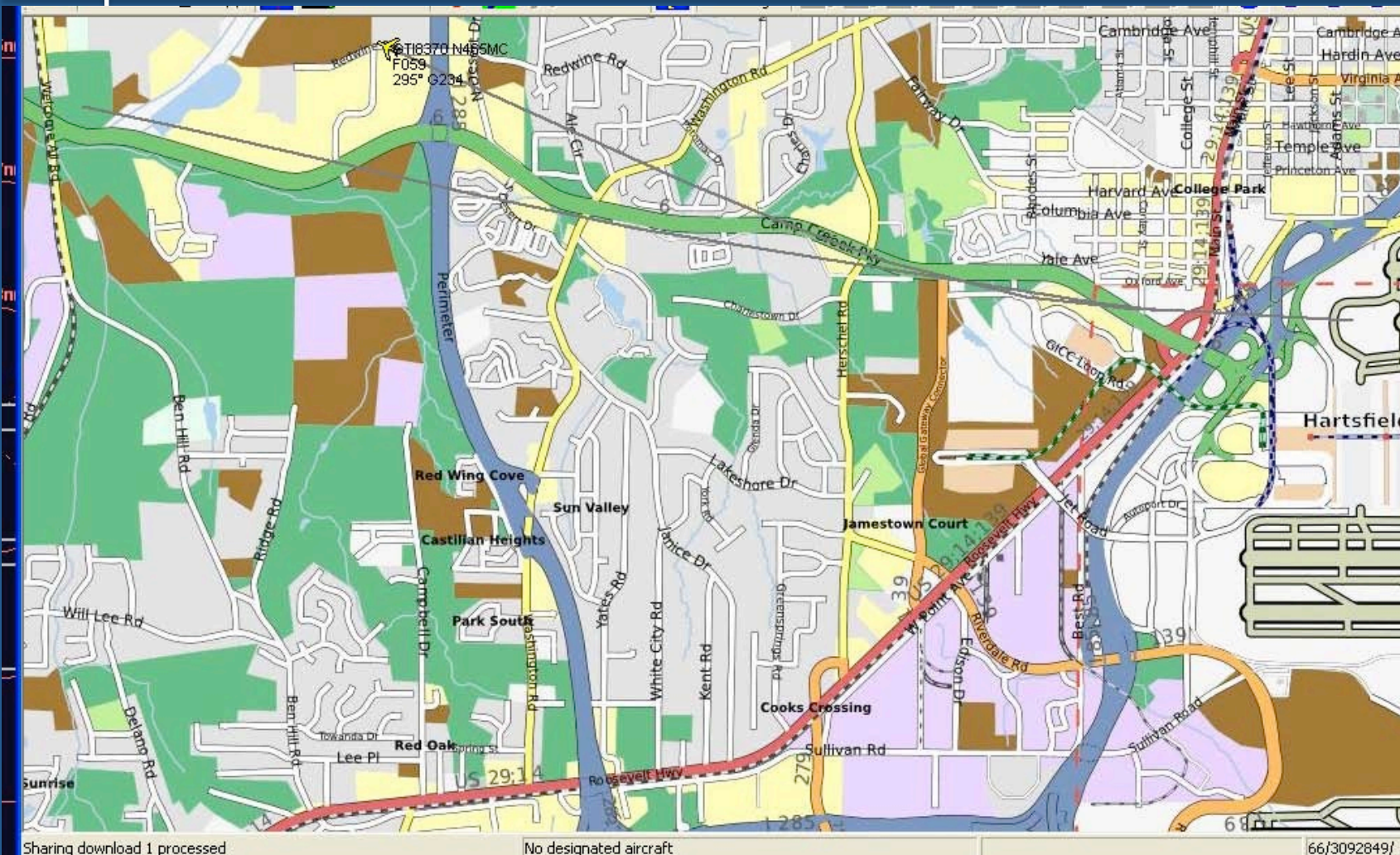
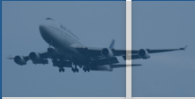


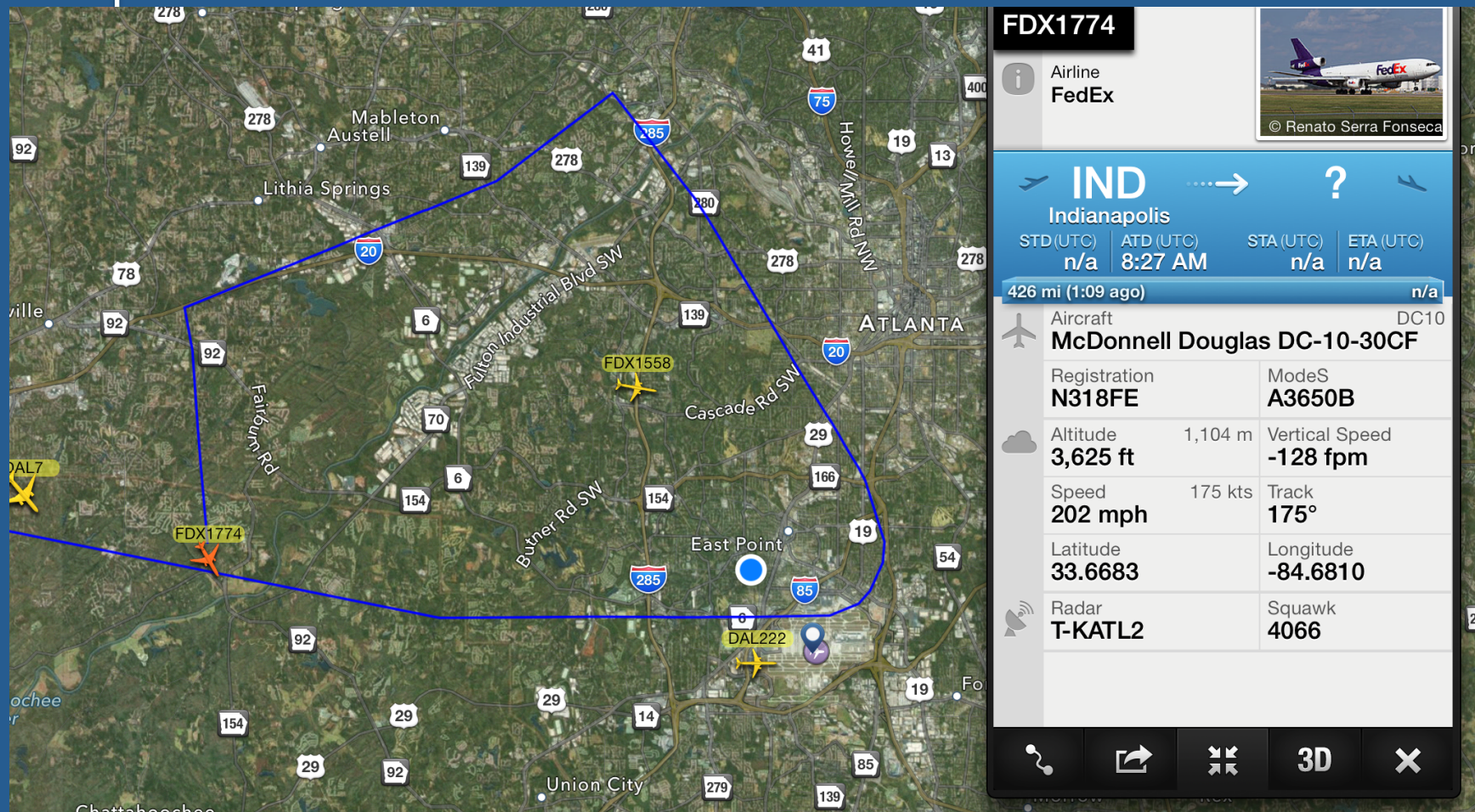
November 13, 2013

NOISE-20131113b

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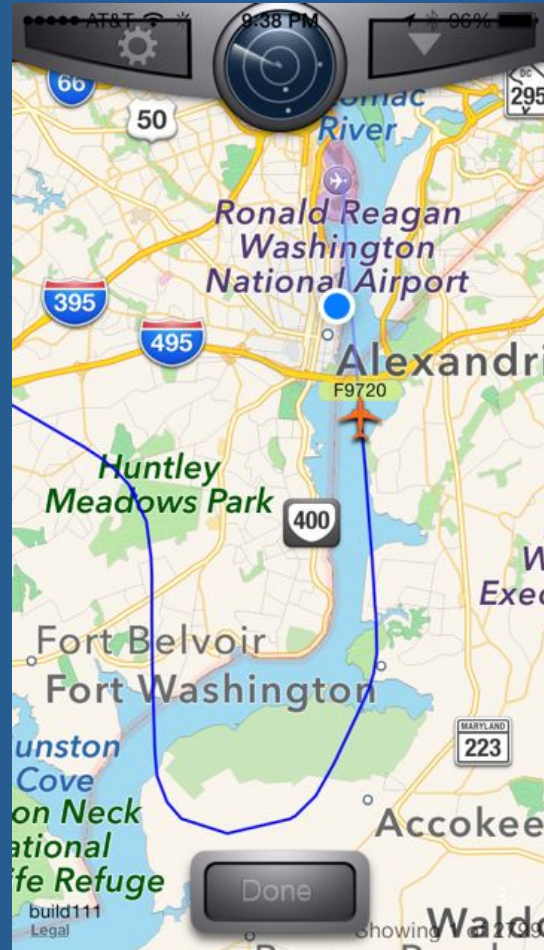
ADS-B Tracks Used by College Park (www.coaa.co.uk/planeplotter.htm)



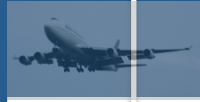




ADS-B/ASDI Tracks for Everyone (iPhone) (FR24Premium App)



Augmented Reality (iPhone) – ADS-B Only (FR24 Premium App)



You can see tracks anywhere! (FR24 Premium App)





New Noise Mitigation Challenges



- NextGen with RNAV/RNP is creating well defined departure tracks that are expressways in the sky.
- Dispersion about the centerline of a track is greatly reduced.
- Citizens located directly beneath departure tracks *newly* experience more frequent, consistently positioned over-flights.
- This brings into question the need to consider new noise mitigation.



Conclusions



- In an atmosphere of trust, fostered by credible, continuing, communication, joint planning with communities will facilitate timely “construction” of these expressways, and mitigation of their noise impact.
- As with any expressway, their location needs to be stable to allow communities to do proper land-use planning.



Contact Information



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