#### OAKLAND COMMUNITY FORUM

Noise News January 2018

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#### A Special Report On PHX Court Findings

#### United States Court of Appeals

No. 15-1158

September Term, 2016

FILED ON: AUGUST 29, 2017

CITY OF PHOENIX, ARIZONA,
PETITIONER

v.

MICHAEL P. HUERTA AND FEDERAL AVIATION ADMINISTRATION, RESPONDENTS

Consolidated with 15-1247

On Petitions for Review of a Decision by the Federal Aviation Administration

Before: ROGERS and GRIFFITH, Circuit Judges, and SENTELLE, Senior Circuit Judge

#### JUDGMENT

These causes came on to be heard on the petitions for review of an order of the by the Federal Aviation Administration and were argued by counsel. On consideration thereof, it is

**ORDERED** and **ADJUDGED** that the petitions for review be granted; the September 18, 2014 order implementing the new flight routes and procedures at Sky Harbor International Airport be vacated; and the matter be remanded to the FAA for further proceedings, in accordance with the opinion of the court filed herein this date.



#### **IMPORTANT NOTES:**

- Community won
- FAA ordered to revise the flight tracks
- Process not similar NorCal Metroplex
  - Ruling is not applicable to NorCal Metroplex issues
  - In essence the FAA did a Categorical Exclusion at PHX
  - For NorCal Metroplex the FAA did an Environmental Assessment (EA) and did not try a CatEx.
- Court did provide comments on the process particularly regarding:
  - Public notification and input, or lack thereof,
  - Criteria used to determine significance of impact
    - FAA will be soliciting comments on revised noise policy later this year and the courts ruling will help guide comments.



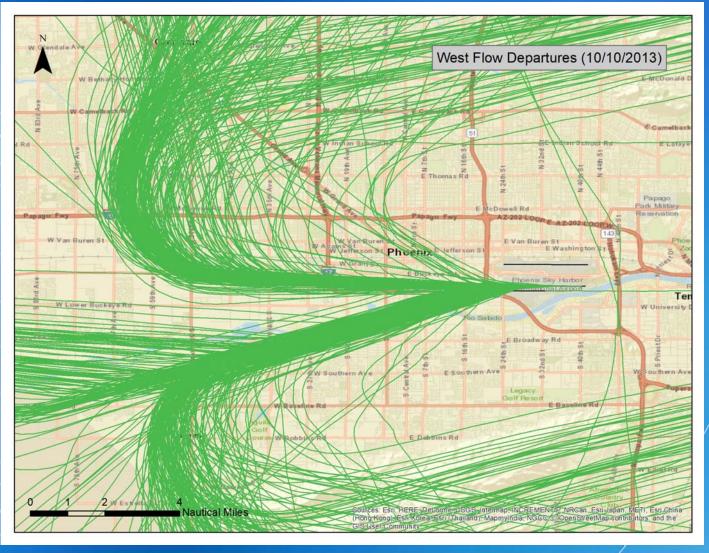
#### "Arbitrary and Capricious"

In the Court's written opinion, it agrees with the City and Neighborhoods' argument that FAA approval of the new flight routes in September 2014 was "arbitrary and capricious" and violated the National Historic Preservation Act, the National Environmental Policy Act, and the Department of Transportation Act.

The court ruling states that "by keeping the public in the dark, the agency made it impossible for the public to submit views on the project's potential effects—views that the FAA is required to consider." The ruling goes on to say that "The FAA had several reasons to anticipate that the new flight routes would be highly controversial: The agency was changing routes that had been in place for a long time, on which the City had relied in setting its zoning policy and buying affected homes. The air traffic over some areas would increase by 300%—with 85% of that increase attributed to jets—when before only prop aircraft flew overhead. The FAA found a 'potential [for] controversy' but did not notify local citizens and community leaders of the proposed changes as the agency was obligated to, much less allow citizens and leaders to weigh in."



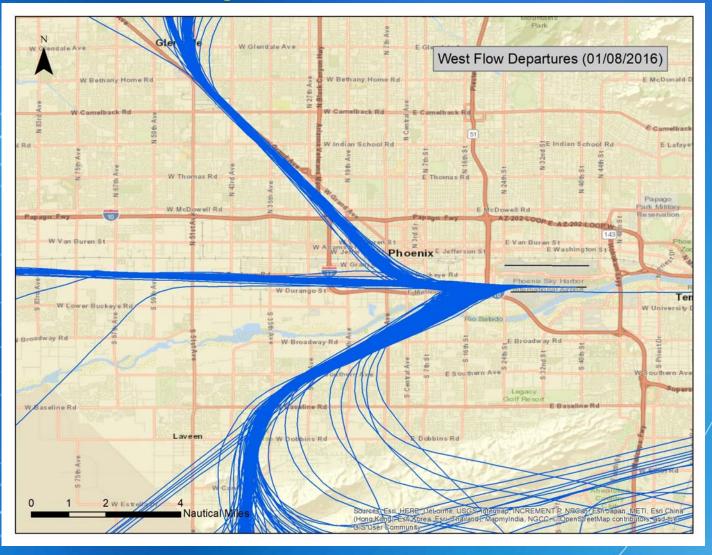
#### **Before and After Flight Tracks**







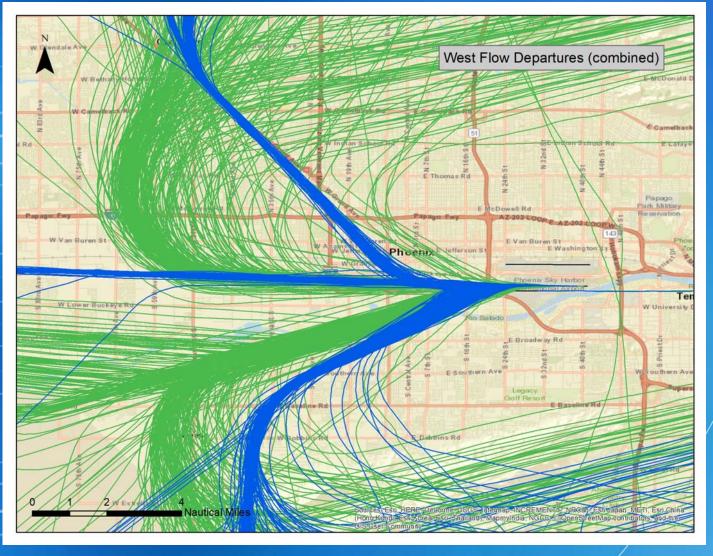
#### Before and After Flight Tracks







#### **Before and After Flight Tracks**







#### The Next Step – An agreement to revise paths

#### Litigation

#### FAA, CITY OF PHOENIX PROPOSE JOINT PLAN TO REDUCE NEXT-GEN FLIGHT PATH NOISE

The FAA, City of Phoenix, and certain city historic neighborhood associations jointly asked a federal appeals court on Nov. 30 to accept a plan they developed to address noise impacts that resulted from RNAV departure procedures FAA implemented in September 2014 at Phoenix Sky Harbor International Airport.

Their plan responds to a landmark Aug. 29, 2017, ruling from the U.S. Court of Appeals for the D.C. Circuit that called for FAA to vacate the new, satellite-based departure procedures at Sky Harbor, which had moved aircraft noise over historic neighborhoods and parks in the city, sparking a torrent of complaints and political action. The City of Phoenix and the neighborhood groups were the plaintiffs in the litigation.





#### Two-Step Plan

The joint plan presented to the Court includes two steps:

- During Step One, the FAA would create new, temporary instructions for departures to the west that would route aircraft near the airport in a manner to approximate, to the extent practicable, the pre- September 2014 routes. The FAA would engage in community outreach before completing this first step.
- During Step Two, the FAA would develop new satellitebased procedures for the westbound departures and consider routes that approximate the pre- September 2014 routes near the airport. The FAA also would consider feedback on procedures throughout the Phoenix area. The FAA would engage in community outreach while developing these procedures.







- The 6 month extension passed last September expires in March 2018.
- An update will be provided at the April OAK Forum meeting
- Daniel K. Elwell was named Acting Administrator
  - Appointed by President Trump as Deputy Administrator in June 2017
  - Air Force Pilot, AA Pilot and Managing Director for International and Governmental Affairs for AA.





#### NASA

#### NASA FLIGHT TESTING TWO TECHNOLOGIES THAT CUT AIRFRAME NOISE DURING LANDING

NASA recently concluded a series of flight tests examining the acoustic benefits of two NASA technologies that may significantly reduce airframe noise for communities near airports.

The flights – completed in October at NASA's Armstrong Flight Research Center in Edwards, CA – gathered data on NASA's Landing Gear Noise Reduction technology, or LGNR, and on a flexible, twistable wing flap that also has been used to investigate improved aerodynamic efficiency.

These technologies, when combined to explore their potential for reduced airframe noise – primarily during landing – are known as Acoustics Research Measurements, or ARM.

NASA conducted the flight tests by flying two Gulfstream III aircraft, one baseline and the other modified to include the flexible wing flap technology, over a 250-foot diameter microphone array developed at NASA's Langley Research Center in Virginia.



#### Complaints

#### FAA SEEKS APPROVAL TO ESTABLISH ONLINE NOISE COMPLAINT AND INQUIRY SYSTEM

The FAA announced Nov. 2 that it is seeking public comment on its intention to establish the "FAA Noise Portal," an online aircraft noise complaint and inquiry system that will allow the agency to more effectively address noise complaints and inquiries.

The public has until Jan. 2, 2018, to submit comments on the proposed Noise Portal.

Under the Paperwork Reduction Act of 1995, FAA is required to invite public comment on its intention to seek Office of Management and Budget approval for voluntary information collections. Those filing complaints through FAA's Noise Portal would have to voluntarily provide information such as their name, email address, street or cross street, city, state, zip code, and a description of the aircraft noise complaint or inquiry.



#### Santa Monica - Continued

# JUDGE TERMINATES TRO BLOCKING RUNWAY SHORTENING

Construction to shorten the sole runway at Santa Monica Airport in order to cut operations by faster and noisier jet aircraft by almost half is moving forward following an Oct. 16 ruling by a U.S. District Court judge denying a preliminary injunction to block the construction and dissolving a temporary restraining order (TRO) he had imposed on the City.

The City of Santa Monica was authorized to reduce the length of its airport's runway from 4,973 feet to 3,500 ft. under the terms of a controversial settlement agreement with



#### More Metroplex Litigation, East Coast

Litigation

#### ORAL ARGUMENT TO BE HELD IN JAN. IN GEORGETOWN CASE

On Jan. 11, 2018, a three-judge panel of the U.S. Court of Appeals for the DC Circuit will hold oral argument in litigation filed by Georgetown University and others challenging NextGen airspace changes out of Reagan National Airport.

A recording of the oral argument will be available by 3 p.m. on the day of the oral argument and can be accessed on the Court's website at www.cadc.uscourts.gov

The case, Citizens Association of Georgetown, et al. v.

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#### **FAA Considering Revising Noise Policy**

# RESULTS OF ANNOYANCE SURVEY WILL NOT BE OUT BY END OF YEAR

It looks like the FAA will not release by the end of 2017 the long-awaited results of an annoyance survey it conducted in communities around 20 U.S. airports.

In May, FAA Deputy Assistant Administrator for Policy, International Affairs and Environment Carl Burleson told the O'Hare Noise Compatibility Commission that he expected the survey result to be issued "later this year."

However, FAA's Office of Communications told ANR

Dec. 12 that the agency is still working on the survey and it is



#### NASA

#### MAJOR MILESTONE REACHED IN DEVELOP-MENT OF NASA'S ALL-ELECTRIC X-PLANE

NASA said Dec. 13 that its engineers have reached a major milestone with the successful testing of the battery system that will power the agency's first all-electric X-plane when it takes flight in 2018.

The testing validated that the battery system has the necessary capacity to safely power NASA's first manned X-plane in two decades – the X-57 Maxwell – for an entire flight profile. The test also confirmed the battery design's ability to isolate potential overheating issues to single battery cells, preventing unsafe conditions from spreading to the rest of the battery system.

The X-57 is the first X-plane to be developed under NASA's New Aviation Horizons Initiative, which was launched in February 2016 (28 ANR 17). NASA Aeronautics researchers will use the Maxwell to demonstrate that electric propulsion can make planes quieter, more efficient, and more environmentally friendly.



#### Electric Aircraft

#### ZUNUM PLANS TO LAUNCH 12-SEAT HYBRID-ELECTRIC PLANE IN 2022

In 2022, the start-up firm Zunum Aero – backed by Boeing and JetBlue – plans to launch a hybrid-electric aircraft that seats up to 12 passengers and has a range of 700 miles.

The launch will mark the first step in creating a regional electric air network providing frequent air service to underused regional and general aviation airports. By 2030, the firm expects to expand the network with up to 50-seat hybrid-electric aircraft with a range of 1,000 mile.

Zunum said its hybrid-electric aircraft "could light up a network of over 5,000 under-utilized airports in the U.S. alone, delivering significantly lower door-to-door times and emissions, at fares below commercial today."

The firm said it's hybrid-electric aircraft will have 80% lower emissions and will reduce community noise by 75%.



#### Airlines

#### DELTA SELECTS GTF ENGINE TO POWER 100 A321 NEO ORDER

Delta Air Lines and Airbus Group said Dec. 14 that they have selected Pratt & Whitney's Geared Turbofan™ (GTF) engine to power Delta's order of 100 A321 neo aircraft.

Aircraft deliveries are expected to begin in the first quarter of 2020.



# Air Quality & Greenhouse Gases



#### **Byproduct of Climate Change**

#### Research

# FLIGHTS WORLDWIDE FACE INCREASED RISK OF SEVERE TURBULENCE, UK STUDY PREDICTS

Flights all around the world will be encountering a lot more turbulence in the future, according to the first ever global projections of in-flight bumpiness published Oct. 4 in a UK study.

The new study, led by the University of Reading in the UK, calculated that climate change will significantly increase the amount of severe turbulence worldwide by 2050–2080.

Severe turbulence involves forces stronger than gravity, and is strong enough to throw people and luggage around an aircraft cabin.

Flights to the most popular international destinations are projected to experience the largest increases, with severe turbulence at a typical cruising altitude of 39,000 feet becoming up to two or three times as common throughout the year over the North Atlantic (+180%), Europe (+160%), North America (+110%), the North Pacific (+90%), and Asia (+60%).



#### Aircraft Engines

### UNDER CLEEN PROGRAM, P&W COMPLETES GROUND TESTING OF NEXT GEN GTF ENGINE

Pratt & Whitney recently completed more than 175 hours of ground testing of a next-generation Geared Turbofan (GTF) engine propulsor technology as part of the FAA's Continuous Lower Energy, Emissions and Noise (CLEEN) program.

CLEEN is an FAA NextGen initiative to accelerate the development of environmentally-friendly aircraft technologies.

"The success of this ground test is an important step in taking our Geared Turbofan engine technology to the next level," Alan Epstein, vice president of Technology and Environment for Pratt & Whitney, said Oct. 12.

"We are working to make sure the next generation GTF engine – already a game-changer – remains on the cutting edge of performance and sustainability."

The full-scale ground testing, conducted in West Palm Beach, FL, marks 10 years since Pratt & Whitney first successfully demonstrated the GTF, a revolutionary new engine that delivers 16 percent better fuel efficiency, 50 percent lower nitrogen oxide emissions to the regulatory standard, and a 75 percent smaller noise



#### Legislation

## BILL WOULD REQUIRE STUDY OF ULTRAFINE PARTICULATE MATTER AROUND 20 AIRPORTS

On Oct. 21, Rep. Adam Smith (D-WA) introduced legislation, supported by the Port of Seattle and local elected officials, which would require the FAA to study the concentration, distribution, source, and health impacts of ultrafine particulate emissions in the air around the 20 largest airports in the United States.

Recent studies have indicated that ultrafine particles (UFPs) from a variety of sources could have detrimental impacts on human health, Rep. Smith said in introducing his bill, the Protecting Airport Communities from Particle Emissions Act (H.R. 4087).

The bill has six co-sponsors, five of which as well as Rep. Smith, are members of the House Quiet Skies Caucus. H.R. 4087 would advance one of the seven goals of the Caucus, which is to accelerate independent research on aviation noise and air pollution.



#### Farm-to-table, Now Farm-to-flight

#### Alternative Fuels

# QANTAS SIGNS LANDMARK FARM-TO-FLIGHT DEAL; WILL MAKE 1ST BIOFUEL FLIGHT TO U.S.

Early next year, Qantas will operate the world's first biofuel flight between the United States and Australia.

The Los Angeles to Melbourne flight will be conducted in collaboration with World Fuel Services and Altair Fuels, and will see Qantas' new Dreamliner being powered by Brassica Carinata (carinata), a non-food, industrial type of mustard seed. Carinata produces high quality oil, ideal for aviation biofuel, biojet for aircraft, and biodiesel for airport vehicles.



# Drones



#### Air Taxis

#### UBER PLANS TO BEGIN TESTING AIR TAXIS IN LOS ANGELES BY 2020

Uber announced last week that it plans to begin testing its air taxi service in Los Angeles by 2020.

L.A. is the third site selected by Uber for the air version of its ride-hailing service after Dubai and Dallas/Fort Worth.

"We are bringing uberAIR to Los Angeles in no small part because Mayor [Eric] Garcetti has embraced technology and innovation, making L.A. a hub for the future," Uber CEO Jeff Holden said in a statement released Nov. 8 at Web Summit, an internet conference held in Lisbon.

"In this case, technology will allow L.A. residents to literally fly over the city's historically bad traffic, giving them time back to use in far more productive ways, whether more leisure time with friends and family or more time to work."





