

**UNITED STATES COURT OF APPEALS  
FOR THE SECOND CIRCUIT**

NATURAL RESOURCES DEFENSE	)	
COUNCIL, DEFENDERS OF WILDLIFE,	)	
FRIENDS OF PFN,	)	
	)	
Petitioners	)	Case No. 06-5267-ag
	)	
v.	)	
	)	
FEDERAL AVIATION ADMINISTRATION,	)	
MARION C. BLAKEY, ADMINISTRATOR,	)	
FEDERAL AVIATION ADMINISTRATION	)	
	)	
Respondents.	)	

**AFFIDAVIT OF DONALD R. HODGES**

DONALD R. HODGES, being duly sworn, declares as follows:

Introduction and Qualifications

1. I am a retired Delta Air Lines executive and registered professional engineer (inactive). I am an Industrial Engineering graduate of the Georgia Institute of Technology (1961). I also took postgraduate studies in Mechanical Engineering at the same institution (1965), leaving these studies when I was employed by Delta Air lines. Inc. ("Delta"). Exhibit A. is my *Curriculum Vitae*.

2. My career at Delta (1965-1993) spanned both technical and management disciplines, with assignments in aircraft and powerplant engineering, ground support equipment engineering, airport facilities engineering and construction management, airport planning, facilities management, aircraft fleet routing and scheduling of aircraft/engine maintenance. My

duties required extensive negotiation, oversight, and administration of consulting, architectural, engineering, aviation technical, and construction contracts for, as well as liason with airport Sponsors and managers regarding proposals for and airport projects to construct, enlarge, and enhance airports, airfields, passenger terminals, and airline-specific tenant facilities such as fuel storage and underground pipelines, baggage systems, cargo facilities and systems, mail systems, passenger bridges, and ground support equipment. As a facilities manager, I administered certain compliance activities related to the Occupational Safety and Health Act, the National Pollutant Discharge and Elimination System, and the Resource Conservation and Recovery Act. As a technical operations executive, I acted as liason with the Federal Aviation Administration ("FAA") on matters arising from FAA's periodic inspection of Delta's aircraft maintenance activities. My duties were largely conducted in the FAA regulatory framework guiding civil airports and airline operations, as well as various state, federal, and local regulatory regimes for environmental and construction regulation.

3. My expertise in this case concerns the utility of an airport configuration in the context of passenger demand and the related passenger aircraft deployments, and the planning and design of adequate airport facilities to support passenger aircraft while complying with FAA regulations and advisory documents controlling airport design. The FAA documents pertaining to these issues are readily available to the public and I am qualified by education and experience to interpret and apply them.

4. I have been asked to examine the FAA's Final Environmental Impact Statement ("FEIS") and the Record of Decision ("ROD"), and to explain the technical merits of alternatives I suggested during preparation of the FEIS. I have also been asked to explain why no urgency

exists for undertaking any of the alternatives, and why there is adequate time for, and no harm to be expected from, judicial review and deliberation of the FEIS/ROD at present.

Adequacy of Existing Airport Through December 31, 2015

5. One or more of the following reasons usually drive the urgency of an airport expansion project:

- (1) the airport experiences in-flight or ground delays because of inadequate capacity for operations (takeoffs and landings);
- (2) the facilities are inadequate for meeting passenger demand;
- (3) larger aircraft cannot be accommodated; or
- (4) modifications are needed for safety.

None of these reasons are expected to manifest at Panama City/Bay County Airport (PFN) before 2015. It follows that construction is not necessary before 2012 and no harm will occur from orderly judicial review now. Each potential "driving reason" as it applies to PFN is discussed below.

6. The Panama City/Bay County airport presently has less than 90,000 annual operations (takeoffs and landings) or 45 percent of its nominal 200,000 operations-per-year capacity. FAA guidance for airport capacity planning (planning for increasing total operations) provides that an airport sponsor should undertake planning for increased capacity when actual operations exceed 60 percent of nominal capacity, and that construction of more capacity should be considered when actual operations exceed 80 percent of nominal capacity. No forecasts accepted by FAA, including recent detailed forecasts through 2035, predict PFN operations at 80 percent of capacity (160,000 annual operations). Although capacity improvement is a high priority for FAA funding, this project has essentially no capacity benefits and the voluminous

studies supporting the project are almost devoid of capacity analysis.

7. Both the Sponsor and FAA have prepared several aviation forecasts for the Sponsor's existing and proposed airports. The purpose of these forecasts is to anticipate increasing passenger traffic to be served by more and/or larger airplanes in the future. When the Sponsor prepared the *Feasibility Study (Bechtel Infrastructure, 2000)*, the forecast predicted growth from 179,570 enplaned passengers in 2000 to over 217,000 in 2005. Only 189,938 passengers were actually enplaned in 2005, and traffic in 2006 declined even further to 176,640. Thus, six years of anticipated growth have failed to materialize, and the airport has less traffic than it had in 2000. Similarly, airline departures have declined from 22 per day to 13 per day, all in small 50- to 70-seat regional-airline airplanes. The *Feasibility Study* predicted only four 150-seat mainline airplanes (such as Boeing 737 or Airbus A320) per day by late in the 2000-2020 interval. The present decline in traffic implies a corresponding delay in this new service. Whatever passenger growth occurs, it has been inhibited by six years of unrealized traffic.

8. The Sponsor's desire to attract occasional larger charter aircraft has not been documented by a forecast acceptable to FAA. FAA's own independent runway length analysis in FEIS Appendix D, prepared March 2003, resulted in FAA's decision to limit federal funding eligibility to a 6800 foot runway, required only if a particular airplane (the 737-800 in the fleet of the dominant airline at PFN, but not used in PFN) provides nonstop service to New York by 2018. Appendix D also stated that regional jets would require only 6500 feet to serve New York and:

"At this time, it appears that the regional jet would be more likely considered the critical aircraft at least through 2015 in the Panama City-New York market assuming that any service at all were initiated in the market." (*Emphasis added.*)

The assumption emphasized above is very significant, because it is virtually unthinkable that PFN would get nonstop regional jet New York service by 2015, and the possibility of nonstop 737 service is even more remote. Consider Tallahassee for example: Prior to the 2005 retrenchment in airline service, Tallahassee had 589,000 enplaned passengers and had just received nonstop 50-seat regional jet service to New York (This service was terminated in 2005). PFN is forecasted to have 580,000 enplanements in year 2038.

9. In 2005, Congress passed into law the "Lautenberg Amendment" to a transportation appropriations bill. This law requires FAA, by the end of 2015, to improve all Runway Safety Areas (the areas alongside runways and beyond runway ends to mitigate damage to aircraft missing or leaving the runway) on air carrier runways by providing either 1000-foot dimensional Runway Safety Area's (RSA's) or Engineered Materials Arresting System (EMAS) arrestor bed installations. The merit of EMAS solutions at PFN is discussed further below.

10. In summary, the available documentation indicates little or no necessity for a new airport, longer runway, larger terminal, or even improved RSA's before 2015. Construction will require three years or less, indicating that 2012 is the earliest year when construction may become necessary.

#### Merit of Certain Runway Alternatives to Meet Aviation Demand and RSA Design Standards

11. I authored extensive comments on the FEIS and the ROD, and I submitted three runway alternatives that FAA accepted as meeting aviation demand and RSA design standards. Two alternatives I submitted were screened out prior to final analysis, and one was carried through FAA's screening for final analysis of alternatives. I will discuss below both the alternative that survived screening and one of the rejected alternatives that has merit warranting

further consideration.

12. Both of these alternatives employ the Engineered Materials Arresting System ("EMAS"). As stated in the FEIS, Section 3.2.8.4:

"EMAS consists of a cellular pavement-like material placed at the end of the runway that collapses around the landing gear if an aircraft overruns the end of runway pavement. The material is designed to stop aircraft traveling at a speed of 70 knots or less. The dimensions of the EMAS are established using the characteristics of the design aircraft for the runway, which in the case of PFN would likely be a B737-800 or equivalent aircraft. EMAS was developed as a means of slowing and stopping aircraft overshooting runway ends where the provision of a fully standard Runway Safety Area (RSA) is precluded because of manmade or natural conditions, such as those at the Existing Site. To date, the EMAS has been established at eight airports in the United States."

13. The EMAS description in Paragraph 12. above fails to recognize the significance of EMAS and its likely widespread deployment to comply with the Lautenberg Amendment while preserving adequate runways for needed operations. In 2006, 284 airports were reported to need the mandated changes and it is unlikely that FAA will be able to comply fully by 2015. EMAS has been recognized by FAA as a viable alternative to standard 1000-foot RSA's, and EMAS will likely be the preferred solution to meet this mandate. As of December 2006, EMAS has been installed at 14 airports and several additional EMAS installations are in progress. These installations are at a wide range of airports by any measure of size, siting, or aviation traffic, from airports with no passenger service to large and medium hub airports (JFK-New York, FLL-Ft. Lauderdale, BUR-Burbank, MDW-Midway/Chicago).

14. The two EMAS designs discussed here for PFN are similar; each is described

below in plain language and by reference to the FEIS and errata text necessary to correct editing errors in the FEIS.

15. The first EMAS design is described as "Extend Existing Runway 14-32 To 6800' Southeast, EMAS Scenario 2" ("EMAS Scenario 2"). This alternative provides a 6800 foot runway with EMAS off each end and requires relocation of 49 residences and 17 businesses. No tunneling of State Highway 390 ("SR 390") is required, as the 750 foot displacement of SR 390 is nominal. This alternative was one of six designs given final analysis.

(FAA has erroneously described this alternative in the narratives of Section 3.2.8.4a of the FEIS and Section 6.3 of the ROD. See Exhibit B. for corrected narrative.) This alternative is further described in FEIS Appendix G., Figure G-8A, attached as Exhibit C.

16. The second EMAS alternative I suggested is "Extend Existing Runway 14-32 To 6800' In Both Directions, EMAS Scenario 3" ("EMAS Scenario 3") This alternative also provides a 6800 foot runway with EMAS off each end, but the northwest-end EMAS is installed on piers over the bay, thus reducing the community impact to 22 residential and 4 business relocations, with only 250 foot displacement of SR 390, no seabed fill, 4.2 acres of piers, and no tunneling. This is the most compact design and fully meets the FAA-determined need for aviation demand and RSA design. "EMAS Scenario 3" was rejected for final analysis but should be given further consideration because it may have even better impact trade-offs than the other "final" alternatives.

(Due to a transposition error, FAA has erroneously described this alternative in the narratives of Section 3.2.8.4b of the FEIS and Section 6.3 of the ROD, and in FEIS Appendix G., Figure G-8B. Wherever the number "473" appears, the number "437" should be substituted.) This alternative is further described in FEIS Appendix G., Figure G-8B, attached as Exhibit D.

17. In rejecting "EMAS Scenario 3" after Level 2 screening, FAA cited "impacts to Florida Class II waters and sovereign submerged lands". FAA's prior discussion of such impacts (see FEIS, Section 3.8.1) is in the context of dredge and fill impacts rather than impacts from bridging or piers. "EMAS Scenario 3" is unique in using piers rather than seabed fill, and should receive further consideration as to its practicability under prevailing regulations and agency discretion.

18. If selected, "EMAS Scenario 3" would displace only 22 residences versus 49 residences displaced by "EMAS Scenario 2", and versus 106 to 221 residences displaced by conventional runway extensions. FAA, in the ROD, has essentially lumped these community impacts and equated them with entirely different natural resource impacts. Although they should be minimized, these displacements are commonplace in airport expansions and FAA has routine relocation assistance available through the Uniform Relocation Assistance and Real Properties Acquisition Acts of 1970.\* FAA, in the FEIS, readily recognized the feasibility of up to 125 relocations in the PFN setting. The reduced community impact of "EMAS Scenario 3", along with the nominal natural resources impact of the piers, might well make it the Preferred Alternative in an objective analysis.

\*(The Atlanta airport alone has acquired over 4,000 properties and acoustically treated over 10,000 properties. Over 1,300 of these properties were acquired for the 2006 fifth runway project.)

#### List of Attached Exhibits

Exhibit A - *Curriculum Vitae* of Donald R. Hodges

Exhibit B - Corrected Narrative for "Extend Runway 14-32 with EMAS Scenario 2"

Exhibit C - FEIS Appendix G, Figure G-8A: "Extend Existing Runway 14-32 To 6800'  
Southeast, EMAS Scenario 2"

Exhibit D - FEIS Appendix G, Figure G-8B: "Extend Existing Runway 14-32 To 6800' In Both  
Directions, EMAS Scenario 3"

Signed, this \_\_\_\_ day of March, 2007.

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Donald R. Hodges

Sworn to before me this \_\_\_\_\_ day of March, 2007.

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Notary Public