

## **C      References**



## C.1 References

### C.1.2 Document Footnotes

The following items represent those numbered footnotes contained in the body of Chapters 1-5 of the EA that are cited for clarification, explanation, or direct reference. They are reproduced here to aid in readability and to account for the referenced materials that are in addition to those noted throughout the body of Chapters 1-5 of the EA, the tables and their source materials, and the exhibits and their source materials.

- 1) The Metroplex initiative was formerly referred to as the Optimization of Airspace and Procedures in the Metroplex (OAPM) initiative. A Metroplex is a geographic area covering several airports, serving major metropolitan areas and a diversity of aviation stakeholders.
- 2) When this Metroplex Project began in 2012, the airport was known as *Opa-Locka Executive Airport*. The name changed in 2014 to *Miami-Opa Locka Executive Airport*. Chapters 1-5 of this EA adopt the revised name for current reference. Other references to the prior name may exist in supporting Appendices due to reference timing and context.
- 3) RTCA, Inc. is a private, not-for-profit corporation that develops consensus-based recommendations regarding communications, navigation, surveillance (CNS), and air traffic management (ATM) system issues. RTCA functions as a federal advisory committee and includes roughly 400 government, industry, and academic organizations from the United States and around the world. Members represent all facets of the aviation community, including government organizations, airlines, airspace users, airport associations, labor unions, and aviation service and equipment suppliers. More information is available at <http://www.rtca.org>.
- 4) RTCA, Inc. Executive Summary, *NextGen Mid-Term Implementation Task Force Report*, September 9, 2009.
- 5) Additional information on Performance-Based Navigation (PBN) is provided at [<https://www.faa.gov/nextgen/cip/pbn/> (Accessed May 1, 2020)].
- 6) U.S. Department of Transportation, Federal Aviation Administration, *FAA Response to Recommendations of the RTCA NextGen Mid-Term Implementation Task Force*, January 2010, p. 14.
- 7) NAVAIDs are facilities that transmit signals that define key points or routes.
- 8) U.S. Department of Transportation, Federal Aviation Administration, FAA Order JO 7400.2M *Procedures for Handling Airspace Matters* (with Change 1), February 28, 2019.
- 9) 14 Code of Federal Regulations (C.F.R.), Part 91.
- 10) Defined in FAA Order JO 7110.65Y, *Air Traffic Control*.
- 11) For a detailed explanation of separation standards, see FAA Order 7110.65Y.
- 12) A nautical mile is equivalent to 1.15 statute miles.

- 13) U.S. Department of Transportation, Federal Aviation Administration, [<https://www.faa.gov/nextgen/faqs/> (accessed February 11, 2020)].
- 14) A Flight Management System (FMS) is an onboard computer that uses inputs from various sensors (e.g., GPS and inertial navigation systems) to determine the geographic position of an aircraft and help guide it along its flight path.
- 15) Department of Transportation, Federal Aviation Administration. *Concept of Operations for NextGen Alternative Positioning, Navigation, and Timing (APNT)*, p. 78. March 19, 2012.
- 16) *Id.* (NOTE *Idem* is the Latin term meaning “the same” and is abbreviated herein as *Id.* It is used in this document to reference an immediately prior footnote).
- 17) U.S. Department of Transportation, Federal Aviation Administration. *Jacksonville Sectional Aeronautical Chart, 105<sup>th</sup> Edition*. Effective 30 Jan 2020 to 13 Aug 2020. Issued 5 December 2019.
- 18) Witham Field Airport, one of the identified Study Airports, has the FAA identifier “SUA” and although the acronyms are the same as Special Use Airspace, the context is largely separate and uniquely associated where used throughout this document.
- 19) U.S. Department of Transportation, Federal Aviation Administration, FAA Order JO 7400.10B, *Special Use Airspace*, February 14, 2020 and Department of Transportation, Federal Aviation Administration, *Airman Information Manual*, Chapter 3-Section 4. Special Use Airspace [[https://www.faa.gov/air\\_traffic/publications/atpubs/aim\\_html/chap3\\_section\\_4.html](https://www.faa.gov/air_traffic/publications/atpubs/aim_html/chap3_section_4.html) (Accessed February 22, 2020)].
- 20) Aircraft under the direct control of the military air traffic control facilities are confined to Special Use Airspace (SUA) or departure and arrival patterns near military airfields. The SUA are specific areas of airspace that are used by military aircraft and are provided air traffic control services by the military. The United States military branches are specifically charged with management of that airspace when active.
- 21) The June 1, 2018 date was chosen for the most immediate proximity to the concluding date of the annual Performance Data and Reporting System (PDARS) radar data sample used to define baseline conditions in this EA. References throughout the EA are made to the June 1, 2017-May 30, 2018 period of radar data used for defining the existing conditions in the FL Metroplex Project.
- 22) U.S. Department of Transportation, Federal Aviation Administration, *1050.1F Desk Reference*, Ch. 11, Noise and Noise-Compatible Land Use, Para 11.1.2, Projects Not Requiring a Noise Analysis., July 2015.
- 23) U.S. Department of Transportation, Federal Aviation Administration. *National Plan of Integrated Airport Systems, Appendix A: List of NPIAS Airports with 5-Year Forecast Activity and Development Estimate*. September 26, 2018. [[https://www.faa.gov/airports/planning\\_capacity/npias/reports/media/NPIAS-Report-2019-2023-Appendix-A.pdf](https://www.faa.gov/airports/planning_capacity/npias/reports/media/NPIAS-Report-2019-2023-Appendix-A.pdf) (Accessed February 12, 2020)].

- 24) Radar data obtained from the FAA's Performance Data Analysis and Reporting System (PDARS) identified 1,741,841 flight tracks to and from the Study Airports between June 1, 2017 and May 30, 2018.
- 25) U.S. Department of Transportation, Federal Aviation Administration. [[https://www.faa.gov/data\\_research/aviation\\_data\\_statistics/operational\\_metrics/](https://www.faa.gov/data_research/aviation_data_statistics/operational_metrics/) (Accessed April 29, 2020)].
- 26) Directional arrival and departure gates are explained further in this EA at: Section 1.2.4.2 *Arrival Flow*, Exhibit 2-7, and Section 2.2.3 *Improve Flexibility and Transitioning Aircraft Traffic*.
- 27) Original document named: *Optimization of Airspace and Procedures in the Metroplex (OAPM) Study Team Final Report South/Central Florida Metroplex*, referred to herein as Appendix F. *South-Central Florida Metroplex Study Team Final Report*, September 2012.
- 28) Areas where the lateral or vertical separation distances are inadequate to allow efficient use of the airspace are referred to as "confliction points" by air traffic controllers.
- 29) Appendix F, *South-Central Florida Metroplex Optimization of Airspace and Procedures Study Team Final Report*, September 2012.
- 30) *Id.*
- 31) *Id.*
- 32) A Human-in-the-Loop (HITL) simulation is conducted to evaluate the feasibility of Proposed Final Designs (PFDs). Prior to HITL simulation activities, industry partners used flight simulators to evaluate the PFDs. The HITL simulation creates an interactive environment similar to the operational areas of terminal and en route facilities for controllers to evaluate interactions among procedures and assess their workability.
- 33) I-Sim is an ATAC/Kongsberg simulation program that provides fast-time "desktop" evaluation of procedures and was also used by the Design Team to assess South-Central Florida Metroplex proposed procedures.
- 34) U.S. Department of Transportation, Federal Aviation Administration, FAA Order JO 1000.37B, *Air Traffic Organization Safety Management System*, October 31, 2018.
- 35) U.S. Department of Transportation, Federal Aviation Administration, FAA Order 8040.4B, *Safety Risk Management Policy*, May 2, 2017.
- 36) More details on the D&I Team Community Engagement process can be found in Appendix A.
- 37) U.S. Department of Transportation, Federal Aviation Administration. [[https://www.faa.gov/about/office\\_org/headquarters\\_offices/ato/service\\_units/te\\_chops/navservices/transition\\_programs/vormon/media/VOR%20Target%20Discontinuation%20List%2020190722.xlsx](https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/te_chops/navservices/transition_programs/vormon/media/VOR%20Target%20Discontinuation%20List%2020190722.xlsx) (Accessed April 29, 2020)].
- 38) "T-routes" are terminal airspace transition aircraft routes that use RNAV specifications and enable aircraft with RNAV capability to operate up to 18,000 feet MSL.

- [[https://www.faa.gov/air\\_traffic/publications/atpubs/aip\\_html/part2\\_enr\\_section\\_3.3.html](https://www.faa.gov/air_traffic/publications/atpubs/aip_html/part2_enr_section_3.3.html) (Accessed May 1, 2020)].
- 39) U.S. Department of Transportation, Federal Aviation Administration. *Order 1050.1F Desk Reference* Appendix B, B-1.3 *Affected Environment*. Also see this EA, Section 4.1.1 *Department of Transportation Act, Section 4(f)* for a more detailed discussion of the type of properties related to 4(f) resources.
- 40) U.S. Department of Transportation, Federal Aviation Administration, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Appendix B. *Federal Aviation Administration Requirements for Assessing Impacts Related to Noise and Noise-Compatible Land Use and Section 4(f) of the Department of Transportation Act (49 U.S.C. § 303)*, Para. B-1.3, *Affected Environment*. July 16, 2015.
- 41) U.S. Department of Transportation, Federal Aviation Administration, *1050.1F Desk Reference*, Ch. 11, *Noise and Noise-Compatible Land Use*, Para 11.2, *Affected Environment.*, July 2015.
- 42) U.S. Department of Transportation, Federal Aviation Administration, *Memorandum Regarding Altitude Cut-Off for National Airspace Redesign (NAR) Environmental Analyses*, September 15, 2003.
- 43) U.S. Department of Transportation, Federal Aviation Administration, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Appendix B. *Federal Aviation Administration Requirements for Assessing Impacts Related to Noise and Noise-Compatible Land Use*, Para. B-1.3, *Affected Environment*. July 16, 2015.
- 44) The Wekiva River has 31.4 miles designated “Wild”; 2.1 miles designated “Scenic”; 8.1 miles designated “Recreational”; and a total length of 41.6 miles. The River is located in the north central portion of the General Study Area and is generally 9 miles west of SFB  
[<https://nps.maps.arcgis.com/apps/MapJournal/index.html?appid=ba6debd907c7431ea765071e9502d5ac#> (Accessed March 9, 2020)].
- 45) The Loxahatchee River has 1.3 miles designated “Wild, 5.8 miles designated “Scenic”; 0.5 miles designated Recreational; and a total length of 7.6 miles. The River is located in the southeast portion of the General Study Area and is generally 26 miles north of PBI  
[<https://nps.maps.arcgis.com/apps/MapJournal/index.html?appid=ba6debd907c7431ea765071e9502d5ac#> (Accessed March 9, 2020)].
- 46) U.S. Fish and Wildlife Service, National Wild and Scenic Rivers System  
[<https://www.rivers.gov/florida.php> (Accessed March 9, 2020)].
- 47) Wayson, Roger, and Fleming, Gregg, “Consideration of Air Quality Impacts by Airplane Operations at or Above 3000 feet AGL,” Volpe National Transportations Systems Center and FAA Office of Environment & Energy, FAA-AEE-00-01-DTS-34, September 2000.  
[[http://www.faa.gov/regulations\\_policies/policy\\_guidance/envir\\_policy/](http://www.faa.gov/regulations_policies/policy_guidance/envir_policy/) (Accessed March 2020)].
- 48) 40 C.F.R. § 93.150(c)(2) (xxii).

- 49) 72 Fed. Reg. 6641 (February 12, 2007).
- 50) U.S. Department of Transportation, Federal Aviation Administration, *Aviation Emissions and Air Quality Handbook Version 3, Update 1*, January 2015 [[https://www.faa.gov/regulations\\_policies/policy\\_guidance/envir\\_policy/airquality\\_handbook/](https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook/)] (Accessed March 2020).
- 51) Report on ‘*Consideration of Air Quality Impacts by Airplane Operations At or Above 3,000 feet AGL*, FAA–AEE–00–01, September 2000, p. 5. [[https://www.faa.gov/regulations\\_policies/policy\\_guidance/envir\\_policy/media/catex.pdf](https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/media/catex.pdf)] (Accessed March 2020)].
- 52) U.S. Environmental Protection Agency [<https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-aircraft>] (Accessed April 2019)].
- 53) Title 36 CFR Part 800.16(l)(1)
- 54) Title 36 CFR Part 800.16(d).
- 55) For fuel burn purposes, jet fuel (“Jet-A-1,” available only in the US) is calculated at 6.6671 pounds per gallon at 59 degrees Fahrenheit. Approximately 8,301,157 pounds of jet fuel are burned by IFR aircraft arriving and departing the Study Airports on an annual average day in the 2021 No Action and 8,339,255 pounds of jet fuel in the 2021 Proposed Action. The 2026 No Action amount is approximately 9,249,529 pounds of jet fuel and the 2026 Proposed Action is 9,289,569 pounds of jet fuel.
- 56) Appendix H *South-Central Florida Metroplex Flight Schedules Technical Report*, May 2020.
- 57) The Decennial Census data is the most accurate data source for population data for general analysis. It serves as the benchmark for interim year projections and estimates until the next Decennial Census data is released. Estimated and/or more recent Census data may be used should the analysis necessitate a geographically focused investigation involving census data.
- 58) Appendix I: *South-Central Florida Metroplex Noise Technical Report*, May 2020.
- 59) All GIS work was conducted using ESRI ArcGIS version 10.8, Manifold Release 9.0, and prior release versions.
- 60) FAA Order 1050.1F Desk Reference, *Noise and Noise-Compatible Land Use*, App. B-1.3, July 2015
- 61) FAA Order 1050.1F Desk Reference, *Noise and Noise-Compatible Land Use*, Sec. 11.1.3, July 2015.
- 62) U.S. Department of Transportation, Federal Aviation Administration, *Terminal Area Forecast*, 2019 [<https://aspm.faa.gov/main/taf.asp>; (Accessed October 2019)].
- 63) Federal Presumed to Conform Actions under General Conformity, 72 Fed. Reg. 41565 (July 30, 2007).
- 64) FAA Order 1050.1F Desk Reference, Section 1, July 2015.
- 65) 40 C.F.R. § 93.153(b).



- 66) FAA Order 1050.1F Desk Reference, Section 1, July 2015.
- 67) *Id.* at 93.153(f).
- 68) Federal Presumed to Conform Actions under General Conformity, 72 Fed. Reg. 41565 (July 30, 2007).
- 69) *Id.*
- 70) *Id.*
- 71) U.S. Department of Transportation, Federal Aviation Administration, *FAA Wildlife Strike Database* [<https://wildlife.faa.gov/search> (Accessed March 2020)].
- 72) U.S. Department of Transportation, Federal Aviation Administration, and U.S. Department of Agriculture Wildlife Services. *Wildlife Strikes to Civil Aircraft in the United States 1990-2018*. July 2019.
- 73) U.S. Department of Transportation, Federal Aviation Administration, *FAA Wildlife Strike Database* [<https://wildlife.faa.gov/search> (Accessed March 2020)].
- 74) U.S. Department of Transportation, Federal Aviation Administration, and U.S. Department of Agriculture Wildlife Services. *Wildlife Strikes to Civil Aircraft in the United States 1990-2018*. July 2019.
- 75) *Id.*
- 76) *Id.*
- 77) U.S. Environmental Protection Agency (EPA), *Fast Facts 1990-2017 National Level U.S. Greenhouse Gas Inventory*. April 2019. 5,742.6 million Metric Tons of CO<sub>2</sub>e are reported for all sources and sinks.
- 78) 16 U.S.C. §§ 460l-4, et seq.
- 79) “Off-Tribal” lands may include Protected Tribal Resources or Native American sacred sites. Areas related to the Brighton, Miccosukee, Immokalee, Big Cypress, Hollywood (Dania), Seminole, Tampa, and Fort Pierce areas are areas identified by the Bureau of Indian Affairs [<https://biamaps.doi.gov/indianlands/> (Accessed March 10, 2020)].
- 80) 36 CFR 800.16(d)
- 81) 40 C.F.R § 1508.7