C References

THIS PAGE INTENTIONALLY LEFT BLANK

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 Draft 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 Draft EA, the tables and their source materials, and the exhibits and their source materials.

1) For the purposes of this document, “heliport” is intended to encompass all non-airport (e.g. those not having a fixed-wing aircraft runway) helicopter-only facilities that may include elevated (e.g. rooftop or other raised pads), ground level, and other prepared and FAA certified surfaces for helicopter landing and takeoff.
2) RTCA, Inc. (RTCA is not an acronym, simply the name for the organization) 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.
3) RTCA, https://www.rtca.org/tactical-operations-committee/, (accessed December 4, 2022).
4) RTCA Tactical Operations Committee, *Recommendations for the Performance Based Navigation Route System*.
5) A type of performance-based navigation (PBN) that allows an aircraft to fly a specific path between two 3-dimensionally defined points in space. RNP differs from RNAV systems in that there is a requirement for on-board performance monitoring and alerting specification within route defined tolerances (e.g. RNP 0.3 means laterally adhering to within 0.3NM of a satellite-defined centerline).
6) U.S Congressional Act, *Transportation, and Housing and Urban Development, and Related Agencies Appropriations Bill, 2019*, June 7, 2018, p. 25.
7) ZK routes are a special operator approved use only designation of the public use “TK” helicopter IFR routes established by 76 FR 37261 June 27, 2011. A TK route can be used by any qualified helicopter operator. A ZK route can only be used by a FAA specified and qualified helicopter operator.
8) U.S Congressional Act, *Transportation, and Housing and Urban Development, and Related Agencies Appropriations Bill, 2019*, June 7, 2018, p. 25.
9) U.S. Department of Transportation, Federal Aviation Administration, Fact Sheet, “NextGen Goal: Performance-Based Navigation,” April 24, 2009

[http://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=8768 (accessed April 11, 2012)].

10) For the purposes of this analysis, “aircraft” encompasses all FAA certificated flying craft, including helicopters. Where contextually appropriate and/or specific, the analysis uses “helicopter” as a reference to those FAA certificated flying craft capable of vertical flight and having other unique identifying characteristics common to helicopters.

11) 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.

12) NAVAIDs are facilities that transmit signals defining key points or routes.

13) U.S. Department of Transportation, Federal Aviation Administration, FAA Order JO 7400.2N, Change 3, *Procedures for Handling Airspace Matters*, Section 32-3-5(b) “National Airspace Redesign,” June 17, 2021.

14) 14 Code of Federal Regulations (C.F.R.), Part 91.

15) RTCA, Tactical Operations Committee, Meeting Summary, August 22, 2017.

16) Defined in FAA Order JO 7110.65Y, *Air Traffic Control*.

17) Skid-equipped helicopters air (hover) taxi to move as needed. Wheeled helicopters can taxi along the ground surface like fixed wing aircraft to move as needed and may also air taxi.

18) “Fixed Wing Aircraft” refers to those aircraft with wings that are attached (or affixed) to the aircraft fuselage as a primary source of lift as opposed to a “rotary wing aircraft” which is synonymous with “helicopter” whose rotating blades provide lift.

19) A waypoint is a predetermined geographical position used for route/instrument approach definition, progress reports, published VFR routes, visual reporting points or points for transitioning and/or circumnavigating controlled and/or special use airspace that is defined relative to a VORTAC station or in terms of latitude/longitude coordinates.

20) Area Control Centers (ACCs) provide similar air traffic services as the FAA ARTCC facilities. NavCanada is the not-for-profit Canadian air navigation service provider covering designated Canadian airspace.

21) U.S. Department of Transportation, Federal Aviation Administration, FAA Order JO 7400.10D, *Special Use Airspace*, February 16, 2022.

22) Aircraft under the direct control of the military air traffic control facilities are confined to Special Use Airspace or departure and arrival patterns near military airfields. These SUAs 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.

23) U.S. Department of Transportation, Federal Aviation Administration, Order 1050.1F *Environmental Impacts: Policies and Procedures*, Appendix B, Section B-1, June 16, 2015.

24) 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.

25) Victor Airways are low altitude airways that utilize VOR navigational aids. T Routes are low altitude RNAV routes that utilize GPS waypoints.

26) ILHS-HAA Route Design Team Meeting Notes, 2020-2022. Conversation with Design Team staff February 2023.

27) ILHS-HAA Route Design Team Meeting Notes, 2020-2022. Conversation with Design Team staff February 2023.

28) ILHS-HAA Route Design Team Meeting Notes, 2020-2022. Conversation with Design Team staff February 2023.

29) 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.

30) 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.

31) U.S. Department of Transportation, Federal Aviation Administration, *Memorandum Regarding Altitude Cut-Off for National Airspace Redesign (NAR) Environmental Analyses*, September 15, 2003.

32) https://fwsprimary.wim.usgs.gov/CBRSMapper-v2/ Accessed December 28, 2022.

33) 92.5 miles of the Allagash River are designated Wild, and 0.0 miles are designated Scenic (https://www.rivers.gov/maine.php, accessed January 2023).

34) On November 12, 1996, 11.5 miles were designated Recreational and on May 2, 2000, an additional 12.0 miles were designated Recreational for a total of 23.5 miles designated Recreational (https://rivers.gov/rivers/Lamprey.php, accessed January 2023).

35) Appendix F, ILHS-HAA Project Noise Technical Report.

36) Appendix F, ILHS-HAA Project Noise Technical Report.

37) 4,079 points were excluded because they were over water in a region that did not have applicable AEDT 3d terrain tiles, thus no noise values would be obtained for those points.

38) Title 36 CFR Part 800.16(l)(1)

39) Title 36 CFR 800.16(d).

40) All GIS work was conducted using ESRI ArcGIS version 10.3 and Manifold System 8.0.30.

41) For fuel burn purposes, jet fuel used by the air ambulance AW-109 helicopters is calculated at 6.7 pounds per gallon. Approximately 1,379.33 lbs. of fuel are burned by IFR helicopters arriving and departing the Study Airports/Heliports on

an annual average day.
42) 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/)
43) 40 C.F.R. § 93.150(c)(2) (xxii).
44) 72 Fed. Reg. 6641 (February 12, 2007).
45) U.S. Department of Transportation, Federal Aviation Administration, Air Quality Procedures For Civilian Airports & Air Force Bases, April 1997. (http://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook/media/Handbook.PDF).
46) 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.
47) U.S. Environmental Protection Agency. https://www.epa.gov/regulations-emissions-vehicles-and-engines/control-air-pollution-airplanes-and-airplane-engines-ghg, Accessed March 2023 to obtain *EPA Final Airplane Greenhouse Gas Emission Standards Fact Sheet - Resource Information(PDF), p2, December 2020, EPA-420-F-20-057).*
48) U.S. Department of Transportation, Federal Aviation Administration, *Guidance on Using the Aviation Environmental Design Tool (AEDT) to Conduct Environmental Modeling for FAA Actions Subject to NEPA, Section 1.1.3 Fuel burn and greenhouse gas emissions*, https://aedt.faa.gov/Documents/guidance_aedt_nepa.pdf, Accessed January 2023.
49) Executive Office of the President. Executive Order 13990 of January 20, 2021 *Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis*, 86FR7037.
50) Council on Environmental Quality, *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions*. 86FR10252, February 19, 2021.
51) FAA 1050.1F *Desk Reference*, *Noise and Noise-Compatible Land Use*, Sec. 11.1.3, February 2020.
52) Various conversations with and documents from FAA and LifeFlight of Maine personnel 2021-2023.
53) 16 U.S.C. §§ 460l-4, et seq.
54) Title 36 CFR 800.16(d).
55) U.S. Department of Transportation, Federal Aviation Administration, *Wildlife Strike Database* (https://wildlife.faa.gov/search [Accessed March 2023]).
56) U.S. Department of Transportation, Federal Aviation Administration. *Wildlife Strikes to Civil Aircraft in the United States 1990-2021*, July 2021 (https://www.faa.gov/airports/airport_safety/wildlife/wildlife_strikes_civil_aircraft_united_states_1990_2021 [Accessed March 2023]).

57) U.S. Department of Transportation, Federal Aviation Administration. *Wildlife Strikes to Civil Aircraft in the United States 1990-2021*, July 2021 (https://www.faa.gov/airports/airport_safety/wildlife/wildlife_strikes_civil_aircraft_united_states_1990_2021 [Accessed March 2023]) at pp. 34.

58) U.S. Department of Transportation, Federal Aviation Administration. *Wildlife Strikes to Civil Aircraft in the United States 1990-2021*, July 2021 (https://www.faa.gov/airports/airport_safety/wildlife/wildlife_strikes_civil_aircraft_united_states_1990_2021 [Accessed March 2023]) at pp vi.

59) The AW-109 is the primary Air Ambulance Helicopter used in IFR in the GSA. Originally Agusta, then AgustaWestland, the manufacturer has been purchased by Leonardo but maintains the AW-109 designation in the FAA database. Operators of the AW-109 are not always discerned, thus the conservative assumption that all AW-109 operators are Air Ambulance helicopters.

60) U.S. Department of Transportation, Federal Aviation Administration, Wildlife Strike Database (https://wildlife.faa.gov/search [Accessed March 2023]).

61) FAA 1050.1F *Desk Reference*, Section 1, February 2020.

62) 40 C.F.R. § 93.153(b).

63) FAA 1050.1F *Desk Reference*, Section 1, February 2020.

64) 40 C.F.R. § 93.153(f).

65) Federal Presumed to Conform Actions under General Conformity, 72 Fed. Reg. 41565 (July 30, 2007).

66) Federal Presumed to Conform Actions under General Conformity, 72 Fed. Reg. 41565 (July 30, 2007).

67) Federal Presumed to Conform Actions under General Conformity, 72 Fed. Reg. 41565 (July 30, 2007).

68) U.S. Environmental Protection Agency. *Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2021*, EPA430-D-23-001. Table ES-2. February 2023. https://www.epa.gov/system/files/documents/2023-02/US-GHG-Inventory-2023-Main-Text.pdf (accessed March 2023).

69) 40 C.F.R § 1508.7.