D List of Acronyms and Glossary

Appendix	D –	l ist of	Acronym	s and	Glossary
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## **List of Acronyms and Glossary**

**Table D-1** provides a list of acronyms used throughout the Draft Environmental Assessment (EA).

Table D-2 identifies and defines technical terms used in the Draft EA.

Table D-1 List of Acronyms

List of Acronyms
Definition
Boston Medical Center Hospital Heliport
PVH Heliport
AR Gould Hospital Heliport
Maine General Medical Center Waterville Heliport
Bar Harbor Heliport
Maine Coast Memorial Heliport
Portsmouth Regional Hospital Heliport
Lincoln Health Miles Campus
Calais Regional Heliport
Stephens Memorial Hospital Heliport
Newton Field Airport
Southern Maine Health Care SMMC Helipad
Maine Medical Center Heliport
Houlton Regional Hospital Heliport
Waldo County General Hospital Heliport
Boston TRACON
Average Annual Day
Area Control Centers
American Community Survey
Aviation Environmental Design Tool
Federal Aviation Administration's Office of Environment and Energy
Above Ground Level
Area of Potential Effect
Air Route Traffic Control Center
Air Traffic Control
Airport Traffic Control Tower
Air Traffic Management
Air Traffic Organization
Biological Assessment
Bangor International Airport ATCT
Clean Air Act
Clean Air Act Amendments

Acronym	Definition
CBRS	Coastal Barrier Resource System
CEQ	Council on Environment Quality
CFR	Code of Federal Regulations
CH <sub>4</sub>	Methane
CNS	Communications, Navigation, Surveillance
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
CONUS	Contiguous United States
CZMP	Coastal Zone Management Plan
dB	Decibel
DNL	Day-Night Average Sound Level
DOT	Department of Transportation
DP	Departure Procedure
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act of 1973
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FEMA	Federal Emergency Management Agency
FL	Flight Level
FMS	Flight Management System
FR	Federal Register
FWS	Fish and Wildlife Service
GA	General Aviation
GHG	Greenhouse Gas
GIS	Geographic Information System
GPS	Global Positioning System
GSA	General Study Area
HAA	Helicopter Air Ambulance
HFC	Hydrofluorocarbon
IFP	Instrument Flight Procedures
IFR	Instrument Flight Rules
ILHS	Instrument Flight Procedures Low Level Helicopter System
JO	Joint Order
K0B1	Bethel Regional Airport
K8B0	Stephen A Bean Municipal Airport

Acronym	Definition
KBGR	Bangor International Airport
KBOS	Boston Logan International Airport
KPWM	Portland International Jetport
KSFM	Sanford Seacoast Regional Airport
LOM	LifeFlight of Maine
LWCA	Land and Water Conservation Act
LWCF	Land and Water Conservation Fund Act of 1965
MBTA	Migratory Bird Treaty Act of 1918
ME	Maine
ME02	Eastern Maine Medical Center Heliport
ME15	Blue Hill Memorial Hospital Heliport
ME23	Franklin Memorial Hospital Heliport
ME37	Bridgton Hospital Heliport
ME43	Northern Light Mayo Hospital Heliport
ME48	Northern Maine Medical Center Heliport
ME49	C A Dean Memorial Hospital Heliport
ME5	Banks Airport
ME50	Millinocket Regional Heliport
ME52	Down East Community Hospital Heliport
ME55	Vinalhaven Airport2
ME63	Rumford Community Hospital Heliport
ME76	Penobscot Bay Medical Center Heliport
ME77	Cranberry Isles Heliport
ME78	Monhegan Island Heliport
ME87	Southern Maine Health Care/Sanford Heliport
ME94	York Hospital Heliport
ME95	CMMC Air Ambulance Landing Site Heliport
MOA	Military Operating Area
MON	Minimum Operational Network
MSL	Mean Sea Level
MT	Metric Tons
NAAQS	National Ambient Air Quality Standards
NAR	National Airspace Redesign
NAS	National Airspace System
NAVAID	Navigational Aid
NEPA	National Environmental Policy Act of 1969
NextGen	Next Generation Air Transportation System
NFDC	National Flight Data Center

Acronym	Definition
NH	New hampshire
NH27	Huggins Hospital Heliport
NH56	Wentworth Douglass Hospital Heliport
NHPA	National Historic Preservation Act of 1966
NLCD	National Land Cover Database
NM	Nautical Mile
NMFS	National Marine Fisheries Service
$N_2O$	Nitrous Oxide
NOAA	National Oceanic and Atmospheric Administration
NPIAS	National Plan of Integrated Airport Systems
NRHP	National Register of Historic Places
$O_3$	Ozone
Р	Partial
Pb	Lead
PBN	Performance-Based Navigation
PDARS	Performance Data Analysis and Reporting System
PFC	Perfluorocarbon
PM	Particulate Matter
$PM_{10}$	Particulate Matter of 10 micrometers or less
PM <sub>2.5</sub>	Particulate Matter of 2.5 micrometers or less
PTC	Presumed to Conform
PWM	Portland International Jetport ATCT
RNAV	Area Navigation
RNP	Required Navigation Performance
SF <sub>6</sub>	Sulfur Hexafluoride
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
$SO_2$	Sulfur Dioxide
SUA	Special Use Airspace
TARGETS	Terminal Area Route Generation, Evaluation, Traffic, and Simulation
TERPS	Terminal Instrument Procedures
THPO	Tribal Historic Preservation Officer
TRACON	Terminal Radar Approach Control Facilities
US	United States
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey

Acronym	Definition
VFR	Visual Flight Rules
VHF	Very High Frequency
VOR	VHF Omnidirectional Range
VORMON	VHF OmniDirectional Range Minimum Operating Network
VORTAC	VHF Omnidirectional Range/Tactical Aircraft Control
ZBW	Boston Center (or ARTCC)

## Table D-2 Glossary

Term	Definition
Acoustics	The science of sound, including the generation, transmission, and effects of sound waves, both audible and inaudible.
Air Pollutant	Any substance in air that could, in high enough concentration, harm man, other animals, vegetation, or material. Pollutants may include almost any natural or artificial composition of airborne matter capable of being airborne. They may be in gases, particulates, or in combinations thereof. Generally, they fall into two main groups: (1) those emitted directly from identifiable sources and (2) those produced in the air by interaction between two or more primary pollutants or by reaction with normal atmospheric constituents, with or without photo-activation.
Air Route Traffic Control Center (ARTCC, Center)	A Federal Aviation Administration (FAA) facility established to provide air traffic control service to aircraft operating on an Instrument Flight Rules (IFR) flight plan within controlled airspace and principally during the en route phase of flight. When equipment capabilities and controller workload permit, certain advisory/assistance services may be provided to Visual Flight Rules (VFR).
Air Traffic Control (ATC)	A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.
Aircraft Surveillance Systems	Systems set up to enable the Air Traffic Control (ATC) system to know the location of an aircraft and where it is heading. Aircraft positions are displayed for controllers as they actively monitor the traffic to ensure that aircraft do not violate separation criteria.
Airport Traffic Control Tower (ATCT)	A facility that uses air/ground communications, visual signaling, and other devices to provide ATC services to aircraft operating in the vicinity of an airport. Authorizes aircraft to land or take off at the airport controlled by the tower regardless of flight plan or weather conditions.
Airspace	Navigable area used by aircraft for purposes of flight.
Airway	An area of Class E airspace established in the form of a corridor, the centerline of which is defined by radio navigational aids. The network of airways serving aircraft operations up to but not including 18,000 feet Mean Sea Level (MSL) are referred to as "Victor" airways. The network of airways serving aircraft operations at or above 18,000 feet MSL are referred to as "Jet" airways.

Term	Definition
Altitude	Height above a reference point, usually expressed in feet. Reference points are typically sea level, the ground, or airfield elevation in which case MSL, AGL, or AFE further describes the altitude, respectively.
Ambient Noise Level	The level of noise that is all-encompassing within a given environment for which a single source cannot be determined. It is usually a composite of sounds from many and varied sources near to and far from the receiver.
Area Navigation (RNAV)	A method of air navigation that permits aircraft to operate on any desired course within a network of station-referenced navigation aids (NAVAIDs), rather than navigating directly to and from the NAVAIDs.
Arithmetic Averaged Sound Pressure Level	The arithmetic sum of a series of sound pressure levels divided by the number of levels included in the sum.
Arrival Stream	A sequence of aircraft that are following similar arrival procedures. This can conserve flight distance, reduce congestion, and allow instrument flight plans into airports with limited NAVAIDs.
Attainment Area	An area in which the Federal or state standards for ambient air quality are being achieved.
A-Weighted Sound Level	A quantity, in decibels, read from a standard sound-level meter with A-weighting circuitry. The A-weighting scale discriminates against the lower frequencies below 1000 hertz according to a relationship approximating the auditory sensitivity of the human ear. The A-weighted sound level is approximately related to the relative "noisiness" or "annoyance" of many common sounds.
Aviation Environmental Design Tool	A software system that models aircraft performance in space and time to estimate fuel consumption, emissions, noise, and air quality consequences
Aviation System Performance Metrics Based Aircraft	A broad collection of systems for reporting on the performance of approximately 29 airlines serving the 77 ASPM airports  Active aircraft that are stationed at an airport on a permanent basis.
Block	Census blocks are small areas bounded on all sides by visible features such as streets, roads, streams, and railroad tracks, and by invisible boundaries such as city, town, township, and county limits; property lines; and short, imaginary extensions of streets and roads. Blocks are numbered uniquely within each census tract or block numbering area (BNA). A three-digit number identifies a block, sometimes with a single alphabetical suffix. The U.S. Bureau of Census designates census blocks.
Centroid	A point representing the geographic center of a US Bureau of Census census block.
Climb	The act or instance of increasing altitude.
Community Noise Equivalent Level	The average A-weighted sound level as measured in decibels during a 24-hour period. A 10-decibel weighting is applied to noise events occurring at night, and a 4.8-decibel weighting is applied to those occurring during the evening hours.

Term	Definition
Conformity	A determination that a project conforms with a State Implementation Plan (SIP) whose purpose is to eliminate or reduce the severity and number of violations of the National Ambient Air Quality Standards and does not impede the scheduled attainment of such standards.
Constructive Use	When the proximity impacts (e.g., noise) of a proposed project adjacent to or near a Section 4(f) property result in substantial impairment of the property.
Controlled Airspace	Airspace of defined dimensions within which air traffic control service is provided to IFR flights and to VFR flights in accordance with the airspace classification.
Criteria Pollutants	The 1970 amendments to the Clean Air Act required the EPA to set National Ambient Air Quality Standards for certain pollutants known to be hazardous to human health. The EPA has identified and set standards to protect human health and welfare for six pollutants: ozone, carbon monoxide, total suspended particulates, sulfur dioxide, lead, and nitrogen oxide. The term "criteria pollutants" derives from the requirement that the EPA must describe the characteristics and potential health and welfare effects of these pollutants. It is on the basis of these criteria that standards are set or revised.
Day-Night Average Sound Level (DNL)	A measure of the annual average noise environment over a 24-hour day. It is the 24-hour, logarithmic- (or energy-) average, A-weighted sound pressure level with a 10-decibel penalty applied to the nighttime event levels that occur between 10 p.m. and 7 a.m.
De minimis Levels	De minimis is defined as lacking significance or importance, or so minor as to be disregarded. De minimis levels are minimum air pollutant levels and vary according to the type of pollutant and severity of the non-attainment area. Unless state minimums are lower than Federal, these levels are consistent for all conformity determinations. The calculation of total project emissions is made and compared to these de minimis cutoffs. If the emissions for a pollutant are above de minimis, the project requires a conformity determination. All emissions from the project must be analyzed and found to conform, not only those above the de minimis levels.
Decibel (dB)	Commonly used to define the level produced by a sound source. The decibel scale is logarithmic (i.e., when the scale goes up by ten, the perceived level is twice as loud).
Departure Descent	The act of an aircraft taking off from an airport. The process of decreasing altitude.
Distance Measuring Equipment (DME)	Equipment installed on an aircraft that provides the distance of the aircraft in relation to a navigation aid as well as ground speed. Distance Measuring Equipment (DME) transmitters are often co-located with a Very High Frequency Omni-directional Radio Range Station (VOR), known in this case as a VOR-DME.
Emissions	Pollution discharged into the atmosphere from stationary sources such as smokestacks, surface areas of commercial or industrial facilities, or residential chimneys and from mobile sources such as motor vehicles, locomotives, or aircraft exhausts.
En Route Airspace Energy-Averaged Sound Pressure Level	A general term to describe the airspace controlled by an ARTCC.  The logarithmic sum of the sound power of a series of sound pressure levels divided by the number of levels included in the sum.

Term	Definition
Enplanement	The total number of revenue passengers boarding aircraft, including originating, stopover, and transfer passengers, in scheduled and non-scheduled services.
Environmental Assessment (EA)	An EA is a concise document that assesses the environmental impacts of a proposed Federal Action. It discusses the need for, and environmental impacts of, the proposed action and alternatives. An environmental assessment should provide sufficient evidence and analysis for a Federal determination whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).
Environmental Noise	Unwanted sound from various outdoor sources that produce noise (e.g., aircraft, cars, trucks, buses, railways, industrial plants, construction activities).
Federal Aviation Administration (FAA)	The FAA is the agency of the United States Department of Transportation with primary responsibility for civil aviation. Among its major functions are the regulation of civil aviation to promote safety, fulfill the requirements of national defense and development, and operate a common system of air traffic control and navigation for both civil and military aircraft.
Fix	A geographical position determined by reference to one or more radio NAVAIDS, celestial plotting, or by some other means such as satellite navigation.
Flight Data Information	Specific information used by ATC for an individual flight, including information such as aircraft identification, destination, type, route, and altitude.
Flight Track	The path an aircraft describes over the ground.
Flow	Describes the direction in which aircraft take off and land at a particular airport. Aircraft generally take off and land into the wind. However, other factors (e.g., nearby airports, construction) can also affect flow.
Flyways	Migration routes for avian species.
Frequency (acoustic)	The number of oscillations per second completed by a vibrating object.
General Aviation (GA) Global Positioning System (GPS)	All civil aviation except scheduled passenger, air taxi, and cargo airlines. A satellite-based radio positioning and navigation system operated by the U.S. Department of Defense. The system provides highly accurate position and velocity information and precise time on a continuous global basis to an unlimited number of properly equipped users.
Hand-Off	An action taken to transfer the radar identification of an aircraft from one controller to another.
Heading	A compass bearing indicating the direction of travel.
Helicopter	A type of aircraft that derives both lift and propulsion from one or more sets of horizontally revolving overhead rotors. It is capable of moving vertically and horizontally, the direction of motion being controlled by the pitch of the rotor blades.
Helipad	A small, designated area, usually with a prepared surface, on a heliport, airport, landing/takeoff area, apron/ramp, or movement area used for takeoff, landing, or parking of helicopters. A helipad on an airport does not constitute a heliport.
Heliport	An area of land, water, or structure used or intended to be used for helicopter landings and takeoffs and includes associated buildings and facilities.
Household	A household includes all the persons who occupy a housing unit. The occupants may be a single family, one person living alone, two or more

Term	Definition
	families living together, or any other group of related or unrelated persons who share living arrangements.
Housing Unit	A housing unit is a house, apartment, a mobile home or trailer, a group of rooms or a single room occupied as separate living quarters or, if vacant, intended for occupancy as separate living quarters.
Hydrocarbons (HC)	Chemical compounds that consist entirely of carbon and hydrogen.
Instrument Flight Procedure	A series of predetermined maneuvers for the orderly transfer of a helicopter under instrument flight conditions from the beginning of the initial approach to a land or to a point from which a landing may be made visually. The same may be provided in reverse, departure procedure published for pilot use, in graphic or textual format, that provides obstruction clearance from the terminal area to the appropriate en route structure. It is typically a non-public procedure approved for a specific authorized operator. The flight procedure is approved for a specific airport/heliport by the FAA.
Instrument Flight Rules (IFR)	Rules governing the procedures for conducting instrument flight in aircraft. Also a term used by pilots and controllers to indicate type of flight plan.
Instrument Meteorological Conditions (IMC)	Weather conditions expressed in terms of visibility, distance from clouds, and cloud ceilings during which all aircraft are required to operate using IFR.
In-Trail Spacing	The distance between two aircraft on an identical route; one aircraft is following another.
Invasive Species	Invasive species are organisms (usually transported by humans) that successfully establish themselves in and then overcome otherwise intact, pre-existing native ecosystems.
Knots	Speed measured in nautical miles per hour.
Level-off	The process by which an aircraft which is climbing or descending transitions to a constant altitude. This can be done once the aircraft reaches its cruise altitude in the en route environment or as a series of steps taken as the aircraft transition to/from the en route environment to guarantee adequate separation from other aircraft.
Loudness	The attribute of an auditory sensation in terms of which sounds may be ordered on a scale extending from soft to loud. Loudness depends primarily upon the sound pressure of the source, but it also depends upon the frequency and waveform of the source.
Low-Income	A person whose median household income is at or below the Department of Health and Human Services poverty guidelines.
Mean Sea Level (MSL)	The height of the surface of the sea for all stages of the tide, used as a reference for elevations or altitude of aircraft flight. Also called sea level datum.
National Airspace System (NAS)	The common network of air navigation facilities, equipment, and services; airports and landing areas; aeronautical charts, information, and services; rules, regulations and procedures; technical information; manpower; and material.
National Ambient Air Quality Standards (NAAQS)	Standards for criteria pollutants established by United States Environmental Protection Agency that apply to outdoor air.
Nautical Mile (NM)	A measure of distance equal to 1 minute of arc on the earth's surface (approximately 6,076 ft. or approximately 1.15 statute miles).
Navigation Aids (NAVAIDs)	Any visual or electronic device airborne or on the surface that provides point to point guidance information or position data to aircraft in flight.

Term	Definition
Next Generation Air Transportation Systems (NextGen)	A program shifting aircraft procedures from fixed, ground-based radio navigation transmitting facilities and radar to satellite, or Global Positioning System (GPS), navigation and onboard surveillance.
Noise	Any sound that is undesirable because it interferes with speech and hearing or is intense enough to damage hearing, or is otherwise annoying.
Noise Exposure	The cumulative acoustic stimulation reaching the ear of a person over a specified period of time (e.g., a work shift, a day, a working life, or a lifetime).
Non-Attainment Area	Areas with levels that exceed one or more of the NAAQS for the criteria pollutants designated in the Clean Air Act.
Study Airports/Heliports	These are the airports/heliports that are the subject of the Proposed Action.
Operation	Landing or take-off of a helicopter.
Over-flights	Aircraft whose flights originate or terminate outside the controlling facility's area that transit the airspace without landing.
Performance-Based Navigation (PBN)	Specifies that aircraft Required Navigation Performance (RNP) and Area Navigation (RNAV) systems performance requirements be defined in terms of accuracy, integrity, availability, continuity, and functionality required for the proposed operations in the context of a particular airspace, when supported by the appropriate navigation infrastructure.
Power Settings	Amount of engine power used by the pilot.
Procedural Deconfliction	Defined altitude or lateral restrictions as part of a procedure to keep aircraft from conflicting with other aircraft on different procedures.
Quadrant	A quarter part of a circle, centered on a NAVAID oriented clockwise from magnetic north.
Radar (primary)	A device which, by measuring the time interval between transmission and reception of radio pulses, and correlating the angular orientation of the radiated antenna beam or beams in azimuth and/or elevation, provides information on range, azimuth, and /or elevation of objects in the path of the transmitted pulses. Also known as "Primary Radar".
Radar (secondary)	A radar system in which the object to be detected is fitted with cooperative equipment in the form of a radio receiver/transmitter (transponder). Radar pulses transmitted from the searching transmitter/receiver (interrogator) site are received in the cooperative equipment and used to trigger a distinctive transmission from the transponder. This reply transmission, rather than a reflected signal, is then received back at the interrogator site for processing and display at an ATC facility. Also known as a "Radar Beacon".
Radial	A magnetic bearing extending from a VOR/VORTAC/TACAN navigation facility.
Required Navigation Performance (RNP)	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 onboard performance monitoring and alerting specification.
Satellite Navigation	See Global Positioning System (GPS).
Section 4(f)	A property that may be protected under special provisions of the U.S. Department of Transportation Act, 49 USC 303(c).
Sector	A defined volume of airspace, including both lateral and vertical limits, in which an air traffic controller is responsible for the safe movement of air traffic. A TRACON's or ARTCC's airspace is comprised of multiple sectors.

Term	Definition
Separation	Required FAA minimum spacing between aircraft.
Sequencing	A process used to merge air traffic into an orderly flow.
Sound Exposure Level (SEL)	A time-integrated metric (i.e., continuously summed over a time period) that quantifies the total energy in the A-weighted sound level measured during a transient noise event. The time period for this measurement is generally taken to be that between the moments when the A-weighted sound level is 10 dB below the maximum.
Sound Pressure Level	A measure, in decibels, of the magnitude of the sound. Specifically, the sound pressure level of a sound that is 10 times the logarithm to the base 10 of the ratio of the squared pressure of this sound to the squared reference pressure. The reference pressure is usually taken to be 20 micropascals. See also Energy-Averaged Sound Pressure Level.
Source (acoustic)	The object that generates the sound.
Special Aircraft and Aircrew Authorization Required	RNP instrument approach procedures with Authorization Required (RNP-AR) These approach procedures build upon the performance-based NAS concept.
Statute Mile (SM)	A measure of distance equal to 5,280 feet.
Sulfur Dioxide (SO <sub>2</sub> )	Sulfur dioxide typically results from combustion processes, refining of petroleum, and other industrial processes.
Terminal Area	A general term used to describe airspace in which approach control service or airport traffic control service is provided.
Terminal Radar Approach Control (TRACON)	An FAA ATC facility that uses radar and two-way radio communication to provide separation of air traffic within a specified geographic area in the vicinity of one or more large airports.
Threshold of Significance	A threshold of significance is a quantitative or qualitative standard, or set of criteria, pursuant to which the significance of a given environmental effect may be determined. These standards or criteria are established by the lead government agency performing a NEPA review, in this case the FAA.
TK	`TK' is the FAA designator assigned to published IFR Low Altitude RNAV helicopter-accessible routes to FAA approved third parties for operations.
ZK	`ZK' is the FAA designator assigned to published IFR Low Altitude RNAV helicopter-accessible routes to public operations