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CHAPTER 9 GLOSSARY AND ABBREVIATIONS

9.1 GLOSSARY

A-WEIGHTED DECIBELS (dBA) – Represents an expression of relative loudness perceived by the human ear.

ADVISORY CIRCULAR – An advisory document produced by the FAA to provide guidance regarding methods, procedures and practices acceptable to the FAA for complying with regulations and grant requirements.

AIMING POINT – The point on a runway where a pilot is instructed to initially touch down as indicated by threshold markings, touch down markings, and fixed distance markings.

AIR CARRIER – The commercial system of air transportation, consisting of the certificated air carriers, air taxis (including commuters), supplemental air carriers, commercial operators of large aircraft, and air travel clubs

AIR TAXI – A classification of air carriers which directly engage in the air transportation of persons, property, mail, or in any combination of such transportation and which do not directly or indirectly utilize large aircraft (over 30 seats or a maximum payload capacity of more than 7,500 pounds) and do not hold a Certificate of Public Convenience and Necessity or economic authority issued by the Department of Transportation.

AIR TRAFFIC CONTROL (ATC) – A service operated by appropriate authority to promote the safe, orderly, and expeditious flow of air traffic.

AIR TRAFFIC CONTROL TOWER (ATCT) – A structure from which air-traffic controllers provide traffic advisories, spacing, sequencing, and separation services to aircraft operating on and within the vicinity of the airport using a combination of radar and direct observation.

AIRPORT IMPROVEMENT PROGRAM (AIP) – A federal program that provides grants-in-aid for certain types of airport development projects, including construction of runways, taxiways, aircraft parking aprons, and public areas in terminals. The program also provides grants for land acquisition connected with airport development, including clear zones and approach protection.

AIRPORT LAND USE COMMISSION (ALUC) – A commission authorized under the provisions of California Public Utilities Code, Sections 21670 et seq. and established (in any county within which a public-use airport is located) for the benefit of the general public. The purpose of each ALUC is “to assist local agencies in ensuring compatible land uses in the vicinity of all new airports and in the vicinity of existing airports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses.” An ALUC need not be created if an alternative process, as specified by the statutes, is established to accomplish the same purpose.

AIRPORT LAYOUT PLAN (ALP) – A plan of drawing (s) that delineates all areas of an airport, facilities, their location on the airport, and the pertinent clearance and dimensional information

required to demonstrate conformance with applicable standards used or proposed for use by the airport. The plan indicates the location and function of existing and proposed airport facilities, including both aviation and non-aviation uses.

AIRPORT MASTER PLAN – A long-range plan for development of an airport, including descriptions of the data and analyses on which the plan is based.

AIRPORT REFERENCE CODE (ARC) – A coding system used to relate airport design criteria to the operational and physical characteristics of the airplanes intended to operate at an airport. The coding system has two components relating to airport design aircraft. The first component, depicted by a letter, is the aircraft approach category and relates to aircraft approach speeds. The second component, depicted by a Roman numeral, is the airplane design group and relates to airplane wingspan or tailheight. **Table 9-1** shows the ARC values for each component.

Table 9-1
AIRPORT REFERENCE CODE

Category	Approach Speed (Knots)	Design Group	Wingspan (feet)
A	< 90	I	to 48
B	91 - 120	II	49 - 78
C	121 - 140	III	79 - 117
D	141 - 165	IV	118 - 170
E	166 or more	V	171 - 213
		VI	214 - 262

SOURCE: FAA, 2011
PREPARED BY: RS&H, 2011

AIRSIDE – This part of the Airport is used for the movement of aircraft. Runways, taxiways, and other movement areas would be included in the airside.

ALLUVIAL – Related to the sediment deposited by flowing water as in a riverbed, flood plain, or delta.

AVGAS – A type of aviation gasoline used in piston engine aircraft.

AVIGATION EASEMENT – An agreement that grants the right to fly airplanes over property.

BLAST PAD – Consists of an overrun area or stopway constructed before the start of the runway where jet blast produced by large aircraft could erode the ground surface.

BUSINESS JET – A jet aircraft designed for transporting peoples for business-related purposes.

CATEGORY C APPROACH – An aircraft approach category characterized by an approach speed between 121 knots and 141 knots.

CHERT – A variety of silica that contains microcrystalline quartz and/or a siliceous rock of chalcedonic or opaline silica occurring in limestone.

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL) – A 24-hour, time-weighted energy average noise level based on the A-weighted decibel. CNEL is the noise metric adopted by the State of California for evaluating airport noise. It represents the average daytime noise level during a 24-hour day, adjusted to an equivalent level to account for the lower tolerance of people to noise during evening and nighttime periods relative to the daytime period.

CORTESE LIST – A list of hazardous waste and substances, LUST sites, solid waste disposal sites, active CDO (see CDO) and CAOs (see CAO) and hazardous waste facilities subjective to corrective actions as defined by the California Environmental Protection Agency.

COUNTY – Also refers to Sonoma County (as a geographical boundary) and County of Sonoma (as an entity)

CRETACEOUS – Belonging to the geologic time, system of rocks, and sedimentary deposits of the third and last period of the Mesozoic Era.

DECIBEL (dB) – a unit used to express the intensity of a sound wave.

DISPLACED THRESHOLD – A threshold that is located at a point on the runway other than the designated beginning of the runway.

EDGE LIGHTING – Lighting with varying intensity located on the edge of runways used as a navigational aid.

ENGINEERED MATERIALS ARRESTOR SYSTEM (EMAS) – A bed of engineered materials built at the end of a runway used to stop an aircraft overrun with no human injury and minimal aircraft damage.

ENTRANCE LOSS COEFFICIENT – The value of a constant that when multiplied by the kinetic energy of a flow stream (defined as the average streamflow velocity squared, divided by 2 times the acceleration of gravity), is representative of the amount of energy required (and therefore lost) for water flow to enter and pass into an enclosed conduit such as a culvert. The precise value of the constant varies depending on the geometric details of the configuration of the culvert opening.

ENVIRONMENTAL ASSESSMENT (EA) – An analysis of the environmental effects of a Proposed Action prepared pursuant to the National Environmental Policy Act (see NEPA) and its implementing guidelines that provide a federal agency sufficient evidence to determine whether an Environmental Impact Statement (see EIS) is required. The EA serves as the basis for the agency's Finding of No Significant Impact (see FONSI) if an EIS is determined not to be necessary.

ENVIRONMENTAL IMPACT STATEMENT – A federal document required by the National Environmental Policy Act (NEPA) for certain actions “significantly affecting the quality of the human environment.”

FARMLAND MAPPING AND MONITORING PROGRAM – Produces maps and statistical data used for analyzing impacts on California's agricultural resources.

FAULT ZONE – A regulatory zone around active faults defined by turning points connected by straight lines.

FEDERAL AVIATION ADMINISTRATION – The United States government agency that is responsible for insuring the safe and efficient use of the nation's airspace.

Federal Highway Administration (FHWA) – The United States government agency that is responsible for administering federal highway transportation programs.

FRANCISCAN COMPLEX – A diverse group of igneous, sedimentary and metamorphic rocks produced in a subduction zone along the northern shore of Clear Lake in California.

GENERAL AVIATION – That portion of civil aviation which encompasses all facets of aviation except air carriers and military aircraft.

GREYWACKE SANDSTONE– A variety of sandstone generally characterized by its hardness, dark color, and poorly sorted angular grains of quartz, feldspar, and small rock fragments or lithic fragments.

HAZARDOUS MATERIAL – A substance or combination of substances, that, because of quantity, concentration, or physical, chemical, or infectious characteristics, may either: (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

HAZARDOUS WASTE – Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, spilled, or contaminated, or that are being stored temporarily prior to proper disposal.

HEC-RAS – The commonly used acronym for the U.S. Army Corps of Engineers Hydrologic Engineering Center's River Analysis System. Since the mid-1990's, this software has been the standard hydraulic software used by the Army Corps of Engineers for the analysis of river and stream flow. Over the years it has been periodically updated with newer versions released. It is the successor to the earlier DOS-based software known as HEC-2, which was the software used to develop the flood elevation profiles for the Countywide update of the Federal Emergency Management Agency (FEMA) Flood Insurance Study Reports and Maps published in the late 1990's. Since 2001, FEMA has actively encouraged the transition to use of HEC-RAS for updating or creating the hydraulic models submitted to the agency for the purposes of flood mapping.

HELIPAD – A prepared area designated for the takeoff and landing of helicopters.

HYDROCARBONS – An organic compound consisting entirely of hydrogen and carbon.

JET A – A kerosene type of aviation fuel designed for use in aircraft powered by gas turbine engines.

JURASSIC – Of or belong to the geologic time, rock series, or sedimentary deposits of the second period of the Mesozoic Era.

LANDSIDE – This part of the airport is bounded by areas at which passengers and goods enter the Airport. Access roads, ramps, parking facilities, terminal facilities, and the aircraft apron would be included in the landside.

LIMESTONE – A common sedimentary rock consisting mostly of calcium carbonate used as a building stone and in the manufacture of lime carbon dioxide, and lime.

LIQUEFACTION – The process by which a sediment starts to behave like a liquid because of the increased pore pressure and reduced effective stress between solid particles generated by the presence of liquid.

LOCALIZER – A component of the Instrument Landing System (ILS) that provides runway centerline guidance to aircraft.

MAFIC – Containing or relating to a group of dark-colored minerals, composed chiefly of magnesium and iron.

MAINLINE CARRIER – Air carrier engaged in regularly scheduled air passenger service using jet aircraft with approximately 100 to 150 seats.

MANNING'S "N" – The value of "n" in an empirical formula attributed to Robert Manning in his reference book "Flow of Water in Open Channels and Pipes", published in 1890, to predict various properties of water flowing under the influence of gravity. Manning's formula typically is used to calculate the velocity of water given the parameters of channel slope, hydraulic radius and a value for "n" that is typically representative of the "roughness" of the channel/fluid boundary. Its value is directly associated with observation of the potential cumulative effects of the actual surface material(s) and topology of a channel on water flow.

MASTER PLAN – A long-range comprehensive plan to guide airport development.

METAMORPHIC – Of or relating to the process of changed mineral composition resulting from pressure or heat.

MILITARY OPERATIONS – All classes of military takeoffs and landings at air traffic control facilities.

MIOCENE – Of or belonging to the geologic time, rock series, or sedimentary deposits of the fourth epoch of the Tertiary Period.

MODIFIED MERCALLI INDEX – The Modified Mercalli Index is designed to describe the effects of an earthquake, at a given place, on natural features, on industrial installations and on human beings

NAVD 88 – North American Vertical Datum of 1988; the most recently established national vertical datum for the measurement of vertical elevation in the continental United States; the current standard of the U S Geologic Survey, Army Corps of Engineers and the Federal Emergency Management Agency.

NGVD 29 – National Geodetic Vertical Datum of 1929; The vertical datum used for nearly all available historical reference material in Sonoma County regarding hydrologic calculations and

flood mapping. Elevations in Sonoma County based upon this datum are approximately two feet lower than the elevation of the same location referencing NAVD 88.

NOISE CONTOUR – A line on a map connecting points of equal noise exposure.

OBJECT FREE AREA (OFA) – A surface surrounding runways, taxiways, and taxilanes which should be clear of parked airplanes and objects except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.

PART 139 – That portion of Title 14 in the CFR which addresses the procedures, requirements, and regulations for airports serving scheduled air carrier operations.

PISTON ENGINE AIRCRAFT – An aircraft that has one or more piston-powered engines connected to a propeller which provides thrust to move the aircraft on the ground and through the air.

PLEISTOCENE– Of or belonging to the geologic time, rock series, or sedimentary deposits of the earlier of the two epochs of the Quaternary Period.

PLIOCENE– Of or belonging to the geologic time, rock series, or sedimentary deposits of the last epoch of the Tertiary Period.

QUATERNARY – Of or belonging to the geologic time, system of rocks, or sedimentary deposits of the second period of the Cenozoic Era.

RUNUP – That location of the airport where pilots can perform checks to their aircraft prior to departure

RUNWAY – A defined rectangular surface at an airport prepared or suitable for the takeoff and landing of aircraft

REGIONAL CARRIER – Air carrier engaged in regularly scheduled air passenger service between mainly small and medium sized communities and the nation's large airports, using turbo-prop aircraft with seating between 10 to 78 seats and small jets with 99 or fewer seats.

RUNWAY PROTECTION ZONE (RPZ) – A trapezoidal shaped area at the end of a runway, the function of which is to enhance the protection of people and property on the ground through airport owner control of the land. The RPZ usually begins at the end of each primary surface and is centered upon the extended runway centerline.

RUNWAY EDGE LIGHTS – Lights with, varying intensities, used to define the lateral limits of a runway.

RUNWAY SAFETY AREA – A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.

RUNWAY THRESHOLD (DISPLACED THRESHOLD) – The beginning portion of a runway that is available for landing. In some instances, the landing threshold may be displaced. (A displaced threshold is a threshold located at a point on the runway other than the designated

beginning of the runway. Displacement of a threshold reduces the length of runway available for landings.)

SEDIMENTARY – Relating to rocks formed when sediment is deposited and becomes tightly compacted.

SHALE – A fissile rock composed of layers of claylike, fine-grained sediments.

SOUND EXPOSURE LEVEL – A value that contains integration of all the acoustic energy contained within the event

TAXILANE – The portion of the aircraft parking area used for access between taxiways and aircraft parking positions.

TAXIWAY – A defined path established for the taxiing of aircraft from one part of the airport to another.

THRESHOLD – The beginning of that portion of the runway usable for landing.

TURBOPROP AIRCRAFT – Aircraft with one or more gas-turbine engines connected to gearboxes that turn the propeller(s), to move the aircraft on the ground and through the air.

VOLATILE ORGANIC COMPOUNDS – Emitted gases from certain solids or liquids. These gases contain a variety of chemicals which may have short- and long-term adverse health effects.

9.2 ABBREVIATIONS

AC – Advisory Circular

ACHP – Advisory Council on Historic Preservation

ADT – Average Daily Traffic

ALP – Airport Layout Plan

ALUC – Airport Land Use Commission

ACGIH – American Conference of Governmental Industrial Hygienists

AMI – Area Median Income

AMP – Airport Master Plan

ANSI – American National Standards Institute

APE – Auxiliary Power Units

ATCT – Air Traffic Control Tower

Chapter 9 – Glossary and Abbreviations

ALUC – Airport Land Use Commission

ALW – Airport-Larkfield-Wikiup

APSA – Aboveground Petroleum Storage Act

ARC – Airport Reference Code

ARFF – Aircraft Rescue and Fire Fighting

ATE – Air Transportation Element (Sonoma County General Plan 2020)

BAAQMD – Bay Area Air Quality Management District

BMP – Best Management Practices

C172 – Cessna 172 Aircraft

CAA – Clean Air Act

CAAQS – California Ambient Air Quality Standards

CALTRANS – California Department of Transportation

CALUP – Comprehensive Airport Land use Plan

CAO – Cease and Abatement Orders

GAV – Ground Access Vehicles

CBC – California Building Code

CCR – California Code of Regulations

CDFA – California Department of Food and Agriculture

CDFG – California Department of Fish and Game

CDO – Cease and Desist Orders

CDOC – California Department of Conservation

CEQA – California Environmental Policy Act

CFCP – California Farmland Conservancy Program

CFR – Code of Federal Regulations

CH₄ - Methane

CIWMB – California Integrated Waste Management Board

CLCA – California Land Conservation Act

cm – Centimeter

CNEL – Community Noise Equivalent Level

CO – Carbon Monoxide

CO₂ – Carbon Dioxide

CO₂e – Carbon Dioxide Equivalents

CoIWMP – Countywide Integrated Waste Management program

CP – County Parcels

CRTK – Community Right to Know Act

CUPA – Certified Unified Program Agency

dB – Decibel

dBA – Weighted Average Decibel

DBH – Diameter At Breast Height

DEIR – Draft Environmental Impact Report

DOHS – Department of Health Services

DPM – Diesel Particulate Matter

DTSC – Department of Toxic Substances Control

EDMS – Emissions and Dispersion Modeling System

EIR – Environmental Impact Report

EIS – Environmental Impact Statement

EMAS – Engineered Materials Arrestor System

EPA – Environmental Protection Agency

ESD – Equivalent Single Family Dwelling Units

FAA – Federal Aviation Administration

Chapter 9 – Glossary and Abbreviations

FBO – Fixed Base Operator

FHWA – Federal Highway Administration

FICAN – Federal Interagency Committee on Aviation Noise

FMMP – Farmland Mapping and Monitoring Program

FONSI – Finding of No Significant Impact

FROG – Fraction of Reactive Organic Gasses

G-IV – Gulfstream IV Aircraft

GAV – Ground Access Vehicles

GHG – Greenhouse Gas

GIS – Geographic Information Systems

GSE – Ground Support Equipment

GWP – Global Warming Potential

H₂O - Water

HAP – Hazardous Air Pollutants

HI – Hazards Index

HMBP – Hazardous Materials Business Plan

HQ – Hazard Quotient

ID – Identification

IEC – International Standards

ILS – Instrument Landing System

INM – Integrated Noise Model

IPCC – Intergovernmental Panel on Climate Control

IRIS – Integrated Risk Management System

ISZ – Inner Safety Zone

IRIS – Integrated Risk Information System

ITZ – Inner Turning Zone

LDN – Day Night Average Sound Level

LOS – Level of Service

LTO – Landing Takeoff Cycle

LUST – Leaking Underground Storage Tank

MLD – Most Likely Descendant

MMI – Modified Mercalli Index

MMT – Million Metric Tons

MU 3001 – Mitsubishi 3001 Aircraft

NAAQS – National Ambient Air Quality Standards

NEPA – National Environmental Policy Act

NHPA – National Historic Preservation Act

NLR – Noise Level Reduction

NOP – Notice of Preparation

NO₂ – Nitrogen Dioxide (Nitrous Oxide)

NO_x – Nitrogen Oxides

NPDES – National Pollution Discharge Elimination System

NRCS – Nation Resource Conservation Service

NTSB – National Transportation Safety Board

NWIC – Northwest Information Center

OEHHA – Office of Environmental Health Hazard Assessment

OFA – Object Free Area

OSZ – Outer Safety Zone

PAPI – Precision Approach Path Finder

Pb - Lead

PEL – Permissible Exposure Limits

Chapter 9 – Glossary and Abbreviations

PM2.5 – Particulate Matter Smaller than 2.5 Micrometers

PM10 – Particulate Matter Smaller than 10 Micrometers

PRMD – Permit and Resource Management Department, County of Sonoma

PS – Public Safety Element (Sonoma County General Plan 2020)

RCRA – Resource Conservation and Recovery Act

REL – Reference Exposure Level

RHN – Regional Housing Need

ROG – Reactive Organic Gasses

RPZ – Runway Protection Zone

SRAAF - Santa Rosa Army Airfield (The Airport was formerly the site of SRAAF)

RSA – Runway Safety Area

RSAT – Runway Safety Action Team

RWQCB – Regional Water Quality Control Board

SCAPOSD – Sonoma County Agricultural Preservation and Open Space District

SCWA – Sonoma County Water Agency

SEL – Sound Exposure Level

SO₂ – Sulfur Dioxide

SOP – Standard Operating Procedure

SPCC – Spill Prevention, Control and Countermeasure

SSZ – Sideline Safety Zone

STS – Identifier for Charles M. Schulz – Sonoma County Airport

TAC – Toxic Air Contaminants

TOG – Total Organic Gasses

TPZ – Traffic Pattern Zone

UBC – Uniform Building Code

URBEMIS – Urban Emissions Software

USACE – U.S. Army Corps of Engineers

USC – United States Code

USEPA – United States Environmental Protection Agency

USGS – United State Geological Service

UST – Underground Storage Tank

VASI – Visual Approach Slope Indicator

VOC – Volatile Organic Compounds

WRCB – California Water Resources Control Board

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