



CHARLES M. SCHULZ–SONOMA COUNTY AIRPORT

Location and Environs

The Charles M. Schulz–Sonoma County Airport (Airport) is located in central Sonoma County, approximately 7 miles northwest of the City of Santa Rosa and 18 miles inland from the Pacific Ocean. The Airport is conveniently accessible to most of the County via U.S. Highway 101, the region’s only major north-south highway (**Figure 1A**). The Airport terminal complex is located 1.6 miles west of Highway 101 on Airport Boulevard, which is the Airport’s principal ground access route.

The Airport lies in a broad, flat valley at an elevation of 125 feet above mean sea level (MSL). Most of the immediate Airport environs are rural residential and agricultural lands. The City of Santa Rosa has been expanding northward toward the Airport. Extensive residential development has been occurring over the past two decades in the incorporated Town of Windsor area to the north and the Larkfield-Wikiup area to the east. Several large office complexes and one light industrial/business park have been established east of the Airport, between the Airport boundary and Highway 101.



History

In 1939, Sonoma County purchased approximately 339 acres of agricultural land and constructed the Airport’s first runway using grant funds from the Civil Aeronautics Authority (predecessor to the Federal Aviation Administration). Between 1941 and 1943, the Army Air Corps added 826 acres, extended the original runway, and constructed the Airport’s second runway, taxiways, apron areas and other facilities. The Army Air Corps took over the Airport in 1943 for use as a military installation. Two of the hangars constructed by the Army remain in use today; the large maintenance hangar occupied by Sonoma Jet Center and the steel-arched “Butler” hangar which is utilized for aircraft storage.

Between February 1943 and January 1946, the Airport was operated by the U.S. Fourth Air Corps. At that time, the Airport was known as the Santa Rosa Army Airfield and was used primarily to train fighter groups and squadrons. At its peak, some 300 to 500 aircraft and 10,000 personnel were based on the army field.



Figure 1A

Location Map Sonoma County Airport

On July 8, 1946, Sonoma County resumed operation of the Airport as a civil facility. Shortly thereafter, two T-hangar structures were built on the Airport. Relatively few improvements occurred in the following decade due to uncertainties about whether or not this site or the Santa Rosa Air Center (located 6 miles southeast of the Airport) would be better suited as the County's main airfield. The 1960s brought resolution to this issue in favor of the current site. Shortly thereafter, development of additional T-hangars, the Air Traffic Control Tower (ATCT) and the airline terminal building began.

In the 1970s and early 1980s, the "Nob Hill" T-hangars (located on Apron E), fire station, an instrument landing system, and non-aviation commercial facilities were added to the Airport. Other improvements that occurred during this time period include additional T-hangars, portable hangars, executive hangars, apron expansion, and on-airport access roads and fencing. A composite listing of recent facility improvements are presented in **Table 1-1**.

Air Carrier Service

Throughout its history, the Sonoma County Airport has operated primarily as a general aviation facility serving private/recreational airplanes, and business/corporate aircraft. It has also operated as a commercial service airport offering mostly commuter airline service to San Francisco and Los Angeles

In March 1947, Southwest Airways (changed to Pacific Airlines in 1958) operated a DC-3 out of Sonoma County Airport as the first scheduled commercial flight. In later years, this airline operated Martin 202s and Martin 404s and occasionally the Fairchild F-27 flew service from the Airport.

In 1968, Pacific Airlines was merged into Hughes Airwest. Scheduled feeder/commuter service by STOL Air, Inc. began in September 1972, with Sonoma County Airport as the base for its operations. In the past, Sonoma County Airport has also had service to various Northern California cities via commuter carriers such as Golden Pacific and Golden West, both of which utilized Beech 99 aircraft.

Passenger enplanements have varied greatly at the Sonoma County Airport over the past 15 years. Yet air passenger demand levels have remained consistently high throughout the period. Between 1989 and 1991, the Airport was served by both United Express, with jet service to Los Angeles International Airport, and by American Eagle with prop-jet (turbo-prop) service to San Jose International Airport. United Express curtailed its service to Los Angeles at the end of 1991 and American Eagle discontinued its San Jose connection at the end of 1993. From 1991 to 1998 passenger enplanements declined, going from 58,074 passengers in 1991 to 17,762 in 1998. In 1999 and 2000 passenger enplanements began to climb again, going from 27,335 in 1999 to 32,177 in 2000. United Express discontinued its air carrier service in October, 2001. From October 2001 until March 2007 the Airport did not have any regularly scheduled air carrier or commuter airline service. During this period, significant numbers of passengers either used the Airport bus service or drove to San Francisco, Oakland or Sacramento International Airports.

Table 1-1 Recent Airfield Improvements	
Listed below are a sampling of the recent construction projects completed at the Charles M. Schulz-Sonoma County Airport since 2001.	
2010	<ul style="list-style-type: none"> • Terminal Expansion and Remodeling • Taxiway Z (Phase II) Rehabilitation • Security Equipment Improvements • Taxiways D and Y Seal Coat and Enhanced Markings
2009	<ul style="list-style-type: none"> • Taxiways H, Z and Apron A Rehabilitation
2007-2008	<ul style="list-style-type: none"> • Installation of PAPIs to Runway 19 • Rehabilitation of Parking Lot and Terminal Building • Runway 14-32 Seal Coat • KaiserAir Apron Reconstruction
2006	<ul style="list-style-type: none"> • Pavement Overlay of Runway 1-19 • Construction of Private Sector Hangars (south & west sides of airport) • Construction of Sonoma Jet Center Fuel Farm • Sonoma Jet Center Office Building Construction • Construction of Airport Security Screening and Hold Area Building
2005	<ul style="list-style-type: none"> • Installation of Airport Perimeter Fencing • Taxiway H Rehabilitation • Safety Area Improvements • Rehabilitation Taxiway A & B (west side) • Supplemental Wind Socks • Construction of Access Road • Drainage Improvements • Construction of REACH Hangar
2004	<ul style="list-style-type: none"> • Construction of Southeast Access Road (Apron E)
2003	<ul style="list-style-type: none"> • Construction of Executive and T-Hangars (Apron E)
2002	<ul style="list-style-type: none"> • Installation of Fire Sprinkler Systems • Construction of Executive Hangars
2001	<ul style="list-style-type: none"> • Construction of Executive Hangar • Runway 14-32 and Exit Taxiway Rehabilitation • Taxiway B, D, and Y Rehabilitation • Airfield Lighting Improvements



The 21st Century

In March of 2000, the Sonoma County Board of Supervisors voted to rename Sonoma County Airport, Charles M. Schulz–Sonoma County Airport. The name change was in honor of the famous “Peanuts” comic strip cartoonist.

On March 20, 2007, Horizon Air instituted nonstop scheduled commuter air service from the Airport to Los Angeles and Seattle. The schedule has expanded to include:

- ◆ 1 daily departure to Las Vegas
- ◆ 2 daily departures to Los Angeles
- ◆ 1 daily departure to Portland, Oregon connecting to Seattle
- ◆ 1 daily departure to Seattle



Flights are operated with 76-seat, Q400 twin-engine turboprop airplanes. The service by Horizon Air has resulted in the Airport’s peak period for passenger activity reaching 204,734 in 2008.

Facilities, Management, and Services

The Airport is owned by the County of Sonoma and operated by the County of Sonoma Department of Transportation and Public Works. Day-to-day operation of the Airport is the responsibility of the Airport Manager. The manager is supported by a full-time staff of 15, all of whom are stationed at the Airport. In addition to management, record keeping and related activities, designated staff members operate the Airport Rescue and Fire Fighting (ARFF) equipment and perform routine maintenance of Airport facilities. **Table 1-2** presents a composite of Airport services and features.

A seven-member Aviation Commission, appointed by the Sonoma County Board of Supervisors, meets monthly to provide guidance on important Airport issues. Major policy decisions regarding the Airport are the responsibility of the Sonoma County Board of Supervisors. The County’s Airport Land Use Commission (ALUC) provides guidance on land use compatibility issues on development proposed in the environs of the Airport.

Airfield

The Airport currently occupies approximately 1,048 acres and features two runways. Runway 14-32, the Airport’s primary runway has a published length of 5,115 feet and is 150 feet wide. Runway 14-32 can accommodate aircraft weighing up to 145,000 pounds. This runway is lighted and has an instrument landing system (ILS) serving the approach end of Runway 32. Runway 1-19 is designated as the crosswind runway. It has a published length of 5,002 feet and is 100 feet wide. The runway is currently unlighted.



Table 1-2
Airport Profile

MAJOR FEATURES**Property**

- ▶ Existing: 1,048.1 acres
- ▶ Easements: 62.4 acres
- ▶ Property encompasses airfield, building area, and most portions of runway protection zones.

Airfield

- ▶ Runway 14-32: 5,115 feet long, 150 feet wide; asphalt
- ▶ Runway 1-19: 5,003 feet long, 100 feet wide; asphalt
- ▶ Runway Lighting (14-32): High Intensity

Navigational Aids

- ▶ Airport:
 - › Segmented circle & lighted wind cone
 - › Rotating Beacon
 - › Pilot Controlled Runway Lights (when tower closed), Runway 14-32
 - › Automated Surface Observation System (ASOS)
- ▶ Runways:
 - › Runway 32: Medium Intensity Approach Lighting System with RAILS
 - › Runway 14: Runway End Identifier Lights, Visual Approach Slope Indicator (VASI)
 - › Runway 19: PAPI

Building Area

- ▶ Majority of facilities located on east side of Airport
- ▶ Aircraft Parking Capacity
 - › T-/Shade Hangars: 261
 - › County Tiedowns: 262
 - › Transient Tiedowns: 73
- ▶ Aviation-Related Facilities
 - › Airline Terminal & Boarding Lounge
 - › CAL FIRE Sonoma County Air Attack Base
 - › Sonoma County Sheriff's Helicopter Center
 - › Redwood Empire Air Care Helicopter (Reach) Facility
 - › Aircraft Parking and Storage
 - › Above ground Fuel
 - › Aviation Museum
- ▶ Non-Aviation Facilities
 - › Automobile Parking
 - › Car Rental
 - › Industrial Buildings

MANAGEMENT AND SERVICES**Management**

- ▶ Airport Management and Maintenance:
 - › County of Sonoma Transportation & Public Works Dept.
 - › Airport Manager and on-site staff of 13

Fixed Base Operations (FBO) Services

- ▶ Several FBOs are located at the Airport. Services include: aircraft fuel, parking maintenance, avionics, flight training, aircraft rental, charter, and car rental.
- ▶ Fuel: 100LL/Jet- self-service cardlock system & truck

Emergency and Security

- ▶ Fire Protection:
 - › CAL FIRE (on-site)
 - › ARFF (on-site)
 - › Rincon Valley Fire Department
- ▶ Police:
 - › Patrolled by Sonoma County Sheriff's Dept. on random basis

AIRPORT SITE AND ENVIRONS**Topography**

- ▶ Airport elevation: 125 ft. MSL
- ▶ Terrain:
 - › On Airport: Terrain ranges from 80 ft. to 125 ft.
 - › Off Airport: Rising terrain 3 miles northwest to 500 ft.

Access

- ▶ Direct: Airport Boulevard east side of airport
- ▶ U.S. Highway 101: 2 miles east
- ▶ Airport 7 miles northwest of the City of Santa Rosa

Jurisdictions

- ▶ Airport within unincorporated portion of Sonoma County

Nearby Land Uses

- ▶ East: Agriculture/Light Industrial
- ▶ North and West: Rural Residential/Agricultural
- ▶ South: Vineyard

AIR TRAFFIC PROCEDURES**Traffic Patterns**

- ▶ Runway 14-32: left traffic
- ▶ Runway 1-19: left traffic
- ▶ Pattern Altitudes
 - › Light aircraft: 1,125 ft. (MSL), (1,000 ft. AGL)
 - › Heavy aircraft: 1,625 ft. (MSL), (1,500 ft. AGL)

Instrument Approach Procedures

- ▶ Runway 14 GPS:
 - › Straight-in (1 mile; 441 ft. AGL)
 - › Circle-to-Land (1 mile; 475 ft. AGL)
- ▶ Runway 14 VOR/DME:
 - › Straight-in (1 mile; 521 ft. AGL)
 - › Circle-to-Land (1 mile; 515 ft. AGL)
- ▶ Runway 32 ILS:
 - › Special CAT II (1,800 ft., 200 ft. AGL)
 - › Straight-in (1/2 mile; 200 ft. AGL)
 - › Circle-to-Land (1 mile; 455 ft. AGL)
- ▶ Runway 32 GPS
 - › Straight-in (1 mile; 481 ft. AGL)
 - › Circle-to-Land (1 mile; 475 ft. AGL)
- ▶ Runway 32 VOR
 - › Straight-in (1/2 mile; 401 ft. AGL)
 - › Circle-to-Land (1 mile; 455 ft. AGL)

Communications

- ▶ CTAF/UNICOM: 118.5 MHz/122.95 MHz
- ▶ Santa Rosa ATCT: 118.5 MHz (7:00 am to 8:00 pm daily)

Noise Abatement Procedures

- ▶ Pilots requested to minimize overflight of residential areas north & east of Airport as published in Noise Management Guide
- ▶ Departure Noise Levels
 - › Daytime (0600-2200L): 83.2 dBA
 - › Nighttime (2200-0600L): 72.0 dBA

The majority of the airfield and apron pavement is made of asphalt concrete. This pavement was constructed at various times throughout the Airport's 70-year existence. The condition of this pavement varies. In general, these pavement areas are in good to very-good condition.

Building Area

Nearly all building area facilities are situated on the east side of the Airport, most are located south of Airport Boulevard. This includes the airline terminal building. The terminal area supports an approximately 13,000-square-foot terminal building, short-term automobile parking lot, four rental car facilities, restrooms and a passenger boarding lounge. The FAA Air Traffic Control Tower (ATCT) is also located within the terminal area.



The building area immediately north of Airport Boulevard consists of a long-term automobile parking lot, general aviation aircraft parking apron and terminal building, two Airport maintenance hangars, fuel facility, FBO building, and a helicopter parking area. The California Department of Forestry and Fire Protection (Cal Fire) air attack base is north of the general aviation terminal building.

Apron

There are six aircraft parking aprons designated A through F at the Airport. Except for Apron F, all of the parking aprons are located on the east side of the Airport. Apron F is located on the south side of the Airport.

Apron A provides parking for transient general aviation aircraft. Aprons A and C support fixed base operations. Apron B supports commercial airline service. Storage hangars (e.g., portable, shade, box, executive/corporate) for based aircraft are situated on Aprons D and E. T-hangars and box hangars are located on Aprons E and F. Apron F is the only apron located on the south side of the Airport. It is supported by Taxiway D, which connects to the ends of Runway 1 and Runway 32.

Fuel

Fuel is available 24 hours a day at the Airport. Pilots can obtain fuel from two FBO facilities on the Airport. One FBO, Sonoma Jet Center, currently offers 100 low-lead (LL) AvGAS from a card lock self-serve facility located to the east of the "Redwood" hangar. A second FBO, Santa Rosa Jet Center – KaiserAir, also offers both 100LL and Jet-A dispensed from fuel trucks and supported by an above-ground fuel farm. The FBOs also provide Jet-A fuel, dispensed from fuel trucks.



FAA Facilities

The principal Federal Aviation Administration (FAA) function at the Airport is operation of the Airport ATCT. From 0700 local time (LT) through 2000 LT, the tower staff provides ground and local air traffic control (ATC) services in the immediate vicinity of the Airport. Other FAA duties at the Airport include operation and maintenance of electronic navigational aids including the Instrument Landing System (ILS), the Very High Frequency Omni-Directional Range (VOR), Approach Lighting System (ALS), and the Automated Surface Observing System (ASOS).

AIRPORT TENANTS

Fixed Base Operators (FBO)

Fixed base operators (FBOs) and specialty aeronautical service operators provide a wide range of general aviation services including aircraft rental and charter, flight instruction, aircraft sales, major maintenance and repair and fuel service.

Two full service FBOs at the Airport offer multiple services such as; aircraft maintenance, avionics, tiedowns, aircraft charter, sales, flight lounge and lobby, and fuel. Seven other operators at the Airport provide specialized services in aircraft maintenance, air ambulance, flight instruction, aircraft charter, and aircraft rental.



Other Tenants

A 1,000 square-foot aviation museum building housing the Pacific Coast Air Museum (PCAM) is located west of north Laughlin Road. The museum showcases aviation related aircraft artifacts spanning the period from World War II to present. Historical aircraft such as the UH-1H Huey helicopter, F-14, F-86, T-37 and others are displayed on three acres of land.



Civil Air Patrol (CAP), Experimental Aircraft Association (EAA, Chapter 124), and the Ninety-Nines have established facilities at the Airport. Civil Air Patrol pilots fly reconnaissance missions for homeland security, search and rescue, and transport personnel and medical supplies. The CAP facility is located in an office trailer near the Pacific Coast Air Museum. The EAA facility is located on the west side of the Airport. EAA maintains facilities for 36 sport/recreational aircraft, including 19 in hangars and 17 on tiedowns. The Ninety-Nines is an international woman pilots' organization named because of the original 99 members. The Ninety Nines was founded in 1929 by Amelia Earhart. **Table 1-3** provides information on the tenants currently based at the Airport.

**Table 1-3
Airport Tenants
Sonoma County Airport**

FIXED BASE OPERATIONS (AVIATION-RELATED SERVICES)																		
Name	Fuel Sales		Flight Instruction		Aircraft Rental		Aircraft Parts & Maintenance				Aircraft Storage			Miscellaneous				
	100/100LL	Jet-A	Fixed Wing	Helicopter	Fixed Wing	Helicopter	Engine	Airframe	Avionics	Helicopter	Other	Based Tie-downs	Hangars	Transient Ramp	Pilots' Supplies	Charter (FAR 135)	Aircraft Sales	Other
Kaiser Air- Santa Rosa Jet Center	✓	✓					✓	✓				✓	✓	✓	✓	✓	✓	✓ ¹
Barron Air							✓											
Dragonfly Aviation			✓ ^{2,3}				✓											
North Coast Air			✓ ²		✓													✓ ⁴
Propjet Aviation							✓											✓
Sonoma Jet Center	✓	✓					✓	✓	✓			✓	✓	✓	✓			✓
Solairus Aviation																✓	✓	✓ ^{1,4}
Sonoma Helicopter				✓		✓									✓			✓
OTHER AVIATION-RELATED TENANTS																		
Name	Type of Business																	
California Department of Forestry (CAL FIRE) and Fire Protection Air Attack Base	Administration of California's private and public forests Prevent and extinguish wildfires																	
Civil Air Patrol Redwood Empire–Squadron 157	Reconnaissance missions for homeland security, and search and rescue																	
Experimental Aircraft Association–Chapter 124	Personal/Recreational aircraft enthusiasts group																	
Santa Rosa Ninety Nines	International woman pilots organization																	
Pacific Coast Air Museum	Aviation education and historical aircraft displays																	
REACH	Air ambulance emergency medical transport–rotor and fixed wing aircraft																	
Sonoma County Sheriff	Law enforcement, search and rescue, medical transport, and fire suppression																	
Alaska Air	Commercial passenger services																	
NON-AVIATION TENANTS																		
Avis, Budget, Enterprise and Hertz	Car rental																	
Cornerstone Properties	Industrial																	
Republic Parking System	Automobile parking operator																	
Sky Lounge	Restaurant																	
Transit Technology	Passenger screening																	
¹ Aircraft Management ² VFR/IFR Flight Instruction ³ Cessna Pilot Center ⁴ Scenic Air Tours																		
Source: Data compiled by Mead & Hunt, Inc. (February 2011)																		



EMERGENCY RESPONSE

ARFF

The Airport Aircraft Rescue and Fire Fighting (ARFF) equipment building is located north of the airline terminal. County staff operates the ARFF equipment. When an aircraft emergency is declared, emergency vehicles will leave the ARFF building and proceed to the incident or specified staging positions in accordance with standard operating practices. The Airport acquired a new, state-of-the-art ARFF truck with FAA funding in mid-2006. This equipment and its response time classify the Airport as 14 CFR, Part 139 Index B.



CAL FIRE

The California Department of Forestry and Fire Protection (CAL FIRE) Air Attack Base was established at the Airport in 1964. CDF continues to serve Sonoma County and outlying areas. The Air Attack Base's immediate response area covers 4,000 square miles. CDF responds to an average of 300 calls during the annual fire season. CDF staff consists of a battalion chief, fire captain, fire apparatus engineer, and six firefighters.

There are three CDF aircraft based at the Airport, an OV-10 Bronco airtactical aircraft and two S-2T airtankers. These aircraft work in unison to extinguish wild fires. The OV-10 is the command and control aircraft. The OV-10 pilot directs the S-2 pilot where to make their fire retardant/water drops.

REACH

Redwood Empire Air Care Helicopter (REACH) is a first responder air medical unit that responds to emergency calls. REACH Air Medical Services is headquartered in Santa Rosa and provides helicopter and airplane patient transportation for injured patients throughout northern California. Critically ill patients are transferred to larger, more specialized hospitals in the Bay Area. Since its inception in 1987, REACH has performed more than 25,000 air ambulance missions and has developed proficiency for serving pediatric and neonatal patients.



Sonoma County Sheriff

The Sonoma County Sheriff’s Helicopter Unit is based at the Airport. A Bell 407 rescue helicopter is used to respond to rescue calls in the county relating to law enforcement, search and rescue, medical transport, and fire suppression.



AERONAUTICAL SETTING

Area Airports

A total of seven public-use airports are located within a 40-nautical mile flying distance of the Airport. In Sonoma County, there are three publicly-owned airports (i.e., Cloverdale Municipal Airport, Healdsburg Municipal Airport, and Petaluma Municipal Airport) in addition to the Sonoma County Airport. Sonoma County Airport is the only airport owned by the County; five airports are owned by other counties, four airports are city-owned, and two are privately-owned.

Among the publicly-owned airports, Sonoma County Airport is the only one to offer an ATCT, a precision instrument approach, ARFF, and ASOS. In addition it is the only airport in Sonoma County capable of accommodating commercial air carrier service. **Table 1-4** provides information on other airports within the Sonoma County Airport environs.

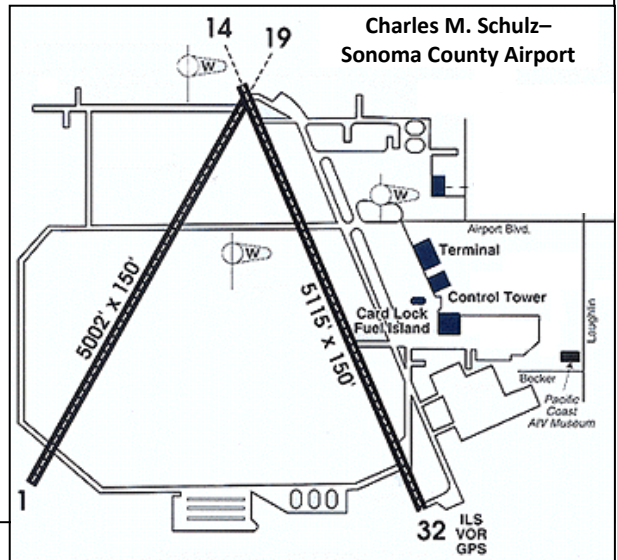
Area Airspace

Airspace in the vicinity of the Airport is relatively uncomplicated. None of the area airports are located close enough to the Sonoma County Airport to result in a need for airspace coordination.

The presence of ground-to-air communication capability and weather observation reporting provided by the ATCT at the Airport permits the existence of Class D – Controlled airspace around the Airport. This controlled airspace, extending a radius of five statute miles around the Airport and upward from the surface to the base of the overlying Class E – Controlled airspace at 2,600 feet mean sea level (MSL) is in-effect during the hours when the ATCT is in operation (currently, 0700 Local Time [LT] through 2000 LT). When the Airport ATCT is not in operation (i.e., 2000 LT through 0700 LT), the airspace in the vicinity of the Airport reverts to Class G – Uncontrolled airspace from the surface up to but not including 700 feet above the surface and Class E – Controlled airspace from 700 feet above the surface to 18,000 feet MSL. **Figure 1B** presents an aeronautical chart of the Airport vicinity. In addition, numerous “Victor” airways based on the Santa Rosa VOR/DME overly the Airport. Figure 1C presents a graphic portrayal and description of the various airspace classes.

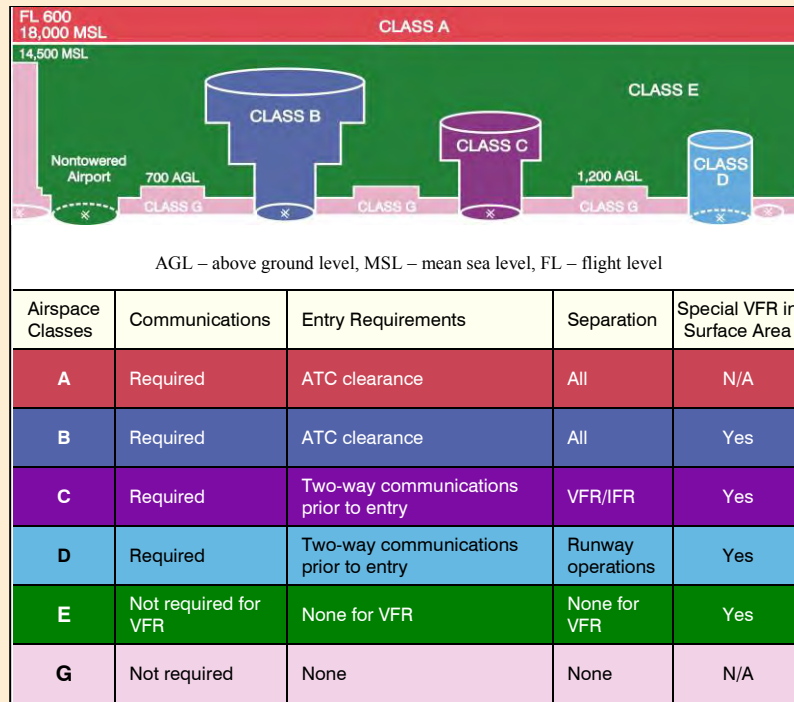
**Table 1-4
Area Airports**

Airport Name ¹	Owner	Location		Facilities						Services						
		Associated City (County)	Distance/Direction ²	Based Aircraft ³	Number of Runways	Longest Runway (ft.)	Surface ⁴	Lighting Intensity ⁵	Approach Visibility ⁶	Control Tower	Airline Service	AvGas	Jet Fuel	Maintenance	Automobile Rentals	Food
Sonoma County	County of Sonoma	Santa Rosa (Sonoma)	-	380	2	5,115	asph	H	1/2*	Yes	Yes	✓	✓	✓	✓	✓
Area Airports																
Healdsburg Airport	City of Healdsburg	Healdsburg (Sonoma)	10NW	63	1	2,707	asph	M	VIS	No	No	✓	-	✓	-	-
Angwin-Parrett Field Airport	Private	Angwin (Napa)	17NE	38	1	3,217	asph	L	VIS	No	No	✓	-	✓	-	-
Cloverdale Municipal Airport	City of Cloverdale	Cloverdale (Sonoma)	18NW	21	1	3,155	asph	M	2	No	No	✓	-	-	-	-
Petaluma Municipal Airport	City of Petaluma	Petaluma (Sonoma)	18SE	203	1	3,600	asph	M	1	No	No	✓	✓	✓	-	✓
Gross Field Airport	County of Marin	Novato (Marin)	25SE	301	1	3,300	asph	M	1 1/4	No	No	✓	✓	✓	-	-
Lampson Field Airport	County of Lake	Lakeport (Lake)	29N	110	1	3,597	asph	M	1 1/4	No	No	✓	-	✓	✓	✓
Napa County Airport	County of Napa	Napa (Napa)	31SE	222	3	5,931	conc/asph	M	3/4	Yes	No	✓	✓	✓	✓	✓
Ukiah Regional Airport	City of Ukiah	Ukiah (Mendocino)	39NW	95	1	4,415	asph	M	1 1/4	No	No	✓	✓	✓	✓	-
Sonoma Valley Airport	Private	Schellville/Sonoma (Sonoma)	25SE	333	2	2,700	asph	-	VIS	No	No	✓	-	✓	-	-



¹ Airports within 40 nautical miles of Sonoma County Airport
² Relative to Sonoma County Airport
³ FAA Airport Master Record data as of August 2005; totals exclude ultralights
⁴ ASPH=asphalt; CONC=concrete
⁵ L=low; M=medium; H=high
⁶ Lowest visibility minimums for instrument approach procedures; distance in statute miles. VIS = No instrument approach – VFR only.
 *RVR 1,800 feet authorized with Flight Director or Autopilot or HUD to DA.

**Figure 1C
Airspace Classes**



Airspace Classes. Federal Aviation Regulations define six categories of airspace, which conform in both name and description with airspace designations used internationally. **Controlled Airspace** is any of several types of airspace in which some or all aircraft may be subject to air traffic control. With the number of aircraft flying over the United States today, proper airspace usage is critical for flight safety and efficient service to pilots and the flying public. To assist in this goal, the airspace is divided into six classifications.

CLASS A is the airspace from 18,000 feet to 60,000 feet. VFR is not allowed. All pilots flying in Class A airspace shall file an Instrument Flight Rules (IFR) flight plan and receive an appropriate air traffic control (ATC) clearance.

CLASS B is generally the airspace from the surface to 10,000 feet. This airspace is normally around the busiest airports in terms of aircraft traffic. Class B airspace is individually designed to meet the needs of the particular airport and consists of a surface area and two more layers. Pilots must contact air traffic control to receive an air traffic control clearance to enter Class B airspace.

CLASS C is the airspace from the surface to 4,000 feet above the airport elevation. Class C airspace will only be found at airports that have an operational control tower, are serviced by a radar approach control, and that have a certain number of IFR operations. Although Class C airspace is individually tailored to meet the needs of the airport, the airspace usually consists of a surface area with a 5 nautical mile (NM) radius, an outer circle with a 10 NM radius that extends from 1,200 feet to 4,000 feet above the airport elevation and an outer area. Pilots must establish and maintain two-way radio communications with the ATC facility providing air traffic control services prior to entering airspace. Pilots of visual flight rules (VFR) aircraft are separated from pilots of instrument flight rules (IFR) aircraft only.

CLASS D is generally that airspace from the surface to 2,500 feet above the airport elevation. Class D airspace only surrounds airports that have an operational control tower. Class D airspace is also tailored to meet the needs of the airport. Pilots are required to establish and maintain two-way radio communications with the ATC facility providing air traffic control services prior to entering the airspace.

CLASS E is generally that airspace that is not Class A, B, C, D, or G. Class E airspace extends upward from either the surface or a designated altitude to the overlying or adjacent controlled airspace. If an aircraft is flying on a Federal airway below 18,000 feet, it is in Class E airspace. Class E airspace is also the airspace used by aircraft transiting to and from the terminal or en route environment normally beginning at 14,500 feet to 18,000 feet. Class E airspace ensures IFR aircraft remain in controlled airspace when approaching aircraft without Class D airspace or when flying on "Victor airways" -- federal airways that are below 18,000 feet.

CLASS G is **uncontrolled** airspace. IFR aircraft will not operate in Class G airspace. VFR aircraft can operate in Class G airspace.

In addition, there are eight other forms of Special Use airspace (e.g., Prohibited Areas, Restricted Areas, etc.) that pilots must be aware of.

Instrument Flight Procedures

One precision and four nonprecision instrument approach procedures serve the Airport. Runway 32 has three straight-in instrument approach procedures – an instrument landing system (ILS) precision approach and VOR and GPS nonprecision approaches. The lowest approach minimums at the Airport are associated with Runway 32 ILS and VOR; as low as 1,800 feet.

Global Positioning System (GPS) - utilizes a network of satellites to assist pilots in determining a positional fix to the airport.

Very-High-Frequency Omnidirectional Range (VOR) - is a navigational aid used to provide bearing information to aircraft en-route to the airport.

Two nonprecision approaches serve Runway 14 – a straight-in GPS approach and a VOR/DME approach. Both procedures have visibility minimums as low as 1-mile. All five approach procedures allow aircraft to circle-to-land to all runways.

Community Profile

Santa Rosa, the county seat, is one of eight incorporated cities in the County. Santa Rosa is an important regional business center and also has many businesses with national and international affiliations. With a population of over 150,000, Santa Rosa is the largest city in California north of the line connecting San Francisco and Sacramento.

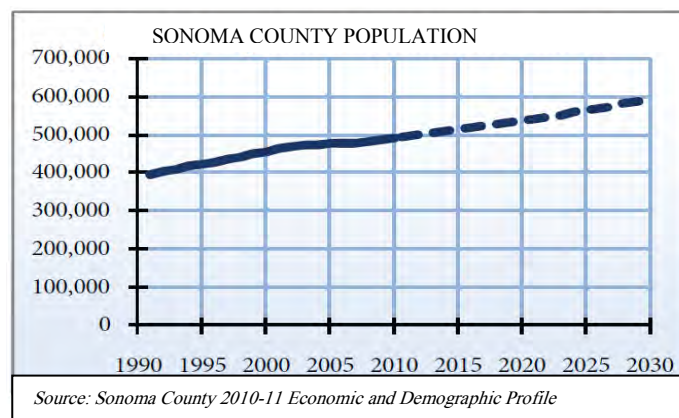
The population of Sonoma County has increased from roughly 422,000 in 1995 to nearly 493,285 in 2010. The population of the County is projected to increase to almost 600,000 by 2030. The largest age group in Sonoma County in 2005 was 50-59 years of age (73,865 people). This age group represents 16 percent of the county's total population.

Industry Employment

Based on Sonoma County 2010-11 Economic and Demographic Profile, in 2008 the top three industries in the county were government (10.5 percent), retail trade (10.6 percent) and healthcare (9.9 percent). Agriculture, forestry, and fishing businesses made up 3 percent of the industry sectors.

The largest private employers in the County are Kaiser Permanente, St. Joseph Health System, Agilent, Medtronic Vascular, and Sutter Medical Center of Santa Rosa. Each of these employers provides over 1,000 jobs; the County employs 5,000 people.

Of all the establishments in Sonoma County, 62 percent employed between one and four employees. This suggests a strong trend in small local businesses (See **Table 1-5** for a synopsis of the Sonoma County region).



**Table 1-5
Community Profile**

GEOGRAPHY

Location

- ▶ Sonoma County is located in northern California
- ▶ Sonoma County total land area: 1,576 square miles
- ▶ 65 miles north of City of San Francisco
- ▶ 107 miles west of Sacramento

Topography

- ▶ Airport elevation: 125 ft. MSL (approximate)
- ▶ Terrain in the vicinity of the airport is relatively flat

SURFACE TRANSPORTATION

Major Highways

- ▶ Highways:
 - ▶ U.S. Highway 101: 1.6 miles east, four-lane divided highway
 - ▶ Highway 12: 7 miles southeast, four-lane divided highway

Public Transportation

- ▶ Sonoma County Transit:
 - ▶ Service to Sonoma County
 - ▶ Connections to Golden Gate Transit and Santa Rosa City Bus
- ▶ Connections to Sonoma County Transit from:
 - ▶ Santa Rosa City Bus
 - ▶ Healdsburg In-City Transit
 - ▶ Petaluma Transit
- ▶ Airport Express
 - ▶ Daily shuttle service from the Airport and Sonoma and Marin Counties to:
 - San Francisco International Airport
 - Oakland International Airport
- ▶ Mendocino County Transit
 - ▶ Service to Fort Bragg, Santa Rosa and the Airport

POPULATION AND ECONOMY

Historical/Current Population

	2000	2005	2010
▶ Sonoma County	457,300	478,440	493,285
▶ City of Santa Rosa	147,100	156,268	163,436
▶ City of Rohnert Park	42,300	42,445	43,398
▶ City of Windsor	22,600	25,475	26,955

(Source: Sonoma County Economic Development Board)

Projected Population

	2015	2020	2030
▶ Sonoma County	503,138	528,403	606,346

(Sources: California Dept. of Finance; County of Sonoma)

Basis of Economy

- ▶ Sonoma County economy historically based on wine, dairy, fish, apples, vegetables, and livestock
- ▶ 2010 Industry groups with greatest percentage of employment in Sonoma County:
 - ▶ Retail trade 10.6%
 - ▶ Construction Government 10.6%
 - ▶ Services Healthcare 9.9%

(Source: Sonoma County 2010-11 Economic and Demographic Profile)

CLIMATE

Temperature

	Avg. High	Avg. Low
▶ Hottest month (August)	83.2°F	57.4°F
▶ Coldest month (January)	51.1°F	37.1°F

(Source: Western Regional Climate Center)

Precipitation and Fog

- ▶ Average annual rainfall in Santa Rosa: 30.3 inches; mostly from November through March
- ▶ Marine layer fog occurs in early morning and late afternoon during certain times of the year

Winds

- ▶ Prevailing winds from the south and southeast.



Tourism

According to the 2011 Sonoma County Indicators report prepared by Sonoma County Economic Development Board (SCEDB), revenue and employment in the tourism sector have declined over the last three years. However, in 2009 Sonoma County moved from fourth to third place in visitor spending among comparable counties; visitors spent over \$1.2 Billion dollars. In 2009, destination spending generated more than 16,640 jobs in the County. Tourism comprises nearly 6.5% of the total employment in Sonoma County. That is, for every \$74,500 in visitor sales, the tourism industry produced an average of one job.

Previous Airport Plans and Studies

A series of previously conducted Airport-related plans and studies set many of the conditions which influenced formulation of the current Airport Master Plan. Key among these is the following two studies:

Charles M. Schulz-Sonoma County Airport: Airport Layout Plan Narrative Report and Technical Study (Mead & Hunt, Inc. – 2004) – This study investigated the question of what would be the appropriate runway length required to sustain scheduled air carrier service at the Airport and what steps would be required to implement the project.

New Passenger Terminal Study: Sonoma County Airport (Gerson/Overstreet Architects – August 2002) – This study evaluated the existing passenger terminal site and prepared alternative development concepts for future terminal development.

Other relevant studies include:

Sonoma County General Plan 2020 Air Transportation Element (Sonoma County PRMD – 2005) – The stated purpose of the Airport Transportation Element is “to establish policies that will guide future growth and development of aviation activity and Airport facilities in the county through the year 2020 in a manner consistent with the goals and policies established in other elements of the General Plan.” The policies in the Air Transportation Element were considered in the development of this Airport Master Plan.

Air Service Market Opportunity with Sonoma County Airport 2005 – The study was prepared for American West Airlines. It examined the market including a catchment area of over one million people. The study assessed prices and fares of San Francisco and Oakland International Airports, as well as the routes of existing and potential air travelers. The study concluded: “From a population standpoint, Sonoma County Airport may be the most underserved Airport in the United States. Without air service, residents opt to fly from other area Airports even though the drive is long and the highways are congested.” This study was updated in 2009 and 2011. The general conclusions of the study remained unchanged.

Air Service Study for Sonoma County Airport 2002 (Tri-Star Marketing Company – 2002) – The stated purpose of this study was to determine the required elements for evaluating the feasibility for commercial air service to return to Sonoma County Airport.

Comprehensive Airport Land Use Plan (Coffman Associates, Inc. – 2001) – This plan updated the 1981 Airport Land Use Policy Plan. It provides the guidelines for the Sonoma County Airport Land Use Commission’s (ALUC) determinations regarding the aviation compatibility of land uses proposed for development in the vicinity of any of the airports in the County. The plan also provides guidance to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities encroach upon or adversely affect the uses of navigable airspace.

1998 Sonoma County Airport Master Plan – 1998 – This document was prepared by the Sonoma County Permit and Resource Management Department and is the currently adopted Airport Master Plan (December 15, 1998).

Sonoma County General Plan Air Transportation Element (Walter E. Gillfillan and Associates – 1988) – The stated purpose of the Airport Transportation Element is “to establish policies that will guide future growth and development of aviation activity and Airport facilities in the county through the year 2005 in a manner consistent with the goals and policies established in other elements of the General Plan.” The policies adopted in the Air Transportation Element provided guidance for the present Airport Master Plan.

Approach Protection Study (Hodges & Shutt – 1983) – The impetus for this study was a long perceived need to provide permanent, positive protection against the development of incompatible land uses in the runway approaches at the Sonoma County Airport. The study contained recommendations regarding acquisition of fee title and easements on property near the Airport and also addressed zoning and Airport Land Use Commission policies. Although the study itself was never adopted, many of its components are reflected in the adopted Sonoma County General Plan Air Transportation Element. An update of this study is contained in Chapter 7 of the present Airport Master Plan report.

Facility Plan for the Sonoma County Airport (Hodges & Shutt – 1982) – The Facility Plan was an abbreviated update of the 1975 Airport Master Plan. It addressed on-airport facility issues and was the basis for revision of the Airport Layout Plan approved by the Board of Supervisors in 1984. Most of the Airport development that occurred during the remainder of the 1980s was based upon this plan.

Airport Land Use Policy Plan (Hodges & Shutt – 1981) – Adopted by the Sonoma County Airport Land Use Commission, this plan provides the guidelines for the Commission’s determinations regarding the aviation compatibility of land uses proposed for development in the vicinity of any of the airports in the County.

Sonoma County Airport Master Plan (Arnold Thompson Associates – 1975) – Even though many of the existing Airport buildings were constructed prior to this plan, the plan’s overall designation of land uses within the eastside building area is essentially the pattern found today. This plan also envisioned the need for a general aviation parallel runway.

Air Trade Study (Leigh Fisher & Associates – 1959) – This study was instrumental in the Sonoma County decision to develop the Sonoma County Airport rather than the former Navy Airfield west of Santa Rosa, which had recently been deemed excess by the federal government.