



Charles M. Schulz – Sonoma County Airport
2290 Airport Boulevard
Santa Rosa, CA 95403
Ph: 707.565.7243

www.sonomacountyairport.org

Charles M. Schulz – Sonoma County Airport (STS)

Aircraft Noise Monthly Report

August 2022



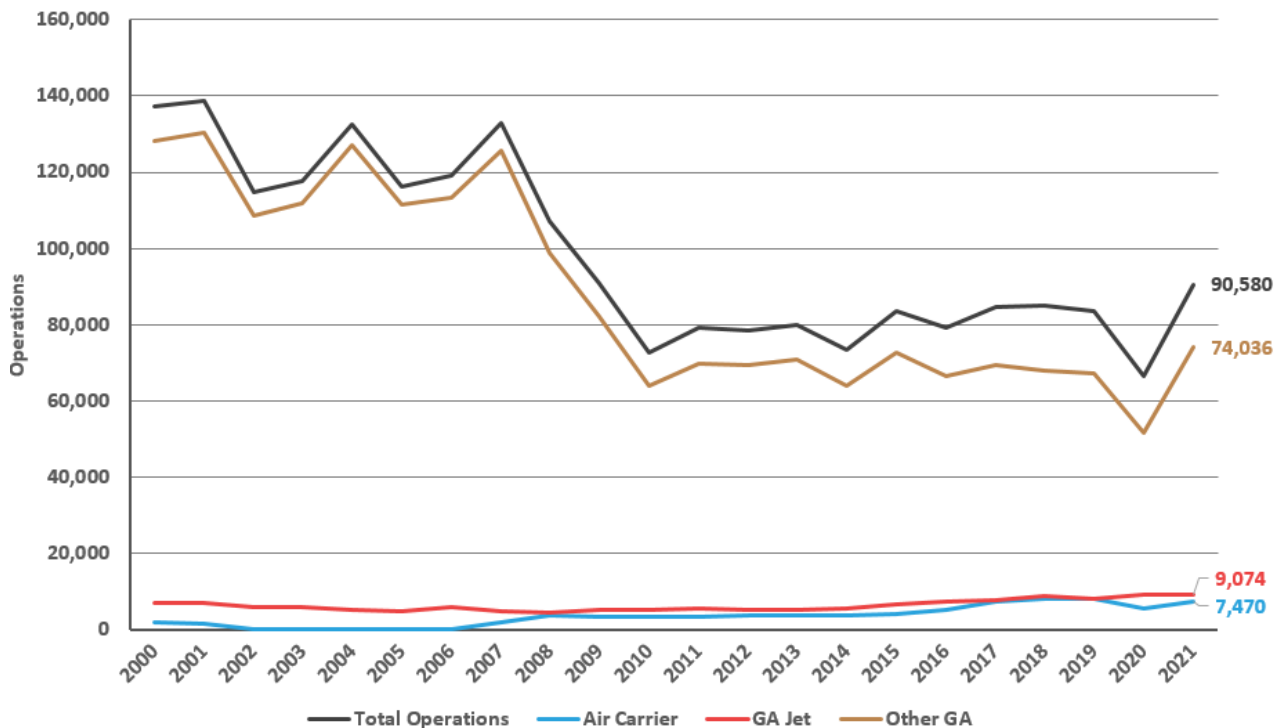
About the Charles M. Schulz – Sonoma County Airport and Noise Abatement

The Airport operates as a self-supporting Enterprise Fund within the Department of Transportation and Public Works and under the jurisdiction of the Federal Aviation Administration (FAA). STS is both a general aviation facility, serving private planes and business jets, and is a commercial airline facility with scheduled air service. STS generates over \$1,300,000 annually in tax revenues, via its users, for Sonoma County and County School Districts.

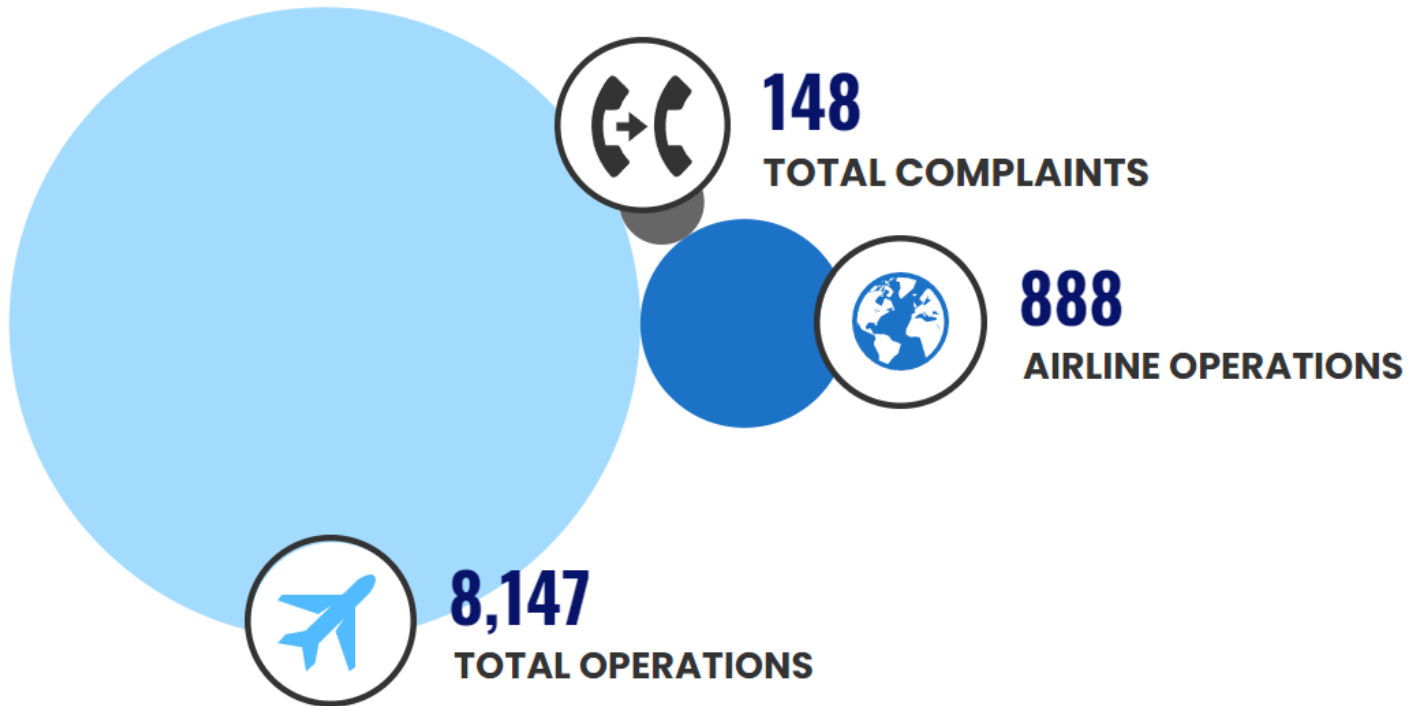
The Airport’s current Noise Abatement Program was established in 1988. STS also works within FAA guidelines, to encourage pilots and airlines to fly with consideration of our neighbors in mind. The Airport makes every effort to promote flight procedures that minimize aircraft noise while always maintaining safety as the highest priority. It is the FAA’s sole responsibility to develop air traffic rules, assign the use of airspace, and control air traffic.

STS is working with our Aviation Commission and a community advisory group to re-write the Airport’s Noise Abatement Guide and associated procedures (to be released in 2022). Using flight-tracking and noise management software, the Airport also provides monthly complaint reports to pilots and to airlines so that operators can use real data to update flight practices and fly friendly. As more data becomes available to STS staff, additional analysis is performed and included in monthly and annual reports.

STS Historical Operations



This Month's Operations



This Month's Noise Complaints At-A-Glance

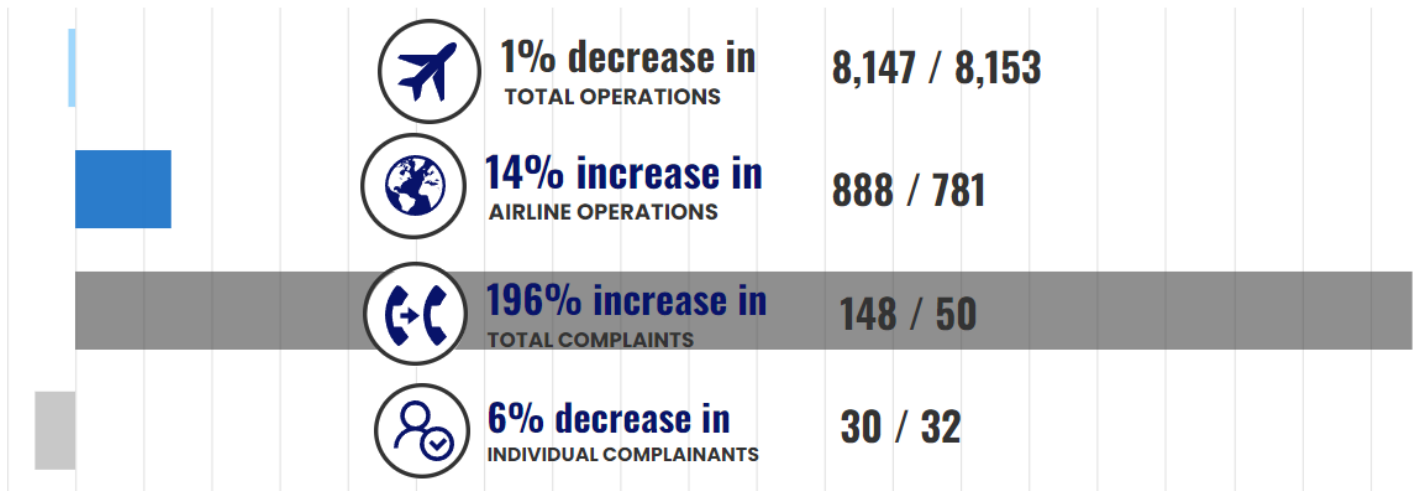
- 148 Noise Complaints received
- 30 Individual Commenters
- 8 New Commenters
- 134 Correlated Operations*
- 14 Complaints that were non-specific, were regarding operations that did not include STS as the origin or the destination (not Airport-related), or were unable to be correlated to a flight track/aircraft



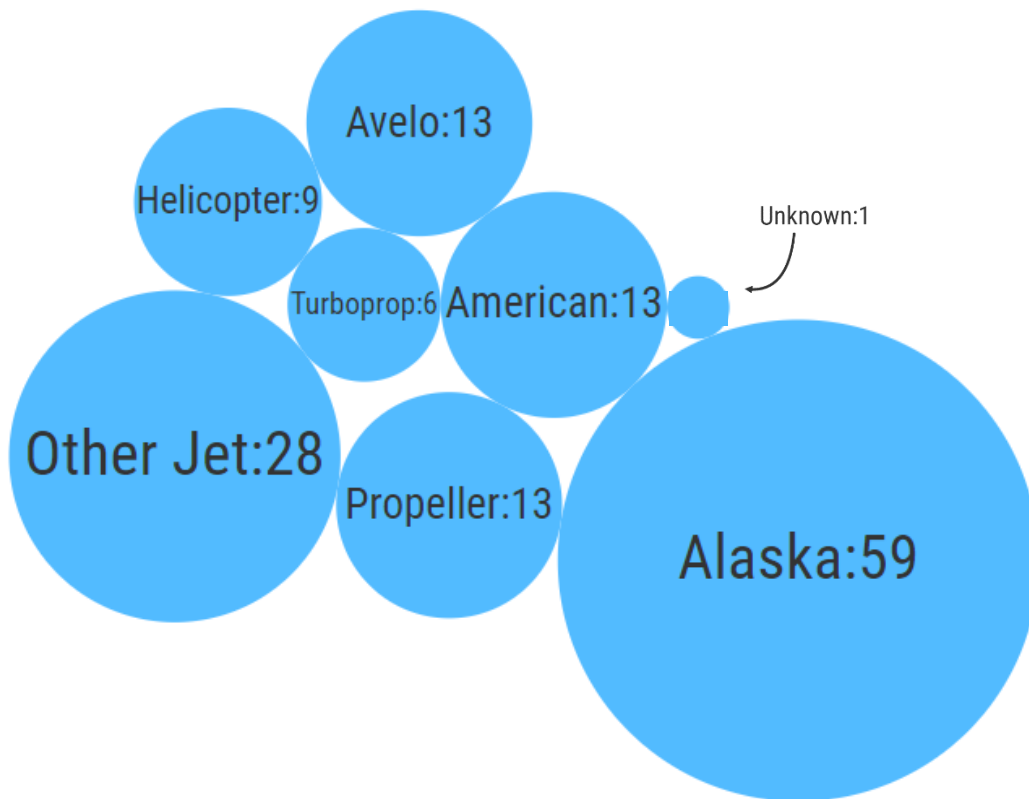
**An Operation is a departure from or an arrival to the Airport. Complaints may be correlated to more than one Operation or may not be correlated to an Operation.*

The Airport received 39 more complaints in August than in July. This month, one of the complaints received was from a commenter located greater than ten nautical miles from the Airport. There were 8 new commenters this month. 17 of the 30 individual commenters live within five nautical miles of STS, including 4 of the new commenters. Four of the new commenters live in Santa Rosa, two in Windsor, one in Kenwood, and one in Sebastopol. The majority of noise complaints received in August were regarding Alaska Airlines, other jets, propellers, and American Airlines.

What's Changed This Year? August 2022 vs. 2021



Airlines and Operators Identified Through Complaints

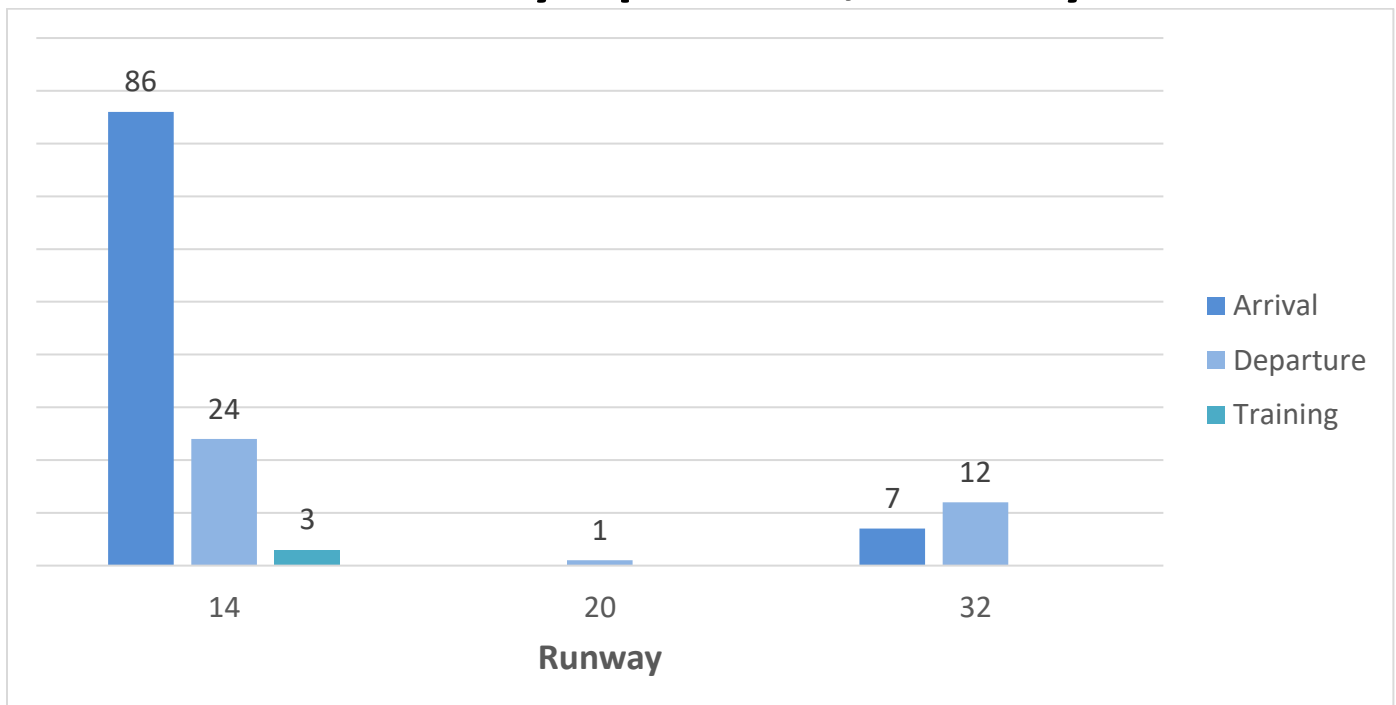


All airlines operate jet aircraft.

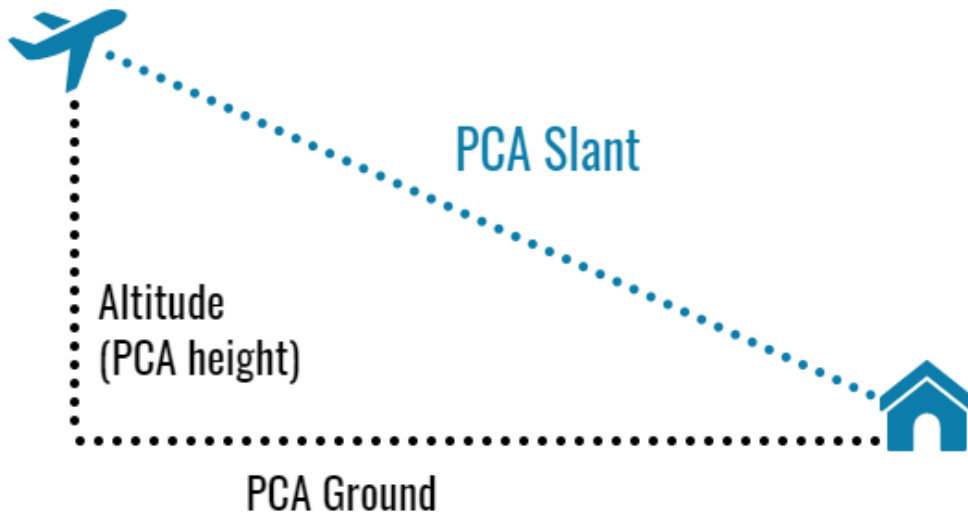
Aircraft Operated by Airlines at STS

| AHA! AIRLINES | ALASKA AIRLINES | AMERICAN AIRLINES | AVELO AIRLINES | UNITED AIRLINES |
|---|---|--|--|---|
| <u>E145 (50 seats)</u>  | <u>E175 (76 seats)</u>  | <u>E175 (76 seats)</u>  | <u>737-800 (189 seats)</u>  | <u>CRJ200 (50 seats)</u>  |
| | | <u>CRJ700 (65-76 seats)</u>  | | |
| | | <u>CRJ900 (76-79 seats)</u>  | | |

Identified Aircraft by Operation, Runway



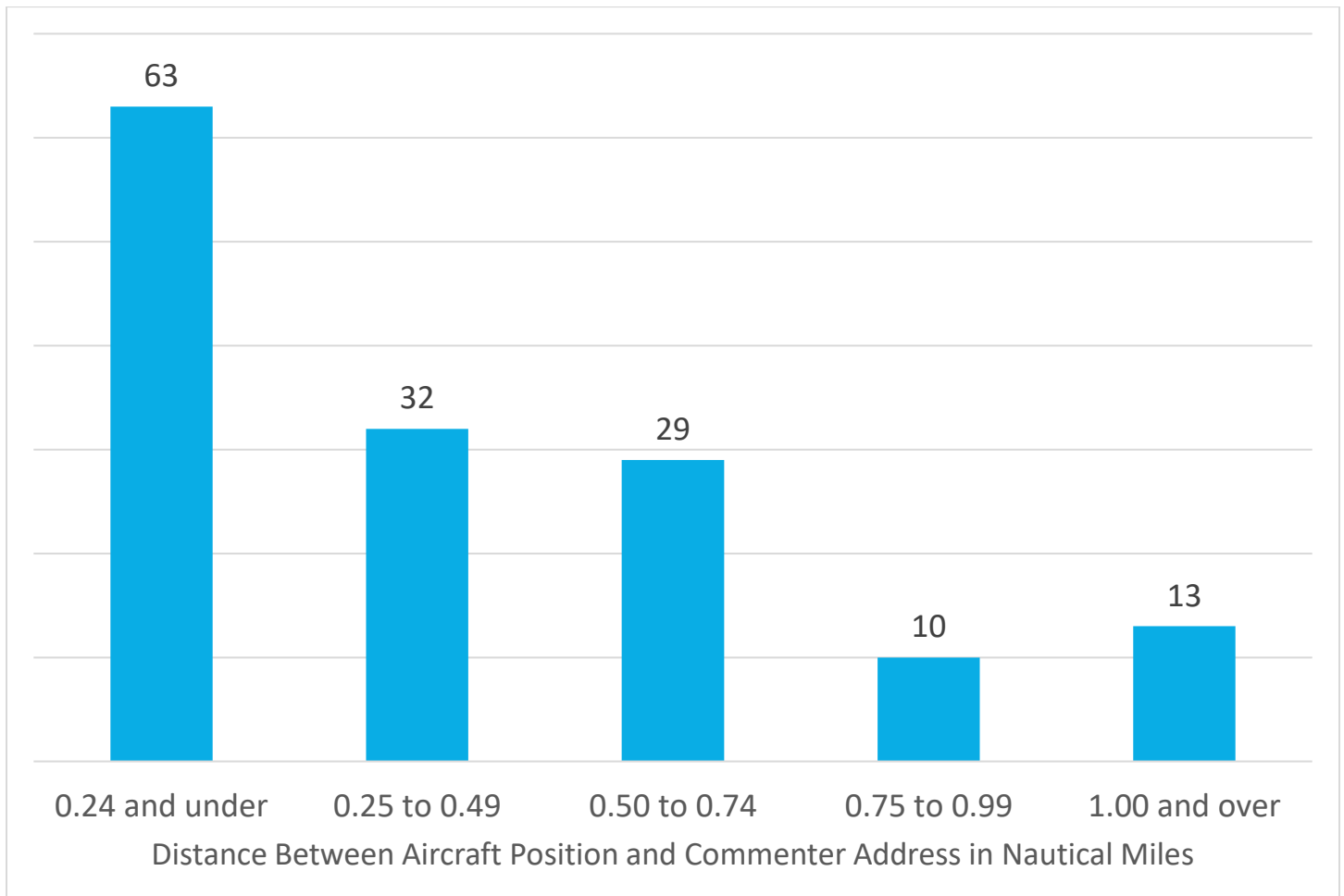
Aircraft Points of Closest Approach (PCA)



There were 147 aircraft identified through complaints made this month with a tracked point of closest approach (PCA). Sometimes called the PCA slant, the PCA is the distance in nautical miles between the commenter’s address and the aircraft.

In August, 44% of aircraft that generated complaints were less than a quarter-mile from the commenter’s address per the PCA measurement.

Most Aircraft Were Between 0 and 0.24 Nautical Miles from the Commenter



Aircraft Altitudes

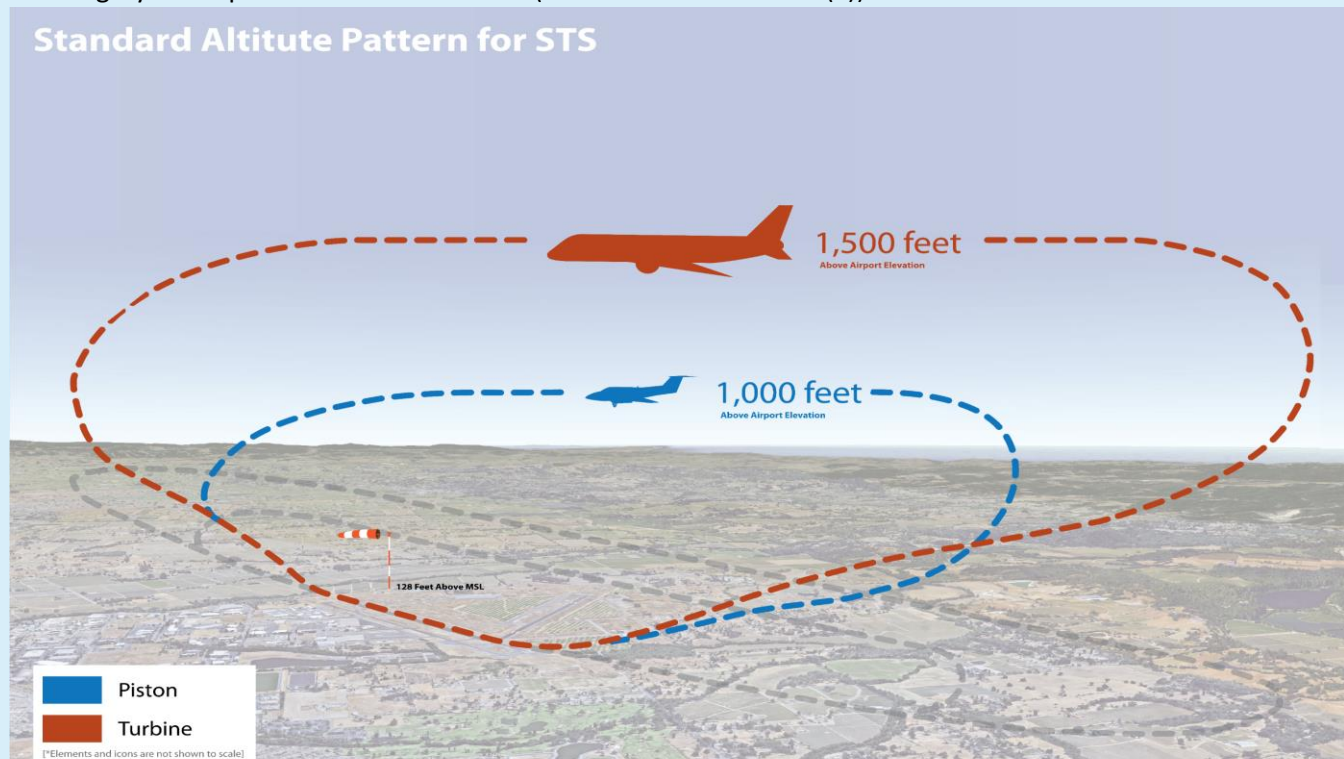
There were 147 aircraft identified through complaints made this month with a tracked altitude. At the point of closest approach to the commenter’s address, the altitude was recorded (in feet) in relation to the commenters location and may be represented as a negative number due to their location being at a higher elevation than the Airport and flight paths. Per FAA aircraft guidelines, except when necessary for takeoff or landing, aircraft must maintain an altitude of at least 1,000 feet over populated areas. Helicopters may operate safely at less than the minimum for other aircraft.

| Recorded Altitude Range | Aircraft | Recorded Altitude |
|-------------------------|----------|---|
| Under 1,000 feet | 69* | 32, 321, 346, 378, 453, 478, 503, 528, 553, 578, 600, 603, 616, 621, 628, 651, 653, 657, 678, 703, 728, 746, 753, 778, 782, 828, 842, 928, 967, 992 |
| 1,000 to 1,499 feet | 10 | 1017, 1042, 1096, 1144, 1182, 1237, 1262, 1301, 1311 |
| 1,500 to 1,999 feet | 23 | 1526, 1546, 1557, 1571, 1617, 1625, 1646, 1678, 1712, 1725, 1737, 1778, 1825, 1850, 1853, 1875, 1900, 1912, 1946, 1950, 1996 |
| Over 2,000 feet | 45 | 2012, 2139, 2162, 2185, 2187, 2226, 2251, 2301, 2321, 2355, 2358, 2371, 2381, 2401, 2434, 2526, 2537, 2596, 2757, 2771 |

*Aircraft under 500 feet are typically helicopters.

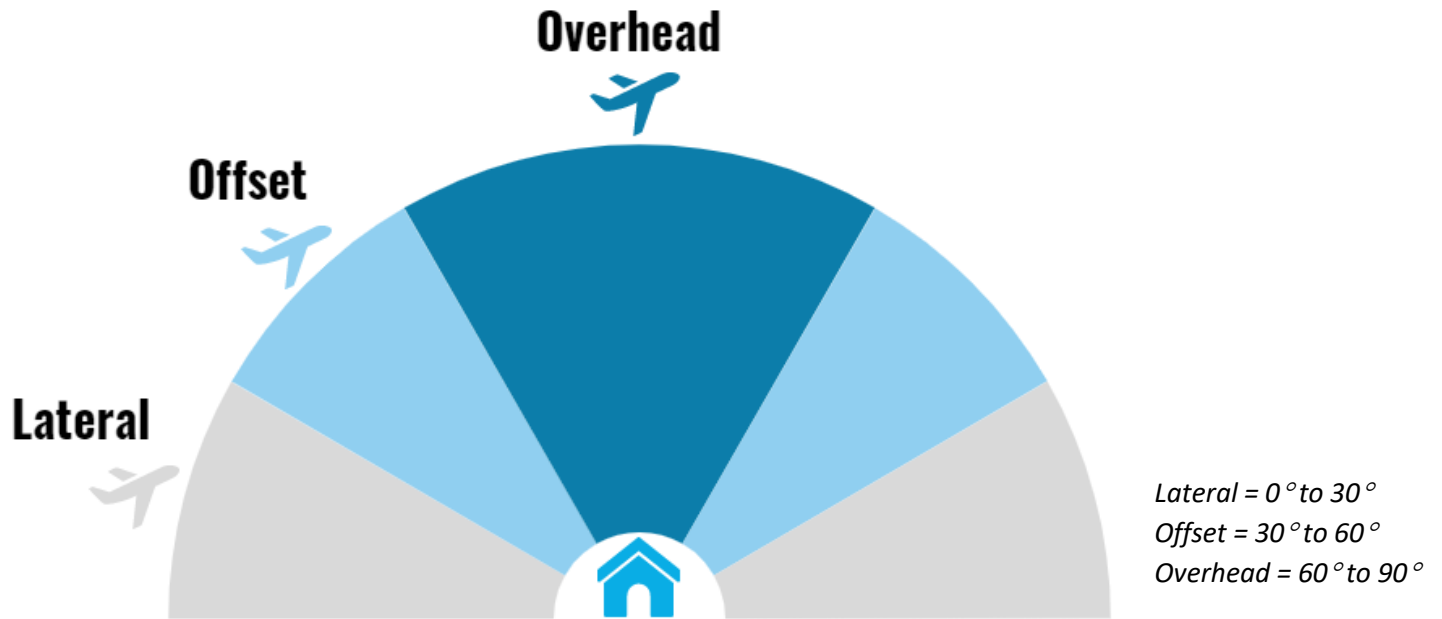
What are the altitude requirements for aircraft landing at or taking off from the Airport?

The Airport’s standard altitude pattern is the highest allowed by the FAA. Under FAA regulations, altitude restrictions are not applicable during landing and takeoff. The FAA has exclusive sovereignty of airspace in the United States (49 U.S.C. Section 40103(a)).

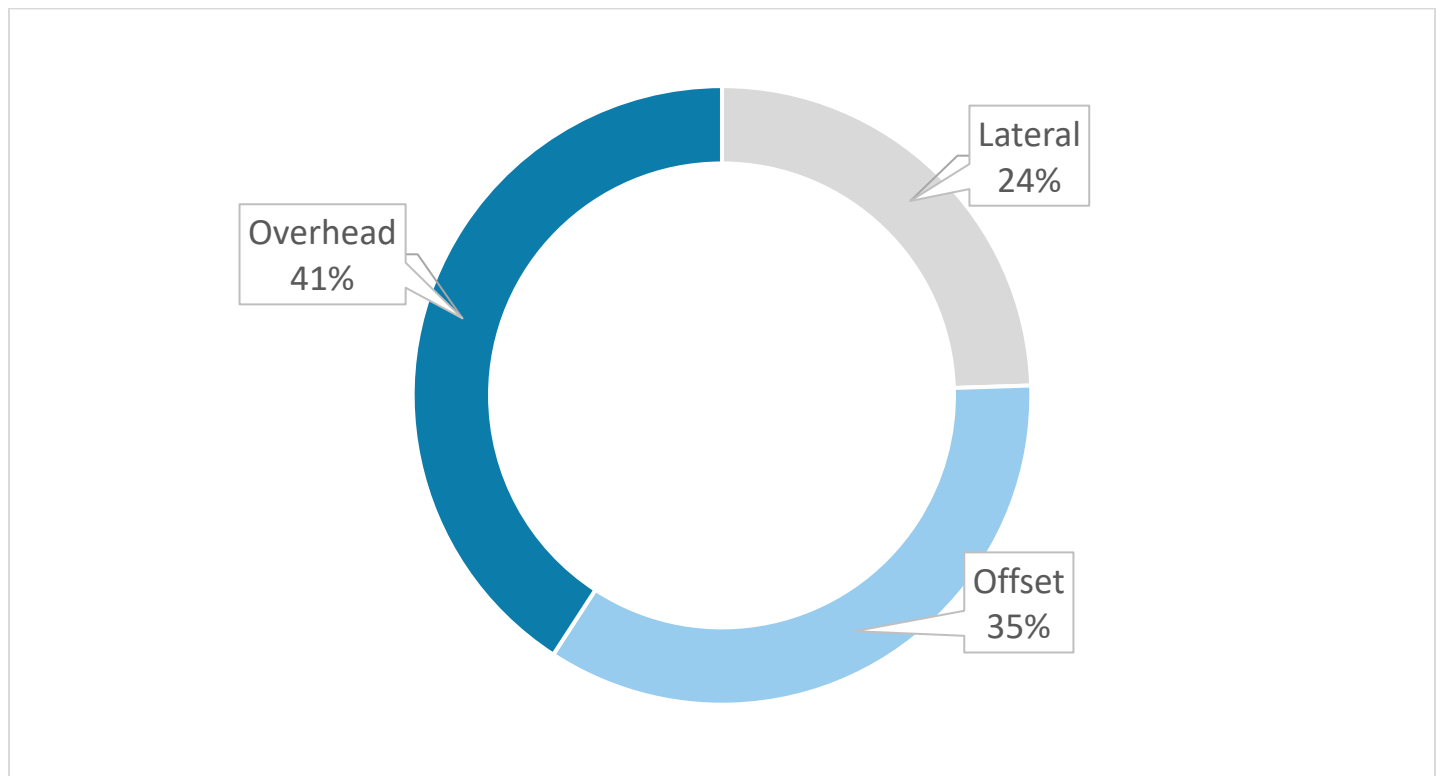


Aircraft Angles

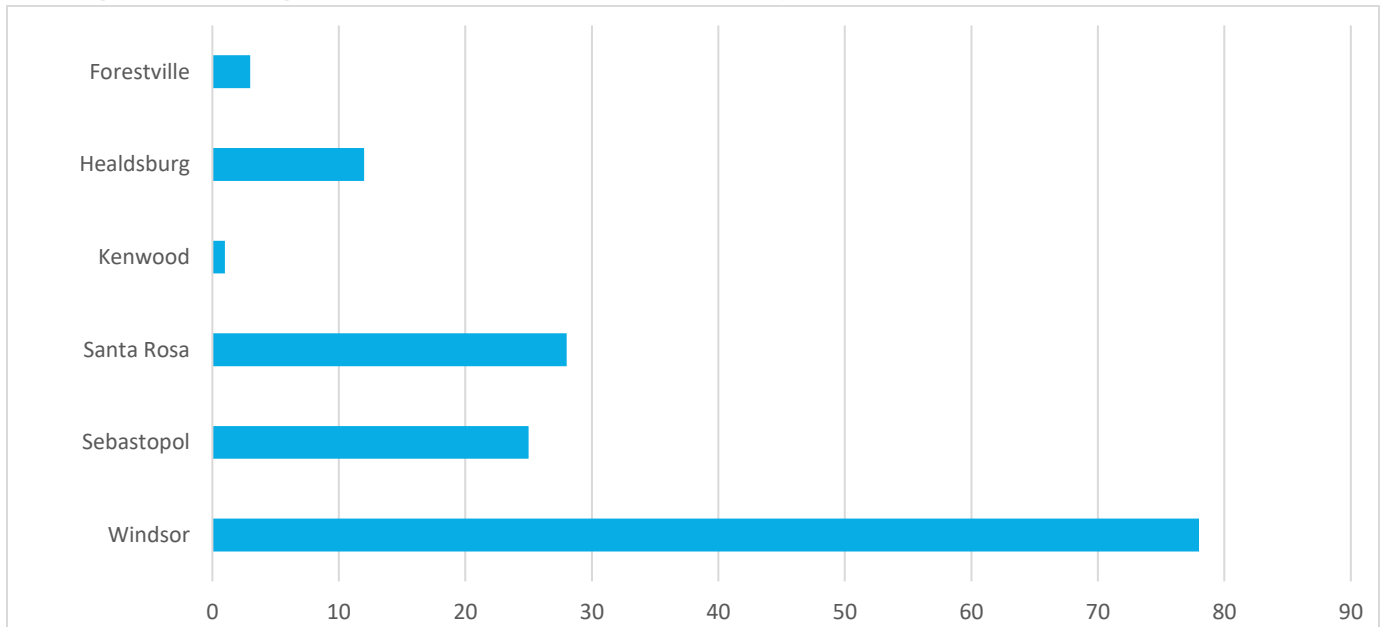
At the point of closest approach to the commenter's address, the angle was calculated. The angle of the aircraft was then categorized as lateral (0° to 30°), offset (30° to 60°), or overhead (60° to 90°).



Most Aircraft Were Overhead at the Time of Complaint



Originating Locations of Complaints

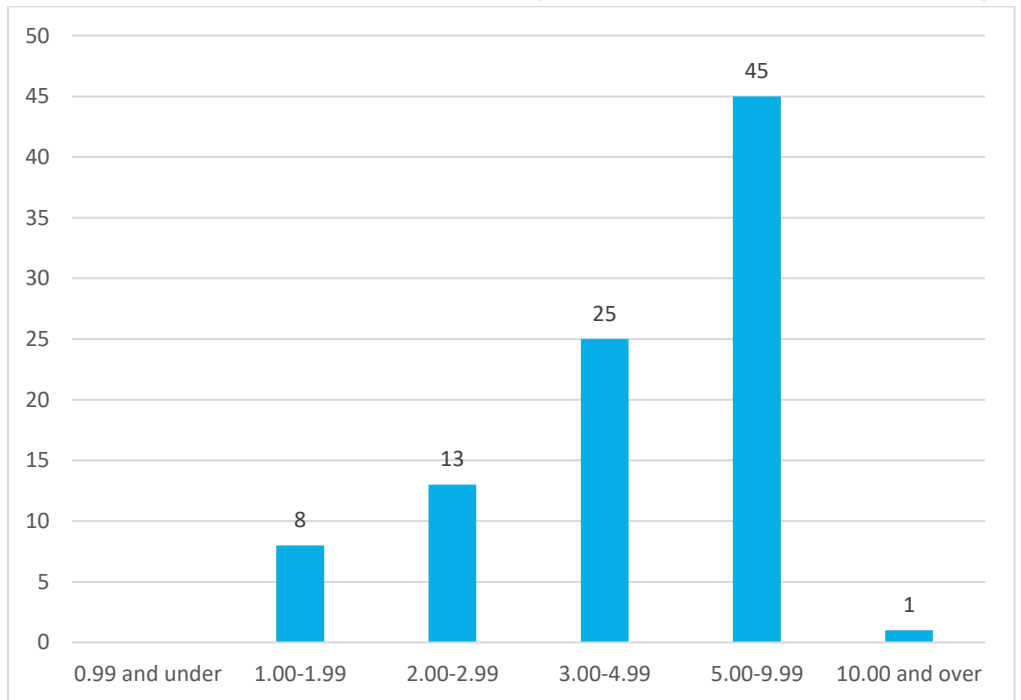


This graph reflects the locations of unique commenters this month.

Distance of Originating Complaint Locations from STS (in nautical miles)

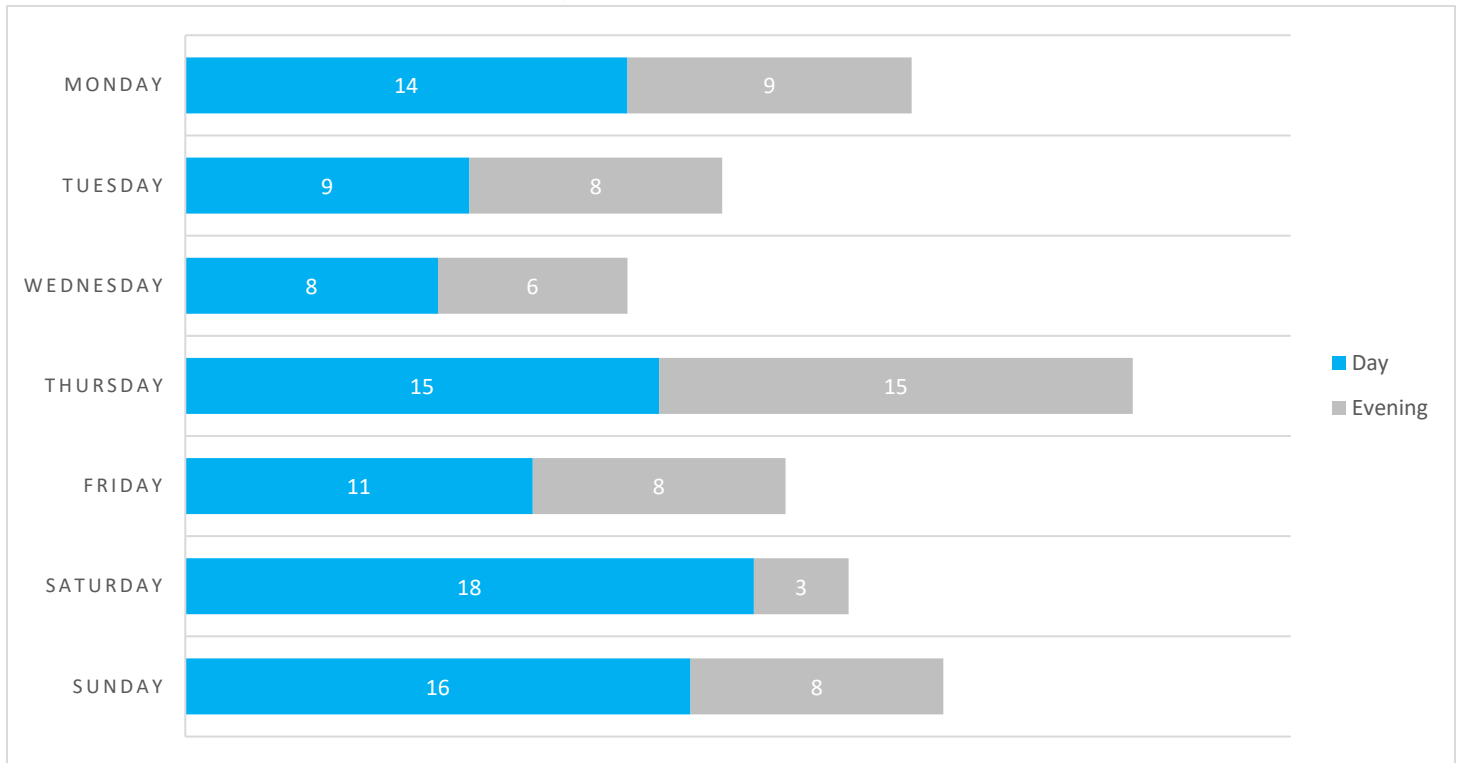
Why are aircraft flying over my house?

The FAA directs traffic into and out of the Airport. Flights are directed to the safest pattern depending on the amount of air traffic and prevailing winds at the time of arrival or departure. Safety is the FAA’s first consideration. However, aircraft can and do fly over all parts of Sonoma County. Sonoma County does not contain any No Fly Zones.



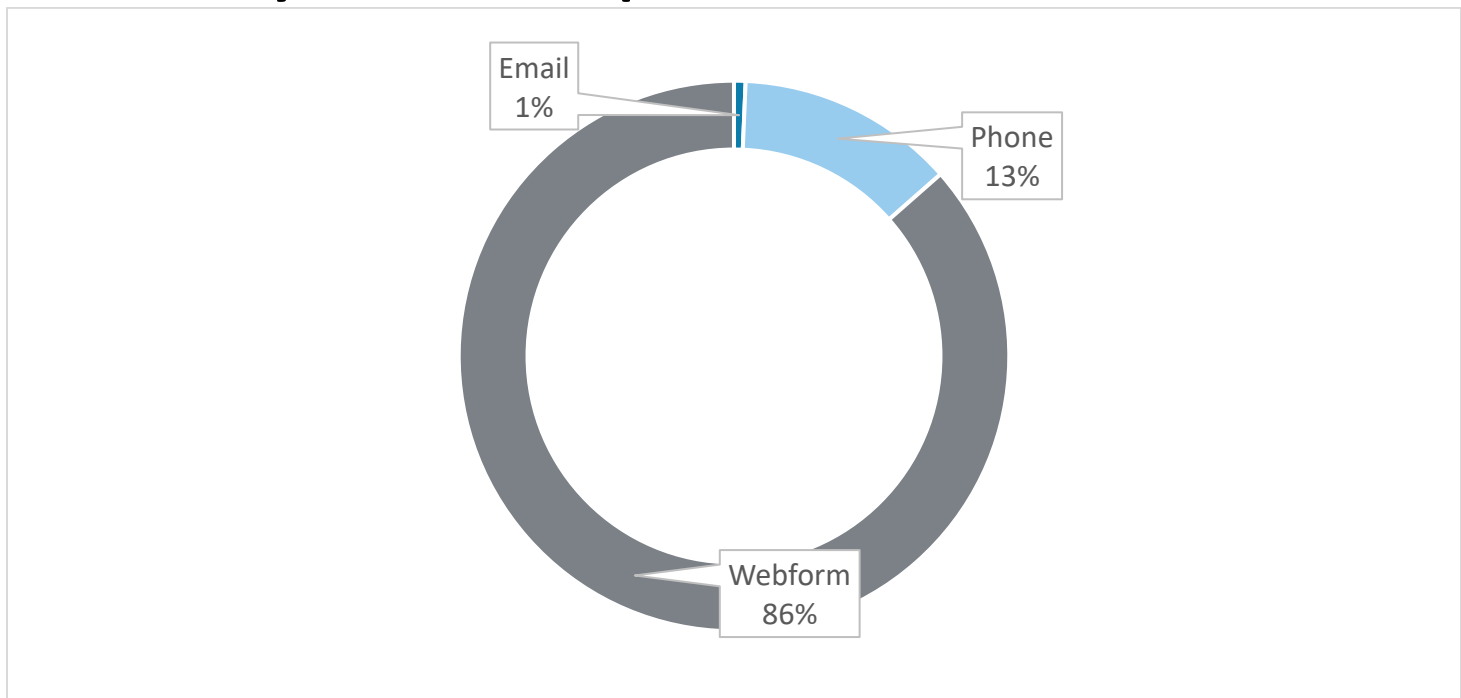
This graph reflects the distance between the Airport and the addresses of unique complainants who made complaints this month in nautical miles (NM).

Days and Times Complaints Were Generated

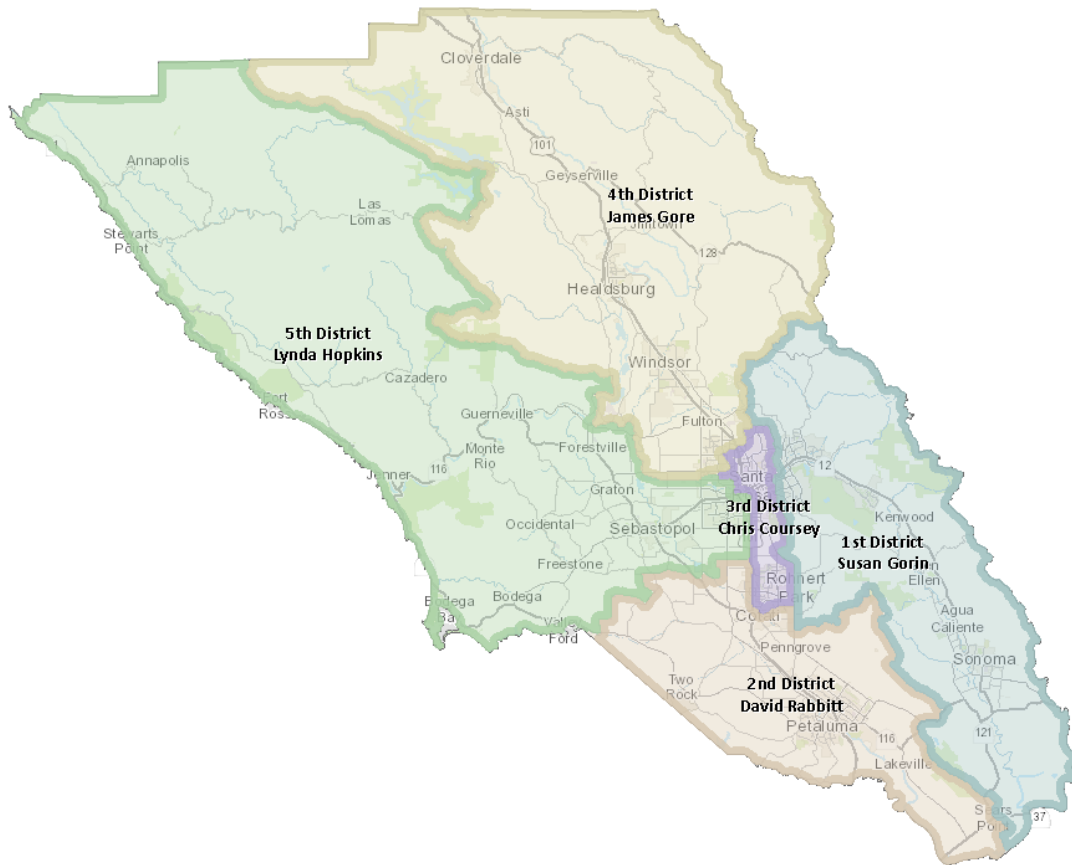
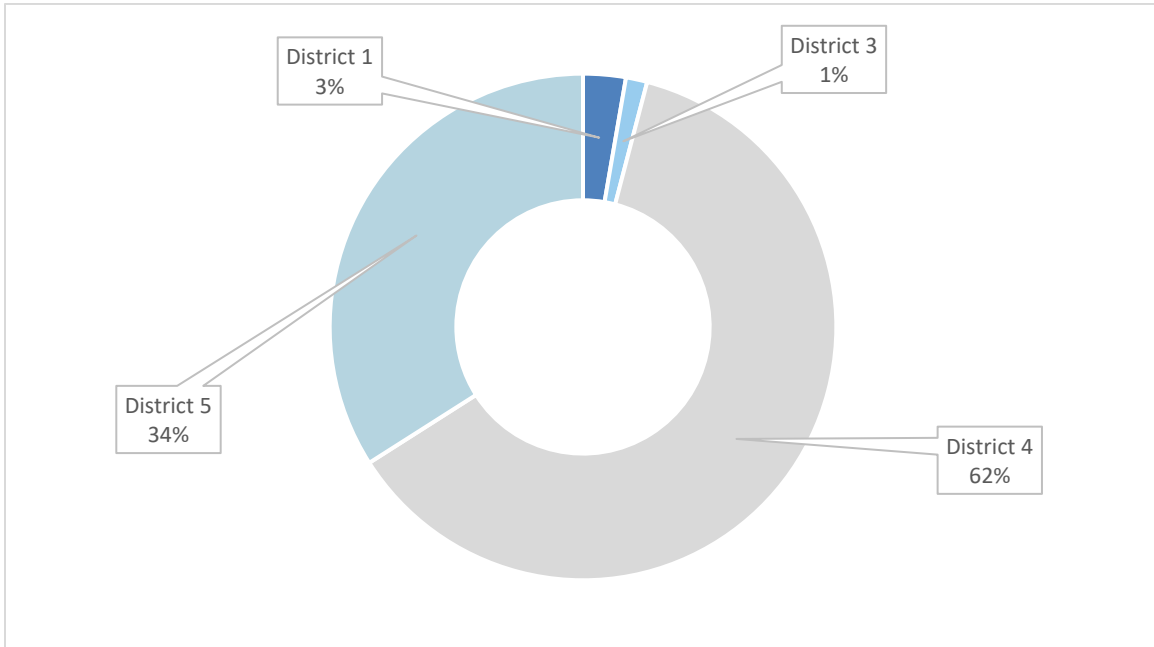


Day = 7:00 AM to 5:59 PM / **Evening** = 6:00 PM to 9:59 AM / **Night** = 10:00 PM – 6:59 AM

Method by Which Complaints Were Received



County Districts Complaints Were Received From*



*Supervisory districts are based on the district map located on the Sonoma County [website](#).

Year-to-Date Operations and Complaints

| Month | 2022 Total Operations | 2022 Airline Operations | 2022 Complaints | 2021 Total Operations | 2021 Airline Operations | 2021 Complaints |
|------------|-----------------------|-------------------------|-----------------|-----------------------|-------------------------|-----------------|
| January | 7,809 | 687 | 54 | 4,851 | 299 | 34 |
| February | 7,410 | 588 | 30 | 6,788 | 203 | 42 |
| March | 8,090 | 723 | 31 | 7,343 | 339 | 68 |
| April | 7,439 | 783 | 54 | 8,287 | 536 | 118 |
| May | 8,738 | 804 | 63 | 8,818 | 620 | 149 |
| June | 8,603 | 884 | 91 | 8,488 | 723 | 184 |
| July | 8,002 | 954 | 109 | 9,180 | 729 | 117 |
| August | 8,147 | 888 | 148 | 8,153 | 781 | 50 |
| September | | | | 7,235 | 869 | 45 |
| October | | | | 7,446 | 931 | 55 |
| November | | | | 8,131 | 775 | 55 |
| December | | | | 5,860 | 665 | 32 |
| YTD | 64,238 | 6,311 | 580 | 61,908 | 4,230 | 762 |

Year-to-Date Activities Identified Through Complaints*

| Month | District 1 | District 2 | District 3 | District 4 | District 5 |
|------------|------------|------------|------------|------------|------------|
| January | - | - | 2 | 29 | 23 |
| February | 2 | - | - | 9 | 19 |
| March | 1 | 2 | - | 5 | 17 |
| April | - | - | 1 | 20 | 33 |
| May | 2 | 2 | - | 31 | 28 |
| June | 2 | 3 | 5 | 32 | 49 |
| July | 1 | 1 | 8 | 55 | 29 |
| August | 4 | - | 2 | 91 | 50 |
| September | | | | | |
| October | | | | | |
| November | | | | | |
| December | | | | | |
| YTD | 12 | 8 | 18 | 272 | 148 |

| Month | Alaska Airlines | Avelo Airlines | American Airlines | United Airlines | Other Jet | Helicopter | Propeller | Turboprop | Military | Unknown |
|------------|-----------------|----------------|-------------------|-----------------|------------|------------|-----------|-----------|----------|-----------|
| January | 8 | - | 1 | 1 | 6 | 2 | 15 | 2 | - | 18 |
| February | 7 | 1 | 1 | 1 | 14 | 3 | 7 | 1 | - | 5 |
| March | 10 | 1 | 1 | 1 | 13 | 3 | 6 | 2 | - | 7 |
| April | 14 | 3 | 7 | 2 | 7 | 1 | 11 | 6 | - | 3 |
| May | 25 | 7 | 2 | - | 8 | 2 | 9 | 6 | - | 4 |
| June | 37 | 7 | 4 | - | 16 | 6 | 8 | 1 | - | - |
| July | 27 | 13 | 17 | - | 23 | 3 | 13 | 8 | - | 5 |
| August | 50 | 13 | 13 | - | 28 | 9 | 13 | 6 | - | 1 |
| September | | | | | | | | | | |
| October | | | | | | | | | | |
| November | | | | | | | | | | |
| December | | | | | | | | | | |
| YTD | 187 | 45 | 46 | 5 | 115 | 29 | 82 | 32 | 0 | 46 |

**Complaints may be correlated to more than one Operation (arrival or departure from the Airport) or may not be correlated to an Operation or aircraft.*

Contact the Charles M. Schulz – Sonoma County Airport

To learn more about Noise Abatement at the Airport or submit a noise complaint:

<https://stsgoodneighbor.com>

Complaint submission tips:

Provide as much information as possible, including date, time, and, if possible, a description of the aircraft. Include the reason for your complaint.

To submit a general comment:

Visit <https://sonomacountyairport.org/about-sts/contact/>