



Charles M. Schulz - Sonoma County Airport

2020 Complaint Summary



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2020 Complaint Summary

The Airport received 997 complaints in 2020, an increase of 205% over 2019. Of the 997 complaints received, 85% (845) were Airport-related. The remaining 15% were not Airport-related, usually complaints made by individuals located farther than 5 miles from the Airport that were not specific or not correlated to an aircraft arriving to or departing from STS. The number of commenters increased 32% in 2020 to 153 from 116 in 2019, including 118 individuals who were classified as first-time callers (1-2 complaints during 2020). However, the majority of the increase in the number of complaints received was due to an increase in activity from frequent callers. The three most-frequent callers accounted for 579 (58%) of complaints received, and the ten most-frequent callers accounted for 710 (71%) of complaints received.

Complaints were generated from throughout Sonoma County, most commonly from Windsor and Santa Rosa residents. Complaints largely involved airlines, corporate jets, and less frequently helicopters and general aviation aircraft. Concerns regarding excess noise and low-flying aircraft accounted for the majority of complaints (76%). Other concerns expressed included frequency and flight paths and some involve overflights (i.e., flights not arriving to or departing from STS). Complaints dropped off sharply in April and then peaked in July.

2020 At a Glance

997 Complaints



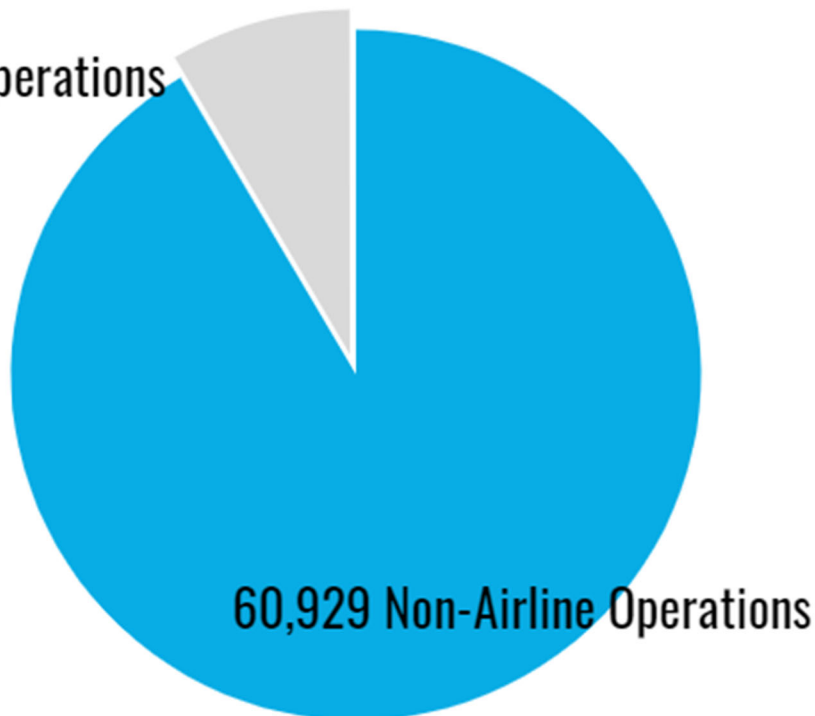
845 Airport-Related



153 Commenters

66,566 Operations in 2020

5,637 Airline Operations



A complaint is considered "Airport-related" if the operation to which the complaint is correlated:

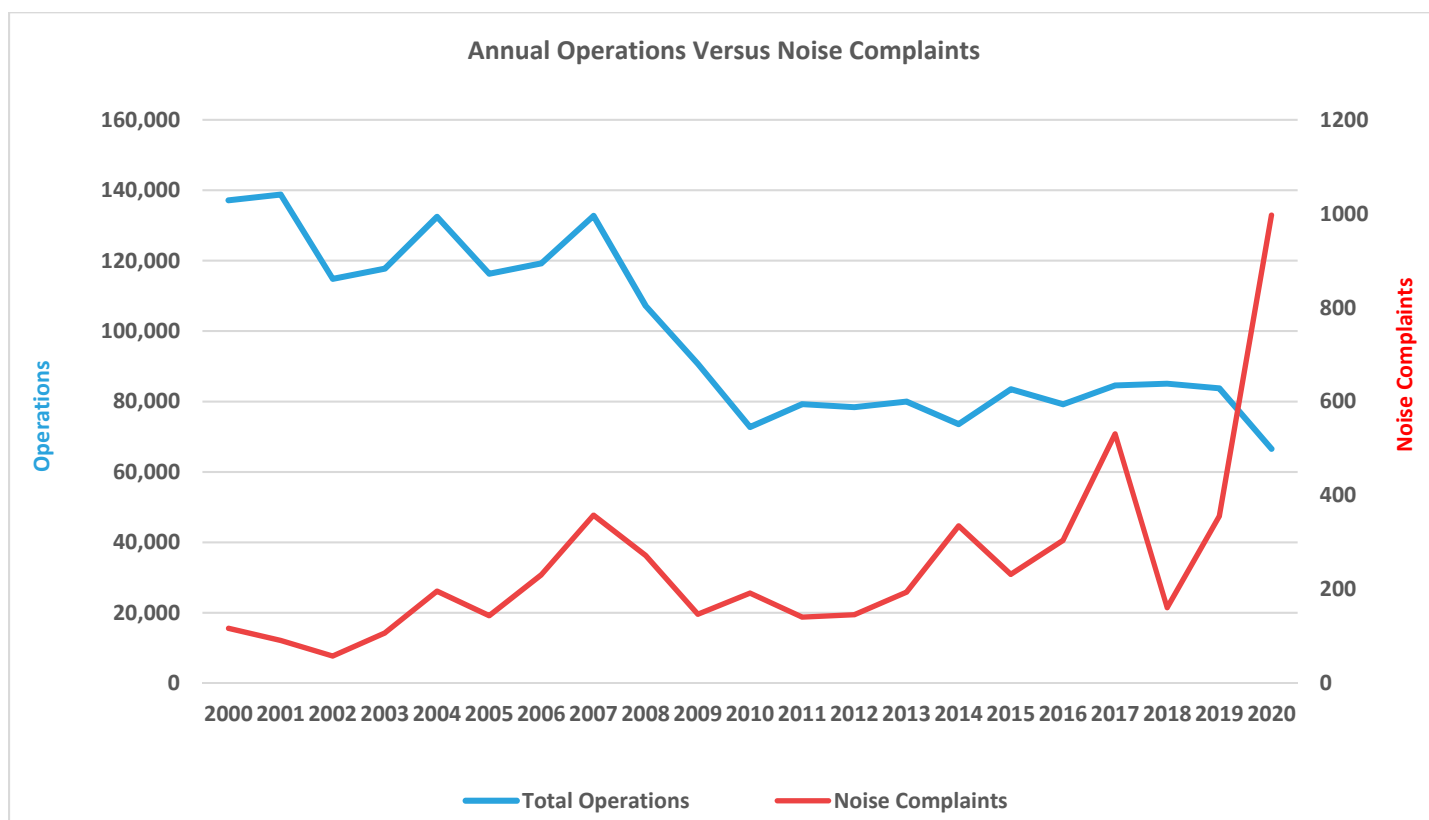
- *Is directly related to takeoff or landing at STS.*
- *Takes place within a five-mile radius of the Airport.*
- *Is a direct result of an Airport-related event.*

Significant Increase in Complaints from 2019

Despite a significant decrease in total and in airline operations, the number of complaints received in '20 increased more than 200% from '19 (to 997 from 327). There were 66,566 total operations in '20, a decrease of 21% from 83,734 in '19. Airline operations decreased at an even greater rate; there were 5,637 airline operations in '20, a decrease of 32% from 8,245 in '19. A variety of factors contributed to this increase, including a continued increase in activity from the most frequent callers (discussed in more detail below). Perhaps one of the greatest contributing factors to the increase in complaints was the onset of the COVID-19 pandemic and stay-at-home order that went into effect in late March of '20. Many more Sonoma County residents were at home during working hours and so experienced air traffic near their homes that they would not experience had they been at their workplaces. During this time there was also a decrease in ambient noise, including traffic noise, which may have made aircraft flights more noticeable to residents. In fact, the very decrease in air traffic could have increased awareness of aircraft flights.

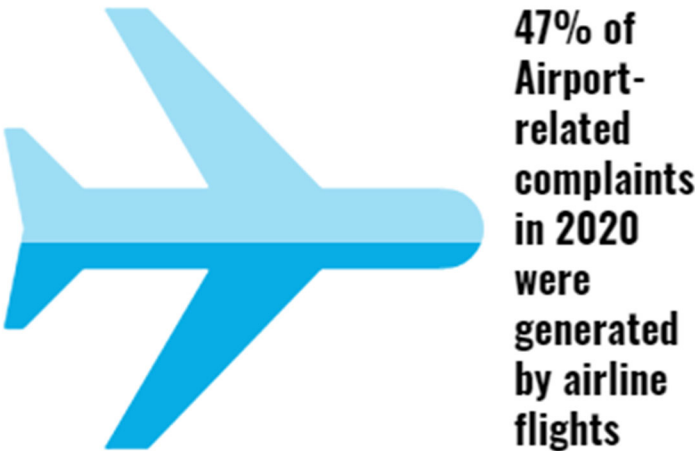
In '20, the Airport received a greater percentage of complaints (15%) that were Non-Airport related than in previous years. One reason for this increase in complaints received regarding operations out of other airports and at a distance from STS could be a greater awareness of the existence of the Airport itself. As Sonoma County and the greater Bay Area has become more cognizant of the presence of STS as a commercial passenger airport, that awareness could contribute to an increase in complaints submitted to the Airport regarding aircraft perceived as being noisy or flying at a low altitude.

The Airport also received a greater percentage of complaints via webform than in previous years. In '19, 72% of complaints were received by voicemail; only 8% were received by webform. In '20, the majority of complaints were still received by voicemail (37%), but 27% were received by webform. (In '20, 32% of complaints were received by email, however almost all were from one commenter.) The webform is a more efficient way to submit a complaint than the Airport's noise complaint hotline. Commenters do not have to listen to any information before leaving their message and they are able to input their personal details just once. The increased convenience of this method of complaint submission may have contributed to the increase in complaints.



Source of Complaints

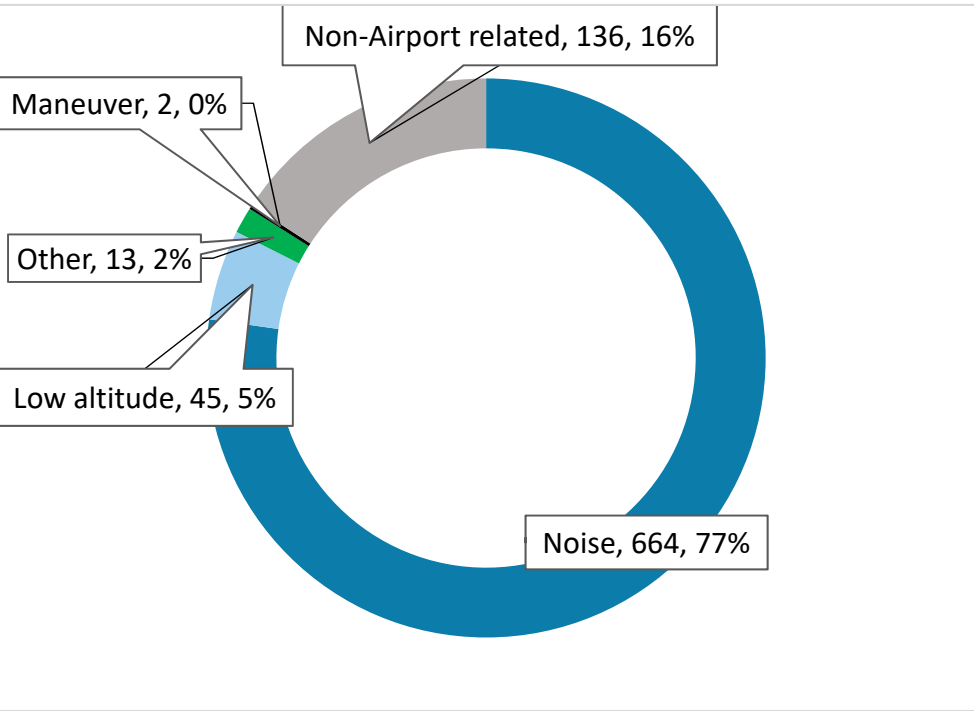
When California’s stay-at-home order was issued on March 19, 2020, airlines were already experiencing a decline in passenger numbers in response to the expanding effects of COVID-19. In April, the Airport’s airline operations dramatically decreased and continued to remain at lower-than-normal levels through the end of 2020. Despite the decrease, as in 2019, 47% of Airport-related complaints received in 2020 were regarding airline operations. Other jet traffic accounted for 23% of complaints received. The remainder of complaints were regarding helicopter or propeller (including light general aviation) operations, or were regarding unknown aircraft.



Continued Increase in Activity from Frequent Callers

The majority (86%) of complaints received in 2020 came from frequent callers (3 or more comments per year). The ten most frequent commenters submitted a total of 722 complaints, or 72%, of all complaints received in 2020. Of the ten most frequent commenters, eight were located in Windsor, one in Healdsburg, and one in Penngrove.

The three most frequent commenters submitted a total of 579 complaints, or 58%. Two of the three most frequent commenters are located in Windsor, north of the Airport within two nautical miles (NM) and roughly in line with Runway 14/32. While commenters from Windsor voiced concern over arriving and departing aircraft, of the complaints submitted by the two most frequent commenters from Windsor, 81% were regarding aircraft arriving to Runway 14. Windsor commenters’ primary concern was a perceived failure of aircraft to approach Runway 14 using a flight path further west of the town.

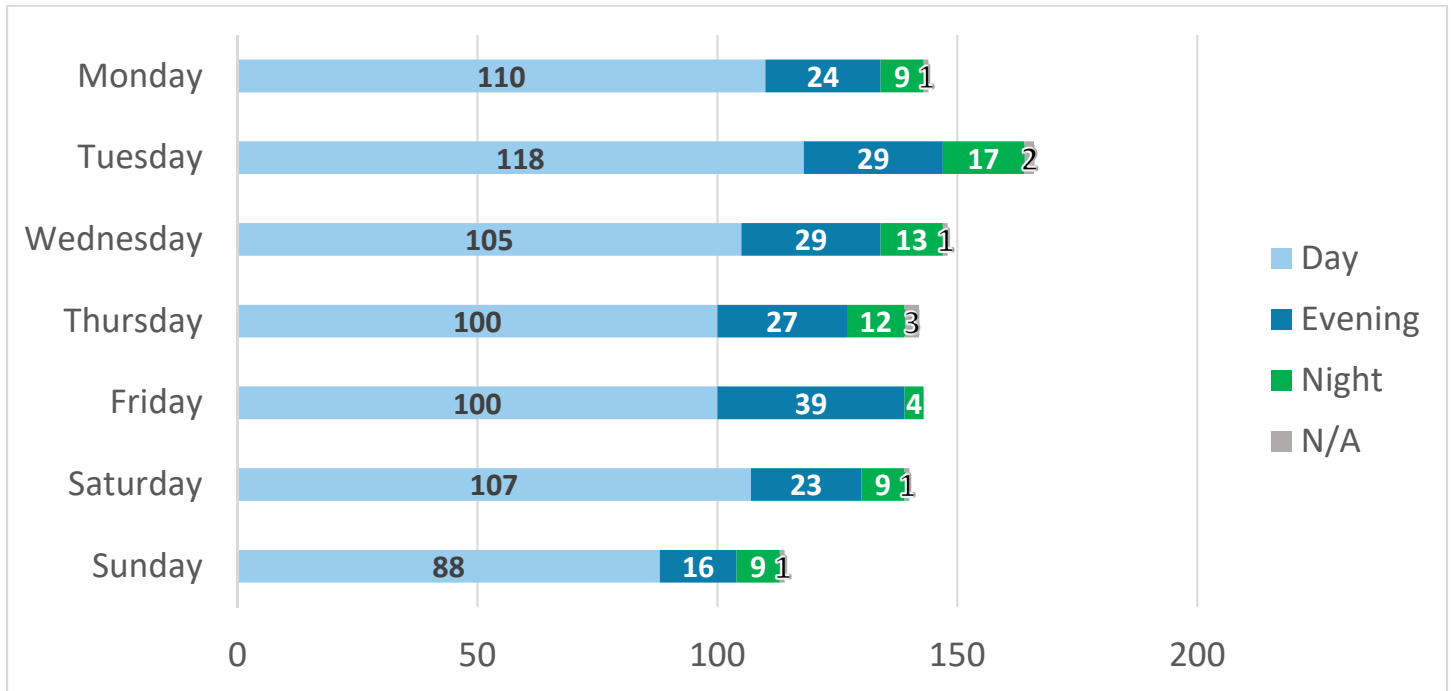


The most frequent commenter (297 complaints, or 30% of total) is located in Penngrove, just over 14 NM south of the Airport. The commenter in Penngrove requested that flights avoid the area altogether and indicated that aircraft should fly over 101 to avoid disrupting rural areas. This commenter lives less than five miles from the Petaluma Municipal Airport and often sent complaints to both STS and Petaluma, in addition to the Federal Aviation Administration (FAA), Oakland International Airport, San Francisco International Airport, Spare the Air Bay Area, and more.

This graph reflects the categories of complaints submitted by frequent callers.

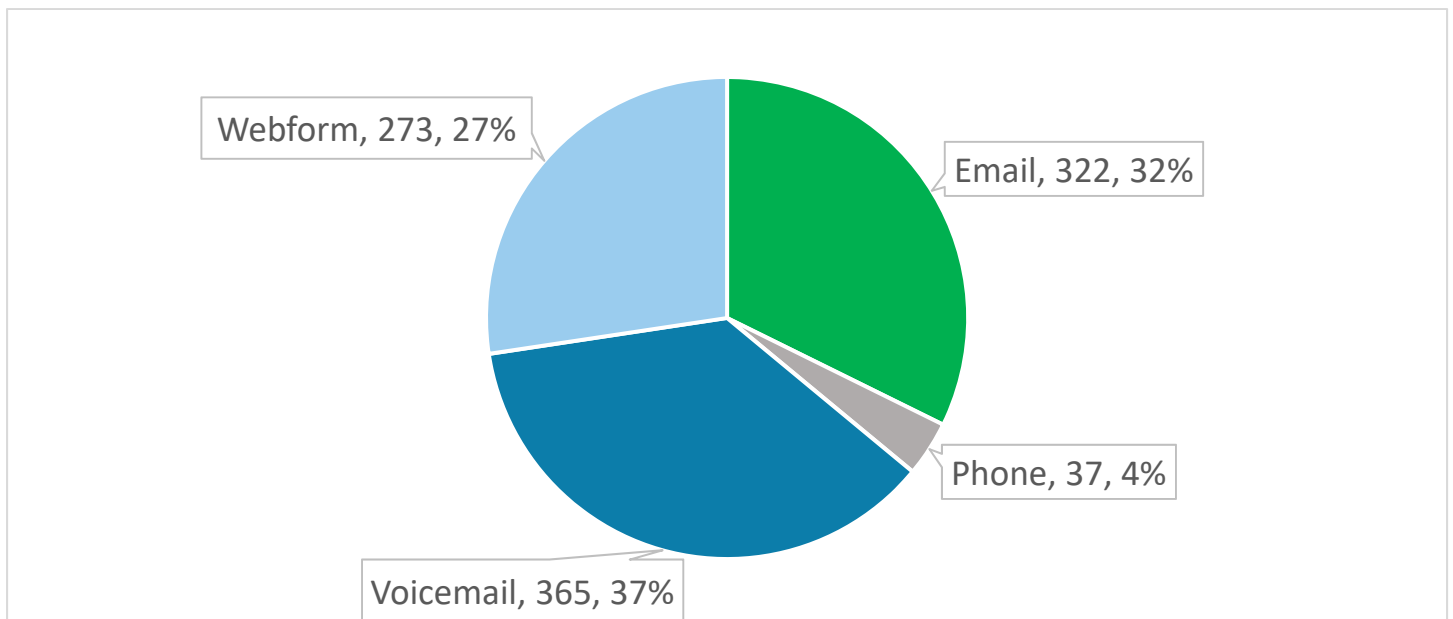
Most Complaints Were Received During the Day

The majority of Airport operations occur between 7:00 AM and 5:59 PM, which correlates with the majority of complaints received. The Airport received more complaints on Tuesdays than on any other day.



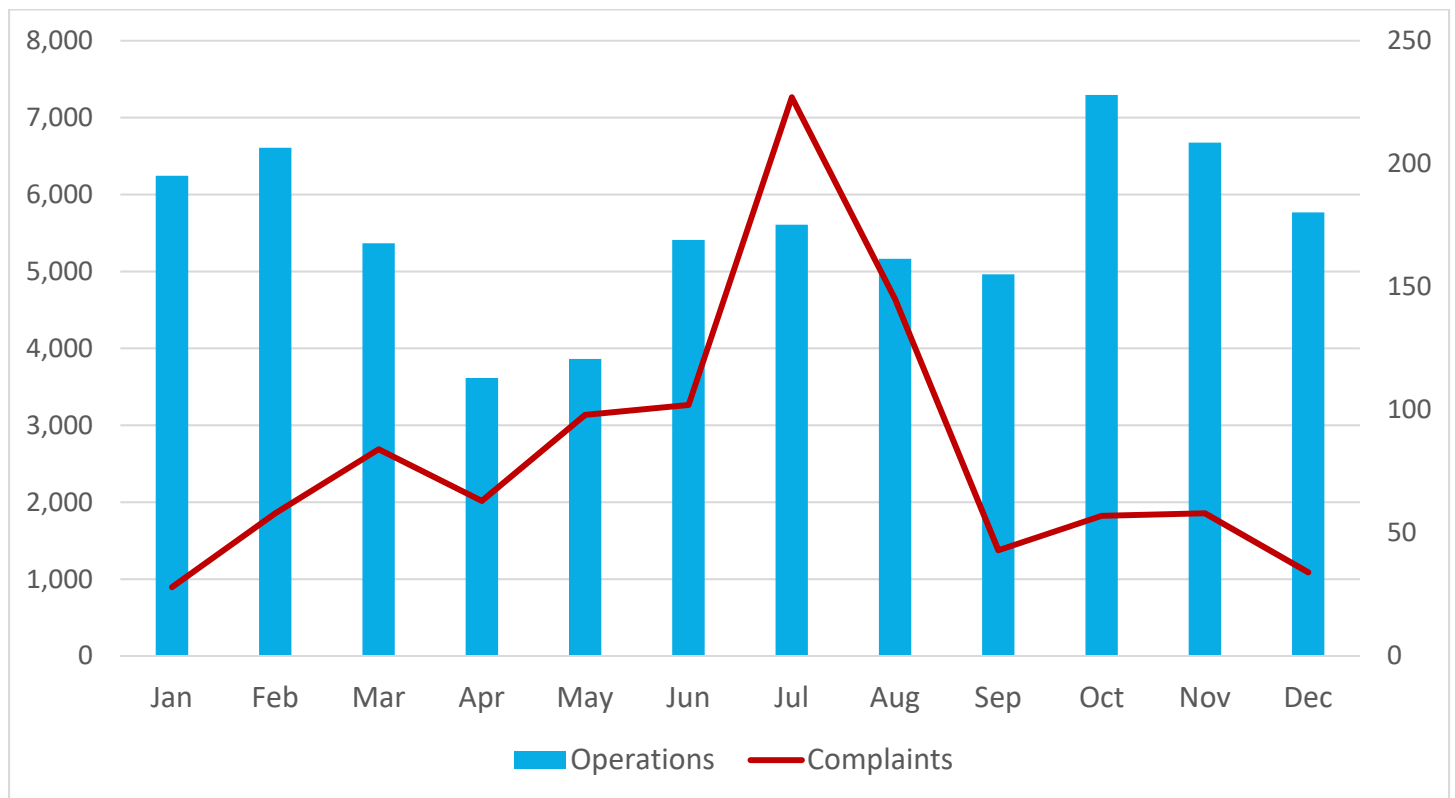
Most Complaints Were Received by Voicemail

STS receives complaints by four methods: voicemail, webform, email, and phone. Most commenters in 2020 used the noise hotline to record a voicemail containing the details of their complaint (365 or 37%). Commenters also used the webform available on the STS website to submit complaints (273 or 27%), sent emails to the general inbox (322 or 32%) or made their complaint by phone to Airport staff (37 or 4%).

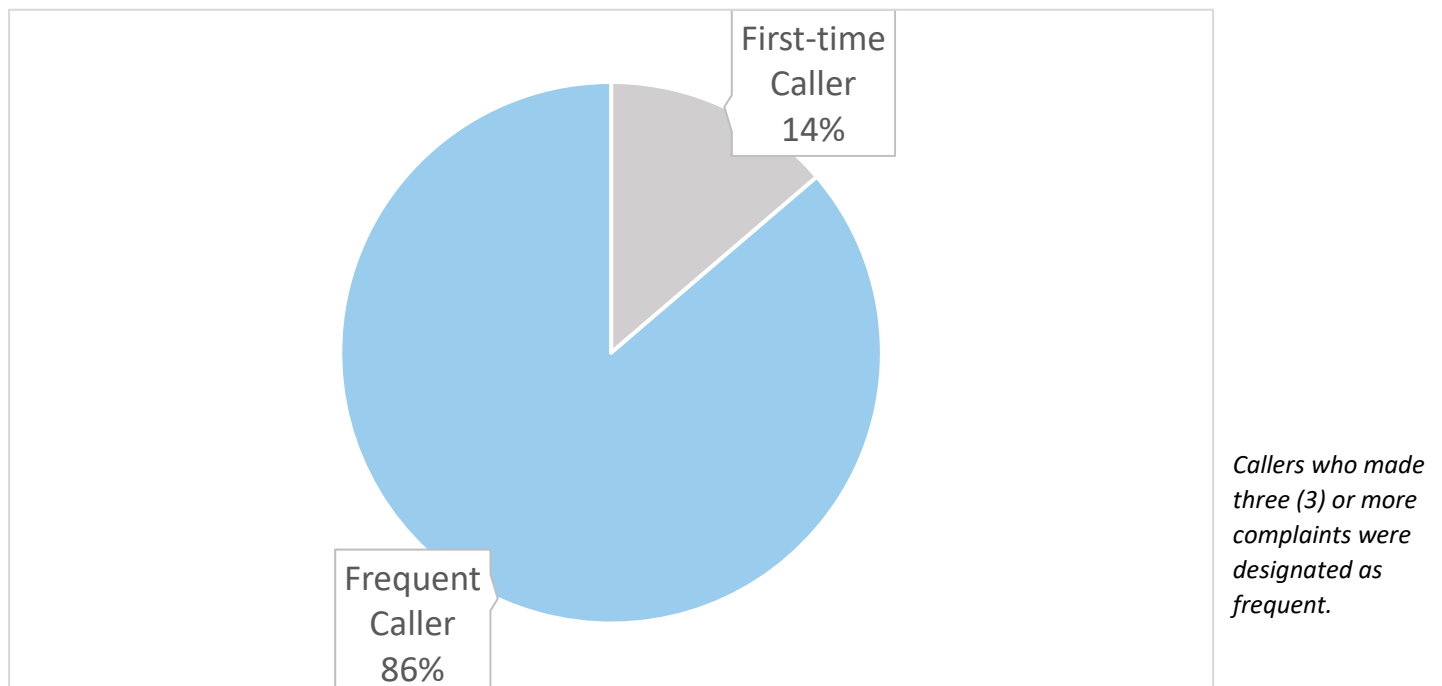


Complaints Increased During Summer Months

The majority of complaints were received between June and August (447 or 45%), which is when operations usually increase seasonally. The spikes in complaints occurred during months when temperatures are mild enough for residents to spend much of their time outdoors gardening or indoors with open windows.

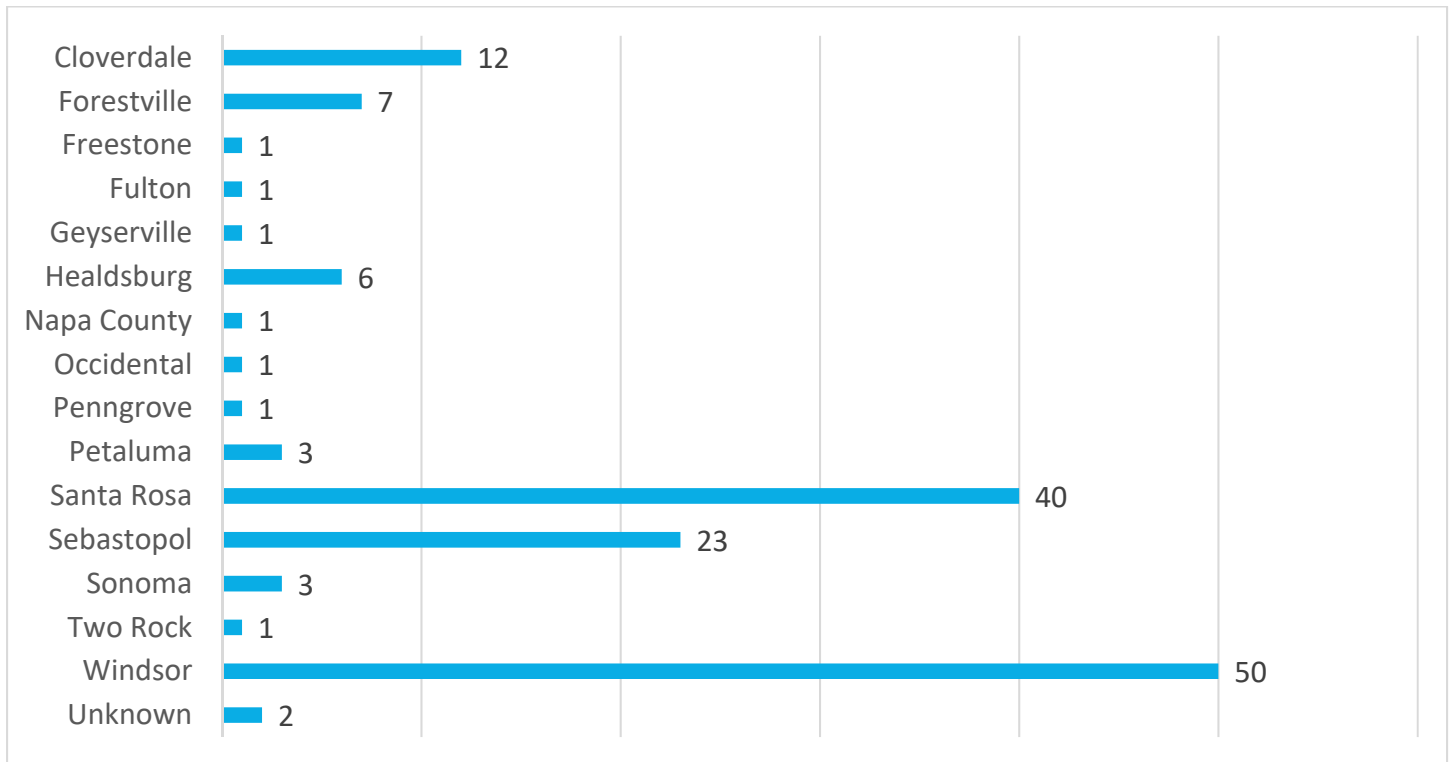


Most Complaints Were Made By Frequent Callers



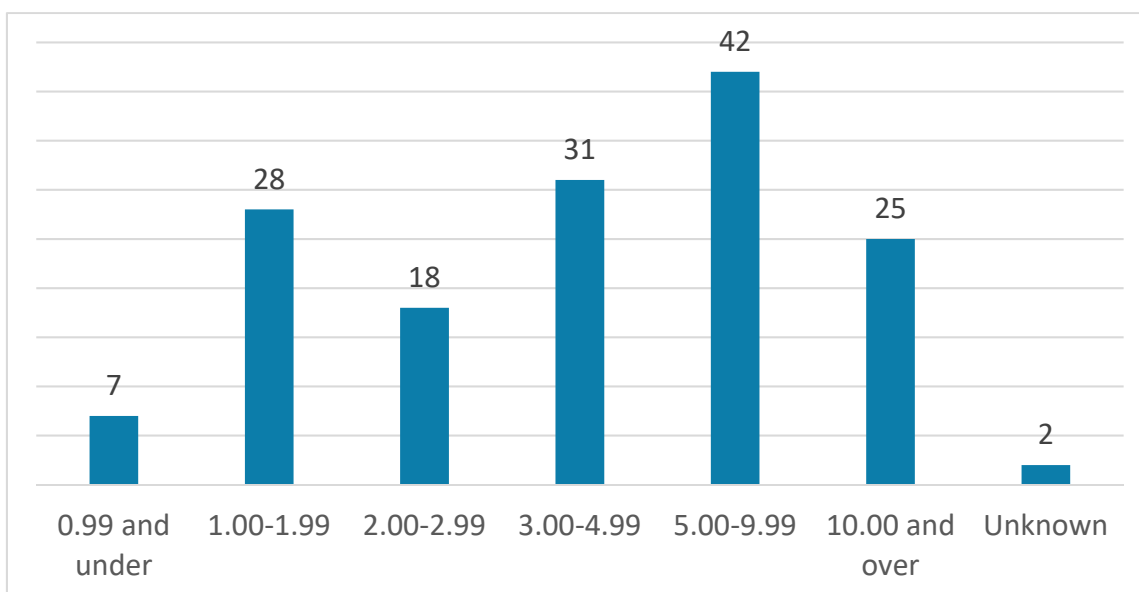
Most Commenters live in Windsor or Santa Rosa

Of the 153 individuals who submitted complaints to STS in 2020, most lived in either Windsor (50 or 33%) or Santa Rosa (40 or 26%). A significant number of complaints also came from commenters in Sebastopol (23 or 15%) and Cloverdale (12 or 8%).



This graph reflects the locations of unique complainants.

55% of commenters are <5 NM from the Airport



More than half of those who submitted complaints in 2020 live less than 5 nautical miles (NM) from the Airport (84 or 55%). 42 or 27% of commenters live between 5 and 10 NM from the Airport and 25 or 16% of commenters live 10 NM or greater from the Airport.

Distance (in nautical miles (NM)) between the Airport and the addresses of 2020 complainants.

2020 Complaint Data

Summary of Operations		Complaints by Type All Complaints		
			Complaints	Percent
Number of Operations	66,566	Noise Related	753	75.5%
Total Complaints	997	Low Flight Related	65	6.5%
Airport Related Complaints	845	Maneuver Related	4	0.4%
Airport Related Complaints (% of total)	84.8%	Other (overflights, track, etc.)	23	2.3%
		Not Airport-related	152	15.2%

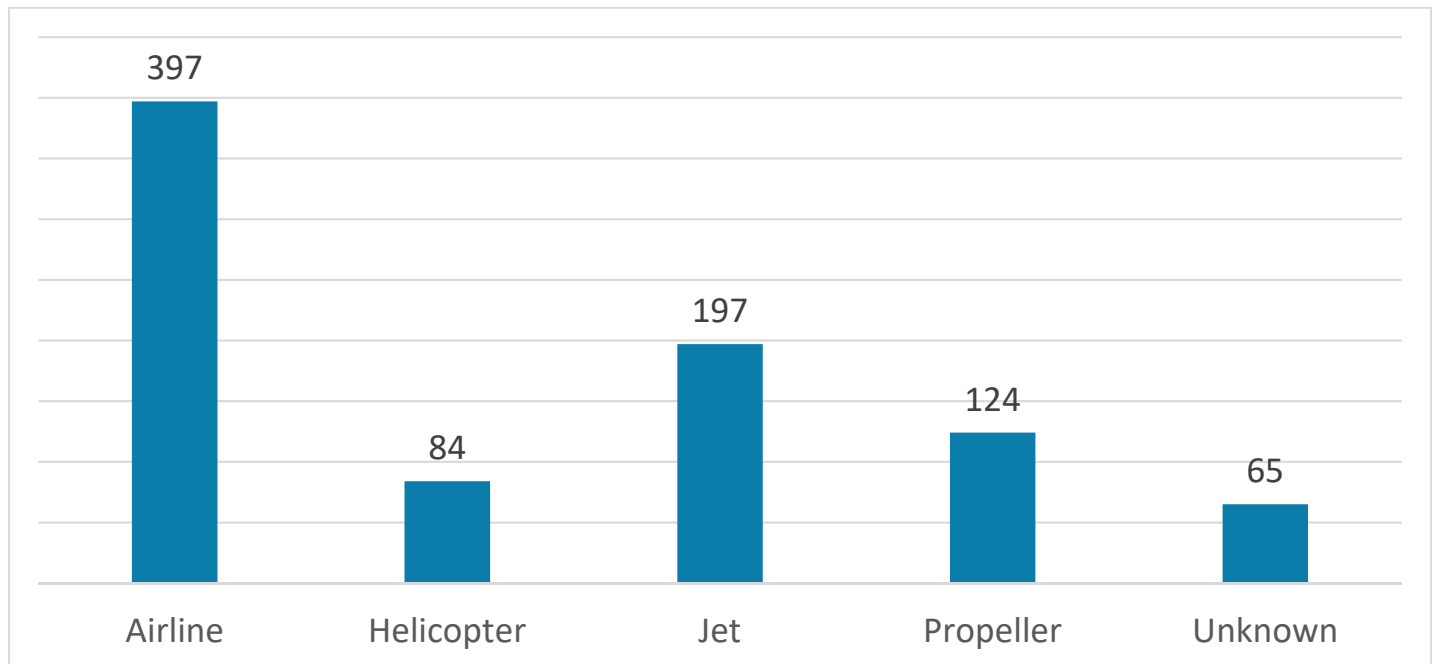
Complainant Frequency			Complaints by Type Airport-Related Only		
	Complaints	Percent		Complaints	Percent
Frequent Complainants 3+/year	860	86.3%	Noise Related	753	89.1%
Infrequent Complainants <3 calls/year	137	13.7%	Low Flight Related	65	7.7%
			Maneuver Related	4	0.5%
			Other (overflights, track, etc.)	23	2.7%

Airport-Related Complaints by Source			Correlated Complaints by Airline			
	Complaints	Percent	Airline	Complaints	Percent of Airline Complaints	% of all Airport- Related
Airline	397	47.0%	Alaska	321	80.9%	38.0%
Private Jet	197	23.3%	American	62	15.6%	7.3%
Unknown/Other	65	7.7%	United	14	3.5%	1.6%
Propeller	124	14.7%		397		
Helicopter	84	9.9%				
Hot Air Balloon	0	0.0%				

Correlated Complaints in Relation to Airline Operations				
	Complaints	Operations	Operations per Complaint	Percent of Operations Correlated with Complaint
Alaska Airlines	321	3,901	12.15	8.2%
American Airlines	62	1,144	18.45	5.1%
United Airlines	14	592	42.28	2.4%

Airline Operations Generated Most Complaints

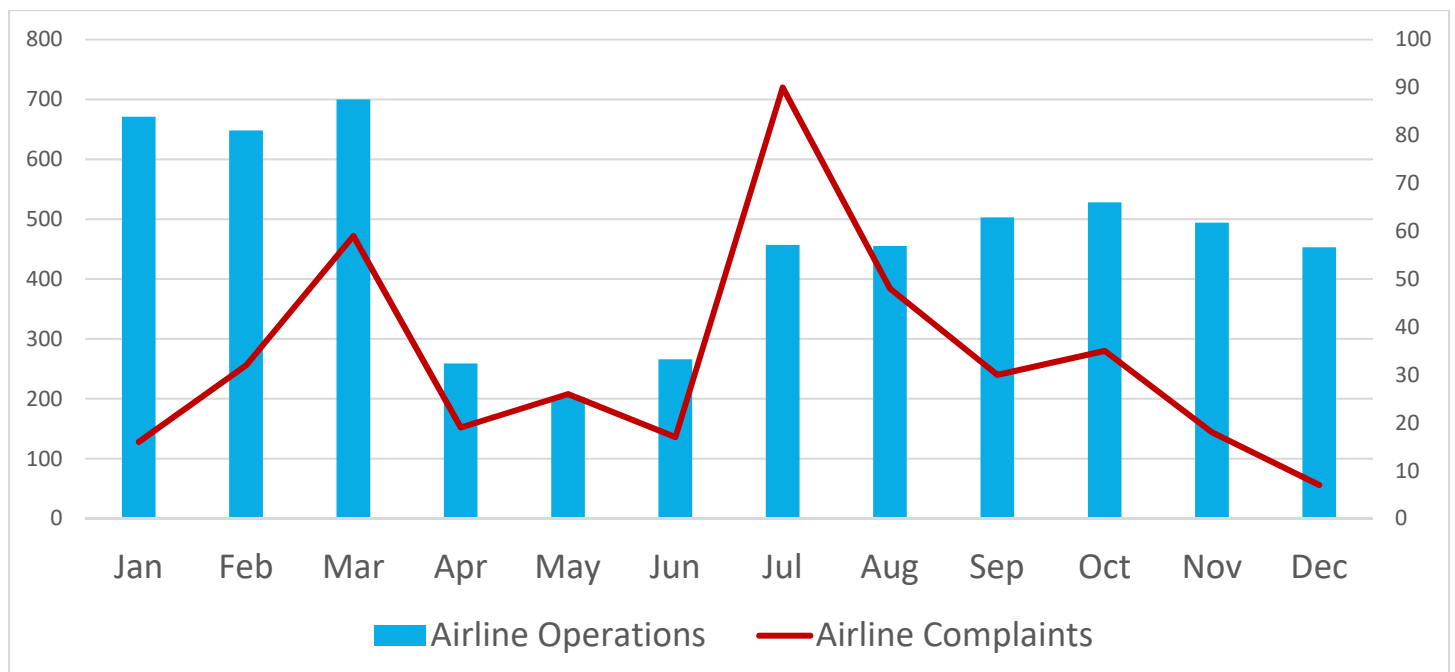
Despite a significant decrease in 2020, airline operations continued to generate more complaints than other aircraft categories.



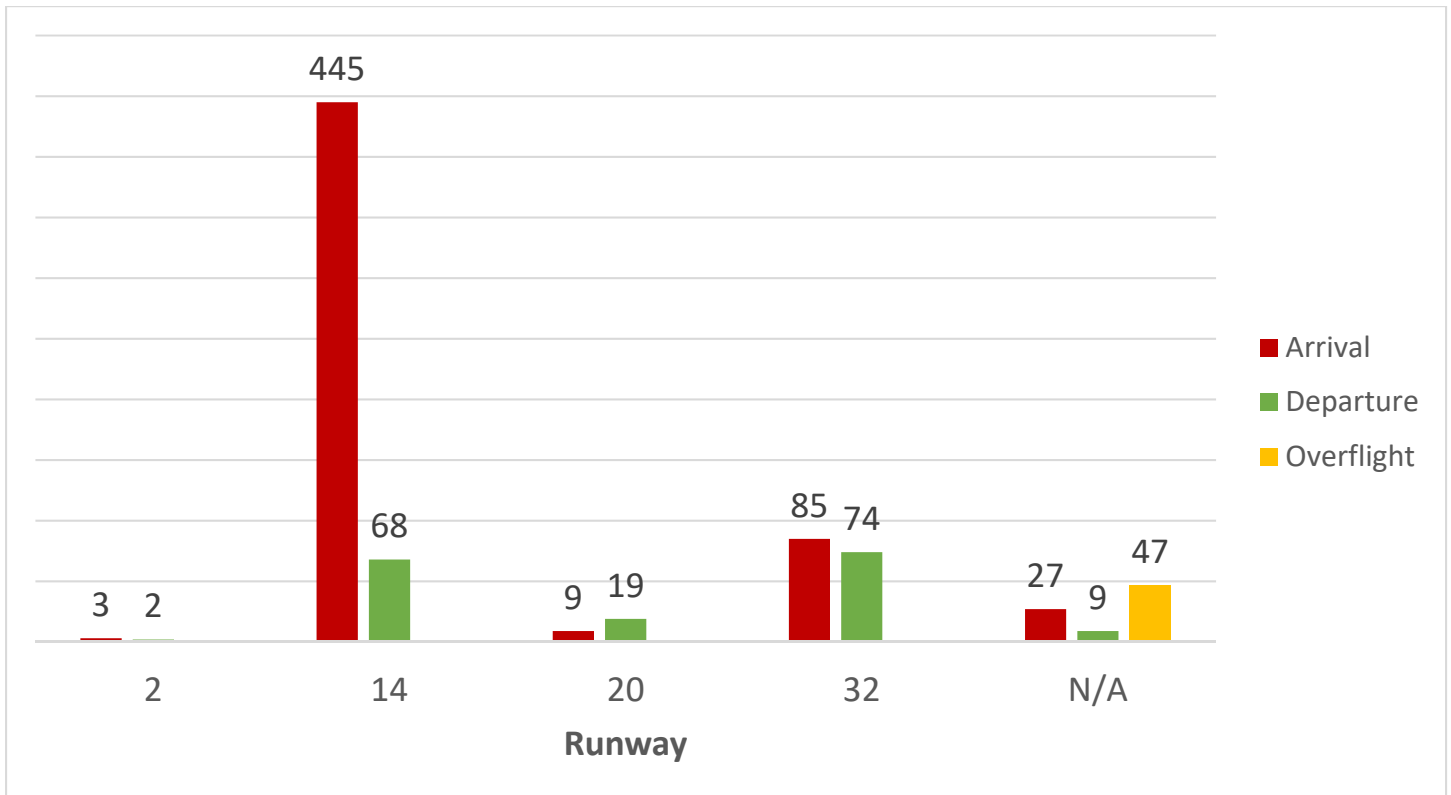
This graph includes Airport-related complaints. In some cases, a complaint may be correlated to more than one aircraft.

Airline Operations and Complaints by Month

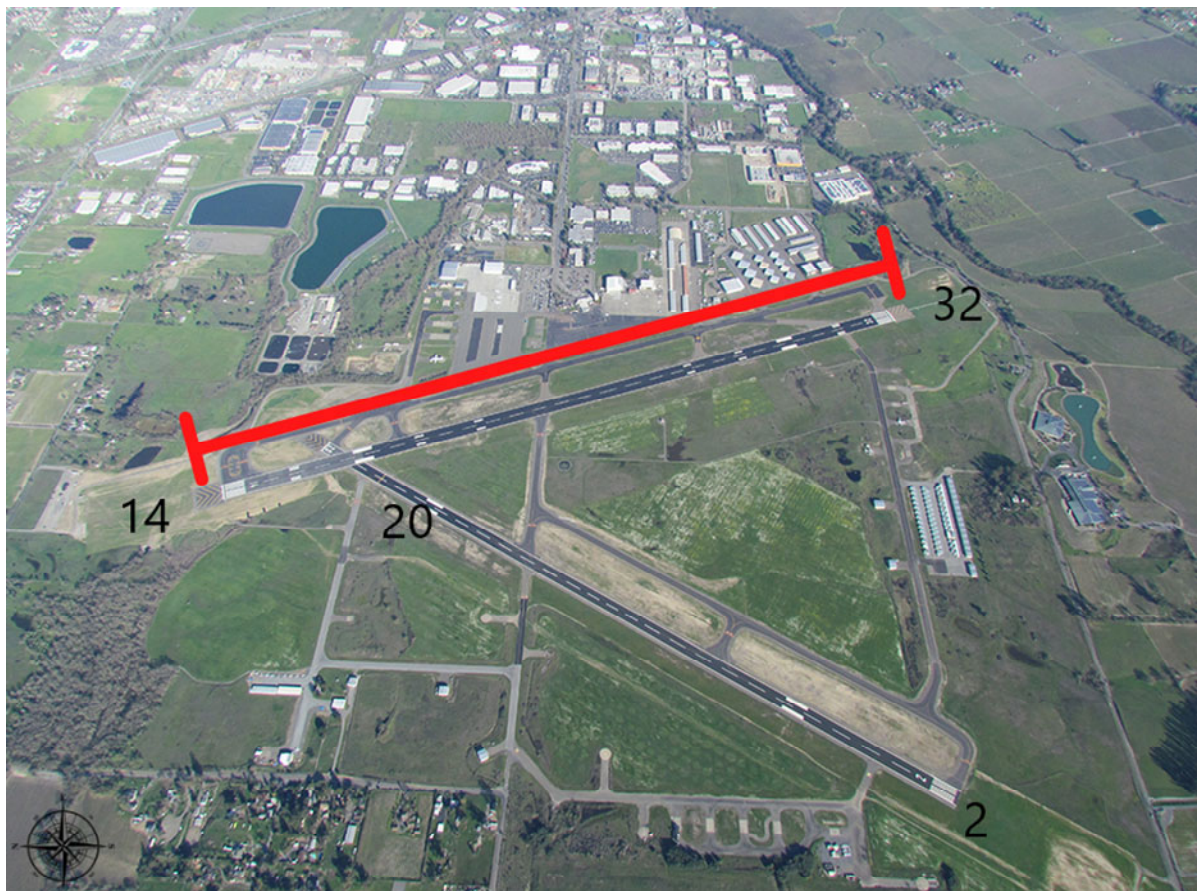
Airline complaints roughly followed the trend line of all complaints; they dropped off sharply in April following March's initial stay-at-home order (the majority of March complaints were received before the March 19 stay-at-home order) and peaked in July, although airline operations remained at lower levels than early in the year.



Arrivals to Runway 14 Generated Most Complaints



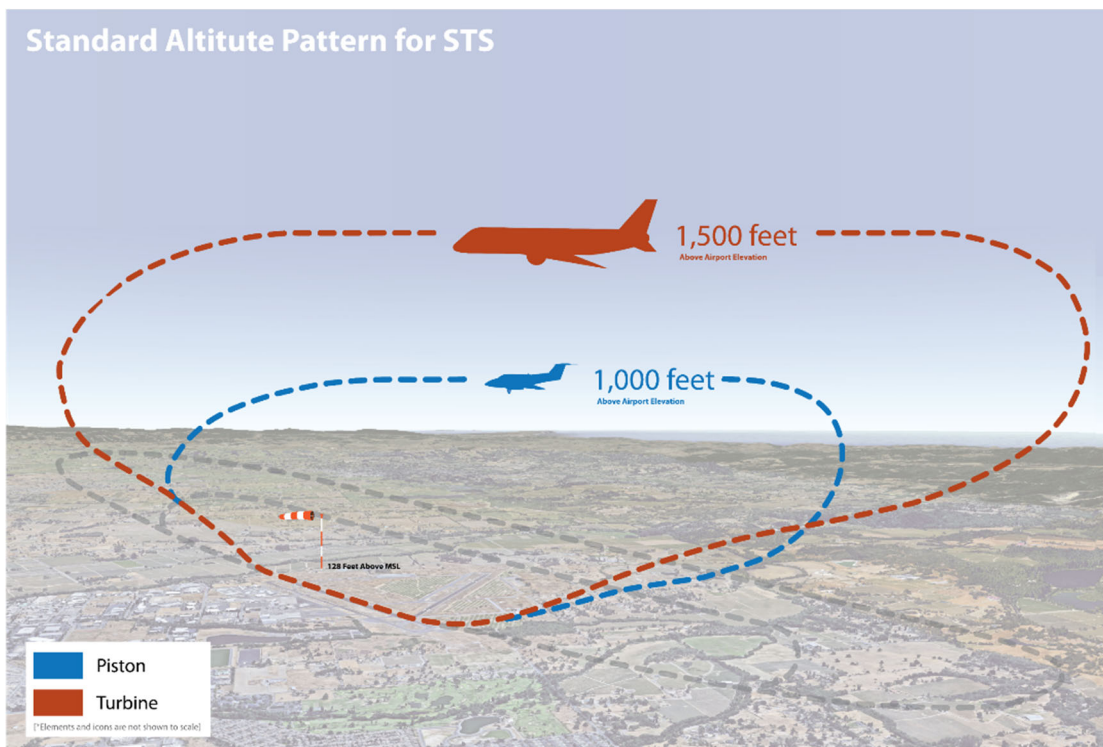
Runway 14/32 is longer and wider than Runway 2/20 and can handle heavier aircraft. Runway 14/32 is also better suited to prevailing winds at the Airport. Runway 2/20 is only used for aircraft allowed to safely operate on its shorter length and slightly lower aircraft weights.



Aircraft Flying Under 1,000 Feet Generated Most Complaints

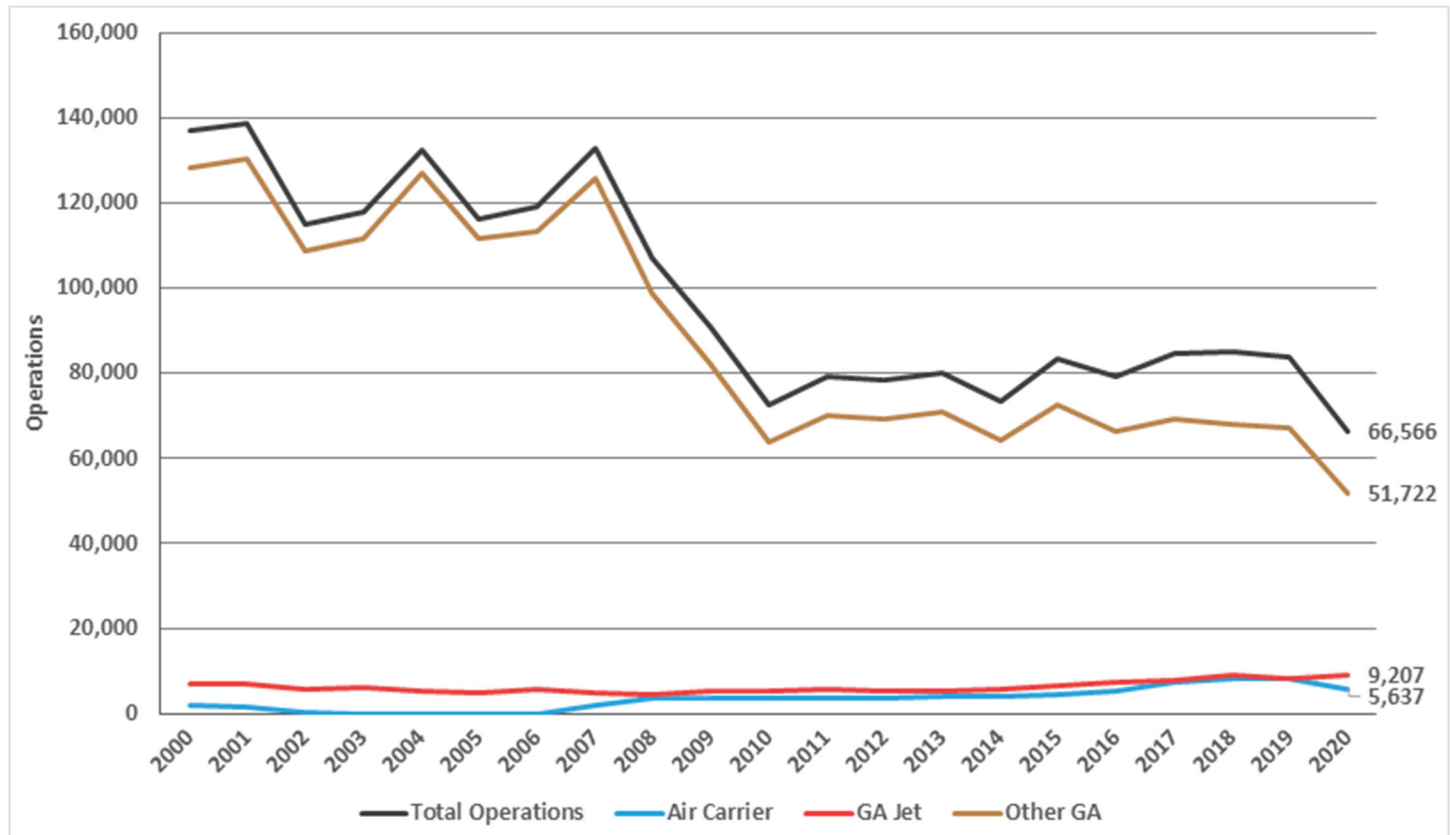
Altitude in Feet	Number of Aircraft	Percentage of Total Tracked Aircraft
Under 300	6	1%
300 to 499	7	1%
500 to 799	97	18%
800 to 999	188	36%
1,000 to 1,249	67	13%
1,250 to 1,499	18	3%
1,500 to 1,749	13	2%
1,750 to 1,999	21	4%
2,000 and over	111	21%

There were 528 aircraft with tracked altitudes identified through complaints made in 2020. At the point of closest approach (PCA) to the complainant's address, altitude was recorded (in feet).



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)).

STS Historical Operations



GA=General Aviation (not airline)

Complaints by Year

Many more complaints were received in 2020 than in any year previous, despite the decrease in both overall operations and airline operations. Several factors could have contributed to this increase in complaints, including the large number of Sonoma County residents working from home in 2020, the decrease in other common background noise such as vehicle traffic, and the pressure of mental and emotional stress due to the COVID-19 pandemic.

Year	Airport-Related Complaints		First-time Callers		Airline Operations	Total Operations	Operations per Airport-Related Complaint
2016	273	90%	176	58%	5,311	79,231	290
2017	475	89%	105	20%	7,417	77,534	163
2018	150	93%	121	75%	7,984	85,060	567
2019	294	90%	98	30%	8,245	83,734	285
2020	845	85%	137	14%	5,637	66,566	79
Average	407	89%	127	39%	6,919	78,425	277

Total Complaints by Category

	2016	2017	2018	2019	2020	Five Year Average	2020 vs. 5 yr. Average
Noise Related	188	402	76	244	753	333	126%
Low Flight Related	42	44	65	22	65	48	37%
Maneuver Related	2	3	2	0	4	2	82%
Other (flight path, frequency, etc.)	41	27	7	28	23	25	-9%
Non-Airport Related	31	55	12	33	152	57	169%
Total Complaints	304	531	162	327	997	464	115%

Airport-Related Complaints By Day Received

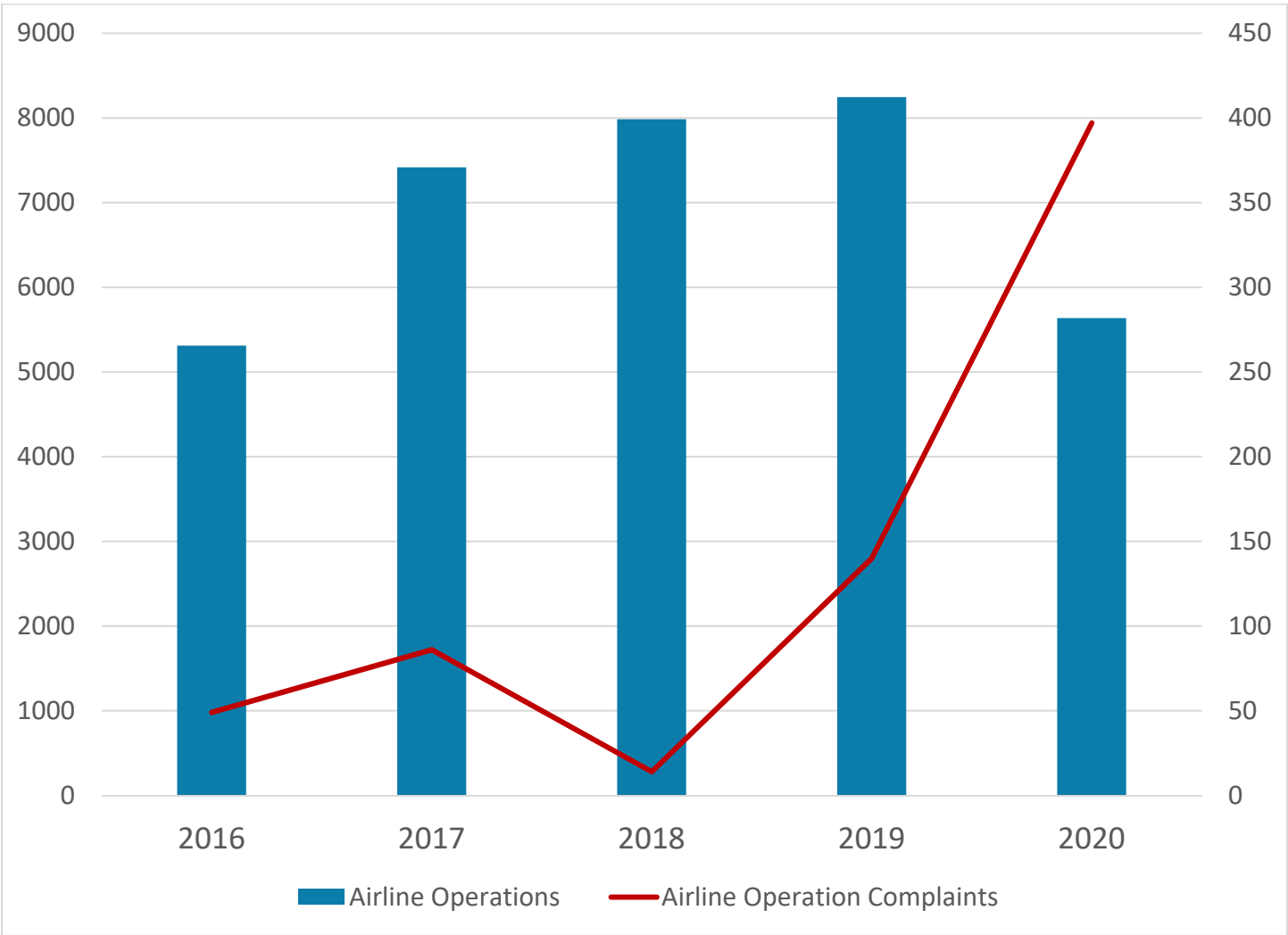
	2016	2017	2018	2019	2020	Five Year Average	2020 vs. 5 yr. Average
Monday	27	61	26	41	120	55	118%
Tuesday	25	40	16	46	139	53	161%
Wednesday	18	44	34	38	126	52	142%
Thursday	73	68	20	64	121	69	75%
Friday	51	97	19	43	123	67	85%
Saturday	23	53	13	20	115	45	157%
Sunday	56	113	22	42	101	67	51%

Airport-Related Complaints By Source

	2016	2017	2018	2019	2020	Five Year Average	2020 vs. 5 yr. Average
Hot Air Balloon	1	5	0	3	0	2	-100%
Helicopter	27	15	28	17	84	34	146%
Jet	108	77	33	85	197	100	97%
Military	33	0	6	0	0	8	-100%
Propeller	21	32	3	22	124	40	207%
Unknown	34	260	66	27	65	90	-28%
Airline	49	86	14	140	397	137	189%

Airline Operations Complaints Increased Over Time

Airline operations increased from 2018 to 2019, as did complaints regarding airline operations (from 14 to 140). Airline operations decreased in 2020, however, complaints regarding airline operations continued to increase, almost exponentially, from 2019 to 2020 (from 140 to 397).



2018 saw a decrease in complaints primarily attributed to the departure of Allegiant Airlines.

Noise Abatement in 2021 and Beyond

The Airport is committed to working with our neighbors in Sonoma County, our airline partners, and our general aviation operators to address noise concerns and continue to evaluate noise abatement procedures. Here's a look at what's on the horizon in the coming year and beyond.



Rewrite the Noise Abatement Guide and the Neighbor Guide

STS is working with the Aviation Commission and a community advisory group, in conjunction with Supervisor James Gore's office, to rewrite the Airport's Noise Abatement Guide and associated procedures. The updated Neighbor Guide will be a collaborative effort between Airport staff and community advisors. Both guides are expected to be published in 2021.



Access and analyze newly available data

The Airport's noise management software has recently been updated to include access to additional aircraft information, including the angle of the aircraft, allowing staff to determine whether the aircraft was directly overhead, someone adjacent, or lateral at the time the complaint was generated. This and other newly available data will allow for more effective responses to noise complaints and potentially help with noise abatement procedures.



Improve accessibility with a new STS Good Neighbor website

In 2021, STS will launch our Good Neighbor website to increase the visibility and accessibility of our noise abatement program. Locating data and submitting comments will be faster and easier.



Develop and implement new procedures for arrivals and departures

The Airport has started the process to evaluate all of the approach and departure procedures with the goal of abating noise and emissions. At the completion of this evaluation, new approach and departure guidelines will be published along with new visual approach and departure paths. This process is expected to take 24 to 36 months for the evaluation, creation, FAA review, and incorporation of revisions and publication for use.