South Flow Operations

Starting this summer, the airport has experienced a high number of morning winds coming from the south. For safety reasons, aircraft must take off and land into these southerly winds, requiring the airport to operate in "south flow." South flow refers to an alternate arrival path into SJC that allows aircraft to land and take off into the wind when it is coming from the south.

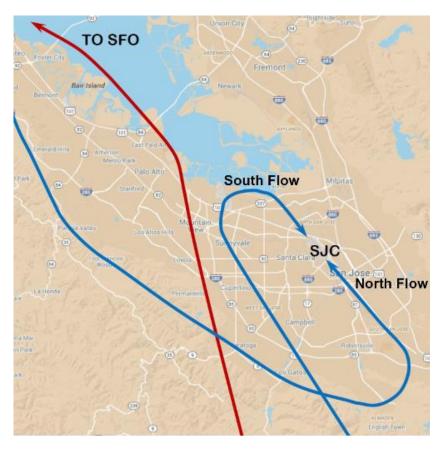
During these mornings aircraft must follow a basic traffic pattern over the area to the west of SJC over Santa Clara and Sunnyvale, before turning east over Moffett Airfield to return to the airport. As these weather systems pass the airport returns to "north flow," our most common configuration, and Air Traffic Control begins directing aircraft to arrive over San Jose downtown. Please refer to the image below for reference.

We aren't sure what has caused the unseasonable change in wind patterns this summer; historically the airport operates in south flow during the winter months between November and March, but the net result has been an increase in the amount of south flow operations during the morning hours. It has been most prevalent during the 6am to 11am time period, when the prevailing wind shifts back to its common direction.

Please be aware that the arrival paths into and out of SJC have not changed; while all of the flights operating in south flow are under the control of FAA Air Traffic Control, they are simply being routed to allow aircraft to

take off and land into the wind, while maintaining safe separation from other SJC aircraft, and aircraft operating in and out of the other Bay Area airports. The aircraft may or may not be along a designated flight path that has been published through the FAA for a number of years depending on the cloud cover in the area.

In the image on the right, the blue lines indicate north and south flow into SJC. The red line indicates arrivals into SFO over the Santa Cruz Mountains - aircraft must proceed along the south flow corridor - any further west would impact SFO arrivals, and any further east and the aircraft wouldn't have sufficient space to complete the turn into the airport. Also be aware that while northerly winds may prevail west of the airport, wind direction can differ drastically in the bay, and the wind in communities west of the airport may not match the wind direction on the ground at SJC.

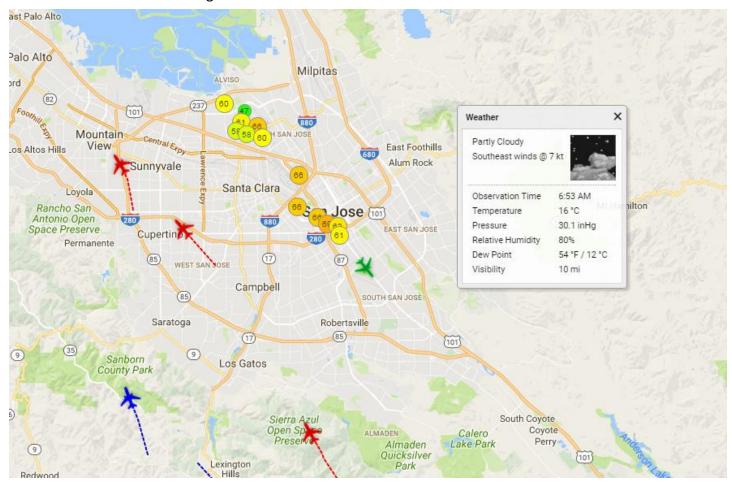


Wind directions in the mornings can be determined by residents by referring to WebTrak, a tool provided by the Noise Office to allow residents to track aircraft over their neighborhoods. The weather in WebTrak is in real time, and is measured from instruments at the airport.

The chart below shows the percentage of aircraft operations that overfly Sunnyvale and surrounding communities as a result of winds from the south at SJC.

2016 Proportion of South Flow Operations to Total Operations			
	Total Operations	South Flow Operations	%
January	11323	4199	37.08%
February	11084	1256	11.33%
March	12172	3137	25.77%
April	12105	971	8.02%
May	12962	1324	10.21%
June	13436	737	5.49%
July	13563	1160	8.55%
August	13565	1254	9.24%

In the below image, the aircraft are in red are SJC operations currently inbound the airport in south flow. The wind, as indicated by the box at the left is currently from the southeast, necessitating an approach from the north. The aircraft in blue, an SFO approach, limits the amount an aircraft can shift to the west, while a shift to the east would not leave enough room to make the turn back to SJC.



We make every effort to operate as quietly as possible while meeting the air transportation needs of the community, which helps in catching irregular flight patterns. Additional information regarding SJC Noise Management policies and procedures is available on our Noise Abatement website.