San Jose ATCT
Standard Operating Procedure
Version 1.6

List of Changes

VERSION	DATE	DESCRIPTION
1.0	25APR2019	Rewrite – Initial Release
1.1	20OCT2019	Removed VOX Channel due to AFV release
1.2	31DEC2020	Added TMC position, created table for SID/Route/Altitude/Freq assignment, runway selection procedures, set SJC delegated airspace to 2,500 and add diagram, revised helicopter ops
1.3	07FEB2022	Fixed CPS-001 link. Removed SJC_TMC position. Minor DP table updates. Changed runway selection in LC section.
1.4	16JUN2022	Clean up unnecessary verbiage, re-format various tables, re-format route assignment table, add additional authorized headings, clarify VFR routing assignment, remove less relevant sections, add RHV/NUQ VFR/IFR procedures, update missed approaches section, add appendix with VFR arrival routes, add equipment section and radar service notes
1.5	23FEB2023	Update tower equipment information, update heading assignment phraseology
1.6	16MAY2024	Update IFR departure section to incorporate new RNAV version of LOUPE# DP

Section 1. General Information **4**
1-1 Purpose 4
1-2 Distribution 4
1-3 Cancellation 4
1-4 Equipment 4
1-5 Positions Table 4
1-6 Runway Configurations 4
Section 2. Flight Data/Clearance Delivery **5**
2-1 General Procedures 5
2-2 IFR Departures 5
2-3 VFR Departures 7
Section 3. Ground Control **8**
3-1 Position Jurisdiction and Responsibilities 8
3-2 Coordination 8
3-3 Multiple Runway Crossings 8
Section 4. Local Control **9**
4-1 General Duties and Responsibilities 9
4-2 Runway Selection 9
4-3 Coordination 10
4-4 Go-Around / Missed Approach 10
4-5 Additional Authorized Headings 10
4-6 VFR Routes 11
Appendix A. Arrival VFR Routes **12**
Attachment 1. Runway Distance Remaining **13**
Attachment 2. San Jose Class C Airspace **14**

Section 1. General Information

1-1 Purpose

This Standard Operating Procedure (SOP) outlines the procedures to be used by controllers working San Jose ATCT positions on the VATSIM network, to ensure that traffic flows are handled in as efficient and timely a manner as possible. This SOP is for simulation purposes only and shall not be used for real world use or reference.

1-2 Distribution

This SOP is distributed to all members of the Oakland ARTCC on VATSIM.

1-3 Cancellation

All previous procedures are canceled.

1-4 Equipment

San Jose ATCT is equipped with a Certified Tower Radar Display (CTRD), and Tower Data Link Services (TDLS) including its three parts, Flight Data Input/Output (FDIO), Digital Airport Terminal Information Services (D-ATIS), and Pre-Departure Clearance (PDC).

1-5 Positions Table

The following position table details authorized positions for San Jose ATCT.

SECTOR	CALLSIGN	RADIO CALLSIGN	FREQUENCY
Clearance Delivery	SJC_DEL	San Jose Clearance	118.000
Ground Control	SJC_GND	San Jose Ground	121.700
Local Control	SJC_TWR	San Jose Tower	124.000
D-ATIS	KSJC_ATIS		126.950

1-6 Runway Configurations

CONFIGURATION	DESCRIPTION
SFOW	SFO utilizing runways 01s and/or 28s, SJC utilizing runways 30s
SFOE	SFO utilizing runways 10s and/or 19s, SJC utilizing runways 12s
SJCE	SFO utilizing runways 01s and/or 28s, SJC utilizing runways 12s
*SJCW**	*SFO utilizing runways 10s and/or 19s, SJC utilizing runways 30s*

** SJCW is a configuration which does not have standard procedures; it shall not be used except during extenuating weather circumstances*

Section 2. Flight Data/Clearance Delivery

2-1 General Procedures

a. Issue departure clearance in accordance with current directives, Letters of Agreement and this section. Ensure accuracy of pilot readback.
b. Issue TEC routes for aircraft with destinations within NCT (except RNO and satellites). If a pilot is unable to accept a TEC route, issue vectors direct destination and coordinate with NCT.
c. Initial headings specified in this SOP shall only be issued when a DP cannot be used or an applicable one does not exist (e.g. pilot is unable to accept DP, TEC route does not include DP)
    i. Initial headings shall be issued with the clearance
    PHRASEOLOGY-
    CLEARED TO (airport) AIRPORT,
    VIA TURN LEFT/RIGHT (heading) / FLY RUNWAY HEADING,
    RADAR VECTORS (first fix/airway)…
d. Pre-Departure Clearances (PDC) are authorized for use with PDC capable aircraft in accordance with CPS-001.
e. When an aircraft requesting clearance requires route or traffic management coordination, advise the TMU/CIC so that they can complete the coordination prior to issuing the clearance.

2-2 IFR Departures

a. Instruct aircraft to expect filed altitude 10 minutes after departure if not assigned a DP.
b. SID/Route and Altitude Assignment:
    i. SFOW

<table>
<tr><th>DEST/ROUTE</th><th>AIRCRAFT</th><th>DP/HDG</th><th>DEP SECTOR</th><th>ALTITUDE</th></tr>
<tr><td rowspan="2">Northbound</td><td>J</td><td>LOUPE#</td><td rowspan="4">Toga
(Grove if bound for OAK/HWD)</td><td>CVS</td></tr>
<tr><td>P, T</td><td>SUNOL#</td><td rowspan="2">CVS x 5,000</td></tr>
<tr><td rowspan="2">Southbound</td><td>J</td><td>SPTNS#</td></tr>
<tr><td>P, T, J</td><td>SJC#</td><td rowspan="2">5,000</td></tr>
<tr><td>via VINCO / V107</td><td rowspan="2">P, T</td><td>RWY</td></tr>
<tr><td>KSNS / via SNS</td><td>275°</td><td>Toga</td><td rowspan="3">3,000</td></tr>
<tr><td>via SFO.V199</td><td>T, J</td><td rowspan="2">RWY</td><td>Woodside</td></tr>
<tr><td>All others</td><td>P, T, J</td><td>Toga</td></tr>
</table>

ii. SJCE

DEST/ROUTE	AIRCRAFT	DP/HDG	DEP SECTOR	ALTITUDE
Northbound	J	BMRNG#	Toga	CVS
	P, T	SUNOL#		CVS x 5,000
Southbound	J	TECKY#		CVS
via MOONY	P, T, J	RWY		5,000 (P) FL190 (T, J)
via MOD	P, T, J			5,000 (P, T) 6,000 (J)
KSNS / via SNS / VINCO / V107	P, T, J			5,000 (P, T) 7,000 (J)
via SFO.V199	T, J			15,000
All others	P, T, J			5,000 (P, T) 15,000 (J)

iii. SFOE

DEST/ROUTE	AIRCRAFT	DP/HDG	DEP SECTOR	ALTITUDE
Northbound	J	ALMDN#	Toga	CVS
	P, T	SUNOL#		CVS x 5,000
Southbound	J	TECKY#		CVS
via MOONY	P, T, J	RWY		5,000 (P) FL190 (T, J)
via MOD	P, T, J			5,000 (P, T) 6,000 (J)
KSNS / via SNS / VINCO / V107	P, T, J			7,000
via SFO.V199	T, J			15,000
All others	P, T, J			5,000 (P, T) 15,000 (J)

2-3 VFR Departures

a. Ensure VFR departures have their aircraft type, origin, and destination filled out in their flight plan.
b. Issue all VFR aircraft, including pattern work, a transponder code.
c. For VFR aircraft issue interim altitude (and departure frequency if requesting flight following) in accordance with Section 4-6.
   EXAMPLE-
   "N172SP, maintain VFR at or below 4,500, departure frequency 121.300, squawk 3201"

d. Certain VFR aircraft may request a "Bay Tour". This is typically a clockwise or counterclockwise flight around the Bay Area stopping at airports such as OAK, HWD, SQL, PAO, or SFO. If requesting flight following, these aircraft shall be issued VFR departure instructions in accordance with 2-3 (c) based on their direction of flight.

Section 3. Ground Control

3-1 Position Jurisdiction and Responsibilities

a. Coordinate and exchange all applicable information with Local Control (LC) in accordance with FAA JO 7110.65, Chapter 3, and this SOP.
b. Jurisdiction of Taxiways
    i. Ground control has jurisdiction over all taxiways except for those between active runways.
    ii. *Runway 29/11 has been converted into taxiway W1 and is under the jurisdiction of GC, however, it may still appear in legacy sceneries*
c. Maintain positive control of all taxiways and runways, which are designated as movement areas; Provide advisories, and issue clearances and control instructions to aircraft.
d. Maintain awareness of arriving traffic and anticipate Local Control needs to allow for arriving aircraft to fully clear the runway(s):
    i. GC will yield or hold traffic for aircraft exiting the runway(s).
    ii. LC has right of way to continue onto taxiway Y one the east side and taxiway W on the west side, unless otherwise coordinated.
    iii. Avoid blocking runway exits and advise LC when ground traffic will hold short of runway exits.
e. Aircraft requiring a run-up prior to departure, to the extent possible, will be instructed to taxi to the run-up area. SJC Airport has only one designated run-up area located at the corner of TWY D and TWY W west of RWY 12R/30L.

3-2 Coordination

a. Ground Control must ensure all aircraft taxi "full length" to the assigned runway, unless otherwise coordinated. Due to airport configuration, aircraft on the west side (terminal side) will be taxied to runway 30L @ B and 12R @ M respectively.
    i. Intersection departures may be assigned when requested or when an operational advantage exists.
        1. TWY D at 30L is considered a hot spot area and use of this intersection for departures is not recommended.
        2. The preferred departure point for RWY 30L pilot requested intersection departures or operational necessity is TWY C.

3-3 Multiple Runway Crossings

a. San Jose ATCT has authorization for multiple runway crossings in accordance with JO 7210.3. The crossing points for RWY 12R/30L and 12L/30R are taxiways B, C, D, J, L, and M.

Section 4. Local Control

4-1 General Duties and Responsibilities

a. LC is responsible for runway separation and control, sequence, and separation of IFR, SVFR, and Class C VFR aircraft in the San Jose ATCT delegated airspace shown in Attachment 2.
    i. LC may provide Class C radar service within their delegated airspace. This may involve radar identifying VFR aircraft (and advising them of radar contact) and making radar handoffs to NCT.
    ii. NCT shall make radar handoffs of IFR arrivals and VFR arrivals/overflights to LC. LC need not accept the handoff before NCT transfers communications.
b. San Jose ATCT delegated airspace is the inner ring of the Class Charlie airspace from surface to 2,500.
c. LC has jurisdiction of all taxiways between active runways and is expected to comply with all local and national directives to ensure compliance with advising pilots to either hold short of or cross a runway surface. Additionally, the following jurisdiction procedures shall apply:
    i. LC has right of way to continue onto taxiway Y one the east side and taxiway W on the west side, unless otherwise coordinated.
d. During RHV Runway 31 operations, LC must instruct VFR aircraft landing at RHV to maintain at or above 1,500 (weather and traffic permitting) and transfer communications prior to the aircraft entering RHV Class D airspace
e. LC must instruct aircraft not requesting flight following and bound for NUQ, PAO, or SQL to maintain the altitude specified below and contact NUQ Tower
    i. SFOW: AOB 2,000
    ii. SJCE/SFOE: AOB 1,500
f. NUQ ATCT may coordinate with SJC for the use of the NUQ east traffic pattern that may penetrate the SJC ATCT delegated airspace

4-2 Runway Selection

a. When the wind is reported as less than 5kts, use the configuration aligned with the other Bay Area airports
b. If the wind is reported as 5kts or greater, use the runway configuration most nearly aligned with the wind
    i. LC shall not use SJCW (SJC using runways 30 while, OAK/SFO are in SFOE) configuration unless necessary for safety

4-3 Coordination

a. Coordinate with GC for arriving/departing helicopter operations.
b. LC must coordinate when using any runway other than the designated active runway
c. RHV/NUQ IFR Departures
    i. LC must approve/disapprove those departure requests specified in this section; issue approximate time of delay if unable to approve the request
    ii. LC must approve/disapprove the following departures
        1. All RHV IFR departures
        2. NUQ Runway 14 IFR departures

4-4 Go-Around / Missed Approach

a. Local Control is responsible for separation of arriving and departing IFR/VFR aircraft
a. When there is a go-around or missed approach, the controller must issue instructions to establish separation
b. Coordinate missed approaches with Toga
c. Issue the following missed approach instructions to all unplanned missed approaches and visual approach go-arounds:

RUNWAY	HEADING	ALTITUDE
30L/30R	RWY	3,000
12L/12R	Published missed (Instrument Approach) RWY (Visual Approach)	4,000

4-5 Additional Authorized Headings

a. Upon verbal approval from NCT, the following headings are authorized as alternate departure or missed approach headings.
    i. DVA headings are not authorized for use during missed approaches

RUNWAY	HEADINGS (specified clockwise)
30L/30R	275° to 325° or *DVA**
12L/12R	*DVA**

** Runway 30L/30R DVA: 075° to 344° clockwise, 490 ft/nm climb gradient until reaching 5600 ft, 210 kts until established on assigned heading*
** Runway 12L/12R DVA: all headings, 470 ft/nm climb gradient until reaching 5600 ft, 210 kts until established on assigned heading*

4-6 VFR Routes

a. The headings need only be issued when the aircraft is requesting flight following.
b. Aircraft requesting a "Bay Tour" and utilizing flight following shall be issued departure instructions based on their direction of flight and shall have a scratchpad of "2ER" entered.
c. SFOW

DIRECTION	AIRCRAFT	HEADING	ALTITUDE	DEP SECTOR
N / NE	P	020° to 060°	AOB 4,500	Toga
	T	060°		
E / SE	P, T	090° to 110°	No restriction	Licke
S	P, T	180° to 200°		
W / NW	P, T	270°	AOB 2,500	
All Jets	J	RWY	AOB 3,000	Toga

d. SJCE/SFOE

DIRECTION	AIRCRAFT	HEADING	ALTITUDE	DEP SECTOR
N / NE	P	020° to 060°	AOB 4,500	Toga
	T	060°		
E / SE	P, T	090° to 110°	No restriction	
S	P, T	150°	AOB 4,500	Licke
W	P, T	Follow I-280	AOB 2,000	
NW	P, T	330° to 010°	AOB 4,500	
All Jets	J	RWY	No restriction	Toga

Appendix A. Arrival VFR Routes

a. The arrival/overflight routes below will be issued by NCT to aircraft on flight following before they enter SJC ATCT airspace and are provided for informational purposes

b. SFOW

ARRIVALS		
FROM DIRECTION	**INSTRUCTIONS**	**ALTITUDE**
N / NE	Cross Embassy Suites	2,500
E	Over RHV	2,500
SE / S / SW	Cross the Pruneyard for left traffic Runways 30	N/A
W	Cross NUQ for left traffic Runways 30	AOA 2,500

c. SJCE/SFOE

ARRIVALS		
FROM DIRECTION	**INSTRUCTIONS**	**ALTITUDE**
N / NE	Cross Embassy Suites	2,000
E	Over RHV	2,500
SE / S	Cross the Pruneyard	2,500
W	Follow Highway 101 for right base Runways 12	N/A
NW	Straight-In	N/A

Attachment 1. Runway Distance Remaining

TAXIWAY	DIST. 30L	DIST. 30R
A1	10,950	
A	10,600	
B	10,150	
C	8,650	
D	7,700	
E	N/A	6,950
F	6,150	
G	5,250	N/A
H	4,350	
J	3,250	
K	NO TAKEOFF	2,450
L	NO TAKEOFF	
M	NO TAKEOFF	
N	NO TAKEOFF	

TAXIWAY	DIST. 12L	DIST. 12R
N	10,950	
M	10,550	
L	9,650	
K	8,500	
J	7,700	
H	6,600	
G	N/A	5,700
F	4,800	
E	4,000	N/A
D	3,250	
C	2,300	
B	NO TAKEOFF	
A	NO TAKEOFF	
A1	NO TAKEOFF	

Attachment 2. San Jose Class C Airspace

Area shaded in red represents airspace delegated to the SJC ATCT