# Bay Area Traffic Introduction 

What's going around the bay?



## OAKLAND $\ddagger$ ARTCC

## Bay Area Airports

$\rightarrow$ Bay Area includes three high-volume commercial passenger traffic airports: SFO, OAK, SJC
$\rightarrow$ High volume general aviation airports: PAO, HWD, SQL
$\rightarrow$ Military airport: NUQ


## SFO-OAK Area

$\rightarrow \quad$ Key local landmarks in the SFO and OAK area are:
\&\#; Mid-Span San Mateo Bridge - the eastern half of the bridge is outside the Bravo if below 1500
\&\#; Fuller's Point - transiting aircraft are kept outside the area between Fullers Point and the approach end of the 1's when aircraft depart the 28's
\&\#; Hunter's Point - north of Hunter's Point is outside the Bravo if below 2000
\&\#; Highway 101 (Bayshore Freeway) - runs $\mathrm{N}-\mathrm{S}$ on the east side of the San Francisco peninsula, E-W once south of SFO
\&\#; Highway 880 (Nimitz Freeway) - runs along the west shore of Oakland, east of OAK
\&\#; Oakland Coliseum (RingCentral Coliseum) just north of OAK


## Bay Area Navaids

$\rightarrow$ OAK VOR - a major navaid for J and $V$ airways
$\rightarrow$ OSI VOR - co-located withARRGG is important for oceanic arrivals and offshore SIDs
$\rightarrow$ SFO VOR
$\rightarrow$ PYE VOR - conventional STARs and SIDs and the offshore SIDs
$\rightarrow$ SJC VOR - used in the SJC
 departures

## Local VFR

$\rightarrow$ VFR flights between SFO and OAK are radar identified by TWR and handed off to TWR.
$\rightarrow$ VFR flights from SFO/OAK to SQL contact SQL TWR when radar services terminated.


## Bay Tour

$\rightarrow \quad$ VFR pilots often request a "Bay Tour"
\&\#; No official definition exists.
\&\#; Usually depart and land at SQL or OAK.
\&\#; Bay Tours may remain clear of the Bravo. May also transition through the Bravo west of Hwy 101 (green).
\&\#; May fly a ring around the San Francisco peninsula, or may fly part of the route marked and then return the way they departed.
\&\#; Should be provided with flight following when possible.


## Bay Tour - IFR Jet

$\rightarrow$ Airliners may rarely request a "Bay Tour"
\&\#; No official definition exists.
\&\#; May request any time before departure.
\&\#;Give usual SID and IFR Clearance.
\&\#; From OAK on OAK\#, COAST\#, CNDEL\# no special instructions.
\&\#;From SFO: "Fly to the Bay Bridge, then the Golden Gate Bridge, remain over the water, maintain 3000, expect vector on course after Golden Gate".
\&\#;Tower should scratchpad "2ER"

## OAK VFR Traffic

$\rightarrow$ Real world procedures shown on this and subsequent slides.
$\rightarrow$ In addition to the OAKW departures from 28 shown, departures to the south and to SFO may be given right $270^{\circ}$ turn, cross numbers of RWY 30.

North Field Preferred VFR Departures


Runways: 10L, 10R, 28L \& 28R | Aircraft Categories: A, B \& C

## OAK VFR Traffic

$\rightarrow$ Preferred noise abatement procedures shown.
$\rightarrow$ Night time preferred departures delete the routes in red from RWY 33 and RWY 28s.

North Field Noise Abatement Procedures


Runways: 28L, 28R \& 33 | Aircraft Categories: A, B \& C

## OAK VFR Closed Traffic

$\rightarrow$ Real world closed traffic pattern is left closed traffic RWY 28L.
$\rightarrow$ Most vZOA staff were trained with right closed traffic RWY 28R.

Runway 28L | Aircraft Categories: A, B \& HEL
Preferred Touch \& Go Pattern


## SFO Bravo

$\rightarrow$ The old SFO Bravo airspace was based on DME arcs from the SFO VOR. The new VOR is based on RNAV fixes.
$\rightarrow$ Slides following are from an FAA briefing at opening of the new Bravo





## VFR Corridors

- A VFR Corridor is a route for the passage of uncontrolled traffic. A VFR corridor is defined as airspace through Class B airspace, with defined vertical and lateral boundaries, in which aircraft may operate without an ATC clearance or communication with air traffic control.
- Due to the density of traffic, there are NO VFR corridors through the SFO Class Bravo Airspace.



## SQL

$\rightarrow$ San Carlos is the closest airport to San Francisco and Silicon Valley with active pilot training programs.
$\rightarrow$ Class D airspace in NCT Area B.
$\rightarrow$ Pilots training at SQL may fly on VATSIM. They are often encountered when controlling NCT or CTR.
$\rightarrow$ RWY 30 is right traffic for planes at 800 ft , left traffic for helicopters.


## KSQL VFR Traffic



## SQL - San Carlos - VFR

## RWY 30 VFR Departures

## Hillsdale Departure (South)

Fly straight out, parallel Highway 101 for 2.75 NM. until abeam the Hillsdale Mall. Begin left turn to a southwesterly heading. Remain clear of the SFO Class B Airspace.

## Oracle Departure (North)

Fly straight out until just past the diamond-shaped waterway, then turn right crosswind, follow the Belmont Slough out towards the Bay. Avoid overflying homes on either side of the Belmont Slough. For obstacle avoidance and to avoid inbound traffic, keep KNBR Radio Tower off to your right.

Coyote Hills Departure (East)
Fly straight out until just past the diamond-shaped waterway, then turn right downwind. At midfield, turn left towards Coyote Hills. Use caution for aircraft inbound from Coyote Hills.

Woodside Departure (South)
Fly straight out until just past the diamond-shaped waterway, then turn right downwind. Continue downwind until abeam Woodside Road, then turn right toward southwest.

## SQL - San Carlos - VFR

## VFR Arrivals

Cement Plant Arrival<br>Inbound from the east over Coyote Hills, expect to arrive via the Cement Plant (VPWFR).

## KNBR Arrival

Inbound from the Northeast, expect to arrive via the KNBR radio tower. Keep KNBR off your right side and enter the downwind as advised. Use caution for aircraft departing SQL via the Oracle Departure $3 / 4$ mile north of the KNBR radio tower.

Overhead Arrival
Aircraft arriving from the west should expect to arrive via overhead the Air Traffic Control Tower at or above 1,200' MSL and enter the downwind as advised.

## Straight-In Arrival

From the vicinity of Woodside VOR (OSI), proceed towards SLAC (VPSLA). Remain at or above 1,000' MSL until passing Kaiser Hospital. Expect a straight-in approach to Runway 30 or a left downwind for Runway 12.

## SQL - San Carlos IFR

## IFR Departures

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IN VFR CONDITIONS (VIS 3 AND 011 CEILING)
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RWY 30: FLY RH UNTIL PAST DIAMOND-SHAPED WATERWAY, THEN RT H120, KEEP TURN WITHIN 2 MILES OF APT FOR RADAR VECTORS TO fix/route, MAINTAIN VFR AOB 011 UNTIL PAST OAK VOR 165 RADIAL, THEN CLIMB AND MAINTAIN 021; EXPECT filed alt 5 mINUTES AFTER DEPARTURE.

NOT IN VISUAL CONDITION:
FLY RH UNTIL 006 THEN RT H120 RADAR VECTORS fix CLIMB MAINTAIN 021, EXPECT filed alt WITHIN 5 MINUTES AFTER DEPARTURE.

## SQL - San Carlos IFR

## IFR Departures

IN VFR CONDITIONS (VIS 3 AND 011 CEILING)
RWY 30: FLY RH UNTIL PAST DIAMOND-SHAPED WATERWAY, THEN RT H120, KEEP TURN WITHIN 2 MILES OF APT FOR RADAR VECTORS TO fix/route, MAINTAIN VFR AOB 011 UNTIL PAST OAK VOR 165 RADIAL, THEN CLIMB AND MAINTAIN 021; EXPECT filed alt 5 MINUTES AFTER DEPARTURE.

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## IFR Arrivals

PYE3 arrival from ENI or SAC via POPES. PYE\# ends at OSI, RV to final or clear for RNAV $Z$ at OSI at or above 5100.

APPROACH: RNAV Z or Y RWY 30 (IAF OSI 5100, SAPID 5500, AMEBY 3900)

## Bay Flyway- over OAK

## ATC Assigned Altitude

(Expect to cross OAK at 2,000)

Example Phraseology:
"Proceed via NE to SW Bay Flyway, Remain Outside of Class Bravo."



## Class B Transition Routes

- Transition Route is defined as a specific route depicted on a TAC for transiting through the Class B airspace. These routes include specific ATC-assigned altitudes, and pilots must obtain an ATC clearance prior to entering Class B airspace on the route.
- Transition routes are designed to show the pilot where to position the aircraft outside of, or clear of, the Class B airspace where an ATC clearance can normally be expected with minimal or no delay.
- Until ATC authorization is received, pilots must remain clear of Class B airspace. On initial contact, pilots should advise ATC of their position, altitude, route name desired, and direction of flight. After a clearance is received, pilots must fly the route as depicted and, most importantly, adhere to ATC instructions.





