

FAA Briefing to SFO International Airport/Community Roundtable Technical Working Group

July 29, 2020



Federal Aviation
Administration

Purpose of this Briefing

This technical presentation is intended to provide information requested by the SFO RT in a letter dated June 15, 2020. The Google Earth files identified in Attachment B of the letter will be emailed to the SFO RT.

This presentation contains information on the following topics:

- **NIITE/HUSSH Departure Procedure**
- **NIITE/HUSSH Departure Procedure Environmental Review**
- **Special Use Airspace**
- **Conclusions**

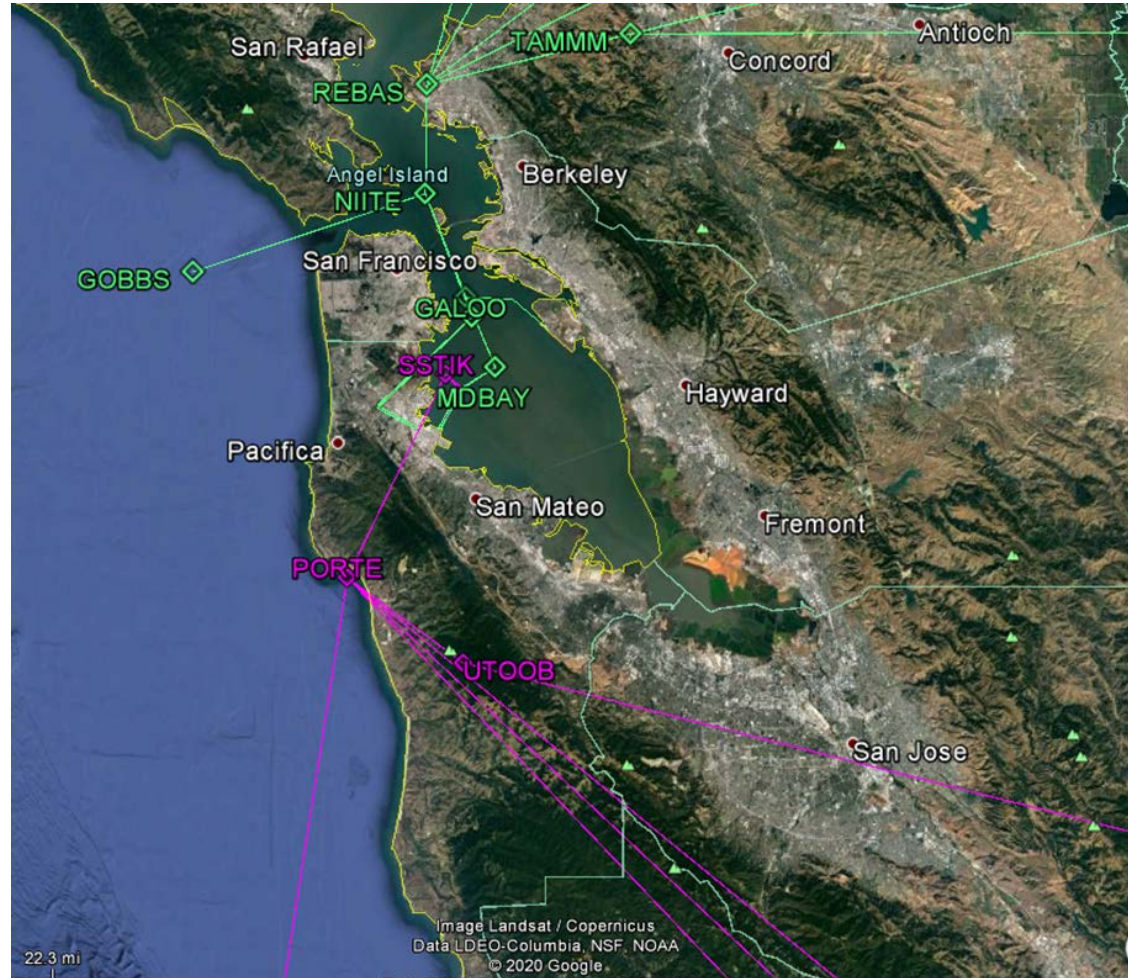


NIITE/HUSSH Departure Procedure

The SFO RT, along with the Select Committee, asked the FAA to utilize the NIITE/HUSSH procedure for southbound SFO/OAK aircraft during nighttime hours instead of the SSTIK/CNDEL procedures.

SFO RT: Implement a south transition to the NIITE/HUSSH departure (NIITE for north and east; GOBBS for west and the to-be determined final fix on south transition) -- not turning early.

SC: Nighttime SSTIK departures use the NIITE procedure up to the NIITE waypoint, then the aircraft would head west out over the Golden Gate Bridge.

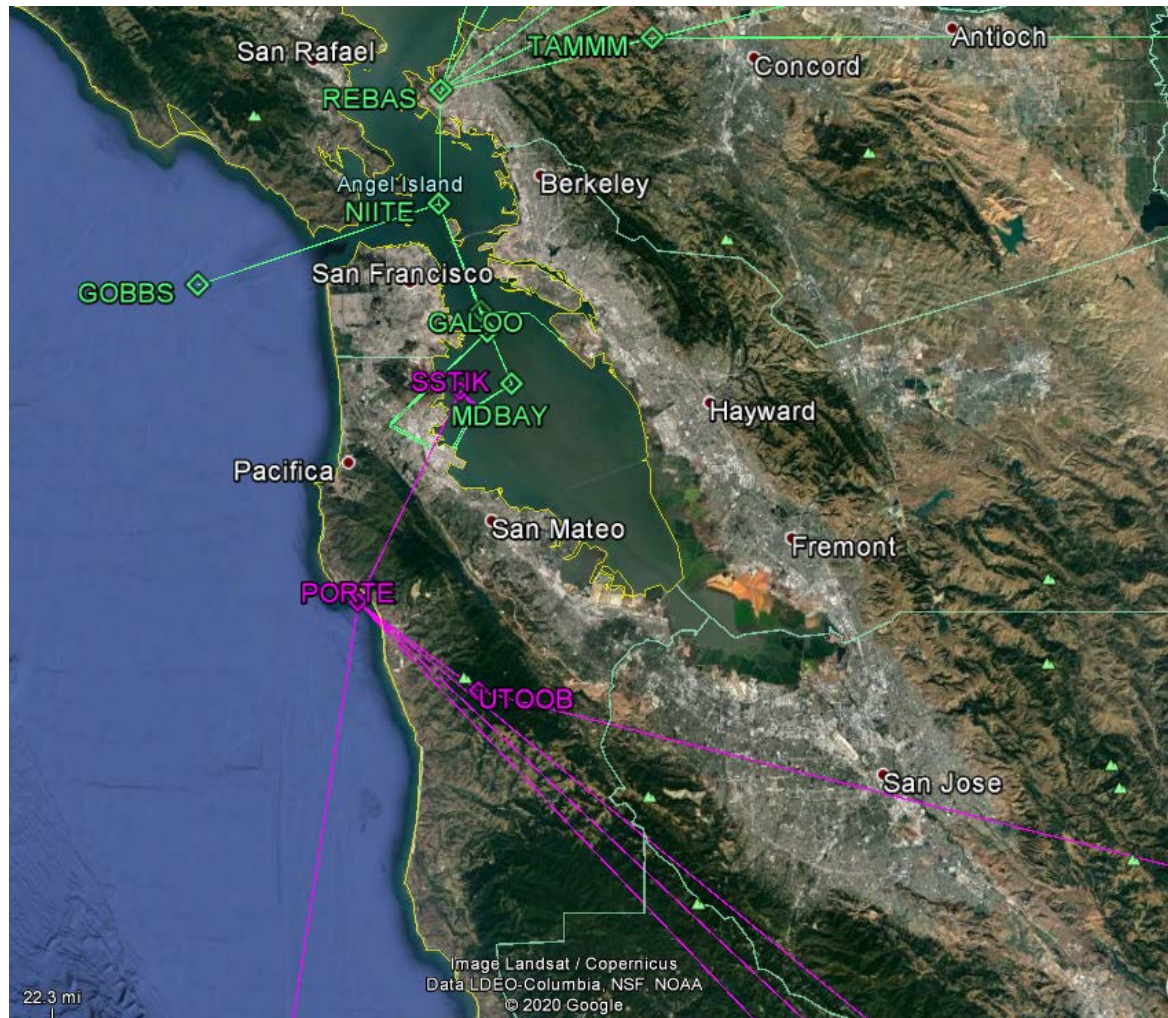


NIITE/HUSSH Departure Procedure

The NIITE/HUSSH departure procedures currently contains a transition from the NIITE waypoint to the GOBBS waypoint.

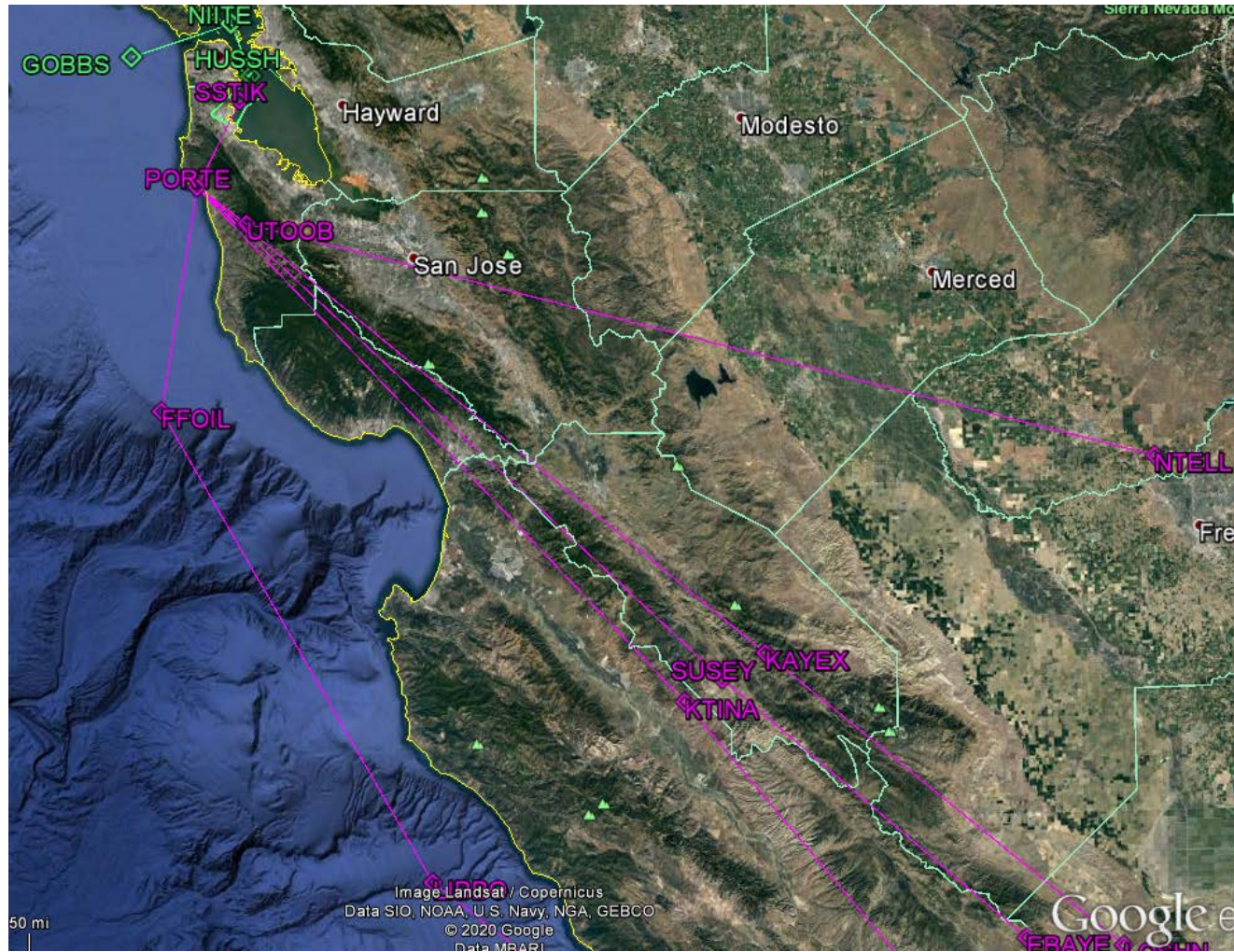
In response to the SFO RT and SC recommendations, the FAA proposes to utilize the GOBBS transition for southbound aircraft (with the exception of aircraft that require Runway 28).

No amendment to the procedure is necessary thereby reducing implementation time.



NIITE/HUSSH Departure Procedure

ATC will allow aircraft to turn to rejoin their route flight once they are over the ocean on the transition from NIITE to GOBBS by proceeding to waypoints to the south and southeast such as NTELL, KAYEX, SUSEY, KTINA, and LIBBO per ATC requirements.

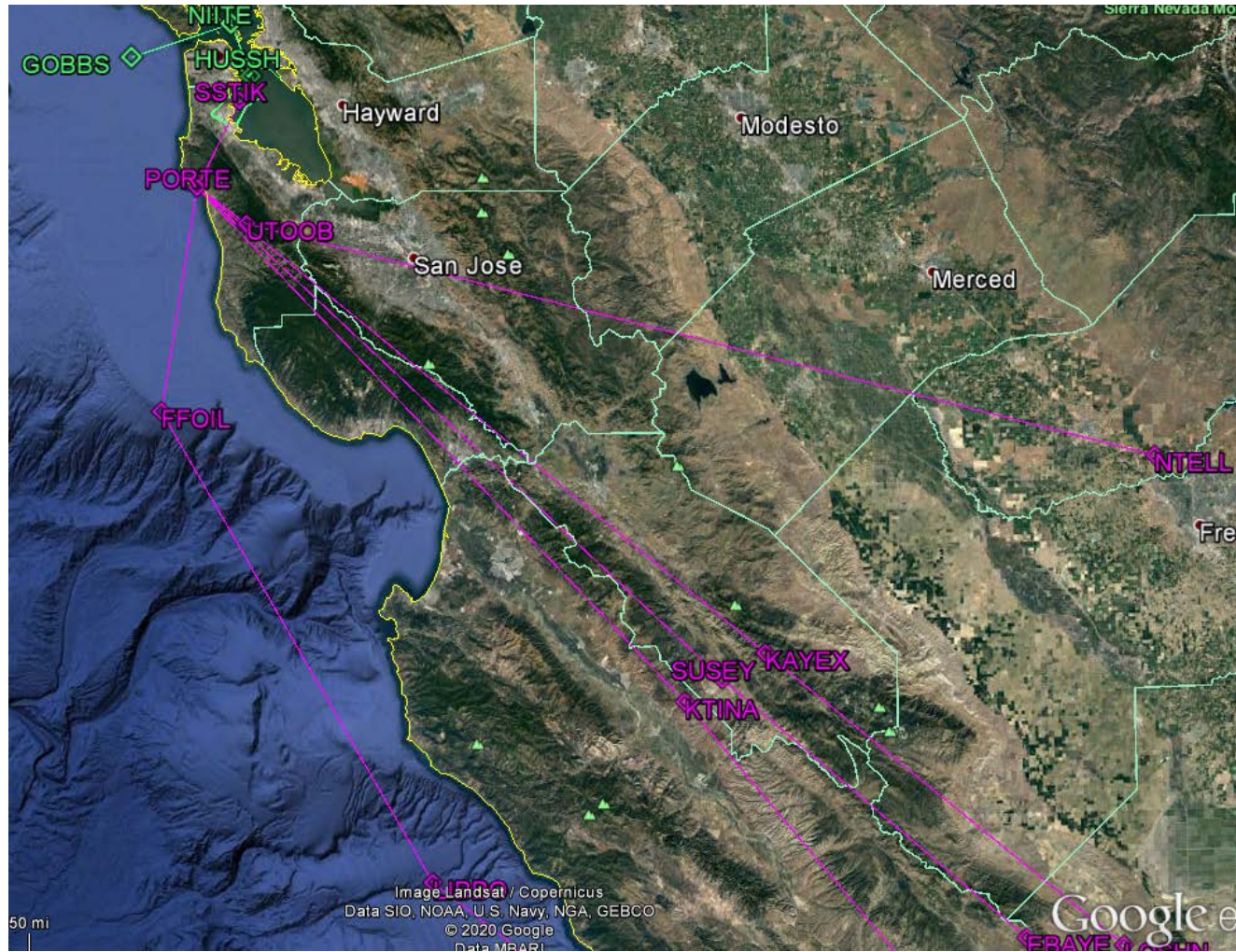


NIITE/HUSSH Departure Procedure

Next fix data for
SSTIK and CNDEL
departures:

- LIBBO: 1%
- KTINA 2%
- SUSEY: 5%
- KAYEX: 48%
- NTELL: 44%

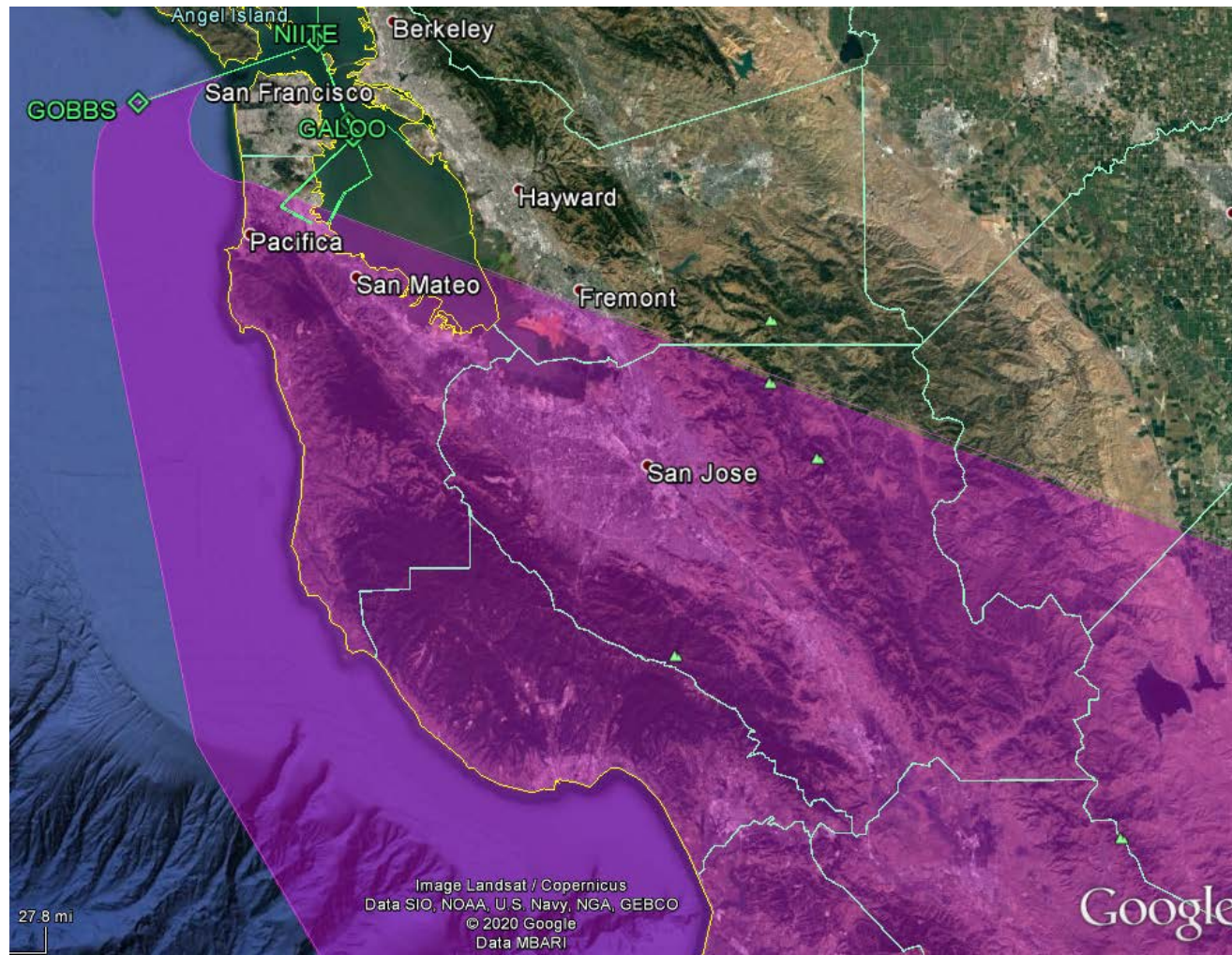
(Data is from 30
random days in 2019,
1-5 am.)



NIITE/HUSSH Departure Transition

The magenta shaded area depicts where aircraft may fly once they start their turn to rejoin their route of flight.

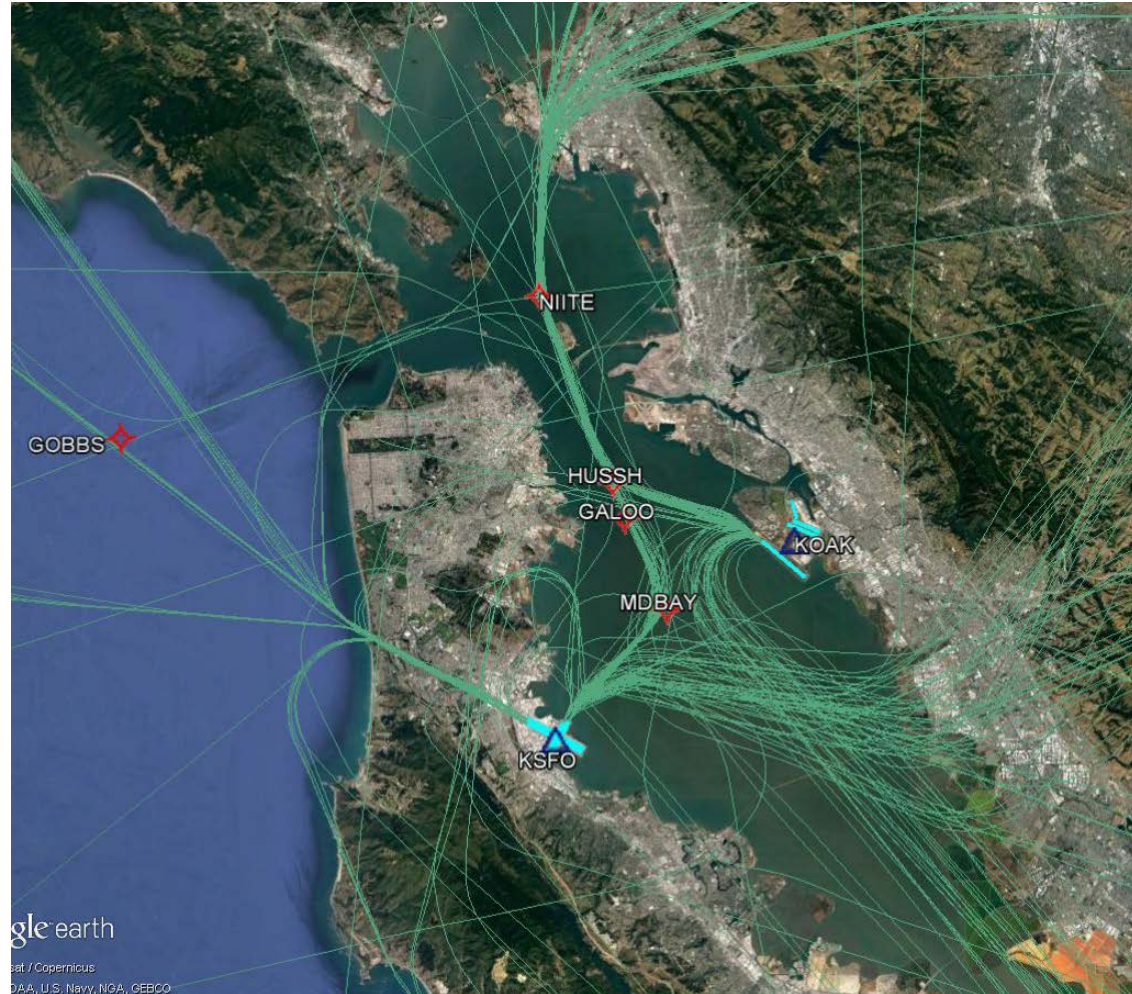
Aircraft passing over the Golden Gate Bridge will probably be anywhere from 10,000 feet AGL to 15,000 feet AGL.



NIITE/HUSSH Departure Procedure

Through collaboration with NCT and the airlines, the FAA determined that combining the southern departures from SFO and OAK into one stream was possible but it might shift noise and would require extra flying miles. Operational ATC analysis showed the max number of aircraft ATC can safely guide over SFO Bay on a single route (NIITE/HUSSH centerline) is 30 per hour, thus restricting the useable hours to 1-5 am.

Image: All SFO & OAK departures, August 1-7, 2019, 1-5 am.



NIITE/HUSSH Departure Procedure Environmental Review

- **The Environmental Review process is currently being conducted to include:**
 - Noise Screening
 - Fuel Burn
 - CO2 Emissions
 - Section 106 Consultation



Special Use Airspace

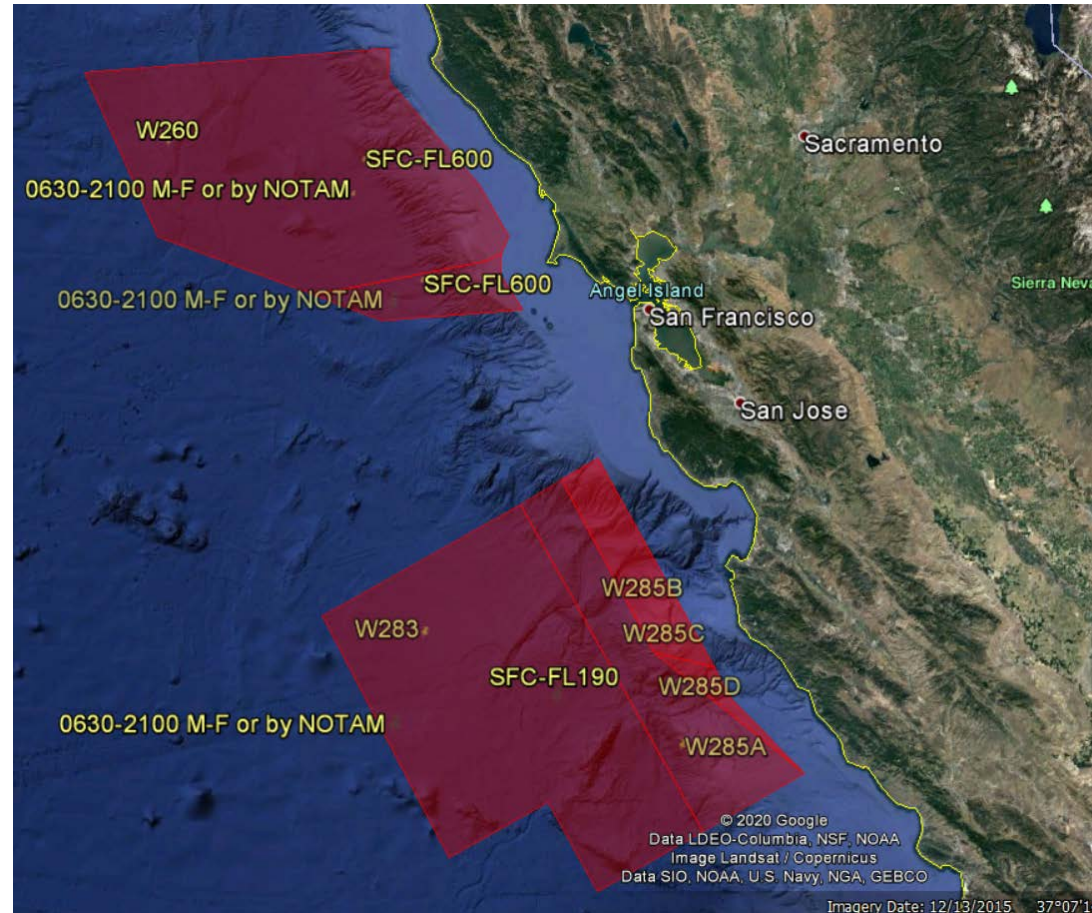
Separation from active SUA is 1,000 feet vertically and 3 NM laterally, unless above 41,000 feet then vertical separation increases to 2,000 feet.

Hours of operation are 0630L to 2100L or other times by NOTAM.

Altitudes are as follows:

- W-260: SFC to 60,000 feet
- W-283 & W-285 A/B/C/D: SFC to 19,000 feet

Activation of SUA is not anticipated to impact any of the aircraft on the NIITE/HUSSH nighttime procedure.



Conclusions



Conclusions

NIITE/HUSSH → GOBBS:

- **Dependent upon consistent operational levels from SFO and OAK.**
- **External effort is being made to sync the operations at SFO and OAK airports.**
- **From 0100L to 0500L, the FAA can continue to operate the SFO and OAK departure routes as a single stream that will not exceed the 30 aircraft per hour capacity, absent unforeseen meteorological or other noteworthy events.**
- **Aircraft volume and the combining of SFO and OAK departure streams are the major factors in determining the usable hours.**
- **Maximum hours would not change with the additional waypoints south of GOBBS or a new departure procedure similar to NIITE/HUSSH.**



Conclusions (cont.)

- **Using the GOBBS transition for nighttime operations can be implemented in a much shorter timeframe than developing and implementing a new procedure.**
 - **Public comments could be submitted to the SFO RT if allowed by the RT.**
 - **Once the environmental review is completed, the SFO RT would coordinate with the FAA to determine the next steps.**

