# Letter of Agreement

Effective: March 20, 2025

1. **PURPOSE.** To establish procedures for the coordination of air traffic and radar handoffs between the Los Angeles ARTCC, Oakland ARTCC, Bakersfield TRACON, Fresno TRACON, and Santa Barbara TRACON. This letter also delegates jurisdiction of portions of the Los Angeles Center control area to Oakland Center and portions of the Oakland Center control area to Los Angeles Center.

2. **SCOPE.** The procedures contained herein are for use between Oakland Center and Los Angeles Center for the controlling of air traffic and the handling of aircraft transitioning between Centers.

3. **CANCELLATION.** All previous agreements are canceled.

4. **DEFINITIONS.**
    a. Facility Areas

| GROUP NAME | AIRPORTS |
|---|---|
| **ZLA Areas** | |
| Empire Area | ONT, CNO, POC, AJO, EMT, RAL, SBD |
| Coast Area | SNA, LGB, TOA, FUL |
| Burbank Area | BUR, VNY |
| San Diego Area | SAN, CRQ, NFG, OKB |
| LA Basin | All airports in Southern California |
| Las Vegas Area (L30) | LAS, VGT, HND, BVU, LSV |
| **ZOA Areas** | |
| Oakland Area | OAK, HWD |
| Sacramento Area | SMF, SAC, MHR, MCC, O88 |
| San Jose Area | SJC, MRY, SNS, NUQ |
| Bay Area | SFO, OAK, SJC, NUQ, CCR, HWD, LVK, APC, RHV, SQL |

5. **PROCEDURES.**
    a. General.
        i. Preferred routes and altitude restrictions for turbojet aircraft are described in Attachments 1 and 2. Tower Enroute Control (TEC) routes for operations between the FAT and BFL TRACONs are included in attachment 3.
            1. Each Center prefers that, where applicable, flight plans contain a STAR appropriate for aircraft type and navigation equipment.
        ii. The minimum radar separation for aircraft being transferred between facilities is 5 nm, constant or increasing.

1. Whenever miles-in-trail restrictions are imposed for identified facility airports, sequencing must be ensured regardless of altitudes. During these times, BUR/VNY/SMO, SNA/LGB, and LAX/HHR must each be treated as one airport.

iii. Inappropriate altitude for direction of flight (IAFDOF), for reasons of traffic, may be assigned with prior approval from the receiving facility.
   1. Aircraft handed off from ZOA Area South to ZLA Sector 26, above FL240 and east of NLC must be assigned odd cardinal altitudes, regardless of compass heading.
   2. Aircraft handed off from ZLA Sector 26 to ZOA Area South, above FL240 and east of NLC, or above FL200 and between NLC and the PRB shelf, must be assigned even cardinal altitudes, regardless of compass heading.

iv. Each Center must advise the other of the configuration of the adjacent sectors. Coordination may be accomplished either verbally or via PM.

v. Each Center must keep the other advised, in a timely manner, of any changes, including sector saturation, weather, or equipment malfunction, which may limit or adversely affect air traffic control and/or facility operation.

vi. Each facility must advise the other of the release of military operating area (MOA), warning area and restricted airspace immediately adjacent to the common boundaries.

vii. Aircraft descending to meet altitude restrictions contained in this LOA must enter the designated sector at or below the restriction altitude unless otherwise specified.

viii. All control instructions issued for turns, speeds, and altitude changes covered in this LOA must be reflected in the data block or flight plan.

ix. Transfer of Control
   1. Control for speed adjustments, changes to the data block, and beacon codes is released upon the completion of a handoff and a frequency change.
   2. For all items contained in the following table, control is released on contact:

| FROM | TO | QUALIFIER | CONTROL |
|---|---|---|---|
| **From ZLA** | | | |
| ZLA 27 | ZOA Area South | North of EHF | Turns up to 25° |
| ZLA 25/28 | ZOA Area South | Within 15 nm of boundary | Turns up to 40° |
| | ZOA Pac South | | Turns up to 40° for all aircraft; descent to FL240 for non-turbojet and all San Jose Area arrivals |
| ZLA 16 | ZOA Area East | North of BTY | Turns |
| SBA | ZOA | | Turns up to 50°, climb (descent for PRB arrivals) |
| BFL | ZOA | | Turns up to 45° |
| BFL | FAT | Within 10 nm of boundary | All |

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| FROM | TO | QUALIFIER | CONTROL |
|---|---|---|---|
| **From ZOA** | | | |
| ZOA Area South/Pac South | ZLA 25 | Within 15 nm of boundary | Turns up to 40° for all aircraft; descent to FL240 for non-turbojet and all SBA arrivals |
| ZOA Area South | ZLA 27 | South of FAT | Turns up to 25° |
| ZOA Area East | ZLA 16 | Within 15 nm of boundary | Turns |
| | | Within 15 nm of boundary, Landing L30 | Descent |
| ZOA | SBA | | Turns up to 50° |
| ZOA | BFL | | Turns up to 45° |
| FAT | BFL | Within 10 nm of boundary | All |

b. Domestic

i. Operations at airports near ZOA/ZLA boundary

1. The following table contains control instructions to be issued by the involved facilities when handling traffic departing/arriving airports near the boundary:

| FROM | TO | QUALIFIER | INSTRUCTIONS/RESTRICTIONS |
|---|---|---|---|
| **From ZLA** | | | |
| SBA | ZOA Area South | SBP Departures | Climbing to 8,000 or lower filed |
| ZLA 25/26 | | PRB Arrivals | Descending to 8,000<br>Direct PRB or any PRB IAF<br>ZOA has control on contact |
| SBA | | | Descending to 6,000<br>Direct PRB |
| BFL | | FAT Arrivals | Via ALTTA STAR, at 12,000 |
| | | BFL TRACON Departures | Climbing to 12,000 or lower filed<br>ZOA has control within 10 nm of the boundary |
| ZLA 27 | | FAT Arrivals | Via ALTTA STAR, at 14,000 |
| | | NLC Arrivals | 16,000 or lowest available<br>Via CETTA |
| ZLA 26 | | | Descending to 16,000<br>Routed AVE CARRL or AVE WADDE |
| **From ZOA** | | | |
| ZOA Area South | SBA | SBP Arrivals | Descending to 7,000<br>Direct SBP, MQO, CREPE, or CADAB |
| | | PRB Departures | APREQ departures entering SBA |
| | BFL | BFL TRACON Arrivals | Descending to 13,000<br>BFL has control for descent within 5 nm of the boundary |

ii. SBA TRACON:
1. When the Hunter SUA is active, aircraft entering ZOA airspace from SBA TRACON airspace must be routed as follows:
a. West of the Hunter SUA
i. Between 7,000 and 10,000 feet: V27.BSR direct next fix
ii. Above 10,000 feet: MQO..CLMNS..LIBBO direct next fix
b. East of the Hunter SUA: PRB direct next fix

iii. BFL TRACON:
1. ZOA must handoff or point out aircraft landing BFL to ZLA
2. The Pixey Area (Attachment 5) is continuously delegated to ZOA (from 11,000 to 13,000) and FAT (from surface to 10,000)

iv. ZOA will ensure DME-equipped turbojet aircraft departing MRY, SNS, OAR, and WVI landing LGB and SNA are routed via the existing Offshore Route, joining that route no further south than MCKEY/YYUNG/TILLT unless coordinated with ZLA.

c. Oceanic
i. Coordination
1. Coordination shall occur for every aircraft transiting the common boundaries of the facilities that are parties to this LOA at least 15 minutes prior to the transfer of control point (TCP).
a. If an aircraft is departing an airport that is less than 15 minutes away from the TCP, the coordination shall be completed as soon as practicable, preferably prior to the aircraft becoming airborne.
2. Coordination shall consist of the aircraft's callsign, TCP fix, and assigned altitude.
***EXAMPLE-***
*ZAK_FSS  LAX_CTR: DAL436, GALIP, FL330.*
3. Aircraft shall be instructed to switch to the receiving controller's frequency no later than 5 minutes prior to the TCP.
a. Aircraft entering oceanic airspace shall be instructed to squawk 2000 and to contact the appropriate HF radio operator.

ii. Altitude Assignment
1. Aircraft operation on a unidirectional route (R576 and R577) may be assigned any cardinal altitude. In the presence of convective weather, altitude assignment must be appropriate for direction of flight.

6. **ATTACHMENTS.**
a. Attachment 1. Preferred Routes and Altitudes from Oakland Center to Los Angeles Center for Turbojets and Turboprops
b. Attachment 2. Preferred Routes and Altitudes from Los Angeles Center to Oakland Center for Turbojets and Turboprops
c. Attachment 3. Tower Enroute Control Routes Between FAT and BFL TRACONs
d. Attachment 4. Paso Robles Area
e. Attachment 5. Lemoore Area
f. Attachment 6. Pixey Area
g. Attachment 7. ZLA Oceanic Shelf
h. Attachment 8. List of Changes

**ATTACHMENT 1. PREFERRED ROUTES AND ALTITUDES FROM OAKLAND CENTER TO LOS ANGELES CENTER FOR TURBOJETS AND TURBOPROPS** (as specified)

Preferred routes and altitudes for aircraft originating in or over-flying Oakland Center and entering Los Angeles Center.

| DEPARTURE | DESTINATION | ROUTING | ALTITUDE/ NOTES |
|---|---|---|---|
| **LOS ANGELES AREA** | | | |
| FAT | LAX | ..PONDD..TAFTO..MUPTT | AOB FL230 |
| MRY | LAX | ..TOKIO<br>..MQO (Non-RNAV) | AOB FL230 |
| ALL (Jets) | LAX | ..BURGL<br>..REBRG<br>..DOUIT<br>..DERBB (Non-RNAV) | |
| ALL (Jets) | LAX | ..BURGL.BAYST STAR<br>..TILLT.DIRBY STAR<br>..MCKEY.LEENA STAR (Non-RNAV) | Only for known cargo aircraft on or west of J501 |
| ALL (Jets) | SMO | ..BURGL<br>..HONZK<br>..MMTLY.<br>..RDHOT<br>..REBRG<br>..AVE (Non-RNAV)<br>..FLW (Non-RNAV)<br>..REBRG.J7.DERBB (Non-RNAV) | AOB FL310 |
| All Other Props East of J1 | LAX/SMO/HHR | ..PAIDD (LAX/SMO only)<br>..EHF<br>..LHS | AOB FL230 |
| All Other Props West of J1 | LAX/SMO/HHR | ..AVE (LAX/HHR only)<br>..FLW<br>..RZS | AOB FL230 |
| **COAST AREA** | | | |
| ALL (Jets) | LGB/SNA | ..TILLT<br>..RDHOT<br>..MMTLY<br>..ELLBC<br>..REBRG<br>..AVE (Non-RNAV)<br>..FLW (Non-RNAV)<br>..MCKEY..DAISY..BENET (Non-RNAV)<br>..REBRG.J7.DERBB (Non-RNAV) | |
| Props East of J7 | LGB/SNA | ..EHF | AOB FL270 |
| All Other Props | LGB/SNA | ..FLW<br>..GVO | AOB FL310 (West of J501)<br>AOB FL230 (East of J501) |

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| | | | |
|---|---|---|---|
| **BURBANK AREA** | | | |
| ALL (Jets) | BUR/VNY | ..BURGL<br>..HONZK<br>..MMTLY<br>..RDHOT<br>..REBRG<br>..AVE (Non-RNAV)<br>..FLW (Non-RNAV)<br>..REBRG.J7.DERBB (Non-RNAV) | AOB FL310 |
| Props East of J1 | BUR/VNY | ..NINTY<br>..EHF<br>..LHS | AOB FL230 |
| All Other Props | BUR/VNY | ..RZS<br>..FLW | AOB FL230 |
| **SAN DIEGO AREA** | | | |
| ALL | SAN | via LAX | Must be over or west of J1 |
| | | ..HUULK<br>..PASKE<br>..EHF<br>..LANDO<br>..LAX (if via PLYYA STAR) | |
| ALL | CRQ/NFG | ..BURGL<br>..TILLT<br>..REBRG<br>..LANDO (AOB FL250)<br>via DERBB.J7.FIM (Non-RNAV west of REBRG) | |
| **PALM SPRINGS** | | | |
| ALL | PSP/TRM/UDD | ..CLASN<br>..OYVEY<br>..BTY..ZELMA<br>..PMD (Non-RNAV, LANDO..PMD avoid R2508) | AOB FL370 |
| **EMPIRE AREA** | | | |
| ALL | ALL | ..CLASN<br>..OYVEY<br>..PMD (LANDO..PMD avoid R2508) | AOB FL350 |
| **LAS VEGAS TERMINAL AREA** | | | |
| ALL | LAS Jets | ..BASIC<br>.Q174.FLCHR<br>.J92.BTY (Non-RNAV) | AOB FL330<br>AOB FL310 via Q174 |
| ALL | LAS Non-Jets/HND | ..FUULL<br>.J92 (Non-RNAV) | AOB FL310<br>AOB FL290 props or via J92 |
| ALL | VGT | .Q174.FLCHR<br>.J92 (Non-RNAV) | |
| ALL | LSV | .J92 | AOB FL330 |

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| OTHER AIRPORTS | | | |
|---|---|---|---|
| ALL | SBA | via GVO | AOB FL290 |
| ALL | SBP | ..MQO..<br>..CREPE..<br>..CADAB.. | |

| ZLA OVERFLIGHTS | | | |
|---|---|---|---|
| ALL | MEXICO | ..LAX.. | Through ZLA 27 |
| SFO/OAK/SJC | ALL | ..BOILE.. | Through ZLA 27 |

**ATTACHMENT 2. PREFERRED ROUTES AND ALTITUDES FROM LOS ANGELES CENTER TO OAKLAND CENTER FOR TURBOJETS AND TURBOPROPS** (as specified)

Preferred routes and altitudes for aircraft originating in or over-flying Los Angeles Center and entering Oakland Center.

| DEPARTURE | DESTINATION | ROUTING | ALTITUDE/ NOTES |
|---|---|---|---|
| **SAN FRANCISCO AREA** | | | |
| LA Basin/ MEXICO | SFO | ..SERFR<br>..BSR (Non-RNAV) | |
| PSP/Burbank Area | SFO | ..MAKRS..SERFR<br>..BSR (Non-RNAV) | |
| Las Vegas Area/Airports East of LAS | SFO | ..RUSME<br>.J92.LIDAT (Non-RNAV) | |
| SBA Area Jets | SFO | ..MQO..CLMNS..LIBBO..NRRLI..SERFR STAR | |
| SBA Area Props | | ..MQO..CLMNS..LIBBO..OSI.. | |
| **SAN JOSE AREA** | | | |
| LA Basin/MEXICO | SJC | ..SCTRR..TROXX<br>..SNS (Non-RNAV) | AOB FL360 |
| PSP/Burbank/ Empire Area | | ..MAKRS..TROXX<br>..SNS (Non-RNAV) | |
| Las Vegas Area/Airports East of LAS | SJC | ..RUSME<br>..STUBL<br>.J92.LIDAT (Non-RNAV) | |
| LA Basin | MRY | ..MAKRS<br>..WIGGL..(West of MAKRS)<br>..PEBBS (West of MAKRS) | AOB FL280 |
| Las Vegas Area/Airports East of LAS | | ..BTY.J92.LIDAT..FRA..SNS | |
| **OAKLAND AREA** | | | |
| LA Basin/ MEXICO | OAK/HWD | ..RGOOD<br>..PXN (HWD + Non-RNAV) | |
| NTD/SBA Area | OAK/HWD | ..EMZOH<br>..PXN (HWD + Non-RNAV) | |
| Las Vegas Area/Airports East of LAS | OAK/HWD | ..RUSME<br>.J92.LIDAT..OAL..SUNOL (Non-RNAV) | |
| **SACRAMENTO AREA** | | | |
| LA Basin/ MEXICO | SMF | ..NURAY<br>..EHF.V23.FRAME (Non-RNAV) | |
| Las Vegas Area/Airports East of LAS | | ..DONNR<br>.J92.OAL..SWR..FLUNK (Non-RNAV) | AOB FL360 |

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| | | | |
|---|---|---|---|
| **RENO AREA** | | | |
| LA Basin/MEXICO | RNO | ..FMG<br>..SLEAT | |
| Las Vegas Area/Airports East of LAS | RNO | ..KENNO<br>.J92.OAL..MVA (Non-RNAV)<br>.J92.OAL..TARVR (Non-RNAV) | AOB FL340 |
| Las Vegas Area/Airports East of LAS | NFL | ..KENNO<br>.J92.OAL (Non-RNAV) | AOB FL280 |
| **OTHER AIRPORTS** | | | |
| All except Las Vegas Area/Airports East of LAS | FAT | ..TTE.ALTTA STAR | |
| Las Vegas Area/Airports East of LAS | | ..KENNO..TTMSN<br>..RUSME..CABAB<br>..KENNO..BIH..FRA (Non-RNAV) | AOB FL300 |
| LA Basin/MEXICO | SCK | ..NURAY..MOD<br>..EHF.V23.FRAME (Non-RNAV) | AOB FL320 |
| | CCR/SUU | ..NURAY<br>..EHF.V23.FRAME (Non-RNAV) | |
| All | PRB | ..PRB | |
| All | NLC | ..AVE..CARRL or ..AVE..WADDE | Over AVE |
| | | ..CETTA..BUMPI | East of AVE |
| Las Vegas Area/Airports East of LAS | TRK/TVL | Direct | AOB FL340 |
| Las Vegas Area/Airports East of LAS | LVK/SCK/MOD | ..KENNO<br>.Q13.SKANN<br>.J92.LIDAT (Non-RNAV) | |
| Las Vegas Area/Airports East of LAS | APC/STS | ..KENNO<br>via RUSME<br>via SNORA<br>.J92.LIDAT (Non-RNAV) | |
| LA Basin/MEXICO | APC/STS | ..RGOOD | |
| **Required Asia Routing** | | | |
| LA Basin | Via ALCOA, REDWD, LINUZ, BOXER | No further direct than SNS or LIBBO | |

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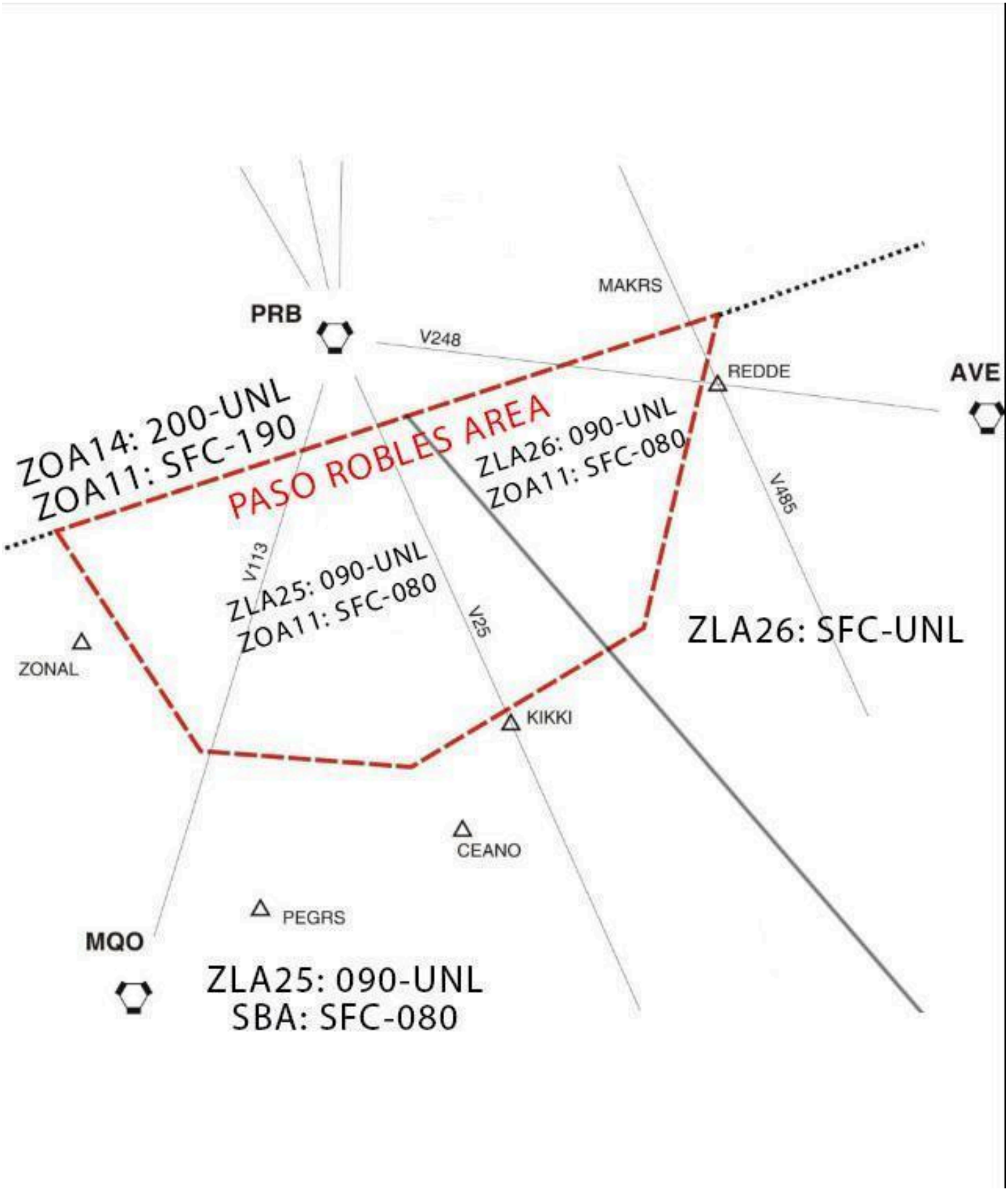
**ATTACHMENT 3. TOWER ENROUTE CONTROL ROUTES BETWEEN FAT AND BFL TRACONs**

| DESTINATION | ROUTING | ALTITUDE |
|---|---|---|
| **LANDING BAKERSFIELD TERMINAL AREA** | | |
| BFL, L45, MIT, L17, L84, L62 | .V23.EHF.. | 5,000/7,000/9,000 |
| DLO, L19 | | 5,000/7,000 |
| PTV | .V165.TTE.. or direct IAF RNAV 12 | 5,000 |
| **LANDING FRESNO TERMINAL AREA** | | |
| FAT | ..TTE.ALTTA STAR | 6,000/8,000/10,000 |
| FCH | .V23.FRAME.. | |
| MAE, E79, O32, D86, 0Q4 | | |
| VIS | ..BRETT..PANES.. or<br>..BRETT..localizer | 6,000 |
| TLR | .V165.EXTRA.. | |
| HJO | ..VIS.. or direct IAF RNAV 32 | |

**ATTACHMENT 4. PASO ROBLES AREA**



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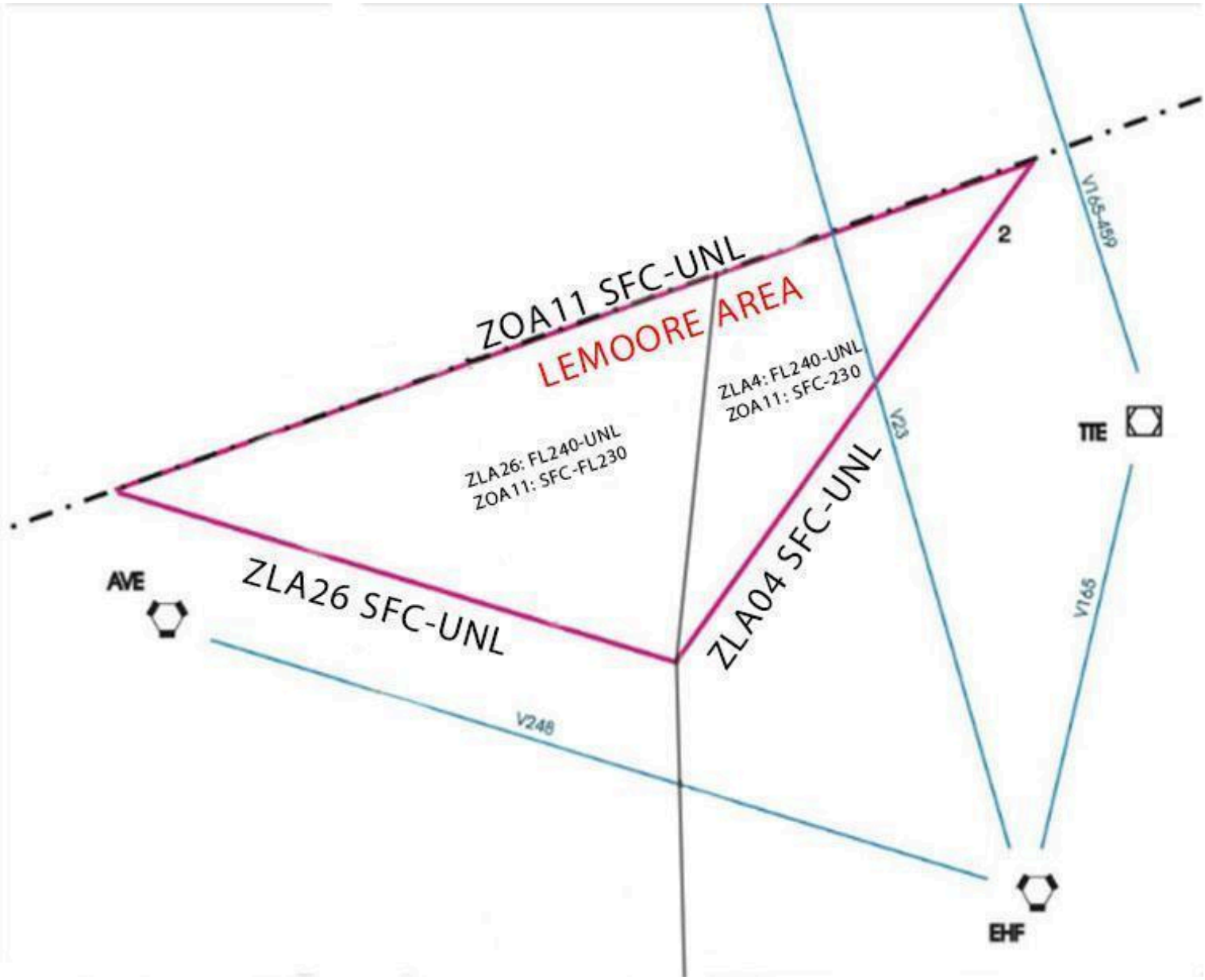
**ATTACHMENT 5. LEMOORE AREA**



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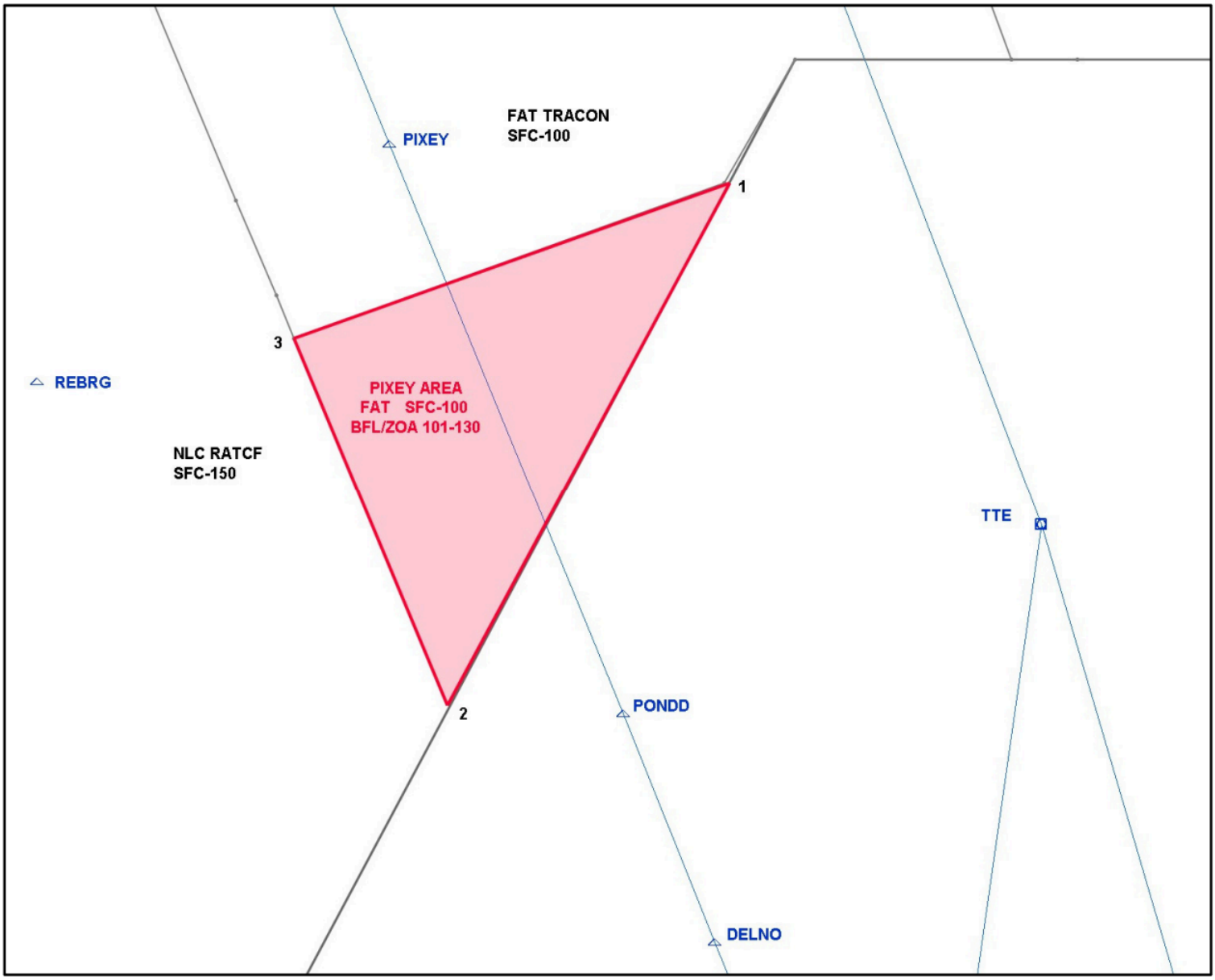
## ATTACHMENT 6. PIXEY AREA



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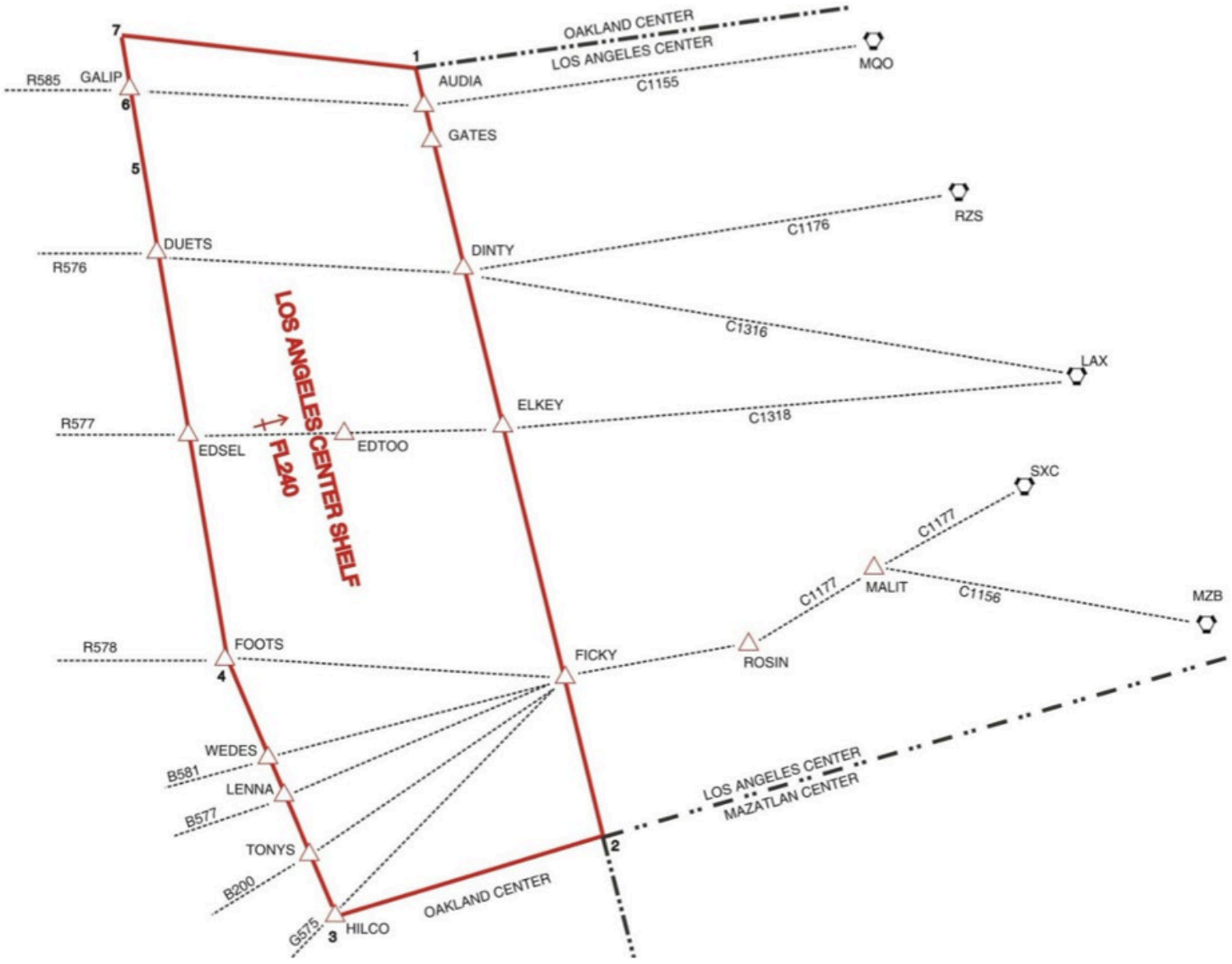
## ATTACHMENT 7. ZLA OCEANIC SHELF



## ATTACHMENT 8. LIST OF CHANGES

| Change | Date | Description | ZOA Approval | ZLA Approval |
|---|---|---|---|---|
| -- | 04MAY2017 | Initial Write | Ryan Parry - ATM | Ethan Bernstein – ATM |
| CHG01 | 25 MAR2018 | Rewrite for new ZOA sectors | Ryan Parry – ATM | Nickolas Christopher – ATM |
| CHG02 | 16 SEP 2019 | Update routes and ZLA sectors | Ryan Parry – ATM | Nickolas Christopher – ATM |
| CHG03 | 01 MAR 2021 | L30 Metroplex changes | Daniel Everman – ATM | Nickolas Christopher – ATM |
| CHG04 | 24 APR 2021 | Updated SAN Routings | Daniel Everman – ATM | Nickolas Christopher – ATM |
| CHG05 | 31 AUG 2021 | Updated MRY/SMF Routing | Daniel Everman – ATM | Nickolas Christopher – ATM |
| CHG06 | 23 FEB 2023 | Merge in SBA/BFL LOAs, reformat, update routings, add oceanic procedures | Ryan Parry – ATM | Nickolas Christopher – ATM |
| CHG07 | 11 JUL 2024 | Updates for ZLA Sectors, changes to SFO SIDs | Andrew Selder – ATM | Nickolas Christopher – ATM |
| CHG08 | 13 JAN 2025 | Updates to remove STAR requirements, RW alignment | Matthew Tedesco – ATM | Nickolas Christopher – ATM |
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| **Matthew Tedesco**<br>**Air Traffic Manager – Oakland ARTCC** | **Nickolas Christopher**<br>**Air Traffic Manager – Los Angeles ARTCC** |