Letter of Agreement

Effective: January 28, 2024

- PURPOSE. This letter of agreement establishes procedures for the routing, coordination and radar handoff of air traffic between Seattle Air Route Traffic Control Center (ARTCC) and Oakland ARTCC.
- SCOPE. The procedures contained herein are for use between Oakland Center and Seattle
 Center for the controlling of air traffic and the handling of aircraft transitioning between
 Centers.
- 3. **CANCELLATION.** All previous agreements are canceled.

4. PROCEDURES.

a. General

- i. Each center must advise the other when changes occur in sector configuration, automation interface, and communication capabilities.
- ii. The forwarding of control information and coordination of IFR departures must be accomplished at least five (5) minutes prior to the aircraft entering the receiving facility's area provided an automatic transfer of data between automated systems will occur.
- iii. 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.

b. Routing

- i. Aircraft must be routed via:
 - 1. Preferred Routes as specified in Attachment 1 or
 - 2. Traffic Management coordination/initiated routes
- ii. Aircraft landing at Los Angeles Basin airports (LAX, BUR, VNY, SMO, SNA, and LGB) may be routed no further direct than Mendocino (ENI), Linden (LIN), Friant (FRA) VORTACs, and REBRG or JAGWA WP.
- iii. ZOA may route aircraft landing SEA no further than BLYTZ or KNGDM.
- iv. ZOA may route aircraft landing PDX no further than MOXEE.

c. Altitude Assignment

- For aircraft tracking a course of 020 degrees through 199 degrees, assign altitudes as specified in Order 7110.65, Air Traffic Control, for 0 degrees through 179 degrees.
- ii. For aircraft tracking a course of 200 degrees through 019 degrees, assign altitudes as specified in order 7110.65 for 180 degrees through 359 degrees.
- iii. Aircraft assigned an altitude of FL240 or higher, transitioning to or from the Oceanic FIR do not require approval for inappropriate altitude for direction of flight between ZOA 36 and ZSE Sector 15.

d. Transfer of Control

- i. At the completion of radar handoff and frequency change, all aircraft are released for turns of 15 degrees or less, beacon code changes, and speed adjustments.
 - In addition to the above, ZSE has control from ZOA 41 for descent on aircraft landing ACV, EKA, and FOT airports and turns of up to 20 degrees.
 - 2. ZOA 36 has control from ZSE Sector 14 for descent on aircraft landing SMF, SAC, and MHR within 15 NM of the common boundary with reference to aircraft previously handed off from ZOA.

e. Special Coordination Procedures

- Reno complex arrivals (RNO, RTS, CXP, MEV, TRK, TVL) filed above FL300, must enter ZOA airspace descending to FL300. Pilot discretion descents are authorized and need not be coordinated.
 - 1. ZSE must point out to ZOA 41.
 - 2. ZSE must hand-off to ZOA 44.
- ii. In order to facilitate timely oceanic coordination, Seattle Center should affect early radar handoffs on westbound oceanic aircraft filed over REDWD, VESPA, UNVER, TRYSH and SHENU.
- iii. The ZOA 44 controller must notify ZSE Sector 13 five minutes prior to the activation of the Reno Military Operating Area (MOA).
- iv. Seattle Center must notify Oakland Center prior to the activation of the Goose, Hart, and Dolphin MOA/ATCAA SAAs.

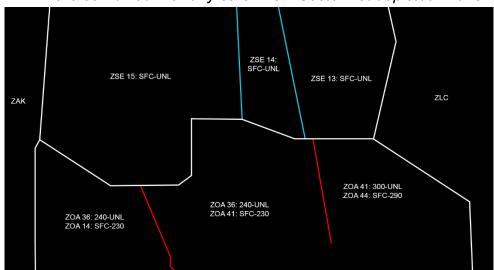
f. Airspace

- i. ZSE Sector 13, 14 and 15 are depicted in the graphic below.
 - ZSE Consolidated is SEA_16_CTR on 135.450
 NOTE- Sector 16 does not own airspace that borders ZOA unless consolidated or otherwise coordinated by ZSE.

NOTE- ZSE will coordinate with ZOA when Sector 13, 14 or 15 are combined with any other ZSE Sector not depicted in this LOA.

- ii. ZOA Sector 14, 36, 41, and 44 are depicted in the graphic below.
 - 1. ZOA Consolidated is OAK CTR on 132.200

NOTE- ZOA will coordinate with ZSE when Sector 36, Sector 41, and/or Sector 44 are combined with any other ZOA Sector not depicted in this LOA.



- g. Oceanic Coordination
 - 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).
 - 1. 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.
 - ii. Coordination shall consist of the aircraft's callsign, TCP fix, and assigned altitude. **EXAMPLE-**

ZAK_FSS □ SEA_CTR: DAL436, SEDAR, FL330.

- iii. Aircraft shall be instructed to switch to the receiving controller's frequency no later than 5 minutes prior to the TCP.
 - 1. Aircraft entering oceanic airspace shall be instructed to squawk 2000 and to contact the appropriate HF radio operator.

5. ATTACHMENTS.

- a. Attachment 1. Preferred Routings for Arrival Aircraft
- b. Attachment 2. List of Changes

ATTACHMENT 1. PREFERRED ROUTINGS FOR ARRIVAL AIRCRAFT

FROM	DESTINATION	PREFERRED ROUTE (RNAV)	NON-RNAV ROUTE				
FROM ZSE - SFOW/SMFS/RNOS							
ZSE Sector 15	SFO	MLBEC.BDEGA STAR	RBGPYESFO RBLPYESFO				
	SFO (Prop)	ENI.PYE STAR	ENI.PYE STAR				
	OAK	SPAMY.WNDSR STAR	RBGREBASOAK RBLREBASOAK				
	SJC	CHBLIBRIXX STAR	RBGPYESFO				
	SJC (Prop)	ENI.PYE STAR	ENI.PYE STAR				
ZSE Sector 13	SMF	LKV.TUDOR STAR	LKV.TUDOR STAR				
	RNO	HARTT.KLUBS STAR	.J5.FMG .J92.FMG				
FROM ZSE - SFOE/SMFN/RNON							
ZSE Sector 15	SFO	MLBEC.STLER STAR	RBG.STINS STAR RBL.STINS STAR				
	OAK	SPAMY.AANET STAR	RBGREBASOAK RBLREBASOAK				
	SJC	GGULF.FRLON STAR	RBG.BRINY STAR RBL BRINY STAR				
ZSE Sector 13	SMF	LKV.TUDOR STAR	LKV.TUDOR STAR				
	RNO	HARTT.EELZA STAR	.J5.FMG .J92.FMG				
FROM ZOA							
ZOA 36/41	SEA	RBLLMTHAWKZ STAR	BTG.OLM STAR				
	PDX	MACHUTMBRS STAR	OED.OCITY STAR				
ZOA 41/44	SEA	LKV.HAWKZ STAR LMTBTGKRIEG.HAWKZ STAR	BTG.OLM STAR				
	PDX	PORTLTMBRS STAR	LMT.OCITY STAR				

ATTACHMENT 2. LIST OF CHANGES

Change	Date	Description	ZOA Approval	ZSE Approval	
	06JUN2016	Initial Write	Ryan Parry - ATM	Brayden Manzella - ATM	
CHG01	07MAR2018	Rewrite for new ZOA sectors	Ryan Parry – ATM	Aaron Schwartz - ATM	
CHG02	17DEC2020	Update for new ZSE Sectors	Ryan Parry – ATM	Matthew Woerly - ATM	
CHG03	20DEC2020	Updated Airspace definitions	Ryan Parry – ATM	Matthew Woerly - ATM	
CHG04	20JAN2021	Updated Airspace definitions, RNO complex arrivals	Daniel Everman – ATM	Matthew Woerly - ATM	
CHG05	15JUL2021	Altitude assignments update, new ZOA sectorization	Daniel Everman – ATM	Matthew Woerly – ATM	
CHG06	26JAN2023	Add oceanic procedures	Ryan Parry – ATM	Eric Steiner – ATM	
CHG07	28JAN2024	Fix typos, update HARTT to KLUBS STAR	Matthew Tedesco – DATM	Shi Bucher - ATM	
Andrew Selder Shi Rucher					

Andrew Selder
Air Traffic Manager – Oakland ARTCC

Shi Bucher Air Traffic Manager – Seattle ARTCC