



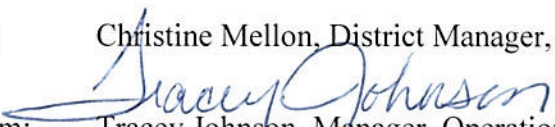
Federal Aviation Administration

Memorandum

Date:

JUL 26 2016

To: Christine Mellon, District Manager, Northwest District, TWNF

From:  Tracey Johnson, Manager, Operations Support Group,
Western Service Center, AJV-W2

Subject: Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control Tower Letter of Agreement; Subject: Approach Control Service and Coordination Procedures

The Operations Support Group has reviewed the attached Seattle Terminal Radar Approach Control and Boeing Field Airport Traffic Control Tower Letter of Agreement; Subject: Approach Control Service and Coordination Procedures, and finds it to be in compliance with FAA JO 7210.3, *Facility Operation and Administration*.

If you have any questions, contact Joseph Bert, NISC Contract Support Specialist, Operations Support Group, Western Service Center at (425) 203-4549.

Attachment




Federal Aviation Administration

Memorandum

Date: JUL 26 2016

To: Christine Mellon, District Manager, Northwest District, TWNF

From:  Tracey Johnson, Manager, Operations Support Group,
Western Service Center, AJV-W2

Subject: Verification of Opposite Direction Operation Documents in Response to AOV Audit.

Operations Support Group (OSG) has reviewed the Opposite Direction procedures contained within the attached Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control Letter of Agreement; Subject: Approach Control Service and Coordination Procedures, and find these procedures to be in compliance with FAA JO 7210.3, *Facility Operation and Administration*, paragraph 2-1-30, and ATO-SG-15-07.

If you have questions, please contact Stephen D. Pearce, Operations Support, AJV-W22 at 425-203-4531 or via E-mail at Stephen.d.pearce@faa.gov

LETTER OF AGREEMENT

EFFECTIVE: JULY 26, 2016

SUBJECT: Approach Control Service and Coordination Procedures.

- 1. PURPOSE:** To establish coordination and control procedures between Seattle Terminal Radar Approach Control (TRACON) and Seattle Airport Traffic Control Tower (Tower).
- 2. CANCELLATION:** Seattle TRACON and Seattle ATCT Letter of Agreement dated June 10, 2013 and all its revisions, and NOTICES S46 N7110.705/SEA N7110.121, S46 N7110.706/SEA N7110.122, S46 N7110.690/SEA N7110.107 and S46 N7110.698/SEA N7110.109.
- 3. SCOPE:** The responsibilities and procedures outlined herein must apply to Tower and TRACON personnel for inter-facility coordination and control of air traffic.
- 4. RESPONSIBILITIES:** Tower and TRACON must be responsible to ensure that all applicable personnel are briefed on and comply with the procedures contained in this agreement.
- 5. PROCEDURES:**
 - a. Pre-arranged Coordination.
 - (1) A clear operational benefit may result by establishing prearranged coordination procedures in this Letter of Agreement. In the event of a malfunction or failure of the radar/computer system that prevents complete alphanumeric track data from being displayed, or in the event that prearranged coordination procedures become impractical due to other circumstances; i.e. weather, equipment, frequencies, etc., the FLM must terminate the applicable prearranged coordination procedures immediately.
 - (2) Prearranged coordination may be terminated at any time by the controller responsible for the airspace and must not be resumed until additional coordination has been effected.
 - (3) When using Special Interfacility Procedures (i.e., Plan Alpha, Plan Bravo, Plan Charlie) between SEA ATCT, BFI ATCT, and Seattle TRACON refer to that Letter of Agreement. Due to the limited scope of this Letter of Agreement, the tri-facility LOA must provide the in-depth guidance necessary for the above procedures.
 - (4) Tower must Quick Look the F1 and F2, Y, and A Sectors and the sector that has control of the BFI final. See Attachments 1, 2, 3, and 4 for descriptions and depictions of Tower and TRACON airspace.
 - (5) TRACON may climb and descend BFI arrivals and departures through Tower delegated airspace along the Runway (RWY) 13R/31L centerlines, except BFI arrivals or departures opposite to the established flow of traffic must be coordinated with Tower.

Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control

b. Transfer of Control/Communication.

(1) TRACON must transfer communications no sooner than 15 Nautical Miles (NM) and no later than the final approach fix unless (in a south flow) there is BFI arrival traffic within 6 NM of BFI, then not until over BFI.

(2) TRACON has control to turn departures after transfer of communications with respect to subsequent departures that have LOA authorized headings or have been issued pre-coordinated headings.

(3) Tower must maintain IFR or visual separation between arrivals established on final within the lateral boundaries of Tower airspace.

(4) Tower has control to change assigned runway with arrivals established on final within the lateral boundaries of Tower airspace. When changing the assigned runway, Tower is responsible to ensure separation from the preceding and succeeding arrivals.

c. Arrivals.

(1) RWY 16R/34L is the arrival runway. The TRACON Traffic Management Coordinator (TMC)/FLM/CIC and the Tower FLM/CIC must coordinate to determine runway usage restrictions as described in the Seattle ATCT/Seattle TRACON Runway Use Procedures Letter of Agreement.

(2) TRACON must post the runway usage restrictions on the ACE-IDS, using the following terms:

(a) **NA** – no arrivals may be assigned without coordination.

(b) **U** – unlimited/no arrival restrictions.

(c) **#** – [miles-in-trail restriction]. i.e. 3 means 3 miles-in-trail at the threshold.

(d) **XX** – runway is closed.

(e) **TM** – available as assigned by Traffic Management

EXAMPLE- 16L – 8, 16C – NA, 16R – U

(3) TRACON must:

(a) Handoff non-STARS tagged SEA arrivals.

(b) Furnish the Tower arrival information and type aircraft when the STARS/TDW is out of service.

Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control

(c) Place the following scratchpad information in the full data block for SEA arrivals:

<u>ILS</u>	<u>Visual Approaches</u>	<u>CAT III</u>
16R/34R	VAR-16R/34R	C3R- 16R/34R
16C/34C	VAC-16C/34C	C3C- 16C/34C
16L/34L	VAL-16L/34L	C3L- 16L/34L
<u>CATII</u>	<u>Pilot Provided Visual On Visual Approach</u>	<u>RNAV (RNP) Approach</u>
C2R – 34R	VVR - 16R/34R	Z or Y 6R/C/L or M6R – 16R/C/L
C2C – 34C	VVC - 16C/34C	Z or Y 4L/C/R or M4L – 34L/C/R
C2L – 34L	VVL - 16L/34L	

NOTE-

When the weather reported at SEA is below 800' ceiling and/or 2 statute miles visibility, TRACON may use either Instrument or CAT III scratchpad entries.

NOTE-

Pilot-provided visual separation must be coordinated with the Tower verbally or by the use of the VVR/C/L on the trailing aircraft.

(d) Verbally coordinate aircraft's intentions for multiple or practice approaches.

(e) When placing IFR arrival RVR requirements in the STARS second scratchpad, use the letter V followed by two digits to denote RVR minimums – V__.

EXAMPLE-

V18 indicates 1800 RVR required.

(f) When Tower Local Control positions are combined assign 119.9, regardless of runway assignment

(4) Tower must:

(a) Update STARS full data blocks to depict actual runway assignments.

(b) Sequence pop-up VFR arrivals that will not interrupt the flow of traffic on final.

(c) Coordinate with the TMC when an arrival sequence is required for VFR aircraft.

(d) Inform TRACON when re-clearing an aircraft for a visual approach when simultaneous dependent approaches are being conducted. This can be accomplished with a scratchpad entry.

Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control

(e) Ensure that the FLM/CIC verbally coordinates through TRACON FLM/CIC when combining/decombining local control positions, and when 2.5 NM in-trail arrival separation is/is not authorized due to tower visibility.

(f) Update the ACE-IDS when 1 or 2 local control frequencies are in use.

(5) Breakouts/Missed Approach/Go-Arounds: See Attachment 5 for a depiction of the breakout areas.

(a) Breakout aircraft requiring a turn prior to reaching the appropriate breakout point should be coordinated through CI-2 when staffed, or AR-F.

(b) In a south flow, assign the breakout aircraft 2,000 feet and in a north flow assign 3,000 feet. Coordinate with the appropriate TRACON departure controller as soon as possible.

(c) Aircraft assigned a higher altitude by TRACON must not be issued the higher altitude until past the approach end of the runway.

NOTE- The intent is to ensure that the breakout aircraft departs Tower airspace into a TRACON departure sector's airspace.

(d) South flow aircraft may be assigned a heading of 160° through 195° after crossing the Final Approach Fix or, if a southeast-bound turn is required, a heading of 140° may be assigned when over the approach threshold. During split flow, no 140° headings will be assigned.

(e) North flow aircraft must be assigned a heading of 340° or vectored to remain in the tower's 3,000' airspace, then positioned to exit the Three Tree Breakout Area, and assigned a heading of 290° through 310°. Aircraft at or north of the Runway 34R threshold must be assigned heading 340° or turned to exit the Three Tree Breakout Area, and assigned a heading of 290°.

d. Departures. Tower must:

(1) Release IFR and VFR departures which will subsequently receive flight following from TRACON without prior approval except:

(a) When any check departure lights are on:

1) Inform the appropriate departure sector of any aircraft which have commenced takeoff roll prior to the activation of the check departure lights.

2) Acknowledge the lights by depressing the button located directly beneath the illuminated position indicator lamp.

(b) In the event of radar failure.

Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control

- (2) When STARS or TDW is inoperative, advise the appropriate TRACON departure sector of ID, STARS gate and filed altitude for each departing aircraft prior to commencing take off roll.
- (3) Coordinate all un-tagged or incorrectly tagged aircraft (IFR and VFR) with the appropriate departure sector before the aircraft reaches a point 2 NM from SEA. Include aircraft position, ID, STARS gate assignment, and filed altitude.
- (4) In a north flow, release IFR departures with respect to traffic on the BFI RWY 31 final approach course. TRACON Boeing Sector must advise Tower of any aircraft not displaying a STARS full data block including current, verified altitude or in a coast status.
- (5) Provide 3 NM initial departure separation between successive like-type departures out the same STARS gate. (In a south flow Q and E Gates are considered the same STARS gate).
- (6) Be authorized to use pilot-provided visual separation for other than same-gate departure pairs.
- (7) To the extent possible, not use Tower or pilot-provided visual separation when the lead aircraft is an A320/A321 or when the trailing aircraft is a B757.
- (8) Assign all departing IFR aircraft standard instrument departure procedures (SID) as follows:
 - (a) Group A aircraft – Issue SIDs in accordance with Attachment 6. BFI arrivals must be issued the SEA SID. Exception: during Sleepytime, assign all departures the SEA SID unless a HAROB, KTSAP, BANGR, or KMORE FMS was filed.
NOTE- Groups of aircraft are defined in Attachment 7.
 - (b) Group B, C, and D aircraft – Issue the SEA SID.
 - (c) If a pilot does not possess or cannot accept a SID, issue the SEA 161° radial (south flow) or the SEA 341° radial (north flow), as appropriate, for initial departure routing and coordinate with the appropriate TRACON departure sector.
 - (d) For all aircraft which are unable to meet the altitude restrictions contained in some SIDs prior to the aircraft commencing take off roll, instruct the aircraft to fly the SEA SID and verbally coordinate with the appropriate TRACON departure sector.
 - (e) Aircraft having a Seattle Center FDIO-generated PDR printed on the strip must be issued the PDR in addition to the appropriate SID.
 - (f) Coordinate with the TRACON Departure West controller any aircraft assigned the KTSAP/KMORE SID.

5, d, (9), (b),

Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control

(9) Assign the following automatic turns to departing IFR Groups B, C, and D aircraft:

(a) South Flow:

1) With filed routes between the SEA 230° and 340° radials, or filed to airports within the Satellite area, or aircraft filed on V187, V165, or V287 (i.e. I, U, or L Gates) south of OLM, a heading of 230°.

2) With filed routes between the SEA 341° and 104° radials, except P Gate departures filed for altitudes of 12,000 feet and above, a heading of 140°, to be assigned at the departure end of the runway or leaving 1500 feet.

3) P Gate departures, filed for altitudes of 12,000 feet and above, a heading of 230°.

(b) North Flow:

1) P Gate filed 8,000 feet and below, a heading of 020°.

2) T, M, A and ZAD Gate, a heading of 020°.

3) E, F, Q, Y, I, U, Z and L Gate, a heading of 250° and ensure the aircraft is established on that heading within 1 NM of runway departure end. If unable to assign heading 250°, assign runway heading to 9,000 and coordinate with the appropriate departure controller.

(c) Early turn provisions are automatically canceled when SEA and BFI are in a split flow configuration, except when BFI is north and SEA is south, the 230° heading remains in effect.

(10) Request turns using the following procedure:

(a) APREQ turns using aircraft identification and gate.

(b) If necessary, modify the STARS position symbol to the appropriate TRACON departure sector, and issue the correct departure frequency.

(11) Assign the following altitudes to departing IFR aircraft:

(a) Any Group B, C, or D aircraft not departing straight out (e.g. via a SID, runway heading, or via SEA 341R/161R) must be assigned 3,000 feet and to expect filed altitude 15 NM from SEA. This applies to all departure aircraft that are turned by Tower, including automatic turns as well as those specifically APREQed.

***NOTE-**This does not apply to an arrival aircraft that cannot complete a normal landing (e.g. a go-around).*

Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control

(b) Group A aircraft, filed below 5,000 feet, must be assigned 5,000 feet. Altitude information in the FDIO must be updated to reflect the assigned altitude. **NOTE-** *This is for noise abatement.*

(c) Except as in (a) and (b) above, all North flow departures filed above 9,000 feet must be assigned 9,000 feet and to expect filed altitude 15 NM from SEA. All South flow departures filed above 7,000 feet must be assigned 7,000 feet, and to expect filed altitude 15 miles from Seattle. If filed altitude is below 9,000 in a North flow, or 7,000 in a South flow, assign filed altitude.

(12) Assign departure frequency as follows:

(a) In a south flow, assign departure frequency in accordance with sectors depicted in Attachment 3, except assign VFR aircraft requesting flight following to the west and northwest to the "D" Sector and issue 125.9.

(b) In a north flow, assign departure frequency in accordance with sectors depicted in Attachment 4.

(c) In either flow, assign all VFR aircraft requesting flight following from TRACON the frequency for the TRACON sector based upon direction of flight as depicted in Attachment 3 and 4.

(13) Any IFR aircraft that is not assigned a PDR, or that is filed on a route that does not coincide with the routes in Attachment 6 (e.g.: direct to a point/airport outside TRACON airspace) must be coordinated with the appropriate TRACON departure sector.

(14) Aircraft departing SEA and landing BFI:

(a) South Flow:

1) Group A, assigned Seattle SID, altitude of 5,000 feet, and frequency 120.4.

2) Group B, C, D assigned SEA-X SID, heading of 230°, altitude 3,000 feet and frequency 120.4.

(b) North Flow:

1) Group A, assigned Seattle SID, altitude of 5,000 feet and frequency 119.2.

2) Group B, C, D assigned Seattle SID, heading of 020°, altitude 3,000 feet and frequency 119.2.

(15) Aircraft departing SEA and landing PAE:

(a) South Flow:

1) Group A, assigned Mountain SID, altitude of 5,000 feet and frequency 119.2.

Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control

2) Group B, C, D, assigned Seattle SID, heading of 140°, altitude 3,000 feet to expect 4,000 feet in 15 NM, and frequency 119.2.

(b) North Flow:

1) Group A, assigned Seattle SID, altitude of 5,000 feet and frequency 119.2.

2) Group B, C, D, assigned Seattle SID, heading of 020°, altitude 3,000 feet and frequency 119.2.

(16) Successive Departures: When a pilot is applying visual separation with a preceding departure, tower will place “VV” in the secondary scratch pad of the STARS data block or verbally coordinated prior to transfer of communication of the succeeding aircraft.

e. Flow Change.

(1) Staffing. When a flow change is anticipated, the following positions must be staffed (staffing permitting):

(a) Tower must staff the Local Assist (LA) position.

(b) TRACON must staff the Coordinator (CI) position.

(2) Responsibilities. All coordination regarding flow changes will be coordinated by the LA and CI positions, unless otherwise coordinated.

(3) Procedures. Tower must have automatic releases for as many departure aircraft as they can depart until the last arrival (as determined by the CI) is on a 5 NM final.

f. VFR Transitions. Utilize automation for all VFR transition aircraft unless otherwise specified.

g. ATIS.

(1) Tower must:

(a) Disseminate ATIS code changes and related information by entering the new approach information and ATIS code into the ACE-IDS.

(b) Assign the ATIS codes A through M in sequence for their ATIS, displaying on the IDS system a single letter with the current weather when VFR. Use double character (AA, BB, etc.) to denote IFR weather.

(c) Notify the TRACON FLM when the ATIS fails or returns to service.

(d) When in a south flow, broadcast the following on the ATIS: *“SIMULTANEOUS APPROACHES TO BOEING AND SEATAC AIRPORTS IN USE. EXPECT*

Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control

TRAFFIC BELOW YOU ON FINAL.”

(4) Whenever the Tower or TRACON receives information that would make a change to the advertised approach necessary (e.g.: weather, equipment outage, etc.), the change must be coordinated with the other facility.

6. BEACON CODES: Tower is authorized the permanent use of TRACON’s beacon codes 5560 and 5561 for surface traffic/vehicles only (e.g. ASDE-X). These codes must not be used for airborne aircraft. Tower must return these beacon codes to TRACON when they are no longer needed.

7. OPPOSITE DIRECTION OPERATION PROCEDURES: See Attachment 8

8. SINGLE PERSON MIDSHIFT PROCEDURES: See Attachment 9.

9. ATTACHMENTS:

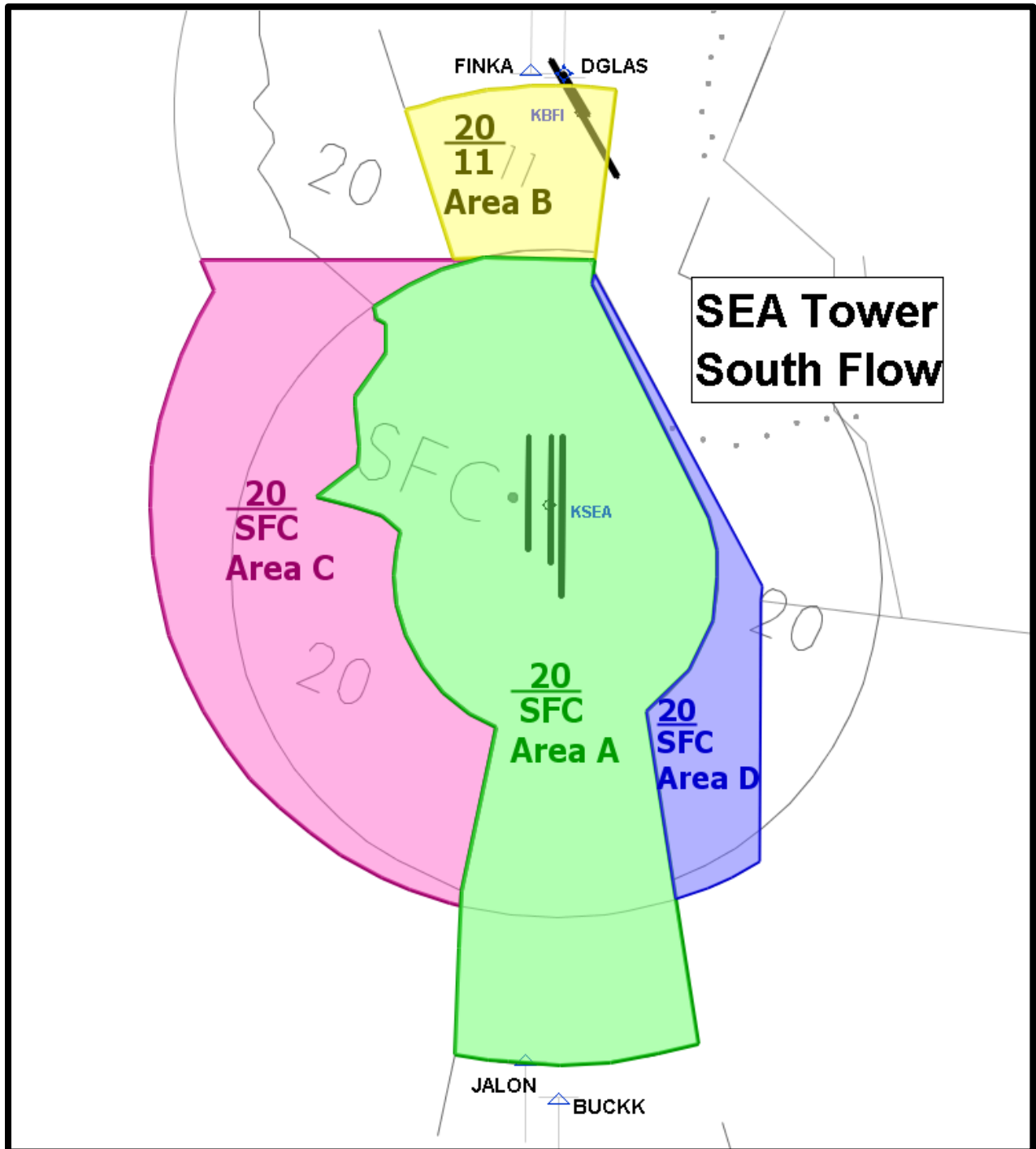
- a. Attachment 1: Jurisdiction of Airspace.
- b. Attachment 2: Tower Areas of Jurisdiction.
- c. Attachment 3: South Flow TRACON Airspace.
- d. Attachment 4: North Flow TRACON Airspace.
- e. Attachment 5: Breakout areas.
- f. Attachment 6: STARS Gate/PDR/Group A Departure Procedure (SID) Assignment.
- g. Attachment 7: Definitions.
- h. Attachment 8: Opposite Direction Operation Procedures.
- i. Attachment 9: Single Person Midnight Operations at TRACON and Tower

Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control

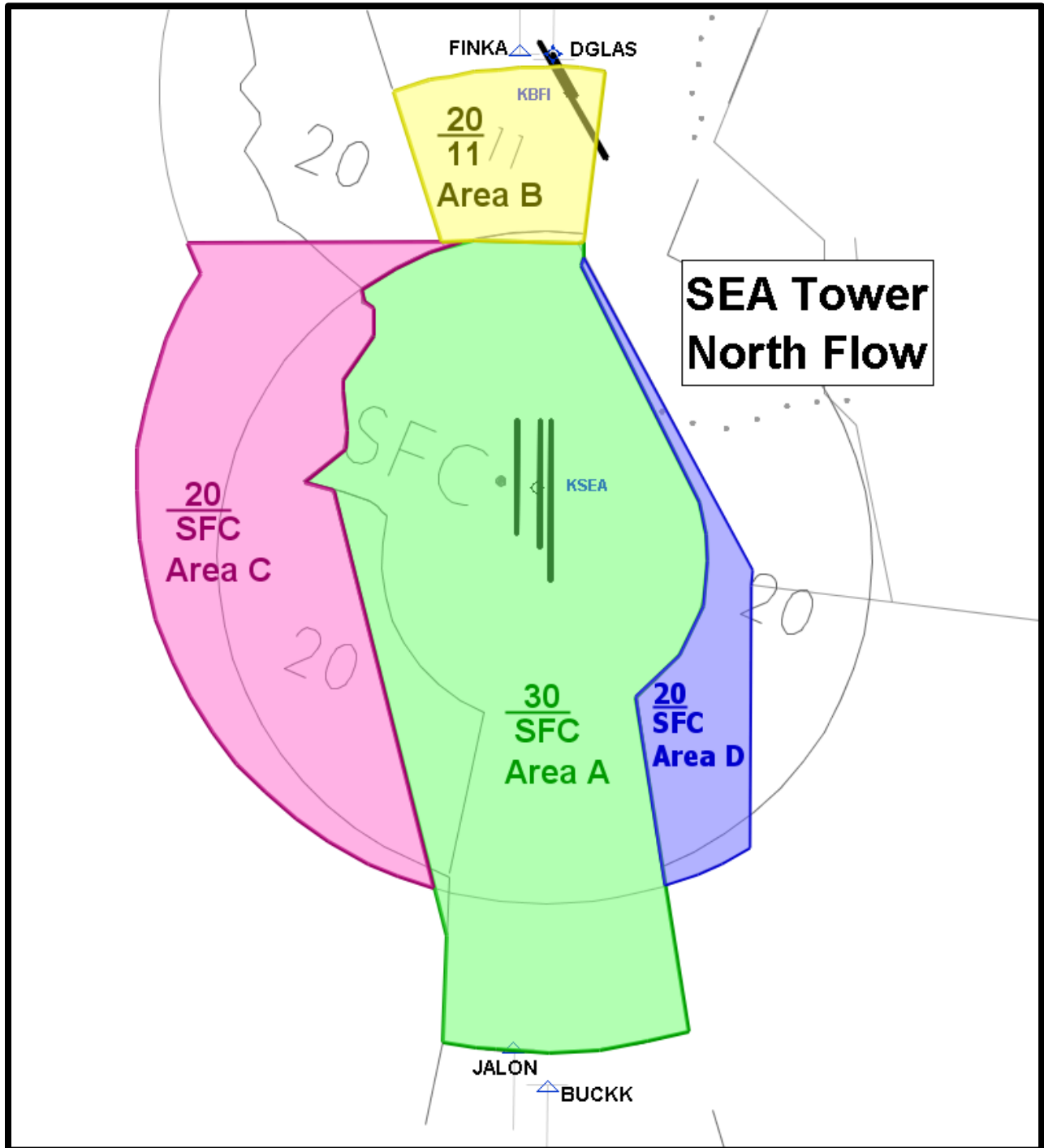
ATTACHMENT 1 – JURISDICTION OF AIRSPACE

1. Tower has continuous jurisdiction of the following airspace (See Attachments 2a, and 2b):
 - a. Seattle Area A, from the surface to 2,000 feet MSL in a south flow. Area A, from the surface to 3,000 feet MSL in a north flow.
 - b. Seattle Area B, 1,100 to 2,000 feet MSL.
 - c. Seattle Area C, surface to 2,000 feet MSL.
 - d. Seattle Area D, surface to 2,000 feet MSL.
2. TRACON has continuous jurisdiction of the Seattle Class D Airspace above 2,000 feet MSL except in Area A in a north flow. (See Attachments 2a, 2b, 3, and 4).

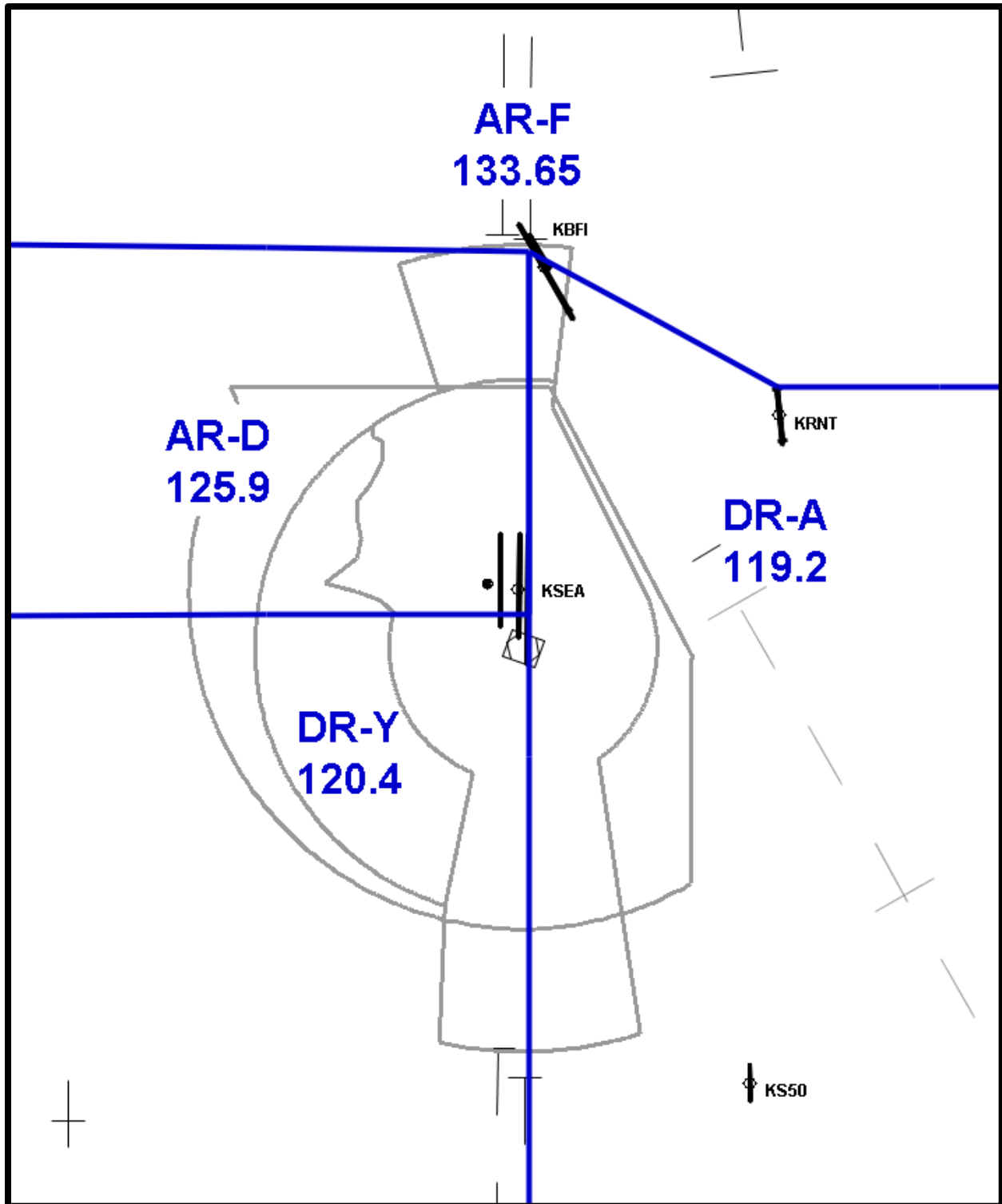
ATTACHMENT 2 (a) – TOWER AREAS OF JURISDICTION



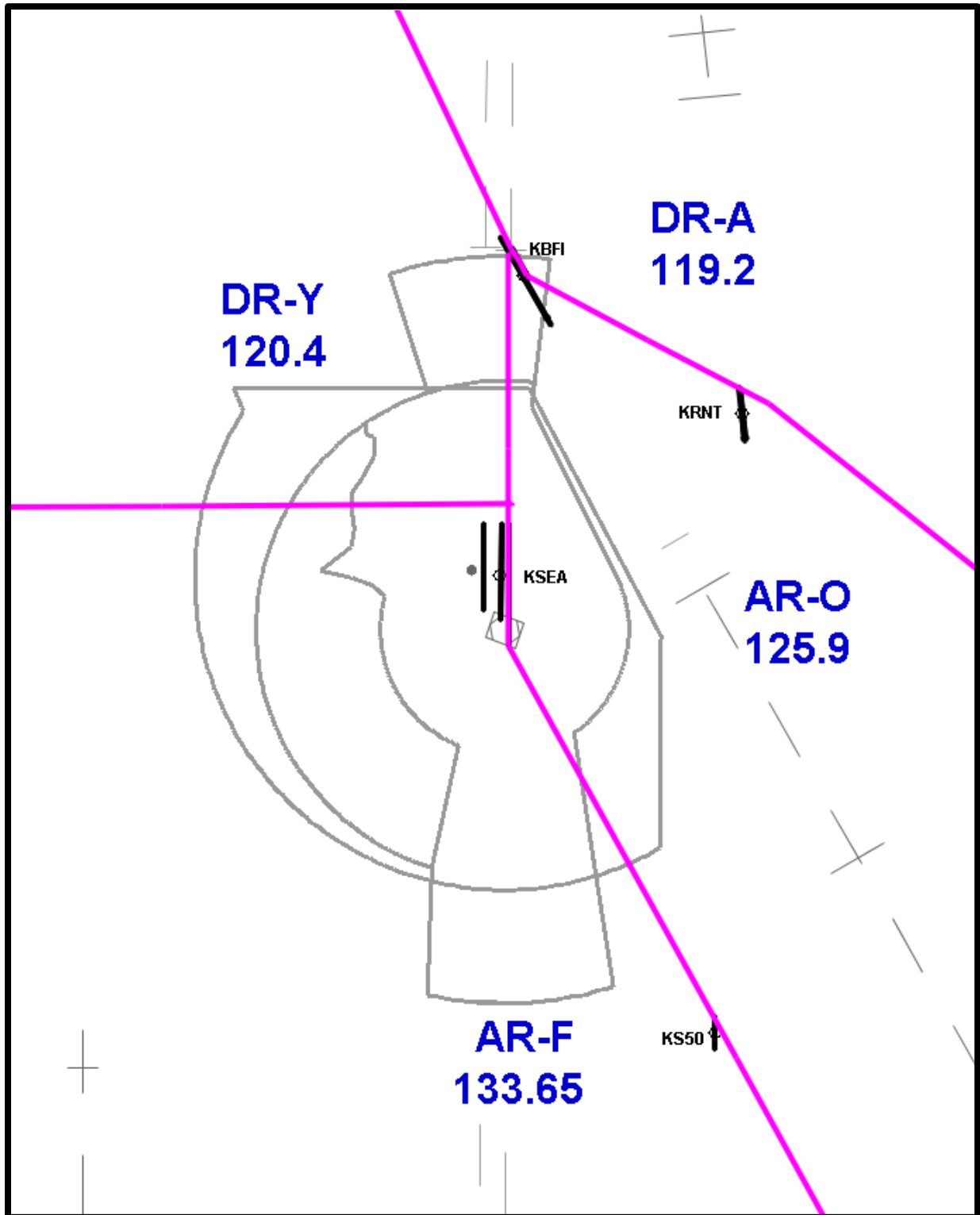
ATTACHMENT 2 (b) – TOWER AREAS OF JURISDICTION



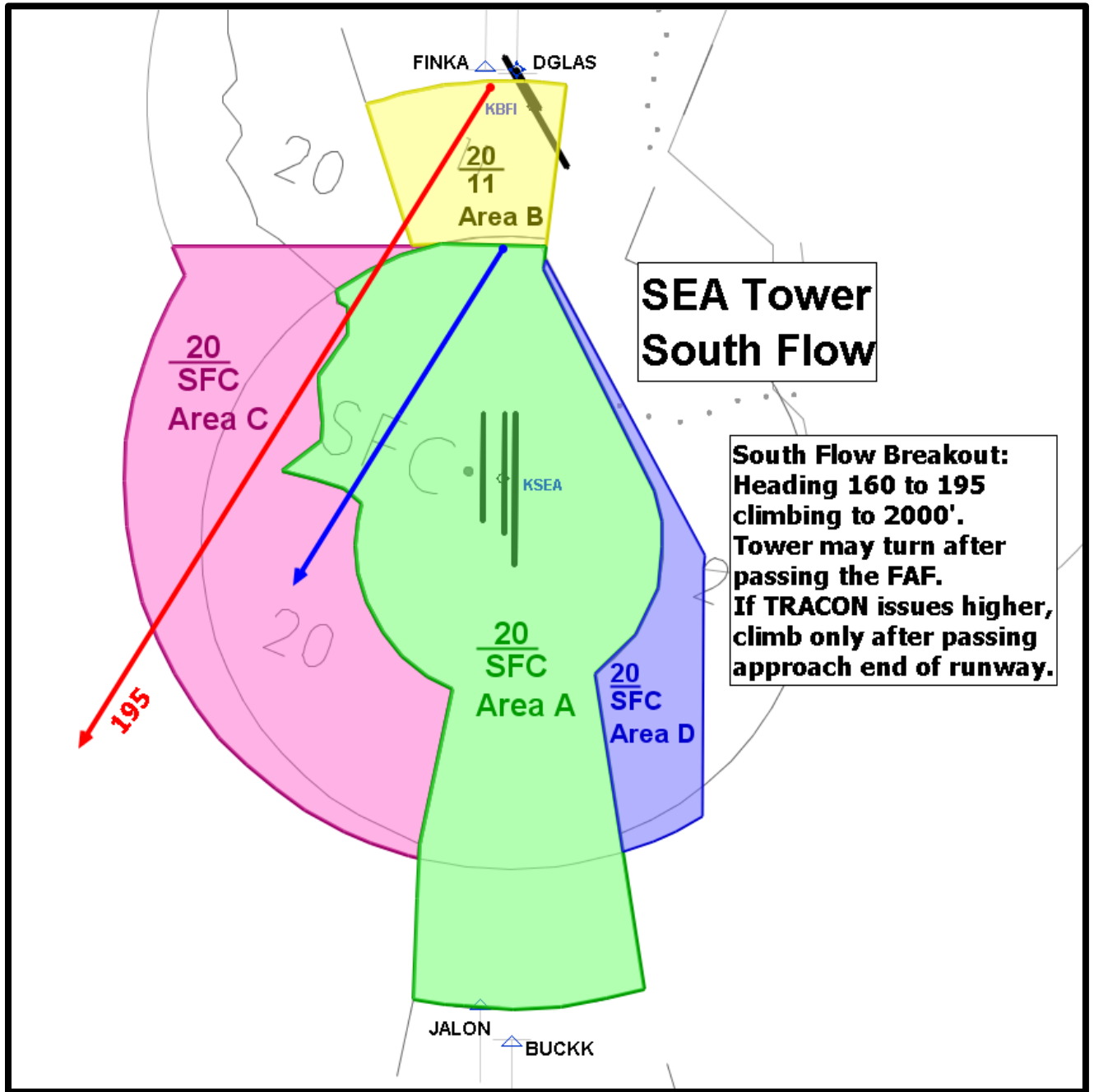
ATTACHMENT 3 – SOUTH FLOW TRACON AIRSPACE



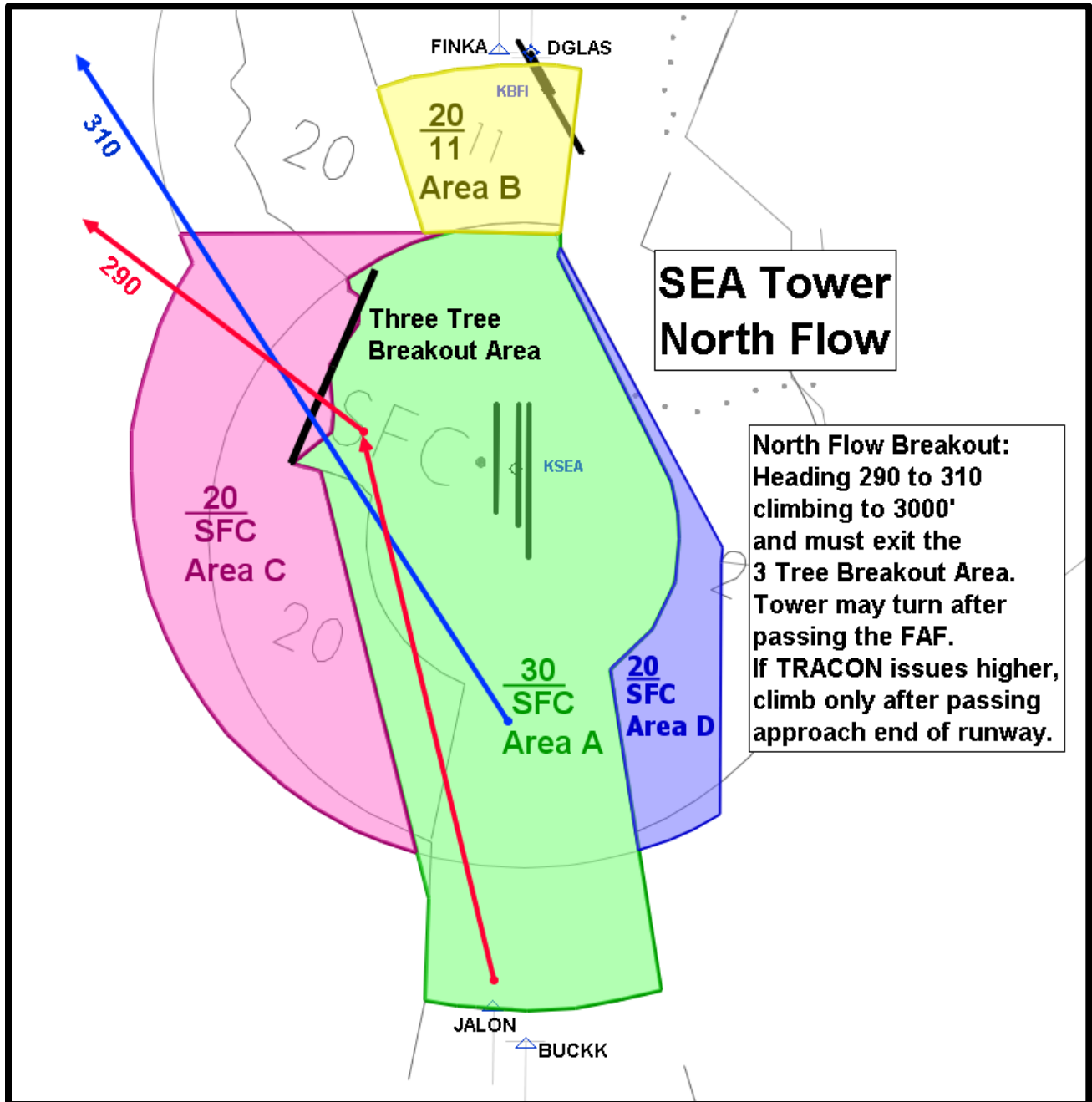
ATTACHMENT 4 – NORTH FLOW TRACON AIRSPACE



ATTACHMENT 5 (a) – BREAKOUT AREAS



ATTACHMENT 5 (b) – BREAKOUT AREAS



**ATTACHMENT 6 – STARS GATE/PDR/Group A Departure Procedure (SID)
Assignment**

STARS GATE	SEA RADIALS	ROUTE/PDR	GROUP A SID	DEPARTURE SECTOR
P (Group B,C,D)	327-008	V23/ACORD,RV to PAE 110 & BLO	N/A	A
P (Group B,C,D)	327-008	V23/ACORD,RV to PAE 120 & ABV	N/A	Y (South Flow) A (North Flow)
P (Group A)	327-008	V23/ACORD,RV to PAE	MTN (South Flow) SEA (North Flow)	A A
J (Group A)	009-042	J503/J505/RV	MTN (South Flow) SEA (North Flow)	A A
J (Group B,C,D)	009-040	J503/RV	N/A	A
T (Group A)	043-103	J12/J70/J90/SEA 072R	MTN	A
T (Group B,C,D)	041-085	V120/J12/J70/J90/SEA 072R	N/A	A
ZAD (Group A)	ZADON	ZADON	MTN	A
ZAD (Group B,C,D)	ZADON	ZADON	N/A	A
M (J20 at and below FL230)	086-123	V2-298/SEA 088R	MTN	A
A (J20 above FL230)	104-160	J5/SEA 146R	SUMMA	Y (South Flow) A (North Flow)
Q (Group A,B)	161-178	HELNS/SEA 161R	SEA	Y
E (Group B,C,D between 100-FL230)	161-178	V495/J1/SEA 168R	N/A	Y
F (Group B,C,D below 100)	161-178	V23/SEA 178R	N/A	Y
L (Group B,C,D)	N/A	OLM.V287 (south)	N/A	Y
U (Group B,C,D)	N/A	OLM.V165 (south)	N/A	Y
I (Group B,C,D)	N/A	OLM.V187 (south)	N/A	Y
Z (Between 100-FL230)	179-230	V27/J70/SEA 230R	ELMAA	Y
Z (Above FL 230)	161-230	J70/SEA 230R	ELMAA	Y
Y (At or above 100)	231-326	J523/SEA 281R	SEA	Y
Y (Below 100)	231-326	V4/V495/SEA 310R	SEA	Y
ZFM (At or above FL240)	161-230	HAROB	HAROB	Y
YFM (At or above 100)	231-326	BANGR	BANGR	Y

ATTACHMENT 7 – DEFINITIONS

- 1. ACE-IDS.** A computerized system for the dissemination of Air Traffic weather and aviation information throughout the Puget Sound area by means of a network of video monitors and keyboards. Also called the IDS.
- 2. AIRCRAFT PERFORMANCE GROUPS.**
 - a. Group A - Jet aircraft.
 - b. Group B - Aircraft with true airspeeds (TAS) greater than 200 knots.
 - c. Group C - Aircraft with TAS of between 150 and 200 knots.
 - d. Group D - Aircraft with TAS of less than 150 knots.
- 3. CHECK DEPARTURE LIGHTS:** A visual/aural coordination system consisting of a light and buzzer activated by the TRACON to stop or restrict SEA departures.
- 4. CONCURRENT APPROACHES:** A procedure, utilizing an Approach Radar Monitor (ARM), to be used when ILS approaches to SEA Runways 16 and BFI RWY 13R are being conducted concurrently and Plan Alpha procedures are not in effect.
- 5. FLOW:** The designated direction of landing at SEA upon which all flow-sensitive procedures are based.
- 6. PLAN ALPHA, PLAN BRAVO & PLAN CHARLIE:** Procedures described in the Seattle ATCT, Seattle TRACON, and BFI ATCT Letter of Agreement in which TRACON delegates to BFI ATCT and SEA ATCT the responsibility to apply visual separation between BFI and SEA IFR traffic.
- 7. SLEEPYTIME:** Noise abatement procedures used during Runway 34 operations at SEA-TAC between the hours of 10:00 PM and 6:00 AM.
- 8. SPLIT FLOW:** The condition which exists when SEA and BFI airports are in opposite flows.
- 9. STARS GATE:** A term used to describe a letter inserted into a full data block scratchpad area by the STARS to indicate departure route information (see Attachment 6).
- 10. SHORELINE ARRIVALS:** This applies to C208 aircraft only. When a C208 aircraft is cleared for a visual approach to RWY 34L it will proceed to the west shoreline in the area of Three Tree Point. The tower will provide visual separation between the C208 and any aircraft on RWY 34R. The TRACON will be required to provide spacing between the C208 and the next 34L arrival. This procedure is only available in north flow, Config 2.

ATTACHMENT 8 – Opposite Direction Operations Procedures

- a. Opposite Direction Operations (ODO) are defined as IFR/VFR Operations conducted to the same or parallel runway where an aircraft is operating in a reciprocal direction of another aircraft arriving, departing, or conducting an approach.
- b. Cutoff points are established as ten (10) NM from the runway threshold, regardless of individual runway, runway configuration, same-runway or parallel-runway operation. Parallel runways will be treated as the same runway.
- c. These procedures apply to all IFR and VFR ODO interactions at SeaTac airport.
- d. Visual separation is not authorized for ODO.
- e. All coordination must be on a recorded line and state “opposite direction.” Initial coordination must include call-sign, type and arrival or departure runway.
- f. Initial coordination between the hours of 0600L and 2200L must be between the OS/WS/CIC in each facility, using the following recorded phone numbers (TRACON: x4722, x4723, x4724 or x4725; Tower: x2516), who may then delegate additional coordination responsibility to another position.
- g. From the hours of 2200L to 0600L all coordination must be between Local Control and Satellite N.
- h. Tower must:
 - (1) Unless an emergency exists, ensure that a departure is airborne and issued a turn to avoid conflict prior to an opposite direction arrival reaching the cutoff point.
 - (2) Issue traffic advisories IAW JO 7210.3 paragraph 2-1-30.
 - (3) Utilize facility designated memory aids when conducting ODO.
- i. TRACON must:
 - (1) Unless an emergency exists, prohibit an arrival from proceeding beyond the cutoff point if:
 - (a) an opposing arrival has not crossed the runway threshold, or;
 - (b) an opposing departure is not airborne and issued a turn.
 - (2) If the conditions of either Subparagraphs i. (1) (a) or (b) above are not met, take immediate action to protect the integrity of the cutoff points.
 - (3) Issue traffic advisories IAW JO 7210.3 paragraph 2-1-30.

Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control

- (4) Utilize facility designated memory aids when conducting ODO.

Seattle Airport Traffic Control Tower and Seattle Terminal Radar Approach Control

ATTACHMENT 9 – Single Person Midnight Operations at Tower and TRACON

Procedures/Responsibilities. In order to ensure that a receiving controller is prepared to accept an aircraft, coordination between facilities during the hours of 0000L and 0500L must be as follows:

a. Tower must:

- (1) Notify TRACON when the Tower is being operated with one ATCS.
- (2) Call for release for all IFR departures when the TRACON is being operated with one ATCS. Tower must ensure that the aircraft departs within 5 minutes of the time of release.
- (3) If TRACON is unresponsive to any coordination, utilize the following phone numbers to determine the status of the unresponsive controller and if necessary begin notifications outlined in the ACT2 Contingency Plan:
 - (a) TRACON Kitchen/Break rooms – 206-214-2477 (2474) (2475)
 - (b) TRACON CBI Lab – 206-214-4621
 - (c) TRACON Sign-in room – 206-214-4687
 - (d) TRACON Guard Shack – 206-214-4881 or 4882

b. TRACON must:

- (1) Notify Tower when the TRACON is being operated with one ATCS.
- (2) Verbally coordinate with Tower prior to the transfer of communication of an IFR arrival when the Tower is being operated with one ATCS. Verbal coordination must occur no earlier than 5 minutes before the FAF estimate, after which the normal automated transfer of arrival information via scratchpad is allowed.
- (3) If Tower is unresponsive to any coordination, utilize the following phone numbers to determine the status of the unresponsive controller and if necessary begin notifications outlined in the ACT2 Contingency Plan:
 - (a) Tower 16th Floor – 206-214-2566 or 2528