SEATTLE (Tacoma) (SEA/KSEA)

Elevation 432ft

CATEGORY A

AV brief – not required

GENERAL

- Ensure correct ACARS addresses are used.
- Large easterly variation.

Threats

Loss of Control
- Flocks of birds in A/D vicinity.
- G/S and LOC deviations caused by arriving and departing traffic on inboard runways.

Mid Air Collision
- Risk of TCAS RA events (often 'Descend, Descend') when on approach to inboard Rwy 16L/ 34R during close-in parallel approach operations in visual conditions. Refer to the 'Approach' section for further guidance.
- Risk of TCAS RA events in the vicinity of Boeing Field (BFI/KBFI) when on approach to Rwy 16L/C/R.
- Risk of TCAS TA events (with no altitude information) from VFR traffic on departure from 34R (in the vicinity of Union Lake approximately 5 miles from runway).

ARRIVAL

Diversion Airports

PORTLAND	PDX/KPDX	112 nm/186°T	CAT A
VANCOUVER	YVR/CYVR	111 nm/342°T	CAT B
CALGARY	YYC/CYYC	397 nm/057°T	CAT A
SAN FRANCISCO	SFO/KSFO	591 nm/180°T	CAT B

Others that may be used include Spokane and Edmonton.

Approach

- TCAS RA Events:

  TCAS RA events frequently occur on approach to the inboard runway – Rwy 16L/ 34R – during close-in parallel approach operations. ATC do not maintain 1.5 nm spacing – often leading to TCAS 'Descend, Descend' guidance due to following traffic at higher airspeed.

Note: Local US carriers can operate with TCAS in TA ONLY during close-in parallel approaches and so will not receive, or comply with, RA guidance.

ATC will assign BAV arrivals to the outboard runway – Rwy 16R/34L – whenever possible and exclude BAV arrivals from close-in parallel approach operations. Except where necessary, crew should avoid requesting approach to the inboard runway – Rwy 16L/34R – to avoid the TCAS risk.

- Approach Guidance in Visual Conditions

  Rwys 16L/34R 16C/34C: When WX conditions are reported as better than 800/2 there will be no protection for the ILS facilities from ground traffic interference. In these conditions crews report significant LOC and G/S fluctuations – including V/ S of up to 1600fpm.

  Use of RNAV approaches is recommended to avoid these fluctuations in approach guidance.

- Approach Terrain

  Rwys 16L/16C/16R and 34L: Approach terrain rises rapidly to threshold causing the radio altimeter to ramp up quickly. For Rwy 16L the RA reads 120R when 100ft above the airfield.

- Rwy16C Alignment

  Caution advised when transferring from instrument approach to visual. Ensure alignment with Rwy 16C as Twy T has been mistaken for Rwy 16C in certain lighting conditions.

BAV Crew Reports
• Fluctuations in visual conditions on ILS 34R were such as to render it unusable. Strongly recommend RNAV.

GROUND

A32N A350 B747 B777 B787

Not applicable

A380

Arrival

- If the A380 arrives on runway 16L/34R, ATC shall ensure that all aircraft are clear from Twy B, north of Twy S.

When the A380 is taxiing on Twy B:

- North of Twy S: ATC will not authorise runway 16L/34R to aircraft arrivals and departures.

  ATC and SRT will coordinate operations on Twy B and taxilane W, so that the A380 on Twy B does not pass any aircraft on taxilane W (or visa-versa).

When the A380 is on Twy A:

- No restrictions on B747-400 and smaller aircraft using Twy B.

  ATC shall not allow wingtips of the A380 on Twy A and another A380 or B747-8 on Twy B, to pass each other.

- ATC shall restrict the A380 from using Twy J, between runway 16C/34C and Twy H. This is due to this Twy section being 75ft wide, versus the remainder of Seattle's Twys, which are 100ft wide.
- When the A380 is on Twy C, ATC shall restrict all operations on Twy D.

Departure

- If the aircraft departs on runway 16L/34R, ATC shall ensure that all aircraft are clear from Twy B, north of Twy S, while the A380 is on the runway.
- There are no restrictions if the A380 departs on runways 16C/34C or 16R/34L.

Airfield Operations

- A 'follow me' will be provided for all A380 taxi operations.

Parking

- Airport staff should have been told whether or not the A380 is carrying its own tow bar, however it is recommended that crew confirm this prior to parking, so that the correct stand can be assigned. A380 tow bar will not be available at Seattle.
- The A380 can be parked on Gate S11 without restrictions to adjacent gates.
- A380 can be parked at gate S11, Cargo 6 Line 3, taxiway A, Cargo 2 NL1, taxiway B (south of Cargo 7), or taxiway T.
- **If the aircraft is not carrying a tow bar, or if ground handlers cannot move the aircraft, then it should only be parked on taxiway A, taxiway B (south of Cargo 7) or taxiway T.**

Gate S11

- Park the aircraft at the A380 nose stop. The jet bridge will only connect to the M1L door.

Cargo 6

- Use the A380 nose stop painted on line 3.

Twy A

- Taxiing north bound on taxiway A, the A380 should park at Pink Spot 2A. Taxiway A from taxiway G and north will be closed by ATC.
- Aircraft on taxiway B, between taxiways D and G, will be restricted to B747-400 and smaller.
- Taxiing south bound on taxiway A, the A380 should park south of pink spot 4A. Making sure that the entire aircraft is south of pink spot 4A, and is north of future Cargo 5 (the Post Office site).
- Until Cargo 5 is constructed, taxiway A from the north end of Cargo 6, to taxiway G will be closed.
- Once Cargo 5 is constructed, taxiway A from the north end of Cargo 5, to taxiway G will be closed.
- Aircraft on taxiway B, between taxiways G and J, will be restricted to B747-400 and smaller.

Cargo 2

- Use the A380 nose stop painted on line NL 1.

Twy B (South of Cargo 7)

- This location is only available when the airport is in south flow.
- Twy B South of Cargo 7 will be closed.

Twy T

- Aircraft will be parked to avoid ILS critical areas at the north and south ends of the Twy.

ALL

DEPARTURE

- Emergency Turn procedures. Refer to CARD/Performance Manuals/OPT for further details.
- Engine failure at low level on Northerly departures may result in flight in areas of dense VFR traffic.

WEATHER

- DEC – FEB: Pacific cyclones produce rain with occasional low St, drizzle and fog.
- MAR – MAY: Showery weather with good visibility. Early morning radiation fog usually clearing by 0900 (1700Z).
- JUN – AUG: St moving in from the Pacific up Puget Sound. The incidence of low St increases through the Summer with ceilings down to 300ft.
- SEP – NOV: Radiation fog early morning and gradually increasing rainfall.

OPERATIONAL INFORMATION

Handling Agent	World Flight Services above wing/Swissport below wing
Handling Agent VHF	130.05
Potable Water	Uplift Permitted

IF ONLY Electrical Power is required	Use ground power at all times
If BOTH electrical power and air conditioning is required:	Use both ground services at all times