

LIMA (LIM/SPJC)

Elevation 113ft

CATEGORY B

AV brief not required

GENERAL

- Jorge Chavez International is the only airport currently serving Lima, the third-largest city in the Americas with a population of nearly 9 million
- Significant expansion is planned over the coming years with a new terminal and second runway
- The airport is located on the coast, 6 NM W of the city centre
- Naval and air force bases are located adjacent to the airfield with associated restricted areas within the terminal area – ATC clearance must be received before deviating from route.

Threats**CFIT**

- The Andes dominate central Peru and a thorough examination of the MRC chart and its relation to the relevant STAR is essential
- The high MSAs require vigilance with altimeter settings
- The immediate area around the airport consists of mostly flat desert coastal plain
- Significant obstacles 2 NM SSE to 450ft amsl and 3 NM E 1,120ft amsl
- A hill to 341ft amsl is located left of the Rwy 15 centreline on short final
- Terrain 5 NM E reaches 2,480ft amsl, rising to 12,500ft amsl within 35 NM and 18,900ft amsl at 65 NM.
- A 250 kt restriction occurs early on in the STAR and is above FL100. High IAS will lead to high rates of descent and ground speeds close to MSA, increasing the risk of EGPWS activation. It is recommended to moderate speed accordingly and if necessary reduce speed to 250 kt earlier than required by the STAR
- Be mindful of Ops Manual limitations regarding rate of descent (no more than 3,000fpm within 3,000ft of MSA)
- If arriving or departing at night the magnitude of the terrain will not be visible

Runway Incursion

- Beware aircraft vacating Rwy 15 at Twy C, stopping short of Twy A and infringing the rwy

Runway Excursion

- Rwy 33 has a displaced threshold of 610m (LDA 2897m)
- The single runway is reported as being rough and bumpy with neither grooves nor a crown
- The runway should be considered slippery when wet, with appropriate consideration given to takeoff and landing performance.

Loss of Control

- Birdstrikes have been reported at Lima
- Congestion and confusion may occur during LVOs
- Temperature inversions may be expected on departure during the summer

Mid Air Collision

- Expect local traffic to be controlled in Spanish
- A training school operates 30 NM S during daylight hours
- The air force base 13 NM S operates with MiG-29s and Mirages; this traffic may interfere with departures from Rwy 15
- A small chance of simultaneous movements in opposite directions from the single runway

Special Considerations

- Enroute driftdown procedures apply
- The final stages of the flight involve crossing the Andes. Options are very limited in the event of a decompression immediately prior to this
- Emergency turn procedures published for departure. 'F' SIDs currently not authorised.

ARRIVAL**Alternates****Enroute**

- Whilst sufficient alternates are available, they are not as numerous as in other areas of the world
- Most Peruvian airfields are military controlled, with few scheduled services and therefore a lack of facilities

- However most have runways of at least 2,500m and could be considered in an emergency
- Many major cities in the area are at altitude and the airports are close to or above the maximum elevation for B747 operation
- The following airfields are suitable and may be useful:
 - MPTO (Panama City)
 - SKRG (Medellin, Colombia)
 - SVMC (Maracaibo, Venezuela)
 - SLVR (Santa Cruz, Bolivia)
 - SBEG (Manaus, Brazil)
 - SEMT (Manta, Ecuador)
 - SPQT (Iquitos, Peru)
 - SPRU (Trujillo)
 - SPCL (Pucallpa, Peru)
 - The diversion airfields listed below:

Diversion Airports

PISCO	PIO/SPSO	114 nm/152°T	CAT B
CHICLAYO	CIX/SPHI	348 nm/332°T	CAT A
GUAYAQUIL (Ecuador)	GYE/SEGU	612 nm/344°T	CAT A

- Holding may be expected at VUMOM, PADIS, KALAR or ILROL, or delay vectoring

Approach

- MSAs enroute and in the initial stages of arrivals may be in excess of 20,000ft – check driftdown requirements
- A proactive check of MSA before deviating from the planned lateral profile is essential. Shortcuts are unlikely to be helpful.
- Full use should be made of the Lido MRC charts which break down the safe altitudes by sector
 - VADOS is overhead Lago Junin, the large lake shown on the MRC approx. 85 NM NE of Lima
- ATC will often clear aircraft to 5,000ft with the STAR. The use of MCP and altitude selections should be discussed in the briefing
- ATC may request high speed – monitor rate of descent in accordance with Ops Manual limitations (no more than 3,000fpm within 3,000ft of MSA)
- Rwy 15 is preferred due noise and the majority of arrivals are in this direction. Expect ILS V, a standard ILS approaching over the sea.
- ILS T is for LVOs, ILS U and S are similar but procedural.
- Rwy 33 has a single 3° VOR approach and overflies the city

GROUND

- Plan to vacate at D (2000m, 90° turn) or G (2600m, RET)
- If ground is congested aircraft may be asked to vacate at F (full length) to hold short of the apron
- Be aware that if vacating D but unable to proceed to the gate the tail may remain infringing the runway
- Landing Rwy 33 expect to vacate at A, though B is technically possible
- Preferred stands 17 and 19, 22 and 21 may also be used

DEPARTURE

- Rwy 15 preferred, Rwy 33 compulsory 0500-1000 due noise
- Call 20 mins prior to departure for clearance
- Refer to CARD for emergency turn procedures
- 'F' SIDs are not authorised
- AMVEX, ILROL and OPROS departures are achievable at medium weights using VNAV and derated climb, but this may not be possible at high weights, in unfavourable conditions or using Rwy 33.
- If SID altitudes/climb gradients cannot be achieved, consider:
 - Asking ATC for an unrestricted climb on first contact with Departure
 - Climb at Max Angle speed and/or remove the climb derate
 - Consider extending the SID by request to ATC once airborne. If required, plan the extra miles early in the departure over the sea. 30 NM should be sufficient.
- Critical targets for planning are:
 - **FL250** or above by **AMVEX/ILROL**
 - **FL290** or above by **20 NM beyond AMVEX/ILROL**
 - **FL200** or above by **OPROS**
 - **FL260** or above by **20 NM beyond OPROS**

WEATHER

- Lima has a desert climate controlled primarily by the cooling effect of the Humboldt current which brings year-round light southerly winds and dry air masses.
- Lima is one of the world's driest capitals. Only in winter (Jun-Aug) is any amount of drizzle likely
- Cloud cover is surprisingly high for the latitude and desert topography
- Humidity is high
- Dense winter fogs are regular (18-24 days per month) and caused by proximity to the coast
- Summer fogs are occasional and a result of inversions
- Fog generally occurs in the morning
- Despite the above, the airport operates in IMC less than 15% of the time

OPERATIONAL INFORMATION

Handling Agent	Talma Servicios Aeroportuarios
Handling Agent VHF	131.65
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