SANTORINI (JTR/LGSR)

Elevation 123ft

CATEGORY B

AV brief – not required

GENERAL

- Volcanic island of Santorini (locally called Thira) is located approximately 120 nm SE of Athens.
- Airfield is situated on the E coast of the island.
- Runway 15/33 is 2120 metres long. Daylight landing only on 15 and 33.
- No ACARS available.
- Check hours of opening and sunset tables to determine if operation is possible in the event of delay ex LHR. Scheduled arrival time of BA652 on day 7 of the S19 season is 1445 UTC. Sunset between May and September is 1708 UTC (04 May)–1619 UTC (21 Sep).

Threats

CFIT

- Terrain rises rapidly to the W and SW.
- The highest point is a mast on the hill around 2 nm SW of the airfield (1.5 nm SW of THR 33) reaching 2142ft amsl.
- Terrain also exists to the W and NW of the airfield. The airfield is normally approached from the NW and is obscured from view by the 1000ft rim of the caldera, which forms most of the western coast of the island.
- The island of Ios is approximately 18 nm North-West and has terrain up to 2340ft amsl.
- A direct routing to MADEX for a straight-in approach to Rwy15 sees the aircraft route directly over Ios, whilst potentially being cleared to 3500ft QNH. This causes early RAD ALT indications and potential for GPWS Cautions.
- All approaches are non-precision. Circling is to the E over the sea due to terrain.

CAUTION: There is significant terrain to the left of the final approach to Rwy33.

Runway Excursion

- ATC may offer Rwy 15 in light winds even though the ATIS states Rwy 33 in use leading to a large shortcut. Careful energy management is required.
- Runway width 30 m – Narrow Runway Operations.
- Deep Landing threat: Runway 15 has a down slope of 1° and a width of 30 m producing an unusual visual perspective and potential for extended float. PAPIs are set to 3.02°. There is no approach lighting, however it has Runway End Identifier Lights (REIL) consisting of two strobes situated at the landing threshold.
- Hard Landing threat: Runway 33 has approach lighting, an up slope of 1° and PAPIs set to 2.95°. The slope combined with the narrow runway width make the flare more challenging than usual.

Runway Incursion

- Taxiway signage and markings are either non-existent or very faded. Taxi with care to avoid Rwy incursion.

Loss of Control

- Expect WINDSHEAR and turbulence with Westerly winds.
- Moderate to severe turbulence may be experienced with winds in excess of 20 kts from 180° to 300°.

Special Considerations

- Narrow Runway – check Performance restrictions.
- The Commander must be PF for TO and LDG.
- The Commander must have successfully completed Narrow Rwy training in the simulator prior to operation.
- Night landings prohibited.
- Arrester cables are located approx 454 m inset from threshold 33. Refer to OM A – Runways Equipped with Arrester Cables.

ARRIVAL

Diversion Airports

ATHENS	ATH/LGAV	119 nm/321°T	CAT A
KOS	KGS/LGKO	82 nm/073°T	CAT A
RHODES	RHO/LGRP	127 nm/090°T	CAT B
IRAKLION	HER/LGIR	66 nm/193°T	CAT B
ISTANBUL(Yeni Havalimani)	IST/LTFM	331 nm/027°T	CAT A

Approach

- All approaches are non-precision using either the SNI VOR or THR NBD.
- Rwy 15 RNAV approach available from mid-September 2018.
- Athens radar generally provide descent to FL70 before transfer to Santorini Tower for a procedural or visual approach.
- Rwy 15 is served by a VOR/DME procedure offset by approximately 2°.
- Rwy 33 is served by a VOR/DME Letdown procedure with the final approach track offset by 10°.
- No advisory altitudes are published on the chart. The VOR approach is not contained within the Navigation Database (CF to THR 33 is the only coding in the Navigation Database) and thus selected guidance must be used for the final approach. PBDs can be created points for additional situational awareness.
- The descent from 8d SNI to THR 33 is approximately 3.5°.
- Following advisory altitudes describe a 3.5° profile. The SNI is approximately 0.3 nm after the THR 33.

Distance (nm)	8	7	6	5	4	3	2	1
Altitude (ft)	3000	2620	2250	1870	1500	1120	740	370

- PAPIs are 2.95° and thus the approach at 3.5° will appear high.
- VOR Letdown approach to Rwy 33 has an odd visual perspective as the Rwy has an upslope of 1°. This can make it appear that the aircraft is very high on the approach (equivalent to a 4.5° slope relative to the Rwy). Use Distance vs Altitude cross checks and all other situational awareness tools to assure the vertical profile is correct.

A380 B747 B777 B787

- If you are visual early it is suggested to position the aircraft for a 3° final approach path using Distance vs Altitude based on the threshold. This will limit the effect of the strange visual perspective and reduce the chance of a hard landing.

A32N

- If you are visual early it is suggested to position the aircraft for a 3° final approach path using Distance vs Altitude based on the threshold. (Airbus: with CF to THR 33 in the F-PLN the donut provides useful guidance for a 3° path from 5 nm). This will limit the effect of the strange visual perspective and reduce the chance of a hard landing.

ALL

- 'Taxiway Alpha' is 30 m wide and has white edge lights of medium intensity. Although it is marked and lit as a runway (16R/34L) the Greek AIP states that it is used exclusively as a taxiway.

GROUND

- Santorini is a joint military/civil airfield which has historically been quiet except when military exercises are in progress.
- Airport is rapidly gaining in popularity and during the summer season is likely to be busy with frequent aircraft movements.
- Terminal is small with limited facilities.
- Earth banks surround military parking.
- Support facilities are limited.
- There is no engineering on site.
- Fuel is generally JP 8.
- Apron is tight with no markings. Marshalling is provided. Caution is advised to assure wingtip clearance from obstacles and vehicles.

Handling Agent

- No ACARS or Company VHF radio coverage on the ground.
- A final Loadsheet is required prior to departure.

DEPARTURE

- There may be a short delay in start-up clearance as this must be co-ordinated with Athens.
- CARD automatically calculates takeoff performance using the runway width of 30 m (accounting for increased VMCG). Performance manual RTOW charts are also calculated using a Rwy width of 30 m.
- There is an arrester cable on 15/33. Refer to OM A Section 8.28.8.a – Runways Equipped with Arrester Cables for information regarding operating on runways equipped with arrester cables.
- “South arrester cable”, located 454 m after THR 33, approx midway between Taxiways Golf and Foxtrot. This cable is permanently submerged in a slot within the runway surface and is controlled from the tower. In its normal ‘down’ position, it is concealed below the surface of the runway and may be crossed at high speed during both landing and take-off. This cable is only raised in military emergencies.

Take-off from 15 “South Arrester Cable” Rigged in Up Position

- Takeoff from the full length position using takeoff data with reduced TORA/ASDA to ensure that the aircraft is airborne prior to crossing the arrester cable.

WEATHER

- Frontal cloud, rain and low ceilings in winter.
- Summer brings isolated CBs.
- Moderate-severe turbulence may be experienced with winds in excess of 20 kts from 180° to 300°.

OPERATIONAL INFORMATION

Handling Agent	SWISSPORT
Handling Agent VHF	
Potable Water	Uplift Ban.

IF ONLY Electrical Power is required	Use ground power for contracted time ONLY (60mins) – then use APU
If BOTH electrical power and air conditioning is required:	Use APU for air-conditioning (Keep ground power connected according to guidance above to reduce fuel burn)