LONDON CITY (LCY/EGLC)

Elevation 20 ft

CATEGORY C

AV brief available. Training required for initial FO/SFO qualification.

CREW EXPERIENCE

The Company has categorised London City as CAT C because of the steep approaches, obstacle environment, short landing distance and the potential for windshear. Crew operating into London City are required to have completed steep approach training (recommended for Captains).

Monitored approaches are used at London City and the PM has a vital role in monitoring the approach, in particular speed control, prior to and after the handover of control. In the event of incapacitation of either pilot a go around and diversion must be carried out.

GENERAL

- The airfield is a “STOLport” situated 6 NM E of the City of London.
- The approach is notable for the 5.5° glidepath mandated for noise abatement and the airfield is only available to aircraft with an AFM entry authorising approaches at 5.5° or steeper.
- BACF has steep approach approval for the Embraer ERJ-190-100 LR (E190).
- The preferred runway is always into wind – this increases operational complexity when LCY operates RWY 09 and London Heathrow operates RWYs 27L/R.

COMPANY MINIMA

The following approach minima are approved for use on the BACF E190 fleet ONLY:

09		**Cat 1 DME** E190 GA 3.0%	**Cat 1 DME** GA 2.5%	**LOC DME** GA 2.5%	**Circling**
C	ft - m/km ft	300 - 1.2 **310**	530 - 2.2 **540**	550 - 2.3 **560**	Not authorized

RWY 09: Minima are for state published standard 2.5% missed approach gradient and optional 3.0% missed approach gradient. The 3.0% minima may be utilised up to 39°C at maximum landing weight.

27		**Cat 1 DME** E190 GA 3.5%	**Cat 1 DME** GA 2.5%	**LOC DME** GA 2.5%	**Circling**
C	ft - m/km ft	380 - 1.5 **400**	610 - 2.4 **630**	610 - 2.6 **630**	Not authorized

RWY 27: Minima are for state published standard 2.5% missed approach gradient and optional 3.5% missed approach gradient. The 3.5% minima may be utilised up to:

- 35°C at maximum landing weight, or
- a maximum 42T landing weight in icing conditions.

THREATS

CFIT

- The approach to RWY 09 involves positioning over Central London at 2,000 ft AMSL – Crystal Palace Mast reaches 1,087 ft AMSL underneath he ODLEG transition/right-hand RWY 09 radar circuit – ATC have CAA approval to apply only 913 ft vertical separation against the mast.
- The RWY 09 final approach/RWY 27 climb out has numerous tall structures – Canary Wharf at 2.5 NM sites multiple tall buildings up to 806 ft AMSL, the Shard at 5 NM reaches 1,015 ft AMSL.

Runway Incursion

- ATC will anticipate minimum runway occupancy for aircraft spacing.
- The taxi-out is short.

Runway Excursion

- The visual aspect on short final is unusual and there can be a tendency to flare early and float. The runway is short and touchdown beyond the TDZ is likely to result in an overrun.
- Both runways have an abbreviated approach light system, an ILS with 5.5° glideslope and 5.5° PAPIs. Refer to FCOM Steep Approach Procedures.
- The TDZ end is marked by two pairs of high-intensity white lights and a go-around is mandatory if touchdown is anticipated to be beyond these lights
- There have been instances (AAIB Bulletin 6/2019) of aircraft departing with incorrect derate/flex thrust selections. Crews must be alert to the risks of operating from the short runway with particular attention paid to Vital Data Procedures detailed in OM Part B.
- Speed control during approach and landing must be accurate. For all approved aircraft it is essential to be fully configured in the landing configuration at final approach speed before descending on the glidepath.
- The runway is maintained as grooved.

Loss of Control

- There is potential for building-induced windshear when landing on either runway in strong winds
- Missed approach stop altitude is 2,000 ft and crews must be alert to the risk of level bust or rapid acceleration beyond flap limit speeds. If a go-around is initiated due to windshear crews should report this to ATC to alert them to the possibility of an unavoidable level bust.

Mid Air Collision

- All SIDs stop at altitude 3,000 ft due to interaction with LHR traffic which descends to altitude 4,000 ft overhead LCY whilst establishing ILS for RWYs 27L/R. Crews must ensure they do not bust the initial level and should be aware that high rates of climb on departure can lead to TCAS RA against LHR traffic.
- The London and LCY CTRs can be busy with VFR helicopter traffic. Whilst ATC will integrate and deconflict this traffic they will not apply standard separation in Class D airspace and this increases the likelihood of TCAS RA. Helicopter traffic will typically route along the River Thames and is often held overhead the Isle of Dogs 1 NM S of the RWY 09 extended centreline at 2.5 NM. There have been multiple airprox reports against VFR traffic in and around the LCY CTR (Airprox Report No 2014171, Airprox Report No 2017072 and Airprox Report No 2021150).

Ground Collision

- All stands are taxi-in and taxi out and marshaller guidance is mandatory.
- On taxi-out follow lead-out markings to achieve adequate wing tip clearance

ARRIVAL

Diversion Airports			
LONDON STANSTED	STN/EGSS	24 NM/016°T	CAT A
LONDON GATWICK	LGW/EGKK	23 NM/203°T	CAT A
LONDON SOUTHEND	SEN/EGMC	24 NM/080°T	CAT A
LONDON HEATHROW	LHR/EGLL	19 NM/265°T	CAT A
LONDON LUTON	LTN/EGGW	27 NM/325°T	CAT A

Diversion Considerations

- Both LCY and Southend are CAT I only. Careful attention should be paid to planning minima requirements before departure (i.e. the weather at LCY must be forecast to be at least CAT I, and the weather at SEN must be at least sufficient for a non-precision approach). OM-A 4.1.4.2.2 refers.
- If the weather at LCY is forecast below CAT I an additional alternate must be planned.
- If the weather at SEN is forecast to be below non-precision minima it cannot be nominated as an alternate and a different airfield must be selected.
- In CAT II/III conditions STN or LGW are preferred.

Initial Approach

- LCY operates a Point-Merge arrival, RNAV-5 STARs terminate at two holding fixes JACKO and GODLU, from here aircraft route via RNAV-1 transitions to establishing points for ILS RWY 09 or 27. Aircraft that are unable RNAV-1 should inform LCY ATC on first contact and they will be radar vectored to final.
- Crews should note the non-standard holding max speed of 210 KIAS at JACKO and GODLU. This restriction applies throughout the majority of the transitions before reducing to max 185 KIAS approaching LCY; however, ATC may approve 250 KIAS on the transition. ATC typically applies speed control of 160 KIAS until 5 DME on RWY 09 and 6 DME on RWY 27 although crews may, if necessary, reduce speed 1 DME before these distances without informing ATC.
- The Point-Merge and transition structure routes from the E of LCY. Aircraft arriving from N/W/S are often afforded significant reductions in track mileage by VATSIM ATC and crews should anticipate this. Expect routing via LAM from the N and via DET from the S. ATC typically provides accurate track mile information when vectoring to expedite arrival and descent planning is generally not challenging.
- LCY always operates on the into wind RWY. This can lead to LCY operating RWY 09 whilst London Heathrow operates RWYs 27L/R. In this event crews must ensure they achieve altitude 2,000 ft before passing abeam LCY to ensure separation against London Heathrow traffic.
- Approaches to RWY 27 are normally from a 3,000 ft platform altitude; GS capture is at 5 DME.
- Approaches to RWY 09 tend to be radar vectored from the Vauxhall Bridge area to the E. Crews should ensure they plan/request a 5-mile final to ensure configuration can commence in accordance with SOPs. This will prevent a step-down altitude being given due to late LOC/GS establishment and possible unstable approach.

Approach

- BACF have dispensation to apply company minima for E190 fleet only.
  All other BA/BACF and franchised/leased operators are to apply standard minima.
- Speed control during approach and landing must be accurate.

Landing

- The runway is short and narrow at 1,494 m LDA x 30 m.
- Immediately after touchdown lower the nosewheel and ensure ground spoilers up, thrust reversers deployed and autobrake operating. In the event of a failure, select max reverse and maximum manual braking until stop assured.
- E190 landing performance at LCY with autobrakes leads to restricted landing weights. Performance is planned with manual braking but SOP is to select autobrake medium for the associated safety benefit of balanced brake application at high speed immediately after landing. The landing roll at LCY should be treated the same as elsewhere, but pilots must anticipate the requirement to transfer to manual braking sooner than on longer runways.
- The aircraft's main wheels must have touched down by the end of the touch down zone as marked by two lights either side of the centreline or a baulked landing is mandatory.
- If there is any doubt that the aircraft will touch down before the touchdown lights, a baulked landing must be commenced immediately.

GROUND

- When landing RWY 09 crews must vacate no later than TWY K to avoid infringing the ILS critical area.
- When landing RWY 27 do not vacate at E - continue to A/B/C/D.
- E190 may operate from stands 3-12 and 21-28.
- Minimum power must be used when taxiing on/off stand to prevent excessive jet blast across the apron area.
- The parking area is restricted. Only Captains may ground manoeuvre the aircraft on to stand.
- Marshaller guidance mandatory on taxi-in - on taxi-out follow lead-out markings to achieve adequate wing tip clearance.
- If the aircraft is not adequately positioned on stand the pilot should proceed as directed by ATC. Do not re-enter the taxi-lane without ATC clearance.

DEPARTURE

- A take-off alternate must be planned. OM-A 4.1.4.2.1 refers.
- Crews must be alert to the risk of level busts - ALL SIDs stop at altitude 3,000 ft.
- SIDs have a 200/210 kt speed restriction for track keeping.
- It is recommended to remain on stand until the final loadsheet has been received.
- Due to restrictive airspace around the airfield, there is an increased risk that ATC may request take-off be abandoned due to aircraft conducting a missed approach.
- Single-engine taxi is not permitted due to ground manoeuvring and engine warm-up/cool down requirements.

WEATHER

- Tailwind may be present at both RWY ends simultaneously.

OPERATIONAL INFORMATION

LCY applies a strict operational curfew, arrivals after closure will be required to divert:

- Mon-Fri Winter 0630-2200 (Summer 0530-2100)
- Sat Winter 0630-1230 (Summer 0530-1130)
- Sun Winter 1230-2200 (Summer 1130-2100)
- Public Holidays Winter 0900-2200 (Summer 0800-2100)
- LCY is closed on 25 December.

Handling Agent	Gatwick Ground Services (EQPT in LCY scheme)
Handling Agent VHF	131.76
Potable Water	Uplift Permitted

IF ONLY Electrical Power is required	Use ground power at all times. Do not start APU until 10 min prior to departure.
If BOTH electrical power and air conditioning is required:	Use APU (ACU EQPT not available). Keep ground power connected to reduce APU fuel burn. APU usage for air conditioning permitted only when OAT below +5C or above +20C.