

Note regarding Noise and Track Violations

10th November 2022

Introduction

This note has been prepared by LLAOL to respond to the inspectors' questions regarding the current noise and track violation schemes operated at London Luton Airport (LLA).

Noise and Track Violations

The below table has been prepared as a summary of the noise and track violations. More detail is provided below in separate noise and track sections. LLA's Flight Operations team investigates the noise and track violations on a daily basis.

	Criteria	Value of fine	Number of fines issued by year
Noise Violation (Daytime)	Departure noise exceeds 80dB(A) at a fixed noise monitor (6.5km from start of roll). In 2017, 2018 and 2019 the limit was set at 82dB(A). Departure noise exceeds		2017 - 7 2018 - 0 2019 - 0 2020 - 2 2021 - 6
Violation (Night time)	79dB(A) at a fixed noise monitor (6.5km from start of roll). In 2017, 2018 and 2019 the limit was set at 80dB(A).	In 2017 and until 31st March 2018, the fine was set at £100 for an isolated event and £500 for an event greater than 3dB.	2018 - 0 2019 - 0 2020 - 0 2021 - 0
Track Violation (Daytime)	An aircraft leaves the Noise Preferential Route (NPR) corridor below an altitude of 3,000ft. For the westerly Match departure route this is set at 4,000ft during daytime.	1	2019 - 42 2020 - 10 2021 - 21
Track Violation (Night time)	An aircraft leaves the Noise Preferential Route (NPR) corridor below an altitude of 4,000ft.		2017 - 12 2018 - 0 2019 - 5 2020 - 1 2021 - 2

Track Violations

Aircraft departing from LLA are required to follow specific flight paths called Noise Preferential Routes (NPRs)¹, unless directed otherwise by Air Traffic Control (ATC). Aircraft flying inside these corridors are considered to be flying on-track.

The NPRs at Luton are designed to avoid the overflight of built-up areas where possible. They set a path for the aircraft to take from the runway until they reach the main UK air traffic routes.

An aircraft's ability to follow an exact route is affected by factors such as:

- navigational equipment
- the type and weight of aircraft
- weather conditions particularly winds that may cause drifting when aircraft are turning

Each NPR is contained in a corridor extending 1.5 km either side of the NPR centre line and departing aircraft must remain within the NPR until reaching an altitude of 3,000ft during the day or 4,000ft at night (the release altitude). For the RNAV route (westerly Match/Detling), the corridor extends 1km either side of the centreline and the release altitude is 4,000ft day and night.

On the 1st April 2015 LLA implemented a Track Violation Penalty System as part of the noise related planning conditions.² Using the airport's Aircraft Noise and Track Monitoring System, the Flight Operations Team evaluates the radar tracks and investigates them with required input from ATC and the airlines. A departure is deemed to have complied with the Noise Preferential Routing if the portion of flight below the appropriate vectoring altitude is flown wholly within the Lateral Swathe (LS). Where the aircraft is clearly flying outside the LS, the aircraft is identified as causing a "possible" track violation and is subject to a nominal fine. This money is transferred to our Community Trust Fund which awards grants to community projects (see below for further information on the Community Trust Fund).

As always, safety is paramount and there may be cases which involve vectoring an aircraft sooner than at the NPR height restriction. If ATC identifies any valid justification that could explain the deviation from the track, then the operator causing it will be exempt from the fine. Valid justifications include:

- Safety or operational reasons, i.e ATC vectoring
- Weather avoidance due to thunderstorm activity (as instructed by ATC)
- Emergencies

Once an aircraft reaches the NPR release altitude, a controller can instruct it to turn onto a more direct heading to its destination, which may take the aircraft outside the NPR corridor - this is called vectoring. There may be occasions where it is necessary for safety reasons (e.g. to avoid severe weather conditions) to vector aircraft off NPRs below the release altitude.

¹ AMR 2019 (CD8.26) – pages 18 and 19

² AMR 2019 (CD8.26) – page 20

Noise Violations

Noise levels of departing aircraft are monitored at three fixed noise monitors (NMT1, NMT2 and NMT3) 6.5km from start of roll on the runway, this is the international standard set by ICAO. ³Any aircraft departure exceeding the noise violation limits at these monitors will be charged accordingly. The noise limits are:

80dB(A) during the daytime (07:00hrs – 23:00hrs) 79dB(A) at night (23:00hrs – 07:00hrs)

Since April 2018, if an aircraft exceeds these noise limits during the daytime they will be fined £1000, and an aircraft exceeding in the night time will be fined £2000. All fines are put into the Community Trust Fund, which is independently administered by the Bedfordshire and Luton Community Foundation.

Community Trust Fund

All of the noise and track fines are put into the Community Trust Fund. In 2021 a total of 29 aircraft were fined for noise and track violations, which generated a total £31,000 that is put towards the Community Trust Fund. In addition to the noise and off-track violation fines, in 2021 LLA contributed £213,000 into the Community Trust Fund.

The Community Trust Fund⁴ allows communities to apply for grants between £250 - £10,000, to help fund or support projects and charities within the local area. In 2021, the money supported the following causes: Alleviating Poverty (15%), Healthy Today (74%) and Skilled Tomorrow (11%).

³ Noise Action Plan (CD13.11) – Page 8

⁴ AMR 2019 (CD8.26) – Page 51