

PRESENT: Marshall Morris, Chairman
Alan Ascott, ARCH Under the Bridge
Larry Dack, Speke Estate
Ian Gaskell, Environmental Health, Knowsley Council
Cllr Evelyn Hudson, Hale Parish Council
Councillor Tricia O'Brien, Cressington Ward, Liverpool City Council
Bob Swann, LJLACC Chairman
Councillor Jeremy Wolfson, Liverpool City Council
Toby Zorn, Environmental Health, Wirral Borough Council
Liverpool John Lennon Airport
Andrew Dutton, Head of Environment
Colin Barnes, Environmental Advisor
Secretariat
Mike A Jones, Assistant Secretary
Kerry Twist, Cheshire West and Chester Council (Observing)

1 ELECTION OF CHAIRMAN

At the annual meeting of the Liverpool John Lennon Airport Consultative Committee on 17 February 2017, the Noise Monitoring Sub-Committee was confirmed to continue. The Sub-Committee were to elect a Chairman for the ensuing year.

Nominations were requested by the Assistant Secretary.

Marshall Morris was nominated by Bob Smart.

There were no other nominations.

DECIDED: That

Marshall Morris be elected Chairman of the Noise Monitoring Sub-Committee for 2017/2018.

2 ELECTION OF DEPUTY CHAIRMAN

Nominations were requested for the role of Deputy Chairman.

Angus Tilston MBE was nominated by Marshall Morris and seconded by Larry Dack.

There were no other nominations.

DECIDED: That

Angus Tilston MBE be elected Deputy Chairman of the Noise Monitoring Sub-Committee for 2017/2018.

3 APOLOGIES

Apologies had been received from:

Norman Elias, Passenger representative
Ian Rushforth, Environmental Protection Unit, Liverpool City Council
Angus Tilston MBE, Wirral Transport user Association

4 CHANGES IN MEMBERSHIP

There were no changes in membership since the last meeting to report.

5 MINUTES OF LAST MEETING

DECIDED: That

the minutes of the meeting of the Noise Monitoring Sub-Committee held on 20 January 2017 be agreed as a correct record.

6 NOISE COMPLAINTS LOG

The Sub-Committee considered the Noise Complaints Log, which detailed every complaint received and the response to it, for the period 1 January 2017 to 31 March 2017. Colin Barnes gave a presentation to members on the Noise Log which included analysis of the number of noise complaints received by date, number of complainants, administrative area and the total number of complaints compared to the previous year. He also detailed the number of test runs. The presentation is attached to these minutes.

During the period a total of 23 complaints had been received, with the highest proportion (11, or 48%) from one individual. It was noted that there no more than 2 complaints had been received on any one day, besides one occasion where the same person sent in five complaints relating the use of runway 09. Seven complaints concerned the Wallasey Beacon, which had caused a slight change in the location of aircraft when it was turned off for maintenance. It had since been reactivated and the status quo resumed.

Colin Barnes then gave a summary for 2016 and trends in some statistics for a longer period. There had been 119 complaints in 2016, with about 32% concerning the use of Runway 09. The numbers of complaints had been generally declining over the years from about 270 in 2001, and the total was 23% less than the peak in 2005.

DECIDED: That

the Noise Complaints Log for 1 January 2017 to 31 March 2017 be noted.

7 ANY OTHER BUSINESS

Prestwich Lower Airspace Systemisation (PLAS)

There was an initiative to revise the airspace in the North of England and Scotland. The PLAS part of the overall project was to move the navigation of commercial aircraft from traditional ground based navigation aids to satellite precision navigation and reshape the routes to maximise the benefits overall for noise, fuel efficiency, CO2 emissions and safety. This had previously been discussed.

Andrew Dutton noted that although many organisations had been offered meetings to pro-actively discuss the change in airspace around Liverpool Airport, which was linked to changes at other airports, very few had taken up the offer and appeared to be waiting for the formal consultation period. Andrew emphasised that being involved at the early stages maximised the influence and benefits of the proposed changes, and the draft version would by then be co-ordinated with surrounding airports for consultation.

8 DATE OF NEXT MEETING

The next meeting of the Noise Monitoring Sub-Committee is scheduled for 21 July 2017 at 10.30 a.m. in the Cavern Suite, Liverpool John Lennon Airport.

Chairman

Date

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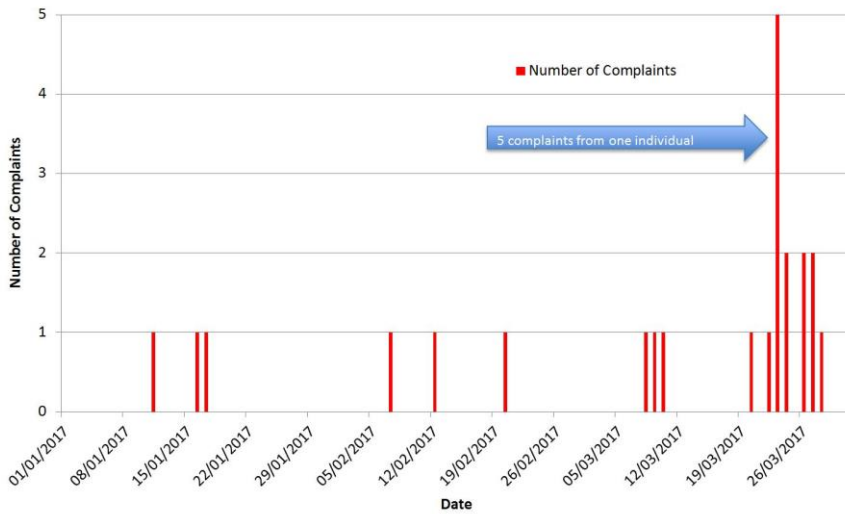
Noise Monitoring Sub Committee

27th April 2017

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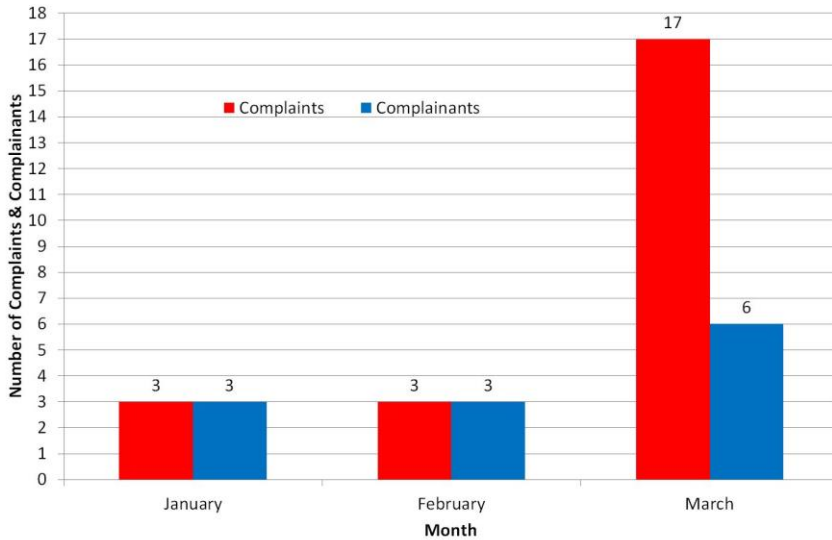
Liverpool John Lennon Airport Noise Complaints By Day 1st January to 31st March 2017



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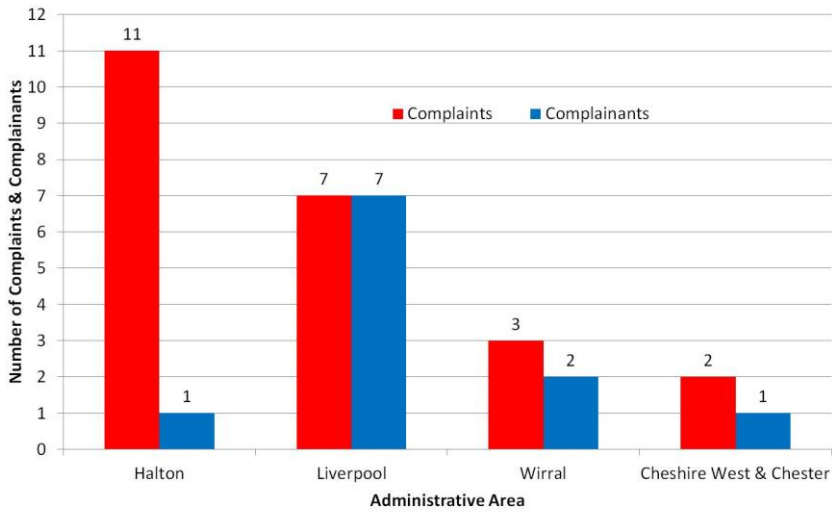
Liverpool John Lennon Airport Complaints and Complainants for 1st January to 31st March 2017



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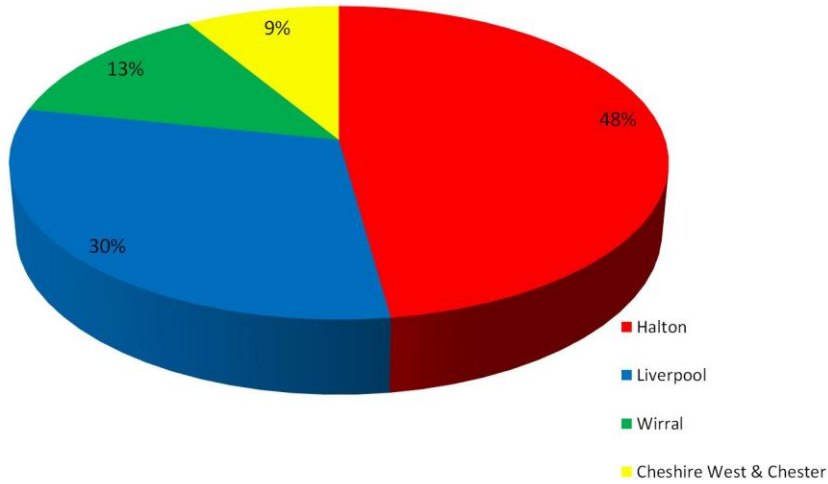
Liverpool John Lennon Airport Complaints and Complainants with Administrative Area for 1st January to 31st March 2017



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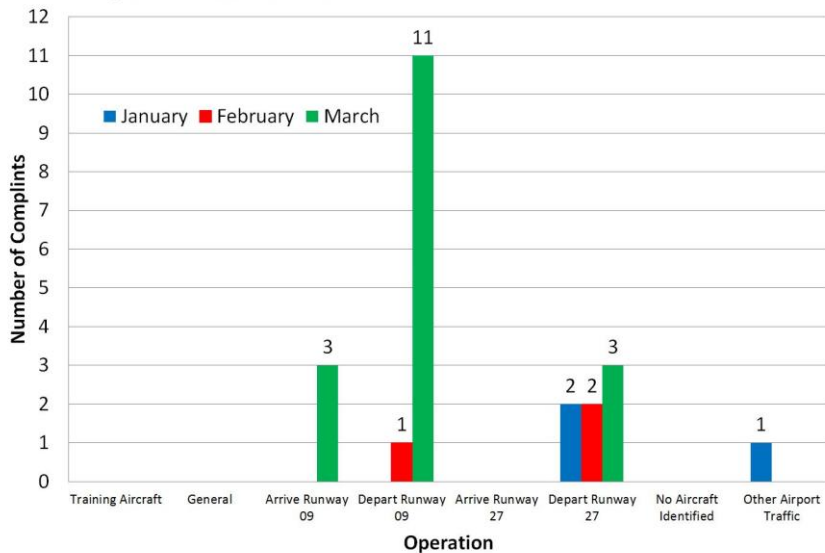
Liverpool John Lennon Airport Percentage of Complaints for Administrative Area 1st January to 31st March 2017



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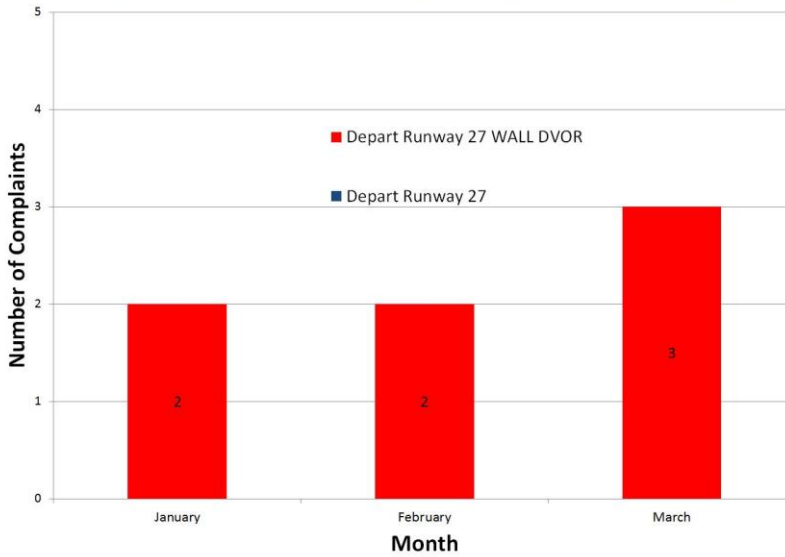
Liverpool John Lennon Airport Operations that caused Noise Complaints for 1st January to 31st March 2017



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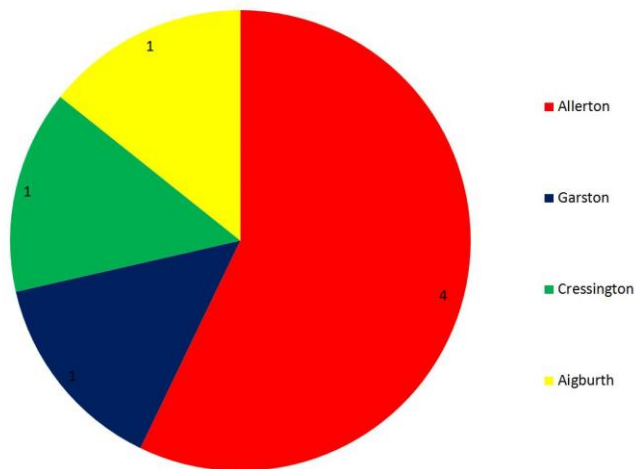
Liverpool John Lennon Airport Operations that caused Noise Complaints for 1st January to 31st March 2017 make up of Departure from Runway 27



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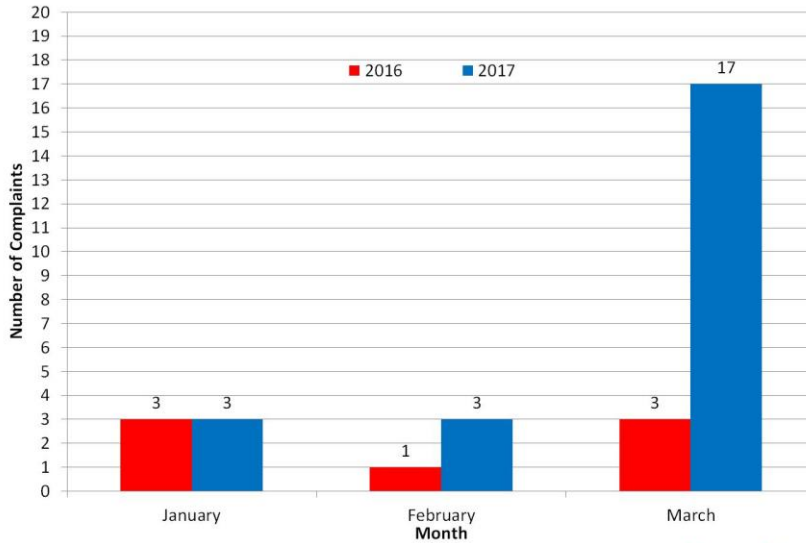
Liverpool John Lennon Airport 1st January to 31st March 2017 make up of WALL DVOR Refurbishment



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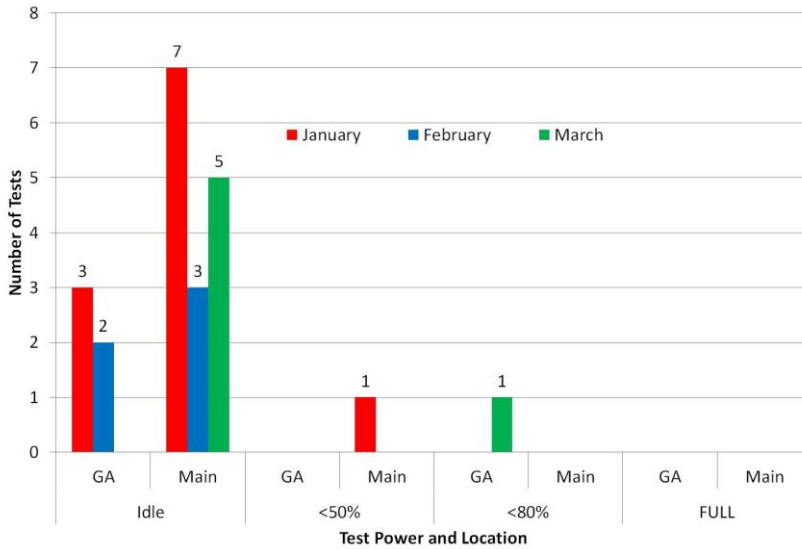
Liverpool John Lennon Airport Complaints Comparison for 1st January to 31st March 2016 & 2017



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Liverpool John Lennon Airport Engine Test Runs 1st January to 31st March 2017



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Annual Noise Report

2016

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Review of Aircraft Movements 2016

	Club	Commercial	Non Commercial	Other	TOTAL
January	1,378	2,788	95	134	4,395
February	2,144	2,820	56	117	5,137
March	2,398	3,087	130	138	5,753
April	2,370	3,285	132	118	5,905
May	2,793	3,645	138	145	6,721
June	2,371	3,450	114	192	6,127
July	2,491	3,654	79	140	6,364
August	2,408	3,699	105	206	6,418
September	2,186	3,403	146	148	5,883
October	2,370	3,301	135	144	5,950
November	1,968	2,570	92	101	4,731
December	1,567	2,769	102	74	4,512
Totals	26,444	38,471	1,324	1,657	67,896

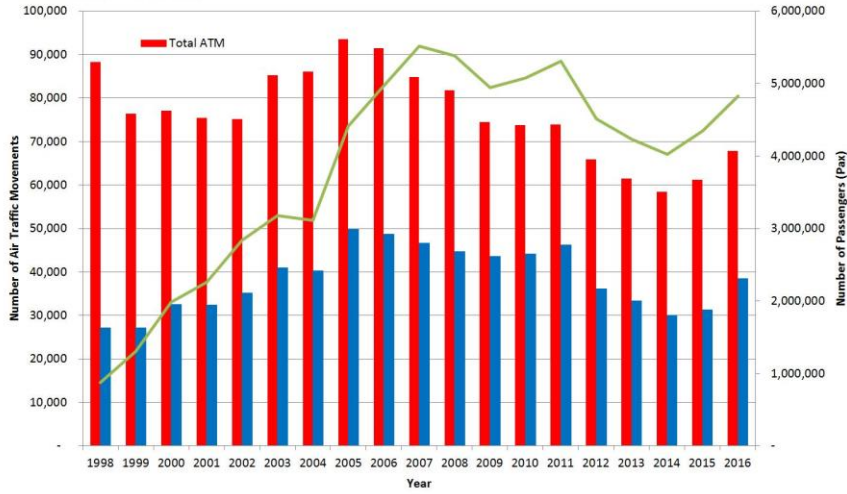
The movements are divided into Commercial (paying passenger services and cargo), Non Commercial (private aircraft), Club (private aircraft based at the airport) and Others (military and positioning flights and other miscellaneous aircraft movements).

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Review of Aircraft Movement (ATM) Type and Passenger (Pax) Numbers from 1999 to 2016



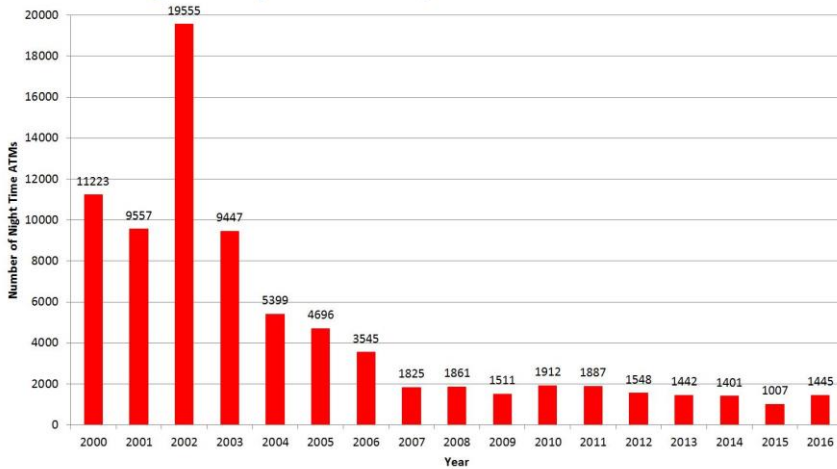
The chart illustrates aircraft movements (both total and commercial) as well as passenger numbers from 1998 to 2016. The number of commercial aircraft movements for 2016 were down by 23% on the peak number in 2005.

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Number of Night Time (23:30 to 06:00) Aircraft Movements 2000 to 2016



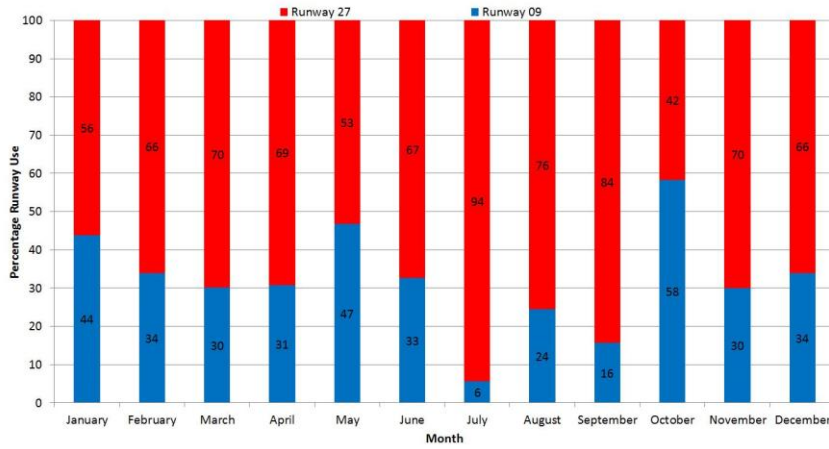
The number of aircraft movements during the night time quota period (23:30 to 06:00) from 2000 to 2016 is shown above. The number of night time aircraft movements for 2016 are down by 93% on the peak year of 2002 when there was a large night time cargo and mail operation at Liverpool John Lennon Airport.

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Runway Utilisation per Month 2016



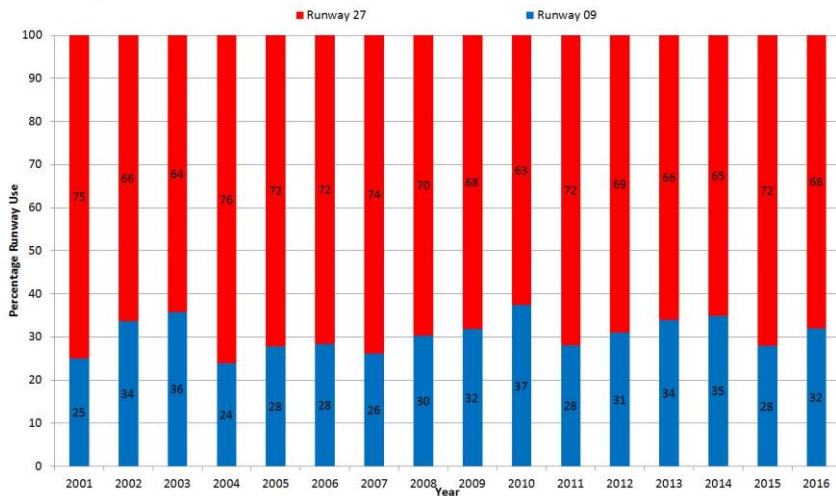
The overall percentage figure for 2016 were runway 09 = 32% and runway 27 = 68%. Runway 09 operations are aircraft arriving (over The Wirral Peninsula) and departing (over Hale Village) to the east. Runway 27 operations are aircraft arriving (over Hale Village) and departing (over the Wirral Peninsula) to the west.

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Runway Utilisation 2001 to 2016



The average for the 2001 to 2015 period shown are runway 09 = 30% and runway 27 = 70%.

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Noise Monitoring

Airborne aircraft noise is monitored at two fixed Noise Monitoring Terminals (NMT's) at Hale C of E Primary School (NMT 1) to the east of the runway and at Eastham (NMT 2) to the west of the runway. The NMT's measure all relevant acoustical parameters. The acoustical parameters are stored in the Noise Monitoring Terminal (NMT) on a data logger located in the NMT cabinet and the data is collected twice a day.



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Average Event Annual Noise Levels for Eastham and Hale Noise Monitoring Terminals (NMT) 2016

Airline	Aircraft Type	Runway 09						Runway 27					
		Arrivals (NMT 2 - Eastham)			Departures (NMT 1 - Hale)			Arrivals (NMT 1 - Hale)			Departures (NMT 2 - Eastham)		
		L_{Aeq} dB	SEL dB(A)	L_{Amax} dB	L_{Aeq} dB	SEL dB(A)	L_{Amax} dB	L_{Aeq} dB	SEL dB(A)	L_{Amax} dB	L_{Aeq} dB	SEL dB(A)	L_{Amax} dB
Fly BE	Bombardier Dash 8	68.0	81.2	72.7	65.8	77.6	70.1	71.0	84.0	77.5	61.9	73.1	64.6
easyjet	Airbus A319	70.2	83.9	76.2	68.3	82.1	73.2	75.2	89.2	83.7	65.5	78.8	69.6
easyjet	Airbus A320	69.0	82.7	74.2	71.2	85.8	77.0	74.8	88.8	83.3	66.0	79.3	70.3
Wizz Air	Airbus A320	69.0	82.7	74.2	71.2	85.8	77.0	74.9	89.0	83.0	62.9	74.8	66.1
Ryanair	Boeing 737-800	70.9	84.7	77.0	72.4	86.7	78.1	75.9	90.0	94.4	64.6	77.1	68.4
Blue	Boeing 737-400	72.2	85.9	79.1	75.6	90.6	82.5	78.1	92.3	87.3	64.6	77.9	68.7

L_{Aeq} - Equivalent continuous sound level. The steady dB(A) level which would produce the same A-weighted sound energy over the stated period of time as specified time-varying sound.

SEL - The Single Event Level (SEL) is a measure of aircraft noise from a single event which takes account of the duration as well as the intensity, being the level maintained constantly for a period of one second that would deliver the same A weighted energy as the given noise event.

L_{Amax} - The L_{Amax} is the maximum noise level measured with slow time weighting and represents the highest level of environmental noise occurring during a correlated noise event.

The Noise Levels vary at NMT 1 and NMT 2, because NMT 1 (4.6 km) is located closer to the Airport than NMT 2 (8.5 km).

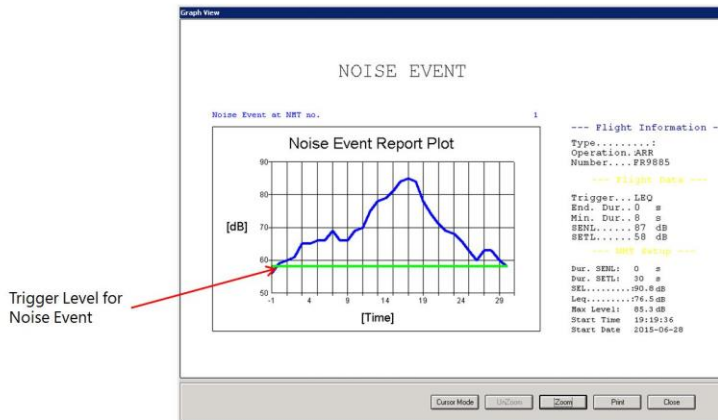
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Noise Event Report

Example of a Noise Event Report form the Noise Monitoring System (NMT 1) for a Ryanair Boeing 737-800 arrival on runway 27.

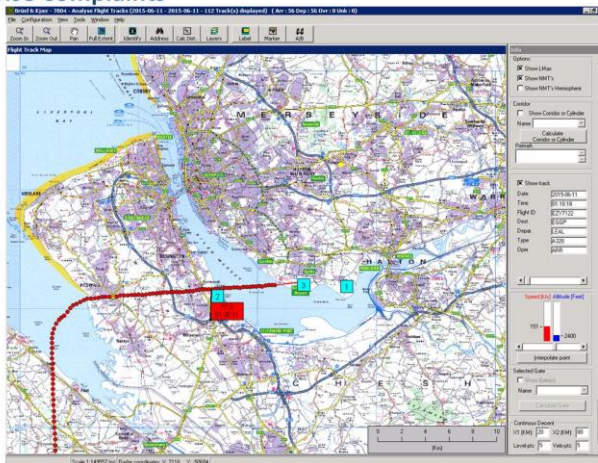


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Noise Complaints



The Airport operates a Noise Complaints Management System to accurately record the nature of the noise complaint made by the local community to the Airport Company, to investigate the potential source of the complaint and to respond to the complainant. A complaint can be made by telephone, letter, email or via the Airport website.

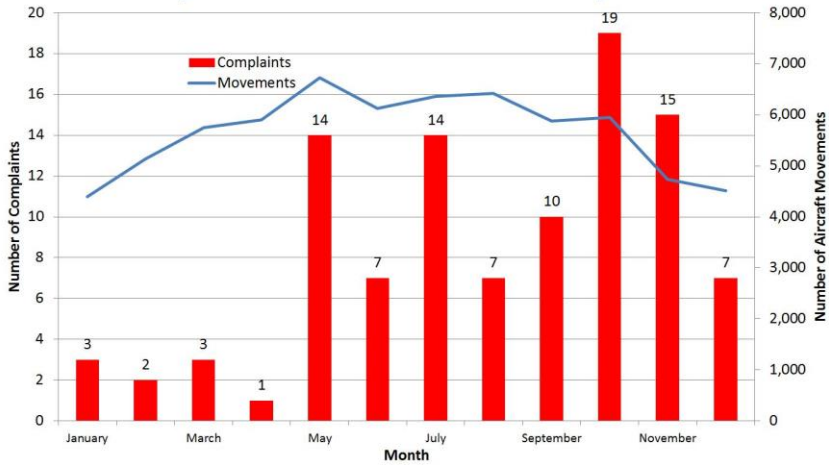
The critical information from the caller includes a description of their concerns, the date, time and location of the event and their contact details. This information is used to investigate the complaint using the Noise Monitoring and Track Keeping System which coordinates Radar aircraft specific information and operational data with information form the Noise Monitoring Terminals.

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Number of Complaints and Total Aircraft Movements per Month for 2016



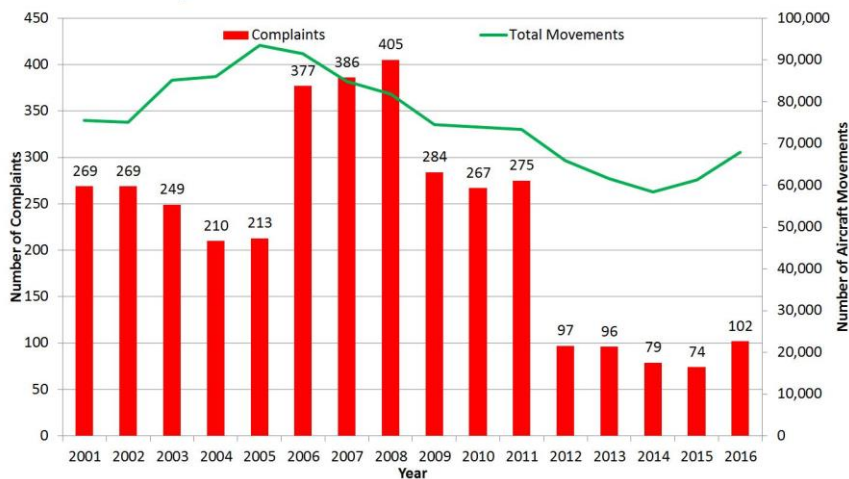
Generally the number of complaints increase during the summer when there are more aircraft movements but this is not always the case as in 2016 where other factors can have a bearing on the number of noise complaints and where they originate from that are received by the Airport. An example in 2016 was the works carried out on the Wallasey DVOR beacon which meant many Standard Departure routes were not in use during October, November & December.

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Number of Complaints and Total Aircraft Movements 2001 to 2015



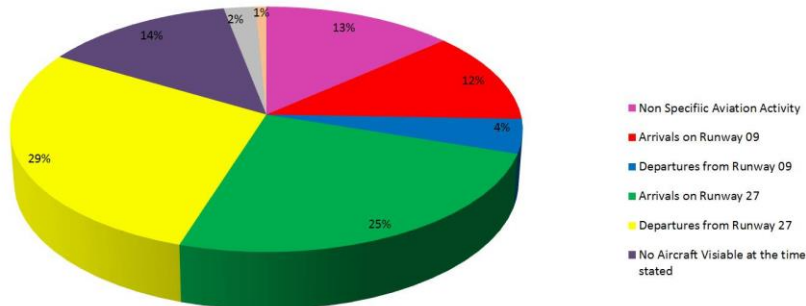
2016 shows a 75% reduction from the peak number of noise complaints in 2008. The absolute number of noise complaints is not a good indicator of actual noise exposure, nor should it be the determining factor in how or what steps can be taken to mitigate noise impacts.

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Activity which Caused Noise Complaints in 2015



During 2015 30% of complaints were generated by aircraft arriving on runway 09 over the Wirral Peninsula. 22% of complaints were generated by arrivals on runway 27 over Warrington, Runcorn and Hale Village. 22% of complaints were generated by departures from runway 27 over the Wirral Peninsula. Just 8% of complaints made related to departures from runway 09 over Hale Village. 5% of complaints were related to the general operation of aircraft at Liverpool Airport. 8% of noise complaints were associated with aircraft movements from other airports and 5% of complaints related to situations where no aircraft activity was identified at the time of the complaint.

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NATS VHF Omni Range (VOR) Replacement Programme 2016

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WAL VOR

- work commenced on the 11th October 2016 and the beacon was returned to service on the 10th March 2017



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WAL VOR

- Liverpool Airport – The WAL outage had the following impacts on operations at Liverpool airport:
- Departures – All SIDs were suspended. Non-standard departures were agreed with NATS and these will also be used in the future should the WAL DVOR ever fail. These procedures closely replicate existing tracks and were promulgated in a Temporary Operating Instruction (TOI) and put into MATS Part 2 (ATC Operating Manual).
- Arrivals – STARs were suspended during the replacement period. All inbound aircraft were individually coordinated on a tactical basis. In the event of holding ATCOs had to vector the aircraft around the holding positions. Whilst this increased the controllers workload, the number of times the hold was used made it achievable.

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NATS VOR Replacement Programme

- NATS has historically operated 46 Doppler VHF Omni Range (DVOR) navigation beacons across the UK to provide an en-route navigation service as either stand alone beacons or co-located with Distance Measuring Equipment (DME) beacons. The CAA has approved in principle a reduction in the VOR infrastructure from 46 to 19 sites by 2020.
- Equipment at the retained sites will gradually be replaced and each replacement will result in the facility being unavailable for use for approximately three months with any co-located DME also being unavailable during this period.
- Each beacon is part of a post-World War II ground-based navigation network used for defining airway routes or providing instrument approaches at airports.
- Commercial aviation – which has always funded the upkeep of the VOR beacons – now almost exclusively relies on the use of satellite navigation making the majority of beacons an expensive and unnecessary financial burden.

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Influence on Noise Complaints in 2016

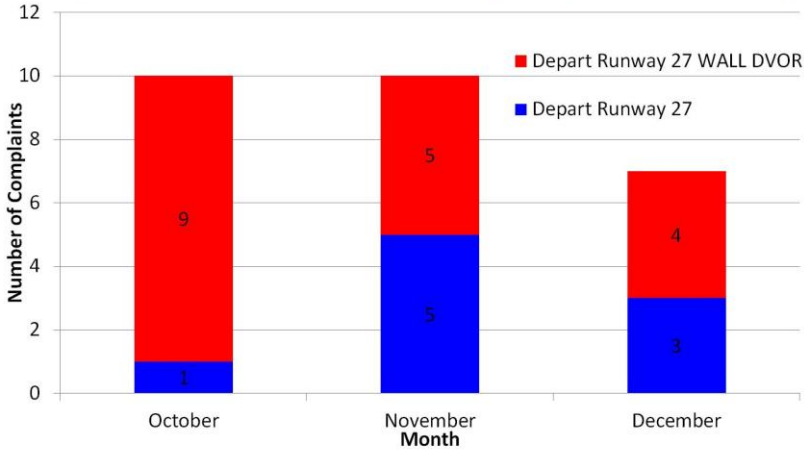
- Departures – Aircraft departing to the North East were vectored to make their initial turn sooner than they would when using the SIDs. This meant aircraft were passing over Garston and other parts of South Liverpool at a lower altitude than normal. This led to an increase of new complaints from these areas who were asking “what had changed?”
- Arrivals – No discernible effect on noise complaints.

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Liverpool John Lennon Airport Operations that caused Noise Complaints for 1st October to 31st December 2016 make up of Departure from Runway 27



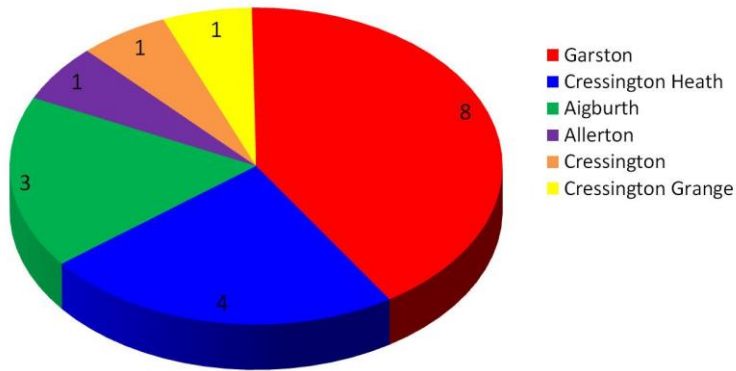
For the three month period October to December 18 of all complaints relating to departures from Runway 27 18 related directly to the Wallasey DVOR replacement works.

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Liverpool John Lennon Airport 1st October to 31st December 2016 make up of WALL DVOR Refurbishment



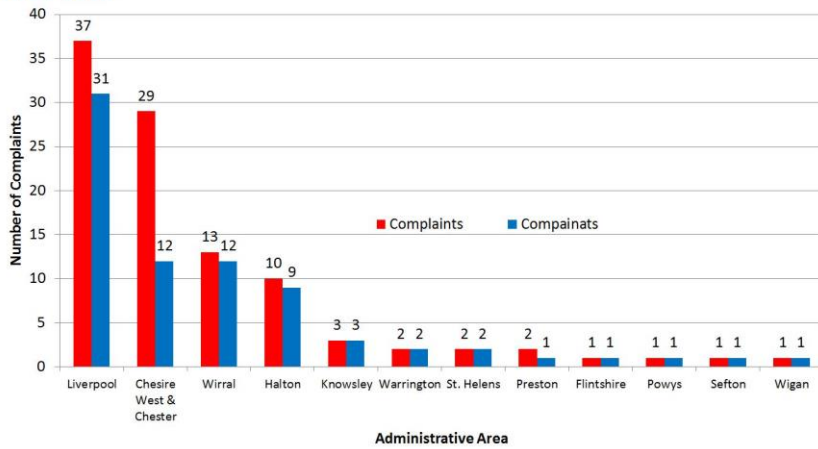
Of the 18 complaints relating to departures from Runway 27, 12 were from Garston and Cressington Heath areas which normally produce a low number of complaints annually.

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Number of Noise Complaints and Complainants for each Administrative Area 2016



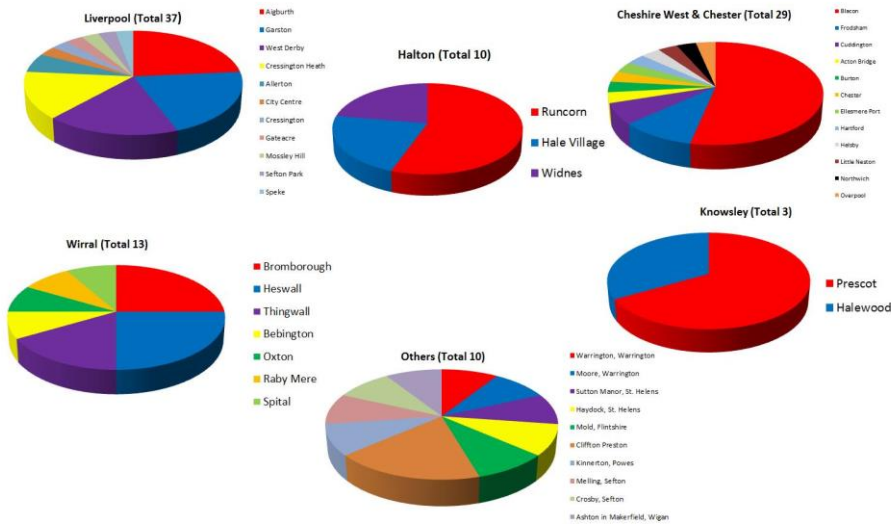
The chart illustrates the number of complaints received from each Local Authority Area and the number of complainants who made the complaints in 2016. 36% of complaints were received from Liverpool residents with 28% coming from Cheshire West & Chester residents. Wirral had 13%, Halton 10%, and Knowsley 3%. St. Helens, Warrington & Preston all had 2% with Flintshire, Powys, Sefton & Wigan all having 1%.

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Number of Complaints Received from each Area of the Administrative Areas in 2016

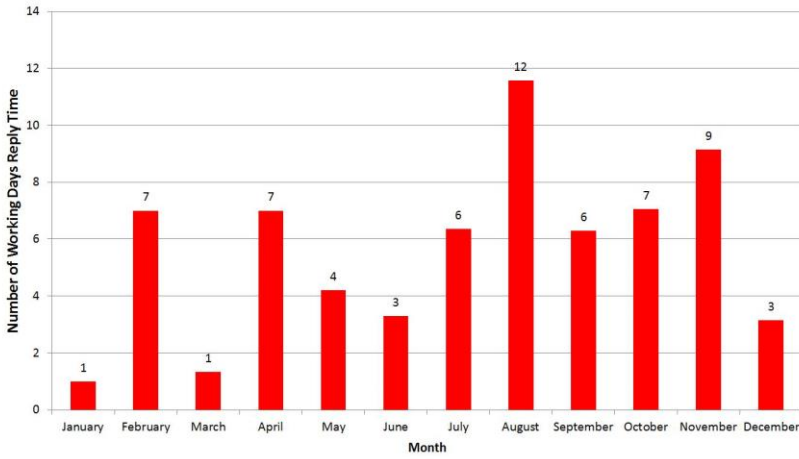


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Average response time for Noise Complaints are Received by the Airport in 2016



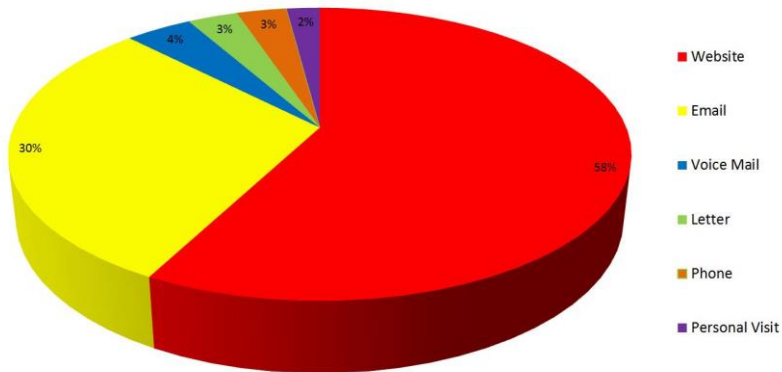
The Airport aims to respond to all noise complaints within 14 working days. During 2015 97% of all noise complaints were responded to within 14 working days.

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Method by which the Noise Complaints are Received by the Airport in 2016



The chart illustrates the method by which noise complaints were received as a percentage in 2016

Website via: <http://www.liverpoolairport.com/about-ljla/aircraft-noise/>

Voice Mail via: 0151 907 1745

Email via: environment@liverpoolairport.com

Letter via: Environment Team, Liverpool John Lennon Airport, Liverpool, L24 1YD

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