

Town and Country Planning Act Section 106/299A

# Environment Report 1 January to June 2025

Farnborough Airport Ltd Farnborough Hampshire GU14 6XA

# 1. INTRODUCTION

1.1 In compliance with the requirements of the agreement in place under Sections 106 and 299A of the Town and Country Planning Act 1990 between Farnborough Airport (FAL) and Rushmoor Borough Council (RBC), FAL hereby submits a report for January to June 2025, detailing results of environmental monitoring as required by clause 1.3, 2.8a, 2.8b and 3.4.

### 2. NOISE MONITORING

2.1 Two permanent noise monitoring terminals (NMTs) continuously operate at the sites of Tweseldown Racecourse and Farnborough College of Technology, approximately one mile from the airfield and beneath the typical arrival and departure flight path.

The portable NMT is provided for ad-hoc monitoring in connection with suggestions made by the Noise Subgroup Committee (NSC), a subset of the Farnborough Aerodrome Consultative Committee (FACC).

2.2 Correlated Noise data (dB(A) Leq16) recorded by the fixed NMTs for "Aircraft", "Community" and "Total" noise is tabulated in Appendix A. These values represent the average noise level over the time of the event or period of interest. It must be remembered that total noise is the addition of community noise and aircraft noise, and is a function of the logarithmic equation whereby:

L1 and L2 =  $10*LOG10(10^{(L1/10)} + 10^{(L2/10)})$ 

For example:

L1 = 57.5

L2 = 50.5

10\*LOG10(10^ (57.5/10) + 10^ (50.5/10))

Total Noise = 58.3dB

- 2.3 Tweseldown Racecourse events have the potential to influence values for "community" and "total" noise at the Tweseldown NMT. The following events took place at the racecourse during the reporting period:
  - 8th and 9th of March
  - 9<sup>th</sup> to 11<sup>th</sup> of May
- 2.4 All three operational NMTs were subject to calibration by an independent specialist on the 6<sup>th</sup> of March 2025. All data submitted during this period is valid.
- 2.5 Noise contours produced using the FAA's Integrated Noise Model (INM 7.0d) for previous year business movements, together with predicted contours for the year ahead, were submitted to RBC in February 2025 in accordance with the requirements of the agreement between FAL and RBC. The modelling exercise results are given below in Table 1, along with those included within the planning agreement. The predicted noise contours were generated using movement data (flight tracks) from the study year, which considers the forecast growth for the year ahead (including predicted helicopter movements).

Table 1: Most recent results of the INM Modelling exercise

dE L <sub>Aeq,</sub>	mayamanta	Amended Control Contour Areas (km²) as per clause 12.1a of the S106 (29/10/2010)	Actual contour areas 2024 (km²)	Predicted contour areas, 2025 (km²)
55	9.07	6.58	2.15	2.12
60	4.03	2.42	0.92	0.91
65	1.70	N/A	0.43	0.43

- 2.6 Contours relating to actual movements for January to June and predicted contours for July to December this calendar year will be submitted to RBC in August with the INM report.
- 2.7 Use of the dB(A) L<sub>eq16</sub> contour is internationally recognised as a means of noise measurement. A 66 dB(A) L<sub>eq16</sub> indicates that the average level of noise during a 16-hour day is 66 dB(A).
- 2.8 In accordance with the requirements of the Section 106 Agreement FAL uses INM 7.0d to produce noise contours. This version of the software includes helicopter movements and considers surrounding terrain within the modelling process.
- 2.9 Daily dB(A) Leq16 Figures are given in Appendix A.

# 3. AIRCRAFT MOVEMENTS

3.1 Table 2 displays a summary of aircraft movements for the reporting period by movement category.

Table 2: Movements summary by type

Category	Jan	Feb	Mar	Apr	Мау	Jun	Report 1 Total
Business	1,886	1,907	2,096	2,010	2,733	3,139	13,771
Helicopter	68	45	66	96	112	78	465
Subtotal (Reported under planning obligations)	1,954	1,952	2,162	2,106	2,845	3,217	14,236
Military	7	2	8	7	19	6	49
Flying Club	18	14	12	4	38	28	114
Other	62	42	60	11	28	29	232
ADS	-	-	-	-	-	-	-
Total	2,041	2,010	2,242	2,128	2,930	3,280	14,631

3.2 Tables 3 and 4 display a summary of movement percentages against the total for each month, by category for weekdays and weekends.

Table 3: Percentage summary by category for weekday movements

	Jan	Feb	Mar	Apr	May	Jun
Business	68	62	67	67	65	69
Helicopter	3	2	2	4	3	2
Military	0	0	0	0	0	0
Flying Club	1	1	0	0	1	1
Other	3	2	2	0	0	1
ADS	-	-	-	-	-	-
TOTAL	74	66	72	71	69	72

<sup>\*</sup> Totals to the nearest whole percent

Table 4: Percentage summary by category for weekend movements

	Jan	Feb	Mar	Apr	May	Jun
Business	25	33	27	28	29	27
Helicopter	1	1	1	1	1	1
Military	-	-	0	0	0	0
Flying Club	0	-	0	-	0	0
Other	0	0	1	0	1	0
ADS	-	-	-	-	-	-
TOTAL	26	34	28	29	31	28

<sup>\*</sup> Totals to the nearest whole percent

3.3 Table 5 displays runway use data. Operations are divided into Arrivals, Departures and those undertaken by helicopters without use of the runway (Aerodrome).

Table 5: Runway in use (as percentages) by mode of operation

	Jan	Feb	Mar	Apr	May	Jun
06 Arrival	5	22	25	30	29	6
24 Arrival	44	28	25	19	20	44
06 Departure	5	20	26	30	29	6
24 Departure	45	29	23	19	20	43
Aerodrome (Heli)	1	1	1	2	2	1

- 3.4 The month of April saw highest sustained period of Runway 06 in use; however, this is typical for the time of year and the associated change in weather and predominant wind direction.
- 3.5 Table 6 below displays Maximum Take Off Weight data for aircraft operated during the reporting period, reflected as a percentage of the overall movements in each month.

Table 6: Percentage by Maximum Take-Off Weight (MTOW) against monthly movements total

	Jan	Feb	Mar	Apr	May	Jun
Over 50t	3	2	3	3	3	3
50t or less	97	98	97	97	97	97

- 3.5 All civil aircraft using Farnborough during the reporting period were compliant with the International Civil Aviation Organisation (ICAO) Chapter 4. All aircraft must provide certification of Noise Chapter prior to permission being granted to operate.
- 3.6 Helicopters, light aircraft and turbo-prop aircraft are not subject to the requirements of the ICAO noise certification scheme.

# 4. AIR QUALITY MONITORING

- 4.1 The locations of the thirteen Nitrogen Dioxide diffusion tubes and the two Learian Streetbox monitors remain as previously reported, to see details of the locations of the monitors please refer to previous reports prior to the first quarter of 2005.
- 4.2 Table 7 below displays the standards accepted by the Government and recommended by the expert panel on air quality standards.

Table 7: Objectives included in regulations for purposes of local Air Quality Management

Dellutent	Air Quality Objective		Date to be achieved by and maintained
Pollutant	Concentration	Measured as	thereafter
NO <sub>2</sub>	200µg/m³ (105ppb) not to be exceeded more than 18 times a year	1 hour mean	1 <sup>st</sup> Jan 2010
NO <sub>2</sub>	40μg/m³ (21ppb)	annual mean	1 <sup>st</sup> Jan 2010

<sup>&</sup>lt;sup>a</sup> Conversions of ppb and ppm to μg/m³ and mg/m³ at 20°C and 1013mb. ppb = parts per billion, μg/m³ = micrograms per cubic metre. Source: <u>Air Quality Objectives Update</u> (last updated 03-04-23

- 4.3 Air quality monitoring results consist of raw data and ratified data by a third-party consultant. Data taken from the Learian Streetbox Monitors consists of hourly mean concentrations of NO<sub>2</sub>. As this data set is extensive when covering a six-month period, it has been displayed as monthly means for the purpose of this report.
- 4.4 Passive and active NO<sub>2</sub> monitoring results are detailed in Figures 1 and 2.

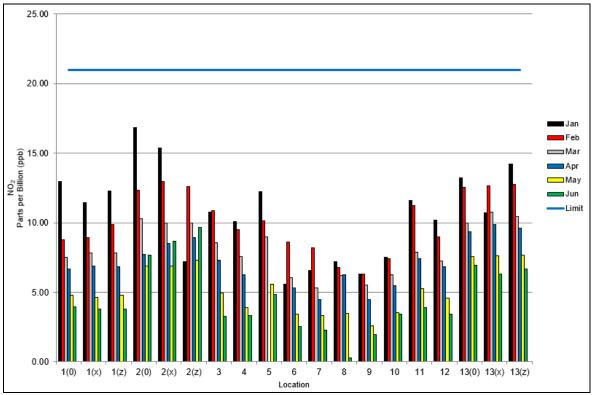


Figure 1: Passive NO<sub>2</sub> monitoring results, January to June

N.B. ppb - parts per billion expressed as a monthly mean. This data has not had a bias adjustment applied

4.5 The results taken from the diffusion tubes indicate that NO<sub>2</sub> levels around the airfield and local communities during the reporting period have achieved the objectives within the regulations for the purpose of Air Quality Management.

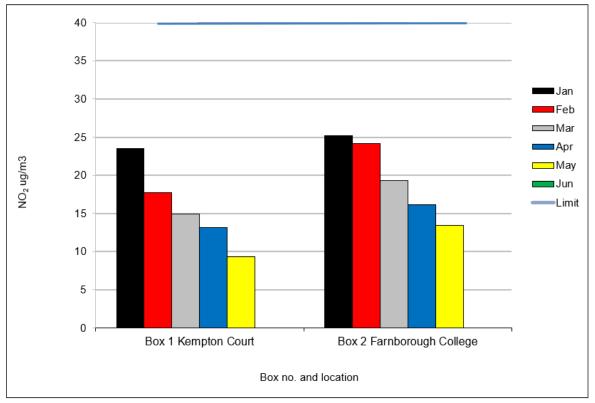


Figure 2: Active NO<sub>2</sub> monitoring results, January – June µg/m3 expressed as a monthly mean

4.6 Figure 2 shows the data collected from the Learian Streetboxes throughout the study period. In June, the units were sent for their scheduled calibration. Upon receipt by the third-party service provider, it became apparent that the reference gas supplied was unstable and hence unsuitable for calibration. Consequently, both the completion of the calibration and the availability of the June data were impacted.

# 5. CONCLUSION

- 5.1 Routine monitoring of compliance with noise abatement routes, air quality targets, and aircraft movements continues at the Airport. To date, all environmental monitoring undertaken has been implemented in accordance with the regulatory requirements and those of the Town and Country Planning Act Section 106 Agreement.
- 5.2 All movements operated at the Airport are restricted to those permitted by the terms of the planning consent and the accompanying agreement.
- 5.3 NO<sub>2</sub> levels recorded by monitoring stations remain compliant with applicable legislation.
- 5.4 The activities at the Airport remain within the specifications of the Section 106/299A agreement.

## **ENDS**

Gareth Andrews
Sustainability Manager
Farnborough Airport
www.farnboroughairport.com

31/07/2025



#### Noise Report Farnborough Airport

Aircraft Noise By Day of Month and NMT Start Date:01-Jan-2025 End Date: 30-Jun-2025

#### January 2025

NMT	1	2	3	4	5	6	7	, E	8 9	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	44.9	49.2	48.2	51.8	3 46	.7 5	51.1	49.7	51.3	47.5	51.6	49.3	48.4	47.6	46.5	45.0	49.7	49.8	49.3	48.7	50.5	48.7	49.6	47.9	50.0	46.2	47.8	51.9	48.4	49.3	49.7	50.2
3	49.3	54.8	55.6	54.9		.5 5	55.6	54.2	53.0	53.8	50.7	50.5	52.5	54.9	53.9	56.4	55.0	54.0	51.7	52.8	56.1	52.6	56.6	57.0	55.9	52.9	55.7	56.9	54.8	53.5	53.8	53.0

#### February 2025

NMT	1	2	3	4	5	6	7	8	9	10	11 1	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
2	47.5	48.8	47.6	47.5	49.2	51.0	50.7	50.1	50.4	52.1	49.5	51.8	51.0	51.9	52.3	48.9	51.7	48.9	48.2	42.8	46.6	49.9	51.5	49.0	45.9	48.6	50.4	51.5
3	54.0	55.3	54.1	54.0	53.3	52.4		55.0	50.6	53.5	54.4	54.3	53.9	57.4	57.2	55.3	54.6	53.0	53.0	55.3	56.0	58.0	59.6	55.7	54.7	54.8	54.1	52.3

#### March 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	52.6	49.	4 50.6	51.3	48.0	47.0	50.5	47.4	50.4	51.6	51.4	49.5	51.1	50.8	49.3	49.9	50.3	48.9	50.8	49.8	51.9	49.3	52.3	48.5	49.0	48.8	48.4	51.5	45.3	49.0	48.4
3	53.5	57.	1 54.9	54.4	55.8	54.8	55.6	55.1	54.2	56.0	55.9	52.1	54.1	53.2	51.4	51.6	55.9	52.7	54.8	55.2	58.3	57.3	55.0	54.2	54.0	56.2	56.6	54.0	52.9	52.5	54.6

#### April 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2	52.3	56.0	51.1	50.3	50.5	49.7	50.2	50.0	52.1	51.1	49.6	45.6	45.4	48.3	49.9	48.7	49.1	49.7	49.5	47.8	49.0	47.1	52.0	51.0	50.9	47.8	49.2	48.8	50.5	52.4
3	54.4	51.7	53.7	53.6	52.1	55.8	51.6	56.3	56.1	55.4	51.4	53.8	53.5	53.2	55.7	56.0	54.6	54.1	54.1	49.0	57.0	55.8	54.8	55.2	56.9	54.2	53.6	52.7	55.5	56.4

#### May 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	48.2	50.0	52.0	50.4	52.8	52.7	51.0	52.1	51.0	49.8	51.1	52.4	51.2	51.8	53.4	51.4	48.7	51.5	52.8	51.3	51.8	53.7	50.7	49.2	49.6	50.8	48.8	48.7	48.5	50.0	49.2
3	54.4	56.2	53.9	55.1	53.4	55.6	54.9	55.5	53.9	54.1	56.0	58.8	53.9	57.1	55.9	55.9	55.3	55.4	56.5	58.1	56.5	57.1	56.8	56.0	54.4	57.1	58.1	55.0	56.9	56.4	54.1

#### June 2025

NMT	1	2	3	4	5 (	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2	48.4	50.2	48.9	48.8	48.4	50.0	51.1	47.7	48.2	48.9	51.4	50.8	51.1	48.1	49.2	49.7	50.0	52.4	52.2	53.5	50.7	51.3	49.4	48.8	52.0	50.3	51.1	50.4	49.2	51.2
3	57.6	56.1	57.4	56.0	57.3	57.8	54.6	55.8	55.5	56.0	56.4	57.1	56.0	55.0	56.2	57.2	56.6	57.8	59.5	64.6	57.4	58.1	60.5	58.2	58.6	58.2	61.5	55.7	56.4	59.8

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#### Noise Report Farnborough Airport

Community Noise By Day of Month and NMT Start Date:01-Jan-2025 End Date: 30-Jun-2025

#### January 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	63.0	51.6	52.6	51.1	56.9	57.9	52.9	50.6	52.0	50.7	51.4	50.7	51.9	52.0	51.1	50.3	50.0	48.2	48.6	52.2	50.5	50.6	56.1	57.7	50.3	55.5	61.9	56.0	50.9	51.5	51.2
3	54.0	51.0	52.9	53.0	54.3	54.8	53.8	53.3	53.4	53.2	52.3	52.8	53.6	52 6	51.3	51.6	51.3	49 1	49.2	52.0	52.2	50.9	55.7	55.0	50.8	55.3	56.7	54 4	52.5	52.9	52.3

#### February 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
2	49.6	50.3	51.8	52.8	56.2	55.5	55.1	49.6	49.7	51.1	50.1	49.6	50.6	50.6	49.8	48.4	51.7	49.1	50.5	54.9	53.9	51.5	57.8	52.7	51.5	53.5	52.0	52.1
3	50.8	51.2	54.5	53.8	53.0	52.6	53.7	51.6	51.0	53.4	51.1	51.0	51.6	52.8	51.2	50.4	52.6	52.1	52.5	54.2	54.3	52.3	55.0	54.1	53.0	54.7	52.0	52.5

#### March 2025

NMT	1	2	3	4	5	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	49.3	49	.2 53.	7	53.5	51.4	51.8	51.0	52.3	53.2	49.4	51.1	51.2	50.9	50.2	52.8	52.0	50.3	53.6	49.8	49.8	50.6	48.9	48.5	49.7	50.0	50.7	51.1	52.0	52.1	51.1	49.4
3	50.0	51	.0 51.	5	52.6	53.7	55.1	52.7	51.9	50.0	51.9	51.0	51.5	51.8	51.5	50.2	49.6	52.4	52.7	51.6	52.3	52.4	50.4	49.0	51.9	51.2	52.0	53.0	53.1	50.7	49.9	51.1

#### April 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2	57.0	64.3	51.7	53.5	54.9	51.1	47.7	48.2	49.4	50.7	48.3	48.1	48.7	49.5	48.7	58.5	55.3	51.3	57.6	47.7	50.0	53.3	49.3	48.4	48.7	49.6	47.6	49.1	48.2	47.9
3	56.0	53.9	52.5	52.2	49.9	48.9	49.6	54.8	55.3	55.2	51.0	49.3	49.9	54.8	54.4	53.5	50.5	53.4	52.5	48.0	51.1	55.6	61.4	58.3	58.2	49.5	48.8	60.4	61.1	60.8

#### May 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	50.7	49.4	50.2	56.0	53.3	53.4	53.8	57.7	52.7	52.3	53.7	49.0	48.1	48.1	48.9	48.2	46.7	46.8	49.0	49.9	49.7	48.8	52.9	55.6	60.7	55.8	57.2	54.6	54.1	49.2	48.7
3	60.9	58.5	48.9	48.6	49.7	60.3	60.5	59.6	56.6	52.6	48.8	51.1	51.1	50.5	50.8	51.0	47.8	47.7	51.7	49.8	50.7	50.8	52.3	50.9	52.3	52.3	57.7	54.0	54.3	53.5	49.4

#### June 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2	51.5	49.2	54.6	51.1	51.9	52.9	50.6	51.9	50.4	51.7	48.7	51.9	48.5	52.7	50.2	49.2	48.9	48.2	48.3	48.7	49.0	56.2	54.9	53.1	48.6	55.9	53.8	49.8	47.3	48.1
3	50.8	53.6	55.6	56.4	57.5	56.0	51.6	50.1	55.2	55.3	54.1	55.6	50.8	51.3	50.1	59.4	57.2	64.2	68.9	71.9	49.2	52.2	66.4	62.8	64.1	56.9	67.8	49.6	47.1	67.8

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#### Noise Report Farnborough Airport

Total Noise By Day of Month and NMT Start Date:01-Jan-2025 End Date: 30-Jun-2025

#### January 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	62.8	53.6	53.9	54.4	57.0	58.4	54.6	53.9	53.3	54.2	53.5	52.7	53.2	53.0	52.0	53.0	52.9	51.8	51.7	54.4	52.7	53.2	56.6	58.1	51.7	56.0	62.1	56.5	53.2	53.7	53.7
3	55.3	56.3	57.5	57.1	59.9	58.3	57.0	56.2	56.6	55.2	54.5	55.7	57.3	56.3	57.6	56.6	55.9	53.7	54.4	57.5	55.5	57.7	59.4	58.5	55.0	58.6	59.8	57.6		56.5	55.7

#### February 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
2	51.7	52.6	53.2	53.9	56.7	56.6	56.3	52.9	53.0	54.6	52.8	53.8	53.8	54.3	54.2	51.7	54.8	52.0	52.5	55.0	54.6	53.8	58.4	54.2	52.5	54.7	54.3	54.8
3	55.7	56.7	57.4	56.9	56.2	55.6	55.9	56.6	53.9	56.5	56.1	56.0	55.9	58.7	58.2	56.6	56.7	55.6	55.8	57.8	58.3	59.1	60.9	58.0	57.0	57.8	56.2	55.4

#### March 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	54.3	52.3	55.2	55.4	53.0	53.0	53.7	53.5	55.0	53.7	54.2	53.4	54.0	53.5	54.3	54.1	53.3	54.8	53.3	52.8	54.3	52.1	53.8	52.2	52.5	52.9	52.9	54.7	52.9	53.2	52.0
3	55.2	58.1	56.6	56.6	57.9	58.0	57.4	56.8	55.6	57.4	57.2	54.8	56.1	55.5	53.9	53.8	57.5	55.8	56.6	57.0	59.3	58.1	56.0	56.2	55.9	57.6	58.2	56.6	55.0	54.5	56.2

#### April 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2	58.0	64.6	54.4	55.1	56.1	53.4	52.1	52.2	54.0	53.9	52.1	50.0	50.4	52.0	52.4	58.6	56.3	53.6	58.0	50.8	52.6	54.2	53.9	52.9	52.9	51.8	51.6	52.0	52.6	53.7
3	58.3	56.0	56.2	56.0	54.2	56.7	53.8	58.6	58.7	58.3	54.2	55.2	55.1	57.1	58.1	57.9	56.1	56.8	56.4	51.5	58.1	58.7	62.2	59.9	60.5	55.5	54.9	61.0	62.0	62.1

#### May 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	52.6	52.8	54.2	57.0	56.0	56.0	55.6	58.7	54.9	54.2	55.5	54.1	53.0	53.4	54.7	53.1	50.9	52.8	54.3	53.6	53.9	55.0	54.9	56.4	60.7	56.8	57.5	55.4	55.1	52.7	52.0
3	61.6	60.4	55.2	56.0	55.0	61.4	61.4	60.9	58.5	56.4	56.7	59.5	55.7	58.0	57.1	57.2	56.0	56.1	57.8	58.7	57.6	58.0	58.1	57.2	56.5	58.4	60.9	57.6	58.8	58.2	55.4

#### June 2025

NMT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
2	53.2	52.7	55.5	53.1	53.5	54.7	53.9	53.3	52.5	53.5	53.3	54.4	53.0	53.9	52.8	52.4	52.5	53.8	53.7	54.8	53.0	57.2	55.9	54.4	53.6	56.8	55.6	53.1	51.4	53.0
3	58.5	58.0	59.6	59.2	60.3	60.0	56.4	56.9	58.4	58.7	58.4	59.4	57.2	56.5	57.1	61.3	59.9	65.0	69.1	72.0	58.0	59.1	67.0	63.9	64.8	60.6	68.4	56.7	56.9	68.1

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