

3 October 2016

Rotorua Regional Airport Ltd
PO Box 7221
Te Ngae
Rotorua 3042

Attention: Ms Nicole Brewer

Dear Nicole

ROTORUA AIRPORT ANNUAL COMPLIANCE ASSESSMENT 2015 AND 2016

Rotorua Airport monitors compliance with noise limits on aircraft operations in accordance with sections 12.2.5.2 and 12.2.5.3 of the Rotorua District Plan.

Rule 12.2.5.2(a) sets a 65 dB L_{dn} noise limit on airport operations outside the Air Noise Area.

Rule 12.2.5.2(d) requires the Airport to provide a report detailing the calculated noise levels at the boundary of the Air Noise Area on an annual basis. The noise contours calculated for this rule are based on the actual aircraft activity during the busiest three consecutive months of the year and the purpose of the contours is to assess compliance with the Airport's noise limits.

Rule 12.2.5.3(a) requires the preparation of an Annual Aircraft Noise Contour (AANC) plan indicating which properties are predicted to lie within the 60 and 65 dB L_{dn} contours at a date twelve months from the date of preparation. The contours are based on the busiest three months of the preceding year with the projected growth over the next year added for the purpose of offering acoustic treatment to eligible dwellings.

Marshall Day Acoustics has previously undertaken the noise modelling work to assess compliance with the 65 dB L_{dn} noise limit and prepare the AANC for the acoustic mitigation programme. The last time this work was carried out, compliance contours for the 2014 financial year (FY14) and the 2015 AANC for sound insulation offers were calculated. These figures are enclosed for reference.

Since FY14, aircraft activity has generally declined. Table 1 lists the total annual movements for year FY14 through FY16 which shows a decrease year on year. We note that there were slightly more commercial movements in FY15 than in FY14 (9 movements over the year). For the purpose of compliance and noise mitigation offers, the L_{dn} noise level should be calculated from the busiest three months of activity. Table 1 lists the average daily movements for the busiest three months in each year. We note there were slightly more movements in the busiest three months in FY15 than in FY14 with approximately one more commercial movement per day.

Table 1: Summary of Aircraft Movements

Year	Busy 3 Month Average Daily Movements			Total Annual Movements		
	Commercial	GA	Total	Commercial	GA	Total
FY14	8.9	13.4	22.3	3197	4219	7416
FY15	9.7	13.0	22.7	3206	3966	7172
FY16	9.3	12.2	21.5	2973	3834	6807

We have calculated the effect of slightly more commercial movements in FY15 including the change in commercial fleet based on the Airport's movement data. From this we conclude that the FY15 contours would not be appreciably different to the FY14 contours (refer enclosed Figure). Furthermore the FY16

movement numbers are lower than both FY14 and FY15 therefore we conclude that noise emissions for FY16 were lower than FY14. On this basis we recommend that calculating aircraft noise contours for years FY15 and FY16 is not required to establish compliance and we conclude that noise from aircraft operations in FY15 and FY16 complied with the 65 dB L_{dn} noise limit at the boundary of the Air Noise Area.

As the Airport does not project any material growth for FY17 we recommend that preparing the 2017 AANC is not warranted as no additional properties would be included in the 60 dB and 65 dB L_{dn} contours. As such no further acoustic mitigation offers are required for FY17.

We trust this information is satisfactory. Please feel free to contact us if you have any queries or require anything further.

Yours faithfully

MARSHALL DAY ACOUSTICS LTD



Laurel Smith

Acoustician

Enclosed	Figure 1	2014 Actual Noise Contours
	Figure 2	2015 Annual Aircraft Noise Contours



