Decision No. [2014] NZEnvC 108

IN THE MATTER

of the Resource Management Act 1991

AND

of an application for resource consent

referred directly to the court under

section 87G of the Act

 $\mathbf{B}\mathbf{Y}$

SKYDIVE QUEENSTOWN LIMITED

(ENV-2012-CHC-116)

Applicant

Court:

Environment Judge J R Jackson

Environment Commissioner J R Mills Environment Commissioner W R Howie

Hearing:

At Queenstown on 13 to 16 and 21 to 24 May 2013,

and 5 May 2014.

Final submissions received 13 May 2014.

Appearances:

R E Bartlett for Skydive Queenstown Ltd

J G A Winchester and S J Scott for the Queenstown Lakes District

Council

R Brabant and A C Ritchie for Jacks Point Residents and Owners Association Incorporated and the Jacks Point Commercial

Interests Group

M C Holm for RCL Queenstown Pty Ltd and Henley Downs Ltd M J Issott for Lakeside Estates Homeowners Association Inc

C G Geddes for himself

Date of Decision:

16 May 2014

Date of Issue:

16 May 2014

DECISION



A: Under section 290 of the Resource Management Act 1991, the Environment Court refuses a replacement resource consent to Skydive Queenstown Ltd to

operate more flights from the airstrip at Remarkables Station, (SH6), near the shores of Lake Wakatipu.

B: Any application for costs may be made by 4 July 2014 and any reply by 30 July 2014.

REASONS

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1. Introduction

1.1 The issue

[1] This is a direct referral to the Environment Court under section 87G of the Resource Management Act 1991 ("the RMA" or "the Act"). The primary question to be decided is whether Skydive Queenstown Ltd ("Skydive") should be granted a replacement resource consent to operate a grass airstrip at the foot of the Remarkables Mountains, near Queenstown, as an "airport" for its existing skydiving business at the site. The core issue is whether Skydive should be given the opportunity to fly more flights than its maximum 35 per day at present, or whether that would impose unsustainable adverse effects on the neighbours.

1.2 The application

- [2] Skydive¹ has operated a commercial parachute and associated transport operation on an airstrip on Remarkables Station for about 20 years. We attach a site plan marked "Attachment 1"². Since 1997 it has operated from the airstrip under a resource consent³ ("the 1997 consent") which, amongst other conditions, restricts the operation to 35 flights per day in total and no more than two aircraft.
- [3] Remarkables Station is owned by the D S and J F Jardine Trust and is located on State Highway 6 (Kingston Road). The legal description of the land/farm is Lots 2 and 6 DP 443832⁴. Skydive leases the airstrip and an area for its buildings from the Station.
- [4] Skydive applied⁵ to the Queenstown Lakes District Council on 26 January 2012 for a new resource consent, in essence to increase the number of flights from the airstrip. This consent is intended to replace⁶ an existing consent. The rationale behind the application is that Skydive would like to increase the number of flights it launches. It believes it can increase the number of flights while keeping the total noise to which neighbours are exposed below the noise potentially allowed under the existing resource consent and below what it says is a reasonable objective exposure level in decibels. The reason for the applicant's confidence is that Skydive has recently replaced its aircraft with Cessna Supervans. They are modern turbo-powered aircraft which are generally quieter than the earlier piston-engined Cessna 185 aircraft.
- [5] After requesting and receiving further information from Skydive the council notified the application on 23 May 2012. Eighty-one submissions were lodged with the council. The process then diverted from the normal flight path when Skydive applied to the council to refer the application direct to the Environment Court. On 30 July 2012 the council gave its consent to a direct referral.

See Sutton v Moule (1992) 2 NZRMA 41 (CA).



It operates as "Nzone", and most jumps are tandem drops.

Produced by J W Trevathan, evidence-in-chief Attachment 1 [Environment Court document 11].

QLDC ref RM 960447.

Computer Freehold Register 555574 Otago.

⁵ QLDC ref RM 120052.

- [6] On 17 October 2012 Skydive applied to the court under section 87G of the RMA. After the court issued directions, section 274 notices were received from 22 submitters and the council. A timetable for service of evidence was then set and complied with.
- [7] In its evidence Skydive amended its application to operate within these restrictions:
 - a maximum of 75 flights per day;
 - a maximum average of 50 flights a day over any 7 day period; and
 - a maximum noise level on any one day of 57 dB L_{dn};
 - a seven-day average noise limit of 55 dB L_{dn} at residential⁸ locations.

(A glossary of acoustic terminology is annexed marked "2"). Further, while the application lodged with the council shows a maximum of 60 dB L_{dn} would be received at the nearby Jacks Point Lodge, Mr Day's evidence referred to the "generally accepted noise limit of 55 dB L_{dn} at residential locations in the adjacent Jacks Point land". In his recommended conditions of consent Day adopted the 55 dBA L_{dn} limit.

- [8] At the hearing in May 2013 the court received inadequate evidence of the heights at which aircraft operated by Skydive flew over adjacent land (off-site) when taking off and landing. Because the court needed some basic facts about those heights, in December 2013 it sought further evidence. The court subsequently received further expert evidence from Captain L Sowerby and from Mr J N Fogden, and some measurements and opinion evidence from Mr C G Geddes, a nearby resident (and a party to the proceeding).
- [9] Due to the other commitments of witnesses and the court's members it was not possible to reconvene the court and resume the hearing until 5 May 2014. Mr Bartlett then sought leave to make further submissions on that evidence and resulting cross-examination. Leave was granted. On 13 May 2014 he advised the Registrar that he did not wish to give further submissions after all.
- 1.3 The section 274 parties who appeared at the hearing
- [10] Immediately adjacent to the airstrip is a residential area which is part of the Jacks Point development. The residents and owners have formed an incorporated society—Jacks Point Residents and Owners Association Inc which is one section 274 party. Another, also associated with the Jacks Point Zone, is a group of companies¹¹ including

Listed in the evidence of J G Darby at para 1.2 [Environment Court document 12].



M J G Garland, evidence-in-chief para 34 page 14.

C W Day, rebuttal evidence para 3.7 [Environment Court document 9A].

C W Day, evidence-in-chief para 2.2 [Environment Court document 9].

C W Day, evidence-in-chief para 7.2 [Environment Court document 9].

Jacks Point Golf Course Ltd. The Association and the group put forward a common case opposing the application. We will call these two section 274 parties collectively "the Jacks Point Interests".

[11] The northern part of the Jacks Point Zone is also earmarked for development. At the time of the hearing it was owned by other section 274 parties, RCL Queenstown Pty Ltd and Henley Downs Ltd, whose counsel appeared with a watching brief. The southern part of the zone is Homestead Bay which is owned by the Jardine family of The Remarkables Station.

[12] Mr C G Geddes, who lives at 13 McKellar Drive about 1.2 kilometres¹² north of the airstrip, lodged a section 274 notice opposing the grant of the resource consent and gave evidence in the proceeding.

[13] Finally, there is another residential enclave — several kilometres south of the airstrip — called Lakeside Estates. The Lakeside Estate Homeowners' Association joined the proceeding as a section 274 party and its president, Mr M J Issott, gave evidence ¹³ opposing the application.

1.4 Activity status under the Queenstown Lakes District Plan

[14] The district plan contains 14 the following relevant definitions:

Air Noise Means a boundary, the location of which is based on predicted day/night sound levels of L_{dn} 65 dBA from future airport operations. The location of the boundary is shown in Figure 31a.

Airport) Means any defined area of land or water intended or designed to be used whether Aerodrome) wholly or partly for the landing, departure, movement or servicing of aircraft.

The words 'airport' and 'aerodrome' are treated as synonyms¹⁵ by the district plan. The airstrip in this case is "defined" both practically in that it is formed on the ground (and mown, not grazed) and legally in that there is a lease from the landowner to Skydive.

The airstrip

[15] The airstrip is in the Rural General Zone. Consequently, the parties agreed that the application requires the following resource consents:



¹² C G Geddes, evidence-in-chief para 15 [Environment Court document 18].

M J Issott, statement dated 14 March 2013 [Environment Court document 19].

¹⁴ Queenstown-Lakes District Plan.

Oueenstown-Lakes District Plan p D-1.

- a discretionary activity consent¹⁶ for an "airport"; and
- a restricted discretionary activity consent for an outdoor commercial recreational activity involving more than five persons¹⁷.

[16] If a noise limit of 55 dBA L_{dn} is not met at all residential locations (and we note that 60 dBA L_{dn} was included in the application), a non-complying activity consent would be required ¹⁸. However, as recorded above, the evidence provided by Skydive was based on compliance with the 55 dBA L_{dn} limit.

1.5 The matters to be considered

[17] We record the agreement of the parties that the relevant version of the RMA is that after the Resource Management (Simplifying and Streamlining) Amendment Act 2009 and the 2011 Amendment Act were enacted but prior to the 2013 amendments.

- [18] Under section 104 of the RMA we must, subject to Part 2 of the Act, have regard to:
 - (a) any actual and potential effects on the environment of allowing the activity; and

(b) any relevant provisions of -

- (i) a national environmental standard:
- (ii) other regulations:
- (iii) a national policy statement:
- (iv) a New Zealand costal policy statement:
- (v) a regional policy statement or proposed regional policy statement:

(vi) a plan or proposed plan; and

(c) any other matter the [Court] considers relevant and reasonably necessary to determine the application.

We understand that to mean that the local authority, or on appeal or direct referral, the Environment Court must make a broad judgment weighing four sets of considerations. The first two are compulsory:

- (a) any actual and potential effects on the environment of allowing the activity; and
- (b) any relevant provisions of [the listed hierarchy of statutory instruments].
- [19] The third and fourth considerations are to be considered if necessary. They are:
 - (c) any other matter the consent authority considers ... relevant; and
 - (d) Part 2 of the Act.

It is well-established that the words "subject to" show that Part 2 of the Act only needs to be resorted to if there is a conflict in or between any of the other three sets of considerations in section 104(1) of the Act: Minister of Conservation v Kapiti Coast



Under rule 5.3.3.3(v) [QLDP p 5-13].

Under rule 5.3.3.3(xi) and site standard 5.3.5.1(ix) [QLDP p 5-18].

Under rule 5.3.3.4(vi) and zone standard 5.3.5.2(v)(d) Noise.

District Council¹⁹ relying on an earlier decision of the Court of Appeal—Environmental Defence Society v Mangonui County Council²⁰ (on the Town and Country Planning Act 1977) where Cooke J stated "... the qualification "subject to" [is] a standard method of making clear that the other provisions referred to are to prevail in the event of a conflict".

- [20] As for the "environment", we hold that the environment includes the actual and practical potential effects of the 1997 consent but subject to the consent holder's duty under section 16 of the RMA to use the best practicable option to ensure that noise from the airstrip does not exceed a reasonable level. We describe that environment in part 2 of this decision.
- [21] We are to have regard²¹ to several statutory instruments, but the only one with any real significance in the opinion of the expert witnesses is the Queenstown Lakes District Plan ("the district plan"). We outline the relevant provisions in part 3 of this decision.
- [22] Finally, we bear in mind that "[i]n a basic way there is always a persuasive burden" on an applicant for resource consent: Shirley Primary School v Telecom Mobile Communications Ltd²². There is also a legal burden²³: "... even if the Court hears no evidence from anyone other than the applicant it would still be entitled to decline consent". Both statements were approved by the Court of Appeal in Ngatt Rangi Trust v Genesis Power Ltd²⁴.

2. Skydive's environment and its operations

2.1 The airstrip and its surrounds

- [23] The airstrip is located west of State Highway 6 as that road runs south along the lake from Frankton to Kingston. Access to the airstrip is gained by the main entrance to the Remarkables Station which has its homestead and principal farm buildings at Homestead Bay to the southwest of the airstrip. The Skydive base is about 500 metres from the highway at the end of a shelterbelt of pines and the airstrip runs on an east-west alignment from the base.
- [24] To the north and west of the airstrip, and between it and Lake Wakatipu the topography rises to a lumpy tableland on which past glacial processes are more obvious. At the southern end of the tableland is a rounded high point, with some exposed schist

Ngati Rangi Trust v Genesis Power Ltd [2009] NZRMA 312 at [23] per Ellen France J and at [49] per Chambers J.



Minister of Conservation v Kapiti Coast District Council (1994) 16 ELRNZ 234, [1994] NZRMA 385 at [8].

Environmental Defence Society v Mangonui County Council [1989] 3 NZCR 257 at [260]; [1989] 13 NZTPA 202,

²¹ Section 104(1)(b) RMA.

Shirley Primary School v Telecom Mobile Communications Ltd [1999] NZRMA 66 at [121].

Shirley Primary School v Telecom Mobile Communications Ltd [1999] NZRMA 66 at [122].

outcrops called Jacks Point. That hill has given its name to a large zone and development between the Lake and the State Highway in the Jacks Point Zone. The Jacks Point development at present contains more than 200 houses (there are plans for more), and connecting roads. It also has a range of recreational facilities²⁵: an 18 hole golf course and clubhouse, a series of walking and cycling tracks, extensive ecological areas, sports fields, tennis courts and a playground.

[25] Noise from the existing and future Skydive operations is a central issue of concern to the neighbouring Jacks Point residents, the Jacks Point Golf Club, to the nearby Lakeside Estate residents and to the developers of Henley Downs. There are concerns about aircraft-generated noise both from aircraft on the ground when idling and taxi-ing, and when taking off and landing. Some of the objectors also complained of noise generated by the skydivers "whooping and hollering" as they descended.

2.2 Skydive's existing operations

[26] Skydive was New Zealand's first professional tandem skydiving operation²⁶ when it commenced in 1990. It has grown since then to become an important part of Queenstown's appeal as an adventure destination. Its Managing Director, Mr L Williams, wrote, with justifiable pride, of its safety policies and procedures and of the awards Skydive has won²⁷. In 2007 the company was the Supreme Winner in the New Zealand Tourism Awards²⁸. Including its Queenstown office, Skydive employs 65 to 70 staff during the peak (summer) season²⁹.

[27] Skydive's facilities on the site are modern and well-maintained. They include a large operations building which includes a reception area, offices, and a large floor in a hangar-like space for packing parachutes and for other aspects of the skydiving experience. A smaller building to the south of the carpark provides a tea-room and toilets. To the north of the main building is a concrete apron, although passengers usually board aircraft on the airstrip further to the north again.

[28] At the time of the application and section 87F report³⁰, Skydive was using both a Cessna Supervan 900 (a "Supervan", and a Cresco 750 aircraft. It has since stopped³² using the Cresco aircraft and now uses two Supervans, each of which can carry up to 19 passengers.

W A Baker, evidence-in-chief para 23 [Environment Court document 14].



J G Darby, evidence-in-chief para 4.8 [Environment Court document 12]; S J Dent, evidence-in-chief para 4.101 [Environment Court document 20].

L Williams, evidence-in-chief para 2 [Environment Court document 8].

L Williams, evidence-in-chief paras 2-4 [Environment Court document 8].

L Williams, evidence-in-chief para 4 [Environment Court document 8].

²⁹ T. Williams avidence in chief para 4 [Environment Court document 0].

L Williams, evidence-in-chief para 11 [Environment Court document 8].

W A Baker, evidence-in-chief para 23 [Environment Court document 14].

A modified Cessna Carayan.

[29] The "Supervan 900" is 12.7 metres (42 feet) long with a 15.88 metre (52 feet) wingspan. In the lay opinion of a nearby resident, Mr C G Geddes who is a party to this proceeding, the aircraft has a significant "presence" for persons in the vicinity when within 500 feet of the ground on either takeoff or landing³³.

[30] Aircraft generated noise received on the golf course is considerably greater than the noise level suggested for the residential lots and sites for accommodation. Other existing recreational facilities near to the western end of runway or the east-west flight path, such as the sports grounds, the playground and some of the walking and biking tracks are also affected by aircraft noise and presence. A proposed lodge ("The Lodge site") and a large lot residential area known as Lot 14 'The Preserve' are located close to the east-west flight path and are similarly affected. (See the site plan which is Attachment 1).

Take-off is always to the west along a slightly downward sloping grass runway. The current flight path then climbs westward over the rising ground of the golf course. With the Supervans the take-off heading is maintained until clear of the tableland and the aircraft is over Lake Wakatipu. On takeoff the flight path takes the Supervans over, or up to 50 metres south of, Tee 3 and Hole 3 and the edge of a residential enclave (not yet fully developed) known as 'The Preserve' on the Jacks Point Golf Course. The typical observed average heights at which those points are crossed was (from a small sample size):

Tee 3	226 feet above ground level ("feet agl") ³⁴ 308 feet agl ³⁵
(Average)	331 feet agl
Hole 3	468 feet agl ³⁶ 324 feet agl ³⁷
(Average)	396 feet agl
The Preserve	487 feet agl ³⁸ 388 feet agl ³⁹ <u>378</u> feet agl ⁴⁰
(Average)	418.5 feet agl

L Sowerby, Further Report 31 January 2014 Table 4 [Environment Court document 34].



C G Geddes, supplementary evidence 16 April 2014 para 13 [Environment Court document 37].
 C G Geddes, evidence-in-chief 17 December 2013 para 10 [Environment Court document 29].

L Sowerby, Further Report 31 January 2014 Table 4 [Environment Court document 34].

³⁶ C G Geddes, evidence-un-chief 17 December 2013 para 10 [Environment Court document 29].

L Sowerby, Further Report 31 January 2014 Table 4 [Environment Court document 34].

C G Geddes, supplementary evidence 16 April 2014 App 1 [Environment Court document 29].

C G Geddes, supplementary evidence 16 April 2014 App I [Environment Court document 37].

The minimum measured heights (recorded by any party) of the aircraft above those points on takeoff were respectively 285 feet agl⁴¹, 314 feet agl⁴², 344 feet agl⁴³.

[32] The aircraft⁴⁴ then climbs following a route generally over the lake and along the face of The Remarkables to heights (above the airstrip) of 9,000ft, 12,000ft and 15,000ft where, at each level, skydivers leave the aircraft. The ascent in a Supervan takes some 15 minutes⁴⁵. A reducing level of aircraft noise can be heard over the general Jacks Point area during the climb.

[33] The aircraft descent takes about 10 minutes⁴⁶. The aircraft approaches the runway more often from the south over Homestead Bay making a low level right hand turn onto the runway, but sometimes from the west over the lake and the golf course. Aircraft noise levels received at the sensitive spots mentioned during this period of the flight do not seem to attract significant adverse reaction except on the golf course on the fewer occasions when the approach is from the west.

[34] As for the height of Skydive's aircraft above neighbouring land on landing approach, Captain Sowerby calculated the theoretical height maximum of the aircraft above key points on landing flight path 'C' which curves around on the inside (the southeastern side) of the trig on Jacks Point and gave one set of measurements of height above ground on that landing path. Mr C G Geddes' evidence was rather more useful about heights on the less frequently used direct flight path (the reciprocal of the takeoff flight path). He recorded the average approach heights when measured from directly below (or slightly to the north, but abeam to the aircraft as follows.

		Approach
1st Green	Height ft 148	
12/12/2013		
		154
		115
17/12/2013		236
13/04/2014	1108	102
	1130	93
	1200	84
	1224	162
Average Minimum		129
		84

C G Geddes, supplementary evidence 16 April 2014 App 1 [Environment Court document 29].

Compiled from C G Geddes, Statement 17 December 2013 para 10 [Environment Court document 29] and Supplement Statement 16 April 2014 [Environment Court document 37].



L Sowerby, Further Report 31 January 2014 Table 4 [Environment Court document 34].

C G Geddes, supplementary evidence 16 April 2014 App I [Environment Court document 29].

Broom this point all references to aircreft will be to Supervans unless we specifically stated

From this point all references to aircraft will be to Supervans unless we specifically state otherwise.

⁴⁵ C W Day, evidence-in-chief Figure 2 [Environment Court document 9].

⁴⁶ C W Day, evidence-in-chief Figure 2 [Environment Court document 9].

⁴⁷ C G Geddes, Statement 17 December 2013 paras 5 and 6 [Environment Court document 29].

⁴⁸ Transcript 5 May 2014 p 41 lines 20 to 27.

2nd Fairway				
12/12/2013	295			
	305			
1000	322			
16/12/2013		390		
17/12/2013		223		
		371		
Average		318		
Minimum		223		
2nd Green				
16/12/2013		308		
		285		
17/12/2013		177		
Average	257			
Minimum	177			
3rd Tee				
17/12/2013	17/12/2013			
Preserve Road				
17/12/2013		512		
08/04/2014	Time			
	1433	288		
	1523	714		
Average	508			
Minimum	288			

- [35] We find that, on the balance of probabilities, Mr Geddes was correct when he said⁵⁰ that Skydive's aircraft are "consistently flying below 500ft over ground at all of the locations at which height measurements were made".⁵¹.
- [36] We return to the jettisoned skydivers: after they leave the aircraft they plummet in freefall for between 25 and 60 seconds depending on the drop height, and then, popping their parachutes, circle their way down for 5 minutes⁵² over the general area around the runway landing near their point of departure beside the runway. Popping of the parachutes and the excitement of the adventure is clearly audible on occasions from the ground.
- [37] The drop zone, centred a few metres from Skydive's buildings on site, is one of the two approved by Civil Aviation Authority within the Wakatipu Basin.
- [38] At present, on relatively calm days an average of 16-20 flights (32-40 movements) occur from the airstrip. That is because the number of potential

C G Geddes, supplementary evidence 16 April 2014 para 14 [Environment Court document 37]. Section 87F report page 15 para 4.



⁵⁰ C G Geddes, supplementary evidence 16 April 2014 para 14 [Environment Court document 37].

parachutists, various logistical difficulties, and/or the weather prevent the 35 flights allowed in the existing resource consent. The highest monthly average number of flights per day in the year from 1 November 2011 to 31 October 2012 was 21.63 in January 2012⁵³. In 2009 the number was slightly higher than in recent years.

2.3 The Jacks Point development

[39] The central part of the Jacks Point Zone has been substantially developed with subtle landscaping in a palate of (predominantly) native species with extensive (exotic) grassed areas, and contains neighbourhoods of houses, built with a limited range of materials (often schist) and colours which are carefully sited to fit into the landscape and gain maximum views and solar advantage. The residential development looks superior (and expensive — there is not much sign of affordable housing).

[40] Mr J G Darby, a director of various companies which are members of the Jacks Point Interests, and a practicing landscape architect, wrote that⁵⁴:

The public and recreational amenities were an essential part of the vision for the JPZ. These recreational activities include the numerous pedestrian, equestrian and cycle trails that have been constructed along with the tennis courts, golf course, playing fields constructed south of the Clubhouse and the Lake Tewa recreational area for kayaking and fishing A new community playground is also currently being constructed within the zone.

[41] He described⁵⁵ the costs of creating the golf course in rather general terms⁵⁶:

A golf course is a land use that provides open space protection for the community. Leaving the issue of land cost aside, championship golf courses typically cost between \$10 million and \$12 million to construct and approximately \$1.5 million per annum to maintain. Without the associated visitor, residential and commercial development, a championship golf course would not be viable in terms of capital investment and annual operating costs.

[42] As for the existing noise environment, Dr J W Trevathan, the acoustic expert called by Jacks Point Interests, wrote⁵⁷:

... ambient noise in the area includes distant traffic noise at some locations, other aircraft noise both distant and flying over, sound associated with the natural environment, residential activities and with the golf course (producing noise levels in the order of 30 to 50 dB LA_{co}).

He added58:

Subjectively however, I was surprised at how distinctive and audible the noise from the aircraft at altitude was, ...

[43] We heard further subjective evidence on the effect of Skydive's existing operations from Mr P M Tataurangi, a professional golfer and consultant golf course

J W Trevathan, evidence-in-chief para 4.19 final bullet point [Environment Court document 11].



³ Ex 8.1

J G Darby, evidence-in-chief para 4.8 [Environment Court document 12].

J G Darby, evidence-in-chief para 6.7 [Environment Court document 12].

We assume to avoid breaching commercial sensitivities.

J W Trevathan, evidence-in-chief para 4.19 final bullet point [Environment Court document 11].

designer. To set the context he described the sense of drama he said is provided by good courses⁵⁹, and then he described his experience at Jacks Point⁶⁰. He concluded⁶¹:

In Now Zealand the remote coastal locations of Kauri Cliffs and Cape Kidnappers have this [dramatic] quality. Jack's Point is in this league but in the grandeur of a mountain/lake setting. The layout enjoys a seamless relationship with the natural surrounds traversing several different environments and giving the golfer the sense at times of being atop one of the surrounding peaks and throughout most of the round of golf at one with nature.

[44] In relation to the existing Skydive operations (under the 1997 consent) he wrote⁶²:

However, unfortunately, I was very surprised to find that encountering low flying aircraft on the opening holes is a part of the golfing experience at Jack's Point. Not only are the aircraft a noise disturbance but for visitors the planes are so low above their heads as to seem a hazard that makes them uncomfortable. An integral part of golf etiquette is to play without undue delay; however when aircraft are flying at such a low altitude on your intended line of play, this causes most players to back-off and wait until the plane has gone. I have also had international guests tell me their experience was compromised by the low flying aircraft. They have all said they were looking forward to a peaceful round at the world-class golf course and did not feel the regularity of the aircraft flying low overhead was commensurate with that.

Cross-examined by Mr Bartlett about how Skydive's flying operations affects the quality of the day and the round of golf⁶³ Mr Tataurangi answered⁶⁴:

... By pure measure of holes two, three and five, when the aircraft is overhead and the noise is, ... at the loudest, ... by percentage, you know, there's three holes out of, of the course of 18 and by average it's 45 minutes to an hour of playing time of those particular holes. However, ... I guess the experience had on those particular holes, because they're the starting holes of the golf course, can have an effect on setting the scene for the golfing experience and because you're aware of them in such a obvious manner in your opening five holes of the golf course, ... therefore you are aware of the activity the whole 18 holes ... which you're playing.

[45] Mr Bartlett submitted at the hearing⁶⁵ that because Mr Tataurangi wrote⁶⁶ that "... golf is more than just a professional career to me, it is a passion and why I play socially as well as professionally" he was "totally disqualified [from] presenting himself as an independent advisor to the court". We do not accept that. Mr Tataurangi gave evidence about the golf course and the potential effects of Skydive's proposal on it and its users, not about the game of golf in itself. He gave evidence about his experience⁶⁷ and knowledge that was not challenged, and he certified⁶⁸ that he had read, understood and complied with the code of conduct in the Environment Court Practice Note. He

P M Tataurangi, evidence-in-chief paras 6-9 [Environment Court document 15].



P M Tataurangi, evidence-in-chief para 13 [Environment Court document 15].

P M Tataurangi, evidence-in-chief para 14 [Environment Court document 15].

P M Tataurangi, evidence-in-chief para 15 [Environment Court document 15].

P M Tataurangi, evidence-in-chief para 16 [Environment Court document 15].

⁶³ Transcript p 447.

Transcript p 448.

⁶⁵ Transcript p 281.

P M Tataurangi, evidence-in-chief para 13 [Environment Court document 15].

P M Tataurangi, evidence-in-chief paras 2-4 [Environment Court document 15].

gave his answers to questions in a considered and dispassionate manner. We are prepared to accept his opinion evidence and give it some weight.

[46] Mr A J Tod, an expert⁶⁹ on golf management, covered the subjects of golf tourism within New Zealand, the development of New Zealand golf tourism, golf tourism marketing, golf tourism development in the Queenstown Lakes and Central Otago regions, the role of Jacks Point, and the impact of Skydive's current operation and of its proposed consent. As for the characteristics of the Jacks Point Golf Course, he wrote⁷⁰:

Jacks Point is a significant golf course for the Queenstown region. Feedback I receive from any clients who have played there is that it is one of the Top 4 courses that they play in New Zealand. The design features of Jacks Point have been carefully considered to make the most of the surrounding landscape with a journey around the course, bringing up a number of delightful experiences and surprises on the way.

I agree with the description of the golfing journey outlined in Mt Tataurangi's evidence. It is this experience and the stunning views and the condition of the golf course which are often commented on being some of the best for any golf course in New Zealand, and an underrated player on the world stage⁷¹.

Distinguished golf writer, Mike Nuzzo, believes that there are three types of golfer. Those who relish the playing challenge; those who revere the courses environment; and those who place the enjoyment-factor above all else⁷². In my experience (both as a player and the operator of guided golf tours in New Zealand) Jacks Point is one of the courses in New Zealand that ticks all the boxes for these three criteria.

2.4 The noise from aircraft

[47] Aircraft generate noise while idling, taxi-ing, taking off and landing, and in the air. As for the assessment of that noise, the court was greatly assisted by the experienced acoustic experts called by the parties. Skydive engaged Mr C W Day of Marshall Day Acoustics Limited who produced evidence-in-chief⁷³ and a rebuttal statement⁷⁴. The section 274 parties engaged Dr J W Trevathan of Acoustic Engineering Services Limited. He produced evidence-in-chief⁷⁵, evidence-in-reply⁷⁶ and a supplementary statement⁷⁷.

[48] The council engaged Dr S Chiles of Chiles Limited (and a contractor to URS New Zealand Limited) who also provided a statement of evidence. He gave a subjective, but independent over-view of noise from Skydive's current operations⁷⁸:

S Chiles, evidence-in-chief para 29 [Environment Court document 10].



⁶⁹ A J Tod, evidence-in-chief paras 2.1 to 2.7 [Environment Court document 16].

A J Tod, evidence-in-chief paras 8.1 to 8.3 [Environment Court document 16].

http://www.travelgolf.com/blogs/jason.scott/2013/03/12/reflecting-upon-my-recent-golf.

Mike Nuzzo — Golf Architecture — A Worldwide Perspective.

⁷³ C W Day, evidence-in-chief [Environment Court document 9].

C W Day, rebuttal evidence [Environment Court document 9A].

J W Trevathan, evidence-in-chief [Environment Court document 11].

J W Trevathan, evidence-in-reply [Environment Court document 11A].

J W Trevathan, supplementary evidence [Environment Court document 11B].

On calm weather days during my two site visits, I have experienced quiet periods around Jack's Point. Much of the area is at least partly screened from the nearby State Highway, and at times there are few anthropogenic sounds audible. Under these conditions, the skydiving plane can be heard for the majority of its ascent; the parachutes can be heard as they open, and some of the parachutists can be heard shouting in the air. At other times, when there is activity on the ground nearby, these sounds from the air are generally not noticeable, although could still be heard if the listener is focused on them. For example, in some areas around the club house the air conditioning plant is relatively noisy and dominates that environment. Elsewhere, sounds such as from grass mowing are louder than sounds from parachutists. The distinctive sounds from the plane, parachutes and parachutists in the air are all noticeable at times and do affect the amenity in Jacks Point, but they are all at relatively low sound levels.

As the Skydive activity already exists, noise measurements were made of the current operations by Mr Day and by Dr Trevathan.

[49] Each aircraft idles while on the ground during the loading of the passengers. Depending on the type and orientation of the aircraft, noise levels at the closest residential boundaries (e.g. at 39 Hackett Road, Jacks Point) at times exceeded levels considered acceptable by all the parties and their acoustic experts because of the idling noise from the Supervans. During taxi-ing aircraft generated noise levels at the closest residential boundaries does at times, as the aircraft faced those sensitive locations, also exceed those suggested acceptable noise levels. The occurrence is brief and depends on the aircraft being flown.

[50] Dr Trevathan reported that the noise level at the closest residential site—39 Hackett Road (as yet unbuilt on)—from 35 flights of a Supervan is 58 dB L_{dn} with ground idling dominating ⁷⁹. If compared to the district plan noise limits Dr Trevathan said ground idle noise from the Supervan when received at 39 Hackett Road exceeds the daytime limit by 10 dB for 4 hours per day.

[51] At the "Jacks Point Residential" location on Jacks Point Rise, Dr Trevathan measured noise⁸⁰ from the Supervan at 53 dB $L_{\rm du}$. Mr Day measured aircraft noise levels at "The Village" at 78 dB $L_{\rm eq}$ from the Supervan 900.

[52] On the golf course Dr Trevathan measured aircraft noise levels for take-off that followed a track over the golf course 81 of 85 dB L_{max} at hole 2 and 80 dB L_{max} at hole 5. Landing (reversing the same track) produced noise levels of 88 dB L_{max} at hole 2 and 85 dB L_{max} at hole 5. Take-off noise that would disrupt speech lasted 20 seconds and during landing it lasted for 10 seconds. Background noise levels were 30–50 dB.

[53] We have recorded that golfers and others engaged in outdoor activities in the area now experience a fly over event on average 20-40 times a day (i.e. 10-20 flights per day). In a 12 hour day that is an event each 18-36 minutes on average. On the golf course aircraft noise levels are significant with maximum levels of up to 88 dB L_{Amax}.



J W Trevathan, evidence-in-chief para 4.20 bullet point 1 [Environment Court document 11],

J W Trevathan, evidence-in-chief para 4.20 bullet point 3 [Environment Court document 11].

J W Trevathan, evidence-in-chief para 4.20 bullet point 4 [Environment Court document 11].

Three holes of the golf course are particularly affected and if each takes about 15 minutes to play, a golfer can expect (at most) between 1 and 3 fly-overs while on those three holes. Those figures are reduced by the facts that some landings use a flight path that avoids the rise and the tableland by coming in from the south (over Homestead Bay) and that due to various factors flights often do not turn around so frequently. This is the existing condition that the golf course and its members and visitors come to, so it is part of the environment for them.

At the Lodge site Dr Trevathan measured⁸² aircraft noise levels of 48 or 51 dB L_{da} depending on the flight path. Mr Day reported 85 dB L_{eq} at this location. At "The Preserve" (Lot 14) Dr Trevathan measured 55 or 51 dB Ldn again depending on the flight path. The council's noise expert, Dr Chiles, did not make any onsite aircraft noise measurements and chose to rely on those made by Dr Trevathan and Mr Day. Dr Chiles also relied on the modelling of aircraft noise generation carried out by those two experts.

The court visited the site, and in particular the locations where the aircraft **[55]** generated noise was of greater concern, while Skydive operations were being carried out. On the golf course the aircraft take-off was very noticeable and distracting for the 20 seconds or so that the aircraft travelled over the course. The combination of noise, speed, the size of the aircraft and its low path made the temporary event intimidating when directly beneath the flight path.

2.5 The 1997 resource consent

The 1997 consent expressly limits the operation to a maximum of two aircraft and 35 flights per day. The applicant claims that the 1997 consent contains no limitation on aircraft size or type, no limitation on take-off or landing flight paths, no specific noise standards to be complied with, and no termination condition. In fact previous aircraft (smaller Cessna 185s) operated by the company followed a climb path that turned right after take-off and climbed to the north⁸³ because of a lower climb rate and the need to avoid the rising ground of the tableland. These earlier aircraft had a different "noise signature" - they were noisier in the air. It seems to us that the flight path described by Mr Day which involved a right-turn to the north over or before the golf clubhouse might be an implicit part of the 1997 consent, but for the purpose of this decision we accept the applicant's assertions.

Mr Williams⁸⁴ advised that with two Supervans, five flights can be completed in an hour. In ideal conditions and with demand he said 7-8 flights an hour could be We understand this frequency requires operating the planes near their maximum capability and no holdups on the ground and possibly climbing to levels lower than 15,000ft, and in fact ideal conditions arise relatively infrequently as the tables of daily flights showed.

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⁸² J W Trevathan, evidence-in-chief para 4.20 bullet point 5 [Environment Court document 11].

⁸³ C W Day, rebuttal evidence para 3.3 and Figure 3 [Environment Court document 9A]. 84

3. The relevant objectives, policies and rules and the noise standard

- 3.1 The objectives, policies and rules in the district plan
- [58] Three chapters⁸⁵ in the district plan are relevant to these proceedings. They are:
 - Chapter 4 District-wide
 - Chapter 5 Rural Areas
 - Chapter 12 Special Zones

Chapter 4 (District-wide issues)

[59] Few of the district-wide objectives and policies are relevant, but some in subchapter 4.4 (recreation) are. The first recreation objective⁸⁶ provides for reserves and is not relevant. The second district-wide recreation objective relates to the environmental effects of recreation. It is⁸⁷ to undertake recreational activities or build and use facilities so as to avoid, remedy or mitigate "significant adverse effects" on the environment or on "the recreation opportunities" available in the district. The most relevant implementing policy is ⁸⁸:

- 2.1 To avoid, remedy or mitigate the adverse effects of commercial recreational activities on the natural character, peace and tranquillity of the District.
- [60] The third recreation objective is ⁸⁹ to use open space and recreational areas effectively when meeting the needs of the district's residents and visitors. The relevant implementing policies are ⁹⁰:
 - 3.1 To recognise and avoid, remedy or mitigate conflicts between different types of recreational activities, whilst at the same time encouraging multiple use of public open space and recreational areas wherever possible and practicable.
 - 3.3 To encourage and support increased use of private open space and recreational facilities in order to help meet the recreational needs of the District's residents and visitors, subject to meeting policies relating to the environmental effects of recreational activities and facilities.

Chapter 5 (Rural Areas) of the district plan

[61] Outdoor recreational activities, such as skydiving, are contemplated within rural areas of the district (which include the Rural General Zone). The resource management issues⁹¹ for rural areas include "Open Space and Recreation" and then refer back to the Chapter 4 (District Wide) objectives and policies relating to that issue. We have already quoted the relevant policies in that chapter. The general rural "Character and

Para 5.1, Chapter 5 Rural Areas [QLDP p 5-1].



The divisions in district plan are called "sections" but to avoid confusion with the RMA's provisions, we will call them "chapters".

Objective (4.4.3) 1 [QLDP p 4-24].

⁸⁷ Objective (4.4.3) 2 [QLDP p 4-25].

⁸⁸ Objective (4.4.3) 2 [QLDP p 4-25].

⁸⁹ Objective (4.4.3) 3 [QLDP p 4-26].

⁹⁰ Objective (4.4.3) 3.1 to 3.3 [QLDP p 4-26].

Landscape" and "Rural Amenity" objectives in Chapter 5 have policies to "allow for" and "ensure" a range of activities including commercial recreation activities 94. The other important and relevant objective with implementing policies for rural areas is to avoid, remedy or mitigate adverse effects of activities on rural amenity 95.

A more specific objective — called a "purpose" — for the Rural General Zone states⁹⁶:

The purpose of the Rural General Zone is to manage activities so they can be carried out in a way

- protects and enhances nature conservation and landscape values;
- sustains the life supporting capacity of the soil and vegetation;
- maintains acceptable living and working conditions and amenity for residents of and visitors to the Zone; and
- ensures a wide range of outdoor recreational opportunities remain viable within the Zone.

The first three parts of the purpose are subsumed in the earlier statement of objectives and policies for all rural areas. The fourth bullet point is the only place where the maintenance of outdoor recreational opportunities is expressly identified as an objective of the zone.

- The environmental results anticipated in these areas are (relevantly)⁹⁷: [63]
 - (viii) Avoid potential land uses and land management practices ... which create unacceptable or significant conflict with neighbouring land based activities, including adjoining urban
 - (xi) Retention of a range of recreation opportunities.

Chapter 12 (Resort Zones)

We have described how the land adjacent to the airstrip is in a large-scale development called Jacks Point. It is part of the Jacks Point Zone - one of the resort zones which the district plan recognises as having potential to contribute to visitor, employment and economic development within the District. The Resort Zones provide for golf courses and a range of outdoor and indoor sporting and recreational activities. Hotel and other visitor accommodation along with support facilities and services are proposed for Jacks Point. The Resort Zones recognise the special amenities of the rural area in which the development is located and provides for the ongoing implementation of the activities of the resorts.



Objective (5.2) 1 [QLDP p 5-2].

⁹³ Objective (5.2) 3 [QLDP p 5-4]. 94

e.g. Assessment Matter xvi [QLDP p 5-36].

⁹⁵ Objective (5.2) 3 [QLDP pp 5-4 and 5-5]. 96

Para 5.3.1 Zone Purposes [QLDP p 5-9].

⁹⁷ Para 5,2.1 [QLDP p 5-8].

[65] The objective and relevant implementing policies for the Jacks Point Zone are:

Objective 3 - Jacks Point Resort Zone 98

To enable development of an integrated community, incorporating residential activities, visitor accommodation, small-scale commercial activities and outdoor recreation — with appropriate regard for landscape and visual amenity values, servicing and public access issues.

Policies

- 3.4 To require development to be located in accordance with a Structure Plan to ensure the compatibility of activities and to mitigate the impact on neighbouring activities, the road network and landscape values.
- 3.5 To control the take-off and landing of aircraft within the zone.
- 3.9 To ensure that development within the sensitive areas of the Zone results in a net environmental gain.
- [66] More detail as to what Jacks Point is about can be gained from the Zone Purposes at the start of the Resort Rules⁹⁹. The relevant part of the purpose states¹⁰⁰:

The purpose of the Jacks Point Zone is to provide for residential and visitor accommodation in a high quality sustainable environment comprising of two villages, a variety of recreation opportunities and community benefits, including access to public open space and amenities.

In addition, the zoning anticipates an 18-hole championship golf course, a luxury lodge, small-scale commercial activities, provision for educational and medical facilities, craft and winery activities, outdoor recreation and enhanced access to and enjoyment of Lake Wakatipu.

The rules for the Rural General Zone: Airports

[67] As stated earlier, resource consent for the airstrip as an 'airport' is needed for a discretionary activity. That is under Rule 5.3.3.3 which states (relevantly):

5.3.3.3 Discretionary Activities

The following shall be Discretionary Activities, provided that they are not listed as a Prohibited or Non-Complying Activity and they comply with all of the relevant Zone Standards; and they have been evaluated under the assessment criteria in rule 5.4.

v Airports

...

xi Any activity, which is not listed as a Prohibited or Non-Complying Activity and which complies with all the relevant Zone Standards, but does not comply with one or more of the



⁹⁸ QLDP pp 12-5 and 12-6.

⁹⁹ Para 12.2 [QLDP p 12-9],

Para 12.2.1 [QLDP p 12-9].

Site Standards, shall be a Discretionary Activity with the exercise of the Council's discretion being confined to the matter(s) specified in the standard(s) not complied with.

[68] The most relevant zone standard 101 states (relevantly):

v Noise

- (a) Sound from non-residential activities measured in accordance with NZS 6801:2008 and assessed in accordance with NZS 6802:2008 shall not exceed the following noise limits at any point within the notional boundary of any residential unit, other than residential units on the same site as the activity.
 - (i) Daytime (0800 to 2200 hours) 50 dB LAeq (15 min)
- (b) Sound from non-residential activities which is received in another zone shall comply with the noise limits set in the zone standards for that zone.
- (d) The noise limits in (a) shall not apply to sound associated with airports ... Sound from these sources shall be assessed in accordance and comply with the relevant New Zealand Standard, either NZS 6805:1992, or NZS 6808:1998. For the avoidance of doubt the reference to airports in this clause does not include helipads other than helipads located within any land designated for Aerodrome Purposes in this Plan.

In effect the district plan rules for the Rural Areas set 102 maximum noise levels of 50 dB $L_{Aeq(15min)}$ during daytime, but they exclude noise associated with an airport. Instead assessment of airport noise is to be in accordance with NZS 6805:1992 103 and the airport noise levels are to comply with the standard. Sub-paragraph (b) of that rule provides that sound from the airport which is received at Jacks Point must comply with the noise limits set in the zone standards for the Jacks Point zone.

[69] Mr Bartlett submitted in respect of the rule and the standard and their application 104:

- 59. The District Plan identifies the noise standard that is to be applied. The application seeks no departure from that standard. To the extent that NZS6805 contains provision for flexibility, as has been described in the evidence, Mr Day has proposed that the flexibility be applied in a way that restricts the applicant.
- 60. In the absence of any means of avoiding the District Plan rule which sets no standards for Open Space, Mr Brabant seeks to persuade the Court that a separate amenity issue arises within which the Court may again consider the noise issue, and potentially impose a noise standard unfettered by the provisions of the District Plan.
- 61. Noise is a component of amenity. The District Plan cannot be read in a way that enables submitters to have two bites — one on the basis that there is a rule and another on the basis that there is not a rule.
- 62. NZS6805 applies a "bucket of noise" approach. The District Plan adopts NZS6805 which does not treat flight frequency as a separate issue for assessment.

Skydive, Closing submissions paras 59-64 [Environment Court document 25].



Rule 5.3.5.2v [QLDP pp 5-20 and 5-21].

¹⁰² Rule 5.3.5.2 v (a) [QLDP pp 5-20 and 5-21].

Rule 5.3.5.2 v (d) [QLDP p 5-21].

- 63. If the District Plan or the framers of the Jack's Point zone had wanted to establish special noise standards to apply to outdoor spaces for that part of the district alone, they could have done so.
- 64. It would be inappropriate for the Court in the context of a resource consent application to invent an outdoor noise standard in a way that created anomalies with other parts of the district.
- [70] Those submissions are incorrect on the key assertions as a matter of simple interpretation of the rules. An airport, as defined in the district plan, is one of the situations which the district plan states is a discretionary activity. The provisos at the start of rule 5.3.3.3 that is all the words after "... provided that ..." add to the tests for the activities identified as discretionary.
- [71] In other words every activity listed as a discretionary activity must <u>also</u> meet three sets of conditions as set out in the introductory words of rule 5.3.3. A listed activity is a discretionary activity if:
 - (1) it is not listed as a prohibited or non-complying activity elsewhere in the district plan; and
 - (2) it complies with all the relevant zone standards; and
 - (3) it has been evaluated under the assessment criteria in rule 5.4.
- [72] In relation to the three preconditions for discretionary status we record first that airports are not listed as a prohibited or non-complying activity.
- [73] If Mr Bartlett's submission was correct then the council's discretion would be limited to the matters in the Zone Standard. But if that was the case then the structure of rule 5.3.3.3 and especially sub-rule xi (quoted above) show that airports would not have been listed separately in sub-rule v. Instead sub-rule xi would have applied to airports in addition to commercial recreation activities.
- [74] There are two relevant sets of assessment matters for the district's rural areas. They are headed respectively 105;
 - xv Discretionary Activity Commercial Recreational Activities (other than on the Surface of Lakes and Rivers)

and

xvii Discretionary Activity - Airports

Their requirements are considered in the next part of this decision where we consider the actual and potential effects of the proposed activity. However, we hold that the discretion is not confined to assessment under those provisions. Rather the assessment



Queenstown Lakes District Council - District Plan pp S-35 and 5-36.

informs the discretion, and compliance with the standard is a bottom line. Depending on the circumstances stronger conditions may be imposed or consent refused.

[75] We hold that because the operation of the airstrip is a fully discretionary activity and not a restricted discretionary activity, any actual or potential adverse effect, may be considered in the overall weighing exercise under section 104 RMA. In particular the effects of the airport are not confined to noise effects (to be assessed primarily under NZS 6805) but include number of flights and their effects on persons underneath (or nearly so) the flight paths.

The rules for the Jacks Point Zone

[76] Similar rules apply to the Jacks Point Zone¹⁰⁶, but curiously in this case there is no requirement to comply with the standard. It refers only to the assessment of airport noise. So, on the face of it, the planes' compliance with the airport noise standard in the Jacks Point Zone is not required. That leaves an absence of specific airport noise standards in the Jacks Point Zone.

The rules for rural areas — commercial activities

[77] The path in the district plan directing that a resource consent is also required for the Skydive operations as a restricted discretionary activity is more tortuous because the Rural Areas rules do not have a separate list of restricted discretionary activities. The relevant rule is simply headed "Discretionary Activities" as quoted above. We have already referred to sub-rule (v) which makes "Airports" a discretionary activity 108. Rule 5.3.3.3 xi 109 makes the commercial recreation a limited discretionary activity.

- [78] Turning to the Site Standards we find (relevantly)¹¹⁰:
 - ix Commercial Recreation Activities (other than on the surface of lakes and rivers)

No commercial recreational activities shall be undertaken except where:

- (a) The recreation activity is outdoors;
- (b) The scale of the recreation activity is limited to five people in any one group.

[79] Since the matter not being complied with in the Skydive operation is that more than five people (in fact up to 19) may be in any one group, it appears the council's discretion (and ours in this direct referral) in respect of the limited discretionary activity is limited 111 to the effects of the extra people in the groups.

Rule 5.3.3.3 xi [QLDP p 5-13].



Rule 12.2.5.2 ix (a) and (e).
QLDC Plan p 5-12.
QLDC Plan p 5-13.

QLDC Plan p 5-13.

Rule 5.3.5.1 [QLDP p 5-18].

3.2 The New Zealand Standard on airport noise management

[80] We have noted that the New Zealand Standard for airport noise management and land use planning (NZS 6805:1992) needs to be complied with according to the district plan rules. NZS 6805 states:

PART 1 AIRPORT NOISE MANAGEMENT USING THE AIRNOISE BOUNDARY CONCEPT

1.1 Scope

1.1.1

This Standard is for use by territorial or regional government for the control of airport noise. It establishes maximum acceptable levels of aircraft noise exposure around airports for the protection of community health and amenity values whilst recognizing the need to operate an airport efficiently. The Standard provides a guide for territorial authorities wishing to include appropriate land use controls in their district plans, as provided for in the Resource Management Act 1991. In this Standard the words "Airport" and "Aerodrome" are synonymous.

1.1.2

The Standard uses the Airnoise Boundary concept as a mechanism for local authorities to establish compatible land use planning and to set limits for the management of aircraft noise at airports where noise control measures are needed to protect community health and amenity values.

1.1.3

The approach advocated is a recommendation for the implementation of practical land use planning controls and airport management techniques to promote and conserve the health of people living and working near airports, without unduly restricting the operation of airports.

1.1.4

The Standard provides the minimum requirement needed to protect people from the adverse effects of airport noise. A local authority may determine that a higher level of protection is required in a particular locality, either through use of the Airnoise Boundary concept or any other control mechanism [underlining added].

The wording in paragraph 1.1.4 of the standard reinforces that compliance with it is a bottom line for consent. As Mr Day acknowledged in cross-examination¹¹² the standard does not impose "... a reasonable level but a minimum requirement". In certain contexts there may be other factors relating to noise which should be weighed by the local authority (here the court) and stricter noise controls then imposed. A key issue in this case is whether the minimum is adequate in the circumstances.

[81] NZS 6805 continues:

1.1.5

The main features of the recommended method of airport noise management are:

(a) The Standard establishes maximum levels of aircraft noise exposure at an Airnoise Boundary, given as a 24 hour daily sound exposure averaged over a three month period (or such other period as is agreed).



Transcript p 138.

- (b) The Standard establishes a second, and outer, control boundary for the protection of amenity values, and prescribes the maximum sound exposure from aircraft noise at this boundary.
- (c) In establishing the Airnoise Boundary, the Standard requires consideration of individual maximum noise levels from aircraft during any proposed night-time operations.
- (d) Noise control measures are necessary when the exposure of the residential community, determined according to Part 2 of this Standard, exceeds 100 pasques (or an L_{dn} of 65), and may be necessary when the exposure exceeds 10 pasques (or an L_{dn} of 55).
- (e) The Standard prescribes compatible land uses for those areas in the immediate vicinity of the airport. Compatible land uses at different levels of sound exposure are specified in table 1 and table 2.

1.1.6

The measurement of sound around an airport for use in setting the Airnoise Boundary and monitoring to ensure that the limits are not exceeded, is detailed in Part 2 of this Standard.

In this case the district plan contains no Airnoise Boundary or Outer Control Boundary in respect of the airstrip.

[82] The standard continues with some tables giving recommended control measures. These are explained as follows:

1.8 Explanation of tables

C1.8.1

All considerations of annoyance, health and welfare with respect to noise are based on the long term integrated adverse responses of people. There is considerable weight of evidence that a person's annoyance reaction depends on the average daily sound exposure received. The short term annoyance reaction to individual noise events is not explicitly considered since only the accumulated effects of repeated annoyance can lead to adverse environmental effects on <u>public health and welfare</u>. Thus in all aircraft noise considerations the noise exposure is based on an average day over an extended period of time usually a yearly or seasonal average. [Underlining added].

1.8.2

...

Table 1 enumerates the recommended criteria for land use planning within the airnoise boundary i.e. 24 hour average night-weighted sound exposure in excess of 100 Pa^2s (65 L_{do}).

1.8.3

Table 2 enumerates the recommended criteria for land use planning within the outer control boundary i.e. 24 hour average night-weighted sound exposure in excess of 10 Pa²s.



[83] The most relevant table in the NZ Standard is Table 2. It states:

Table 2
RECOMMENDED NOISE CONTROL CRITERIA FOR LAND USE PLANNING INSIDE
THE OUTER CONTROL BOUNDARY BUT OUTSIDE THE AIR NOISE BOUNDARY

Sound exposure Pa ² s (1)	Recommended control measures	Day/night level L _{dn} ⁽²⁾
>10	New residential, schools, hospitals or other noise sensitive uses should be prohibited unless a district plan permits such uses, subject to a requirement to incorporate appropriate acoustic insulation to ensure a satisfactory internal noise environment.	>55
	Alterations or additions to existing residences or other noise sensitive uses should be fitted with appropriate acoustic insulation and encouragement should be given to ensure a satisfactory internal environment throughout the rest of the building.	

NOTE -

- (1) Night-weighted sound exposure in pascal-squared-seconds of "pasques".
- (2) Day/night level (L_{th}) values given are approximate for comparison purposes only and do not form the base for the table.

ľ847 In summary, the Airport Noise Standard NZS 6805:1992 is concerned with land use planning and the management of aircraft noise in the vicinity of an airport, or aerodrome, for the protection of community health and amenity values 113. It establishes a maximum level of aircraft noise exposure of 65 dB L_{dn} at an Airnoise Boundary. The noise level is expressed as a 24 hour daily sound exposure averaged over a three month period (or such other period as agreed). It also establishes a second, and outer, control boundary for the protection of amenity values and prescribes the maximum sound exposure from aircraft at this boundary of 55 dB Ldn. The Standard advises local authorities to show the areas enclosed by these boundaries on the district plan. The consequences of this planning process are that the airport operator is required to manage its operations so that aircraft noise at the boundaries is not exceeded, the aircraft operator is required to keep aircraft noise emissions as low as possible and the local authority should prohibit new residential, schools, hospitals or other noise sensitive uses within the 55 dB L_{dn} noise contour or require acoustic insulation to ensure a satisfactory internal environment.

[85] However, it is important to note first that neither Skydive nor the council has given any indication that they intend to start the full process described in NZS 6805, i.e. to establish an Airnoise Boundary and an Outer Control Boundary for the airstrip on Remarkables Station. Second, on its face Table 2 does not set a standard or noise control. It is, in the words of Mr Day the acoustic expert for Skydive, "...a land use planning guideline" 114.



¹¹³ Foreword NZS 6805:1992.

Transcript p 138 lines 4 and 5.

4. Predicting the effects on the environment

4.1 <u>Introducing the assessment</u>

[86] For the purposes of assessing the potential effects of the proposal on the environment, Mr Bartlett submitted we should compare those effects with those of the current Skydive operations. He submitted that the latter was the maximum allowable under the resource consent (i.e. the effects from 35 flights) even if that is very rarely achieved in practice. In contrast, Mr Brabant submitted we should compare the average predicted effects for the exercise of the consent Skydive is seeking, with the effects of the average number of flights at present. We consider the latter is incorrect: The "environment" in section 104(1)(c) of the RMA — and in part 2 of the Act — usually includes the reasonably likely future environment: see the Court of Appeal's decision in Far North District Council v Te Runanga a Iwi o Ngati Kahu¹¹⁵. In this case that includes the probability that Skydive will attain a higher average number of flights per day.

[87] However, while initially attracted to Mr Bartlett's idea, on reflection we consider Mr Bartlett was not wholly correct either. Even if demand increases throughout the year so that the number of potential skydivers on any given day is not a limiting factor, the weather and practical problems certainly are ¹¹⁶. Accordingly we think it is fanciful to suggest that Skydive might sustain maximum numbers of flights for 265 days per year at more than 75% (i.e. 26 flights per day) of the theoretical maximum. On average over 100 days per year are not flown at all and in the year from 1 November 2011 to 31 October 2012 the maximum (actually 34 flights) was only achieved twice, on 26 December 2011 and 9 January 2012¹¹⁷. So 26 flights per day (52 movements) is the practical maximum average in the existing environment in 7 day period when flying occurs. We suspect that is being generous since Skydive's own proposed maximum 7 day average is 50 which is only 67% of the daily maximum it proposes.

[88] To describe the potential for a maximum of 26 flights per day ("the practical maximum average") as the existing environment could potentially have caused problems because none of the experts used that figure. Fortunately they did use figures either side of it (average flights of 16-20 per day existing / 50 flights per day proposed; and maximum flights of 35 per day existing / 75 proposed).

[89] The practical maximum average we have identified tends to increase the total noise in the "existing" environment. However, there is another factor which must be taken into account which tends to decrease it. The environment must be assessed on the basis that all obligations imposed by resource consents, district or other plans, and the RMA itself are being fully complied with. That is an important point because, as we



Far North District Council v Te Runanga a Iwi o Ngati Kahu [2013] NZCA 221 at [80].

Source Exhibit 8.1.

L Williams, evidence-in-chief para 3 [Environment Court document 8].

have pointed out, the RMA imposes an extra duty on noise emitters. Under section 16 of the RMA Skydive must "... adopt the best practicable option to ensure that the emission of noise does not exceed a reasonable level". The moves from Cessna 185s to Supervans and the alteration in holding position to reduce the effect of idling noise from the Supervans can (and should) be seen as easy and thus appropriate steps to comply with the section 16 duty.

[90] Skydive's existing operations (as measured) showed little effort to comply with section 16. The existing operations had not (before the hearing) altered the idling position to reduce noise. Nor had Skydive retained the old take-off flight path with its right-hand turn (to the north) to reduce noise affecting people on the golf course or on the cycling and walking tracks on the rise, or systematically used an alternative landing flight path over Homestead Bay (when conditions allow). Those are simple relatively inexpensive steps that could have been taken which would reduce the existing sound exposure levels. To that (unquantified) extent the noise measurements of the existing environment are exaggerated. (We accept that Skydive appears to have since altered its practices for the better).

[91] As recorded, there are two relevant sets of assessment criteria in the district plan. The court may in its discretion disregard an adverse effect if the district plan permits an activity with that effect¹¹⁸ but that is not relevant here.

The commercial recreation assessment matters

[92] The proposal is largely positive when assessed under the commercial recreation criteria. It will not "... result in levels of traffic or pedestrian activity which are incompatible with the character of the surrounding rural area" 119. Whether there would be any adverse effects of the proposed activity in terms of noise and vibration incompatible with the levels acceptable in a low-density rural environment is a question we consider below.

[93] Given the location of the landing pad at the eastern end of the airstrip we consider it will not result in levels of traffic congestion¹²⁰ or produce levels of traffic safety which are inconsistent with the classification of the adjoining State Highway 6, compromise pedestrian safety¹²¹ in the vicinity of the activity, or cause extra litter and waste¹²². No new buildings are proposed, so the question of their compatibility¹²³ with the character of the local environment does not arise. We were not referred to any relevant Code of Practice¹²⁴ so the extent to which the proposal might have been audited and certified is irrelevant. There was no evidence that the activity would have adverse

Assessment matter 5.4,2.3 (xiv)(f) [QLDP p 5-35].



¹¹⁸ Section 104 (2) RMA.

Assessment criteria 5.4.2.3 (xiv)(a) [QLDP p 5-34].

Assessment matter 5.4.2.3 (xiv)(b)(iii) [QLDP p 5-35].

Assessment matter 5.4.2.3 (xiv)(b)(iv) [QLDP p 5-35].

Assessment matter 5.4.2.3 (xiv)(b)(v) [QLDP p 5-35].

Assessment matter(s) 5.4.2.3 (xiv)(c) and (e) [QLDP p 5-35].

effects on the quality of ground and/or surface waters¹²⁵ or on the life-supporting capacity of soils¹²⁶. There was no suggestion that the use of the airstrip for the recreational activity will compromise levels of public safety¹²⁷, or cause a visual distraction to drivers on arterial routes¹²⁸, or cause adverse effects on nature conservation values¹²⁹.

[94] There is no evidence of cumulative effects¹³⁰ from the activity in conjunction with other activities in the vicinity apart from the (important) fact that the proposal would add to the noise from the existing Skydive operations.

[95] The extent to which the nature and character of the activity would be compatible 131 with the character of the surrounding environment raises questions in relation to the Jacks Point Zone. However, we find that the proposed activity will not result in a loss of privacy or sense of security for residents within the rural environment 132. Similarly there will be minimal loss of privacy or reduction in any sense of remoteness or isolation 133. The extent to which it may result in a loss of amenity values is a matter we consider below.

[96] An important assessment matter is 134:

The extent to which the recreational activity will adversely affect the range of recreational opportunities available in the District or the quality of experience of the people partaking of those opportunities.

This is a key issue and it is repeated in the airport assessment matters we consider next.

Assessment matters for "airport" noise

[97] A more focused set of assessment matters relates to "airport" noise ¹³⁵ (bearing in mind that the airstrip falls within the definition of an "airport" under the district plan). Relevantly it requires consideration of:

- (a) The extent to which noise from aircraft is/will:
 - (i) [be] compatible with the character of the surrounding area.
 - (ii) adversely affect the pleasant use and enjoyment of the surrounding environment by residents and visitors.

Assessment matter 5.4.2.3 (xiv)(g) [QLDP p 5-35].

Assessment matter 5.4.2.3 (xiv)(h) [QLDP p 5-35].



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¹²⁷ Assessment matter 5.4.2.3 (xiv)(k) [QLDP p 5-35]. 128 Assessment matter 5.4.2.3 (xiv)(m) [QLDP p 5-35]. 129 Assessment matter 5.4.2.3 (xiv)(I) [QLDP p 5-35]. 130 Assessment matter 5.4.2.3 (xiv)(b)(vi) [QLDP p 5-35]. 131 Assessment matter 5.4.2.3 (xiv)(d) [QLDP p 5-35]. 132 Assessment matter 5.4.2.3 (xiv)(i) [QLDP p 5-35]. 133 Assessment matter 5.4.2.3 (xiv)(b)(ii) [QLDP p 5-35]. 134 Assessment matter 5.4.2.3 (xiv)(j) [QLDP p 5-35]. 135 Assessment matter 5.4.2.3 (xiv) [QLDP p 5-36].

- (iii) adversely affect the quality of the experience of people partaking in recreational and other activities.
- (b) The cumulative effect of a dispersed number of airports.
- (c) Convenience to and efficient operation of existing airports.
- (d) The visual effect of airport activities.
- (e) The frequency and type of aircraft activities.
- (f) Assessment of helicopter noise pursuant to NZS 6807:1994

As for (a)(i), we consider that noise from aircraft is generally compatible with the character of the surrounding area given that aircraft taking off and landing on the Queenstown Airport regularly fly over the area (at several thousand feet). We consider (a)(ii) to (e) in the remainder of this decision. Assessment factor (f) is irrelevant as helicopters are not proposed to be used.

4.2 Convenience to and efficient operation of existing airports

[98] The airstrip (as an airport) does already exist, and is very conveniently sited inside the circuits for the larger (commercial) Queenstown Airport.

[99] We received expert evidence for the applicant ¹³⁶ from Captain Sowerby and for JPROA ¹³⁷ from Mr J M Fogden in relation to air safety. We accept the evidence of both witnesses, that the proposed activity can be undertaken without significant adverse safety effects. Indeed Captain Sowerby was of the (unchallenged) opinion that allowing Skydive to operate more flights from the airstrip would improve overall safety because it would enable Skydive to move flights (and drops) away from the much busier Queenstown Airport. He wrote ¹³⁸:

The current requirement for [Skydive] to conduct overflow operations from Queenstown International Airport adds complexity to the operation, increased workload for ATC and exposure to the mixture of traffic operating to and from Queenstown International Airport.

The requirement that overflow operations depart/arrive from Queenstown International Airport is driven solely by the current 35 daily flights limitation.

Captain Sowerby concluded 139:

In a practical sense, safety is enhanced by the circumstance that all flights, up to the limit of thirty five, remain within close proximity to sole use Jardines Airport, do not transit any populated area and remain clear of the Queenstown International Airport traffic circuit.

[100] We also record that the Queenstown Airport Corporation ("QAC") lodged a submission raising air safety issues, but did not join the proceedings as a section 274



L Sowerby, evidence-in-chief para 8.6 [Environment Court document 6].

J M Fogden, evidence-in-chief [Environment Court document 17].

L Sowerby, evidence-in-chief paras 7.7 and 7.8 [Environment Court document 6].

L Sowerby, evidence-in-chief para 5.12 [Environment Court document 6].

party. Captain Sowerby's evidence (and its attachments) state that a condition of consent has been agreed upon and that based upon that condition being included in any consent, QAC will "withdraw" its submission. The condition reads:

At the completion of the first twelve (12) months of the operation authorised by this consent, Skydive Queenstown shall undertake a review of airspace safety issues arising from these operations. The review shall be conducted in such a way as to require Skydive Queenstown to consult with the QC, Airways NZ, a representative of the Scheduled Airline Operators that utilize Queenstown Airport and the CAA with respect to airspace safety matters. If as a result of the consultation and review, adverse effects on airspace safety are demonstrated to have occurred from the consented operations, then Skydive Queenstown shall be required to immediately adapt its operations to avoid such effects in the future. The results of this review and any measures taken by Skydive Queenstown to adapt its operations shall be reported to the parties listed above within one (1) month of the completion of the review.

4.3 Would the consent impose unreasonable noise on residents?

[101] First we find that the noise from the skydivers (parachutists) is unlikely to have serious adverse effects on the amenities of any of the parties. Nor are they likely to constitute an unreasonable invasion of privacy. The first important effects issue this proceeding turns, rather, on the noise from the aircraft as they takeoff and land.

[102] For Skydive Mr Garland's opinion on the effects of aircraft was that 140:

The actual take-offs and landings will have no adverse effect on privacy, amenity values or sense of security for residents with the rural environment. While residents within the Jacks Point urban environment have expressed concerns, these are related to the presence of the drop zone which would remain if aircraft were to operate from another aerodrome.

[103] Focusing on the assessment criteria relating to airport noise¹⁴¹ he was a little more expansive¹⁴²:

It is important to note that the extent of noise from the operation consented to in 1997 has been modelled and that it is not proposed to exceed that level of noise exposure. As I understand it, the applicant is happy to be restricted to noise exposure levels rather less than that which would be possible under that consent. When the original consent was granted, no consideration was given to types of aircraft, only to the number of movements. Currently the company is free to use whatever type of aircraft it wishes. That is the level of adverse effects that Jacks Point residents have come to in later years — no noise control, only control of aircraft movements. In my experience, having lived in Wakatipu and largely because of recreational activity, the area is generally noisier than I have experienced in a suburban city area. This is part and parcel of what draws people to the District. Nonetheless, there should be protection from excessive noise and this is what the applicant is proposing while allowing its own established operation to evolve and prosper like any other commercial recreational activity.

Mr Garland admitted¹⁴³ that he did not consider the frequency and type of aircraft activities.



M J G Garland, evidence-in-chief para 20(i) referring to commercial recreation assessment matter (i) [Environment Court document 13].

Rule 5.4.3.2 xvi [QLDP p 5-36].

M J G Garland, evidence-in-chief para 21 [Environment Court document 13].

¹⁴³ Transcript p 390.

[104] Mr Issott, Mr Geddes and Mr S Dent, a planner for the Jacks Point Interests addressed the effects of noise on the surrounding environment in their evidence. Their evidence related to their living environments and their predicted loss of amenity due to the noise from the aircraft, parachutes and parachutists. Mr Issott and Mr Geddes each expressed their opinion that the current operation is already detrimental to amenity in terms of noise effects and that any increase in the number of flights would cause a further loss of amenity. We consider that their opinions (for the little weight we can give them, given they are parties) are not significantly further weakened by their concessions. Mr Issott and Mr Geddes each conceded that they understood fully the current resource consent held by Skydive Queenstown when they each chose to purchase their dwellings; and that they accepted the effects resulting from the exercise of that consent.

The experts' calculations

[105] Further consultation between the noise experts during the hearing resulted in an agreed table of calculated aircraft noise levels. The aircraft operating was the Cessna Supervan 900 and four levels of operation were modelled for 35 flights per day, 50 flights per day, 75 flights per day and 50 flights per day with idling noise mitigation. Because the Cessna Supervan 900 has a maximum noise signature when operating on the ground that is oriented in a 60 degree cone ahead of the aircraft, mitigation of the significant idling noise on the residential locations can be achieved very simply by facing the aircraft away from the residences. This is referred to as idling mitigation.

[106] The resulting table is reproduced below.

Flights/day	35	50	75	50*
[The Village/ Residential]	44 dB L _{dn} 48 dB L _{eq15} **	46 B L _{dn}	47 dB L _{dn}	46 dB L _{dn} 51 dB L _{eq15} ***
[The Lodge]	52 dB L _{dn} 56 dB L _{eq15} **	53 dB L _{dn}	55 dB L _{dn}	53 dB L _{dn} 59 dB L _{eq15} ***
[39 Hackett Road]	58 dB L _{dn} 62 dB L _{cq15} **	54 dB L _{dn} *	56 dB L _{dn} *	52 dB L _{dn} 59 dB _{Leq 15} ***

- * denotes noise received with idling noise mitigation.
- ** denotes one flight each 15 minutes.
- *** denotes two flights each 15 minutes.



[107] In terms of the sound exposure level of 55 dB L_{dn} applied from the standard, NZS 6805:1992, only two cases would cause noise levels at 39 Hackett Road to exceed that level; viz. 35 flights per day with no mitigation of ground idling noise and 75 flights

per day with ground idling noise mitigation. Calculated noise levels at the other locations fall within the limit.

[108] A further column was provided by Mr Day in his evidence for the noise received at The Village/Residential and at The Lodge from the operation of the piston engine aircraft that had been used in the past. That data has not been included in the table above; first, because now only the two Cessna Supervan 900 aircraft (with a turbine engine) are used, and secondly, because the evidence showed no attempts by Skydive to avoid unreasonable noise.

[109] The table also includes an assessment of the aircraft noise, in $L_{eq15min}$ terms, received at the three sensitive sites for 35 flights per day and for 50 flights per day with idling noise mitigation. These measurement units relate to the provisions in the District plan. Those figures show $L_{eq15min}$ units are between 4 and 7 dB higher than the L_{dn} units but, because of various averaging and other adjustment procedures that the acoustic experts say apply, Dr Trevathan considered that the increase would normally be about 2 or 3 dB¹⁴⁴.

[110] At the Village/Residential location, if the aircraft noise was to be compared to the general noise limits of the District plan, flight numbers up to about 50 per day would be acceptable. But on the same basis aircraft noise levels at The Lodge and at Hackett Road would not be acceptable, even at the current maximum numbers of flights per day of 35.

[111] The experts agreed that "55 dB L_{dn} is an appropriate criterion for aircraft noise from this skydiving operation to control noise effects on residential and visitor accommodation activities"¹⁴⁵. The noise sensitive areas to which this criterion should apply were agreed to be lots on the south side of Jacks Point Rise and Hackett Road, Jacks Point Village, the Lodge site and The Preserve¹⁴⁶. It is important to note that agreement relates to controlling noise effects on residential and visitor accommodation activities not on other activities (e.g. recreation).

[112] Other items where agreement was reached related to:

- aircraft idling noise being included within the 55 dB L_{dn} criterion;
- the effectiveness of a noise barrier on aircraft idling noise;
- that up to 50 flights per day could comply with the 55 dB L_{dn} criterion with "Noise Abatement Idling";
- a flight track to the south should be used wherever practicable;
- an assumption that only aircraft activity authorised by this consent will use the airstrip; and

Joint Statement Acoustic Experts para 5.

Annexure A to Joint Statement Acoustic Experts.



¹⁴⁴ Transcript p 327 lines 6-8.

 proposed conditions with the exception of those topics where agreement had not been reached.

[113] Three planners were called in the proceeding — Mr M J G Garland for Skydive, Ms W Baker for the council and Mr Dent. In their joint statement they agreed that a "maximum level of 55 dBA L_{dn} at all residential and visitor accommodation locations is an appropriate level". They also agreed that visual effects of the proposal on the landscape would be "minimal" and that "... there are other non-acoustic matters to consider in the context of th[e] application" — without identifying what those are.

[114] The three planners also agreed that a maximum noise level of 55 dBA L_{dn} at all residential and visitor accommodation locations is appropriate. However, they disagreed on how that is to be measured and in particular noise averaging. They wrote 150:

We have each relied on expert evidence in regards to the acoustic effects and each based our evidence on the acoustic evidence as provided by those experts engaged by the respective parties. This has resulted in us reaching the same conclusions (and disagreement) in relation to whether or not it is appropriate to include the ability to average the noise over a 7 day period. Specifically, our disagreement with regards to including averaging in the overall noise level is appropriately and adequately summarized by the acoustic experts in paragraphs 14-17 of their Joint Statement dated 17 April 2013. This means Ms Baker and Mr Garland are of the view that averaging is appropriate, whereas Mr Dent does not consider it appropriate.

Averaging

[115] In fact for the experts to say they had reached agreement about the maximum "noise bucket" which could be thrown onto residential and visitor accommodation was slightly ingenuous. The figure of 55 dB $L_{\rm dn}$ is a calculated figure, and it is reliant (inter alia) on averaging over a chosen period of time. What period of time is chosen is critical to the calculation.

[116] We accept that it is standard practice for the measurement of sound pressure levels to be averaged over time, (except in the case of maximum levels). For example, the district plan rule for non-airport noise relates to the average over 15 minutes and is a common criterion. The airport noise standard uses the average over a 24 hour period with a penalty added during the night hours. In this case averaging over a 24 hour period when operations are confined to daytime appears to unduly diminish the reported sound level. We were told that if the sound pressure levels were averaged over only the daytime period the levels would be 3–4 dB higher ¹⁵¹. The airport noise standard NZS 6805:1992 suggests a three month averaging period to determine the location of the airnoise boundaries for inclusion in the district plan. It recognises other averaging periods can be used.

Transcript p 326 line 30.



Joint Statement of Planning Experts para 8 [Environment Court document 13B].

Joint Statement of Planning Experts para 10 [Environment Court document 13B].

Joint Statement of Planning Experts para 9 [Environment Court document 13B].

Joint Statement of Planning Experts para 13 [Environment Court document 13B].

[117] NZS 6805 suggests 152 a "yearly or seasonal average". However, the effect of using averages over one year, in this case, would enable Skydive to run large numbers of flights (because down days over winter come into the calculation) so all three experts agreed that was inappropriate.

[118] The averaging of the actual sound levels received at the noise sensitive locations proposed by the applicant and Mr Day was based upon averaging the sound levels measured or deduced over a consecutive seven day period. The idea is that if two of the seven days experienced weather that prevented skydiving then a higher level of activity on the remaining fine five days would be permitted with aircraft noise levels exceeding the criterion on the busier days but, when averaged over the seven days, would not exceed the criterion. Dr Chiles agreed that the seven day averaging of the sound levels would adequately protect residential amenity. However he also considered a cap on total flights in any one day of 50% more than the average would be appropriate, i.e. 75. Dr Trevathan disagreed. In his opinion the averaging is likely to result in the maximum noise exposure occurring on the "best" weather days when residents also wish to enjoy the outdoors.

[119] Dr Trevathan's comment on Dr Chiles' evidence was 153:

- 2.2 The weather dependence of the operation in conjunction with a 7 day average noise limit creates two issues:
 - noise on any given day could be very high if there were a number of non-flying days in a week, and
 - even if there are only 1 or 2 non-flying days in a week, the 7 day average will be skewed by these 'outliers' in the data (the non-flying days) allowing high noise levels on the remaining days.

Only the first of these issues is addressed by the peak day $L_{d\alpha}$ noise limit which Dr Chiles has proposed.

- 2.3 The second of these issues has not been addressed. This is a common problem in statistics where one extreme value in a small sample can unduly influence the average. Some solutions are to exclude any outliers, or to consider the 'median' value rather than the mean. This is not an issue for more typical airfields which use a 3 month averaging period so the average is not significantly affected by one-off extreme days, and the 'extreme' days may be more infrequent and moderate.
- 2.4 The issue in terms of effects and the 55 dB L_{dn} limit is that the high flying intensity days will correspond with the best weather, whereas on the low or no flying days people are less likely to be outdoors, have doors or windows open and noise may be generated by wind and rain. Some of the L_{dn} levels reported for individual days may also have actually arisen from a part day of very high intensity activity, interrupted by poor weather—which creates the same issue on a smaller scale (in that case the L_{dn} may not appropriately account for the degree of effect on that individual day).



¹⁵² NZS 6805 para C 1.8.1.

J W Trevathan, evidence-in-reply paras 2.2 to 2.5 [Environment Court document 11A].

2.5 The basic problem is that the 'average' noise levels produced in this case will not correlate well with people's experience of the noise.

Numbers of flights

[120] One of the relevant assessment matters is "the frequency and type of aircraft activities" ¹⁵⁴. We note that this in itself suggests that the district plan is not simply concerned with the overall noise bucket but also with the wider effects experienced from takeoff and landing of aircraft. On this issue it will be recalled that we found at the beginning of this part of the decision that the existing environment is — allowing for future increased efficiency in the Skydive operation — 26 flights (52 movements) per day on the 265 days when, on average, parachuting is possible. In contrast the applicant seeks an average of 50 flights (100 movements) per day.

[121] The other topic on which agreement was not reached related to a "limit" on the number of flights per day. Dr Trevathan considered 50 flights should not be exceeded on any single day. Drs Trevathan and Chiles considered a limit on the number of flights daily is required to control amenity on the golf course and in the wider area. Mr Day considered the 55 dB L_{dn} criterion, including the 7 day averaging, is sufficient control of the aircraft noise levels permitted. He added that if a limit on the number of flights is imposed then there would need to be a procedure to change the limit if aircraft type and noise emission changes in the future. Mr Day wrote¹⁵⁵:

The proposal is based on the widely accepted principle that noise exposure and community response from aircraft noise is based on a combination of the noise level from individual aircraft movements and the total number of flights.

[122] However, Dr Trevathan considered the unique nature of the Skydive operation compared to a more conventional "airport", requires control over not only the received noise level but also over the number of flights¹⁵⁶. He referred us to a Swedish study by Rylander and Bjorkman¹⁵⁷ which found that the time aircraft were overhead and the frequency of the events both affected the perception of people subject to the noise. That study is quite important because it suggests that the principle behind Skydive's application is incorrect.

[123] Dr Trevathan relied on the Rylander and Bjorkman study for a qualification to the principle stated by Mr Day. That study found that "... for areas below the breakpoint, (i.e. 70 events per 24 hours) the number of events seems to be the crucial factor". Above that breakpoint the maximum noise level affected responses and below, the number of events was important. Seventy events correspond to 35 flights.

R Rylander and M Bjorkman "Annoyance by Aircraft Noise Around Small Airports" op cit at 536.



Assessment matter 5.4,2.3 (xyi)(e) [QLDP p 5-36].

C W Day, evidence-in-chief para 3.6 [Environment Court document 9].

J W Trevathan, evidence-in-chief para 5.3 first bullet point [Environment Court document 11].

R Rylander and M Bjorkman "Annoyance by Aircraft Noise Around Small Airports" Journal of Sound and Vibration (1997) 205(4), 533-537.

[124] Mr Bartlett criticised Dr Trevathan's evidence in two ways. First he discussed the Rylander and Bjorkman paper:

- 25. A discussion of the paper prepared by Rylander and Bjorkman concerned the proposition that notwithstanding compliance with an agreed or acceptable dB L_{dn} limit, the frequency of events required consideration as a separate issue.
- 26. Far from creating a difficulty for the applicant, the Rylander and Bjorkman paper supported a view that there was no significant difference in effect between 50 flights and 75 (100 and 150 events) where the authors had identified 70 events as the point at which the extent of annoyance flattened out. Coincidentally, 70 is precisely the number of events available in the presently consented environment (but not subject to the proposed noise mitigation practices that have been discussed in the context of the hearing) and which would be enforceable at any level of activity under the new consent.

We do not accept Mr Bartlett's analysis. First he relies on the Jacks Point environment as, in the future, involving 35 flights (70 movements per day) being the maximum permissible under the 1997 consent. While he is correct—as we have found—in allowing for <u>some</u> future improved performance by Skydive, he has overstated the position.

[125] Second our understanding of the studies on aircraft noise before Rylander and Bjorkman and referred to by them¹⁶⁰ is that the breakpoint of 70 movements per 24 hours was for airports with that much traffic almost every day. Here we had evidence from Mr Williams for Skydive that on average it loses 100 days per year from the weather, i.e. there are no flights of all. Adjusting for that reduces the actual effects of flights on the environment to 161 51 movements per day on average. In other words, Mr Bartlett has not allowed for the 100 days (on average) in each year on which no parachuting can take place, or the other days on which 100% efficiency cannot be attained through no fault of Skydive's.

[126] Third, Mr Bartlett wrote that 162:

Under cross-examination by Mr Winchester, Dr Trevathan¹⁶³ confirmed his understanding that NZS6805 was the standard that the Queenstown Lakes District Plan required be used for assessing noise from airports.

He went on to confirm that there were no other suitable standards available in New Zealand for assessing aircraft noise and that in terms of NZS6805 the recreational and open space areas were non-residential uses. When asked by Mr Winchester if recreational facilities and walking tracks were noise sensitive for the purpose of the standard, he avoided the question by repeating that the "focus" of the standard was on residential and similar activities.

Skydive Final submissions paras 52-53 [Environment Court document 25]. Transcript p 250, lines 26-30.



Applicant's summary of issues paras 25 and 26 [Environment Court document 21].

R Rylander and M Bjorkman "Annoyance by Aircraft Noise Around Small Airports" Journal of Sound and Vibration (1997) 205(4) 533 at 534 and 536.

 $^{70 \}times 265 \div 365 = 50.9$

[127] The precise question actually asked by Mr Winchester was:

... and in your opinion and based on your understanding of the standard are the recreational facilities and walking tracks noise-sensitive uses for the purposes of the standard?

And Dr Trevathan's answer was 165:

I think when viewed as a whole, the focus of the standard is on residential and similar activities when it talks about land use controls.

That is a reasonable answer. We can find no reference in the NZS 6805 to recreational facilities or walking tracks. So we do not regard Dr Trevathan's answer as evasive. In fact during the hearing we gained the impression that Dr Trevathan was a professional witness attempting to give accurate and objective answers.

[128] We conclude that Dr Trevathan was entitled to put some weight on the Rylander and Bjorkman's study, and in turn that his opinion—that flight numbers are important 166—should be given some weight.

4.4 Effects on the golf course and recreational users

[129] There was very little evidence-in-chief from the applicant, Skydive, in relation to the effects of increased flight numbers on recreationalists in the Jacks Point Zone. Mr Garland was the planning witness called by Skydive. He is a very experienced planner and has wide, international, experience of airport planning. He wrote, more generally, of the effects of the proposed Skydive operation on neighbours¹⁶⁷:

While it may result in more flights, the proposed noise controls will result in less noise exposure to nearby properties than can occur under the existing consented regime which simply limits flight numbers rather than aircraft type or noise footprints.

[130] Mr Garland's one sentence on the effects of the aircraft on the quality of the experience of people involved in recreation 168, was 169:

One of the most significant recreational activities nearby is boating activity on the lake — water skiing, fishing and just exploring the lake. Having spent many hours doing just that and at the same time observing the sky diving operation, I do not believe there is any adverse effect.

As that sentence shows, he did not consider the effects of the aircraft and their noise on the experience of those using the playground, on golfers, or on walkers.

[131] Skydive's acoustic expert, Mr Day, did not consider the effects of aircraft activities or noise on recreationalists in his evidence-in-chief, but contented himself with

M J G Garland, evidence-in-chief para 21 [Environment Court document 13].



¹⁶⁴ Transcript p 251.

Transcript p 251.

For confirmation of this in cross-examination see Transcript p 252.

M J G Garland, evidence-in-chief para 9 [Environment Court document 13].

Assessment matter 5.4.2.3 (xv)(a)(ii) and (iii) [QLDP p 5-35].

calculating the overall noise exposure (L_{dn}) at various residential and visitor accommodation sites¹⁷⁰.

[132] The Jacks Point Interests' witness, Mr Darby, expressed his opinion that 171:

The proposed increase in flights will adversely affect the experience of individual users of the trails, and may cause safety issues with the equestrian riders.

When people come to Jacks Point (or decide to reside within JPZ), they have an expectation that they are coming to an area of spectacular scenery with high amenity. This is true not only in terms of the championship golf course, but also the network of recreational elements and trails within the JPZ. From a master planning perspective, the large green backyard, with recreation, golf, and limited outside noise influences is part of the attraction for people visiting the area.

I have significant concerns that an increase in the number of daily flights will degrade the quality of this experience.

However, Mr Darby was not purporting to speak as an independent expert so we can give little weight to that.

[133] Mr Darby also wrote that 172:

The presence of the skydive operation was known at the time of the Jacks Point plan change. However, there was never any anticipation that the operators would seek to increase the number of flights or the noise generated from the skydive operations. It was anticipated that, at the very least, that the runway would be realigned so that planes would have a different take-off and landing flight path, so that they would not fly over the lodge and golf course sites.

He was cross-examined on this by Mr Bartlett on the theme that there was no justification for that assertion. The results of the cross-examination were inconclusive on their face. However, we note that there is some independent evidence for Mr Darby's statement. The council's decision on the 1997 consent expressly records 173:

Mr Williams¹⁷⁴ confirmed that [the consent holder] ... did not envisage any problem with the number of flights being restricted to 35 per day.

[134] As to the impacts of the proposal on club membership and patronage, Mr Darby considered it would have an impact but could not quantify that ¹⁷⁵. In Mr Tod's opinion ¹⁷⁶:

In my view, an increase in flight numbers from that which currently exists will hugely degrade the initial part of the journey around the Jacks Point golf course, to the degree that it will become a significant and detracting feature in "Clubhouse" conversation back at the travelling golfers home course.

A J Tod, evidence-in-chief paras 9.7 and 9.8 [Environment Court document 16].



C W Day, evidence-in-chief Table 2 [Environment Court document 9].

¹⁷¹ J G Darby, evidence-in-chief paras 7.9 to 7.11 [Environment Court document 12].

J G Darby, evidence-in-chief para 7.2 [Environment Court document 12].

¹⁷³ QLDC RM 960447 (dated 7 February 1997) at p 2.

Then a director of Parachute Adventures Queenstown Ltd and now a director of Skydive — see L Williams, evidence-in-chief [Environment Court document 8].

Transcript p 366.

Jacks Point is a remarkable world class course in an outstanding setting. It is an important part of the golf tourism market in Queenstown and New Zealand. I have concerns that an increase in flight numbers by Skydive Queenstown, and the corresponding increase in noise will be detrimental to the experience at the course, and ultimately golf tourism in Queenstown.

[135] He was cross-examined on that by Mr Bartlett¹⁷⁷ as follows:

- So it's not very upfront marketing is it, describing Jacks Point in what is to be one of the biggest suburbs of Queenstown, as being, having the remoteness or naturalness of Kauri Cliffs or Cape Kidnappers, is it?
- A. Well I certainly, I disagree, I can make comparisons to the quality of the golf course, and this is just purely the quality of the golf course, this is the playing environment as being very similar to Cape Kidnappers and Kauri Cliffs. They are, they are both, and also Kinloch, Kinloch has got a residential element to it and I have absolutely no issue with expressing that Jacks Point is a course of the same stature as these courses and it is because the course is away from the residential at Jacks Point, that you don't feel like you are in a residential community. There is not, there is some of those houses in the middle of the course. However, there is not an element of real estate or residential that impacts on the game of golf that you have at Jacks.

Despite some initial concessions, we consider the last part of Mr Tod's answer is correct and so his evidence was not weakened to the point where we should put little weight on it. Further, to cross-examine Mr Tod on advertising he is not responsible for, is not helpful to the court. We give some weight to Mr Tod's evidence that increasing flight numbers may have an adverse effect on patronage of the golf course.

[136] Mr Tataurangi gave evidence 178 that the proposed increase in flights would be detrimental to the golfing experience at Jacks Point. In an attempt to undermine Mr Tataurangi, Mr Bartlett followed his witness, Mr Day, in portraying this as a more-orless routine "airport" case. For example, Mr Bartlett invited us to ignore or at least devalue Mr Tataurangi's evidence with his submission that the witness "... may well be in the group of hyper-sensitive individuals whose responses are routinely put to one side by consent authorities deciding airport noise cases". We will return to the issue of whether this is a routine airport case later.

[137] In the meantime we accept that Mr Tataurangi has no expertise in NZS 6805 or the district plan requirements 180 but hold that, as a golf professional and consultant, he is entitled to express an opinion about the effects of aircraft and their noise on him and on other users of golf courses. While the latter point is arguably outside the traditional scope of opinion evidence, the court is not bound by the rules of evidence¹⁸¹ and Mr Tataurangi's is the best evidence the court heard on that issue. No golf professional was



Transcript pp 468-470.

¹⁷⁸ P M Tataurangi, evidence-in-chief paras 19 et ff [Environment Court document 15].

¹⁷⁹ Closing submission for the applicant para 58.

¹⁸⁰ Not that he claimed any.

¹⁸¹ Section 276 RMA.

called for Skydive, and its expert recreational witness, Mr Greenaway, who could have given a more objective and authoritative opinion, did not express one in his evidence.

[138] Consequently we are prepared to put some weight on Mr Tataurangi's evidence 182 that an increase in flights is likely to reduce patronage of the club. We find it realistic that an increased number of flights by Skydive could do so, and that the long-term reputation of the golf course might suffer.

[139] Mr Dent, the planner for the Jacks Point Interests, considered the issue in rather more detail. In his opinion the effects of the Skydive operation went beyond the brief period when speech (or golf shots) would be interrupted. He wrote 183:

4.97 While noise associated with an aircraft arrival or departure may affect the participants in a golf game from playing a shot or cause speech interruption between their companions for a short period during each flight event, the overall amenity of playing on a championship golf course with constant aircraft activity overhead and alongside will have a negative adverse effect on the participants overall experience. Mr Tataurangi attests to this at paragraph 16 of his evidence.

Mr Dent was not weakened on that in cross-examination 184.

[140] Mr Tod was of a similar opinion¹⁸⁵. In relation to other recreationalists, Mr Tod added¹⁸⁶:

- 4.100 I consider that users of the various walking and biking trails provided within and adjacent to the Jacks Point Resort Zone will also potentially be subject to increased numbers of noise events which will have an adverse effect on the users amenity.
- 4.101 In addition to the activities mentioned above, Jacks Point plays host to a range of recreational community activities and events that utilise the public spaces within the Jacks Point Zone ...
- 4.102 In my opinion, the persistent and more frequent aircraft activity that will be required to realise the applicants proposed increased daily flight numbers will detract from the experience of participants in these activities (particularly the more passive events) as well as those who are spectators to these activities.
- 4.103 In my opinion, one of the attractions of residential living and short term accommodation within the Jacks Point Resort Zone is the recreational activities/facilities and opportunities available on "the doorstep". Any increase in the adverse effects on the amenity of these recreational resources will have a significant adverse effect on the amenity of the Jacks Point Resort zone as a whole.

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P M Tataurangi, evidence-in-chief para 27 [Environment Court document 15].

S J Dent, evidence-in-chief paras 4.97 [Environment Court document 20].

Transcript p 567.

¹⁸⁵ Transcript p 468 (lines 9-14).

S J Dent, evidence-in-chief paras 4,100 to 4,103 [Environment Court document 20].

[141] Dr Trevathan introduced his evidence on this issue by stating ¹⁸⁷:

Effects on the golf course of an increase in [Skydive] activity are difficult to quantify using traditional acoustic measures. Unlike a residential situation those exposed to the noise are only in the area for a limited period of time (so parameters such as the L_{dn} level are not particularly relevant); however they are in the area for the purpose of undertaking a specific outdoor activity which involves periods of concentration, and they may have chosen to undertake this activity in this area due to a perception that the location embodies a certain set of values, and aircraft noise in that context is surprising and disruptive. This differs from a residential situation where a variety of activities are undertaken both indoors and out, and the nature of the surrounding environment is known and understood.

[142] He continued 188:

What is clear is that the situation on the golf course would change with the advent of more [Skydive] flights, as follows:

- Currently if there were 35 flight in a day the average gap between aircraft over flights is 8 minutes.
- If 75 flights took place, the gaps between over flying aircraft would be reduced to 4 minutes.

Based on the time taken to play holes 2 and 5 of the golf course, this change considerably increases the likelihood that a player will experience multiple aircraft flyovers during their round.

[143] He then produced ¹⁸⁹ an "approximation of noise levels of hole 2 Jacks Point Golf Course for 75 flight peak day", and contrasted that with his measurements and noise levels of hole 2 on 28 September 2012. His evidence shows that over the golf course, disturbance events on days with flights at the (theoretical) maxima would increase from one each 10.3 minutes for 35 flights/day to one every 7.2 minutes for 50 flights/day and one every 4.9 minutes for 75 flights/day assuming a 12 hour day. For the three golf holes primarily affected, assuming each takes 15 minutes to play, on a peak day golfers would be disturbed nine times (three times on each of the three most affected holes) roughly two to three times the current most intense experience.

[144] We accept that a doubling of the number of Supervan Flights would not double the noise. Rather it increases the noise bucket by at most 3 dBA¹⁹⁰. Similarly the 7-day averaging proposed by Mr Day and Dr Chiles would only lead to a 2 to 3 dB increase in the total noise which is barely perceptible (at 3 dB)¹⁹¹.

[145] However, the effect on recreationalists is not so much about the calculated noise bucket, but about the numbers of flights and the overall physical experience, especially because few recreationalists would experience the noise of the aircraft for the full day (unlike some residents). It also needs to be borne in mind that the aircraft are passing

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⁹EAL OF 74 188 189 190 191

J W Trevathan, evidence-in-chief para 5.38 [Environment Course document 11].

J W Trevathan, evidence-in-chief para 5.39 [Environment Course document 11].

J W Trevathan, Attachment 3 [Environment Course document 11].

¹⁹⁰ Transcript p 162.

¹⁹¹ C W Day, rebuttal evidence para 3.11 [Environment Court document 9A].

overhead relatively close to the ground (i.e. below 150 metres agl) sometimes only a single figure multiple of the aircraft's wingspan (nearly 15 metres).

[146] Dr Chiles, for the council, simply accepted Dr Trevathan's figures about existing high sound levels at holes 2 and 5, then continued:

... I consider that increasing the number of flights from 35 to 50 or even to 75 on occasion would not fundamentally alter the amenity. The amenity on the golf course is already compromised by the existing consented skydiving operation, meaning that this is not a remote location free from such anthropogenic sounds. On 29 January 2013 there were regular flights throughout the day and, while increasing the frequency of flights would have increased the number of times players were disturbed, in my opinion it would not have significantly altered the overall amenity.

[147] Dr Trevathan's response was 193:

I... note that Dr Chiles description of the proposed change incorrectly understates the significance of the change. [Thirty-five] flights is the current 'peak day' limit. The current average is in the order of 15 to 20 flights. So the change being considered in from an average of 15 to 20 to an average of 50, and from a peak day of 35 to a peak day of 75 (that is, typically more than a doubling of flight numbers).

With regard to the effects of this increase in activity, it seems to me that the expert evidence of Mr Tataurangi¹⁹⁴ is relevant, as is the material outlined in the evidence in reply of Mr Dent including the references in the District Plan to consideration of the "frequency and type of aircraft activity" in the vicinity of airports, and the "preservation and enhancement" of recreational facilities.

[148] At this point it is convenient to refer to Mr Bartlett's submission¹⁹⁵ that "[t]here was no evidence before the Court as to the response of golf club members to the <u>existing</u> airport activity" [our underlining]. He did not explain the significance that any such evidence would have had. He then asked ¹⁹⁶ ... the Court to reconsider its comments in relation to cross-examination the lack of survey evidence from Jacks Point. The court's statements complained of were ¹⁹⁷:

... its relevance I suspect is very marginal indeed, as to whether he's interviewed golf club members ...

[and]

... I must say you'll have to make a submission on that later — because if he had, if he had done what experts lovingly call a qualitative analysis of views, you'd be getting into him for the subjectivity of that.

Skydive's Final submissions para 57 [Environment Court document 25].
 Transcript p 284, line 3.



S Chiles, evidence-in-chief para 30 [Environment Court document 10].

J W Trevathan, evidence-in-reply paras 3.7 and 3.8 [Environment Court document 11A].
 Not considered by Dr Chiles: S Chiles, evidence-in-chief para 6 [Environment Court

document 10].

Skydive's Final submissions para 56 [Environment Court document 25].

Skydive's Final submissions para 57 [Environment Court document 25].

In fact those comments (by the Judge) were made in the opposite order, and about the cross-examination of Dr Trevathan on the effects on golfers, rather than on the evidence for Jacks Point generally.

[149] In any event the court was not being critical of Mr Bartlett at that time. If the witness had "surveyed" the golf club members, the court would have encouraged cross-examination on the techniques and on any subjectivity involved 198. In any event the situation was more complex than Mr Bartlett's cross-examination suggested in that the witness claimed no expertise in surveying the public or a sector of it

[150] We do not see how Dr Trevathan's omission to speak to golf club members affects the credibility or objectivity of his evidence. Rather it might have affected his credibility adversely if he had.

[151] In his rebuttal evidence, Mr Day drew our attention to the fact¹⁹⁹ there are golf courses close to airports in a number of locations around New Zealand:

Nelson Airport and Whakatane Airport have a golf course at the end of the runway and Invercargill has golf courses at both ends of the runway. Queenstown Airport has a golf course immediately [beside] the runway and Wellington Airport has a golf course 400m side on to the runway. Christchurch Airport has three golf courses in close proximity.

He then produced a figure showing Harewood Golf Course 300 metres to the northwest of the NW-SE runway and Russley Golf Course 1,500 metres southeast of, and Clearwater Golf Course 4 kms northeast of the main runway.

[152] The Clearwater Golf Course has been the venue for the New Zealand Open for the last two years²⁰⁰. Mr Day wrote that²⁰¹:

Aircraft on arrival to Christchurch are overhead Clearwater holes 3, 4 and 5 at an altitude of approximately 200 metres. Noise levels experienced on these holes from individual events would be in the order of 100 dB L_{AE} from a Boeing 747 and approximately 92 dB L_{AE} from a Boeing 737-300. The B737 noise level is the same as the noise level of the Supervan measured by Dr Trevathan on the 2nd hole at Jacks Point – 92 dB L_{AE} .

Clearly the administrators and professional golfers in New Zealand do not think these noise levels are a significant adverse effect by choosing this golf course over many other high quality golf courses available in New Zealand for the New Zealand Open.

[153] Mr Day then referred to the Sydney Airport which has a number of golf courses east of runway 25/07 (the east/west runway). He wrote that ²⁰²:

²⁰² C W Day, rebuttal evidence para 2.12 [Environment Court document 9A].



On the basis of Shirley Primary School v Christchurch City Council [1999] NZRMA 66 at (137)

¹⁹⁹ C W Day, rebuttal evidence para 2.7 [Environment Court document 9A].

²⁰⁰ C W Day, rebuttal evidence para 2.8 [Environment Court document 9A].

²⁰¹ C W Day, rebuttal evidence para 2.9 [Environment Court document 9A].

... the Lakes Golf Club, one of Australia's premier golf courses, is located approximately 1500 metres from the east end of runway 25/07. Over most of this golf course, golfers would experience noise levels in the order of 110 dB L_{AE} from a Boeing 747 and 100 dB L_{AE} from a Boeing 737-300 on approach. These noise levels are 10 to 20 dB higher than that experienced at Jack's Point.

[154] We accept that the noise experienced by golfers at Jacks Point would be similar to those situations. However the experience is different: the aircraft are likely to be lower at Jacks Point, there may be fewer movements and of course the setting is very different.

[155] Turning to the evidence of the Jacks Point Interests about adverse affects on outdoor recreation²⁰³ Mr Day responded to Dr Trevathan's conclusion²⁰⁴ that "a peak day limit of 50 flights may be appropriate":

In my opinion the difference between 75 flights and 50 flights per day would not be a noticeable effect on golfers. At worst, each golfer might experience four departures for their round rather than three while playing holes 2, 3 and 5. As discussed previously, it does not appear that this type of event significantly affects professional and amateur golfers using high quality golf courses such as The Lakes and Clearwater.

Mr Day may be correct about that. However he did not refer to the fact that Dr Trevathan's conclusion was expressly based on the premise²⁰⁵ that the court might consider it appropriate to (further) compromise the amenities on the Jacks Point land. It is not clear to us at this stage that we should do so.

[156] Mr Day continued²⁰⁶:

Overall, it is my opinion that the proposed activity (50/75 Supervan flights) will have a significantly lower impact on the golf course [than] 35 flights of the Cessna piston aircraft for the following reasons:

- Firstly, the noise level of the Supervan aircraft in flight is significantly lower than the Cessna piston (more than 10 dB). Dr Trevathan measured the Supervan at 92 dB L_{AE} on the 2nd hole and I previously measured the Cessna piston at 104 dB L_{AE} beside the 2nd tee.
- Secondly, the Supervan has a much higher climb rate than the piston aircraft and gots away from the golf course more quickly resulting in shorter duration events over the golf course (1500ft per min vs 600ft per min).
- Thirdly, due to the lower climb rate of the Cessna piston, these aircraft when fully laden, could not climb directly over Jack's Hill and had to fly north over Jack's Point [land] as shown in Figure 3 below. This track over flies holes 1, 17 and 18 and then back along the ridge over holes 13, 14, 15, 16, 4 and 5.
- The proposed activity thus affects three golf holes for a total duration of 30 seconds and the previous Cessna piston activity affected nine holes for a total duration of 130 seconds.

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C W Day, rebuttal evidence paras 3.2 to 3.4 [Environment Court document 9A].

J W Trevathan, evidence-in-reply para 3.11 [Environment Court document 11A].

As Mr Day conceded in cross-examination: Transcript p 160.

C W Day, rebuttal evidence paras 3,3 and 3.4 [Environment Court document 9A].

In summary, the proposed activity creates noise over the golf course that is quieter and shorter duration than the previous piston aircraft — less golfers will be affected. Higher levels of aircraft noise are experienced at the Australian Open Lakes Golf Course and these are regarded as reasonable by professional golfers and the club members.

We accept those points, but all of Mr Day's evidence proceeds on the assumption that the volume of noise and the total sound bucket are the key factors in relation to adverse effects of airport noise. We prefer the more considered evidence of Dr Trevathan that for this unique "airport" it is more likely that it is the number of plane movements which is the crucial factor. In addition, the question of what is perceived as reasonable is very context driven. The environment in this Wakatipu Basin proceeding is very different from Sydney or Christchurch. In the larger cities other factors may come into play as to the choice of championship venues: for example demographics and advertising coverage.

Financial effects on the golf club

[157] Mr Darby, Mr Tataurangi and Mr Tod referred particularly to the effects on the players on the Jacks Point Golf Course. In particular they were concerned about the potential reduction in international golf tourists and subsequent financial consequences if the enjoyment of playing the course is reduced by low flying aircraft.

[158] Mr Bartlett cross-examined Mr Tataurangi on the loss of income (using loss of patronage as a proxy) that might be caused to the golf club. The exchange went²⁰⁷:

- Q. ... will the granting of this consent or something like it on conditions by the Court likely result in the reduction or a loss, a loss of patronage, loss of future patronage if that's clearer to you, for Jacks Point Golf Club?
- A. It's my belief that the experience at Jacks Point will be tremendously compromised by the number of flights of which the applicant is seeking and in compromising that golf experience and in the environment of which the golf course sits, that I do have the view that patronage over the long haul would be affected, yes,
- Q. By what degree?
- A. I have no cause to give you a figure of whether that would be one percent, 10 percent, 50 percent.

We cannot quantify the predicted effect on the basis of the evidence given to us, but we accept the evidence for the Jacks Point Interests that such an adverse effect is likely.

4.5 Lot 14 The Preserve and the Lodge site

[159] Neither Lot 14 nor the Lodge site has yet been built on.

[160] Lot 14 is directly underneath the principal flight path over the tableland. Dr Trevathan described it as the "closest residential site to the aircraft flight path by some



Transcript p 449.

margin"²⁰⁸. The amenities are, of course, reduced by potentially up to 26 flights per day over the property. The proposed consent would increase the average number of daily flights from a possible 26 to 50 on the 265 days of the average year on which parachute drops are possible, and the daily maximum from 35 to 75. While the effects of the noise on residents of any future house on Lot 14 might be acceptably managed with a 55 dBA L_{dn} total noise limit, we consider the issue is more complex than that. Lot 14 is a residential allotment on the crest of the tableland, with views west over the lakes, north up the lake, past Queenstown, and east to the Remarkables. It is exposed to the weather but on fine calm days its outdoors' amenities would be very fine. To nearly double the average maximum number of flights from 26 to 50 would have a major adverse effect on the outdoor amenities of Lot 14.

[161] Mr Darby was also concerned with the impact of the increase in flights (and noise) on the proposed lodge site (see Attachment 1 to this decision). A resource consent has been granted for the construction and use of this lodge. Mr Darby described the concept as follows²⁰⁹:

There is an area adjacent to the golf course which is zoned for a lodge development It has always been anticipated that the lodge site would be developed for a luxury 5-star facility, catering for the high end international and domestic market.

The site for the lodge was specifically chosen, adjacent to the golf course, away from the commercial and residential areas of the zone. The location provides a sense of exclusivity while enabling guests to appreciating the spectacular scenery of Lake Wakatipu, the Remarkables and the adjacent championship golf course. The construction of the 5-star facility, in conjunction with the championship golf course, has always been a key component of the vision for the zone.

The success of a 5-star lodge is reliant on the golf course and the quality of the golfing experience. An increase in plane noise and flight activities, from take-off and landing, will significantly impact on the amenity in this area. It is anticipated that the increase in the number of flights to the maximum of 75 in any one day would likely occur on a calm day. This increase of 40 flights (over the 35 flights per day allowed under the existing consent) would result in a higher level of noise and annoyance to those enjoying the lodge facilities as well as those playing on the golf course.

The proposed increase in flights will alter the vision for the area to a point that the establishment of a 5-star lodge in this location would be severely prejudiced.

[162] He acknowledged that the resource consent for the lodge (which he contributed to the design of) expressly recognises the 1997 consent held by Skydive. From the cross-examination by Mr Bartlett it was unclear whether a lodge would proceed given the existing flights by Skydive over the lodge site.

[163] Similar (but lesser) extra adverse effects are likely to be imposed on the Lodge site, in addition to those already experienced.



J W Trevathan, evidence-in-chief para 4.14 [Environment Court document 11].

J G Darby, evidence-in-chief paras 7.4 to 7.7 [Environment Court document 12].

5. Evaluation

5.1 Having regard to the relevant matters under s 104(1)

[164] We have held that, overall, the application by Skydive should be treated as a discretionary activity²¹⁰. The court may grant or refuse the application²¹¹. We turn to the two compulsory matters we must have regard to under section 104 of the Act:

- (a) the actual and potential effects of allowing the activity on the environment;
- (b) the relevant statutory instruments.

There are no 'other matters' under section 104(1)(c) of the Act which are reasonably necessary to be had regard to.

[165] It is important to understand the setting — the environment — of this case. Mr Bartlett, counsel for Skydive, in his cross-examination of some of the witnesses²¹² portrayed the Jacks Point Golf Course as a standard golf course beside suburbs with a general aviation airport's landing and take-off flight paths over it. We have major difficulties with that picture. We accept Mr Bartlett's submission that the Jacks Point Golf Course is not remote and pristine in the way that the Kauri Cliffs and Cape Kidnappers courses in the North Island may be. However, on the balance of probabilities (to the extent these are factual issues) we find that he is wrong on a number of matters.

[166] First, the "suburbs" Mr Bartlett refers to are quite well separated from the airstrip and golf course (see Attachment 1). At present the only part of the urban area abutting the golf course is Jacks Point village which comes close to the large pond between the low density urban activities and the golf course. It may be, in future, that part of Henley Downs residential development (for whom Mr Holm acted) may share the boundary with the golf course. We accept also that there are houses on the rise (the Preserve) which are surrounded by the golf course. However, they barely constitute a suburb, more a small residential enclave.

[167] Second, while we find that the Skydive operation is quite different to the operation of a normal farm airstrip, it is also very different to a commercial airport or a general aviation aerodrome supporting local and club flying. It is an intensive flying operation of, currently, 70 take-off and landing events maximum per day undertaken alongside residential and accommodation land uses and immediately over the rising ground of a distinguished golf course and other outdoor recreation facilities. It is also unusual in that both the take-off flight path and one landing flight path pass over the same ground. That causes more than the disturbance of a more conventional airport operation for the same number of takeoffs and landings. We accept that effect is



See part 1.4 of this decision.

Section 104B(a) RMA.

See, e.g. Transcript pp 468-470; cross-examination of Mr Tod quoted above.

lessened to the extent that the alternative landing flight path from the south is used. However there was no undertaking given as to the frequency of use of that southerly approach landing flight path. Nor could there be: the evidence was that under the Civil Aviation Act 1990 and its regulations, the choice of flight paths on final approach to landing is under the sole control of the pilot²¹³.

[168] The application seeks to authorise up to 150 events maximum per day — an increase from 70 (35 flights). From a current or possible average number of events per day of 20-52 the application seeks to increase that average to 100. Roughly that is a doubling of the present activity.

[169] Third, while we accept the evidence of Mr Garland and Mr Day for Skydive that golf courses are quite frequently to be found adjacent to airports, whether a proposal to increase the use of an airport achieves the purpose of the RMA is a question of context to which the principles of the RMA and the objectives and policies of the district plan have to be applied. We find that the Jacks Point Golf Course is not an average golf course. It has been designed²¹⁴ to be and we find, based on the evidence of Mr Tod and Mr Tataurangi, is of a very high standard even by international standards. The existing operations of Skydive, or the future possible operations under the 1997 consent do diminish that quality but not seriously.

[170] Fourth, Mr Bartlett's submissions ignored the other recreational use of the Jacks Point land; the walking and cycling tracks under the flight path and (to a lesser extent) users of the playground and their minders.

5.2 The actual and potential effects on the environment

[171] In what follows we consider all the potential (adverse) effects as subject to the conditions proposed by Skydive for remedying or mitigating those effects.

Positive effects

[172] We accept the evidence of Mr Greenaway²¹⁵, the expert on recreation, that Skydive plays an important part in the adventure tourism industry's contribution to the Further, increased flights and jumps would increase the "free local economy. destinational marketing through skydive freefall photography ... thus making [Skydive] one of New Zealand's most significant distributors of Queenstown imagery ..."216.

[173] In addition to the positive effects for the economy of providing for more skydivers, there are additional (smaller, but accumulatively significant) positive effects. They are:

L Williams, evidence-in-chief para 12 [Environment Court document 8].



²¹³ Subject to any provisions in the NZAIP.

²¹⁴ J G Darby, evidence-in-chief paras 6.1 and 6.7 [Environment Court document 12].

²¹⁵ R. Greenaway, evidence-in-chief [Environment Court document 7]. 216

- that the site is close²¹⁷ to the drop zone on the airstrip;
- the closest residential land in vicinity is undeveloped so that new owners can take account of and design around airstrip²¹⁸;
- in terms of New Zealand it is very small airport²¹⁹;
- there would be no night flying²²⁰;
- there would be a single operator²²¹ (except possibly for occasional topdressing flights);
- the airport is on the southern side of Hackett Road so sound insulation on the southern side of dwellings would interfere little with outdoor living²²²;
- the proposal makes efficient use²²³ of the existing airstrip;
- the proposal would increase safety at Queenstown Airport.

Effects on residential activities

[174] To put this case in context, the noise which would be imposed on residents, recreationalists and other visitors to the Jacks Point Zone is greater than they would normally have to be subjected to in Rural Areas of the district. The district plan provisions give some guidance about the reasonable noise with its rules about outdoor activities than for airports. The relevant rule limits daytime noise to 50 dB L_{eq} 15min. Even with the current operation, of the three sensitive sites, only the Village site receives noise less than the district plan limit at 48 dB L_{eq15min}. At the Lodge the received noise is 56 dB L_{eq15min} and at Hackett Road it is 62 dB L_{eq15min}. At the Hackett road site idling mitigation reduces the noise level by 3-5 dB. So received noise from the current operation at the Lodge and Hackett Road sites is in the mid 50s dB L_{eq15min}, a level noticeably higher than the level for Rural Areas generally.

[175] If the number of flights per day was increased to 50, the noise received at those sites would be:

- 51 dB L_{cq15min} at the Village;
- 59 dB L_{eq15min} at the Lodge; and
- 59 dB L_{col5min} at Hackett Road.

These levels would all be significantly higher than both the current operation and the District plan levels. On a peak day with 75 flights the levels would be higher again.

[176] However, in the District plan under the Rural Area rules the usual noise limits are not to apply to airport noise. Instead the Zone Standard requires that airport noise be

²²⁴ Rule 5.3.5.2 v [QLDP p 5-20].



Transcript p 536 (Cross-examination of Mr Dent).

Transcript p 536 (Cross-examination of Mr Dent).

Transcript p 538 (Cross-examination of Mr Dent).

Transcript p 538 (Cross-examination of Mr Dent).

Transcript p 538 (Cross-examination of Mr Dent).

Transcript p 544 (Cross-examination of Mr Dent).

Excluding externality issues.

assessed in accordance (and comply) with NZS 6805:1992 225 . However, as recorded earlier, the local authority has not established air noise boundaries for this airstrip so there are no applicable aircraft noise planning standards. The acoustic experts have extracted the 55 dB L_{dn} noise level from the Standard and adopted that as the criterion for an acceptable aircraft noise level for residential and accommodation activities. There are no guidelines given in the Standard or by the experts for acceptable aircraft noise levels for outdoor activities.

[177] The acoustic experts agree that a maximum noise level from aircraft at residential and accommodation sites should be 55 dB $L_{\rm dn}$. We consider that, given the nature of the operation, that is generous to Skydive especially since the experts were not unanimous about the appropriate averaging period for noise.

[178] Further we consider on the balance of probabilities that with the number of flights currently carried out (16-20 average — not counting non-flying days and 26 potential average on the same basis) the limiting factor in respect of annoyance is not the overall sound exposure but the number of flights.

[179] While we accept that the 55 dBA L_{dn} level is a reasonable measure of noise for most of the neighbourhoods (suburbs) at Jacks Point we do not accept that is so for Lot 14 The Preserve or for the Lodge (see Attachment 1). The outdoor amenities of those properties would be best enjoyed on calm clear days which are also the best days for skydiving. We find that an increase in the average number of flights per day from (say) 26 to 50, and in the maximum from 35 to 75 is likely to impose unreasonable adverse effects on the occupiers of those properties.

Effects of noise on amenity and enjoyment of open space

[180] We have considered the evidence of the witnesses for the Jacks Point Interests and the responses from Skydive's witnesses about the adverse effects of the proposal on the amenities and enjoyment of the Jacks Point Zone specifically:

- the golf course, especially holes 2, 3 and 5;
- Lot 14, The Preserve outside amenities;
- the proposed Lodge;
- the walking and cycling (mountain-bike) tracks;
- the playing fields and playground.

[181] In relation to the golf course Mr Tataurangi concluded²²⁶ that "any increase of flight activity by Skydive ... will, no doubt, impact the genuine world class golf experience that is currently enjoyed there". Mr Day responded:



²²⁵ Rule 5.3.5.2 (v) (d).

P M Tataurangi, evidence-in-chief para 27 [Environment Court document 15].

Clearly this broad statement is not correct — for example, an increase of one flight per day of an aircraft that is 10 dB quieter than previous aircraft would reduce the impact on the golf course.

In fact the position is more complex than that, because it is not on the evidence simply a matter of brief noise — the operation of the aircraft causes anticipation, discomfort²²⁷ and accumulative effects.

[182] In relation to amenity the planners' joint statement records²²⁸:

New Zealand standard NZ6805 and amenity

Mr Dent does not consider that the standard adequately safeguards amenity in respect of noise. Mr Garland and Ms Baker consider that the standard was drafted to protect residential amenity in relation to noise. They do not consider the residential locations surrounding the activity have any unique characteristics which anticipate a higher level of amenity than the standard anticipates.

[183] Despite that, the planners' joint statement concluded on the number of flights²²⁹:

We all agree that a limit is appropriate. Mr Garland is not particularly concerned with the number of flights as long as the appropriate acoustic limits are met. Mr Garland does consider a limit should be set on flights. Ms Baker is equally of this view but understands the average maximum of 50 flights and daily maximum of 75 flights have been volunteered by the applicant. Any additional flights have not been assessed by her and she considers the consent should limit the flights to these numbers. Mr Dent remains concerned that any number of flights beyond the daily maximum of 35 flights allowed by resource consent RM960447 under which the applicant currently operates will result in unacceptable adverse effects.

[184] We found the evidence of Mr Garland and Ms Baker on the potential adverse effects on recreationists in the Jacks Point Zone to be skeletal and non-existent respectively. We prefer and accept the better-informed evidence of Mr Dent on the adverse effects of the Skydive proposal.

[185] Overall we find that the proposal is likely to lead to a serious reduction in the recreational amenities of Skydive's immediate neighbours compared with operations under the 1997 consent.

5.3 The objectives, policies and rules of the district plan

[186] There is one district-wide policy as to recreation which supports Skydive's application. It is²³⁰ to encourage and support increased use of private recreational facilities to meet the recreational needs of residents and visitors. However, this policy is equally supportive of the recreational facilities at Jacks Point which rather cancels out any weight to be given to it for the proposal. That neutral position is vacated in favour of the Jacks Point Interests when the qualification to the policy is applied. That makes policy (4.4.3)3.3 "... subject to meeting policies relating to the environmental effects of recreational activities".

Joint Statement of Planning Experts para 16 [Environment Court document 13B].



Policy (4.4.3) 3.3 [QLDP p 4-26].

P M Tataurangi, evidence-in-chief para 16 [Environment Court document 15].

Joint Statement of Planning Experts para 18 [Environment Court document 13B].

[187] The latter policies²³¹ require the consent authority to avoid, remedy and mitigate the adverse effects of (commercial) recreational activities on the natural character, peace and tranquillity of the district, and to avoid, remedy or mitigate conflicts between recreational activities.

[188] There is a clear conflict between several sets of recreational activities here. The ultimate question for us under the district plan is how to appropriately avoid, remedy or mitigate that conflict²³².

[189] As for the application of the Zone Standard: in this case the minimum standard of 55 dBA $L_{\rm dn}$ set in the NZ Standard is inadequate for two reasons. First, the context requires a lower noise bucket (sound exposure level) to maintain the quality of the surrounding environment. Secondly, and more importantly, there are so few flights at present that it is not the sound exposure level but the number of flights per day (frequency) which is the important factor when considering their annoyance value.

[190] The most experienced planner /resource manager to give evidence, Mr Garland, stated²³³ that golf courses go with airports. The relatively junior planner, Mr S Dent, called by the Jacks Point Interests took a more nuanced view. In his (expert) opinion the co-existence of a golf course with an airport depends on the context²³⁴. We prefer his evidence that in the Jacks Point context the adverse effects of the proposal outweigh the benefits, particularly since the airstrip is subject to the Rural General Rules. The district plan has no specific objectives and policies, that we were referred to, identifying the "airport" as being of public importance.

5.4 Part 2 of the Resource Management Act 1991

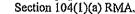
[191] Because the proposed airport activity would be likely to have both positive and negative effects on the environment²³⁵, we need to have recourse to Part 2 of the Act to assess the weights to be given to the various factors.

[192] The ultimate question is whether the resource consent sought would manage the resources of the airstrip and the surrounding area so as to enable people and the Queenstown community to provide for their well-being, health and safety while meeting the (moveable) bottom lines in section 5(2)(a) to (c). In answering that question there was no evidence that any section 6 matters of national importance are relevant.

[193] We turn to section 7 of the RMA. There are three relevant matters which that section requires us to have particular regard to:

Policy (4,4.3)3.1 [QLDP p 4-26].

²³⁴ Transcript p 544.
235 Section 104(1)(2)





Policy (4,4,3) 2.1 and policy (4.4.3) 3.1[QLDP pp4-25 and 4-26].

M J G Garland, rebuttal evidence para 11 [Environment Court document 13A].

- (b) the efficient use and development of natural and physical resources;
- (ba) ...

...

- (c) the maintenance and enhancement of amenity values;
- (e) maintenance and enhancement of the quality of the environment;

We consider paragraphs (c) and (e) together, since in the context of this case there seems to be no difference in their meanings.

[194] Section 8 of the RMA is not relevant in this case.

Efficient use of resources (section 7(b))

[195] We accept that the increased use of the airstrip would be efficient in a fundamental and important sense in that it removes the aircraft from the commercial and general aviation traffic at Queenstown Airport. The use of the approved drop zone is also clearly desirable for any increase in the number of tandem skydivers. We also find that an increased use of the airstrip for flights and for parachutists' landings is an efficient (unquantified) contribution to the local tourism economy.

[196] Just as Mr R G Greenaway, the recreational expert for Skydive, emphasised the importance of that operation for the local economy, Mr Tod, the golf tourism expert for the Jacks Point Interests, did the same for the Jacks Point Golf Course. Similarly, the evidence of Mr Tod, Mr Darby and Mr Tataurangi suggested that increased flights might impact on the financial performance of the Jacks Point Golf Club. Mr Bartlett was critical of that evidence pointing out that it was not quantified in any way. He is correct about that, but then neither was the potential profit to Skydive nor, more relevantly, the potential net benefit or loss to the public. So we are unable to weigh those costs and benefits in any objective way.

[197] Of course there is no obligation on an applicant to carry out a cost benefit analysis of a rigorous kind—*Meridian Energy Ltd v Central Otago District Council*²³⁶—but if it wishes to establish that a certain use of natural and physical resources is more efficient than another, then it bears the burden of that (and a cost benefit analysis can be helpful in that regard).

The maintenance and enhancement of amenity values (Section 7(c) and (e))

[198] We have found that the amenities of recreationalists — golfers, walkers, and cyclists at Jacks Point would be diminished by granting the resource consent sought.

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Meridian Energy Ltd v Central Otago District Council [2010] NZRMA 477 at [116], [123] (FC).

The proposed increase in the maximum number of daily flights from a theoretical 35 (under the 1997 consent) to 75 would cause a substantial adverse effect on the amenities of an area which the district plan has recognised as special. So would increasing the daily maximum average from 28 to 50.

Conclusion

[199] Enabling Skydive to expand so more of its customers enjoy the environment of the Wakatipu Basin and the lake can only be achieved by imposing substantial extra adverse effects on the Jacks Point Zone. The principle in section 5(2)(c) of the RMA that externalities should at least be remedied or mitigated is inadequately applied by Skydive's proposed mitigation.

It should not really be necessary to say so, but in view of Mr Bartlett's submissions, we emphasise that we are not creating a new standard for airports in respect of noise. This case is decided on its own unique facts.

5.5 Result

Weighing the competing factors [200] Mr Bartlett submitted²³⁷:

In terms of the Court's exercise of judgment, the major issue involving balancing of competing interests is the opportunity for the applicant to be able to increase or to maximize utilization of its two aircraft, and the enjoyment of the Skydive patrons as opposed to the risk of interfering with the recreational experience of visitors to the golf course during the time they are on the 2nd, 3rd, 4th and 5th holes.

On the evidence we find that experiences on golfers on the Jacks Point course are likely to be significantly worse than that imposed by current operations.

[201] Further, Mr Bartlett's submission overlooks two other sets of adverse effects. First there are the likely effects of the proposed consent on other recreationalists in particular walkers and cyclists and also to a much lesser extent, children and their minders at the playground. Secondly, there are the likely effects of an increased number of flights on persons outdoors on Lot 14 of The Preserve and at the Lodge site. We accept that the increased number of flights will not unreasonably affect residents or guests when in the house or Lodge, but when they are outside on fine days, the procession of up to 80 extra movements²³⁸ overhead will have a major adverse effect on their enjoyment of the respective properties.

[202] Probably the most useful comparison is between the potential maximum average number of flights (approximately 26) and the average of 50 under the proposal, assuming in both cases that landings would use the alternative flight path over Homestead Bay. Despite that mitigation, we have found that the proposal would cause

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Applicant's summary of issues para 3 [Environment Court document 21].

⁷⁵⁻³⁵⁼⁴⁰ (comparing theoretical maxima) flights x 2 = 80 (extra) movements.

serious extra adverse effects on Lot 14 The Preserve, the Lodge, on golfers, on walkers and cyclists, and on users of the playground.

[203] We have also considered Mr Bartlett's point that the Jacks Point Interests came to the noise, i.e. that Skydive was operating in the area first. We accept that the Jacks Point Interests came to the area with knowledge of the existing noise environment and other adverse effects. However, we consider it is not unreasonable of them to expect those effects to be maintained at the level allowed under the 1997 consent (subject to section 16 of the Act).

[204] We have considered whether we should grant an amended resource consent for substantially lesser average and maximum flights per day to incentivise Skydive to move from its 1997 consent. For the reasons stated earlier, we are insufficiently clear as to what the 1997 consent, with reasonable application of the section 16 duty, might allow so we have an inadequate grasp of what it is we were asked to replace. Further because we find that the witnesses for Skydive assessed the effects on the neighbours so inadequately, and in such an all-or-nothing way that means that compromise options have not been adequately assessed. It may be that if the Skydive application had gone to a council hearing, some of the issues now raised could have been explored more thoroughly. The applicant chose to forego that possibility, and we have inadequate evidence to satisfy us as to alternative operating conditions.

[205] We conclude that the objectives and policies of the district plan, especially the second district wide objective, would not be achieved because the proposal would have substantial extra adverse effects on the recreational opportunities in the Jacks Point Zone and on the amenities of Lot 14, The Preserve which are not outweighed by the potential benefits (producer and consumer surpluses) which granting consent would likely lead to. Nor would the proposal adequately mitigate conflicts between the skydiving activity and those other recreational and living opportunities. Weighing all the competing factors, we judge that the purpose of the RMA is better achieved by refusing rather than granting consent and will make orders accordingly.

Other matters

[206] During the hearing we raised an issue with the parties as to whether an effect of the High Court decision in *Dome Valley District Residents Society Inc v Rodney District Council*²³⁹ is that a resource consent is needed for the manoeuvre of taking off and landing when under 500 feet and over the Jacks Point land. In the result we have not needed to determine that question.

[207] Towards the end of the hearing the section 274 parties suggested that a realignment and relocation of the grass airstrip might make it possible for an increased



Dome Valley District Residents Society Inc v Rodney District Council [2008] 3 NZLR 821; [2008] NZRMA 534.

Skydive operation to become acceptable. That involved aligning the airstrip to the southwest and extending it east closer to the highway. We were given few details about this possibility and so cannot make any comment on it other than to record the suggestion.

[208] Costs should be reserved.

For the Court:

J R Jackson

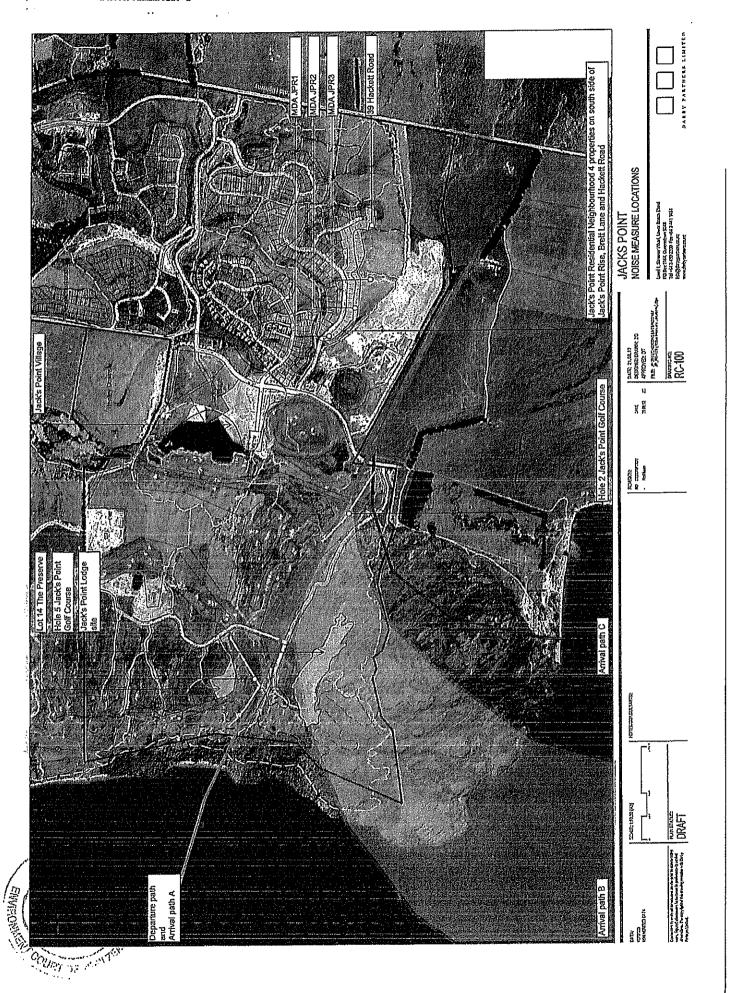
Environment Judge

Attachments:

Attachment 1: Site Plan (From Dr J W Trevathan).

Attachment 2: Glossary of acoustic terminology.

Jacksoj\Jud_Rule\d\Skydive decision-DR.don



Mr Page - Skydive Queenstown Ltd Resource Consent

Attachment 2: Glossary of Acoustic Terminology

The experts used the following terminology²⁴⁰:

dBA	A measurement of sound level which has its frequency characteristics modified by a
	filter ("A-weighted") hence the "A" after "dB" so as to more closely approximate the
	frequency bias of the human ear.

LAE Sound exposure level (for single event noise)

L_{eq} The time averaged sound level (on a logarithmic/energy basis) over the measurement period (normally A-weighted).

 L_{dn} The day-night sound level which is calculated from the 24 hour L_{eq} with a 10 dBA penalty applied to the night-time (2200-0700 hours) L_{eq} (normally A-weighted).

L₉₅ The sound level which is equalled or exceeded for 95% of the measurement period. L₉₅ is an indicator of the mean minimum noise level and is used in New Zealand as the descriptor for background noise (normally A-weighted).

L₁₀ The sound level which is equalled or exceeded for 10% of the measurement period.

L₁₀ is an indicator of the mean maximum noise level and is used in New Zealand as the descriptor for intrusive noise (normally A-weighted).

 L_{max} The maximum sound level recorded during the measurement period (normally A-weighted — in which it is written as " L_{Aniax} ").

 L_{peak} The peak instantaneous pressure level recorded during the measurement period (normally not A-weighted).

Noise A sound that is unwanted by, or distracting to, the receiver.



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Derived from C W Day, Appendix A to evidence-in-chief and his para 5.1 [Environment Court document 9].