

Before the Expert Panel

**FTAA-2504-1054**

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Under **Fast-track Approvals Act 2024**

In the matter of an application for approvals in relation to the Ryans Road Industrial Development

By **Carter Group Limited**  
Applicant

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**Statement of evidence of Andrew Victor Shelley**

23 February 2026

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## STATEMENT OF EVIDENCE ANDREW VICTOR SHELLEY

### 1. QUALIFICATIONS AND EXPERIENCE

- 1.1 My full name is Andrew Victor Shelley.
- 1.2 I hold a Bachelor of Business Studies degree from Massey University, a Master of Arts degree with first class honours from Massey University, a Master of International Security with distinction from Massey University, and a PhD degree from the Victoria University of Wellington.
- 1.3 My expertise includes aviation regulation and aviation safety – the primary focus of this report.
- 1.4 I have prepared this statement of evidence in my capacity as an expert, and I acknowledge that I have read and understand the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. I have complied with it when preparing this statement of evidence.
- 1.5 For the last 15 years (since late 2010) I have been a Director and lead consultant for Aviation Safety Management Systems Limited, renamed in 2021 to Fenix Flight Training Ltd. Prior to that I worked as a consultant for a number of companies, most notably my own consulting company Andrew Shelley Economic Consulting Ltd, and the Boston-based firm of CRA International.
- 1.6 The following are a selection of projects conducted in my capacity as a consultant for Aviation Safety Management Systems Ltd:
- (a) In 2017 and 2018, I provided independent advice to Auckland Council on a plan change related to Auckland International Airport Ltd. This advice was particularly concerned with obstacle limitation surfaces, notification surfaces, and other provisions relating to development in the vicinity of an aerodrome.

- (b) I have advised the New Zealand Defence Force on multiple matters relating to developments that would penetrate the obstacle limitation surfaces at two air bases, including RNZAF Base Auckland located at Whenuapai.
- (c) I have advised Watercare Services Ltd on issues relating to obstacle limitation surfaces and aviation safety in respect of three water supply and wastewater treatment projects, including the presentation of evidence at the resource consent hearing for water supply reservoirs located at 108 Runciman Road, Pukekohe East.
- (d) I have advised a helicopter operator on the obstacle limitation surfaces associated with proposed heliports.
- (e) In 2017 I advised a helicopter operator on the preliminary design for a multi-pad heliport in the South Island and prepared the Notice of Intention to Construct an Aerodrome required by the Civil Aviation Rules Part 157.
- (f) In 2015 I appeared as an expert witness on aviation safety matters in an Environment Court hearing concerning a helipad in Queenstown (ZJV v QLDC [2015] NZEnvC 205). This case required consideration of both health and safety requirements and the Civil Aviation Rules.
- (g) In 2013 I was the joint author of a report for the Civil Aviation Authority (“CAA”) on joining procedures at uncontrolled aerodromes. These are the procedures applied by pilots of aircraft as they arrive at an aerodrome where there is no air traffic control.
- (h) I have written or substantially revised the operating procedures manuals for approximately thirty aviation operators certified by the CAA. The operating procedures manuals are required to contain procedures to ensure the operator will comply with all applicable Civil Aviation Rules.

- (i) I have conducted a detailed analysis for a small air transport operator of the feasibility of operating from a particular aerodrome during the summer. This required consideration of whether it would be possible to meet Civil Aviation Rule requirements governing take-off and landing distances given likely (and historical) meteorological conditions and obstacles located near the aerodrome.

## **2. INTRODUCTION**

**2.1** The purpose of this report is to provide expert comment on aviation regulatory matters relating to the application for approvals in relation to the Ryans Road Industrial Development under the Fast-track Approvals Act 2024 (FTAA).

**2.2** My involvement with the proposal:

- (a) I was first approached by Carter Group in January 2026 and asked to review the detailed analyses prepared by their consultants, review the submissions from CIAL and Airways NZ, and to provide a report describing how these analyses and submissions relate to the requirements of the Civil Aviation Act and Civil Aviation Rules.

**2.3** The key documents and sources of information that I have reviewed in the preparation of this report are:

- (a) The following appendices to the Applicant's response to comments received, including proposed conditions, per s55 of the FTAA:
  - (i) Appendix 02: Memorandum from Novo Group to Jeremy Phillips, Director and Senior Planner, 28 November 2025, re FTAA – 2504 - 1054: Ryans Road Industrial Development Applicant Section 55 Response – Planning;

- (ii) Appendix 03: Ryans Road Industrial Development – Applicant Section 55 Response Fast-Track Conditions – CCC, Consents and DOC Wildlife Approval, Updated 28 November 2025
  - (iii) Appendix 05: Capture Plan Set Rev F with DCM Landscape and Height 27 November 2025
  - (iv) Appendix 17: L+R Airport Consulting, Christchurch International Airport Safeguarding Assessment, 28 November 2025
  - (v) Appendix 18: Cyrrus Technical Safeguarding Assessment of Air Navigation Equipment, 18 November 2025
  - (vi) Appendix 19: Navigatus Consulting, Ryans Road Industrial Development Aviation Safeguarding Assessment, 28 November 2025
- (b) Memorandum of Counsel for Christchurch International Airport Limited addressing Minute 6, 18 December 2025.
  - (c) Ryans Road Industrial Development Fast Track Application – Airways Submission Supplementary, 18 December 2025.
  - (d) Memorandum of Counsel on behalf of Airways Corporation of New Zealand, 16 February 2026.
  - (e) Memorandum of Counsel for Christchurch International Airport Limited in response to Minute 8, 16 February 2026.
  - (f) Christchurch District Plan, latest version available online.
  - (g) The following supplementary statements of evidence on behalf of the applicant:
    - (i) Maggie Hong and Greg Akehurst, Market Economics Ltd, Economic Assessment of Regional

Significance and Claimed Third-Party Costs – Ryans Road Industrial Development,.

- (ii) Supplementary statement of evidence of Simon McPherson (Safeguarding Officer, Cyrrus Limited), 17 February 2026.
- (iii) Supplementary statement of evidence of Geraint Birmingham (Navigatus), 23 February 2026.
- (iv) Supplementary statement of evidence of Ben Hargreaves (L&R Airport Consulting), 20 February 2026.
- (v) Supplementary statement of evidence of Jeremy Phillips (Director + Senior Planner, Novo Group), 23 February 2026.

**2.4** The structure of this report is as follows:

- (a) Section 3 provides an executive summary.
- (b) Section 4 provides an overview of the civil aviation regulatory framework, including civil aviation rules, guidance publications known as advisory circulars, rule requirements applying to aerodrome operators, rule requirements applying to developers, and rule requirements applying to the provision of navigational aids. This section also addresses how essential aviation safety requirements are incorporated into the Christchurch District Plan.
- (c) Section 5 provides a more technical discussion about air traffic surveillance technologies used to detect aircraft, particularly those that are used by Airways New Zealand at Christchurch International Airport.
- (d) Section 6 comments on three areas from the submissions of Airways, CIAL, and Garden City Helicopters: the Australian NASF guidance regarding 'strategic helicopter landing sites', issues raised by Airways about interference with radar coverage, and issues raised by Airways and CIAL about aeronautical studies.

- (e) Section 7 provides further detailed consideration of the impact on Garden City Helicopters, specifically the potential impact on flight paths and the absence of any impact on the operation of air ambulance helicopters.
- (f) Section 8 provides comment on specific aspects of the Ryans Road industrial development, including the extent to which it meets obstacle limitation requirements, Part 77 notification requirements, consideration of unknown future development, and the appropriateness of the proposed consent conditions.
- (g) Section 9 provides comments on the potential impact / costs of the proposal, particularly with respect to whether the proposal could give rise to costs that affect the economic significance of the project.
- (h) Section 10 provides concluding comments.
- (i) A number of attachments are also included to provide additional detail:
  - (i) Attachment 'A' provides a table of abbreviations.
  - (ii) Attachment 'B' provides a copy of the CAA publication Guidance material for land use at or near aerodromes, June 2008.
  - (iii) Attachment 'C' provides Obstacle Limitation Surface and Notification Surface diagrams from relevant civil aviation publications.
  - (iv) Attachment 'D' provides a copy of the GCH Aviation Procedures from the Aeronautical Information Publication.
  - (v) Attachment 'E' provides my responses to the Airways and CIAL NPS-I assessment, 16 February 2026.

### **3. EXECUTIVE SUMMARY**

- 3.1** The main purpose of the Civil Aviation Act 2023 (the Act) is '*a safe and secure civil aviation system*' and the appropriate authority for decisions on aviation safety is the Director of Civil Aviation who has responsibility for administering the Act.
- 3.2** Most of the Ryans Road project can be developed without triggering any notification requirements imposed under the Civil Aviation Act 2023 and its regulatory instruments, so by definition, the project will ensure safety from an aviation perspective and consistency with the purpose of the Act.
- 3.3** Those portions of the development that require notification to the CAA will be subject to standard notification, assessment and determination procedures under Civil Aviation Rule Part 77 and such development must comply with any conditions imposed by the Director of Civil Aviation. As such, there is no aviation safety reason why the development should not be consented to under the Fast Track Approvals Act 2024. I note that a consent condition is proposed by the applicant making it clear that the appropriate notifications will be made and determinations obtained prior to construction commencing and I support that condition.
- 3.4** Notwithstanding the points above, the applicant has evaluated aviation safety risks to an appropriate standard by accounting for and complying with District Plan regulatory controls and protection surfaces; engaging with CIAL and Airways; and commissioning expert advice on relevant aviation safety issues and risks. They have adopted consent conditions and development constraints that provide surety as to such matters. On this basis, essential aviation safety requirements are met and no residual issues of significance should affect CIAL or Airways and their obligations under CAR Parts 139, 171 and 172.

## 4. CIVIL AVIATION REGULATORY FRAMEWORK

### Regulatory Overview

- 4.1** The Civil Aviation Act 2023 (Civil Aviation Act or Act) is the governing legislation for civil aviation in New Zealand. The Civil Aviation Act applies to every person in New Zealand (s9(1)(a)). The Minister of Transport makes Civil Aviation Rules (CARs) under the Act for a wide range of purposes. CARs may generally specify actions, conditions, or standards that participants in the civil aviation system – and persons interacting with the civil aviation system – must comply with. Many CARs specify that persons and organisations providing a particular services or performing a particular function within the civil aviation system are required to hold an operating certificate issued by the Civil Aviation Authority (CAA).
- 4.2** The CAA does not just issue licenses and operating certificates, but also has the statutory responsibility for enforcing compliance with the CARs and with any condition attached to an organisation certificate. The CAA also publishes advisory circulars (ACs) which may specify an acceptable means of compliance with the relevant CARs, and which will also provide general guidance for complying with the relevant rules.
- 4.3** The CAA is deliberate in its use of the words shall and should. If a rule or advisory circular states that a person shall do something, then the relevant action is mandatory. However, if a rule or advisory circular states that a person should do something then the action is not mandatory but is considered good practice.

### Enforcement

- 4.4** If a Civil Aviation Rule is applicable to a particular activity then compliance with that Rule is mandatory. Non-compliance with the Civil Aviation Rules is addressed via two means.
- (a) The first – applicable to the holder of an operating certificate issued under the Civil Aviation Rules – is that the certificate may be suspended or have conditions imposed. This is relevant to CIAL under Part 139 (i.e. as the holder of an aerodrome certificate), and to Airways under Parts 171 and

172 (i.e. as the holder of a Telecommunication Service certificate).

- (b) The second means of addressing non-compliance is enforcement action taken under the Civil Aviation (Offences) Regulations 2025. For example, if a landowner fails to comply with Part 77, that non-compliance is an infringement offence under Schedule 3 of the Regulations.

**4.5** In addition to addressing a matter under the Civil Aviation Act, the CAA also has the ability to take enforcement action under the Health and Safety at Work Act 2015. This could occur where the CAA assesses that although Civil Aviation Rules are or were complied with, there is a material risk to health and safety that must be addressed under the Health and Safety at Work Act.

#### **Relevant Civil Aviation Rules**

**4.6** The Civil Aviation Rules (“CARs”) are divided into “Parts”, each of which concerns a particular activity. The Rule Parts that are relevant to this assessment are:

- (a) *Part 77 Objects and Activities Affecting Navigable Airspace*, which provides the rules around objects such as trees, buildings, objects, and construction activities to the extent that this might affect the safe flight of an aircraft; and
- (b) *Part 139 Aerodromes – Certification, Operation and Use*, which provides the rules governing aerodromes and airstrips.
- (c) *Part 171 Aeronautical Telecommunication Services – Operation and Certification*, which governs the aeronautical telecommunications services including the provision of navigational aids (navaids).
- (d) *Part 172 Air Traffic Service Organisations Certification*, which governs the provision of air traffic control services.

**4.7** The Civil Aviation Rules also provide a basis for many activities to be “certificated” by the CAA. This means that the relevant operator or

organisation (i) has an “exposition” (a controlled document or documents) describing how it complies with the relevant Rules, (ii) has been assessed by the Civil Aviation Authority as complying with the relevant Rules, and (iii) has been issued with a certificate in recognition of this. CIAL holds a Part 139 Aerodrome Operator certificate and Airways is the sole holder of a Part 171 Aeronautical Telecommunication Services Certificate in New Zealand. Airways also holds Part 172 Traffic Service Organisations certificate.

### **Advisory Circulars**

**4.8** The CAA also publishes “Advisory Circulars” which in general explain how to achieve compliance with a particular Rule or Rule Part. An Advisory Circular describes an “acceptable means of compliance” and as such compliance with an Advisory Circular is not mandatory, as there may be an alternative means of compliance which achieves an equivalent level of safety. However, the practices specified in an Advisory Circular are indicative of best practice, and in the event of a prosecution the defendant would need to prove that they had a good reason to depart from the recommended practice.

### **Other Guidance Material**

**4.9** The CAA may at times issue other guidance material. An example of this is the publication *Guidance material for land use at or near aerodromes*, June 2008. This publication provides general guidance on matters such as obstacle limitation surfaces, wildlife hazard reduction, objects and activities affecting navigable airspace, noise, and local authority zoning. A copy of this publication is annexed as Attachment ‘B’.

### **Part 139 Requirements**

**4.10** As noted above, aerodromes such as Christchurch International Airport are subject to the provisions of CAR Part 139 *Aerodromes Certification, Operation and Use* (“Part 139”). The objective of Part 139 is to set standards, specifications, restrictions, and requirements for the issue and exercise of an Aerodrome certificate under the Civil Aviation Act 2023, and to ensure New Zealand meets and maintains applicable ICAO safety and security requirements for the certification, operation and use of aerodromes. An aerodrome such as Christchurch International Airport must be certificated under Part 139 both because

it is an international airport and because it serves aeroplanes having a certificated seating capacity of more than 30 passengers that are engaged in regular air transport operations for the carriage of passengers.

**4.11** Appendix D to CAR Part 139 concerns obstacle restriction and removal. That appendix specifies the following obstacle limitation surfaces are required for an aerodrome such as Christchurch:

- (a) *The following obstacle limitation surfaces must be established for a runway—*
  - (1) *conical surface; and*
  - (2) *inner horizontal surface; and*
  - (3) *approach surface; and*
  - (4) *transitional surfaces.*
  
- (b) *The following additional obstacle limitation surfaces must be established for a precision approach runway category II or III—*
  - (1) *inner approach surface; and*
  - (2) *inner transitional surfaces; and*
  - (3) *balked landing surface.*

The relevant dimensions of these surfaces are specified in Advisory Circular AC139-6 – *Aerodrome Design Requirements: All Aeroplanes Conducting Air Transport Operations, All Aeroplanes above 5700 kg MCTOW*, Revision 8, 10 July 2025.<sup>1</sup>

**4.12** By way of explanation:

- (a) Air Transport Operations are those for the carriage of people or goods for hire or reward.
  
- (b) The abbreviation “MCTOW” means “Maximum Certificated Take-Off Weight”, which is the maximum weight at which an aircraft can safely take-off. The MCTOW for common aircraft types likely to use Christchurch International Airport are

<sup>1</sup> Section 4 - Obstacle Restriction and Removal, pages 54-68, specifically Table 4-1 and Table 4-2.  
FTAA-2504-054 Supplementary Statement of Andrew Shelley.docx

Airbus A320 (71,500kg-77,000kg), Airbus A380 (480,000kg-575,000kg), Boeing 787 (244,944kg), Boeing 777 (294,840kg-344,554kg).

- 4.13** Advisory Circular AC139-6 also has several diagrams to illustrate the relevant surfaces (Figures 4-1, 4-2, 4-3, 4-4). Those diagrams are reproduced in **Attachment C** for ease of reference.
- 4.14** The requirements described above from Part 139 are reproduced in section 6.7 of the Christchurch District Plan (Plan), with the diagram in paragraph AC139-6 Figure 4-1 (Figure 3 in Attachment C) reproduced as Figure 6.7.1 in rule 6.7.4.4 of the Plan.
- 4.15** The proximity of the Ryans Road site to Garden City Helicopters also means that the obstacle limitation surfaces for a heliport are also relevant. Due to the differing characteristics of helicopters and large fixed wing aircraft, the obstacle limitation surfaces for a heliport are much simpler than those for an aerodrome serving fixed wing aircraft, and the slopes are much steeper. The relevant surfaces and their dimensions are specified in Advisory Circular AC139-8 – *Aerodrome design: Heliports*. The key requirement is that the “approach and take-off climb surface should... have an obstacle free gradient not steeper than 1:8” (para 4.1.2). The obstacle limitation surface is shown on the Capture drawing RC-PG125 Rev D "Garden City Helicopters Protection Surfaces". The 1:8 obstacle limitation surface is a much steeper slope than the 1:25 notification surface applied in the Navigatus Aviation Safeguarding Assessment of 28 November 2025.

#### **Part 77 Requirements**

- 4.16** Part 77 complements Part 139 by requiring certain obstacles and constructions to be notified to the CAA. While most CARs only apply to participants in the civil aviation system, the Part 77 requirements apply to all persons, including those who would not otherwise have any interaction with the civil aviation system (such as the Carter Group). For a structure, the relevant triggers for notification to CAA are:

*77.5 ... [the] structure:*

*(1) extends more than 60 m in height above the ground level at its site; or*

*(2) exceeds the general tree height in the area by 18 m and is located in an area of low level aerial activity or other low flying activity, or in a low flying zone or low level route ...; or*

*(3) is located below the approach or take-off surfaces of an aerodrome as outlined in figures A.1 and A.2 of Appendix A , and extends to a height greater than a surface, outlined in Appendix A, extending outward and upward at 1 of the following:*

*(i) a slope of 1:83 from the fan origin of the take-off surface of a runway where the runway is used or intended to be used by aircraft with a MCTOW above 5700 kg:*

*(ii) a slope of 1:50 from the fan origin of the take-off surface of a runway where the runway is used or intended to be used by aircraft with a MCTOW at or below 5700 kg:*

*(iii) a slope of 1:25 from the nearest point of the safety area of a heliport; or*

*(4) penetrates the conical, inner horizontal, or transitional side surface of an aerodrome as—*

*(i) outlined in figure A.1 of Appendix A; or*

*(ii) specified in Part 139; or*

*(iii) as defined in the local district scheme.*

**4.17** The surfaces defined in figures A.1 and A.2 of Appendix A of CAR Part 77 are the same as the surfaces defined in Appendix D of CAR Part 139. The relevant figures are reproduced in Figure 1 and Figure 2 of **Attachment C**.

**4.18** Of note, the CAR Part 77 requirements also include a notification surface that lies below the approach or take off obstacle limitation surface. Objects may penetrate the notification surface, but notification is required.

**4.19** Part 77 requires that a notice of proposal to construct or alter a structure includes the following details:

(a) The location of the proposed structure, the elevation of the site, and the maximum height of the structure.

- (b) Site orientation, other nearby obstacles, and construction materials of the proposed structure.
- (c) Lateral dimensions of the activity.
- (d) Obstacle lighting/markings installed or to be installed on the structure.
- (e) Evidence of consultation with Interested parties.
- (f) Other information pertinent to the activity or event, such as procedures, support arrangements, expected periphery activity.

**4.20** The notice of proposal to construct or alter a structure must be submitted to CAA at least 90 days prior to the start of construction. The CAA will then post a brief (one page) notice on its website notifying the proposal and inviting submissions from interested parties. The proposal will typically be open for comment for a period of 4 weeks (i.e., 20 working days). The Director of CAA must make a determination as to whether the proposed construction will be a hazard in navigable airspace within 28 working days of having received the notification.

#### **Implications of Breaching a Notification Surface**

**4.21** The fact that a notification surface is breached does not automatically mean that the development cannot proceed. The CAA process ensures that where possible any adverse aviation safety impact is managed for to ensure safe outcomes. For example, it is very routine for crane activity in the vicinity of an aerodrome to be notified to the CAA and conditions placed on that activity such as low intensity lighting visible to aircraft and a construction management plan that includes co-ordination with the aerodrome. Such cranes may breach the OLS, but this is usually considered acceptable as it is a temporary breach that can be managed and mitigated. Where a structure results in a permanent breach of a notification surface, this too is addressed through the established CAA assessment process, which routinely determines whether the breach can be safely accommodated and what, if any, mitigations are required.

#### **Part 171 Requirements**

**4.22** Part 171 requires that any person providing an aeronautical telephone service (i.e. radio service) in support of instrument flight or in support of air traffic control services must have an operating certificate from

CAA. The rule sets out the required procedures and minimum standards for the provision of such a service. Airways is the sole holder of a Part 171 certificate in New Zealand.

- 4.23** Subpart D of Part 171 sets minimum requirements for the nav aids known as a Non-directional Beacon (NDB) and UHF Distance Measuring Equipment (DME). Advisory Circular AC171-1 *Aeronautical Telecommunication Services – Operation and Certification* sets additional specifications and requirements for both the NDB and DME, as well as for two other nav aids known as VHF Omnidirectional Radio Range (VOR) and the Instrument Landing System (ILS). This Advisory Circular also provides guidance on the “surveillance and other systems supporting Air Traffic Services”; these are systems that provide air traffic control with the ability to identify the location of aircraft under their control.

#### **Part 172 Requirements**

- 4.24** Part 172 requires that any person providing air traffic services must have an operating certificate from CAA. Part 172 sets out a range of requirements including minimum requirements for air traffic service facilities, personnel requirements, different types of control service that may be provided, the use of air traffic surveillance systems, and various technical requirements including standard phraseology to be used by air traffic controllers. Airways is the sole holder of a Part 172 certificate in New Zealand.

#### **Interaction between the Resource Management Act and civil aviation regulatory requirements**

- 4.25** The Resource Management Act 1991 (RMA) recognises the critical role of major aerodromes. In particular it enables aerodromes to become a requiring authority. An aerodrome as defined in the Civil Aviation Act has the status of a 'network utility operator' under RMA s166(1)(g). All network utility operators may apply for approval as a requiring authority (s167). CIAL became a requiring authority on 24 March 1994 and Airways became a requiring authority on 28 July 1994.<sup>2</sup> As approved

<sup>2</sup> Ministry for the Environment, List of requiring authorities under the RMA, accessed 13 January 2026, <https://environment.govt.nz/guides/applying-for-requiring-authority-status/requiring-authorities-under-rma/>

requiring authorities, Airways and CIAL may at any time give notice of its requirement for designation "in respect of any land, water, subsoil, or airspace where a restriction is reasonably necessary for the safe or efficient functioning or operation of such a project or work" under s 168(2)(b). If further constraints on development are required to ensure the safety and continued operation of the Christchurch International Airport, or of the provision of air traffic control services at that airport, then I would reasonably expect that after more than 30 years those requirements are already included in section 6.7 of the District Plan.

- 4.26** CAR 139.121 specifically requires that the holder of an aerodrome operator certificate must protect navigation aids and air traffic service facilities to the extent it is able. The rule states that:

*A holder of an aerodrome operator certificate must—*

*(1) prevent any construction or activity **on the aerodrome** or surrounding area that the certificate holder has authority over, that could have an adverse effect on the operation of any electronic or visual navigation aid or air traffic service facility for the aerodrome; and*

*(2) prevent, **as far as it is within the certificate holder's authority**, any interruption of electronic or visual navigation aid or air traffic service facility for the aerodrome.*

***[My emphasis]***

- 4.27** It is also significant that CAR 139.121 is limited to matters within the aerodrome operator's authority. Subclause (1) applies only to construction or activities on the aerodrome or in the surrounding area that the operator "has authority over", and subclause (2) is expressly confined to what the operator can prevent "as far as it is within the certificate holder's authority". These qualifications make clear that the rule does not extend to land or activities outside the operator's control. This is precisely why aerodrome operators are recognised as network utility operators under the RMA and may obtain requiring authority status: to enable them to designate land (beyond an aerodrome or land that they have authority over) where restrictions are reasonably necessary for the safe or efficient functioning or operation of the airport. Additional protections are embedded in district plan controls, which

give effect to safety related constraints on development where required.

**4.28** In my experience working with aerodromes across New Zealand, this approach is standard: for development in the vicinity of a major aerodrome, it is typically unnecessary to look beyond the relevant district plan, as the relevant constraints are already embedded there and, in any event, the airport's status as a requiring authority provides a further mechanism to issue a notice of requirement where restrictions are reasonably necessary for the safe or efficient operation of the aerodrome. In the case of Christchurch International Airport, this is achieved through the relevant requirements included in the District Plan.

**4.29** This means that if the requirements of the District Plan are met then the essential aviation safety requirements are met for both obstacle limitation and protection of navigation aids and air traffic service facilities. There might be some residual aviation safety matters to be considered in an aeronautical study, but if the requirements of Part 77 are not breached by the developer, then these matters can be appropriately managed or mitigated by means other than restricting the proposed development. The mitigations could, for example, include a minor adjustment to a flight path.

### **Protection of Airways' Parts 171 & 172 Requirements**

**4.30** Airways certification under CAR Parts 171/172 and its operational capability is managed/protected by:

- (a) Siting of equipment (clear of obstructions etc).
- (b) Protection surfaces and buffers (e.g. per the ICAO diagrams, etc that Airways has supplied).
- (c) District Plan rules and designations.
- (d) The aerodrome operator's obligations under CAR 139.121 and Part 77 controls also work alongside these controls to ensure that Part 171/172 certification is managed/protected.
- (e) The status of both Airways and CIAL as requiring authorities under the RMA.

## 5. AIR TRAFFIC SURVEILLANCE SERVICES AND TECHNOLOGIES

5.1 Air traffic surveillance services are used to locate and identify aircraft and other objects in the air. Surveillance services have traditionally involved radar, but now include a number of other technologies. It is helpful to review the various technologies employed at Christchurch and likely future augmentation of those services. The first important distinction to make is between the detection of non-cooperative objects and the detection of cooperative objects. A cooperative object will itself transmit useful information by way of a device known as a “transponder”; a non-cooperative object does not transmit useful information.

5.2 On 31 December 2022 it became mandatory for all aircraft operating in controlled airspace in New Zealand to have a type of transponder known as “Automatic Dependent Surveillance-Broadcast (ADS-B).”<sup>3</sup> As a result of this, ADS-B is now the main or primary method of detecting aircraft in controlled airspace in New Zealand, including in Christchurch.<sup>4</sup> ADS-B equipped aircraft use GPS and other global navigation satellite positioning systems (GNSS) to obtain an accurate location, and then transmit their position, altitude, and speed (and potentially other information) using the ADS-B message protocol. ADS-B is the technology that enables us to download an app on our phones and see where aircraft are. The apps on our phones are not linked in to air traffic control systems; instead, there is a network of ADS-B ground-based receiver stations and these feed into a live database that has open access. Airways New Zealand has its own network of receiver stations, but there are also “community stations” set up by enthusiasts or other interested parties. The fact that there is a network of receiving stations is important: it means that we are not reliant on a single point source transmission that might be physically blocked – if we can’t receive the signal at one ground-based receiver then we can receive it at another station.

<sup>3</sup> Civil Aviation Authority, ADS-B rule signed with December 2022 deadline, <https://www.aviation.govt.nz/about-us/media-releases/show/ADS-B-rule-signed-with-December-2022-deadline/>

<sup>4</sup> Phil Rakena (Airways New Zealand), New radar for air traffic control, April 2024, <https://www.aviation.govt.nz/safety/safety-education-and-advice/education/vector-magazine/vector-online/new-radar-for-air-traffic-control/>

**5.3** Airways New Zealand elected to move to ADS-B because the air traffic control radar system across New Zealand was reaching end-of-life and required replacing, and ADS-B was seen as a cheaper option. Benefits of moving to ADS-B were also promoted as being:<sup>5</sup>

*It is more technologically advanced than the current surveillance system, providing more accurate data more often. This means that air traffic controllers have a more complete picture of an aircraft's whereabouts.*

*ADS-B also provides better surveillance coverage: 45 percent more of New Zealand's airspace will be visible when ADS-B is fully implemented. That includes surveillance to the ground at all controlled aerodromes.*

**5.4** I note that there is no suggestion from Airways or CIAL that the Ryans Road development will in any way affect the operation of the ADS-B system. That is because, as discussed in paragraph 5.2 above, the network of ground-based receiver stations means that we are not reliant on a single point-source detector. This means that, barring the unlikely event of a GNSS outage or catastrophic technical failure of the ground-based receiver network, all aircraft that have an ADS-B transponder will be visible to Air Traffic Control via their main or primary means of monitoring aircraft.

**5.5** The radar towers shown in the photo on page 51 of the Navigatus report are the new “primary surveillance radar” (PSR) and “secondary surveillance radar” (SSR) installed at Christchurch airport.

(a) The SSR is the backup to the ADS-B system. The radar sends out a signal and a transponder on the aircraft replies with information about the aircraft's identity and altitude. Aircraft position is determined by the radar.

(b) Contrary to its name, the PSR is not the primary means of identifying the location of aircraft. Rather, the word “primary” is used to describe how the radar operates. Primary

<sup>5</sup> Civil Aviation Authority, ADS-B in New Zealand: Information for aircraft owners, operators, maintainers, and crew, <https://www.nss.govt.nz/assets/nss/resources/2018-07-31-ADSB-FAQ-Document-V0.3.docx.pdf>.

surveillance radar is radar as we might conventionally understand it: pulses of radio signal are transmitted, and the return echo is used to judge the range and bearing to an object. While good for detecting what is known as “non-cooperative” radar targets, much more useful information can be obtained from both ADS-B and SSR.

- 5.6** The reason for retaining PSR is that ADS-B and SSR both rely on an aircraft having a functional transponder to transmit the information required by those systems. An aircraft that has a malfunctioning transponder or has no transponder cannot be detected by a system that relies on transponders. PSR enables detection of such aircraft and related objects (which may include, for example, a weather balloon). There will only ever be very few non-cooperative aircraft and objects within the controlled airspace in the vicinity of Christchurch airport. If there is a radar shadow that limits the ability to see a small area of airspace at low level then it is only ever going to affect a very small number of non-cooperative aircraft and objects. If those objects are transiting through the airspace then they will be able to be detected before and after the shadow, with the path through the shadow able to be predicted. Air Traffic Control may elect to reroute other aircraft or use a different approach, and will be able to do so with a highly accurate view of where those aircraft are.

## **6. COMMENTS ON SUBMISSIONS**

- 6.1** This section of my report addresses three issues raised in submissions:
- (a) The Australian NAS-F guidance, particularly ‘Guideline H’ for ‘strategic helicopter landing sites’ (paragraphs 6.2 to 6.8);
  - (b) Issues raised by Airways about interference with radar coverage (paragraphs 6.9 to 6.13); and
  - (c) Issues raised by Airways and CIAL about aeronautical studies (paragraphs 6.14 to 6.21).

## NAS-F Guidance for Strategic Helicopter Landing Sites

**6.2** Garden City Helicopters (GCH) refers to the “NAS-F Guidance” from Australia, particularly “Guideline H”. The NAS-F Guidance is the “National Airports Safeguarding Framework”, which is a land use planning framework promulgated by the Australian National Airports Safeguarding Advisory Group (NASAG). NASAG is comprised of Commonwealth, State and Territory Government planning and transport officials, the Australian Government Department of Defence, the Civil Aviation Safety Authority (CASA), Airservices Australia and the Australian Local Government Association (ALGA).<sup>6</sup> The framework does not have the status of legislation, regulation, or rules, but is intended to be a best practice planning framework.

**6.3** Guideline H is specifically concerned with protecting strategically important helicopter landing sites. Guideline H states that strategic helicopter landing sites (SHLS) to protect should include:<sup>7</sup>

- a) a HLS associated with a hospital; or*
- b) an elevated HLS, located within a populated area; or*
- c) a HLS subject to instrument flight procedures; or*
- d) any other facility identified as strategic by State/Territory or Commonwealth government/authorities*

**6.4** The GCH site is not associated with a hospital (although it is acknowledged that GCH does provide and operate professional air rescue and air ambulance operations for the Canterbury region).

- (a) Within the South Island, there are 11 heliports associated with a hospital:
- (i) Christchurch Hospital
  - (ii) Christchurch Hospital Hagley
  - (iii) Timaru Hospital
  - (iv) Oamaru Hospital
  - (v) Dunstan Hospital

<sup>6</sup> National Airports Safeguarding Framework, <https://www.infrastructure.gov.au/infrastructure-transport-vehicles/aviation/aviation-safety/aviation-environmental-issues/national-airports-safeguarding-framework>

<sup>7</sup> NASF, Guideline H, para. 6.

- (vi) Dunedin Hospital
- (vii) Gore Hospital
- (viii) Southland-Kew Hospital
- (ix) Murchison Hospital
- (x) Nelson Hospital
- (xi) Wairau Hospital

(b) There are also a further eight helipads directly associated with a medical centre:

- (i) Kaikoura Medical Centre
- (ii) Hanmer Medical Centre
- (iii) Ashburton Medical Centre
- (iv) Ranfurly Medical Centre
- (v) Tapanui Medical Centre
- (vi) Te Anau Medical Centre
- (vii) Wanaka Lakes Health Centre
- (viii) Twizel Medical Centre

**6.5** With reference to Guideline H, I also note that the GCH site:

- (a) Is not an elevated HLS located within a populated area;
- (b) Is not subject to instrument flight procedures; and
- (c) Has not otherwise been identified by the government as a strategic facility.

**6.6** Setting aside the question of whether the GCH site is strategic, Guideline H is required in part because:<sup>8</sup>

*In Australia, HLS are not licensed, certified or regulated in the way that aerodromes are under Part 139 of the Civil Aviation Safety Regulations 1998 (CASR).*

That may be a shortcoming of the Australian civil aviation regulatory regime, but it is not a shortcoming of the New Zealand civil aviation regulatory regime. In New Zealand heliports are treated in the same manner as any other aerodrome: heliports can elect to become certificated under Part 139 (as can any other aerodrome), and the Part 77 requirements also apply to development in the vicinity of a heliport.

<sup>8</sup> NASF, Guideline H, para. 12.

The New Zealand regulatory regime already has the appropriate protections in place.

**6.7** It is also of note that Guideline NAS-F sets out “how it should be used”. It provides that “the responsible authorities within each jurisdiction should commence consultation with relevant asset owners/operators, aircraft operators (if identified) to identify HLS that should be safeguarded through land-use planning controls.” In New Zealand, this outcome is already achieved: the Christchurch District Plan was prepared through consultation with relevant aviation operators and incorporates the necessary safeguarding provisions, meaning the intent of Guideline H is already met within our existing planning framework.

**6.8** Lastly, it is also important to note that although the NASF does not have the force of law, the GCH site is not strategic as defined in Guideline H, and the New Zealand regulatory regime has protections that the Australian regime does not, Carter Group’s consultants have taken account of relevant matters included in Guideline H. For example, all of the following have been considered:

- (a) Obstacle Limitation Surfaces;
- (b) Helicopter landing site flight path;
- (c) Trees (there are none);
- (d) Gaseous plumes (use controls);
- (e) Cranes (the Part 77 process);
- (f) Lighting;
- (g) Windshear and turbulence (Navigatus’ assessment, which specifically considered the NASF guidelines); and
- (h) Wildlife / Bird strikes (also relevant to CIAL).

### **Radar coverage**

**6.9** Airways expresses concern about overreliance on the mitigation of rotating a building by 2 degrees. Airways states (p. 7):

*Airways considers promoting this as a mitigation unacceptable without more information further detailing the building material specifications which will identify the potential level of electromagnetic spectrum interference.*

**6.10** The Cyrrus report is very clear that the buildings are modelled as a perfect reflector. This means that the modelling is an absolute worst-case scenario. In this instance, any real-world building would have lower reflectivity and produce lesser effects than those modelled. The Supplementary statement of evidence of Simon McPherson confirms that the rotation of the building is a well accepted mitigation technique and that real-world buildings would have characteristics that would further reduce the reflections.

**6.11** Airways also expresses concern about the proposed mitigation of “lifting the radar beams”. Airways states that (p. 9):

*“Lifting the [radar] beams... would reduce detection at greater ranges over Lake Ellesmere, Tawhaki airfield, and the Port Hills GA corridor.”*

**6.12** The northwest edge of Lake Ellesmere has controlled airspace as low as 1500ft AMSL, with the remainder of the lake having controlled airspace above 3500ft AMSL. Tawhaki aerodrome sits within the area where controlled airspace is above 3500ft AMSL. The only point in the development that might affect the ability of radar to “see” aircraft at 1500ft AMSL at 20NM is at the far western edge of the development site, which provides a direct radar line of sight to the southeast corner of 1500ft controlled airspace over Lake Ellesmere. Controls on building heights and use have been proposed for this particular site which would seem to address this particular issue.

**6.13** This is clearly a very technical matter, and requires expertise on radio propagation, radar, airspace, and aviation law requirements. The report from Cyrrus provides that assessment.

### **Aeronautical Studies**

**6.14** The responsibility for aeronautical studies depends on the scope of the study and the location of activity of interest:

- (a) Aeronautical studies conducted as a result of a Part 77 application for situations such as a crane temporarily penetrating an OLS (or notification surface) are pro-forma

assessments conducted by CAA after an application is made. Hereafter and for clarity, I refer to these as a 'Part 77 study'.

- (b) When an aerodrome operator proposes a construction on their own land then they conduct an aeronautical study, in accordance with AC139-15; and the CAA then reviews the study to determine whether any additional constraints are required on airport operations.
  
- (c) The Ryans Road development is close to, but not within an aerodrome. Accordingly, the Civil Aviation Act does not require an aeronautical study, per AC139-15 to be prepared by the developer. Indeed, it would likely be challenging or impossible for private landowners or developers to produce a 'consensus' aeronautical study in full compliance with AC139-15, where there are conflicting interests with an aerodrome operator, limited timeframes and/or practical barriers to obtaining the information required to inform such a study. However, in any case, that is the role of the CAA as a Part 77 study would be commissioned by the CAA, for activities beyond the aerodrome that are notified under CAR Part 77. The aerodrome operator also has an obligation under Part 139 to conduct its own aeronautical study per AC139-15 to account for any relevant changes in the vicinity of the aerodrome and conduct any adjustments to its operations that may be necessary.

**6.15** An essential component of an aeronautical study prepared by an aerodrome operator under AC139-15 is engagement between the relevant parties. By contrast, a 'Part 77 study' carried out by CAA also entails engagement but by CAA with relevant participants; and such engagement can be expected for any notifications under Part 77 relating to the development.

**6.16** Engagement is clearly a matter of importance to CIAL and Airways in their comments and the need for meaningful engagement as part of an aeronautical study was reinforced by Nick Jackson of CAA in a meeting held on Wednesday 4 February 2026 which I attended with Mr Jeremy

Phillips (Novo Group). A summary of that meeting is provided in Mr Phillips' supplementary statement of 23 February 2026.

- 6.17** Whilst I have explained why private landowners beyond an aerodrome are not required to prepare a full aeronautical study under AC139-15, with associated engagement, the documents that I have reviewed indicate that there has been engagement between the parties in any event. For example, the email from Roy McEwan, Airways, dated 31 January 2025 indicates that Carter Group proactively (prior to the original application submission) organised a meeting with Airways to “discuss the interaction between the proposed industrial park and the Airways Navigational aids at Christchurch Airport.” The email then lists three potential issues, with the “main area of concern” being the “DVOR radiated pattern”. The email’s author attaches a “siting criteria drawing” based on “the latest ICAO guidelines”. This drawing shows what objects are permissible within specified distances from the DVOR.
- 6.18** The email of 31 January 2025 concludes with the suggestion that Airways could put Carter Group in touch with some possible candidates to conduct an “aeronautical review”. Whether an “aeronautical review” is the same as an “aeronautical study” is something of a semantic issue; it is unlikely that the email’s author was thinking about precise definitions when writing the email, particularly when the matters to include in an aeronautical study are not well defined and are somewhat situation-specific.
- 6.19** In any event, this initial consultation with Airways ultimately led to Carter Group retaining Cyrrus (I understand as recommended by Airways) as consultants to conduct a detailed analysis of issues related to navigational aids.
- 6.20** A more holistic overview is then provided by Navigatus, who also consider a range of other matters including compliance with the obstacle limitation surfaces, the heliport, helicopter downwash, radar, and runway end protection areas.
- 6.21** The report (dated 28 November 2025) from L+R Airport Consulting is consistent with what could be expected of a document described as an aeronautical study. It synthesises the Cyrrus report, Navigatus report,

environmental reports, noise, etc. In particular Sections 5 and 6 of the L+R report provide a comprehensive summary of the various risks and how they have been addressed.

- 6.22** Ultimately, the applicant has evaluated aviation safety risks to an appropriate standard by accounting for and complying with District Plan regulatory controls and protection surfaces; engaging with CIAL and Airways; and commissioning technical expert advice on relevant aviation safety issues and risks. They have adopted consent conditions and development constraints that provide surety as to such matters, and they will otherwise comply with the relevant obligations under CAR Part 77 that will provide for further engagement between the CAA and relevant parties and entail a Part 77 (aeronautical) study being carried out by the CAA. Therefore, I consider that CIAL and Airways' criticisms of the aviation assessments undertaken by the applicant are unsubstantiated, and those aviation assessments are entirely appropriate for this decision making process and would also be appropriate in an RMA process.

## **7. FURTHER CONSIDERATION OF GARDEN CITY HELICOPTERS**

### **GCH Flight Paths**

- 7.1** To demonstrate the minor nature of changes that might be required for the GCH flight paths, I now consider the procedures officially published in the Aeronautical Information Publication for the 'Copter South Arrival' and 'Copter South Departure' for GCH. The flight path for these procedures does not track all the way from the GCH helipad to cross Ryans Road, but instead crosses Grays Road. A copy of the relevant pages from the Aeronautical Information Publication is appended as Attachment 'D'.
- 7.2** The 'Copter South Departure' track is 187 degrees magnetic, tracking slightly away from Grays Road. The published procedure requires pilots to "turn left before Ryans Road tracking towards Riccarton Racecourse". The departure track could be rotated slightly to the east so that it parallels or even tracks slightly towards Grays Road.

Helicopters could then comply with the published procedure by turning left to cross Grays Road before reaching Ryans Road.

- 7.3** The approach procedure is the reverse of the departure procedure. The ‘Copter South Arrival’ procedure requires:

*From [Riccarton Racecourse], track towards Grays Road and intercept track 007°M to Garden City Heliport, land at your discretion.*

The arrival track could be rotated so that it is closer to due north (000 degrees magnetic). Helicopters could then comply with the published procedure by crossing Grays Road to intercept the arrival track, rather than intercepting the track south of Ryans Road.

- 7.4** If the changes described above were required for the GCH departure and arrival procedures, it is a minor change and would impose no additional cost on GCH.

### **GCH Operation of Air Ambulance Helicopters**

- 7.5** Notwithstanding my assessment in paragraph 6.4 that the GCH heliport does not meet the NASF Guideline H definition of a strategic helicopter landing site in part because it is not associated with a hospital, it is still useful to consider whether the proposed Ryans Road Industrial Development would impact GCH’s ability to operate helicopters providing an air ambulance service from its existing site.

- 7.6** The *New Zealand Aeromedical Service Standard V4.0 2024* requires that helicopters involved in the provision of aeromedical services (including emergency medical services) are multi-engine turbine helicopters.<sup>9</sup> This requirement means that the helicopter has (at least) two engines, so that in the event of the failure of one engine it is able to safely continue flight on the other engine. This is known under the Civil Aviation Rules as a “Performance Class 1” helicopter. While this document does not have the status of a Civil Aviation Rule, it is

<sup>9</sup> Refer Table 1, page 27, Ambulance New Zealand and Aviation Industry Association, New Zealand Aeromedical / Air SAR Standard, Version 4.0, 1 August 2024. <https://www.tewhatauora.govt.nz/assets/Corporate-information/About-us/Expert-groups/Ambulance-team/New-Zealand-Aeromedical-and-SAR-Standard-V4-2024.pdf>

published on the Te Whatu Ora (Health NZ) website. The *Proposed future operating model for the air ambulance service*, 14 April 2025, also on the Te Whatu Ora website, proposes to standardise future air ambulance services around two specific helicopter types, both of which are Performance Class 1.<sup>10</sup> Both helicopter types operated by GCH as “Westpac Rescue Helicopters” are Performance Class 1 helicopters.

- 7.7 The relevance of this is that Performance Class 1 helicopters are able to operate in locations that single engine helicopters cannot, and specifically from locations where there might not be locations available to conduct an autorotative landing in the event of an engine failure (because the second engine has sufficient power for safe flight). Civil Aviation Rule 91.127 Use of Aerodromes requires that (91.127(d)(3):

**unless the helicopter is a performance Class 1 helicopter,**  
*any place used as a heliport or as a place to hover has such approach and take-off paths that an autorotative landing can be conducted without causing a hazard to any persons or property on the surface.*

***[My emphasis]***

- 7.8 Similarly, paragraph 4.1.3 of AC139-8 states

*A major safety consideration of a heliport is the availability of suitable approach and take-off climb surfaces. Heliports should have approach and take-off paths such that, if the helicopter is not a performance Class 1 helicopter, an autorotative landing can be conducted without any undue risk to any person on the ground.*

- 7.9 The helicopters operated by GCH for the provision of air ambulance services are Performance Class 1 helicopters, and will be required to be Performance Class 1 helicopters in the future. These helicopters are permitted by the Civil Aviation Rules to have approach and take-off paths that pass over areas with obstructions that prevent a safe autorotative landing. This is permitted because the second engine ensures

<sup>10</sup> Page 56, Proposed future operating model for the air ambulance service, Aeromedical Commissioning Programme, 14 April 2025. <https://www.tewhatuora.govt.nz/assets/Publications/Ambulance/Proposed-future-operating-model-for-the-air-ambulance-service.pdf>

that safe flight can continue if one engine fails. This means that, even if there is no alternative flight path to the existing Copter South approach and departure, air ambulance operations can continue uninterrupted from the GCH heliport.

## **8. RYANS ROAD INDUSTRIAL DEVELOPMENT**

### **Part 77 Requirements**

- 8.1** In the case of the Christchurch aerodrome, CIAL has exercised its power as a requiring authority and all relevant obstacle limitation surfaces and notification surfaces under the Civil Aviation Rules are also specified in the Christchurch City District Plan. If those limitations are not breached then there is no requirement under the Civil Aviation Rules to notify the CAA because there are no significant safety concerns. If the limitations are breached, then the applicant must notify the CAA under Part 77.
- 8.2** The evidence presented shows that in relation to each of the notional surfaces for Christchurch International Airport, the proposed industrial development has the following effects:
- (a) Conical Surface – not within the lateral confines of this surface, so not relevant.
  - (b) Inner Horizontal Surface – proposed maximum building elevation would not breach this surface, although cranes used during construction might.
  - (c) Approach Surface – no buildings are proposed to breach this surface. A temporary crane may breach this surface when constructing low-level buildings (3.5m to 5.5m) on Lot 58.
  - (d) Transitional Surfaces – no buildings are proposed to breach this surface, although cranes used during construction might.
  - (e) Inner Approach Surface – this is contained within the extent of the approach surface and no buildings are proposed to breach this surface.
  - (f) Inner Transitional Surfaces – these lie above the transitional surfaces, and no buildings are proposed to breach this surface.

(g) Balked Landing Surface – baulked landing surface lies above the approach surface, no buildings breach this surface.

**8.3** The implication of the above paragraph is that, given the proposed maximum building heights, none of the proposed buildings will penetrate the relevant obstacle limitation surfaces for the airport's main runway. Some of them may, however, temporarily breach the Part 77 notification surfaces and obstacle limitation surfaces temporarily via construction equipment, and therefore would require notification to the CAA. As noted in the Navigatus Aviation Safeguarding Assessment of 28 November 2025, the requirement for notification will trigger safeguarding requirements, but this will not, in itself, prevent the development from occurring as any restrictions imposed on the developer will only be to the extent of the non-compliance with Part 77.

**8.4** The evidence presented also shows that no buildings will penetrate any obstacle limitation surface, but on some lots may penetrate the notification surfaces in relation to the Garden City Helicopters heliport (Navigatus Aviation Safeguarding Assessment, section 6). As the Aviation Safeguarding Assessment notes, there is sufficient clear land to the east of the Garden City Helicopters site that an alternative approach and departure path could be used by helicopters using that facility. A reasonable, and entirely possible outcome from an aeronautical study triggered by a Part 77 application could be that an alternative approach and departure procedure is required. This would be a minor change. Furthermore, as I have discussed at paragraphs 7.5 to 7.9, even if no alternative flight path is available, the proposed Ryans Road Industrial Development will have no impact on the ability of air ambulance helicopters to use the GCH site.

**8.5** As described earlier in paragraphs 4.19 and 4.20, notification to CAA under Part 77 will trigger the CAA to conduct a Part 77 study. The Part 77 study will consider all relevant impacts on aviation safety. The study will include consultation with potentially affected parties to identify potential safety concerns, and establish appropriate mitigations if those are appropriate. The Director of Civil Aviation must make a determination as to whether the proposed construction will be a hazard in navigable airspace within 28 working days of the receipt of the

notification. The Director of Civil Aviation makes his or her decision based on the results of the study.

- 8.6** If the proposed development will be a hazard in navigable airspace then the Part 77 study will consider appropriate mitigations. For example, a crane in the vicinity of an aerodrome is likely to be required to have a low intensity light on top. In some locations – but not all – the operation of the crane may need to be coordinated with airport operations.

### **Future Developments**

- 8.7** No one can reasonably foresee all the future developments that might occur in the wider vicinity of the Christchurch aerodrome. The Part 77 study also does not pretend to make this assessment. Rather, each new development is assessed for its impact on aviation safety given the environment as it exists at that time. This necessarily means that future developments may be constrained by current developments; this is a natural consequence of a market based economy rather than a centrally planned economy.
- 8.8** The inability to know exactly what uses each lot in the development will be used for also means that it is reasonable to specify conditions of consent on each lot. Maximum heights can be specified on some sites where those heights would be critical. On other lots it may be appropriate to simply reflect Council Plan requirements or CAR Part 77 requirements for notification if proposed building heights are above a height equal to the height of the obstacle limitation surface (or notification surface if applicable).
- 8.9** In my view, none of these matters raise a reason to withhold approval under the Fast Track legislation. The appropriate authority for decisions on aviation safety is the Director of Civil Aviation. Most of the Ryans Road site can be developed without triggering any notification requirements, so by definition are safe from an aviation perspective. Those portions of the development that require notification to the CAA should be consented subject to a condition that the appropriate notification is made and that any development on those sites must comply with any conditions imposed by the Director of Civil Aviation.

## Consent Conditions

**8.10** I have reviewed the proposed consent conditions revised 20 February 2026. I consider that the proposed conditions will effectively address any aviation safety risks that may arise from any particular development:

- (a) Condition 7 addresses building heights, including the requirement for a Part 77 notification requirements.
- (b) Conditions 9, 10, 11, and 12 appropriately address lighting requirements.
- (c) Condition 13 addresses the protection surfaces (including obstacle limitation surfaces).
- (d) Advice Note A addresses the helicopter downwash hazard.
- (e) The new proposed condition 21A appropriately addresses Part 77 notification requirements.
- (f) New condition 21C proposes an Aviation Risk Assessment, which is over and above anything that developers are legally required to conduct. In my view, this is overly precautionary and not necessary.
- (g) The proposed Aviation Risk Assessment:
  - (i) The Assessment is limited to only the matters that are relevant to development within the industrial park, which is appropriate given the overall controls on the industrial park (such as building heights).
  - (ii) The Assessment requires the Applicant to notify the CAA and invite the CAA to comment on any aviation safety matters it considers should be addressed with the scope of the proposal.
  - (iii) The proposed Assessment provides an appropriate definition of what constitutes meaningful engagement with other stakeholders. With the full package of consent conditions in place it is

appropriate that other stakeholders are able to comment but their agreement is not required.

**8.11** Overall, I consider the conditions proposed by the Applicant to be suitable and appropriate to address and mitigate any residual aviation safety effects (if any) that may arise from individual developments within the industrial park. This is notwithstanding my view that compliance with the District Plan provisions and the applicable Civil Aviation Rules provides a sufficient framework to ensure aviation safety, and that the development, as proposed, does not give rise to unacceptable aviation risks. As such, I consider that the conditions proposed by the Applicant constitute a precautionary response to address any outstanding aviation safety matters such as those raised by CIAL and Airways.

## **9. POTENTIAL IMPACTS/COSTS OF THE PROPOSAL**

### **Economic Impacts**

**9.1** In preparing this statement, I confirm that I have read Economic Assessment of Regional Significance and Claimed Third Party Costs – Ryans Road Industrial Development by Maggie Hong and Greg Akehurst (Economic Assessment).

**9.2** In my opinion, no significant operational impacts on CIAL, GCH or Airways are anticipated to arise from the proposal. Any mitigation measures required to protect navigation equipment or helicopter operations are expected to be minor and fall within standard aviation practice, with associated costs (if any) being limited in scale. These potential costs would be far outweighed by the economic benefits of the proposal, as outlined in the Economic Assessment.

### **Response to matters raised in NPS-I Assessment**

**9.3** On 16 February 2026, CIAL and Airways each filed responses to Minute 8 of the Expert Panel, which requested an assessment of the National Policy Statement for Infrastructure (NPSI). I note that CIAL's assessment was prepared with input from planning advisors (Airways also relies on this planning assessment prepared for CIAL), but neither

party appears to have obtained any input from a person with aviation safety expertise. Given this, I have provided in **Attachment E** below a response to the aviation related matters raised in their assessments.

## **10. CONCLUSION**

- 10.1** The particulars of the proposal and as evidenced by the technical assessments and compliance with the District Plan / protection surfaces means the proposal will be safe and appropriate from an aviation safety perspective. I consider that the information and technical assessment provided by the Applicant are more than sufficient for this process, and go well beyond what would typically be expected in an RMA process, particularly given the proposal's compliance with the District Plan protection and the applicable CARs.
- 10.2** Further assurance of aviation safety is provided by the regulatory processes under the CAA which will be followed.
- 10.3** The conditions of consent proposed by the Applicant require/reinforce/support the above.
- 10.4** Given the above, including the evidence in the technical assessments, there will be no significant operational constraints, costs or limitations on CIAL or Airways. With reference to the economic assessment of Maggie Hong and Greg Akehurst, if there are any additional costs to CIAL or Airways, those costs would not be of a magnitude that would materially affect the regional significance of the Ryans Road development.



**Andrew Victor Shelley**

**23 February 2026**

## **LIST OF ATTACHMENTS**

- A. Table of Abbreviations
- B. CAA Guidance material for land use at or near aerodromes
- C. Obstacle Limitation Surface and Notification Surface diagrams
- D. GCH Aviation Procedures, Aeronautical Information Publication
- E. Responses to Airways and CIAL NPS-I Assessment, 16 February 2026

## Table of Abbreviations

The following abbreviations are used in the report of Andrew Victor Shelley:

AC	Advisory Circular
CAA	Civil Aviation Authority
CAR	Civil Aviation Rule
CDP	Christchurch District Plan
CIAL	Christchurch International Airport Limited
DME	UHF Distance Measuring Equipment (a type of navaid)
FTAA	Fast-track Approvals Act 2024
GCH	Garden City Helicopters
HLS	Helicopter Landing Site
ICAO	International Civil Aviation Authority
ILS	Instrument Landing System (a type of navaid)
MCTOW	Maximum Certificated Take-Off Weight
NASF	(Australian) National Airports Safeguarding Framework
Navaid	Navigational aid
NDB	Non-directional Beacon (a type of navaid)
NoR	Notice of Requirement
OLS	Obstacle Limitation Surface
PSR	Primary Surveillance Radar
RMA	Resource Management Act 1991
SSR	Secondary Surveillance Radar
VOR	VHF Omnidirectional Radio Range (a type of navaid)

**CAA Guidance material for land use at or near aerodromes**



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# **Guidance material for land use at or near aerodromes**

**June 2008**

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## **Overview**

The environment at and surrounding an airport has unique characteristics that impact on land use. Specific requirements for the operation of aircraft, airport design and airspace management are covered in the Civil Aviation Act 1990 and Civil Aviation Rules. The regulatory oversight of these requirements is undertaken by the Director of Civil Aviation and the Civil Aviation Authority of New Zealand.

New Zealand is a signatory to the Convention on International Civil Aviation (the Chicago Convention) which is a set of international requirements for civil aviation coordinated through the International Civil Aviation Organisation (ICAO). New Zealand has adopted the ICAO standards and recommended practices as the basis for New Zealand Civil Aviation Rules (CARs).

Aerodrome operators in New Zealand should monitor and review land use activities around their aerodrome to ensure the safe operation of aircraft and protection of airspace. Those persons making changes to land use must ensure that they comply with any applicable CARs, local authority planning requirements and work with aerodrome operators in land use changes.

The following provides guidance for those persons proposing land use changes around aerodromes and identifies specific points to be taken into account.

## **Glossary**

### **Aerodrome—**

- (1) means any defined area of land or water intended or designed to be used either wholly or partly for the landing, departure, and surface movement of aircraft; and
- (2) includes any buildings, installations, and equipment on or adjacent to any such area used in connection with the aerodrome or its administration.

(An aerodrome includes a heliport)

**Civil Aviation Rules** means rules made under the Civil Aviation Act.

## **Types of Aerodromes**

Many aerodromes in New Zealand hold a Civil Aviation Rule Part 139 aerodrome operating certificate. These include international and large domestic aerodromes. The Part 139 certificate is required for aerodromes where aircraft with more than 30 passenger seats operate regular air transport operations. Aerodromes that do not meet the more than 30 passenger seat criteria may also hold a Part 139 certificate. The Part 139 certificate requires the aerodrome operator to comply with a range of rules and requirements including ongoing CAA oversight.

Under Part 139, there are two specific requirements to be met for land use; Obstacle Limitation Surfaces and Wildlife Hazard Management.

The remainder of New Zealand's aerodromes are non-certificated. The only CAR requirements on a non-certificated aerodrome are those that form part of the operating requirements for any airline or aircraft operator that uses the aerodrome.

## **Obstacle Limitation Surfaces**

Under CAR 139.51 an aerodrome operator must have in place obstacle limitation surfaces for the aerodrome that are defined surfaces in the airspace above and adjacent to the aerodrome. These obstacle limitation surfaces are necessary to enable aircraft to maintain a satisfactory level of safety while manoeuvring at low altitude in the vicinity of the aerodrome. These surfaces should be free of obstacles and subject to control such as the establishment of zones, where the erection of buildings, masts and so on, are prohibited.

More information on obstacle limitation surfaces (OLS) can be viewed online at [www.caa.govt.nz](http://www.caa.govt.nz) under Advisory Circulars.

For Part 139 certificated aerodromes the OLS requirements can be found in Chapter 4 of CAA Advisory Circular AC139-6.

For non-certificated aerodromes the OLS requirements can be found in Chapter 3 of CAA Advisory Circular AC139-7.

For heliports the OLS requirements can be found in Chapter 4 of CAA Advisory Circular AC139-8.

The OLS surfaces are normally published in the local District Plan and can also be sourced directly from the aerodrome operator.

It is important that any proposed building or structure does not infringe required OLS areas. Consultation with the aerodrome operator and the relevant local authority at an early stage is essential.

## **Wildlife Hazard Management**

Under CAR 139.71 an aerodrome operator must establish an environmental management programme to minimise or eliminate any wildlife hazard that presents a hazard to aircraft operations at their aerodrome in areas within their authority.

The management of wildlife, especially birds, is critical for aircraft operational safety. Bird strikes put the lives of aircraft crew members and their passengers at risk. In the United States over 7,500 bird and other wildlife strikes were reported for civil aircraft in 2007. Bird and other wildlife strikes to aircraft annually are estimated to cause well over \$600 million in damage to civil and military aviation in the United States alone.

It is important that land use changes are monitored and reviewed by the aerodrome operator in areas outside their immediate control to ensure that these land use changes do not increase wildlife hazards for the aerodrome.

Garbage disposal dumps and other sources that may attract wildlife activity on, or in the vicinity of, an aerodrome, need to be assessed as a potential source of wildlife hazard. It is

an International Civil Aviation Organisation requirement that such activities are closely managed by the controlling authority. If necessary an aeronautical study may need to be undertaken to assess the potential wildlife activity hazard.

Examples of wildlife attractants include:

- Refuse Dumps and landfills
- Sewage Treatment and Disposal
- Agricultural - cultivation of land, types of activity e.g. pig farming.
- Fish processing plants
- Cattle feed lots
- Wildlife refuges
- Artificial and natural lakes
- Animal farms
- Abattoirs and freezing works

Proper planning of these activities and their impacts on wildlife should be undertaken. It should be noted that aircraft approach and departure areas may extend for a distance from the aerodrome runway, therefore wildlife impacts on aircraft activities may not be immediately apparent. Consult the aerodrome operator as early in the planning as possible.

The International Civil Aviation Organisation provide specific environmental management and site planning information on the following:

### **Refuse dump or landfills**

If a refuse dump is proposed in the vicinity of the aerodrome there may be a requirement to provide bird control at the site to reduce the attractiveness to birds. The potential threat to aircraft depends on location relative to airport and flight paths, type of refuse, and the types of birds expected in the vicinity.

The ICAO Bird Control and Reduction Manual recommends that refuse dump sites be located no closer than 13 kilometres from the airport property. The proper siting of refuse dumps can reduce hazard and any location should be analysed by a group of specialists on bird problems.

### **Water**

Surface water is a large bird attractant and developments that have drainage ditches, artificial waterways and large areas of water close to an aerodrome may attract birds and other wildlife.

In the ICAO Bird Control and Reduction Manual it is noted that in the vicinity of an aerodrome artificial and natural lakes increase the bird strike hazard depending on the size and the shape of the lake, its ecological state and the surroundings. It is recommended that

an ornithologist/biologist evaluate the ecological conditions of the whole vicinity as well as migration in the area. The bird strike hazard can be reduced if the lake is made smaller and the shores steeper, and if fishing, hunting and water sports are forbidden. Filling a lake with soil or covering the surface with wires and nets are two of the better solutions to the problem.

## **Notice of Intention to Construct, Alter, Activate or Deactivate an Aerodrome**

Civil Aviation Rule Part 157 requires that prior notice be given to the Director of Civil Aviation whenever a person intends to construct, alter, activate or deactivate an aerodrome. This notice will enable the Director to identify whether the use of the airspace associated with the aerodrome proposal will be a hazard to other established airspace users. It will also allow identification of problems to do with the safety of persons and property on the ground.

It is also necessary to consider efficient use of airspace at an early stage. The Director, after receiving such notice, will give advice on the effects the proposal would have on the use of navigable airspace by aircraft and on the safety of persons and property on the ground. An aeronautical study will be undertaken and a determination on the proposal made.

The Part 157 rule requirements and Part 157 Advisory Circular are available on the CAA web site [www.caa.govt.nz](http://www.caa.govt.nz)

There is also a Part 157 information leaflet available from CAA or at: [http://www.caa.govt.nz/aerodromes/Aero\\_Studies\\_Pt157\\_info.pdf](http://www.caa.govt.nz/aerodromes/Aero_Studies_Pt157_info.pdf)

## **Objects and Activities Affecting Navigable Airspace**

Civil Aviation Rule Part 77 prescribes rules for a person proposing to construct or alter a structure that could constitute a hazard in navigable airspace; or use of a structure, lights, lasers, weapons, or pyrotechnics, that could constitute a hazard in navigable airspace.

There are several areas that require a Part 77 application for a determination on such objects and activities including:

- A structure that extends more than 60 m in height above the ground level at its site.
- A structure that exceeds the general tree height in the area by 18 m and is located in an area of low level aerial activity or other low flying activity, or in a low flying zone or low level route as prescribed under Part 71.
- A structure that is located below the approach or take-off surfaces of an aerodrome as defined in Part 77.
- A structure that penetrates the obstacle limitation surface of an aerodrome.

- A person proposing to use a structure that may discharge efflux at a velocity in excess of 4.3 m per second through an obstacle limitation surface of an aerodrome or higher than 60 metres above ground level.
- A person proposing to operate a light or a laser if the light or laser is liable to endanger aircraft.
- A person or organisation that proposes to use a weapon that fires or launches a projectile that has a trajectory higher than 45 m if within 4 km of an aerodrome boundary, or 120 m if more than 4 km from an aerodrome boundary.
- A person who proposes to stage a pyrotechnics display that involves the firing or launching of a projectile that has a trajectory higher than 45 m if within 4 km of an aerodrome boundary or 120 m if more than 4 km from an aerodrome boundary.

A person proposing to construct or alter a structure must notify the Director of Civil Aviation 90 days before the proposed date of commencement of construction or alteration. The specific requirements are detailed in Civil Aviation Rule 77.13.

An aeronautical study will be undertaken and a determination on the proposal made.

Full details and information on Part 77 requirements are available in the Part 77 Rule which can be accessed at the CAA web site [www.caa.govt.nz](http://www.caa.govt.nz).

## **Noise Issues**

Noise issues to do with aerodromes are the responsibility of the local controlling authority and the CAA does not have any statutory function in relation to aircraft or aerodrome noise. The Minister does produce rules relating to noise abatement measures under Civil Aviation Rule Part 93 which are published on behalf of the aerodrome operator from local authority requirements.

## **Local Authority Zoning**

The CAA encourage local authorities to protect aerodromes in their areas to ensure the long term sustainability of the aerodrome, the safety of the aircraft operations, and the safety of persons and property. In addition to the required obstacle limitation surfaces other areas can be specifically zoned to assure that future uses of the land are compatible with airport operations and to protect persons and property. Zoning solely to obstacle limitation surface is insufficient to prevent the construction of incompatible uses such as housing or uses that attract congregations of people in the approach areas.

In the United States a runway protection zone (RPZ) is used by many local authorities for the protection of people and property on the ground. Compatible land use within the RPZ is generally restricted to such land uses as agricultural, golf course, and similar uses which do not involve congregations of people or construction of buildings or other improvements that may be obstructions. Land uses prohibited from the RPZ are residences and places of public assembly including churches, schools, hospitals, office buildings and shopping centres.

## **Summary**

Aerodromes have an important role in aviation safety in particular the safety of aircraft and passengers. In New Zealand the Civil Aviation Authority oversees aviation safety based upon international aviation requirements. It is important that persons wanting to alter land use near an aerodrome do so in consultation with the aerodrome operator, the relevant local authority and, where necessary, the Civil Aviation Authority.

It is important that land use changes near aerodromes are also compliant with any Civil Aviation Rule requirements.

## **Contacting the CAA**

The Aeronautical Services Unit of the CAA has responsibilities for the oversight of the services supporting the New Zealand aviation system. The unit is responsible for certification and surveillance of aerodromes and heliports, and air traffic, telecommunications, navigation, meteorological and aeronautical information services.

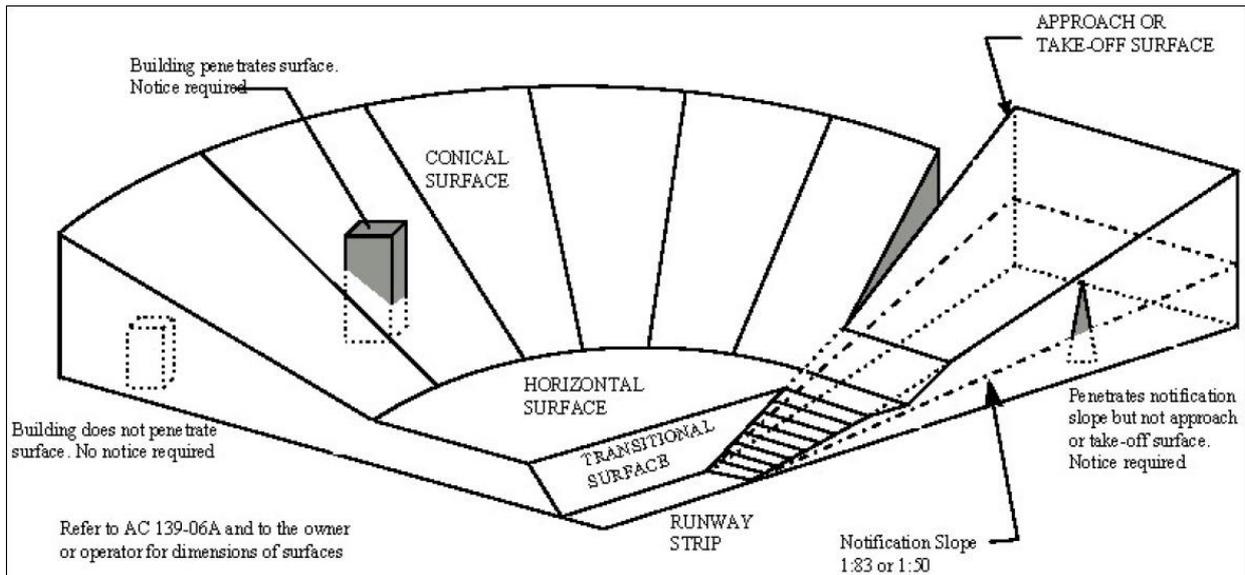
The unit also has responsibilities regarding airspace and Part 77 determinations for objects affecting navigable airspace, such as structures, fireworks, unmanned balloons, kites and model aircraft. They can offer advice on matters relating to Part 139 certificated aerodromes and Part 157 aerodrome determinations.

They can be contacted by phoning the CAA on 04 560 9400 or through specific contact details on the CAA web site [www.caa.govt.nz](http://www.caa.govt.nz)

**Obstacle Limitation Surface and Notification Surface diagrams**

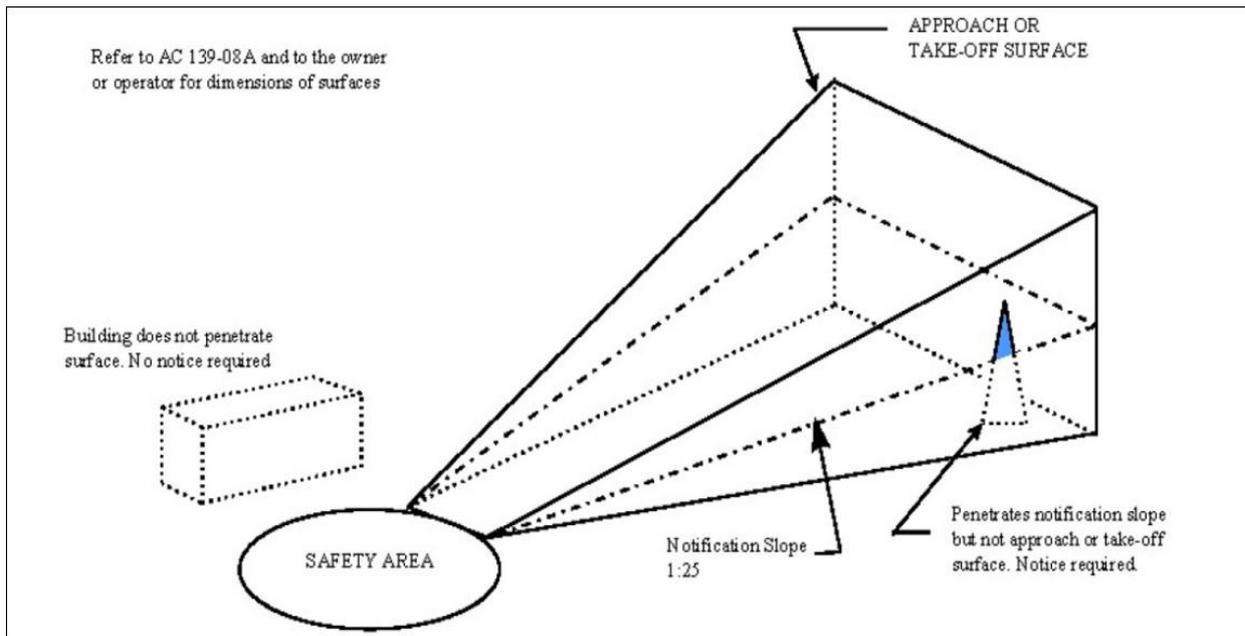
**Part 77: Appendix A**

**Figure 1: Aerodrome Notification Requirements**



Source: Part 77, Appendix A, Figure A.1

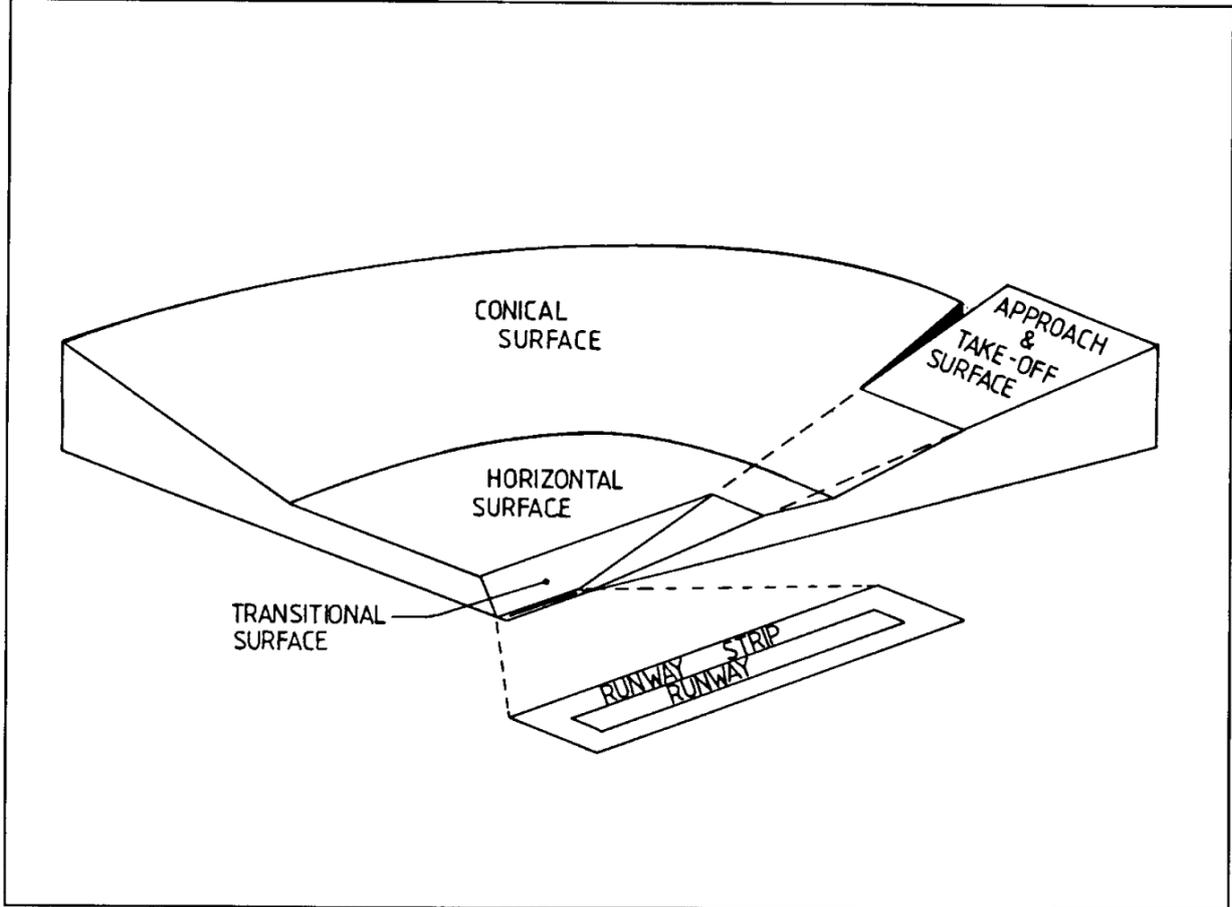
**Figure 2: Heliport Notification Requirements**



Source: Part 77, Appendix A, Figure A.2

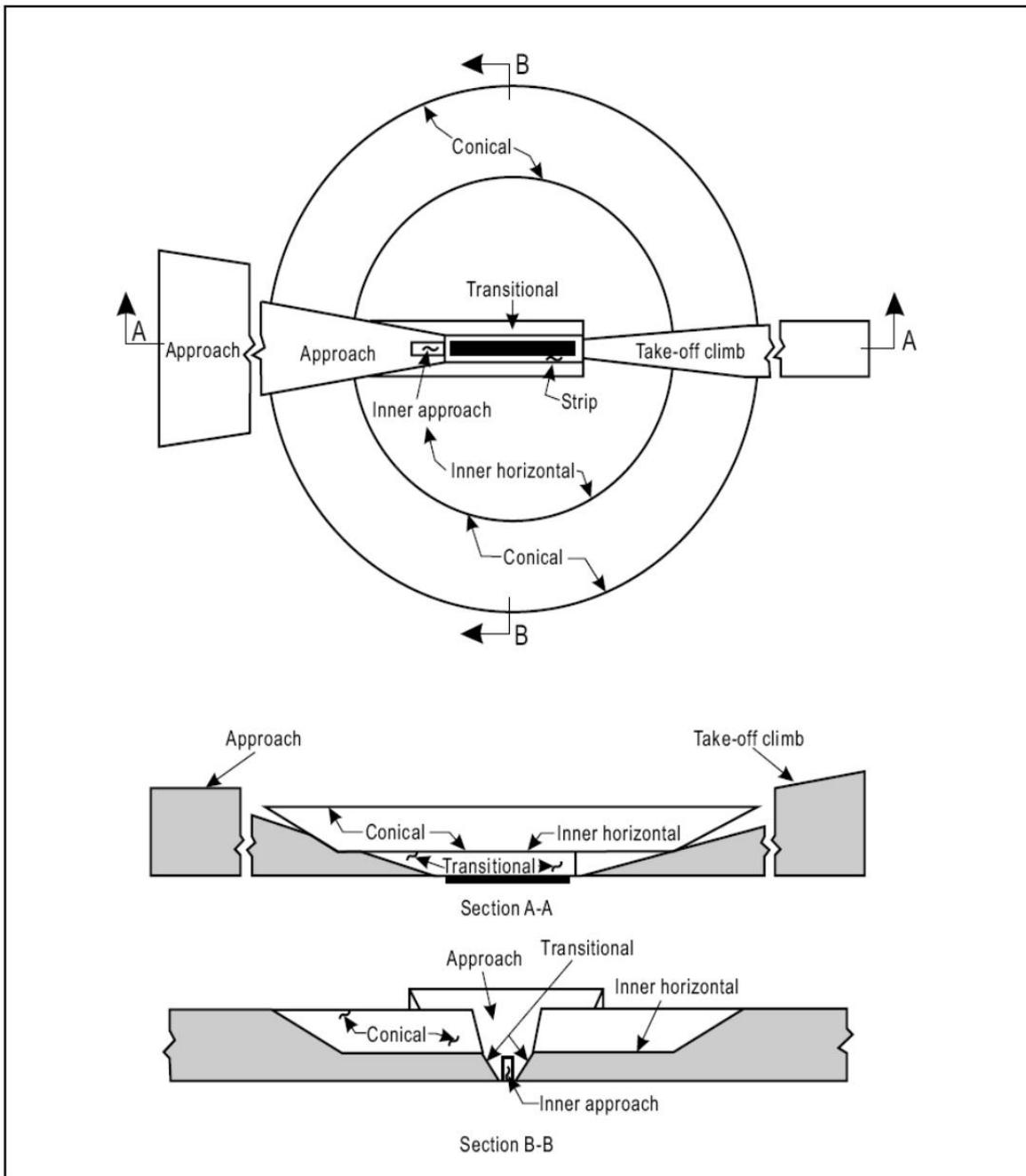
Advisory Circular AC139-6

Figure 3: Obstacle limitation surfaces



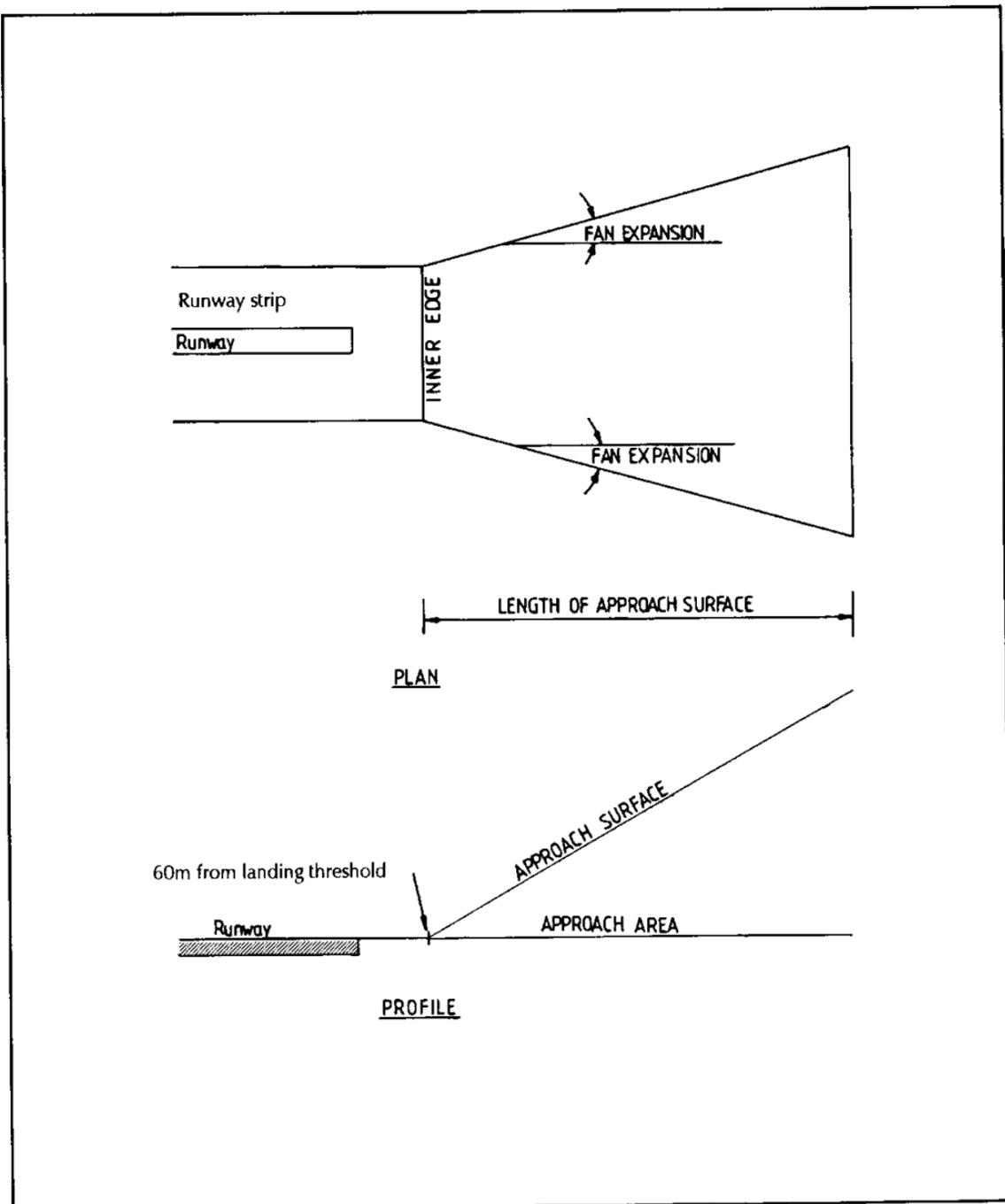
Source: Figure 4-1, AC139-6, p. 57

Figure 4: Obstacle limitation surfaces



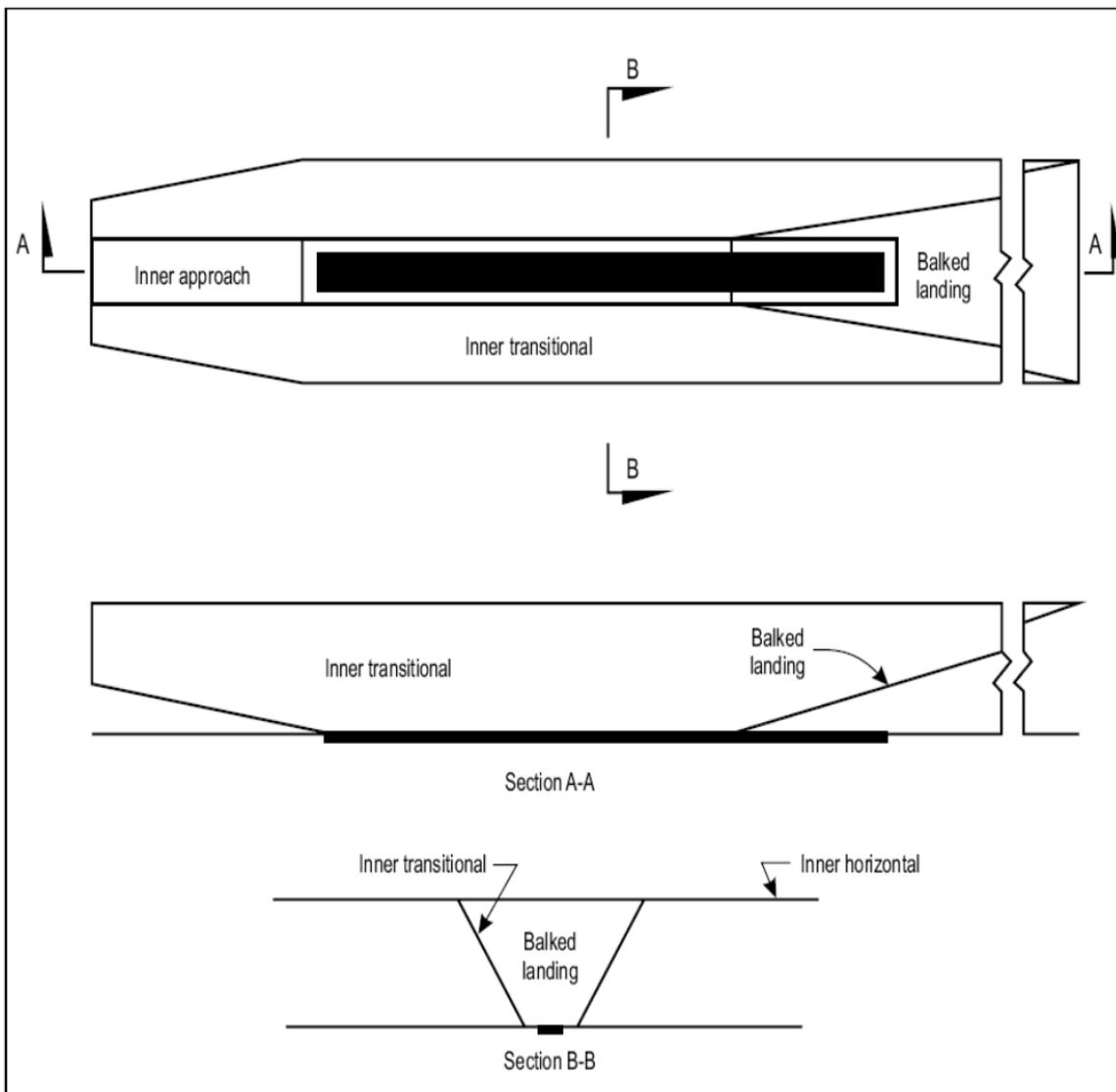
Source: Figure 4-2, AC139-6, p. 58

Figure 5: Approach area and surface



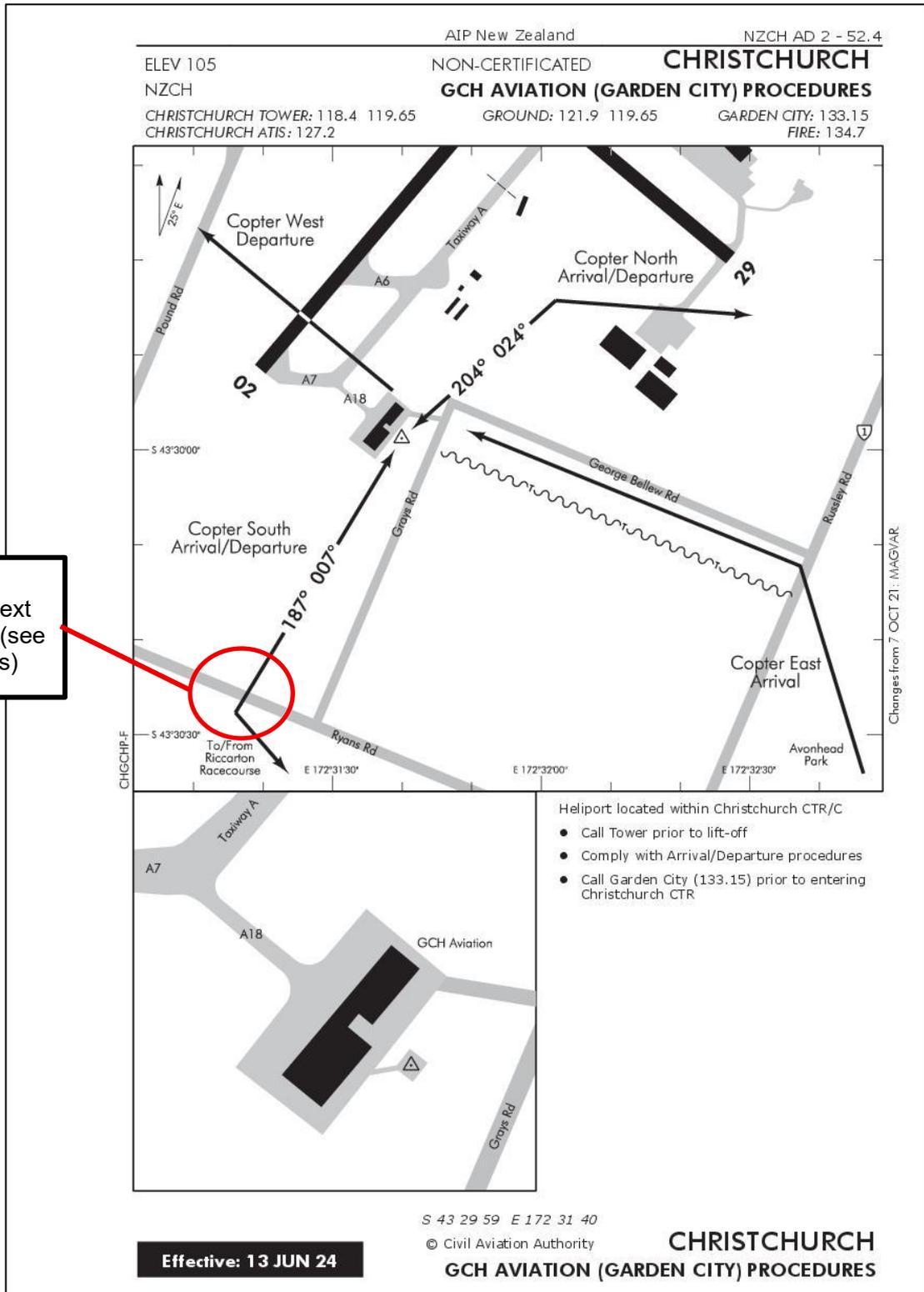
Source: Figure 4-3, AC139-6, p. 59

**Figure 6: Inner approach, inner transitional and balked landing obstacle limitation surfaces**



Source: Figure 4-4, AC139-6, p. 60

**GCH Aviation Procedures, Aeronautical Information Publication**



Does not conform to text procedures (see next 2 pages)

NZCH

**FATO/TLOF**

	SIZE	SFC	STRENGTH	MARKINGS
FATO	30 m x 30 m	Conc		Nil
TLOF	15 m x 15 m	Conc		Aiming point with H

**LIGHTING**

TLOF: Perimeter lighting. Floodlighting.

**FACILITIES**

Avgas 100 and Jet A1 available only by prior arrangement.

Overnight hangar space may be available by prior arrangement with GCH Aviation. Fees payable direct to the administrator.

FBO/Jet Centre: Refuelling and ground handling services available.  
Email: info@gchjetcentre.com

**SUPPLEMENTARY**

Operator: Christchurch International Airport Ltd, PO Box 14001, Christchurch  
Tel (03) 358 5029 Fax (03) 353 7730

Administered by: GCH Aviation Ltd, PO Box 14147, Christchurch Airport 8544  
Tel (03) 358 4360 Fax (03) 358 4150  
Email: info@helicopters.net.nz

Available for limited use, subject to the prior agreement of the administrator.

Pilots required to telephone the administrator for a briefing, and to advise ETA prior to departure from point of origin.

**ATC PROCEDURES**

**Departure Procedures**

The following departure procedures will not be issued until such time as the helicopter can depart. If traffic requires a delay in departure, an instruction to hold (on the ground or air taxi) will be issued. Note that aircraft should not overfly the rescue/fire base under any circumstances.

Copter North Departure Take-off at your discretion, climb out on track 024°M; turn right before RWY 29 to intercept assigned departure procedure.

**D** Copter South Departure Take-off at your discretion, climb out initially on track 187°M; turn left before Ryans Road tracking towards Riccarton Racecourse to intercept assigned departure procedure.

Copter West Departure (RWY 29 only) Take-off at your discretion, track west bound remaining south of TWY A6 (and parallel to RWY 29) until crossing Pound Road, then intercept the assigned departure procedure.

*(continued)*

**Effective: 26 MAR 20**

**CHRISTCHURCH****GCH AVIATION (GARDEN CITY) OPERATIONAL DATA (2)****ATC PROCEDURES (CONT)****Arrival Procedures**

Copter North Arrival	Track south of RWY 29 threshold, intercept track 204°M to Garden City Heliport, land at your discretion, report arrival to ATC.
<u>Copter South Arrival</u>	Track initially towards Riccarton Racecourse. From there, track towards Grays Road and intercept track 007°M to Garden City Heliport, land at your discretion, report arrival to ATC.
Copter East Arrival	Track via Avonhead Park to the intersection of Russley and George Bellew Road, thence via George Bellew Road to Garden City Heliport. Land at your discretion, report arrival to ATC.  In case of a go-around, the pilot shall initiate the Copter Departure procedure in the direction of the duty runway in use.

**Effective: 25 FEB 21**

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**CHRISTCHURCH****GCH AVIATION (GARDEN CITY) OPERATIONAL DATA (2)**

## Attachment 'E'

### Responses to Airways and CIAL NPS-I Assessment, 16 February 2026

Document	Comment	My Response
CIAL	<i>"The evidence from CIAL and Airways establishes a credible potential risk to public safety and nationally significant infrastructure, directly engaging with the Objective and Policy 1(3)(1);"</i>	CIAL and Airways have provided planning evidence but I have not seen any evidence provided by an aviation safety expert – or evidence provided by technical expert in a specific technology – that points to a credible potential risk to public safety.
CIAL	<i>"The evidence shows mitigation may require operational constraint, or system modification by existing aviation operators – contrary to Policies 2, 4 and 8 of the NPS-I, the allocation principle in Policy 11 and the avoidance directive in Policy 5.3.9 of the RPS"</i>	As above. No evidence has been provided that establishes a credible risk or demonstrates an operational constraint.

Document	Comment	My Response
CIAL	<p><i>"CIAL and Airways have identified the aeronautical work required to properly assess and interrogate how risk can be managed. The work has not been done and no expert evidence says it is unnecessary"</i></p>	<p>The management of any risks that may arise from the proposed development is addressed in the technical reports provided by the Applicant.</p> <p>My evidence further confirms that the additional aeronautical work sought by CIAL and Airways is not required, as the matters they identify have already been resolved within the scope of the safeguarding assessments undertaken.</p>

Document	Comment	My Response
<p>CIAL Appendix 1</p>	<p><i>" ...Any decision which constrains the Airport's ability to grow and evolve over time would challenge the longer planning horizons the NPS-I is seeking to apply to infrastructure planning and more particularly, the need to meet the diverse and changing needs of present and future generations.</i></p> <p><i>Additional examples of such effects, including matters of reduced efficiency and operation of the Airport, reduced levels of service and safety, and a potential reduction of economic benefits being realised are discussed with respect to Themes 2 to 4"</i></p>	<p>The Applicant has provided extensive technical assessment which demonstrates that any risks can be adequately mitigated. No operational change is required to the airport, and apparently minor changes may be required to one of GCH's approach and departure paths. Operational changes and the attendant costs will be minor and not affect the significance of the economic benefits.</p> <p>Conversely, CIAL makes vague statements about constraints to the Airport's ability to change and evolve, without providing any specifics of what the potential future developments might be that are somehow constrained.</p> <p>All assertions of reduced efficiency, reduced operation, and reduced levels of service and safety remain unsubstantiated by any specific examples.</p>

Document	Comment	My Response
<p>CIAL Appendix 1</p>	<p><i>"CIAL and Airways have identified unresolved risks to aviation navigation and surveillance infrastructure, including the ILS, DVOR/DME and radar systems. Both have advised that the safeguarding assessments provided do not demonstrate that aviation safety risks are fully understood. It follows the Panel is unable to and therefore cannot be satisfied risks are appropriately avoided or mitigated."</i></p>	<p>The Cyrrus Technical Safeguarding Assessment of Air Navigation Equipment, 18 November 2025, and the Supplementary statement of evidence of Simon McPherson, 17 February 2026, collectively demonstrate that the risks to aviation navigation and surveillance infrastructure, including the ILS, DVOR/DME and radar systems are well understood. Not only was Cyrrus recommended to the Carter Group by Airways, but the evidence of Jeremy Phillips, 23 February 2026, is that CIAL has previously relied on a technical assessment by Cyrrus of similar matters, and the CAA accepted that analysis.</p> <p>The assessments provided to date are sufficient and go beyond what I would typically expect for a developer located outside the boundary of an aerodrome. Those assessments have identified mitigations that are considered standard (such as building rotation) and which are accepted by the Applicant.</p>

Document	Comment	My Response
<p>CIAL Appendix 1</p>	<p><i>" <b>Theme 3: If the Project were allowed to proceed and the subsequent aeronautical study identifies safety risks requiring action, the Project would externalise those risks to existing aviation infrastructure and operators, requiring changes to, or curtailment of, airport and aviation operations at the Airport ...</b> CIAL's 18 December 2025 memorandum provides a worked example of this, where it discusses the constraints that could be foist upon the operations of Garden City Helicopters if the proposal were to proceed.<sup>9</sup> In addition to the above, transferring the burden of managing land use effects onto existing infrastructure would be inconsistent with Policy 11(1)(c) of the NPS-I."</i></p>	<p>The restrictions in the Christchurch District Plan reflect all matters that would significantly impact aviation safety. Additional matters are then addressed in the technical reports provided by the Applicant, including impacts on nav aids, building-induced turbulence, helicopter downwash, etc.</p> <p>CIAL's 18 December 2025 memorandum has a general discussion of GCH operations but does not include anything that could be described as a worked example. For a worked example I would expect to see the alternative flight path that might be utilised, quantification of any reduction in flights able to be undertaken, and quantification of any extra costs that would be incurred. If significant costs were likely to be "foist upon" GCH then it seems likely that it would be straightforward to articulate the link between the proposed development and each of these items, and to then be able to provide an indicative quantification for each.</p>

Document	Comment	My Response
<p>CIAL Appendix 1</p>	<p><b>Theme 4: The Applicant's economic assessment does not evaluate the potential costs associated with maintaining aviation safety if this Project proceeds</b> The Application does not include a assessment of whether the introduction or management of aviation safety risk would require operational, procedural, or infrastructural changes by CIAL, Airways New Zealand (Airways), or other aviation system participants, nor who would bear the cost of any such measures.</p>	<p>It is not clear how an applicant could meaningfully evaluate the costs of any supposed changes. Assertions are made of significant risk and potential need for operational, procedural, or infrastructure changes, but no evidence has been presented by either Airways or CIAL as to actual concrete steps that might reasonably be required to be taken if the Application proceeds. In the absence of such evidence it is simply not possible to “magic up” how much the imaginary changes might cost.</p> <p>Even the “worked example” provided by CIAL in its submission of 18 December 2025 does not actually state what changes would actually be required. My assessment, in paragraphs 7.1-7.4 suggests that changes for GCH would be relatively minor and would not reach the threshold of materiality in the Economic Assessment.</p>

Document	Comment	My Response
Airways	<p><i>"There is a fundamental lack of information in the Application on the aviation safety risks on Airways' infrastructure, which requires significant and critical further work by CGL. It is important that the safety risks are understood and then quantified and addressed by CGL. This is work that is required up front, not retrospectively through conditions for example"</i></p>	<p>In my view, the technical assessments provided are extensive and there is already sufficient information to assess the aviation safety effects. As such, my view is that the conditions proposed by the Applicant are, if anything, already overly precautionary.</p>
Airways	<p><i>"In our submission, the fundamental failing of the Application, namely, the significant information gaps in the aviation safety assessments provided by CGL, and potential adverse impacts on aviation safety on its own provides sufficient grounds for the Panel to decline the Application under section 85(3)"</i></p>	<p>Neither Airways nor CIAL have provided evidence to support its claim potential adverse impacts on aviation safety on its own provides sufficient grounds for the Panel to decline the Application under section 85(3). I consider that there is no reason decline by reason of the issues raised by CIAL/Airways.</p>