IN THE COURT OF APPEAL OF NEW ZEALAND

CA374/2016 [2017] NZCA 27

NEW ZEALAND AIR LINE PILOTS'

BETWEEN ASSOCIATION INDUSTRIAL UNION

OF WORKERS INCORPORATED

Appellant

AND DIRECTOR OF CIVIL AVIATION

First Respondent

AND WELLINGTON INTERNATIONAL

AIRPORT LIMITED Second Respondent

Hearing: 20 October 2016

Court: Harrison, Wild and Brown JJ

Counsel: H B Rennie QC and E M Geddis for Appellant

FMR Cooke QC and M S Smith for First Respondent

V L Heine and S E Quilliam-Mayne for Second Respondent

Judgment: 28 February 2017 at 10.30 am

JUDGMENT OF THE COURT

- A The decision of the first respondent made on 20 March 2015 is set aside.
- B The first respondent is directed to reconsider the application by the second respondent in accordance with the terms of this judgment.
- C The first respondent and the second respondent are ordered to pay the appellant one set of costs for a standard appeal calculated on a band A basis with usual disbursements. We certify for second counsel.

REASONS OF THE COURT

(Given by Harrison J)

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Introduction

[1] By law all aerodrome operators in New Zealand must provide what is known as a runway end safety area (RESA) at each end of a runway if it is used for international operations or by aircraft with more than 30 seats. A RESA is an internationally required measure of the appropriate safety margin within which an aircraft can come to a stop; under the relevant international instrument, state parties must ensure RESAs extend to a distance of at least 90 metres from the end of the runway and if "practicable" to a distance of at least 240 metres. Its purpose is to reduce the risk of human and physical harm where an aeroplane undershoots or overruns the runway. The probability of such an event occurring at a given location at any particular time is very low. But the consequences may be catastrophic.

[2] On 20 March 2015 the Director of Civil Aviation accepted a request by an aerodrome operator, Wellington International Airport Ltd (WIAL), to approve its provision of a 90-metre RESA for a proposed runway extension at Wellington International Airport. The New Zealand Air Line Pilots' Association Industrial Union of Workers Inc (NZALPA or the Association), representing approximately 2,200 pilots and air-traffic controllers, applied to the High Court to review the lawfulness of the Director's decision. NZALPA's appeal against Clark J's judgment declining its application raises the issue of whether the Director erred in law when deciding that a RESA of 90 metres was acceptable.

Physical layout of an aerodrome

[3] It is appropriate to open our judgment by introducing some of the categories used to describe the physical dimensions of an aerodrome under the statutory rules:²

1.1 General definitions

In rules made under the [Civil Aviation Act 1990], unless the context otherwise requires—

. . .

Aerodrome-

means any defined area of land ... intended or designed to be used either wholly or partly for the landing, departure, and surface movement of aircraft;

. . .

Clearway means a defined rectangular area on the ground ... at the departure end of the runway ... selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height:

. .

Runway means a defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft:

Runway end safety area means an area symmetrical about the extended centre line of the runway and adjacent to the end of the runway strip primarily intended to reduce the risk of damage to an aeroplane undershooting or over-running the runway:

New Zealand Airline Pilots' Association Industrial Union of Workers Inc v Director of Civil Aviation [2016] NZHC 1528 [HC judgment].

See pt 1 of the Civil Aviation Rules.

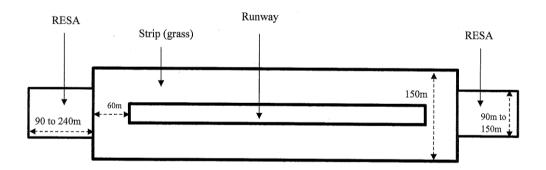
Runway strip means a defined area including the runway, and stopway (if a stopway is provided), that is intended—

(1) to reduce the risk of damage to an aircraft running off the runway; and

..

Stopway means a defined rectangular area on the ground at the end of take-off run available prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off.

- [4] In summary, a runway is an area prepared for take-off and landing. At the take-off end of a runway there may be a stopway. Both the runway and stopway form an area known as the runway strip. The clearway is an additional area at the departure end of the runway and the RESA is an adjacent area intended to reduce the risk of damage in the event of undershooting or overrunning. The physical characteristics of a RESA are regulated by the Civil Aviation Rules (the Rules), which we discuss in detail below.
- [5] In diagrammatic form, the relationship between the runway, the runway strip and the RESA is set out below:³



Factual background

[6] The background circumstances are not in contest and can be recited shortly. The existing runway at Wellington Airport is 2,081 metres long, including both a 60-metre stopway area and a 90-metre RESA. Both the latter two areas are used as

This diagram, based on the runway at Queenstown Airport, is included simply to show the placement of RESAs at each of a runway; other dimensions and features do not represent the runway at Wellington International Airport.

starter extensions to increase the distance available to aircraft when taking off. These distances are insufficient to accommodate larger commercial aircraft unless they operate under weight restrictions.

- [7] On 6 August 2012 WIAL requested the Director's clarification about the length of the required RESA if it extended the runway 200 metres to the north. A week later the Civil Aviation Authority (the Authority) responded by asking the company to supply further information about the operational levels and to undertake a cost-benefit analysis.
- [8] On 27 March 2013 NZALPA wrote to the Authority about WIAL's intention to extend the runway. The Association's position was that any extension should provide for a RESA of at least 240 metres in length or an engineered arresting system of equivalent effect.⁴ Shortly afterwards WIAL provided the Director with a number of reports, including a cost-benefit analysis prepared by McGregor & Co (McGregor), a consultant with expertise in aviation safety issues. NZALPA later commissioned its own report from Aaron Schiff of Covec Economic Consultants, which took the form of a peer review of the cost-benefit analysis undertaken in the McGregor report. WIAL then commissioned an updated report from McGregor. In November 2013 the Authority engaged another consultant, Castalia Strategic Advisors, to review the McGregor report and also conduct its own internal analysis.
- [9] All the reports were given to the Director. He considered them along with other material and internal legal advice. On 18 February 2014 the Director communicated his view to WIAL and the Association that it would not be practicable to require the company to provide a RESA exceeding 90 metres.
- [10] WIAL then revised its plan and decided to extend the runway by 200 metres in a southerly direction, instead of to the north. In December 2014 the company commissioned a further updated report from McGregor before approaching the Director anew about approval for a 90-metre RESA for a southern runway extension. Before us, Mr Rennie QC for the Association referred to reports of WIAL's plan to

An arresting system may take different forms; one in particular uses engineering materials which will crush under the weight of an aircraft, absorbing the aeroplane's energy and bringing it to a stop.

extend the existing runway to the south by 350 metres. It appears, however, that the Director's assessment was based on the body of information available prior to this latest plan.

[11] On 20 March 2015 the Director prepared what was described as a file note, expressing his view in significant reliance on McGregor's updated report that a RESA of 90 metres would be acceptable. Clark J's finding that the Director's note was a reviewable decision is in dispute.⁵ Like her, we shall refer to the note for narrative purposes as the Director's decision.

General legal framework

International obligations

[12] Since 1947 New Zealand has been a party to the Convention on International Civil Aviation (the Chicago Convention), described as a framework convention adopted "in order that international civil aviation may be developed in a safe and orderly manner". The Chicago Convention created the International Civil Aviation Organization (ICAO) as a specialised agency of the United Nations responsible for coordinating and regulating international air travel. Its function is to adopt and amend where necessary international standards and recommended practices and procedures (known as SARPs). Particular functions to be regulated are those dealing with the characteristics of airports and landing areas and "such other matters concerned with the safety, regularity and efficiency of air navigation as may from time to time appear appropriate". SARPs are adopted by the Council of the ICAO in accordance with ch VI and designated as Annexes to the Convention. Annex 14 in particular is relevant to the present case.

[13] New Zealand's obligations under art 37 of the Convention are to adopt the international standards and as far as possible to conform with all recommended practices:

⁵ HC judgment, above n 1, at [77]–[95].

Convention on International Civil Aviation [Chicago Convention] 1175 UNTS 126 (opened for signature 7 December 1944, entered into force 4 April 1947), preamble.

⁷ See generally pt II.

⁸ Article 37.

⁹ Article 54(1).

Each contracting State undertakes to collaborate in securing the *highest* practicable degree of uniformity in regulations, standards, procedures, and organization in relation to aircraft, personnel, airways and auxiliary services in all matters which such uniformity will facilitate and improve air navigation.

To this end the International Civil Aviation Organization shall adopt and amend from time to time, as may be necessary, international standards and recommended practices and procedures dealing with:

. . .

(b) Characteristics of airports and landing areas:

. .

and other such matters concerned with the safety, regularity, and efficiency of air navigation as may from time to time appear appropriate.

(Our emphasis.)

Legislative purpose

[14] New Zealand complies with its Convention obligations through the Civil Aviation Act 1990 (the Act) and the Rules promulgated under pt 3 of the Act. The long title describes the purpose of the Act as being:

- (a) to establish rules of operation and divisions of responsibility within the New Zealand civil aviation system in order to promote aviation safety; and
- (b) to ensure that New Zealand's obligations under international aviation agreements are implemented; and
- (c) to consolidate and amend the law relating to civil aviation in New Zealand
- [15] The first of these purposes identifies the means through which the objective of aviation safety is to be achieved: by rules of operation and assigned responsibilities. The second affirms a further purpose of the statutory regime of implementing New Zealand's international obligations, which flow principally from the Chicago Convention and its Annexes.

[16] It is necessary to set out material aspects of the legislative history to highlight how Parliament has implemented these substantive purposes. The Act established the Authority to exercise functions and powers under the Act as well as those delegated by the responsible Minister. The powers and functions of the Director, who is appointed as the chief executive of the Authority, include taking appropriate action to enforce statutory and regulatory requirements, and auditing the participants' performance against the prescribed safety standards and procedures. This function has been described as an oversight responsibility, rather than one which requires participation in operational issues which are the province of airline operators.

[17] A principal function of the Minister when the Act came into force was to "promote safety in civil aviation at a reasonable cost". However, by the Civil Aviation Amendment Act (No 2) 2004, both the Minister's and the Authority's objectives were amended; they are now to undertake their functions "in a way that contributes to the aim of achieving an integrated, safe, responsive and sustainable transport system". The 2004 amendments eliminated the earlier guiding reference to "reasonable cost", discarding the existing two-factor analysis of balancing safety against cost.

[18] Ministerial statements made during the passage of the amendments through the House suggested that safety at a reasonable cost would remain an unstated but not dominant consideration.¹⁷ However, the sole reference to cost in the amended Act is the inclusion of "the costs of implementing measures" as one of about 12 mandatory considerations to be taken into account when the Minister or Director is making a rule.¹⁸ Crucially, the legislation did not diminish the importance of

See also Clark J's comprehensive outline in HC judgment, above n 1, at [18]–[38].

¹¹ Currently the Minister of Transport.

¹² Civil Aviation Act 1990, s 72I(3)(b).

Survey Nelson Ltd v Maritime New Zealand [2010] NZCA 629 at [22].

Civil Aviation Act, s 14 (as enacted; now repealed).

¹⁵ Sections 14(a) and 72AA.

HC judgment, above n 1, at [28].

¹⁷ (30 November 2004) 622 NZPD 17228.

¹⁸ Civil Aviation Act, s 33(2)(fa).

safety. As Clark J observed, quoting the explanatory note, ¹⁹ the principal objective of the 2004 amendments was "to align the relevant transport entities 'without materially compromising safety or interfering with New Zealand's international obligations", ²⁰—the two substantive purposes of the present Act under s 14.

Standards and recommended practices (SARPs)

[19] As noted, a key role of the ICAO is to adopt SARPs which contracting states are then expected to implement. In conferring the rule-making power on the Minister and the Director, the Act highlights the distinction between international standards and recommended practices as well as the more general obligations owed by New Zealand as a state. This distinction has clear statutory emphasis as follows:

Matters to be taken into account in making rules

- (1) The ordinary rules made by the Minister and the emergency rules made by the Director shall not be inconsistent with the following:
 - (a) the *standards of ICAO* relating to aviation safety and security, to the extent adopted by New Zealand:
 - (b) New Zealand's international obligations relating to aviation safety and security.
- (2) In making, or recommending the making of, a rule the Minister or the Director, as the case may be, shall have regard to, and shall give such weight as he or she considers appropriate in each case to, the following:
 - (a) the *recommended practices of ICAO* relating to aviation safety and security, to the extent adopted by New Zealand:

. . .

(Our emphasis.)

[20] Some of the definitions included by the ICAO in the foreword of Annex 14 to the Chicago Convention also highlight this distinction:

Standard: Any specification for physical characteristics, configuration, matériel [sic], performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States will conform in

HC judgment, above n 1, at [38].

Transport Legislation Bill 2004 (172-1) (explanatory note) at 1.

accordance with the Convention; in the event of impossibility of compliance, notification to the Council is compulsory under Article 38.

Recommended Practice: Any specification for physical characteristics, configuration, matériel [sic], performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States will endeavour to conform in accordance with the Convention.

[21] In short, the Convention obliges states to "conform" to standards, whereas they must "endeavour to conform" to recommended practices.

Particular legal provisions

Relevant SARPs

- [22] The physical characteristics of a RESA are regulated by pt 139 of the Rules, which was made in 2006 pursuant to s 28 of the Act. Its purpose was to implement the SARPs contained in Annex 14 to the Chicago Convention as requirements of New Zealand law.
- [23] Clause 3.5 of Annex 14 to the Convention materially provides:²¹

Dimensions of runway end safety areas

3.5.3 A [RESA] shall extend from the end of a runway strip to a distance of at least 90 m where [the airport is a certain code number; Wellington International Airport is code number 3 and therefore subject to the standard].

. . .

If an arresting system is installed, the above length may be reduced, based on the design specification of the system, subject to acceptance by the State.

Note.— Guidance on arresting systems is given in Attachment A, Section 10.

- 3.5.4 **Recommendation.** A [RESA] should, as far as practicable, extend from the end of a runway strip to a distance of at least:
 - 240 m where the code number is 3 or 4; or a reduced length when an arresting system is installed;

We were referred by the parties to the Sixth Edition of Annex 14, dated July 2013, which differs slightly in form but not in substance from the version cited by Clark J. Compare HC judgment, above n 1, at [45]. Nothing turns on this difference.

(Emphasis in original.)

[24] In essence the relevant international standard mandates that a RESA must "extend from the end of a runway strip to a distance of at least 90 m"; whereas the recommended practice is that a RESA "should, as far as practicable, extend from the end of a runway strip to a distance of at least ... 240 m". These distances can be relaxed if an aerodrome invests in an adequate arresting system. Mr Rennie drew our attention to para 10.2 of Attachment A to Annex 14 issued by ICAO to provide guidance to member states:

Where provision of a [RESA] would be particularly prohibitive to implement consideration would have to be given to reducing some of the declared distances of the runway for the provision of a [RESA] and installation of an arresting system.

[25] In 2004 the Authority issued a notice proposing to make rules implementing these SARPs. That document referred to the November 1999 amendment to Annex 14, which originally introduced the standard of 90 metres and a recommendation of varying lengths between 120 and 240 metres without reference to arresting systems. Thus, in 2005 the Authority reported that "neither ICAO nor any other regulatory authority considers engineered aircraft deceleration systems an equivalent to the ICAO specification for RESA". But that position has changed with the current version of Annex 14 referring to the complementary mechanisms of a RESA of 240 metres and an arresting system. While pt 139 of the Rules does not include reference to arresting systems, it is axiomatic that an expert decision-maker in this field must be alive to evolving international obligations.

Rules governing RESAs

[26] In adopting the relevant SARPs, r 139.51 prescribes the requirements for an aerodrome operator to secure the Director's approval:²²

139.51 Aerodrome design requirements

. . .

We were referred to a version of the Rules up to date as of 1 February 2016. Clark J dealt with an earlier version of r 139.51(c), which stated: "The physical characteristics, obstacle limitation surfaces, visual aids, equipment and installations, and *RESA provided at the aerodrome must be acceptable to the Director.*" Nothing turns on this difference.

- (b) An applicant for the grant of an aerodrome operator certificate must ensure that *a* [RESA] that complies with the physical characteristics prescribed in appendix A.1 is provided at the end of each aerodrome if [the runway is used for international flights or by aircraft with more than 30 seats].
- (c) The RESA provided at the aerodrome must be acceptable to the Director

. .

(Our emphasis.)

[27] The corollary to r 139.51(c) is that the Director cannot find an aerodrome acceptable if the RESA does not comply with the features prescribed by Appendix A.1. Appendix A.1 to pt 139 of the Rules is at the heart of this appeal:

A.1 Physical characteristics for RESA

- (a) A RESA must extend—
 - (1) to a distance of at least 90 metres from the end of the runway strip, and
 - (2) *if practicable—*
 - (i) to a distance of at least 240 metres from the end of the runway strip; or
 - (ii) to the greatest distance that is practicable between the 90 metres required in paragraph(a)(1) and the 240 metres required in paragraph (a)(2)(i).

. . .

(Our emphasis.)

[28] In imposing a mandatory minimum RESA of 90 metres, Appendix A.1(a)(1) is in materially identical terms to the standard provided by cl 3.5.3 of Annex 14.1 to the Chicago Convention except for the former clause's exclusion of any reference to an emergency arresting system. But Appendix A.1(a)(2) is also expressed in mandatory terms in imposing an extension to 240 metres, albeit subject to a practicability qualification — "A RESA must extend … if practicable … to a distance of at least 240 metres". By contrast, the recommendation in cl 3.5.4 of Annex 14.1 uses the language of "should, as far as practicable".

The rule-making process

- [29] As evidence of the deliberative process undertaken by the Authority in implementing r 139.51 and Appendix A.1, Mr Cooke QC for the Director highlighted the seven-year period of consultation (pursuant to s 34 of the Act) which preceded the Rules relating to RESAs enacted by the Minister for Transport Safety on 5 September 2006. We agree with him that the process is significant. We have referred to the Authority's notice in July 2004 of its proposed rule-making, including what became pt 139 of the Rules. The notice was comprehensive, totalling 51 pages. Its express purpose was to implement the SARPs contained in Annex 14 where, among other things, there are development proposals to extend an existing runway. One of the objectives was to give foreign aircraft operators the same level of risk reduction in undershoot and overrun incidents when operating in New Zealand as they have when operating internationally. The proposal was apparently triggered by research undertaken since the 1970s which had shown that the majority of accidents for commercial jet operations occur during take-off and landing.
- [30] The notice referred to earlier consultations with a technical study group which had been established by the Authority to develop the necessary amendments to the Rules to implement the RESA requirements. That group represented aerodrome operators (including WIAL), aircraft operators, aircrew (including the Association), the airways system operator and the regulatory authority. The notice also referred to recommendations made by the group or some of its members and to issues addressed during consultation. One of its constant themes was the Authority's reliance in its proposals on statistical information that an increased RESA length of 240 metres would capture approximately 22 per cent more accidents than a 90-metre RESA; and its satisfaction, reinforced by a cost-benefit analysis, "that the RESA length should be 240 metres where it is practicable".
- [31] The Authority then undertook a thorough consultative process with all interested parties and in September 2005 released an extensive report summarising public submissions received together with its responses. The report referred frequently to the Authority's view that rules would be made which "prescribed the mandatory requirements which may reflect, by an incorporation by reference if

necessary, an ICAO standard and where appropriate an ICAO recommended practice" (our emphasis).

[32] The report also noted in response to one of the submissions that:

The [Authority] intends the proposed RESA rules to, among other safety initiatives (review of part 139), expand the specific requirements under the physical characteristics for aerodromes to cover RESA requirements to reduce the risk during takeoff and landing. Worldwide statistical information shows that accidents between aircraft, aircraft controlled flight into terrain, and accidents in the approach, landing and take-off phases of flight constitute a high proportion of overall aircraft accidents. ... The requirement for RESA is aimed at reducing the consequences of landing and takeoff accidents.

(Our emphasis.)

[33] In a similar vein, the Authority answered another submission by referring to research that showed:

... undershoots are involved in 7% to 18% of landing accidents, overruns are involved in 12% to 31% of landing accidents, and overruns on takeoff are involved in 25% to 56% of take off accidents. These rates are significant ...

[34] Significantly, in answer to a submission that ICAO's recommended practices are not standards and should be optional, the Authority noted:

There is no reason why ICAO recommended practices cannot be reflected in the rule as mandatory requirements if that is what is appropriate for the New Zealand aviation environment.

The Authority also noted its intention that:

RESA should be 240 metres where possible because the statistics indicate that 240 metres will capture approximately 90% of the events compared to approximately 68% for 90 metres. The [Authority] is aware of the concerns over the use of the term practicable ... and advisory material on the processes to be followed when developing RESA will be developed and published as individual cases are dealt with. It should be noted that the term is now used extensively in current world wide and New Zealand legislation and the [Authority] intends in these proposed rules to ensure the aerodrome operator takes all reasonable steps to implement the requirement as quickly as possible and, if required, be able to show the CAA the processes and steps taken.

(Footnote omitted.)

[35] The Authority's publications are apposite for four reasons. First, they confirm Mr Cooke's submission that the consultative process leading to the enactment of r 139.51 and Appendix A.1 was very deliberative. Second, they reflect the Authority's guiding concern with safety. Third, they show the Authority's primary focus on the frequency of landing accidents through undershoots or overruns and the ability of RESAs of between 90 metres and 240 metres to reduce their adverse consequences. And fourth, they show the Authority was receptive to the prospect of adopting international recommendations, such as the 240-metre RESA length found in cl 3.5.4 of Annex 14 to the Chicago Convention, as mandatory requirements of New Zealand law.

The Director's decision

- [36] A full copy of the Director's file note is appended to this judgment. However, we refer now to its core elements to give context to what follows.
- [37] As noted, by r 139.51(c) the RESA was required to be acceptable to the Director. His decision recited the material which he had read and considered; his acceptance of the validity of McGregor's analyses of the probabilities of overruns and undershoots at Wellington Airport; and his reference to the other expert reports. He noted his rejection of an opinion submitted by the Association from Mr Rennie on the meaning and requirement of practicability before summarising his conclusion that:
 - ... a 90 metre RESA provides an acceptable level of safety at the airport, in light of the nature of operations, their frequency, the type of aircraft using the aerodrome, and the consequent risk attendant upon these operations.
- [38] In support of this conclusion the Director noted his significant reliance on McGregor's final updated report. He first expressed himself satisfied that a 90-metre RESA provided an acceptable level of aviation safety risk based on McGregor's advice that:
 - (1) operations at the greatest risk at Wellington Airport are heavy aircraft on domestic operations, and the probability of a landing overrun for these aircraft is assessed as being 8.31 occurrences per 10 million

landings or equivalent to a landing overrun incident once every 209 to 243 years based on projected traffic volumes;

- the probabilities of landing undershoots and take-off overruns were lower again at their most significant 4.94 occurrences per 10 million takeoffs (for medium aircraft) and 2.52 occurrences per 10 million landings (for heavy aircraft);
- a 90-metre RESA would capture 76 per cent of all landing overruns,73 per cent of undershoots and 53 per cent of take-off overruns; and
- (4) there is thus a very low risk of overrun or undershoot occurrences at the airport.

[39] The Director observed:

In this context, a 90 m RESA can be assessed as providing an acceptable level of safety, a level that is appropriate in light of Wellington's status as an international airport and key domestic hub. In this regard, I note that in deciding to provide a 90 m RESA WIAL will be complying with the relevant international standard specified in Annex 14 [to the ICOA]. 90 m is, of course, the length of RESA currently provided by WIAL.

- [40] The Director then addressed the additional question of cost-benefit considerations and whether WIAL had appropriately assessed the practicability of longer RESAs. His approach was to inquire whether the cost of extending the RESA beyond 90 metres would achieve additional safety benefits outweighing that cost. The Director made several key findings and assumptions:
 - (1) He adopted the Authority's advice on the meaning of "practicable" as follows:
 - Practicability should be interpreted as incorporating elements of feasibility and reasonableness; some element of pragmatic limitation must be applied;
 - "practicable" does not equate to "that which is possible";

- The test of practicability involves balancing safety benefits to be achieved against the associated cost and difficulty.²³
- (2) He was satisfied that the longer the RESA, the lower the level of residual risk associated with undershoots or overruns. But he was not satisfied that the additional safety benefits would outweigh the additional cost, concluding that they were "small, when calculated with reference to the very low probability of an adverse event in the first place, combined with the level of effectiveness of the 90 m RESA".
- (3) He took into account McGregor's conclusion that safety benefits associated with an extension of the RESA to either 240 metres or an intermediate length of 140 m were greatly exceeded by the cost of around \$1 million per linear metre of additional RESA. The additional safety benefits in an already very low-risk environment do not justify the higher cost.
- (4) He observed that he had not considered whether construction of an emergency arresting system in conjunction with the RESA would provide additional safety benefits because the viability of such a system did not form part of WIAL's decision to extend the runway and he had no information on which to assess its effectiveness.
- [41] The Director was guided in his decision by a 2013 letter from the Authority advising NZALPA as to its preferred interpretation of practicability:

As you are aware, the provisions of Appendix A of Part 139 require that the RESA must be the greatest 'practicable' distance from the end of the runway strip up to 240 metres, but no shorter than 90 metres. The dictionary definitions of the word 'practicable' suggest something "able to be done or put into practice successfully" and "reasonably capable of being accomplished; feasible". The dictionary definitions denote elements of "feasibility" and "reasonableness". The use of the word 'practicable' in Part 139 necessarily imports some element of pragmatic limitation. Simply because something is possible, it does not mean that it is "practicable", in all contexts, for that thing to be done.

-

We observe that this was the test originally provided under the Act before its amendment in 2004. See [17]–[18] of this judgment.

[42] That letter was included in the materials sent to the Director by Chris Ford, a senior manager for the Authority; Mr Ford's cover letter contained similar advice:

In essence, your consideration of what is "practicable" may involve an element of "reasonability" and this element may be informed by cost benefit considerations. Accepting this, the "practicability" test is a high one. The fact that resources may need to be allocated to implement and comply with a rule or standard may necessarily mean it is expensive or inconvenient for an aerodrome operator. Such expense or inconvenience in and of itself does not negate the validity of the standard, nor the need for compliance with it.

[43] The Director added a postscript to his decision to the effect that his view had been based on the information provided by WIAL, including the costs of extending the RESA; and that he would need to revisit that view if "these things were to change materially".

Judicial review

A reviewable decision?

[44] At first instance, Mr Cooke disputed the High Court's jurisdiction to review the Director's file note. In reliance on its postscript, he argued that the Director had not exercised a statutory power of decision, nor had there been a proposed exercise of that power — it was simply a view provided in advance of a concrete proposal which was subject to change.²⁴ In rejecting that argument, Clark J was satisfied that a material change in the underlying information and regulatory requirements which might require the Director to revisit his assessment did not make his first view preliminary.²⁵ In her judgment, the decision was and remains determinative and operative.

[45] Mr Cooke pursued a limited challenge to that finding on appeal. While accepting that the decision is reviewable as such, he maintains his argument that it is not final. However, we agree with Clark J that the contingency of a revision of the Director's assessment does not convert the nature of his decision into a

HC judgment, above n 1, at [82].

²⁵ At [88]–[95].

preliminary or provisional one.²⁶ His view was plainly intended to be operative and WIAL has acted upon it accordingly.

High Court judgment

NZALPA claims that the Director's decision was erroneous in law in four [46] material respects, in that he (1) misconstrued his powers under r 139.51 due largely to his error as to the meaning of the word "practicable"; (2) placed undue weight on the McGregor reports; (3) failed to properly consider the availability of an arresting system as an alternative or complementary option; and (4) failed to consider a reduced runway extension. On our view of the Director's decision, all four discrete errors alleged by NZALPA fall within one composite category dictated by his interpretation and application of the statutory test including the requirement of practicability. We shall thus consider all elements of the Association's claim together.

Clark J undertook a careful analysis of the meaning of "practicable" in its She was satisfied that the Director's exercise of his power under r 139.5(1)(c) will entail "potentially complex value judgments", ²⁸ a point much emphasised by Mr Cooke before us. We shall return to some elements of the Judge's analysis. But for now we cite her conclusion that:

The proper construction of Appendix A.1(a) is that it requires a runway end safety area to be the greatest practicable distance from the end of the runway strip up to at least 240 metres but no less than 90 metres.

In Clark J's judgment: [48]

- Ascertaining the practicability of the length of a runway end safety area will require a case by case assessment engaging a range of complex factors which will encompass:
- elements of physical feasibility, and reasonableness because the unvarnished formula²⁹ in Appendix A.1(a) does import an element of pragmatic limitation. Simply because something is possible does not mean it is practicable in all contexts.

Contrast Marlborough Aquaculture Ltd v Chief Executive, Ministry of Fisheries [2003] NZAR 362 (HC).

²⁷ HC judgment, above n 1, at [62]–[76].

At [66].

By comparison, for example, with "physically practicable".

- a balancing exercise in which safety considerations will be weighed against the cost and difficulty of extending a runway end safety area.
- potentially a cost-benefit analysis which may be an aspect of a safety case.

The correct legal test

[49] Counsel for all three interested parties before us advanced comprehensive written and oral submissions. However, in our view the issue is a confined one, falling for determination within the orthodox parameters of statutory interpretation, and does not admit of undue complexity. The question is essentially one of legal construction of pt 139 of the Rules — in particular of the meaning of the word "practicable" where used in Appendix A.1 — and whether the Director applied the correct test to WIAL's application.

[50] Part 139 of the Rules is the necessary starting point for our analysis. Appendix A.1 postulates two mandatory requirements. The first, of an unconditional nature, is that the RESA must extend to a distance of at least 90 metres from the end of the runway strip; 90 metres is a minimum threshold which allows of no exceptions. The second, of a conditional nature, is that the RESA must "if practicable" extend to a total distance of at least 240 metres or to the greatest distance that "is practicable" between 90 and 240 metres. Both proceed, however, from the shared obligatory premise imposed by Appendix A.1(a) that a RESA "must extend" not only to 90 metres but also a further distance to 240 metres unless that is not practicable. In that case the RESA must extend as far as practicable through an intermediate distance between 90 and 240 metres. The Director's consideration of an application to approve a RESA of less than 90 metres must start from that standpoint.

[51] We agree with the Judge that the meaning of "practicable" must be coloured by its legislative text and context.³⁰ The express statutory purposes provide powerful guidance. They require that rules be established, and responsibilities be divided, both to promote aviation safety and ensure implementation of New Zealand's

HC judgment, above n 1, at [64]–[68].

obligations under the Chicago Convention. When read together, and in the specific context of a RESA, those two statutory objectives take precedence.

[52] However, we part company with Clark J's analysis in a number of material respects. First, we disagree that the grammatical meaning of "practicable" or its meaning as decided by the authorities in other contexts is not of assistance.³¹ The word "practicable" has a well-known meaning, as confirmed by this Court, as something that is feasible or able to be accomplished according to known means and resources; it links the feasibility or practicality of something to the availability of resources.³² When dealing with the construction of an aerodrome runway, "practicable" must refer to what is actually able to be constructed, importing considerations of practical issues such as the nature of the site and surrounding physical environment, available engineering technology and potential construction options.

[53] Second, the word "practicable" imports a stricter or higher standard than "reasonably practicable," which is seen as affording greater latitude to adopt an cost-benefit analysis. That is important because Clark J found that what she called "the unvarnished formula" imports an element of pragmatic limitation — that is, reasonableness. By that means the Judge elevated physical feasibility and reasonableness to the same level, before observing that what was "practicable" would engage a range of complex factors including (1) a balancing exercise of weighing safety considerations against the costs and difficulty of extending a RESA; and (2) potentially a cost-benefit analysis. 34

[54] We do not agree. In our judgment, Clark J has resurrected the now-repealed balancing exercise between the factors of safety and cost. This approach has no place in the current statutory regime. In common with Messrs Rennie and Cooke, we accept that cost has some limited relevance within an inquiry into what is feasible. There may come a point where cost makes an objective economically

Union Steam Ship Company of New Zealand Ltd v Wenlock [1959] NZLR 173 (CA) at 191 per Gresson P.

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³¹ At [62].

HC judgment, above n 1, at [75].

³⁴ At [68]–[71].

infeasible or impracticable, which WIAL does not contend for here. But cost is not a predominant factor to be balanced against the requirement of promoting safety; given its removal from the amended primary legislation, "reasonable cost" is now a factor of subordinate importance. The Authority itself undertook the relevant cost-benefit analysis as part of the legislative process during the extended consultative period before pt 139 was finalised in 2006. The same exercise was not relevant to subsequent enforcement of the rule.

[55] Third, in apparent acceptance of Ms Heine's argument for WIAL, the Judge found support for her construction by referring to the degree of flexibility contemplated by the Chicago Convention; to New Zealand's obligation as a state party under art 37 of the Convention to collaborate in securing "the highest practicable degree of uniformity in regulations, [and] standards" relating to aircraft and air navigation; and to the requirement under art 38 on any contracting state "which finds it *impracticable* to comply in all respects with any such international standard or procedure" to give immediate notification to the **ICAO** (emphasis added). Clark J referred to this Court's previous affirmation of the degree of flexibility accorded to contracting parties by art 38;35 and to the diversity of conditions — economic, geographic and climatic — recognised by the "potentially fluid nature of the binding character of convention obligations". 36

[56] As Mr Rennie submitted, the flexibility under the Convention is of a limited and constrained nature; it is a mistake to say that parties merely undertake to comply with SARPs if or to the extent they find it practicable to do so.³⁷ Article 38 applies where a state party elects to opt out of compliance with a particular SARP by filing a formal notice of difference with the ICAO.³⁸ That is not the case here, and there is otherwise an expectation that New Zealand domestic law will conform to and implement the SARPs. We refer in this respect to the well-settled presumption in New Zealand law that domestic legislation will be interpreted, as far as its wording

New Zealand Air Line Pilots' Association Inc v Attorney-General [1997] 3 NZLR 269 (CA) at 275.

HC judgment, above n 1, at [43].

J David McClean (ed) *Shawcross and Beaumont Air Law* (vol 1, looseleaf ed, Lexis Nexis) at [20]–[30].

³⁸ At [31]–[33].

allows, in a manner consistent with our international obligations.³⁹ In our judgment, the expectation of our law's conformity with the SARPs must apply particularly to international airfields, as opposed to purely domestic operations. While the cost of a particular RESA may be substantial, it is the price New Zealand pays for its status as a party to the Chicago Convention and as a responsible member of the international aviation community.

[57] We add that conceptual clarity is important in this field. The interplay between New Zealand's obligations under the Chicago Convention and the Rules governing aerodromes illustrates the general relationship between domestic and international law. The latter is classically understood as a discrete body of law which must be positively transformed by domestic institutions in order for it to attain the status of New Zealand law. The fact that here the subordinate legislation largely reflects the form and phraseology of the international instrument should not distract from the fact that the Rules are made under the authority of, and are therefore interpreted in light of, an Act of Parliament. 40

While international commitments may aid the interpretation of subordinate [58] legislation in a general sense, the courts would never allow them to justify a meaning inconsistent with the purposes of its parent statute. Or, indeed, a meaning inconsistent with the overriding obligations under the Convention: international civil aviation safety. Any flexibility enjoyed by state parties under the multilateral framework does not permit a relaxation of the statutory parameters binding a domestic decision-maker.

[59] Mr Cooke drew a distinction within the components of SARPs. Their essential difference within art 37 is that a standard is recognised as "necessary" whereas a recommended practice is recognised as desirable in the interests of "safety, regularity and efficiency of international air navigation". Mr Cooke's point was that only standards of the type provided by cl 3.5.3 to Annex 14, stipulating a mandatory minimum RESA of 90 metres, are of a legally binding nature. By contrast cl 3.5.4, dealing with RESAs of 240 metres, has the lesser force of a

Ye v Minister of Immigration [2009] NZSC 76, [2010] 1 NZLR 104 at [24].

See generally New Zealand Air Line Pilots' Association Inc v Attorney-General, above n 35, at 284–285, particularly subparas (e) and (f).

recommendation. He submitted that Appendix A.1(a)(2) should be construed consistently with this distinction.

[60] Mr Cooke's submission can be answered shortly. The Authority and the responsible Minister, acting in accordance with the functions and powers assigned by Parliament, has chosen to accept the ICAO standards and recommended practices and implement cl 3.5 of Annex 14 in its entirety. It is irrelevant that cl 3.5.4 falls within the ICAO definition of a recommendation. The Authority elected to adopt its essence as a mandatory provision of domestic law, as it proposed when reporting on the consultative process prior to pt 139's introduction to the Rules. It is irrelevant also that the wording of Appendix A.1(a)(2) is in absolute terms ("must extend ... if practicable") whereas cl 3.5.4 is more equivocal ("should, as far as practicable"); we are bound by the unequivocal terms of the former. In any event, we do not view the difference in wording between cl 3.5.4 and Appendix A.1(a)(2) as ultimately The wording of the former is in affirmative terms and, moreover, it material. provides for the express alternative of an emergency arresting system to justify a distance below 240 metres.

[61] There are 191 signatories to the Chicago Convention, reflecting the global spectrum of economic development and transport infrastructure. It is thus unsurprising that minimum standards exist to allow for piecemeal extension of safety practices during operation. But New Zealand has elected to implement a statutory regime for civil aviation giving priority to aviation safety and its international obligations. The Chicago Convention serves as an interpretive aid insofar as we must assume that the regulations are to be read as giving effect to the recommended practices identified by the ICAO.

[62] Fourth, Clark J also relied on (1) the ministerial rule-making power and the mandatory requirement to consider costs of implementation during the rule-making process;⁴¹ and (2) the use of the expression "where physically practicable" referring to the provision of prescribed lighting systems in Appendix E.6 of pt 139. However, we agree with Mr Rennie that the ministerial obligation to consider the costs of implementing measures for which the rule is being proposed applies only at the stage

⁴¹ Civil Aviation Act, s 33(2)(fa).

where a rule is under consideration, not after the rule is made where the costs of implementation are already accepted as part of the rule.

[63] In our view also the phrase "where physically practicable" as used in Appendix E.3.6 does not support a distinction to the effect that it excludes the physical element of practicability where the phrase is used elsewhere. The adverbs "reasonably" and "physically" add a qualifying gloss to the ordinary meaning of "practicable" — the former supports a closer focus on economic analysis and the latter on the practical feasibility of construction. But in pt 139 the Authority has decided to impose the test of "practicable" without more. We must approach the issue accordingly, guided also by New Zealand's international obligations, the statutory context and the Authority's consultations and representations during the rule-making process as opposed to inferences drawn from the absence of an adverb.

Analysis of Director's decision

[64] In an affidavit sworn in the High Court the Director described the test he applied as follows:

In giving my view I was aware that, although a longer RESA is always safer, the costs of implementing a longer RESA must be weighed against the costs of not doing so. The fact that a longer length under Appendix A of Part 139 may involve significant cost or the allocation of significant resources does not itself mean that compliance is "impracticable" but the cost and difficulty must be carefully weighed against the safety benefits to be achieved. This is where the cost/benefit analysis is relevant, as is the "practicable" consideration. Having looked at the extensive data and research collected on the proposed southern runway extension I came to the view that a 90 metre RESA was acceptable.

[65] Our focus is on the terms of the decision itself, not the Director's subsequent explanation of it, although the two are materially consistent here. In our judgment the Director erred in a number of material respects. His primary mistake was in failing to start from the premise that by law the RESA must extend to at least 90 metres and, if practicable, to at least 240 metres or the greatest distance that is practicable between those two distances. Leaving aside for the moment the meaning of what is practicable, the Director simply failed to turn his mind to this requirement. He did not ask himself why it was not practicable for WIAL to provide a RESA of more than 90 metres where Appendix A.1(a) expressly required a RESA of up to

240 metres. We do not accept Mr Cooke's proposition that the Director's starting point of a 90-metre rather than a 240-metre RESA was a semantic distinction; or that the fact that Wellington has an existing 90-metre RESA is the appropriate starting point for reassessing the current application. In our judgment the Director was required to approach the operator's request in accordance with the plain terms of Appendix A.1(a).

[66] The Director treated the 90-metre mandatory minimum not as an obligatory minimum from which the next stage must be considered but as an acceptable standard in itself without more. But he was bound to go further. He was obliged to require a RESA from the threshold minimum of 90 metres to a distance of at least 240 metres providing that was practicable. There was nothing to suggest that the Director undertook that critical inquiry or referred to evidence which might be relevant to it. There was nothing in the material before the Director to suggest that an extension to the RESA of an extra 150 metres (taking it to 240 metres) was not practicable. If the runway could be extended a further 200 or 350 metres, there was nothing to suggest that the RESA cannot be similarly extended. There was nothing to suggest a RESA of 240 metres was not feasible or able to be accomplished according to known means and resources; and there was nothing to suggest that a RESA of that distance was unachievable given the engineering technology available and the potential construction options for dealing with this site.

[67] Instead, the Director started from the premise that a 90-metre RESA provides an acceptable level of safety in light of the operations at the airport, their frequency, type of aircraft and the consequent risks. The root of his error was his reliance on the McGregor report. Ms Heine herself emphasised that that report was based on calculating the incremental benefits to be gained from a RESA of longer than 90 metres. Its focus was, as Clark J accepted, on the marginal benefits of a RESA longer than the required minimum. 42

[68] McGregor's statistical analysis was all based on the probability of landing undershoots or overruns. Its methodology was: (1) to assess the risk of the occurrence of an accident, which was then quantified by calculating the social costs

HC judgment, above n 1, at [111].

of an accident injury and any investigation costs; (2) establish the present value of the marginal benefit provided by a RESA of more than 90 metres; and (3) compare that figure to the cost of obtaining the RESA. The cost of providing the additional RESA was treated as independent from the costs of the existing project even though the land-reclamation costs were used as a proxy for the cost of any additional distance required.

- [69] The test is not whether the safety benefits provided by the construction of a longer RESA are small when calculated by reference to the low probability of an adverse event. That factor also was taken into full account when pt 139 of the Rules was enacted. The test, we repeat, is whether there is any factor about this particular runway extension which makes it impracticable not to require the full mandatory distance of 240 metres. The Director's approach was to second guess the rationale for the rule; he treated a 90-metre RESA as a proxy for "an acceptable level of safety", ignoring the express affirmation that 240 metres is the acceptable standard unless, we repeat, its construction is not practicable.
- [70] The Director appears to have separated the inquiry of whether a RESA is "acceptable" from the assessment of whether a length of 240 metres is "practicable". The acceptability of a RESA depends on the Director's prior assessment of whether it is impracticable to comply with the mandatory length of 240 metres. The Director erred in approaching the issue by asking whether extending the runway past 90 metres "would achieve additional safety benefits that outweigh the costs". He resurrected the balancing approach which Parliament had replaced in the primary legislation in 2004, rendering it irrelevant to the acceptable standard when applying the Rules.
- [71] The Director may be correct that the safety benefits provided by the construction of a longer RESA are small when calculated by reference to the low probability of undershoot or overrun in conjunction with a 90-metre RESA. Those factors hold true for all aerodromes. Otherwise, the Director did not undertake an independent assessment of the practicability of longer RESAs at Wellington Airport. He simply concluded that, in an already very low-risk environment, the cost of a

RESA of either 140 or 240 metres (about \$1 million per linear metre) was not justified.

[72] We agree with Mr Rennie that the Director erred materially in two other respects. One was his omission to consider, if a 240-metre RESA was not practicable, whether a RESA of an intermediate distance between 90 and 240 metres was practicable. He was bound by Appendix A.1(a)(2) to address that option.

[73] The other error identified by Mr Rennie was the Director's failure to consider whether an arresting system might provide the necessary degree of additional safety otherwise available from a 240-metre RESA. He simply discounted this consideration on the ground that the viability of an arresting system had not formed part of WIAL's plan or decision. Clark J justified this omission because Appendix A.1(a) is silent on arresting system technology;⁴³ the focus on length limits the Director's function to ensuring the physical characteristics of the RESA are acceptable. However, her observation reinforces the importance of correctly applying Appendix A.1(a)'s emphasis on the safety available from a 240-metre RESA.

[74] We are satisfied that the Director in exercising his statutory power was bound to consider carefully whether an alternative means of ensuring safety was available without a 240-metre RESA, irrespective of whether or not that alternative was referred to in the rule or in WIAL's plan. In assessing practicability in light of the statutory purposes of aviation safety and New Zealand international obligations, the availability of an arresting system (as an alternative measure referred to in Annex 14 to the Convention) must be a relevant consideration in assessing the acceptability of the RESA length.

[75] Mr Cooke sought to exempt the Director's decision from adverse scrutiny as being of an inherently evaluative and subjective nature where reasonable decision-makers may differ on what is practicable in any particular circumstances. In this case, he submitted, WIAL formed its own judgment on the appropriate length of a RESA and the Director, in similar exercise of his judgment, found that position

⁴³ At [126] and [127].

acceptable. On our analysis, however, the Director's error was not in exercising his judgment but in misunderstanding the legal test he was bound to apply. Mr Cooke acknowledges that is a proper ground for interference if the error is made out.

- [76] Mr Cooke referred to a number of other factors which might have justified the Director's decision had they been taken into account. However, we cannot reconstruct his decision by our independent valuation of the merits. We also question whether consideration of those additional factors would, on a proper application of the law, lead to a different result.
- [77] It follows that in our judgment the Director made material errors of law when deciding to accept WIAL's request to approve its provision of a 90-metre RESA to its proposed southern extension of the Wellington Airport runway.

Summary

- [78] In summary, we are satisfied that an acceptable RESA must comply with the prescriptions imposed by Appendix A.1 to pt 139 of the Rules. The Authority, through the responsible Minister, made these Rules under the Act in order to implement the SARPs contained in cl 3.5 of Annex 14 to the Chicago Convention. We have reviewed New Zealand's international obligations, the legislative purposes of the Act, the elimination of cost-benefit analysis by the 2004 amendments to the Act, the content of the Rules governing RESAs when compared to the relevant SARPs, and the intention of the Authority throughout its consultative process to implement the recommended practice as a mandatory requirement under New Zealand law in the interests of aviation safety. Our review leads us to the inescapable conclusion that a RESA must extend to 240 metres in length unless it can be shown that it is not practicable.
- [79] The correct legal test therefore requires the Director to assess whether a 240-metre RESA can feasibly be constructed. If satisfied that this is not practicable, the Director is empowered to approve a shorter RESA only if it extends to the greatest distance practicable between 90 and 240 metres and meets the purposes of the statutory regime aviation safety and New Zealand's obligations under

international aviation agreements — taking into account the development of arresting systems as a complement to RESAs in international aviation safety.

Decision

[80] The decision of the Director of Civil Aviation made on 20 March 2015 is set aside.

[81] The Director is directed to reconsider the application by WIAL in accordance with the terms of this judgment.

[82] The Director and WIAL are ordered to pay the Association one set of costs for a standard appeal calculated on a band A basis together with usual disbursements. We certify for second counsel.

Solicitors:

New Zealand Air Line Pilots' Association Inc, Auckland for Appellant Civil Aviation Authority, Wellington for First Respondent Chapman Tripp, Wellington for Second Respondent