

NEW ZEALAND AIR LINE PILOTS' ASSOCIATION

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Chairman NZ Commerce Commission
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14th January 2013

Draft report to the Ministers of Commerce and Transport on how effectively information disclosure regulation is promoting the purpose of Part 4 for Wellington Airport

Dear Sir,

The New Zealand Air Line Pilots Association has reviewed a copy of the above report dated 2nd November 2012 and while we recognise that the submission date on the said report has passed we would however like to make an aviation safety submission to the Commission on the issue of Runway End Safety Areas for the Commission's future technical reference and consideration.

Introduction:

The New Zealand Air Line Pilots' Association (NZALPA) is an incorporated body representing the professional and technical interests of its members.

The Association's members are employed in New Zealand as pilots (ranging from agricultural pilots and flying school instructors through to international airline pilots) and air traffic controllers. These members, who number in excess of 2000, constitute the majority of airline pilots and air traffic controllers in New Zealand.

Members of the Association play an integral role in the safe operation of air transport and the Association is intimately concerned with developments that affect the safety of its members. The Association's policies are directed towards the pursuit of excellence in professional and technical standards.

The Association is also a founding member and active participant in the affairs of the International Federation of Air Line Pilots' Association (IFALPA). IFALPA represents more than 100,000 pilots in over 95 countries and is one of only two non governmental organisations with a permanent representative at the International Civil Aviation Organisation (ICAO).

Runway End Safety Areas (RESAs):

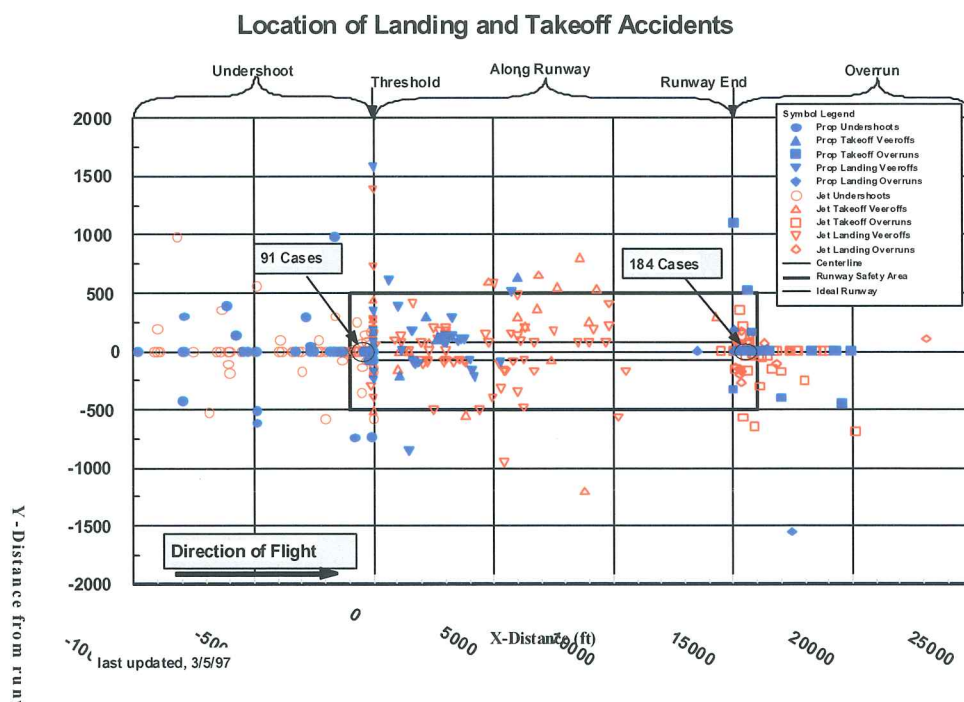
The requirement for Airports in New Zealand to provide RESAs is the result of an amendment to the New Zealand Civil Aviation Rules that came into force on the 12th of October, 2006. The effect of the amended Rule was to require RESAs to be provided

at all New Zealand International Airports by the 12th of July, 2007 or if not practicable, no later than the 12th of October 2011.

The rationale for RESAs is supported by analysis of the statistical breakdown of accidents which indicates around 75% of all accidents occur in the approach/landing or takeoff phases of flight. Overruns and undershoots dominate the statistics.

Accident reports published by the United States National Transportation Safety Board (NTSB) and the International Civil Aviation Organisation (ICAO) have provided information on aircraft weight, speed, location, runway conditions, and injuries for most aircraft overrun accidents. In brief;

- 83% of the undershoot accidents occurred within 300m of the threshold and all the undershoots of the Part 121 aircraft were within 200m of the threshold.
- In overruns, 93% stopped within 300m of the threshold and 64% of overruns remained within the extended edges of the runway.



There is a multiple of reasons for the overruns and overshoots, including some controversial aircraft certification parameters, however the reality is that somewhere around the world they occur at the rate of around one a week. A benign area of 300 meters off the runway end will safely contain 90% of these overrun/undershoot events.

In its Notice of Proposed Rule Making (NPRM) prior to amending the Civil Aviation Rules to require RESAs at New Zealand airports, the Civil Aviation Authority (CAA) stated that, *"It is considered and reinforced by the cost benefit analysis, that the RESA length should be 240m where it is practicable."*¹

We were disappointed that Wellington Airport was able to apply a less than optimal RESA length of 90 meters due to *"the geographical and other physical features of the land surrounding Wellington aerodrome"*². The Association considered that the cost of full length RESA implementation had been overstated in the cost benefit analysis with the cost of a RESA equivalency by the use of an *Engineered Material Arresting System* (EMAS) not even being considered.

The technological solution of EMAS is designed for use at airports that are physically constrained. The installation of EMAS would involve capital costs of approximately US\$3.5 million per runway end however it can provide a near equivalency to a 240m RESA in arresting an overrunning aircraft.

Statistically a 90m RESA will protect around 50% of overrunning aircraft however a 240m RESA or equivalent will safely contain around 90% of overrunning aircraft. NZALPA considers EMAS installation at Wellington Airport would provide significant safety enhancements with a positive cost benefit.

In summary, it is the view of NZALPA that the monies spent and any future moneys allocated by Wellington Airport to create RESAs to meet minimum internationally agreed safety standards was mandated by CAA rules for compliance. Further, we would submit that Wellington Airport should have provided not just a minimum 90 meter long RESA but applied best practice of 240 meters or equivalency.

Yours sincerely



Captain Stu Julian
Technical Director

¹ NPRM 04-03, page 19

² NPRM 04-03, page 35