



DISCUSSION PAPER - SAFEGUARDS FOR AIRPORTS AND THE COMMUNITIES AROUND THEM

NT AIRPORTS RESPONSE TO THE DISCUSSION PAPER

1. INTRODUCTION

In its response to the Green Paper Northern Territory Airports welcomed the Australian Government intention to improve planning coordination and integration between all levels of government and airports, while maintaining regulatory arrangements that promoted investment, efficiency and innovation.

The Safeguards for Airports Discussion Paper states that the Australian Government is committed to working with the state and territory governments to develop a framework including initiatives such as:

- national airspace protection legislation that protects approaches to major airports to prevent intrusion into airspace by buildings approved at state and local government level;
- developing a clear policy on the definition of public safety zones around airports which can be taken into account in local planning with a view to ensuring that the community is not exposed to any undue level of risk from aircraft operations; and
- developing strategies and plans to address other airport related issues such as aircraft noise, traffic linkages, and best practice community consultation models.

The intention to work towards a national approach to land use planning and development on land affected by aircraft operations, through the auspices of COAG, is applauded. Gaining agreement by all Australian jurisdictions would be a major achievement.

2. PLANNING FOR COMPATIBLE DEVELOPMENT

1. Does the ANEF system provide an effective basis for planning in noise affected areas?
2. How effective is the ANEF system as a land use planning standard for greenfield developments around airports?
3. Are the acceptable levels of aircraft noise for particular developments identified in AS2021 consistent with current community expectations?
4. How can the current planning arrangement to address developments in noise-affected areas around airports and under flight paths be improved to take account of community expectations, while also providing for the reasonable growth of aviation activity at airports?
5. For developments around the major capital city and freight airports, should state governments have to refer residential development within a defined buffer zone to the Commonwealth Transport Minister or Secretary for approval?

Background

Alice Springs Airport does not have any urbanisation surrounding the Airport, but will have residential development to the north of the aviation operation in the future. Darwin International Airport, except off the main runway ends, is surrounded by light industrial, residential, Defence or community facility developments.

The Northern Territory Planning Scheme contains a specific clause – Clause 6.9 Land in Proximity to Airports- which has the purpose to:

- (a) minimise the detrimental effects of aircraft noise on people who reside or work in the vicinity of an airport;
- (b) prevent any new use or intensification of development on land that would prejudice the safety or efficiency of an airport; and
- (c) retain the non-urban character of the land.

Until recently the Northern Territory planning system had largely prevented inappropriate development surrounding Darwin International Airport. There has been long standing inappropriate residential development on Commonwealth (Defence) land which was not subject to the Northern Territory Planning Scheme. These Defence residences have been subject to significant (largely military) aircraft noise.

The ANEF/AS2021 System

Being the product of logarithmic averaging, the ANEF and AS2021 system have been the subject of long term criticism because ANEF contours mean little to noise affected people. However, currently the ANEF and AS2021 are entrenched in the land planning system and there is no effective alternative on the immediate horizon.

One policy initiative which could be taken immediately is to require long term or ultimate capacity ANEF's as opposed to the current 20 year forecast requirement. The reasons to lengthen the ANEF term are:

- buildings have a longer life than 20 years and, on construction may be in an Acceptable ANEF zone, but after 25 years may have moved into a Conditional or Unacceptable ANEF zone because of growth in aircraft traffic;
- a 20 year period is not long enough to avoid the effects of short term aviation industry shocks (eg September 11 combined with the collapse of Ansett) and hence the contours (particularly the 20 ANEF contour) can flex in and out. This is not a good attribute for a long term planning tool; and
- long term or ultimate capacity ANEF's are accepted by the legal system following the Canberra Airport court decision on the ultimate capacity ANEF.

It is submitted that a 40 year ANEF should replace the 20 year ANEF requirement in the *Airports Act* in order to provide a longer term view of aircraft noise.

While there are arguments for an ultimate capacity ANEF to be mandated, some airports are unlikely to reach ultimate capacity (eg Alice Springs) and for joint-user airports there is the additional complexity of determining the civil and military share of ultimate capacity aircraft movements.

High Noise Corridors

A High Noise Corridor is that area of land that is subject to significant approach or departure aircraft noise and where noise sensitive development (particularly residential) should not occur. However, a High Noise Corridor is ideal for industrial and commercial uses when appropriate long term noise attenuation measures are employed.

In Canberra the High Noise Corridors extend 8 nautical miles from each end of the main runway.

High Noise Corridors recognise that aircraft do not follow the same approach or departure track and hence a wider corridor is necessary to protect noise sensitive land uses from aircraft operations. The High Noise Corridor planning tool also allows for traffic to increase over time within that corridor (they do not rely on long term aircraft movement forecasts that may or not be accurate).

High Noise Corridors are, of course, of more use in controlling greenfields development.

The 40 year ANEF, supplemented by planning use of High Noise Corridors, could provide a short to medium term planning tool while the search for a replacement system continues.

Community Expectations of Noise

Various studies have shown that noise sensitivity is a very individual characteristic. Some people are considerably more noise sensitive than others. In respect of aircraft, some people are more disturbed by a light aircraft in earshot for 30 seconds than a much noisier jet aircraft in earshot for 10 seconds and others vice versa. Noise sensitivity also varies markedly with the overall level of background noise eg town or rural area vs a large city.

In the end, it would be practically impossible to arrive at an absolute noise profile which would be accepted by a cross-section of society as a reasonable aircraft noise severity-duration computation that is acceptable for eg a residential area. In the end, those decisions need to be made by experts.

Future Growth of Aircraft Activity at Airports

Significant aircraft noise has been a reality at many airports since the beginning of the civil jet era around 50 years ago. Since then aircraft movements have steadily increased and for the last 20 years civil jet aircraft have become progressively quieter.

Where airports were a greenfields development originally (eg Tullamarine) it is perfectly reasonable that aircraft movements grow to ultimate capacity.

Aircraft activity at most airports where airport noise is an issue will grow into the future. Residents near an airport should never be under the mis-apprehension that aircraft noise will disappear one day.

Airports Act airports were leased by the Commonwealth for 99 years on the basis that the airports would continue to grow in line with market demand.

This message that aircraft noise will continue and airport traffic will grow is a difficult one to sell. However, both the State/Territory and Commonwealth levels of government need to communicate this message to noise affected residents. Nobody else can communicate this message with authority.

Commonwealth Role in Development Near Airports

The only way of achieving consistent development outcomes in the vicinity of airports is to have a single body or a single set of standards not subject to variation between Australian jurisdictions.

A single set of national standards to be applied by Commonwealth, State/Territory and Local Governments for on-airport and off-airport development is the preferable outcome.

The alternative of every development being referred to a Commonwealth approving authority for final sign-off is potential ground for building on the planning conflict between the States/Territories and the Commonwealth that already exists. A common set of standards via COAG appears the appropriate route.

3. PROTECTION OF OPERATIONAL AIRSPACE

For the Joint User Darwin International Airport, the combination of the Civil Aviation Safety Regulations, *Airports Act* Protection of Airspace Regulations and Defence (Areas Control) Regulations provides sufficient protection of airspace to preserve the operational integrity. The Civil Aviation Safety Regulations and *Airports Act* Protection of Airspace Regulations are sufficient for Alice Springs Airport.

4. PUBLIC SAFETY ZONES

17. Should an approach based on the identification of public safety zones be introduced to help ensure that new developments around the ends of runways do not lead to undue levels of risk?

18. For which airports might such public safety zones be identified – all airports or only major airports with regular airline traffic?

19. What methodology and criteria should be applied in defining the boundaries of a PSZ?

20. What sort of additional controls might be imposed for new developments in identified PSZs?

21. What sort of steps might be taken to ensure the identification of a PSZ does not unduly affect the value and enjoyment of existing properties within the zone?

The concept of a Public Safety Zone off runway ends is difficult to argue with as a part of a comprehensive aviation safety and land planning approach to minimising human casualties due to aircraft crashes in the vicinity of an airport.

The Safeguards for Airports Discussion Paper immediately focuses on the location specific risk of aircraft crashes when approaching or departing individual airports. This is supported. The traffic profiles and runway configuration of each airport dictate the risk to the surrounding residents, workers and visitors.

One issue is the aircraft crash risk that is adopted for Australian airports. Is the worldwide crash risk for turbo-prop and jet aircraft that is used in the United Kingdom in its 1 in 10,000 and 1 in 100,000 crash risk studies also appropriate for Australia. The United Kingdom are overt in the fact that, because they do not use the much lower First World crash risk data, that their crash risk studies overstate the probability of death because of an aircraft crash. The reason United Kingdom crash risk data is not used is that it is unlikely that there would be enough data in the model to make a reasonably reliable risk assessment.

Queensland applies a fixed dimension Public Safety Zone for all airports which have greater than 10,000 RPT movements. Queensland considers that this Public Safety Zone equates to an annual risk of death by aircraft crash within the Zone to between 1 in 10,000 and 1 in 100,000.

The issue of a national methodology for establishing Public Safety Zones at all airports should be agreed at COAG and incorporate the following attributes:

- uniform or at least consistent national approach;
- all airports with jet traffic should be captured by the national system;
- methodology should be a location specific crash risk assessment ;
- methodology should be developed as an Australian Standard; and
- government should fund any compensation arrangements which arise.

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