



5 December 2013

Sam Lotu-liga

Member of Parliament for Maungakiekie-Tamaki

Parliament Buildings

Wellington

Dear Mr Lotu-liga,

Thank you for your time on Monday 21 October to discuss the Northern SMART Approaches initiative that was recently trialled in Auckland by Airways New Zealand and Auckland Airport in conjunction with three airlines represented by the Board of Airline Representatives of New Zealand (BARNZ) – Air New Zealand, Qantas and Jetstar.

Please find attached responses from all partners to the questions you raised on behalf of a number of residents.

As discussed with you and the residents at the meeting on 21 October, the questions have been compiled into groupings that are either best answered by all aviation stakeholder partners, or by a specific stakeholder. The groupings relate to SMART Approaches, and Airways New Zealand and Auckland Airport specific questions.

A number of these questions have been answered through information already provided to you and to residents, however, where possible, we have provided an answer to each question.

We would be happy to discuss directly any further questions you, or your local constituents, may have.

Kind regards

Judy Nicholl

General Manager Aeronautical Operations Auckland Airport, on behalf of Airways New Zealand, Auckland Airport and the Board of Airline Representatives of New Zealand (BARNZ)



SMART Approaches

1. What are the top three key drivers behind development of the SMART route? Please use clear and direct statements.

There are a number of key benefits to SMART Approaches, however the main drivers include:

- A reduction in carbon emissions, flight times and fuel consumption by aircraft. This is aligned with sustainability goals of the international aviation industry.
- Fewer miles being flown by aircraft over residential areas.
- On the SMART Approaches the jet engines generate less noise than on other less efficient approaches.

2. Please provide the groups you notified prior to the SMART Approach trial starting

The trial was presented to and endorsed by the Aircraft Noise Community Consultative Group (ANCCG), a group that represents the interests of local communities and industry as it relates to aircraft noise impacts.

The trial was conducted with the support of the aviation stakeholder partners – the airlines represented through BARNZ.

The trials were conducted under the auspices of Airways New Zealand, which operates the control tower and manages aircraft arrivals and departures, and Auckland Airport, which is responsible for the terminals and runway.

3. Please provide noise monitoring equipment to at least 6 residential addresses along the new SMART flight path to collect data. The data collected must encompass all flights arriving or leaving Auckland Airport over the suburbs stated above. Please confirm you will release the collected RAW data for review

Five noise monitoring stations were installed in residential locations for varying periods of time. The equipment was measuring continuously and thus measured all overflying aircraft, where identifiable amongst other ambient sound.

Some of the RAW data has been released already and the remainder will be available along with the analysis that will form part of the draft report.

4. Confirm that the SMART route will cease to be used at the end of the trial while the assessment is completed



Yes, that is correct. The route that was being trialled as part of the Northern SMART Approaches trial ceased to be used from the end of the trial date, 31 October 2013. This was announced to the news media, in newspaper advertising and directly to community groups and members of the public who had previously provided feedback on the trial.

5. Confirm the process used to inform the airlines that the SMART trial period has been completed

The three airlines participating in the Northern SMART Approaches trial have been informed that the trial period has ended. This is as per the original agreement that the trial would end after a 12 month period, on 31 October 2013.

On an operational basis, Airways controllers ceased providing clearance to fly a SMART Approach from the end of the trial.

6. Confirm the parties involved in the evaluation process and the governance structure used

The trial will be evaluated by Airways New Zealand, which operates the control tower and manages aircraft arrivals and departures and Auckland Airport, which provides the terminals and runway. They, along with BARNZ which represents the airlines – Air New Zealand, Qantas and Jetstar – that participated in this trial, will each provide data for the draft report, which is being prepared by Auckland Airport in conjunction with Airways New Zealand.

Data from community noise monitors will be compiled and assessed.

Community feedback has also been sought and this is also being evaluated. This will include feedback from the ANCCG.

The draft report will then be made public in late March 2014. Members of the community and any other interested parties will then be able to provide feedback on it.

7. Confirm the process used to evaluate the SMART trial

Airways New Zealand and Auckland Airport will be evaluating the data from the airlines, noise monitors, community feedback and their own data against the following:

- Community feedback and response
- Measured noise levels and impact of SMART Approaches on compliance with obligations relating to noise, including the New Zealand Standard NZS 6805:1992 Airport Noise Management and Land Use Planning.
- Whether the design of the SMART Approaches procedure is aligned to international goals for reducing carbon emissions

- Ability for the SMART Approaches to equitably distribute flight paths across Auckland
- How well different aircraft types fly the procedure and the ability for Air Traffic Controllers to safely manage traffic on conventional and SMART Approaches
- Runway efficiency

Based on that information, a draft report will be prepared by Auckland Airport in conjunction with Airways New Zealand. This will then be made public in late March 2014 and any interested party, including members of the community, will have an opportunity to provide feedback on it before a decision is made on the use of Northern SMART Approaches.

8. Confirm how the outcomes of the trial will be communicated to residents in the affected areas

The draft report will be available on the websites of Auckland Airport (www.aucklandairport.co.nz) and Airways New Zealand (www.airways.co.nz).

The following communications activity is expected to take place:

- Members of the community who have provided feedback on the Northern SMART Approaches trial will be notified directly that the draft report is available
- Relevant community representatives, including Local Board members, Councillors, community groups and MPs, will also be advised of its publication
- Community notices giving information on the draft report will be placed in various locations around affected areas, such as libraries, supermarket notice boards and community centres
- Advertising in community newspapers

Up to date information and feedback mechanisms will also appear on partner websites.

Meeting/s may also be held to inform interested parties of the draft report and findings from the Northern SMART Approaches trial, and gather further feedback.

Following this, Auckland Airport in conjunction with Airways New Zealand will develop a final report.

Approval to action any outcomes will be determined by the nature of the recommendations in the final report. For example, the recommendations may require only Airways New Zealand and Auckland Airport approval, or may require approval from another body, such as the Civil Aviation Authority of New Zealand (CAANZ).

The final decisions will be widely communicated.

9. Confirm the process used to implement the protocols if the SMART trial is successful

This will be determined by the recommendations in the final report.

10. If successful how many flights per day and week are you going to move to using the new SMART route

We are not currently in a position to answer this question as the data is still to be fully analysed and the review process completed.

11. Please advise how you are reviewing and responding to submissions

Airways New Zealand and Auckland Airport will be evaluating the data from the airlines, noise monitors, community feedback and their own data against the following

- Community feedback and response
- Measured noise levels and impact of SMART Approaches on compliance with obligations relating to noise, including the New Zealand Standard NZS 6805:1992 Airport Noise Management and Land Use Planning
- Whether the design of the SMART Approaches procedure is aligned to international goals on reducing carbon emissions
- Ability for the SMART Approaches to equitably distribute flight paths across Auckland
- How well different aircraft types fly the procedure and the ability for Air Traffic Controllers to safely manage traffic on conventional and SMART Approaches
- Runway efficiency

Based on that information, a draft report will be prepared by Auckland Airport in conjunction with Airways New Zealand. This will then be made public in late March 2014 and any interested party, including members of the community, will have an opportunity to provide feedback on it before a decision is made on the use of Northern SMART Approaches.

We have been capturing and responding to feedback relating to the Northern SMART Approaches throughout the duration of the trial, and are in the process of responding to any outstanding questions relating to this trial period.

Feedback and submissions on the draft report will be taken into account in the final report recommendations.

12. The way this trial is not being measured it would appear in terms of impact on residents. Please advise what steps you are taking to mitigate the impact of this increased noise on this area

Impacts on the community were measured throughout the trial period via noise monitors installed in residential areas. This data will be analysed and factored in to the draft report.

Community feedback on the trial has also been received and more will be sought.

The need for any mitigation measures will be assessed based on this information.

The operation of the SMART Approaches must also be carried out in a way that ensure the obligations to comply with existing New Zealand Standard NZS 6805:1992 Air Noise Management and Land Use Planning are not breached.

13. I am frustrated at the lack of recognition of public voice on this issue and would also like to know what public meetings have been held or are to be held, and how submissions are being recorded for the public record

Two public meetings have been held, one called by MP for Maungakiekie-Tamaki Sam Lotu-liga, and one by the Plane Truth Group. The first of these meetings was attended by representatives from Airways New Zealand, Auckland Airport and BARNZ and the second was attended by BARNZ.

Five further meetings with individual community representatives have also been held, along with numerous meetings with local MPs and local body officials.

A large number of residents have been contacted personally, both by phone and in writing.

Both Airways New Zealand, which operates the control tower and manages aircraft arrivals and departures, and Auckland Airport, which is responsible for the terminals and runway, are keeping records of the feedback being received.

14. I would like to hear the submissions presented by way of public meeting as the Auckland Council has recently done, for the draft unitary plan changes. Why is it that this major change to the amenity of our neighbourhood is not subject to public review like a change to the road networks would be, or a new retail development would be in terms of its impact on the environment? The process lacks transparency

Different organisations have different requirements to establish change. We are committed to public engagement and the review of the draft report will provide a transparent and comprehensive process for this.

Noise monitors were installed at key locations to understand the impact of the flight trial.

This is in addition to other factors, such as the safety of aircraft, the efficiency of the flight path in reducing carbon emissions and fuel use. The reduction in flight times is also a consideration.

15. Airways and Auckland Airport state that trial flights will be limited to 10 approaches per day between the hours of 7 am and 10pm. In fact there are several flights after 10pm and before 7am. This activity contradicts their advertised statements

The flights outside of 10pm and 7am were not part of the Northern SMART Approaches trial but are flights that were on conventional flight tracks already in existence for many years.

16. How will the trial be evaluated and assessed

Auckland Airport will be evaluating the data from Airways New Zealand, the airlines, noise monitors, community feedback and its own data against the following:

- Community feedback and response
- Measured noise levels and compliance of SMART Approaches with existing New Zealand Standard 6805:1992 Airport Noise Management and Land Use Planning that relate to the management of airport noise
- Whether the design of the SMART Approaches procedure is aligned to international goals on reducing carbon emissions
- Ability for the SMART Approaches to equitably distribute flight paths across Auckland
- How well different aircraft types fly the procedure and the ability for Air Traffic Controllers to safely merge traffic on conventional and SMART Approaches
- Runway efficiency

Based on that information, a draft report will be prepared by Auckland Airport in conjunction with Airways New Zealand. This will then be made public in late March 2014 and any interested party, including members of the community, will have an opportunity to provide feedback on it before a decision is made on the use of Northern SMART Approaches.

17. Many of us have been woken at night by noise from planes outside of the times that the SMART approach trial uses. If the SMART flights are limited to no more than 10 flights a day and fly only between 7am and 10pm then it must be flights on the existing flight paths that are causing this increased noise. Has the number of flights on existing flight paths over local suburbs increased in the past year

Airways New Zealand analysis shows that there has been no significant increase in the number of flights over local suburbs including Epsom, Mt Roskill, and Royal Oak, in the past year, with an estimation of possibly 1%, if any, increase in the number of flights.

18. Has there been a lowering of the altitude at which these planes fly in the past year

No, the altitudes for planes on existing flight paths have not lowered in the past 12 months, except for the 10 flights per day that were using the SMART Approaches track.

Below is the average height for aircraft arriving on conventional tracks within a 2nm radius of the way point LOSGA near the intersection of Dominion Rd and Mt Albert Rd across the past three years:

- August 2011 – average height 6545 ft
- August 2012 – average height 6818 ft
- August 2013 – average height 6855 ft

19. We ask that you report back to the community on these matters together with proposals to mitigate or address any recent changes

The draft report will be available on the websites of Auckland Airport and Airways New Zealand.

The following communications activity is also expected to take place:

- Members of the community who have provided feedback on the Northern SMART Approaches trial will be notified directly that the report is available
- Relevant community representatives, including local Board members, Councillors, community groups and MPs, will also be advised of its publication
- Community notices giving information on the report will be placed in various locations around affected areas, such as libraries, supermarket notice boards and community centres
- Advertising in community newspapers

Up to date information and feedback mechanisms will also appear on partner websites.

Meeting/s may also be held to inform interested parties of the draft report and findings from the Northern SMART Approaches trial, and gather further feedback.

Following this, Auckland Airport with involvement from Airways New Zealand will develop a final report.

Approval to action any outcomes will be determined by the nature of the recommendations in the final report. For example the recommendations may require only Airways New Zealand and Auckland Airport approval or may require approval from another body, such as the CAA.

The final decisions will be widely communicated.

20. Identify all four of the satellite based approaches developed

There are two 'South' approaches and two 'North' approaches.

21. Identify clearly, the two different routes currently being operated

The two tracks are:

1. The track commonly referred to as the "Epsom / Royal Oak / Onehunga" track for landing on Runway 23L (i.e. landing in a South-Westerly direction); and
2. The track commonly referred to as the "Hillsborough / Manukau Harbour" track for landing on Runway 05R (i.e. landing in a North-Easterly direction).

22. Identify why the current two routes were commissioned

The two Northern SMART Approaches trial tracks were identified as they provide an effective and efficient track to the runway, helping to reduce flight times and carbon emissions, supporting international aviation sustainability goals.

23. Explain why the other two routes were not commissioned

Two Southern SMART Approach routes are still currently being trialled.

24. If this is a trial, then why has there not been proper plans for measuring empirically the loudness of the noise from aircraft which are at a much lower altitude than was previously the case. Why were there no measurements done of noise levels in areas to be affected prior to the trial so that a measure of effect could be ascertained from the control

Prior to the Northern SMART Approaches trial, projected noise levels were calculated and noise samples taken as part of the flight path procedure design process. This is part of the evaluation process.

25. What part will the 'other' stakeholders play in the final assessment, ie. those residents who due to their vested interest as ratepayers and taxpayers have a significant stake in AIAL and Air NZ? Will their elected officials both local and central be involved in the final evaluation and to what degree

Communities, including local boards and MPs, will be invited to provide feedback on the draft report, for consideration in preparing a final report. Depending on the nature of the recommendations, the decisions could be for Airways New Zealand and Auckland Airport to make, or another body such as the CAA.

26. Please confirm that once the evaluation is complete you will attend a further public meeting at which you will clearly outline and communicate the conclusions reached, and what AIAL intends to do as a result. For example,

if AIAL intends to permanently adopt the SMART approach route, do you consider this requires amendment to the District Plan airport noise contours? If so, when are you intending to pursue that

The draft report will be available to any interested person and further feedback will be sought.

At this stage the data from the trial has not been assessed.

Airways specific questions

27. Please detail the governance structure used to assess changes to flight paths and flight altitudes

The basis for any changes include the respective District Plan (or Unitary Plan in future versions) in relation to the management of airport noise, the CAA noise rules for the airport (CAA Rule Part 93), and the procedure design rules CAA Rule Part 173. Airports, airlines or Airways can ask to design a new procedure and they follow those rules to achieve that aim.

28. What are the processes you use to ensure that aircraft flying into the Auckland region are engaging correctly with the regulatory requirements set? State the processes used by both the airport and airways.

Each airline is required to be certified by CAANZ and then operate to its exposition.

Airways NZ operates the airspace management system (a regulated service under CAANZ rules Part 172), air traffic control staff are trained to follow the appropriate procedures that ensure compliance with those Part 172 rules. In addition Airways (through CAANZ) follows the international convention with respect to air traffic control that comes from the International Civil Aviation Organisation (ICAO) – the NZ Government is a signatory to ICAO conventions. Where aircraft, airlines or air traffic controllers or their systems do not conform to rules/regulations this is reported to CAANZ through a specific reporting system held by CAANZ. CAANZ is also overseeing the consultation process around the National Airspace and Air Navigation Plan please refer to: http://www.caa.govt.nz/naanp/naanp_home.htm for more information. Performance Based Navigation (PBN) is a part of that Plan and the PBN Implementation Plan is available at: <http://www.caa.govt.nz/PBN/pbn.htm>

29. Please release a copy of Auckland Airports Process and Approval Procedural documentation itemising how regulatory changes are made to flight paths and flight altitude

Any proposed changes to flight paths and flight altitude must be in accordance with various existing rules and regulations, as outlined in question 28.

30. Will you please investigate thoroughly the perceived decrease in altitude and increase in noise of aircraft on traditional flight paths (apart from the SMART trial) in the past year as compared to previous years

Our evidence presented as feedback to the community and comparing three “same” month samples from 2011, 2012, 2013 of aircraft crossing heights at waypoint LOSGA has shown that the altitudes being flown by aircraft following the traditional flight paths has increased slightly, as per the below:

- August 2011 – average height 6545 ft
- August 2012 – average height 6818 ft
- August 2013 – average height 6855 ft

While no specific noise measurement comparison was possible for those three sample months – with the same aircraft types being within the sample (arguably older types were more prevalent in 2011/2012, which could be noisier), logically the noise experienced on the ground could be expected to be the same also.

31. Please provide the RAW data for the last three years from Airways of all flights over the suburbs named above, giving the Date, Flight number, flight path and altitude readings

The Airways system is not designed to produce mass outputs of information that can be readily deciphered by the general public without specialist tools. We have had to decline a recent Official Information Act request of a similar nature on the basis of requiring collation and research that would take an unreasonable length of time.

32. How does the new CFM/AMAN system related to the SMART flight path

The relationship is limited to the Standard Arrival Route (STAR) procedures and approach (SMART) selection being a factor of consideration within the automated air traffic control system. Throughout the trial, air traffic controllers would decide to allocate a SMART approach and the machine validated or rejected the selection, based on opportunity at the flight’s arrival time.

33. Have any other new flight paths been implemented over the named suburbs in the last 12 months

Yes, we have designed two (RWY05 & RWY23) visual arrivals (good weather days) for use by propeller aircraft. They complement the SMART trial jet approaches on fine weather days. While they can be flown by jets, no jet flights from the north or west have ever flown one, nor are intended to fly one.

34. Has the altitude of any flights over these suburbs above changed in the last two years

Yes, from the sample data provided of the same three months from 2011/12/13, for flights flying the same long path to the runway instrument landing system, aside from those using the Northern SMART Approach, the aircraft were marginally higher in the 2013 year than the previous two years.

35. In the next three, five and 10 years, please list the number of flights you expect over these suburbs

The current average numbers of arrivals from Australia and Asia is about 50 flights per day (2013), any increase will depend upon flight schedules and aircraft size, which relate to frequency and time of day. Auckland Airport's IATA / BARNZ predictions for growth will give an indication.

36. How does the new CFM/AMAN system relate to the standard flight paths over the suburbs listed

All standard flight paths for all flights arriving in to Auckland are available to the air traffic control system. Where options are available (i.e. short STAR to SMART approach), the CFM/AMAN tool can assist the decision process of the air traffic controller. Where no other options are available the CFM/AMAN system issues the standard STAR paths – just as a person would if CFM/AMAN didn't exist or was not operating. CFM/AMAN is an air traffic scheduling tool that ensures the airspace is managed as efficiently and safely as possible.

37. Is it possible the CFM/AMAN system is creating an impact on the suburbs listed above?

As above

38. What is preventing the flights returning to the way they were flying over these suburbs in 2012

The original flight tracks "from 2012" were being flown throughout the Northern SMART Approaches trial, as aircraft not on the SMART trial flew the "old" path to the runway instrument landing system.

39. The SMART approach trial was unannounced. It was difficult for many of us to find information on exactly what was happening and how to give feedback as an affected resident. Are there any other unannounced trials or changes to flights in this area in the past year



There are no unannounced trials planned, and the only changes have been associated with the propeller flight paths for visual approaches mentioned in question 33.

40. Is there a plan by Airways, Auckland airport or any of the major airlines that use the airport to condense international approaches from the north and west of Auckland into existing flight paths over local suburbs

Airways NZ has no plans to condense international approaches from the north and west, however any growth in airline schedules of flights from those directions will result in more flights following the designed flight paths. These flights have to follow a standard STAR path to ensure that the total system is coordinated.

41. We ask for transparency and full disclosure by Airways and Auckland Airport in all dealings with the community of affected residents

The community will have access to and an opportunity to comment on the draft Report, which will include data and analysis, as per the review process outlined.

Auckland Airport specific questions

42. Please provide the expected growth in the number of planes landing at Auckland Airport over the next three, five and ten year periods. In the last annual report, approximately 154,000 planes are listed as landing each year.

Information published at the Auckland Airport Investor Day presentation on 1 November 2013 provided the following indicative growth forecasts, with the caveat that the numbers have been formulated by Auckland Airport for planning purposes and are based on a range of forecasts and assumptions for this purpose only. While this information is given in good faith, its accuracy and correctness is not guaranteed and it should not be relied upon in connection with any contract or commitment whatsoever.

- Passengers per annum: 14.5 m current, 40m by 2044
- Domestic/International: 6.7/7.8 current, 16/24 m by 2044
- Air Traffic Movements pa: 155,000 current, 240,000 by 2044
- Aircraft Positions: 56 current, 94 by 2044

It is important to note that the forecasts indicate that the number of air traffic movements grow at a slower rate than passenger numbers because of more efficient and larger aircraft being added to airline fleets.



43. Outside of the SMART flight HOTLINE, can you please state the processes used by the Airport and Airways to collect and respond to community concerns

Auckland Airport has a number of mechanisms set up to collect and respond to concerns. This includes:

- Dedicated customer service phone lines
- Dedicated feedback email address available via our website

We also engage with neighbouring communities through many commitments and connections, including, but not limited to the Auckland Airport Community Trust, MIT student employment initiative, coastal clean up, ANCCG processes and procedures, Life Education Trust and others.

44. Will the impact of noise on residents be taken into consideration in the creation of any new flight paths?

We are committed to taking all feedback on the Northern SMART Approaches trial into consideration before the draft and final recommendations are made.

In addition noise monitors were placed in the community. Any changes to the flight paths must not result in the noise levels set in the District Plan being exceeded.