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By Electronic Transmission

Department of Infrastructure and Regional Development
Western Sydney Airport Submission
Western Sydney Unit
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Email: WSAsubmission@infrastructure.gov.au

Our Ref: T400029

Dear Sir/Madam,

Western Sydney Airport Draft EIS 2015

This submission is tendered on behalf of the Australian Air Line Pilots' Association (**AusALPA**) which is comprised of the Australian and International Pilots Association and the Australian Federation of Air Pilots and represents more than 6,000 professional pilots within Australia on safety and technical matters.

AusALPA takes an active stake in the Australian aviation industry, participating in inquiries in the Australian aviation sector and contributing members to various industry forums. AusALPA is also an active member of the global pilot body, the International Federation of Air Line Pilots' Associations, which represents over 100,000 airline pilots internationally.

AusALPA, through its Aerodrome and Ground Environment (**AGE**) Portfolio, has been involved in a number of aerodrome related forums, working groups and projects, including the CASA Part 139 Working Group and Sydney Airport Runway Capability Review. The Association is also an active participant in airport Local Runway Safety Teams nationally, including Sydney, Brisbane and Gold Coast Airports and has provided Airport Liaison Representative training to CASA, Airservices Australia as well as other industry stakeholders. AusALPA is also currently a member of the Australian Aviation Wildlife Hazard Group Executive.

The AGE Portfolio is aimed at establishing a rapport between the airport community, AusALPA, CASA and Airservices Australia, as well as to improve lines of communication between the Association and airport stakeholders in order to develop a positive working

relationship that achieves a safe and operationally efficient airport; or as we call it, a “Pilot Friendly Airport”.

In relation to the proposed Western Sydney Airport (**WSA**), AusALPA has reviewed the Environmental Impact Statement (**EIS**) together with the Draft Airport Plan and would like to make the following comments:

1. GENERAL COMMENTS

In general, the Association supports the decision to have Badgerys Creek as the site for the WSA. AusALPA also supports the airport being built to the standards and requirements to accommodate up to Code 4F aeroplanes (including a suitable runway [length and width], a parallel taxiway and apron stands) with a plan to expand to a parallel runway with the associated taxiways and apron stands.

AusALPA believes that this airport will complement Sydney Kingsford Smith in the short to medium term, but in the long term with proper infrastructure (including a dedicated train link) may become the primary airport for the Sydney basin area.

Whilst both the EIS and the Draft Airport Plan are lengthy documents, there are many areas in which they lack the necessary detail. There is also an unclear path as to when the transfer of responsibility for functions of the airport and its operations will be handed to other parties.

2. ESTABLISHMENT OF A PROVISIONAL AIRPORT AUTHORITY

The Draft Airport Plan makes reference to an airport lessee company (**ALC**) as the entity that will be granted the lease by the Commonwealth (under the Airports Act 1996) to develop and operate the airport post Phase 1 development.

It is not clear whether that the Sydney Airport Group will oversee Phase 1 development or that this will be part of the ALC’s remit. In other countries, a Provisional Airport Authority (**PAA**) was established to progress the airport development prior to handing it over to the airport operator, in this case the ALC. The report seems to be “light” on the detail as to how this “seamless” process will be achieved. The Association strongly supports the establishment of a PAA with the necessary authority and responsibility to deliver Phase 1 of the project. Such a PAA or equivalent should make use of the expertise and experience of stakeholders groups, such as AusALPA. Pilot involvement in Hong Kong, Singapore, Bangkok, Centrair (Nagoya) and other international airports has been shown to make these airports safer and more operationally efficient.

3. CASA STANDARDS AND REGULATIONS

It should be noted that a Post Implementation Review of Part 139 CASRs and the associated Manual of Standards is taking place and that the amendments may affect the design criteria for the airport.

It is also expected that the airport will be constructed to the **AS2021:2015**. New Australian Standard **AS2021:2015**, which was approved and released in April 2015.

4. RUNWAY ORIENTATION

Whilst it is understood that the planned orientation of the runways is to enable parallel runways to be constructed (in time) and to reduce the potential noise footprint, from an operational perspective, the planned orientation of the runways (05/23) is not ideal. The preferred direction would be for both runways to be constructed in a northerly/southerly direction to align it with Sydney Kingsford Smith Airport and to account for the predominant weather.

5. FLIGHT PATHS

It should be noted that the Flight Paths are “indicative” and not “final”. The EIS (p. 140) states:

“The impacts identified in this EIS are based on indicative flight paths developed by Airservices Australia for aircraft approaches and departures at the proposed airport. It is expected these flight paths would be progressively refined during a detailed design process which would provide the opportunity to optimise safety, efficiency, noise and environmental impacts and **may require changes to existing regional airspace management arrangements before operations begin at the proposed airport**”.

“Proposals about airspace management above and around the proposed airport, including the determination of flight paths, will be made by Airservices Australia and the **CASA closer to the start of airport operations**”.

It should be understood that both Tokyo Narita and Haneda Airports have conflicting airspace issues as a result of the runways not being aligned.

6. TAILWINDS/CROSSWINDS

In terms of wind direction, the report has been carefully worded to infer that the crosswind limit will be at or below the ICAO design criteria of 20 knots. In reality, the BoM report shows that the runways will be susceptible to crosswinds from the north-westerly direction, as a result of their orientation. The dominant direction is reported as south-westerly (frequency averaging 34% during winter and autumn months) meaning that only RWY 23 would be useable, during these periods, due to excessive tailwinds. In addition, the crosswind limit will be less when operating from wet or contaminated runways (following heavy rain) and during low visibility operations. Whilst the latter (fog) normally occur in lighter winds, the topography and the climatology of the area may result in stronger winds, which could affect LVO operations.

These factors need to be considered in the runway alignment and the traffic management.

7. ALL WEATHER OPERATIONS

It is vital that the airport operates 24 hours and WSA must ensure that the aerodrome remains curfew free despite the continual urban sprawl of greater Western Sydney.

It is also essential that the aerodrome is equipped with all-weather operations (CAT IIIB) capability, including the necessary systems, ground equipment and sensors, as according to the BoM report, it will have a fog factor worse than Kingsford-Smith (*“Badgerys Creek ...experiences significantly more fog events than Sydney Airport. These fog events can occur during all months of the year, and can last for an extended period of time”* BoM WSA Climatology Review, p. 42). Canberra is referenced in the EIS report to indicate that operations can continue in fog conditions, but the reality is that flights presently have to divert as they are unable to land at Canberra, as it is only equipped with a CAT I ILS. It is, therefore, essential that CAT IIIB capability with the accompanying infrastructure and systems is installed and operational from the beginning.

Other weather phenomena (Appendix D/BoM review) have been identified in terms of the temperature, climatology and topography and the “planned mitigation measures” should be detailed in the airport plan. The high temperatures will also have an effect on aircraft performance and these need to be considered in terms

of take-off run available and aircraft performance particularly for the ultra-long range aircraft.

8. WEATHER RECORDS

The weather records for Sydney, Richmond, Holsworthy (Army Helicopter Base) and Camden should be examined in association with each other and the records used should include the last 10 years. Climate change has already had an effect and this will only increase over the next 25-50 years. For example, storm systems have intensified, temperatures have increased right across Australia. Wind rose diagrams do not highlight winds above 30 or 40 km/hr depending on the diagram used. That is, the most adverse events are not shown.

It is evident that WSA will be a significantly different weather environment to Kingsford Smith Airport. This combined with the increased elevation (therefore, lower relative cloud and fog levels as mentioned above) and the relative proximity to the ranges will result in considerable local differences. For example, more days of fog, greater density, duration and ceiling/visibility will be poorer for a greater proportion of the time.

Weather events in combination should be analysed at their respective probability of occurrence illustrated.

9. PREPARATION AND SETTLEMENT OF SITE

Stage 1 will require sufficient time and equipment/monitoring to ensure required compaction/soil consolidation prior to Runway Surface Construction. This has been a significant issue for many international airports including Bangkok. This needs to be factored and protected in the build schedule.

10. PARALLEL RUNWAY

The future Master Plan must continue to include a second parallel runway (with supporting taxiways and apron stands) to be built with sufficient lead time to meet the capacity needs. The forecast date of 2050 in the EIS may be too conservative (p. 63).

11. TRAIN LINK

Reconsideration should be given to having a train link completed at airport opening. There are enough examples globally where dedicated rail links are an integral and essential part of the airport's viability, as well as for their environmental benefits.

12. BUILDING DEVELOPMENT, AIRSPACE PROTECTION AND ZONING

Any planned buildings on or off airport that might affect the runways should be subject to a full wind disturbance study and only approved, if the disturbance is less than the "NLR limits".

Likewise, the provisions of both the OLS and PANS-OPS should be enforced to protect the airspace around the airport.

Zoning should be introduced to prevent building and/or activities that are incompatible with aircraft movements.

13. HAZARD ASSESSMENT

AusALPA supports the implementation of the Public Safety Areas. It notes that runway incursions were not included in the hazard assessment, because they are only referenced to intersecting runways. Runway incursions can occur when aircraft, vehicles or people enter the runway without permission. The use of stopbars to prevent runway incursions as a safety and efficiency device should be

included in the airport plan. (Note: These would be required for CAT III operations.)

AusALPA also supports the implementation of the provisions of the National Airports Safeguarding Framework, as amended (Guideline B).

Avisure has stated that wildlife mitigation management and control measures need to be implemented by the airport operator and that more detailed studies will be required closer to airport opening to better assess the risk from wildlife at the aerodrome. It is essential that these recommendations are to be actioned.

14. ARFFS/EMERGENCY PLANNING

The position of the ARFF fire station is stated as being in the middle of the runway(s). It may be necessary to provide a secondary station to ensure that the requirements of MOS 139H Chapter 6.1.1.3 (p. 23) are met where a 3 minute response time is required to reach anywhere on the aerodrome perimeter. Ideally, the response time would be 2 minutes as per the ICAO Recommended Practice. The ARFFS must also have all weather capability (such as FLIR) in order to be able to react in low visibility conditions.

An Emergency Plan needs to be developed that includes Emergency Response Time for external capabilities (i.e. Ambulance, HAZMAT, Helicopter Assets, CT, NSW Police SRG etc.).

15. ONGOING CONSULTATION

Ongoing consultation must continue during the transition from Government control to the ALC. This consultation process should encompass all stakeholders, including pilot groups.

AusALPA would like to thank you for the opportunity to comment on the WSA Draft EIS. Should you wish to further discuss any of the above issues, please do not hesitate to contact us.

Yours sincerely,



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