No Helipads in Bardens Bay

OBJECTION TO MP 06 _0309 MOD 3

Trinity Point Drive Morisset Park. Johnson Property Group

From
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No Seaplanes in Bardens Bay

Contents

About the Writer

1. From 2009 I have been consistently (and continue) training helicopter pilots and air-crew personnel for an on organisation based at Bankstown Airport.

   This organisation provides air support via its fleet of 4 [1]AS350 helicopters (formally known as H125 machines the same type used by Johnson Property Group (JPG) when conducting the acoustic report). The helicopter organisation for which I work provides services to National Parks and Wildlife; Rural Fire Services and State Emergency Services.

2. From 1998 until 2010 I spent 13 years as a professional sailor delivering new and used yachts for their owners around the world including France to Australia twice; Australia to Singapore; Malaysia; Thailand, Borneo; Brunei; throughout the Mediterranean plus Australia's north, east and south coasts including Tasmania. My certified log totals 102,000 sea miles

   I am a published writer for Sail-World and Australian Yachting magazines

3. I am the former owner/ operator of "Seaplane Charter Fiji"

4. I live at Brightwaters under one of the proposed flight paths indicated by MP 06_0309 MOD 3.

5. I am a member of Morisset Park and District Action Group (MPDAG) and I support all submissions lodged as objections for this new helipad application and/all applications for aviation operations including seaplanes submitted by Johnson Property Group (JPG) within Bardens Bay.

I have not made any political donations in the past years.

Signed by Irene Bates

Date:

[1] *The H125 machine was developed and over time and became known as the AS350 to comply with the stringent noise requirements when servicing locations such as national parks; the in-cabin noise levels so passengers may readily converse during flight.*

Introduction

This is the 1st of several other submissions objecting to Johnsons Property Group new application for MP 06_0309 MOD 3

As part of this submission for MP 06_0309 MOD 3 I am also including comments and objections in relation to any other types of contentious and further aviation transport operations for the Trinity Point Marina e.g. seaplanes as identified in JPG's distributed marketing materials.

JPG's new major development application for a helipad pad/ helicopter and/ or other types of aviation operations are of environmental and ecological significance.

Background

This new development application is a contentious issue for the local area as the response summary received by the assessing officer (DoPE) for MP06_0309 (*N:\37429\PPR\Jun09, Response to Submissions.docx)* clearly states on pages 8 and 15 "***The proposed helipad has been deleted following concerns raised by the community."***

It is recognised the Court of Appeal has clarified that the Minister for Planning's power to modify a Part 3A approval under section 75W can only be used for changes that have *'limited environmental consequences beyond those approved in the original project assessment'.*

This is a new major Johnson Property Group (JPG) project development application. It is a *'radical transformation' from the existing concept plan and takes it beyond the scope of the current approval* as;

- There are no similarities between the operations of a marina Vs the operation of a helipad or floating dock to berth a sea plane.
- The target market suggested by JPG Is incompatible with the marina target market approved by DoPE
- Aviation operations for either a helicopter or sea plane are incompatible with boats, yachts, passive recreational uses e.g. kayakers, canoeists, people fishing, water skiers' etc.
- Owners of yachts and boats would not tolerate aviation operations within 30 meters of their berthed yacht or boat at Trinity Point Marina
- Boating insurance companies have an exclusion clause for '*high wind'* areas.

These objections cover the contents contained in Johnson Property Group's (JPG) MP 06 _0309 MOD 3. Appendix E – Acoustic Report, the Environmental Assessment Report (EAR) and information contained in JPG's Appendix D.

Objection 1. Outdated Australian Standards used for the acoustic report Appendix E

a) JPG's acoustic assessment is based on **outdated Australian Standards** for the measurement of helicopter operations. The report uses AS2363 – 1990. The current Australian Standards are AS 2363 1999.

b) JPG has selected superseded acoustic measurement 'models' to meet their preferred outcome. There are inaccuracies and misleading information in an attempt to convince the community and planners that residents will not be affected by the intrusion of noise from helicopter or aviation operations.

c) JPG uses acoustic Australian Noise Exposure Forecasts (ANEF) measurement models to meet the contour requirements for planning and monitoring airports. This approach does not relate to the local conditions. For example, this 'one size fits all' system treats a new location and 'greenfield' site no different from an area which currently experiences noise pollution from overfly, take-off and landing at Sydney airport.

d) Air Services Australia (ASA) noise principles (item 11) state: "*when deciding between an existing airport and a new location, the area previously, approved and currently exposed to the noise of aircrafts (for a considerable period of time) and a new location*; The existing operational site should be chosen e.g. Belmont and Wanervale airports.

Comment: The acoustic report is invalid

Standards are documents setting out specifications, procedures and guidelines. They are designed to ensure products, services and systems are safe, reliable and consistent.

a) JPG's appendix E 4.7 – Noise Criteria for helicopters page 35 states "*Australian standards Acoustic – Measurement of noise from helicopter operations sets out the methodology for the measurements and analysis of helicopter noise. Whereas AS2363 1990 version of the standard included the noise criteria, the 1999 version of the standard does not."*

b) Item 4.2 of JPG's report (page 22) states "*in 1999" the second version of AS 2363 was issued, it incorporated minor amendments to the assessment procedure and excluded the recommended acceptable levels in Appendix A.*

c) JPG's appendix E 4.2 & 4.7 (pages 22) from the acoustic report rejects the current AS 2363 1999 standards on the basis that it "*incorporated minor amendments."*

d) When attempting to retrieve a copy of AS2363 1990 it was found that these standards were superseded.

e) A copy of the current AS2363 1999 standards is attached to this submission – see attachment 1.

There are significant differences between the outdated and current standards.

Broadly, it is alleged JPG has selected these outdated 1990 standards as they do not require the following acoustic measurements for all types of helicopters which will use the landing site.

Item 4.5 –page 7 of the current AS2363 1999 states:

"EACH Helicopter Landing Site (HLS) & when conducting the noise measurement system the helicopter must be loaded as per the upper limit"

The current appendix A (AS2363 1999) clearly states in item A1, A2, A3 & A4;

"Data is required for";

a) Each mode of operation and each flight path for each helicopter type which uses or will use, the landing site.
b) Each noise from en- route operations
c) The number of times each operation will be performed by each helicopter type during the time period.

The AS 2363 1999 clearly describes (in Appendix A) the formula for noise calculations. The proponent has elected to use outdated and superseded Australian Standards – 1990 Vs 1999 in an attempt to convince readers (of the acoustic report) that standards are met.

Using outdated and superseded information to advantage the proponent's noise calculations claim is misleading for planners and the community.

Objection 2 JPG's acoustic report has selected an acoustic report model to meet their own requirements.

Comment

Consultants engaged by JPG are not independent as they have been engaged (and paid) by JPG over a number of years to meet, support and document EAR 'briefs' according to the proponents desired outcomes.

JPG produced and circulated a marketing document stated *'up to 40 flights per day can be accommodated as a result of the noise tests conducted on 24/03/2016. '*

The reality is:

a) JPG selected an acoustic report model to meet their own requirements. The consultant adopted the client's perspective on all issues and selected an outdated standard of operation to meet the client's need.

b) By using superseded standards the survey becomes invalid. JPG's Fact sheet 6 "*Helicopter Survey page 1* states; Australian Standard 2363 1990; "*does not require operations to be at maximum load, but rather to be according to usual commercial practice."*

Item **4.5 –page 7 of the current AS2363 1999 standards state: *"The test helicopter shall be of the type(s) likely to be used and shall be loaded as for the upper limit of the proposed operations."***

There is no external or independent validation that the helicopter was loaded to the '***upper limits.'***

There are no helicopter weight and balance sheets attached to JPG's acoustic report .

Recommendation

The acoustic report is deemed as invalid as item 4.5 of the AS2363 1999 was not followed.

It is extremely important that sampling and testing is carried out in accordance with current standards and that the results are accurately reported and certified.

The decision to use outdated standards in an effort to meet the proponent's needs is a valuable reminder that experts apply the appropriate standard when forming and articulating their opinions.

Objection 3 Information measurements contained in the acoustic report is misleading & confusing

Comment

a) The acoustic report (JPG's appendix E) compares the local environment (Bardens Bay) against major jet airports.

b) The acoustic report submitted by JPG switches from one measurement to another and is based on the 1990 superseded acoustic standards. For example Table 1 measures noise in dB(A) and Table 2 measures noise as LAeq,T (HEL) & LAmax HEL).

c) The acoustic report submitted by JPG – Table 3 (page 40) and table 5 & 6 represents the Australian Noise Level Exposure Forecast (ANEF) from the superseded AS 2363 1990 and is a calculation for an average daily operation of an airport. This is made up from the total number of flight movements in a year, and then averaged out over the number of operating days.

d) The 1999 AS2363 standards pages 10 and 11 – Appendix A includes; "*The required calculation of time average A- weighted sound pressure level contribution."* On the basis that such levels are calculated as an average over a typical day based on the total number of flights in a year such an index does not identify the impact of individual aircraft or the range of variation in exposure levels that occur from day to day, or week to week, or season to season.

e) The ANEF system was established in the early 1980s to provide guidance to land use planners on the types of developments that are likely to be compatible with future helicopter/ aircraft noise exposure levels around an airport.

f) The ANEF system's lack of sensitivity to air operation movements has significant long-term implications when based solely on ANEF contours. This approach does not facilitate local conditions being taken into account. For example, this 'one size fits all' system treats a Greenfield site no different from a totally urbanised or existing airport site e.g. Sydney or Bankstown airport.

Making a decision based solely on ANEF contours leads to the control of development applications from planners to 'experts' who carry out the computer acoustic modelling.

g) The community is being deceived by the information contained in JPG's – EAR –appendix E as the tables 3,4,5,6,7 & 8 are calculations and estimates from a variety of noise sources.

h) The information in these tables is not a true measure of noise exposure for the local environment.

The acoustic report goes to great lengths to explain how the predicted noise levels meet the 'required superseded AS2363 1990 standards' and includes a set of tables with calculations from different 'noise criteria standards'.

- In particular Table 8 calculates the projected noise (for 8 movements per day) across a 24 hour period. By this logic one must question the use of this calculation Aeq24hr which appears to the non-expert as a way of 'integrating' the noise effect as if it occurred over a full day, rather than the disturbance and intrusiveness of up to 4 hours every day.

- The JPG report relates to 'receivers' and gives the impression that the criteria or predicted noise levels apply only to that location – (JPG's appendix A7). That is not the case for example, between the locations 2 and 3 over 500 homes are affected. The noise testing locations indicated in JPG's report 4, 5, 6 and 7 are many times increased. In actual fact more than 7000 home owners will be affected.

- The use of the 24 hour average may be suitable for very busy airports but it is totally inappropriate for 8 movements per day as the actual impact of helicopter / aviation noise on this quiet environment is much greater.

- Table 10 (page 52) of JPG's noise report under the 20 ANEF calculation that a twin engine helicopter such as the Augusta Westland produces substantially more noise than other single engine helicopters. The table clearly demonstrates that a reduction in movements per day by twin engine helicopters is as much as 68%.

Presenting an 'accurate' picture in the Environmental Assessment Report. (EAR)

It is fundamental when providing data to the public every effort should be made to ensure its accuracy.

An EAR that does not provide the community and decision-makers with a clear picture of the likely outcomes of a proposal, and relies solely on technical descriptors falls far short of its purpose as inaccurate and incomprehensible data is misleading.

There are numerous technical aircraft noise descriptors which have specialist uses. The Australian Noise Exposure Forecast (ANEF) is conventionally used by planners as the main technical descriptor for carrying out detailed noise assessments in formal environmental assessment reports and as a result 'contours' are developed.

This interpretation of noise impacts is based on studies examining *community* rather than *individual* reaction. Therefore, due to the wide range in individual reactions to helicopter or aircraft noise, this approach inevitably leads to people believing they are being misled by 'official' information.

The same is true when the proponent uses outdated standards to meet and match their own outcomes.

Recommendation

In view of the circumstances that the information contained in JPG's Appendix E:

a) Is misleading and confusing
b) Applies logarithmically averaged and 'annual average day' helicopter/ aircraft noise energy ANEF requirements for large airports.
c) Uses ANEF contours which lack contextual information and do not provide an individual with information directly relevant to their home.
d) Uses superseded noise measurement standards.

It is recommended that JPG's Appendix E is deemed invalid.

Objection 4 Location of the noise measurement equipment

Item 3.7 (page 5) of the AS2363-1999 – Acoustic – Measurement of noise from helicopter operations state: *"premises not associated with helicopter landing site determined by the relevant authority to be the most affected by the noise generated helicopter operations during overflight, approach, departure and while landing* must be measured. "

Comment

In JPG's acoustic report page (page 2) states: "*Prior to the actual testing … the noise monitoring sites were established in consultation with Council Officers"* Appendix A7 of JPG's acoustic report identifies 7 sites where noise recording was collected.

Lake Macquarie City Council's (LMCC) Scenic Quality guide identifies significant features, viewing points and ridgelines (page 6 & 8) which will be affected by the noise generated helicopter / aviation operations.

Featured Sites – as listed by LMCC's Scenic Quality Guide

1. Morisset's Campsite Tree – Morisset
2. Morisset Hospital Conservation Management Plan Area
3. Bird Cage Point – Morisset
4. Johnys Point - Silverwater
5. Fig Tree Point – Balcolyn
6. Shingle Splitters Point – Balcolyn
7. Stingaree Point and entrance to Dora Creek – Dora Creek

Significant Ridgeways

In addition to these featured sites LMCC's Scenic quality guideline (page 8) state there are significant ridgeways within Morisset Peninsula and extends from Morisset via Fishery Point Road Morisset to Balcolyn, Silverwater and Sunshine.

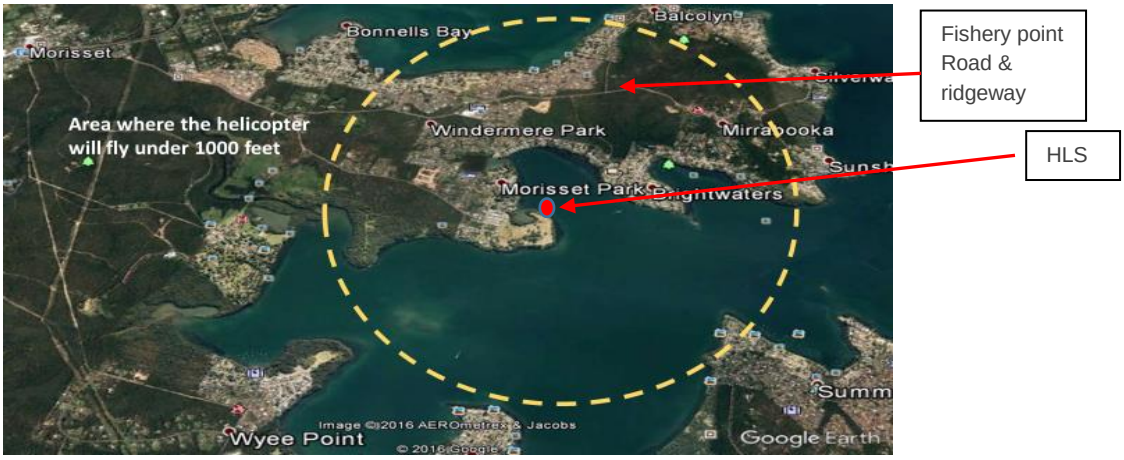
The ridgeway extends upwards from the proposed helipad and commences approximately 850 meters from the landing site.

In appendix C1 of JPG's acoustic report states: "*Flight paths are shown where the helicopter was less than or equal to 1000 feet.'* When calculating these distances descent and climb occurs approximately 2 klms from the landing site and is considerably less over the ridgeways.

This is evidenced by the complaints received when noise testing was conducted.

The following figure (yellow dotted line) indicates where helicopter operations will be under 1000 feet.

Figure 1



Given that JPG indicates that council officers were consulted regarding the locations for noise measurement and with knowledge that the helicopters overfly included the ridgeway, noise measurement equipment should have been placed according to Item 3.7 (page 5) of the AS2363-1999

The measurement locations listed in JPG's acoustic report does not take into considerations the overfly, take-off and landings when proceeding over the ridgeway along Fishery Point Road and above Morisset Peninsula – including Morisset to Balcolyn, Silverwater and Sunshine. All of which are located within 2 klms of the proposed helipad site.

Time above (TA) contours do not describe noise in a way that relates to a person's experience and is highly misleading. More importantly, helicopter/ aircraft noise contours are used by planners when reviewing and approving development applications.

Using JPG's Appendix E acoustic measuring results taken from selected locations and comparing these results against the TA contours for aircraft noise around an airport such as Sydney bears no resemblance to the intrusive and impact noise helicopters and aircraft such as seaplanes has on the local environment.

Most household members want to know about the helicopter /aircraft noise in the vicinity of their home. Helicopter and aircraft noise have the potential to be highly annoying to a person given information which was documented in an EAR. This potential is heightened if expectations have been created by 'official' aircraft noise information published by a developer to meet their own needs.

When producing 'present situation' noise contours for helicopter /aircraft noise information purposes, it is considered very important that comprehensive flight path information be provided which extends a long way from the landing site and well beyond the outermost noise measurement locations.

A weakness with this current noise recording process is that it gives the impression that there is no noise outside the contours of the noise measuring system.

Recommendation

It is identified that JPG's Appendix E did not conduct noise testing requirements according to **Item 3.7 (page 5) of the AS2363-1999 – Acoustic – Measurement of noise from helicopter operations.**

Based on this information it is recommended that JPG's Appendix E is considered as invalid.

Objection 5: The acoustic report does not meet the Australian Standards AS 2363 – 1999 items 4.5; 4.6; 7 Appendix A – A1

The Australian standards AS2363-1999 item [2]4.5 (page 7) State; ***"The test helicopter shall be of the type(s) likely to be used, and shall be loaded as for the upper limit of the proposed operations."***

The Australian standards AS2363-1999 item [3]4.6 (page 8) *"must be recorded and reported for noise measurement for* ***each relevant helicopter type*** *for each receptor (noise recording) point*

a) The Australian standards AS2363-1999 – Acoustic – Measurement of noise from helicopter operations state the following in item [4]7 (d) (page 8)

b) "Information to be recorded"

c) ***"The report of the measurement of the noise level of the proposed or existing landing site shall include type and loading conditions of the helicopter(s) under investigation."***

Comment

After a local media release in the local newspaper challenging the weight and types of helicopter used for the acoustic report noise testing JPG changed their documentation.

- In the EAR Appendix E JPG states *"during the test flight 2 persons were on board @ approximately 230 kgs.*

- In the information contained in JPG's fact sheets - 06/12/2016 – JPG states on page 7 "Helipad proposal"- 3 people were on-board and half a load of fuel.

This information dispersed to the local community by JPG on the 06/12/2016 stated in fact sheet 6; *"Helicopters, in commercial operations, do not operate at maximum load as such loadings restrict operations. For that reason the Australian Standards 2363 – 1990 that guides noise surveys does not require operations to be at maximum load*." And*, "noise surveys do not require operations to be at maximum load, but rather to be according to usual operations."*

JPG uses the wrong standard. The current 1999 AS2363 (page 7) clearly states in item 4.5 "*the test helicopter shall be of the type(s) likely to be used, and shall be loaded as for* ***upper limit of the proposed operations.***

In JPG's Appendix D Part 14 page 21 states that the type of helicopter used (H125) for the noise testing has the capacity for 2250 kgs take-off weight (TOW) and can carry 540 litres of fuel plus 6 passengers + the pilot.

[2] *Attachment 1*

[3] *Page 8 – 4.6 1999 AS2363 attachment 1*

[4] *Attachment 1*

In JPG's EAR Appendix E item 3.2 page 7 states: 2 persons were on board @ total weight of 230 kgs plus 90% of fuel = 486 litres and calculated as 389 kgs.

After the local media release to the newspaper, JPG 'changed their story.' On 06/12/2016 page 7; JPG issued a 'helipad proposal' stating that 3 people were on-board @ a total weight of 390 kgs and half a load of fuel = 270 litres and calculated as 216 kgs.

In the photograph of the JPG's EAR Page 128 it is clear that only 2 persons were on-board.

The type of helicopter used for the noise testing consumes 160 litres of fuel per hour.

JPG tries to convince the planners and the community that *"noise surveys do not require operations to be at maximum load, but rather according to usual operations."* Given that the helicopter when undertaking testing was '*loaded according to usual operations'* means that:

- Just 1 passenger can be on-board; therefore the commercial flight becomes economically unviable.

- If less fuel is carried when additional passengers/luggage are on-board; the commercial flights stated in JPG's 06/12/2016 fact sheet 6 - '*Helicopters do not start or finish their route at Trinity Point – they will come from somewhere else. '* It is therefore reasonable to conclude that during the noise testing the helicopter was well below the required ***upper weight limit standards*** as required by the 1999 AS2363 item 4.5 standards.

- When helicopters/ seaplanes are loaded as for the 'upper limit" more power is required and more noise produced.

- There is no indication in JPG's Appendix E that fuel was replaced during the noise testing.

Recommendation

1. There are no weight and balance reports to validate 'take-off-weight.'

2. The information supplied by JPG in Appendix D part 14 page 21 indicates that the H125 helicopter can carry substantially more weight (2250 kgs) than that used for the noise testing. The acoustic report is deemed invalid as it does not meet item 4.5 AS2363 1999.

3. JPG used outdated 1990 take-off- weight standards as stated in their 06/12/2016 fact sheet 6 (page 1) Vs the current standards requiring ***loading as for the upper limit*** stated in item 4.5 AS2363 1999.

Objection 6; JPG's Appendix E – noise testing does not meet the Australian noise testing AS 2363 1999 for item 7 (L) page 9.

Item 7 (L) states the report of the measurement of the noise level at the proposed or existing site must include:

"Description and sketch of the flight paths used by the helicopter(s), in particular the horizontal distance of closet approach of each flight path to the noise measurement positions and the estimated height above ground of the helicopter when at its point of closet approach on each flight path."

Comment

JPG has not met Item 7 (d & L) – pages 8 & 9 for the current Australian 1999 Standards.
The noise testing report from JPG (Appendix E) makes no reference to distances or heights.

It is critical that height and distances are recorded and are provided to ensure planners and the community have accurate information.

For planners and the community AS2363 1999 Item 7 (d & L) requires distances and heights as fundamental tools.

In JPG's Appendix E;

a) There are no sketches or diagrams in JPG's noise measurement report indicating the horizontal distances to each of the sound level meters from the proposed landing site.

b) There are no topography diagrams indicating the height at which a helicopter /plane would fly above the significant 'ridgeway' identified in Lake Macquarie City Council's (LMCC) Scenic Quality guide

c) There is no references to height above ground when undertaking;
   - Reconnaissance
   - Take-off
   - Landing

When producing 'present situation' noise contours for helicopter and aircraft noise information purposes, it is considered very important that comprehensive flight path information is provided for horizontal distances and the estimated height above homes during aviation operations.

JPG's documentation falls far short of the current Australian Standard requirement as;

1. There is no documentation or diagrams indicating **the horizontal distances** from the noise testing equipment and the proposed helipad / floating pontoon distances to homeowners and residences within a 2 kilometer radius.

2. There is no documentation indicating the **height above houses** when a helicopter/ aircraft approaches for [5]overflying, landing or, take-off.

3. There is no documentation indicating the noise level distances from houses when 'winding down' or 'winding up'

Recommendation

JPG's Appendix E does not meet the standards for AS2363 1999 Item 7 (d & L) – pages 8 & 9 and in view of these circumstances it is recommended that JPG's Appendix E is deemed as invalid.

Objection 7 Inconsistent and misleading information

Wind conditions

Page 7 item 3.2 of JPG's acoustic report calculates wind speed as average 4-5 m/s with gusts 8-10 m/s. The AS2363 1999 standards state (page 7 item 4.5) ***"the test shall be done in calm air or in no more than light wind conditions – 5 km/h.*** When calculating the wind speed used in JPG's noise report the wind conditions were 14 -18 km/h. Wind is an important factor when calculating noise as the stronger the wind the more the noise is dispersed.

9 different types of helicopters will be used

The AS2363 1999 standard – (see attachment A) is in place to ensure each different type of helicopter is tested for the landing site.

Helicopters are powered by different engines – some very loud and others just loud.
3 of the helicopters listed in JPG's report are from the Bell range type and these can be either twin or single engine machines.

The MD500 helicopter is identified as 'another type of helicopter which will use the helipad' is a single engine helicopter and promoted as having more powerful engines than other single machines.

The Airbus 135 and the Augusta Westland AW109 are both twin engine machines.

AS 2363 1999 standard Item 4.5 (page 7) states: *The test helicopter shall be of the type(s) likely to be used, and shall be loaded as for the upper limit of the proposed operations.*

[5] *Overflying is a requirement by CASA*

The **Augusta Westland** is certified and **capable of producing 91.4 decibels when taking off and landing.**

Table 10 of JPG's Appendix E page 52 clearly demonstrates the differences of noise generated as applied to the ANEF regarding the increase in sound measurement from single to twin helicopters. The table clearly demonstrates that the number of movements per day for the Augusta Westland is reduced by approximately 68% by comparison to other helicopters or aircraft as the noise generated by twin helicopters increases.

Recommendation

JPG's Appendix E does not meet the AS 2363 1999 standards Item 4.5 (page7).

JPG has chosen superseded standards to meet their own outcomes.

JPG's Appendix E is misleading and it is considered that the Appendix E of JPG's EAR is invalid.

Objection 8 Proposed flight paths are misleading

The information identified in JPG's documentation for the flight paths is identified in appendix E; A3, A4, A5 & A6 are misleading as the statement made in JPG's Appendix D – Landing Site Report states:

- "*Pilots will normally always land and take-off into the prevailing wind."*
- "*It is the pilot's responsibility to land the helicopter safely and in a direction that assists that outcome."*
- "*Flight paths listed in Appendix D – Helicopter landing site - A, B, B1, B2 and C are the* ***PREFERRED*** *FLIGHT PATHS and are designed to meet most wind conditions. The pilot remains responsible for the safe operation of aircraft."*

> The information listed by JPG in regards to the 'preferred flights' is synonymous with the misleading information used in the acoustic report from JPG under the outdated AS2363 standards.

The information provided does not meet Item 7 (d & L) – pages 8 & 9 for the current Australian 1999 AS 2363 Standards.

In order to correctly identify the flight paths when taking into account the statements made by JPG's appendix D; '*that the pilot will choose their own flight paths*' & *Pilots will normally always land and take-off into the prevailing wind."* It is clear that the information provided in JPG's documentation 'preferred flight paths' are inaccurate.

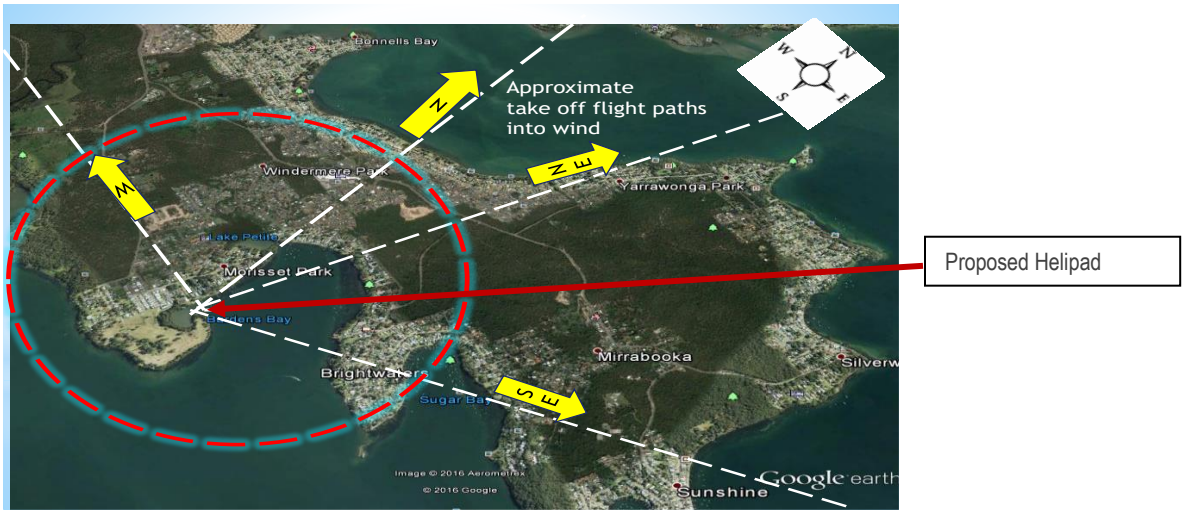
Listed below are figures 2 and 3 indicating the true effects on households and the surrounding community for this new development application;

1. Over 7000 homes will be affected by helicopter/ aviation noise.
2. Helicopters and/ or seaplanes will descend from 1000 feet within the outer circle.
3. Helicopters and/ or seaplanes will be below 500 feet within the inner circle.
4. The pilot will take the most appropriate path and '*land into wind*' (as indicated in JPG's Appendix D - A5 & A6.
5. The reality is that the **'preferred flights'** listed in JPG's are inaccurate and do not consider the prevailing winds in Bardens Bay.
6. JPG's documents do not represent or identify a true compass reading for the prevailing winds in relation to their statement Appendix E –A5 & A6

In Figure 2 (below) pilots of helicopters or seaplanes will descend below 500 feet over houses before landing at the proposed site. All pilots of helicopters or seaplanes will land 'into wind' and this means that up to 4 hours each day (8 movements each day) a resident is exposed to the noise from helicopters and/ or a seaplane.

Figure 2 Landing flight paths

Figure 3 Take off flight paths



This means that although there are 'preferred flight paths' the pilot will over-ride these flight paths in favour of landing and taking off into wind.

Therefore, the flight paths identified by JPG are misleading and there is no guarantee that these proposed flight paths will ever occur.

Proposed flight paths do not contain overfly, take-off and landing heights over residential areas.

Page 30 of JPG's Appendix E -acoustic report states *"the flight tracks that been nominated for the helipad do not involve circling over residential areas."*

This statement contravenes safety requirements. When planning to land or take off at an unfamiliar site, reconnaissance is required to determine direction, speed of the wind, a touchdown point, suitability of the landing area, approach, departure axes, and obstacles for both the approach and departure.

A' high' reconnaissance is usually flown at an altitude of 300 to 500 feet.

JPG's proposed flight paths do not identify the requirements for reconnaissance – Pilots need to over-fly a Helicopter Landing Site (HLS) to conduct safe helicopter operations.

It is therefore concluded that the flight paths listed in JPG's Appendix D items A3, A4, A5, A6 can be overridden 38 times each week depending on the pilot's decision.

Recommendation

a) The proposed flightpaths contained in JPG's appendix E; A3, A4, A5 & A6 are misleading
b) The proposed flightpaths do not take into consideration '*that the pilot will choose their own flight paths*' & *Pilots will normally always land and take-off into the prevailing wind.'*
c) The proposed flight paths do not accurately identify the prevailing winds for the area.
d) There is no 'compass' to identify the wind direction.
e) Reconnaissance and overflight is required as a matter of safety.
f) The Fly Friendly Neighborhood is identified as a 'preferred flight pattern.' Pilots will make their own decision according to wind direction.

The information contained in JPG's appendix E; A3, A4, A5 & A6 are misleading and inaccurate. It is therefore deemed that Appendix D is invalid.

Objection 9 presenting an accurate 'picture'

The Federal Government Department of Infrastructure & Regional Development (July 9 2014) clearly states in Appendix A that Environmental Impact Statements (EIS) submitted by developers for new flight paths includes:

> ***Presenting an 'accurate' picture in Environmental Impact Statements (EISs) this includes "that non-experts do not want aircraft noise described in technical terms but want information based on 'everyday talk.' It is now considered essential that an EIS no longer be treated purely as a technical document conveying information between the noises experts representing the parties involved. It is both a technical and an information document."***

The Acoustic assessment submitted by JPG for the proposed helipad fails to meet this requirement.

a) The information contained in the acoustic report is outdated and superseded by the current AS 2363 1999
b) There are no diagrams in the Acoustic report indicating the height and distance levels the helicopter will fly over the Barden's Bay area when overflying, landing and taking off.
c) The JPG acoustic report and proposed flight paths indicate that the helicopter will descend from 1000 feet at approximately 2kilometers from the helipad.
d) There is no indication of height levels when descending over the ridgeway which surrounds the helicopter landing site.
e) The descent/ take –off is from 0-1000 feet and flies over a range of up to 7000 existing homeowners houses.

Content, transparency and accuracy of the acoustic report.

The Federal Government Department of Infrastructure & Regional Development (July 9 2014) clearly state:

"***It is now generally recognised that basing planning decisions solely on ANEF contours, and, without reference to other information (particularly on the location of flight paths), is likely to lead to less than optimal outcomes."***

a) There are 2 schools, a hospital (Morisset Hospital), child care centre & an aged care facility within the area of noise exposure.

b) There are over 7000 home sites which will be affected by the noise.

c) There is no guarantee The *'Fly friendly neighbour procedure'* listed in JPG's Appendix D – pages 17 & 18 will be met.

d) The *'Fly friendly neighbour procedure'* listed in JPG's Appendix D – pages 17 & 18 is subject to varying degrees of helicopter pilot skills, knowledge of the location, environment, ridgeways and wind conditions.

Objection 10 Insufficient evidence for alternate helicopter/ seaplane sites.

Pages 36-38 of JPG's EAR states that Belmont Airport (Commonly known as Aero Pelican) is an unsuitable base.

JPG tries to convince the community and planners that the Belmont site is inconvenient. JPG uses the argument that 4 steps (page 36) are required for a visitor to complete.

This maybe the case if the operations are designated, scheduled flights, but this is not the case as each of the 38 flights are associated with tour operators.

Tour operators collect and return passengers to and from destinations. This means that landing at Belmont Airport the tour operator's transport (either boat or coach) is waiting.
The 4 steps proposed in JPG's EAR (page 37) is totally inaccurate.

JPG also contends that "*by establishing the proposed helipad attached to the marina (as proposed), Trinity Point will have full control of all helipad operations."*

Belmont airport is registered by the Civil Aviation Safety Authority (CASA) as a designated Aircraft Landing Area (ALA). The owners of Belmont Airport state: "*the airport welcomes opening up the airfield for private aircraft and aviation-related businesses. Helicopters could fly to and from Sydney and we need more private operators.*

As an ALA Belmont airport has considerably more safety features than Trinity Point could even hope to establish.

The reality is that Belmont Airport is just a short 12-15 minute boat ride from Trinity Point. JPG's proposed 4 steps in the EAR (page 37) is exaggerated as tour operators organise transport when arriving by helicopter.

JPG also states in the EAR page 162 that a single Helicopter Landing Site (HLS) at Trinity Point has constraints as it is limited one helicopter on the pad at any one time particularly if the helicopter requires an overnight stay.

Therefore landing sites which can accommodate more than 1 helicopter or overnight stays is a more preferred option.

The other alternate option provided in JPG's EAR page 38 is no option at all.

JPG has not considered Warnervale Airstrip which has recently been re-surfaced. The airstrip is a 15 minute car / bus ride from Trinity Point.

Air Services Australia (ASA) – Fundamental principles for environmental assessments

ASA clearly state in their principles to minimise noise;

Principle 1 – "*Noise abatement procedures should be optimised to achieve the lowest possible overall impact on the community. "*

Principle 11 - "*In deciding between a new and mutually exclusive overflight, take-off and landing site, and equivalent existing options. The area which has been previously exposed to aircraft noise for a considerable period of time must be chosen.*"

Recommendation

Based on JPG's own statements when identifying the constraints for overnight helicopter or seaplane stays which also closes the 'no-go-zone' for extended periods of time JPG has not provided sufficient evidence for planners and the community to consider realistic alternative sites.

The alternate sites listed above provide:

a) For more than one aircraft/ helicopter
b) Are established
c) Additional safety features
d) Areas which meet ASA principle 11.

Therefore it is recommended that the information contained in JPG's EAR items 3.4.1 pages 36, 37, 38 and 39 is unsubstantiated.

Conclusion

Standards are documents setting out specifications, procedures and guidelines. They are designed to ensure products, services and systems are safe, reliable and consistent.

It is fundamental to any report or noise test that current standards are used. Planners and the community cannot accept documents where standards are superseded and the results skewed to meet the proponent's outcome.

It is vital when using aircraft noise descriptors it is assessed against current standards so that it matches the needs of the issue being examined. This has not been achieved by JPG.

1. During the noise testing a single engine AS350 Helicopter. The intention is for 9 different helicopters to use the helipad of which some are twin engine helicopters capable of and certified to produce 91.4 decibels.

2. The location of the noise measurement equipment did not include the ridgeway. This is where hundreds of homes and a school are affected by the intrusive noise.

3. The inconsistencies in information provided to the community. After local media coverage JPG began to change 'stories' in relation to the weight carried when conducting the acoustic tests.

4. No matter how many arithmetical calculations are produced and averages recorded, single event intrusive noises of a discordant variety jar upon the human ear. When calculating the time for take-off and landing JPG estimates each movement requires 15 minutes. This means that over 8000 residents will have to endure the start-up; take-off; landing and shut down for to 4 hours each day and that is 24 hours each week or 1248 hours every year.

5. Any proposal for any helipad or seaplane operations located in Bardens Bay is totally unacceptable by this community.

Table 1 Compliance

Current AS 2363 1999 standards	Compliance requirements	Comment	Compliant against current standards Yes/ No
Item [6]4.6 (page 8) 1999 standards	*"Must be recorded and reported for noise measurement for **each relevant helicopter type for each receptor (noise recording) point."***	1. Only 1 helicopter was used 2. No acoustic measurements were located on the ridgeway. This includes the local school site.	**No**
Item 4.5 (page 7) 1999 standards	***"The test helicopter shall be of the type(s) likely to be used, and shall be loaded as for the upper limit of the proposed operations."***	JPG states*: 'helicopter noise surveys does not require operations to be at maximum load.'* When challenged via local media regarding the take –off -weight JPG kept changing stories regarding how the helicopter was loaded- see objection 5 of this submission.	No
Item 7 (d) page 8 1999 standards	Type and loading conditions of the helicopter(s) under investigation	There are no weight and balance sheets for the helicopter.	No
Item 7 item (L)(page 9) 1999 standards	Description and sketch of the flight paths used by the helicopter, in particular the horizontal distance to the closet approach of each flight path to the noise measurement positions and the estimated height aboveground of the helicopter when at its point of closest approach on each flight	There are no horizontal, vertical or distance measurements identified during the noise tests. There are no horizontal, vertical measurements or distances identified in the proposed flight paths. The proposed flight paths are inaccurate in relation to the prevailing winds. There is no 'compass' indicating the proposed flight paths for the prevailing winds.	No
Item 4.5 (page 7) 1999 standards	The test shall be done in calm air or in no more than light wind conditions (5 km/h)	The calculated wind on the day of testing were 14 -18 km/h.	No

[6] *Page 8 – 4.6 1999 AS2363 attachment 1*

Dept. of Infrastructure & regional development			
	Compliance requirements	**Comment**	**Compliant against current standards Yes/ No**
The Federal Government Department of Infrastructure & Regional Development (July 9 2014)	*"That non-experts do not want aircraft noise described in technical terms but want information based on 'everyday talk."*	There are no diagrams in the Acoustic report indicating the height and distance levels the helicopter will fly over the Barden's Bay area when overflying, landing and taking off.	No
The Federal Government Department of Infrastructure & Regional Development (July 9 2014)	"*It is now generally recognised that basing planning decisions solely on ANEF contours, and, without reference to other information (particularly on the location of flight paths), is likely to lead to less than optimal outcomes."*	ANEF contours are used by large airports e.g. Sydney. There are other methods to record noise zones that give an accurate picture for persons living in proposed noise exposure zones.	No
Air Services Australia			
Air services Australia are used in environmental assessments. Principles 1 & 11 applies and is not addressed by JPG	Principle 1 states "Noise abatement procedures should be optimised to achieve the lowest possible overall impact on the community. " Principle 11 states: "In deciding between a mutually new and exclusive area (for a flight path) –but otherwise equivalent; the area e.g. Belmont or Wanervale airports the area which is exposed to aircraft noise for considerable time should be chosen over any newly exposed area."	Pages 36-38 of JPG's EAR states that Belmont Airport (commonly known as Aero Pelican) & now known as Lake Macquarie Airport is an unsuitable base. Wanervale airport has not been considered as an alternate site. JPG states in the EAR page 162 that a single Helicopter Landing Site at Trinity Point has constraints such as limits to one helicopter on the pad or limited spaces to stay overnight	No

Recommendations:

It is strongly recommended that the acoustic report is deemed as invalid on the following basis.

1. The acoustic report consultants selected an acoustic 'model' to meet JPG's requirements.
2. The acoustic report is based on the superseded AS 2363 1990 standards.
3. The current standards for acoustic measurement of noise from helicopter operations is AS2363 1999
4. The acoustic report does not meet The Federal Government Department of Infrastructure & Regional Development (July 9 2014) requirements.
5. The acoustic report does not meet Air Services Australia environment assessment principles 1 & 11.
6. There is insufficient evidence identifying alternate Helicopter Landing Sites

Submitted by Irene Bates.