



**ÚDARÁS EITLÍOCHTA NA hÉIREANN**  
**IRISH AVIATION AUTHORITY**

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Aeronautical Services Department

**21<sup>st</sup> May 2009**

**Ref: AGA 4/6/1**

**Mr. John de Robeck,  
Gowran Grange,  
Naas,  
Co. Kildare.**

**Re: Aerodrome Licence Application for Aerodrome at Gowran Grange**

**Dear Mr. de Robeck,**

I refer to the Aerodrome Licence Application submitted to this office dated 8<sup>th</sup> October 2007 for the aerodrome at Gowran Grange and your subsequent letter dated 19<sup>th</sup> March 2009 providing additional information which had been requested from you as well as details of an assessment flight received from Mr. Andrew Mulhall on 15<sup>th</sup> December 2008.

The information submitted is generally acceptable except for the following:

I have examined the survey details provided by you of the proposed aerodrome and obstacle limitation surfaces. Each relevant item, (and any associated issues), is described in the following paragraphs.

**Runway Slope:**

The relevant specification for the slope of a runway is in the Irish Aviation Authority's document ALM 003, Chapter 5, Clause 5.1.4 - Slopes on runways – which states "Along no portion of a runway should the longitudinal slope exceed 2%".

From the survey details provided the slopes on the runway for various sections are as follows:

From 495.92m to 433.86m moving northwards on the runway the slope as calculated is 4.99%.

From 495.92m to 317.75m moving northwards on the runway the slope as calculated is 3.36%.

From 495.02m to 267.47m moving northwards on the runway the slope as calculated is 2.46%.

Therefore the first half, (approximately), of the runway from the southern end, (03 Threshold), exceeds the 2% allowable slope. For the first 62.06m of the runway from the 03 Threshold the slope is 4.99%. The various slopes on the runway as detailed above are not acceptable. Remedial works required on the runway would involve re-profiling the surface to ensure the runway slope does not exceed 2% along any portion of the runway. This will also mean appropriate re-grading of the adjacent runway strip to match in with the new runway profile.

### **Runway Strip:**

The relevant specifications for the runway strip are in the Irish Aviation Authority's document ALM 003, Chapter 5, Clause 5.2.1 - Length of runway strips – which states “A runway strip shall be provided and shall extend before the threshold and beyond the end of the runway for a distance of least 30m”;

ALM 003, Chapter 5, Clause 5.2.2 - Width of runway strips – which states “The width of a strip should extend on each side of the centre line of the runway for a distance of at least 30 m”; and

ALM 003, Chapter 5, Clause 5.2.3 - Grading of runway strips – which states “Agricultural crops other than grass should not be grown within the runway strip since they may provide a bird attractive environment or a fire hazard. The length of grass within a runway strip should not exceed 20cm in height. An object situated on the runway strip that may endanger aeroplanes should be regarded as an obstacle and should, as far as practicable, be removed”.

From the survey details provided the full runway strip is not provided at the southern end of the runway, (i.e. the strip would extend outside the aerodrome boundary with the runway thresholds in their current positions). At least 30m of strip at the southern end is affected. The boundary fence is an object on the runway strip at the southern end of the runway and either must be removed or the runway threshold relocated to ensure the full strip is provided.

### **Approach Surfaces:**

The relevant specifications for the approach and take-off climb surfaces are in the Irish Aviation Authority's document ALM 003, Chapter 6, Clause 6.2.4 – Approach and take-off surface – detailed description of surfaces: and

ALM 003, Chapter 6, Clause 6.3.1 – Objects that penetrate the obstacle limitation surfaces – which states “New objects or extensions of existing objects shall not be permitted above an approach or transitional surface”.

From the survey details provided the 21 Approach Surface, (Northern end), is penetrated by a hedgeline 3m high and the boundary fence line as well as a roadway at the Punchestown Racecourse, (roadway is considered as a 4.8m high object). To ensure that the 21 Approach is clear of obstacles the hedgeline and boundary fence would have to be removed or the 21 Threshold would have to be relocated by 60m approximately.

From the survey details provided the 03 Approach Surface, (Southern end), is penetrated by a hedgeline and trees between 3m and 5m high and a utility pole. To ensure the 03 Approach Surface is clear of obstacles either remove the hedgeline and trees and lower the utility pole or relocate the 03 Threshold at least 60m. The exact distance required to relocate both thresholds will depend on whether the trees/bushes, etc., are removed, lopped or retained.



**Transitional Surfaces:**

The relevant specifications for the transitional surfaces are in the Irish Aviation Authority's document ALM 003, Chapter 6, Clause 6.2.5 - Transitional surfaces – detailed description of surfaces; and

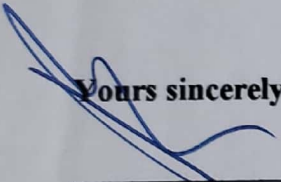
ALM 003, Chapter 6, Clause 6.3.1 - Objects that penetrate the obstacle limitation surfaces – which states "New objects or extensions of existing objects shall not be permitted above an approach or transitional surface".

From the survey details provided the Transitional Surface on the western side of the runway is penetrated by trees up to 18m in height. These trees will have to be lopped by at least 8m to ensure they are no longer obstacles in the Transitional Surface.

Could you please forward to this office your proposals to address the above issues relating to the runway slope, runway strip, approach surfaces and transitional surfaces including a schedule and timescale for addressing each of the listed items.

When I have received your proposals I will need to visit the site to discuss your response. When the above issues have been satisfactorily addressed then Phase 1 of the licensing process can be progressed.

Please contact me if you have any queries on the above.

  
Yours sincerely,

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**Brendan King**  
**Aerodromes Division**