

MAGNETIC SURVEY

COMPASS CALIBRATION BASE CAMBRIDGE CITY AIRPORT

Mr Paul J Leiyton
14th July 2025
QinetiQ/MAS/43053652-2001
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Document Control

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Amendment History

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1. COMPASS CALIBRATION BASE (CCB) SURVEY REPORT

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Reference A:

CAA/CAAIP CAP 562 Book 2, Chapter 34, Leaflet 34 -10 Compass Base Surveying

1.1 Introduction

Magnetic Range Officers from the QinetiQ magnetic survey team based at Portland Bill in Dorset visited Cambridge City Airport on 9th July 2025. The purpose of this visit was to complete a routine magnetic survey of the CCB located on the Airfield, this survey was conducted in accordance with Ref A.

1.2 Survey Results

The results of the survey confirm that, in accordance with Ref A, the area continues to meet the magnetic requirements of a Class 1 CCB. An analysis of magnetic deviations taken at random across the base gave a normal distribution of +/-0.1688° (3σ value) and a mean of -0.0343°. It should be noted that this survey was conducted at a height of 5 feet above ground level (agl), certification only applies to the area within the datum circle at this height and above. Consult QinetiQ Portland Bill before attempting the calibration of any compass system in which the magnetic sensor is below this level, as magnetic deviations may increase towards the ground and exceed limits set out at Ref A.

1.3 Certification

Please find the Class 1 certificate of conformity enclosed in this report for your retention. This certificate is valid for five years from the survey date: therefore, this CCB will be due for the next routine magnetic survey in July 2030.

1.4 Acknowledgement

The Surveying Officers would like to thank Operations Staff at Cambridge City Airport for their kind assistance and hospitality during the visit, which was most appreciated.

1.5 Survey Equipment Used

Execution of the survey utilised the following equipment/identification numbers:

Bartington Gradiometer	AMC 0109500	Ferrous Search Instrument
Datum Compass (1)	157/HW/1A/93	Central Static Compass
Datum Compass (2)	132/HW/1A/93	Mobile Compass
Ferromaster Meter	Serial No. 192	Permeability Test
Datum Tripod	LN1	Central Fixed Tripod
Datum Tripod	LN2	Mobile Tripod

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Certificate of Compass Base Calibration

Applicant:	Cambridge City Airport Newmarket Road Cambridge CB5 8RX
	QinetiQ Assignment Number: 43053652-2001

This is to certify that the Class 1 Compass Calibration Base (CCB) located at Cambridge City Airport was subject to magnetic survey on the 9th July 2025. The normal distribution of magnetic deviations across the CCB were found to be $\pm 0.1688^\circ$ (3σ value) about a mean of -0.0343° , this CCB conformed to Class 1 standards on the date of survey.

The following standards apply:

CAA/CAAIP CAP 562 Book 2, Chapter 34, Leaflet 34 -10 - Compass Base Surveying

COMPASS CALIBRATION BASE	CAMBRIDGE CITY AIRPORT
CLASS OF CERTIFICATION	CLASS 1
DATE OF SURVEY	9th July 2025
EXPIRY DATE	9th July 2030
CERTIFICATE NUMBER	COM/04/2025

Mr Paul J Leiyton



Magnetic Range Officer

Date: 14th July 2025

This certificate is issued in accordance with the measurement capability of the facility which operates a quality management system under the requirements of ISO 9001:2015. The units of measurement, where possible, are traceable to National Standards. The certificate only confirms that the CCB (compass calibration base) conformed to class 1 (or class 2) standards on the date of the survey. QinetiQ Portland Bill should be informed of any modifications intended, or carried out within 200 metres of the centre of the base, which may affect the magnetic integrity of the CCB during the certified calibration period. The following standards apply: Civil Aircraft Airworthiness Information and Procedures (CAP) 562 - Book 2, Chapter 34 Navigation, Leaflet 34-10 Compass Base Surveying.

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2 Annexes

2.1 Annex 1 - List of Contacts

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