

# Certificate of Calibration

Issued by University of Salford (Acoustics Calibration Laboratory)  
UKAS ACCREDITED CALIBRATION LABORATORY NO. 0801



0801

University of  
**Salford**  
MANCHESTER

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## APPROVED SIGNATORIES

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## acoustic calibration laboratory

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Certificate Number: 04661/1

Date of Issue: 10 March 2020

## CALIBRATION OF A SOUND CALIBRATOR

FOR:                      Enfonic Ltd  
                                 Unit 2A  
                                 Century Business Park  
                                 Dublin  
                                 D11 T0HV

FOR THE ATTENTION OF:      Gary Duffy

DESCRIPTION:                      Calibrator with housing for one-inch  
                                 microphones and adaptor type UC 0210 for  
                                 half-inch microphones.

MANUFACTURER:                      Bruel & Kjaer

TYPE:                                      4231

SERIAL NUMBER:                      3005620

DATE RECEIVED:                      04/03/2020

DATE OF CALIBRATION:              10/03/2020

TEST PROCEDURE:                      CTP06 (Laboratory Manual)

Test Engineer (initial): GP

Name: Gary Phillips

*This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to the units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full except with the prior written approval of the issuing laboratory.*

# Certificate of Calibration

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## MEASUREMENTS

The sound pressure level generated by the calibrator was measured using a calibrated, WS2P condenser microphone as specified in this certificate. The calibration was carried out with the calibrator in the half-inch configuration.

Five determinations of the sound pressure level, frequency and total distortion were made.

The results have been corrected to the reference pressure of 101.325 kPa using manufacturer's data.

## RESULTS

Coupler configuration: Half-inch  
Microphone type: GRAS 40AG  
Output level (dB re 20 $\mu$ Pa): 94.07 dB  $\pm$  0.14 dB  
Frequency (Hz): 999.96 Hz  $\pm$  0.12 Hz  
Total Distortion (%): 0.32 %  $\pm$  0.32 %

Average environmental conditions at the time of measurement were:

Pressure: 99.243 kPa  $\pm$  0.021 kPa  
Temperature: 22.1  $^{\circ}$ C  $\pm$  0.4  $^{\circ}$ C  
Relative humidity: 50.2 %  $\pm$  1.9 %

*The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor  $k=2$ , providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.*

*All measurement results are retained at the acoustic calibration laboratory for at least four years.*

-----END OF CERTIFICATE-----

*This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to the units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full except with the prior written approval of the issuing laboratory.*



## FS Form-003 2250 Based NMT PM Report

### 1. Site Information

1.1 CMS Ticket	#348595	1.2 Airport/Urban	Airport
1.3 Inspection		1.4 Location	St Davids
1.5 Site Number	NMT06	1.6 Date	10-Sep-20
1.7 Inspected by	Michael Hand/David Courtney		
1.8 Normal NMT Operation Interrupted	From 14.40	To	14:50:00

### 7. Occupational Health and Safety Check

Environmental exposure – Appropriate clothing, wide brimmed hat, sunscreen, drinking fluids	Yes
Designated work area – Use of witches hats, barricades as cordons	No
Personal Protective Equipment (PPE) – protective gloves, safety boots, high viz vest, insect repellent	Yes
Animal hazards	No
Height / door work	No
Ladder used	Yes
Pole erected	No
Multiple personnel required	Yes
Manual handling issues	Yes
Contact with electricity – Overhead power	No
Structural earthing of buildings / installations	No
Working alone / isolated – means of communication	No
Security or access issues	No
Traffic hazards	No
Work within 2M of edge	No
Harness used	No
Support used	No
Anchor points	No
Emergency equipment	No
Residual current devices	No
Risk of public injury	No
New hazards identified	No

Comments: Site Secure and no safety concern

### 11. Mechanical Inspection

Site Condition:	Good	✓	
Fence Condition:	Good	✓	
Cabinet Condition:	Good	✓	
Moisture inside NMT:	None		
Insect Infestation:	None		
Windshield Foam:	Good	✓	
Bird Spike:	Good	✓	
Lightning Rod:	Good	✓	
Earth Connection:	Good	✓	
Pole and Pole Mounting Condition:	Good	✓	
Conduit Condition:	Good	✓	
Solar Panel Condition:	NA		
Solar Battery Cabinet Condition:	NA		
Cleaned Solar Panel:	NA		
Battery Terminal Check:	Yes	✓	
GPS Coordinates:	Altitude: 41 m	Latitude: 53.38148	Longitude: -6.216719

### 12. Electrical Inspection

11.1 NMT LCD Display:	Good		
11.2 Door Switch:	Good		
1.11 NMT Model:	3639-A	1.9 NMT SNo:	3023702
1.10 2250 SNo:	3008396	2250 Type:	G4 Light
		Cal Report No:	NA
		11.5 Firmware Version:	4
		Lab Certificate Date:	NA
Current Microphone Model:	4952	1.12 SNo:	3037363
1.13 Modem Type:	Other	Modem SNo:	
		IMEI Number:	

### Pistonphone/ Calibrator Information

2.1 Pistonphone/Calibrator Model:	B&K Type 4231 Calibrator	2.2 Calibrated Date:	3/10/2020
2.1 Serial Number:	3005620	Cal Report No:	04142/1
2.5 Normalized Output (dB):	94.07	2.3 Atmos. Pressure (hPa)	
		2.4 Atmos. Pressure Correction (dB)	

Backup Battery Check:	1
Battery voltage with Load & Mains (13 to 14V at -10°C to 40°C):	14.39
Battery voltage with load only, wait for 5 minutes before measuring (≥12V):	14.01

### Existing Microphone Calibration

Acoustical Calibration:	Before Calibration	After Calibration
-------------------------	--------------------	-------------------

2.6 Expected Calibration Level (dB):	94
Sensitivity (mV/Pa):	26.69
Deviation from initial (dB):	-0.23
Deviation from last (dB):	-0.1

Calibrating Level (dB):	93.45
New Sensitivity (mV/Pa):	27.12
Deviation from last (dB):	-1.33
Deviation from initial (dB):	-0.09
<b>CIC Calibration</b>	
CIC Reference Ratio (dB)	-36.48
CIC Ratio (dB)	-36.48
CIC Result	Passed

**2250 Replacement (New)**  No

2250 SNo:  Cal Report No:  Lab Certificate Date:

2250 Type:  Firmware Version:

**13. Microphone Replacement (New)**  No

Microphone Model:  SNo:

**Acoustical Calibration:**

Before Calibration	After Calibration
Expected Calibration Level (dB):	Calibrating Level (dB):
Sensitivity (mV/Pa):	New Sensitivity (mV/Pa):
Deviation from initial (dB):	Deviation from last (dB):
Deviation from last (dB):	Deviation from initial (dB):

**CIC Calibration:**

CIC Reference Ratio (dB)
CIC Ratio (dB)
CIC Result

**18. Weather Station**  N/A SNo:  Confirm weather data:

**Barix Instreamer**  N/A Confirm live data:

**19. Final Check Completed**  Yes

**Any Other Comments:**

Utility Unit readings not available on meter. Windsheild replaced.

Call Envirosuite Operation Centre (EMS OC) on 1-866-583 0280 or +61 3 9508 4930 to verify NMT operation



# FS Form-003 2250 Based NMT PM Report

## 1. Site Information

1.1 CMS Ticket	348585	1.2 Airport/Urban	Airport
1.3 Inspection		1.4 Location	Trailer
1.5 Site Number	NMT22	1.6 Date	16-Sep-20
1.7 Inspected by	Michael Hand/David Courtney		
1.8 Normal NMT Operation Interrupted	From 14.45	To	15:05:00

## 7. Occupational Health and Safety Check

Environmental exposure – Appropriate clothing, wide brimmed hat, sunscreen, drinking fluids	Yes
Designated work area – Use of wickets hats, barricades as cordons	No
Personal Protective Equipment (PPE) – protective gloves, safety boots, high viz vest, insect repellent	Yes
Animal hazards	No
Height / door work	Yes
Ladder used	No
Pole erected	No
Multiple personnel required	Yes
Manual handling issues	Yes
Contact with electricity – Overhead power	No
Structural earthing of buildings / installations	No
Working alone / isolated – means of communication	No
Security or access issues	No
Traffic hazards	No
Work within 2M of edge	No
Harness used	No
Support used	No
Anchor points	No
Emergency equipment	No
Residual current devices	No
Risk of public injury	No
New hazards identified	No

Comments: Site Secure and no safety concern

## 11. Mechanical Inspection

Site Condition:	Good	✓
Fence Condition:	Good	✓
Cabinet Condition:	Good	✓
Moisture Inside NMT:	None	✓
Insect Infestation:	None	
Windshield Foam:	Good	✓
Bird Spike:	Good	✓
Lightning Rod:	Good	✓
Earth Connection:	Good	✓
Pole and Pole Mounting Condition:	Good	✓
Conduit Condition:	Good	✓
Solar Panel Condition	Good	
Solar Battery Cabinet Condition:	Good	
Cleaned Solar Panel:	Yes	
Battery Terminal Check:	Yes	✓
GPS Coordinates:	Altitude: 58m	Latitude: 53.424132
		Longitude: -6.231516

## 12. Electrical Inspection

11.1 NMT LCD Display:	Good				
11.2 Door Switch:	Good				
1.11 NMT Model:	3639-A	1.9 NMT SNo:	3023700	11.5 Firmware Version:	4.5.2.179
1.10 2250 SNo:	3010352	2250 Type:	G4 Light	Lab Certificate Date:	NA
		Cal Report No:	NA		
Current Microphone Model:	4952	1.12 SNo:	3037361		
1.13 Modem Type:	GX400	Modem SNo:		IMEI Number:	

## Pistonphone/ Calibrator Information

2.1 Pistonphone/Calibrator Model:	B&K Type 4231 Calibrator	2.2 Calibrated Date:	3/10/2020
2.1 Serial Number:	3005620	Cal Report No:	04142/1
2.5 Normalized Output (dB):	94.07	2.3 Atmos. Pressure (hPa)	NA
		2.4 Atmos. Pressure Correction (dB)	NA

Backup Battery Check:	1
	1
Battery voltage with Load & Mains (13 to 14V at -10°C to 40°C):	13.7
Battery voltage with load only, wait for 5 minutes before measuring (≥12V):	11.4

## Existing Microphone Calibration

Acoustical Calibration:	Before Calibration	After Calibration
-------------------------	--------------------	-------------------

2.6 Expected Calibration Level (dB):	94
Sensitivity (mV/Pa):	29.46
Deviation from initial (dB):	0.61
Deviation from last (dB):	-0.61

Calibrating Level (dB):	93.9
New Sensitivity (mV/Pa):	29.57
Deviation from last (dB):	-0.58
Deviation from initial (dB):	0.64
<b>CIC Calibration</b>	
CIC Reference Ratio (dB)	-36.85
CIC Ratio (dB)	-36.85
CIC Result	Passed

2250 Replacement (New)  No

2250 SNo:   
 2250 Type:  Cal Report No:

Lab Certificate Date:   
 Firmware Version:

13. Microphone Replacement (New)  No

Microphone Model:  SNo:

**Acoustical Calibration:**

**Before Calibration**

Expected Calibration Level (dB):	<input type="text"/>
Sensitivity (mV/Pa):	<input type="text"/>
Deviation from initial (dB):	<input type="text"/>
Deviation from last (dB):	<input type="text"/>

**After Calibration**

Calibrating Level (dB):	<input type="text"/>
New Sensitivity (mV/Pa):	<input type="text"/>
Deviation from last (dB):	<input type="text"/>
Deviation from initial (dB):	<input type="text"/>

**CIC Calibration:**

CIC Reference Ratio (dB)	<input type="text"/>
CIC Ratio (dB)	<input type="text"/>
CIC Result	<input type="text"/>

18. Weather Station  N/A

SNo:

Confirm weather data:

Barix Instreamer  N/A

Confirm live data:

19. Final Check Completed  Yes

**Any Other Comments:**

Windshield replaced. New plastic needed for 4952.

Call Envirosuite Operation Centre (EMS OC) on 1-866-583 0280 or +61 3 9508 4930 to verify NMT operation



# FS Form-003 2250 Based NMT PM Report

## 1. Site Information

1.1 CMS Ticket	#348585	1.2 Airport/Urban	Airport
1.3 Inspection		1.4 Location	St. Doolaghs
1.5 Site Number	NMT02	1.6 Date	04-Sep-20
1.7 Inspected by	Michael Hand/David Courtney		
1.8 Normal NMT Operation Interrupted	From 14.15	To	9:36

## 7. Occupational Health and Safety Check

Environmental exposure – Appropriate clothing, wide brimmed hat, sunscreen, drinking fluids	Yes
Designated work area – Use of witches hats, barricades as cordons	No
Personal Protective Equipment (PPE) – protective gloves, safety boots, high viz vest, insect repellent	Yes
Animal hazards	No
Height / door work	No
Ladder used	Yes
Pole erected	No
Multiple personnel required	Yes
Manual handling issues	Yes
Contact with electricity – Overhead power	No
Structural earthing of buildings / installations	No
Working alone / isolated – means of communication	No
Security or access issues	No
Traffic hazards	No
Work within 2M of edge	No
Harness used	No
Support used	No
Anchor points	No
Emergency equipment	No
Residual current devices	No
Risk of public injury	No
New hazards identified	No

Comments: Site Secure and no safety concern

## 11. Mechanical Inspection

Site Condition:	Good	✓	
Fence Condition:	Good	✓	
Cabinet Condition:	Good	✓	
Moisture Inside NMT:	None	✓	
Insect Infestation:	None	✓	
Windshield Foam:	Good	✓	
Bird Spike:	Good	✓	
Lightning Rod:	Good	✓	
Earth Connection:	Good	✓	
Pole and Pole Mounting Condition:	Good	✓	
Conduit Condition:	Good	✓	
Solar Panel Condition:	NA		
Solar Battery Cabinet Condition:	NA		
Cleaned Solar Panel:	NA		
Battery Terminal Check:	Yes	✓	
GPS Coordinates:	Altitude: 34 meters	Latitude: 53.41434	Longitude: -6.185997

## 12. Electrical Inspection

11.1 NMT LCD Display:	Good		
11.2 Door Switch:	Good		
1.11 NMT Model:	3639-A	1.9 NMT SNo:	3037367
1.10 2250 SNo:	3008054	2250 Type:	G4 Light
		Cal Report No:	NA
		11.5 Firmware Version:	4
		Lab Certificate Date:	NA
Current Microphone Model:	4952	1.12 SNo:	3037367
1.13 Modem Type:	GX400	Modem SNo:	
		IMEI Number:	

## Pistonphone/ Calibrator Information

2.1 Pistonphone/Calibrator Model:	B&K Type 4231 Calibrator	2.2 Calibrated Date:	3/10/2020
2.1 Serial Number:	3005620	Cal Report No:	04142/1
2.5 Normalized Output (dB):	94.07	2.3 Atmos. Pressure (hPa)	
		2.4 Atmos. Pressure Correction (dB)	

Backup Battery Check:	1
Battery voltage with Load & Mains (13 to 14V at -10°C to 40°C):	14.52
Battery voltage with load only, wait for 5 minutes before measuring (≥12V):	14.26

## Existing Microphone Calibration

Acoustical Calibration:	Before Calibration	After Calibration
-------------------------	--------------------	-------------------

2.6 Expected Calibration Level (dB):	94
Sensitivity (mV/Pa):	34.46
Deviation from initial (dB):	0.07
Deviation from last (dB):	0.75

Calibrating Level (dB):	94
New Sensitivity (mV/Pa):	35.09
Deviation from last (dB):	0.16
Deviation from initial (dB):	0.23
<b>CIC Calibration</b>	
CIC Reference Ratio (dB)	-36.72
CIC Ratio (dB)	-36.74
CIC Result	Passed

**2250 Replacement (New)**  No

2250 SNo:  Cal Report No:  Lab Certificate Date:

2250 Type:  Firmware Version:

**13. Microphone Replacement (New)**  No

Microphone Model:  SNo:

**Acoustical Calibration:**

Before Calibration	After Calibration
Expected Calibration Level (dB):	Calibrating Level (dB):
Sensitivity (mV/Pa):	New Sensitivity (mV/Pa):
Deviation from initial (dB):	Deviation from last (dB):
Deviation from last (dB):	Deviation from initial (dB):
<b>CIC Calibration:</b>	
CIC Reference Ratio (dB)	CIC Reference Ratio (dB):
CIC Ratio (dB)	CIC Ratio (dB):
CIC Result	CIC Result:

**18. Weather Station**  N/A SNo:  Confirm weather data:

**Barix Instreamer**  N/A Confirm live data:

**19. Final Check Completed**  Yes

**Any Other Comments:**

Windsheild replaced

Call Envirosuite Operation Centre (EMS OC) on 1-866-583 0280 or +61 3.9508 4930 to verify NMT operation





# FS Form-003 2250 Based NMT PM Report

## 1. Site Information

1.1 CMS Ticket	#348585	1.2 Airport/Urban	Airport
1.3 Inspection		1.4 Location	Bay Lane
1.5 Site Number	NMT01	1.6 Date	10-Sep-20
1.7 Inspected by	Michael Hand/David Courtney		
1.8 Normal NMT Operation Interrupted	From 12.00	To	12:30:00

## 7. Occupational Health and Safety Check

Environmental exposure – Appropriate clothing, wide brimmed hat, sunscreen, drinking fluids	Yes
Designated work area – Use of witches hats, barricades as cordons	No
Personal Protective Equipment (PPE) – protective gloves, safety boots, high viz vest, insect repellent	Yes
Animal hazards	No
Height / door work	No
Ladder used	Yes
Pole erected	No
Multiple personnel required	Yes
Manual handling issues	Yes
Contact with electricity – Overhead power	No
Structural earthing of buildings / installations	No
Working alone / isolated – means of communication	No
Security or access issues	No
Traffic hazards	No
Work within 2M of edge	No
Harness used	No
Support used	No
Anchor points	No
Emergency equipment	No
Residual current devices	No
Risk of public injury	No
New hazards identified	No

Comments: Site Secure and no safety concern

## 11. Mechanical Inspection

Site Condition:	Good	✓
Fence Condition:	Good	✓
Cabinet Condition:	Good	✓
Moisture inside NMT:	None	✓
Insect Infestation:	Infested	Spiders. Spiders and nests cleared
Windshield Foam:	Good	✓
Bird Spike:	Good	✓
Lightning Rod:	Good	✓
Earth Connection:	Good	✓
Pole and Pole Mounting Condition:	Good	✓
Conduit Condition:	Good	✓
Solar Panel Condition:	NA	
Solar Battery Cabinet Condition:	NA	
Cleaned Solar Panel:	NA	
Battery Terminal Check:	Yes	✓
GPS Coordinates:	Altitude: 76 meters	Latitude: 53.425119
		Longitude: -6.346295

## 12. Electrical Inspection

11.1 NMT LCD Display:	Good		
11.2 Door Switch:	Good		
1.11 NMT Model:	3639-A	1.9 NMT SNo:	3023432
1.10 2250 SNo:	3008332	2250 Type:	G4 Light
		11.5 Firmware Version:	4.5.0.92
		Cal Report No:	NA
		Lab Certificate Date:	NA
Current Microphone Model:	4952	1.12 SNo:	3037360
1.13 Modem Type:	GX400	Modem SNo:	
		IMEI Number:	

## Pistonphone/ Calibrator Information

2.1 Pistonphone/Calibrator Model:	B&K Type 4231 Calibrator		
2.1 Serial Number:	3005620	Cal Report No:	04142/1
2.5 Normalized Output (dB):	94.07	2.2 Calibrated Date:	3/10/2020
		2.3 Atmos. Pressure (hPa)	NA
		2.4 Atmos. Pressure Correction (dB)	NA

Backup Battery Check:	1
	1
Battery voltage with Load & Mains (13 to 14V at -10°C to 40°C):	15.16
Battery voltage with load only, wait for 5 minutes before measuring (≥12V):	14.26

## Existing Microphone Calibration

Acoustical Calibration:	Before Calibration	After Calibration
-------------------------	--------------------	-------------------

2.6 Expected Calibration Level (dB):	94
Sensitivity (mV/Pa):	32.37
Deviation from initial (dB):	-0.01
Deviation from last (dB):	0.21

Calibrating Level (dB):	93.42
New Sensitivity (mV/Pa):	32.52
Deviation from last (dB):	0.04
Deviation from initial (dB):	-0.03
<b>CIC Calibration</b>	
CIC Reference Ratio (dB)	-36.87
CIC Ratio (dB)	-36.87
CIC Result	Passed

**2250 Replacement (New)**  No

2250 SNo:  Cal Report No :  Lab Certificate Date:

2250 Type:  Firmware Version:

**13. Microphone Replacement (New)**  No

Microphone Model:  SNo:

**Acoustical Calibration:**

Before Calibration	After Calibration
Expected Calibration Level (dB):	Calibrating Level (dB):
Sensitivity (mV/Pa):	New Sensitivity (mV/Pa):
Deviation from initial (dB):	Deviation from last (dB):
Deviation from last (dB):	Deviation from initial (dB):

**CIC Calibration:**

CIC Reference Ratio (dB)	
CIC Ratio (dB)	
CIC Result	

**18. Weather Station**  N/A SNo:  Confirm weather data:

**Barix Instreamer**  N/A Confirm live data:

**19. Final Check Completed**  Yes

**Any Other Comments:**

Windshield replaced

Call EMS B&K Operation Centre (EMS OC) on 1-866-583 0280 or +61 3 9508 4930 to verify NMT operation



## FS Form-003 2250 Based NMT PM Report

### 1. Site Information

1.1 CMS Ticket	#348585	1.2 Airport/Urban	Airport
1.3 Inspection		1.4 Location	Bishopswood
1.5 Site Number	NMT03	1.6 Date	10-Sep-20
1.7 Inspected by	Michael Hand/David Courtney		
1.8 Normal NMT Operation Interrupted	From 13.19	To	13:30:00

### 7. Occupational Health and Safety Check

Environmental exposure – Appropriate clothing, wide brimmed hat, sunscreen, drinking fluids	Yes
Designated work area – Use of witch's hats, barricades as cordons	No
Personal Protective Equipment (PPE) – protective gloves, safety boots, high viz vest, insect repellent	Yes
Animal hazards	No
Height / door work	No
Ladder used	No
Pole erected	No
Multiple personnel required	Yes
Manual handling issues	Yes
Contact with electricity – Overhead power	No
Structural earthing of buildings / installations	No
Working alone / isolated – means of communication	No
Security or access issues	No
Traffic hazards	No
Work within 2M of edge	No
Harness used	No
Support used	No
Anchor points	No
Emergency equipment	No
Residual current devices	No
Risk of public injury	No
New hazards identified	No

Comments: Site Secure and no safety concern

### 11. Mechanical Inspection

Site Condition:	Good	✓	
Fence Condition:	Good	✓	
Cabinet Condition:	Good	✓	
Moisture Inside NMT:	None	✓	
Insect Infestation:	Infested	Spiders, Nests removed	
Windshield Foam:	Good	✓	
Bird Spike:	Good	✓	
Lightning Rod:	Good	✓	
Earth Connection:	Good	✓	
Pole and Pole Mounting Condition:	Good	✓	
Conduit Condition:	Good	✓	
Solar Panel Condition:	NA		
Solar Battery Cabinet Condition:	NA		
Cleaned Solar Panel:	NA		
Battery Terminal Check:	Yes	✓	
GPS Coordinates:	Altitude: 78 m	Latitude: 53.437636	Longitude: -6.333185

### 12. Electrical Inspection

11.1 NMT LCD Display:	Good				
11.2 Door Switch:	Good				
1.11 NMT Model:	3639-A	1.9 NMT SNo:	3023432	11.5 Firmware Version:	4
1.10 2250 SNo:	3006805	2250 Type:	G4 Light	Lab Certificate Date:	NA
		Cal Report No:	NA		
Current Microphone Model:	4952	1.12 SNo:	3037364		
1.13 Modem Type:	Other	Modem SNo:		IMEI Number:	

### Pistonphone/ Calibrator Information

2.1 Pistonphone/Calibrator Model:	B&K Type 4231 Calibrator	2.2 Calibrated Date:	3/10/2020
2.1 Serial Number:	3005620	2.3 Atmos. Pressure (hPa):	NA
2.5 Normalized Output (dB):	94.07	2.4 Atmos. Pressure Correction (dB):	NA

Backup Battery Check:	1
	1
Battery voltage with Load & Mains (13 to 14V at -10°C to 40°C):	15.16
Battery voltage with load only, wait for 5 minutes before measuring (≥12V):	14.26

### Existing Microphone Calibration

Acoustical Calibration:		
Before Calibration		After Calibration

2.6 Expected Calibration Level (dB):	94
Sensitivity (mV/Pa):	30.54
Deviation from initial (dB):	0.05
Deviation from last (dB):	-0.21

Calibrating Level (dB):	94
New Sensitivity (mV/Pa):	30.61
Deviation from last (dB):	-0.22
Deviation from initial (dB):	-0.17

<b>CIC Calibration</b>	
CIC Reference Ratio (dB)	-36.72
CIC Ratio (dB)	-36.72
CIC Result	Passed

2250 Replacement (New)  No

2250 SNo:   
 2250 Type:  Cal Report No:

Lab Certificate Date:   
 Firmware Version:

13. Microphone Replacement (New)  No

Microphone Model:  SNo:

**Acoustical Calibration:**

**Before Calibration**

Expected Calibration Level (dB):	<input type="text"/>
Sensitivity (mV/Pa):	<input type="text"/>
Deviation from initial (dB):	<input type="text"/>
Deviation from last (dB):	<input type="text"/>

**After Calibration**

Calibrating Level (dB):	<input type="text"/>
New Sensitivity (mV/Pa):	<input type="text"/>
Deviation from last (dB):	<input type="text"/>
Deviation from initial (dB):	<input type="text"/>

**CIC Calibration:**

CIC Reference Ratio (dB)	<input type="text"/>
CIC Ratio (dB)	<input type="text"/>
CIC Result	<input type="text"/>

18. Weather Station  N/A

SNo:

Confirm weather data:

Barix Instreamer  N/A

Confirm live data:

19. Final Check Completed  Yes

**Any Other Comments:**

Windsheld replaced

Call Envirosulte Operation Centre (EMS OC) on 1-866-583 0280 or +61 3 9508 4930 to verify NMT operation



## FS Form-003 2250 Based NMT PM Report

### 1. Site Information

1.1 CMS Ticket	348585	1.2 Airport/Urban	Airport
1.3 Inspection		1.4 Location	Feltrim
1.5 Site Number	NMT20	1.6 Date	04-Sep-20
1.7 Inspected by	Michael Hand/David Courtney		
1.8 Normal NMT Operation Interrupted	From 14.58	To	15.05

### 7. Occupational Health and Safety Check

Environmental exposure – Appropriate clothing, wide brimmed hat, sunscreen, drinking fluids	Yes
Designated work area – Use of witches hats, barricades as cordons	No
Personal Protective Equipment (PPE) – protective gloves, safety boots, high viz vest, insect repellent	Yes
Animal hazards	No
Height / door work	Yes
Ladder used	Yes
Pole erected	No
Multiple personnel required	Yes
Manual handling issues	Yes
Contact with electricity – Overhead power	No
Structural earthing of buildings / installations	No
Working alone / isolated – means of communication	No
Security or access issues	No
Traffic hazards	No
Work within 2M of edge	No
Harness used	No
Support used	No
Anchor points	No
Emergency equipment	No
Residual current devices	No
Risk of public injury	No
New hazards identified	No

Comments: Site Secure and no safety concern

### 11. Mechanical Inspection

Site Condition:	Good	✓
Fence Condition:	Good	✓
Cabinet Condition:	Good	✓
Moisture Inside NMT:	None	✓
Insect Infestation:	Infested	Spider and Spider nests. Mild. Removed
Windshield Foam:	Good	✓
Bird Spike:	Good	✓
Lightning Rod:	Good	✓
Earth Connection:	Good	✓
Pole and Pole Mounting Condition:	Good	✓
Conduit Condition:	Good	✓
Solar Panel Condition	NA	
Solar Battery Cabinet Condition:	NA	
Cleaned Solar Panel:	NA	
Battery Terminal Check:	Yes	✓
GPS Coordinates:	Altitude: 55m	Latitude: 53.474919
		Longitude: -6.286379

### 12. Electrical Inspection

11.1 NMT LCD Display:	Good				
11.2 Door Switch:	Good				
1.11 NMT Model:	3639-A	1.9 NMT SNo:	3037367	11.5 Firmware Version:	4
1.10 2250 SNo:	3008500	2250 Type:	G4 Light	Lab Certificate Date:	NA
		Cal Report No:	NA		
Current Microphone Model:	4952	1.12 SNo:	3037367		
1.13 Modem Type:	GX400	Modem SNo:		IMEI Number:	

### Pistonphone/ Calibrator Information

2.1 Pistonphone/Calibrator Model:	B&K Type 4228 Pistonphone	2.2 Calibrated Date:	3/10/2020
2.1 Serial Number:	3005620	Cal Report No:	04142/1
2.5 Normalized Output (dB):	94.07	2.3 Atmos. Pressure (hPa)	
		2.4 Atmos. Pressure Correction (dB)	

Backup Battery Check:	1
	1
Battery voltage with Load & Mains (13 to 14V at -10°C to 40°C):	15.16V
Battery voltage with load only, wait for 5 minutes before measuring (≥12V):	14.26

### Existing Microphone Calibration

Acoustical Calibration:	Before Calibration	After Calibration
-------------------------	--------------------	-------------------

2.6 Expected Calibration Level (dB):	94
Sensitivity (mV/Pa):	29.16
Deviation from initial (dB):	-0.11
Deviation from last (dB):	-0.7

Calibrating Level (dB):	94
New Sensitivity (mV/Pa):	30.27
Deviation from last (dB):	-0.37
Deviation from initial (dB):	0.22

<b>CIC Calibration</b>	
CIC Reference Ratio (dB)	-36.62
CIC Ratio (dB)	-36.62
CIC Result	Passed

2250 Replacement (New)

2250 SNo:   
 2250 Type:  Cal Report No:

Lab Certificate Date:   
 Firmware Version:

13. Microphone Replacement (New)

Microphone Model:  SNo:

**Acoustical Calibration:**

**Before Calibration**

Expected Calibration Level (dB):	<input type="text"/>
Sensitivity (mV/Pa):	<input type="text"/>
Deviation from initial (dB):	<input type="text"/>
Deviation from last (dB):	<input type="text"/>

**After Calibration**

Calibrating Level (dB):	<input type="text"/>
New Sensitivity (mV/Pa):	<input type="text"/>
Deviation from last (dB):	<input type="text"/>
Deviation from initial (dB):	<input type="text"/>

**CIC Calibration:**

CIC Reference Ratio (dB)	<input type="text"/>
CIC Ratio (dB)	<input type="text"/>
CIC Result	<input type="text"/>

18. Weather Station

SNo:

Confirm weather data:

Barix Instreamer

Confirm live data:

19. Final Check Completed

**Any Other Comments:**

Windsheild replaced

Call Envirosuite Operation Centre (EMS OC) on 1-866-583 0280 or +61 3 9508 4930 to verify NMT operation



# FS Form-003 2250 Based NMT PM Report

## 1. Site Information

1.1 CMS Ticket	#348585	1.2 Airport/Urban	Airport
1.3 Inspection		1.4 Location	Balcultry
1.5 Site Number	NMT05	1.6 Date	04-Sep-20
1.7 Inspected by	Michael Hand/David Courtney		
1.8 Normal NMT Operation Interrupted	From 15.30	To	16:00

## 7. Occupational Health and Safety Check

Environmental exposure – Appropriate clothing, wide brimmed hat, sunscreen, drinking fluids	Yes
Designated work area – Use of witches hats, barricades as cordons	No
Personal Protective Equipment (PPE) – protective gloves, safety boots, high viz vest, insect repellent	Yes
Animal hazards	No
Height / door work	No
Ladder used	No
Pole erected	No
Multiple personnel required	Yes
Manual handling issues	Yes
Contact with electricity – Overhead power	No
Structural earthing of buildings / installations	No
Working alone / isolated – means of communication	No
Security or access issues	No
Traffic hazards	No
Work within 2M of edge	No
Harness used	No
Support used	No
Anchor points	No
Emergency equipment	No
Residual current devices	No
Risk of public injury	No
New hazards identified	No

Comments: Site Secure and no safety concern

## 11. Mechanical Inspection

Site Condition:	Good	✓	
Fence Condition:	Good	✓	
Cabinet Condition:	Good	✓	
Moisture inside NMT:	None	✓	
Insect Infestation:	None	✓	
Windshield Foam:	Good	✓	
Bird Spike:	Good	✓	
Lightning Rod:	Good	✓	
Earth Connection:	Good	✓	
Pole and Pole Mounting Condition:	Good	✓	
Conduit Condition:	Good	✓	
Solar Panel Condition:	Good		
Solar Battery Cabinet Condition:	Good		
Cleaned Solar Panel:	Yes		
Battery Terminal Check:	Yes	✓	
GPS Coordinates:	Altitude: 54m	Latitude: 53.414163	Longitude: -6.137969

## 12. Electrical Inspection

11.1 NMT LCD Display:	Good				
11.2 Door Switch:	Good				
1.11 NMT Model:	3639-A	1.9 NMT SNo:	3037367	11.5 Firmware Version:	4
1.10 2250 SNo:	3007636	2250 Type:	G4 Light	Lab Certificate Date:	NA
Cal Report No:	NA				
Current Microphone Model:	4952	1.12 SNo:	3037367		
1.13 Modem Type:	GX400	Modem SNo:		IMEI Number:	

## Pistonphone/ Calibrator Information

2.1 Pistonphone/Calibrator Model:	B&K Type 4231 Calibrator	2.2 Calibrated Date:	3/10/2020
2.1 Serial Number:	3005620	Cal Report No:	04142/1
2.5 Normalized Output (dB):	94.07	2.3 Atmos. Pressure (hPa)	NA
		2.4 Atmos. Pressure Correction (dB)	NA

Backup Battery Check:	1
Battery voltage with Load & Mains (13 to 14V at -10°C to 40°C):	13.65
Battery voltage with load only, wait for 5 minutes before measuring (≥12V):	13.11

## Existing Microphone Calibration

Acoustical Calibration:	Before Calibration	After Calibration
-------------------------	--------------------	-------------------

2.6 Expected Calibration Level (dB):	94
Sensitivity (mV/Pa):	29.94
Deviation from initial (dB):	-0.33
Deviation from last (dB):	-0.47

Calibrating Level (dB):	94
New Sensitivity (mV/Pa):	30.61
Deviation from last (dB):	-0.28
Deviation from initial (dB):	-0.14
<b>CIC Calibration</b>	
CIC Reference Ratio (dB)	-36.68
CIC Ratio (dB)	-36.68
CIC Result	Passed

2250 Replacement (New)  No

2250 SNo:

2250 Type:  Cal Report No:

Lab Certificate Date:

Firmware Version:

13. Microphone Replacement (New)  No

Microphone Model:  SNo:

**Acoustical Calibration:**

**Before Calibration**

Expected Calibration Level (dB):

Sensitivity (mV/Pa):

Deviation from initial (dB):

Deviation from last (dB):

**After Calibration**

Calibrating Level (dB):

New Sensitivity (mV/Pa):

Deviation from last (dB):

Deviation from initial (dB):

**CIC Calibration:**

CIC Reference Ratio (dB)

CIC Ratio (dB)

CIC Result

18. Weather Station  N/A SNo:

Confirm weather data:

Barix Instreamer  N/A

Confirm live data:

19. Final Check Completed  Yes

**Any Other Comments:**

Need to replace backup battery as voltage is very low. Windsheld replaced with new one.

Call Envirosuite Operation Centre (EMS OC) on 1-866-583 0280 or +61 3 9508 4930 to verify NMT operation





# FS Form-003 2250 Based NMT PM Report

## 1. Site Information

1.1 CMS Ticket	#348585	1.2 Airport/Urban	Airport
1.3 Inspection		1.4 Location	Oscar Papa
1.5 Site Number	NMT20	1.6 Date	03-Sep-20
1.7 Inspected by	Michael Hand/David Courtney		
1.8 Normal NMT Operation Interrupted	From 14.15	To	14:45:00

## 7. Occupational Health and Safety Check

Environmental exposure – Appropriate clothing, wide brimmed hat, sunscreen, drinking fluids	Yes
Designated work area – Use of witches hats, barricades as cordons	No
Personal Protective Equipment (PPE) – protective gloves, safety boots, high viz vest, insect repellent	Yes
Animal hazards	No
Height / door work	No
Ladder used	No
Pole erected	No
Multiple personnel required	Yes
Manual handling issues	Yes
Contact with electricity – Overhead power	No
Structural earthing of buildings / installations	No
Working alone / isolated – means of communication	No
Security or access issues	Yes
Traffic hazards	No
Work within 2M of edge	No
Harness used	No
Support used	No
Anchor points	No
Emergency equipment	No
Residual current devices	No
Risk of public injury	No
New hazards identified	No

Comments: Site Secure and no safety concern, arranged access through IAA contacts

## 11. Mechanical Inspection

Site Condition:	Good	✓	
Fence Condition:	Good	✓	
Cabinet Condition:	Good	✓	
Moisture Inside NMT:	None	✓	
Insect Infestation:	None	✓	
Windshield Foam:	Good	✓	
Bird Spike:	Good	✓	
Lightning Rod:	Good	✓	
Earth Connection:	Good	✓	
Pole and Pole Mounting Condition:	Good	✓	
Conduit Condition:	Good	✓	
Solar Panel Condition:	NA		
Solar Battery Cabinet Condition:	NA		
Cleaned Solar Panel:	NA		
Battery Terminal Check:	Yes	✓	
GPS Coordinates:	Altitude: 5m	Latitude: 53.414163	Longitude: -6.137969

## 12. Electrical Inspection

11.1 NMT LCD Display:	Good				
11.2 Door Switch:	Good				
1.11 NMT Model:	3639-A	1.9 NMT SNo:	3037367	11.5 Firmware Version:	4
1.10 2250 SNo:	3007665	2250 Type:	G4 Light	Lab Certificate Date:	NA
Cal Report No:	NA				
Current Microphone Model:	4952	1.12 SNo:	3037367		
1.13 Modem Type:	GX400	Modem SNo:	A151520250001009	IMEI Number:	353567043275834

## Pistonphone/ Calibrator Information

2.1 Pistonphone/Calibrator Model:	B&K Type 4231 Calibrator	2.2 Calibrated Date:	3/10/2020
2.1 Serial Number:	3005620	Cal Report No:	04142/1
2.5 Normalized Output (dB):	94.07	2.3 Atmos. Pressure (hPa)	NA
		2.4 Atmos. Pressure Correction (dB)	NA

Backup Battery Check:	1
Battery voltage with Load & Mains (13 to 14V at -10°C to 40°C):	15.16
Battery voltage with load only, wait for 5 minutes before measuring (≥12V):	14.39

## Existing Microphone Calibration

Acoustical Calibration:	Before Calibration	After Calibration
-------------------------	--------------------	-------------------

2.6 Expected Calibration Level (dB):	94
Sensitivity (mV/Pa):	31.78
Deviation from initial (dB):	-0.21
Deviation from last (dB):	0.05

Calibrating Level (dB):	94
New Sensitivity (mV/Pa):	32.57
Deviation from last (dB):	0.26
Deviation from initial (dB):	-0.11

<b>CIC Calibration</b>	
CIC Reference Ratio (dB)	-36.57
CIC Ratio (dB)	-36.57
CIC Result	Passed

2250 Replacement (New)

2250 SNo:   
 2250 Type:  Cal Report No:

Lab Certificate Date:   
 Firmware Version:

13. Microphone Replacement (New)

Microphone Model:  SNo:

**Acoustical Calibration:**

**Before Calibration**

Expected Calibration Level (dB):	<input type="text"/>
Sensitivity (mV/Pa):	<input type="text"/>
Deviation from initial (dB):	<input type="text"/>
Deviation from last (dB):	<input type="text"/>

**After Calibration**

Calibrating Level (dB):	<input type="text"/>
New Sensitivity (mV/Pa):	<input type="text"/>
Deviation from last (dB):	<input type="text"/>
Deviation from initial (dB):	<input type="text"/>

**CIC Calibration:**

CIC Reference Ratio (dB)	<input type="text"/>
CIC Ratio (dB)	<input type="text"/>
CIC Result	<input type="text"/>

18. Weather Station

SNo:

Confirm weather data:

Barix Instreamer

Confirm live data:

19. Final Check Completed

**Any Other Comments:**

Windshield replaced

Call Envirosuite Operation Centre (EMS OC) on 1-866-583 0280 or +61 3 9508 4930 to verify NMT operation