

Packing Slip

COBHAM**Chelton Avionics Inc.**

dba Cobham Aerospace
Communications
6400 Wilkinson Drive
Prescott
AZ 86301-6164
United States
928-708-1550/928-708-1545

Deliver To:

**INFRASTRUCTURE
& TRANSPORTATION**

900 FERRY RD, HANGAR T-5
WINNIPEG, MANITOBA R3H 0Y8
Canada

Delivery Number: AEM DN#

Shipping Date:

Tracking Reference:

Order Number: 24170

Cobham Order Contact:

Diane Read

Contact e-mail:

diane.read@cobham.com

Bill To:

INFRASTRUCTURE & TRANSPORTATION

900 FERRY RD, HANGAR T-5
WINNIPEG, MANITOBA R3H 0Y8
Canada

2112456

Incoterm:	EXW Supplier Plant	Payment Terms:	30 Net (Net 30 Days)
Delivery Method:	FedEx 2 Day	Order Currency:	USD

ATTENTION: AIR SERVICES BRANCH STORES
SHIPPING ACCOUNT 123634969

Description of Goods (in code and in full)	Qty UOM
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NTX138-062

Transceiver with custom guard

Customer Ref: 4501093403

S/N: 1174

BN 68456

1

ANALYSIS: MINOR REPAIR - Although the unit is functional it requires an alignment as many adjustments are out of specification. MOD 29 applied to improve receiver sensitivity.

REASON FOR RETURN: Channel 4 is unserviceable.

CUSTOMS REPAIR VALUE \$1976.00

CUSTOMS VALUE OF UNIT \$N/A

EIN: N/A

SHIP VIA FEDEX 2 DAY A/C 123634969

FORM 1 REQUIRED

RMA N/A

CUSTOMER CONTACT/PHONE PAM ASHTON 204-945-1982

FAA STATUS and Technical Spec : CERT_NOTE Direct ship from AEM with a Form One based on the NAT TC STC
#SH05-12 and #SA07-25.

ITAR/EAR statement : These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

This part number is controlled by the U.S. Export Administration Regulations (EAR) specific to Export Control
Classification Number (ECCN) 7A994

Total Number of Packages:

0

Total Volume / UOM:

0m3

Continued....

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5702112456

Packing Slip

COBHAM

Certificate of Conformity: The item(s) listed above is/(are) certified to comply to respective currently defined inspections, tests, drawings and design specifications applicable for part numbers on the customer's purchase order. QA certified and released by:

Delivery Number:

AEM DN#

Shipping Date:

Total Gross Weight / UOM:


Tyler Hertz

Shipper

Chelton Avionics, Inc.

Materials Handler

Ray Guenther

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**ANODYNE
ELECTRONICS
MANUFACTURING CORP.**

Returned Materials Report

Printed: Sep. 4, 2018 03:23 pm

Customer:

Chelton Avionics (formerly dba Wulfsberg Electronics - Cobham Aerospace Communications Inc. - Prescott)

Cust. Code: WULF95R

City: Prescott

State / Prov: AZ

Country: USA

Contact: Diane Read

Date Rec'd: Aug. 8, 2018

SO PO#: 12012027

RMA #: 10057

SO #: 000000000023283

WO #: 69235

Cust. PO#: 4501093403

Contract RMA #: 24169

Org. Cust. Manitoba Govt Air Services Br.

Part No: NTX138-062

S/N: 1174

Qty: 1

Add. Part No: n/a

S/N: n/a

Document Used:
SM 28

Revision:
4.10

Build Date:
May 2000

Last Repaired at AEM:
Jul 2001

MOD Status In:
1-12

Revision In:
n/a

Firmware In:
Ver. 1.17, Csum 7927

Modem Firmware In:

Reported:

CHANNEL 4 is unserviceable.

Evaluation Description:

No WL. Radio needs Complete tune up. W.B. deviation levels are not set correctly, MIC gain is not set right. (they were fully clock wise). Main RX audio level is not set correctly. Guard board needs a tune up. Mod 21 is needed.

Fault Confirmed: No

Repair / Work Description:

Install MOD21 (M706).
Re-aligned main Receiver, Mic gain level & deviation were set.
Replaced Guard filters FL401A & FL401B. Re-aligned Guard board receiver.

ATP-ATR.

Mod Status Out:
1-12,21

Revision Out:
n/a

Firmware Out:
Ver. 1.17, Csum 7927

Modem Firmware Out:

Technician:
Leo Beauregard
Date Completed:
Aug. 31, 2018

Inspector:
Rodney Hyndman
Date Inspected:
Sep. 4, 2018

Work Result:
Repaired/Reworked

Statement: Certifies that items identified above were repaired, tested, and released in accordance with CAR 571.

For additional details please refer to AEM's Terms and Conditions of Sale located at:
<http://www.aem-corp.com/about/TermsConditions.php>

ANODYNE ELECTRONICS MANUFACTURING CORPORATION

15-1925 Kirschner Road, Kelowna, B.C., CANADA V1Y 4N7, Tel 250-763-1088



ACCEPTANCE TEST REPORT

NAT Part #: NTX138-050

Description: Remote Mount FM Transceiver

Document #: NTX138\000\518-0

Rev: 1.30

Acceptance Test Procedure: NTX138\000\614-0

ATP Rev: 1.3x

Serial Number: 1174

ATP Results		Output	
Test	Requirement	Observation	Pass
5.1 Receiver Wideband Audio Power			
5.1.1	100 ± 10 mW	95 mW	✓
5.2 Receiver Audio Distortion			
5.2.1	<4% audio distortion		✓
5.3 Receiver Narrowband Audio Power			
5.3.1	Same value as in step 5.1.1 ± 10%	105 mW	✓
5.4 Receiver Narrowband Sensitivity			
5.4.1	CH003, 12 ± 1 dB SINAD	12 dB	✓
	Input signal, 0.4 ± 0.15 µV	0.44 µV	✓
5.4.2	CH001, 12 ± 1 dB SINAD	12 dB	✓
	Input signal, 0.4 ± 0.15 µV	0.45 µV	✓
	CH002, 12 ± 1 dB SINAD	12 dB	✓
	Input signal, 0.4 ± 0.15 µV	0.48 µV	✓
5.5 Receiver Narrowband Audio Squelch			
5.5.1	CH003, un-squelch @ 0.4 ± 0.15 µV	0.43 µV	✓
	Squelch again @ 0.3 ± 0.1 µV	0.35 µV	✓
	LED illuminates with presence of audio		✓
5.5.2	CH001, un-squelch @ 0.4 ± 0.15 µV	0.42 µV	✓
	Squelch again @ 0.3 ± 0.1 µV	0.36 µV	✓
	LED illuminates with presence of audio		✓
	CH002, un-squelch @ 0.4 ± 0.15 µV	0.49 µV	✓
	Squelch again @ 0.3 ± 0.1 µV	0.37 µV	✓
	LED illuminates with presence of audio		✓
5.6 Receiver Wideband Audio Squelch			
5.6.1	CH003, un-squelch @ 0.5 ± 0.2 µV	0.55 µV	✓
	Squelch again @ 0.4 ± 0.15 µV	0.39 µV	✓
	LED illuminates with presence of audio		✓
5.6.1	CH001, un-squelch @ 0.5 ± 0.2 µV	0.52 µV	✓
	Squelch again @ 0.4 ± 0.15 µV	0.40 µV	✓
	LED illuminates with presence of audio		✓
	CH002, un-squelch @ 0.5 ± 0.2 µV	0.56 µV	✓
	Squelch again @ 0.4 ± 0.15 µV	0.43 µV	✓
	LED illuminates with presence of audio		✓
5.7 Receiver CTCSS Tones			
5.7.1	0 mW		✓
5.7.2	Audio heard		✓
5.7.3	100 ± 10 mW		✓

Rev. 1.30

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ENG-FORM: 518-0108.DOT

Sep 26, 2005

CONFIDENTIAL AND PROPRIETARY TO NORTHERN AIRBORNE TECHNOLOGY LTD.

Serial Number: 1174

NTX138-050 Acceptance Test Report

062 R4

ATP Results		Output	
Test	Requirement	Observation	Pass
5.8 Receiver DCS Tones			
5.8.1	0 mW		✓
5.8.2	Audio heard		✓
5.8.3	100 ± 10 mW	92 mW	✓
5.9 Transmitter Wideband Deviation			
5.9.1	CH001, 2.5 kHz ± 500 Hz	2.56 kHz	✓
5.9.2	CH002, 2.5 kHz ± 500 Hz	2.41 kHz	✓
	CH003, 2.5 kHz ± 500 Hz	2.68 kHz	✓
5.9.3	CH001, < 4.0 kHz deviation		✓
5.9.4	CH002, < 4.0 kHz deviation		✓
	CH003, < 4.0 kHz deviation		✓
5.10 Transmitter Narrowband Deviation			
5.10.1	CH001, 1.5 kHz ± 500 Hz	1.30 kHz	✓
5.10.2	CH002, 1.5 kHz ± 500 Hz	1.25 kHz	✓
	CH003, 1.5 kHz ± 500 Hz	1.33 kHz	✓
5.11 Sidetone			
5.11.1	25 ± 5 mW	25 mW	✓
5.12 Transmit Audio			
5.12.1	Audio heard without noise or disruptions		✓
5.13 Transmitter Frequency Error			
5.13.1	< 100 Hz		✓
5.14 Transmitter HI Power			
5.14.1	CH001, 10.0 +2.5/-2.0 W	12.3 W	✓
5.14.2	CH002, 10.0 +2.5/-2.0 W	11.6 W	✓
	CH003, 10.0 +2.5/-2.0 W	11.3 W	✓
5.15 Transmitter Low Power			
5.15.1	CH001, 1 +0.5/-0.1 W	1.48 W	✓
5.15.2	CH002, 1 +0.5/-0.1 W	1.19 W	✓
	CH003, 1 +0.5/-0.1 W	1.27 W	✓
5.16 Transmitter CTCSS Tones			
5.16.1	CH002, 123 Hz; 450 ± 200 Hz deviation	123 Hz 530 Hz	✓
5.16.2	CH001, CH002 , 123 Hz; 450 ± 200 Hz deviation	123 Hz 490 Hz	✓
	CH003, CH002 , 123 Hz; 450 ± 200 Hz deviation	123 Hz 520 Hz	✓
5.16.3	CH002, 123 Hz; 750 ± 250 Hz deviation	123 Hz 840 Hz	✓
5.16.4	CH001, 123 Hz; 750 ± 250 Hz deviation	123 Hz 720 Hz	✓
	CH003, 123 Hz; 750 ± 250 Hz deviation	123 Hz 900 Hz	✓
5.17 Transmitter DCS Tones			
5.17.2	450 ± 50 Hz deviation	440 Hz	✓
	Verify decoding of code 023		✓
5.18 GD1 Transmitter			
5.18.1	Demodulated audio displayed		✓
5.19 GD2 Transmitter			
5.19.1	Demodulated audio displayed		✓
5.20 Scanning Lock-up Level			
5.20.1	CH001, ≤ 1.0 μV		✓

Reviewed/Approved

Initials

Date

Apr 26/06

Rev. 1.30

ENG-FORM-518-0108.DOT

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Sep 26, 2005

CONFIDENTIAL AND PROPRIETARY TO NORTHERN AIRBORNE TECHNOLOGY LTD.

Serial Number: 1174

NTX138-050 Acceptance Test Report

ATP Results		Output	
Test	Requirement	Observation	Pass
5.20.2	CH002, $\leq 1.0 \mu V$		✓
	CH003, $\leq 1.0 \mu V$		✓
5.21 GD1 Receiver Audio Output Power			
5.21.1	100 $\pm$ 10 mW	100mW	✓
5.22 GD1 Receiver Audio Distortion			
5.22.1	<5% distortion		✓
5.23 GD1 Receiver Sensitivity			
5.23.1	≥ 12 dB SINAD		✓
5.24 GD1 Receiver Audio Squelch			
5.24.1	GD1, un-squelch @ $0.7 \pm 0.2 \mu V$	0.84 μV	✓
	Squelch again @ $0.3 \pm 0.2 \mu V$	0.37 μV	✓
	LED illuminates with presence of audio		✓
5.25 GD2			
5.25.1	100 $\pm$ 10 mW	100mW	✓
	<5% distortion		✓
	≥ 12 dB SINAD		✓
	GD2, un-squelch @ $0.7 \pm 0.2 \mu V$	0.84 μV	✓
	Squelch again @ $0.3 \pm 0.2 \mu V$	0.38 μV	✓
	LED illuminates with presence of audio		✓
6. Visual Inspection			
6.1 Enclosure	No defects or omissions found		✓

Authorized Inspection		
Stamp: 	Signature: 	Date: SEP 04 2018

1. Approving Civil Aviation Authority Country Transport Canada		2. AUTHORIZED RELEASE CERTIFICATE FORM ONE			3. Form tracking No. REP 10626	
4. Organization name and address		 Anodyne Electronics Manufacturing Corp. #15-1925 Kirschner Road Kelowna, B.C. V1Y 4N7 CANADA			5. Work order/contract/invoice 69235	
6. Item 1.	7. Description Cobham Remote Mount Transceiver	8. Part No. NTX138-062	9. Qty. 1	10. Serial/batch No. 1174	11. Status/work Repaired	
12. Remarks 1. Unit inspected and tested in accordance with manufacturer's specifications. Record of work on file at AEM, reference Work Order number: 69235 EASA Approval No. EASA.145.7222 Data used: Service Manual SM28 Rev. 4.10. Complies with TC STC #SH05-12 and #SA07-25. Install MOD21 (M706). Re-aligned main Receiver, Mic gain level & deviation were set. Replaced Guard filters FL401A & FL401B, Re-aligned Guard board receiver. ATP ATP completed						
13a. Certifies that the items identified above were manufactured in conformity to. ☐ Approved design data and are in condition for safe operation. ☐ Non approved design data specified in block 12.			14a. ☒ CAR 571.10 Maintenance release. ☒ Other regulations specified in block 12. Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12 has been performed in compliance with the Canadian Aviation Regulations.			
13b. Signature N/A		13c. Approved Organization Number N/A		14b. Signature  		14c. Approved Organization Number AMO #91-09
13d. Name N/A		13e. Date(dd/mmm/yyyy) N/A		14d. Name Rodney Hyndman		14e. Date(dd/mmm/yyyy) 04 Sep 2018

Important: See notes below.

INSTALLER RESPONSIBILITIES

1. This certificate does not constitute authority to install.
2. Installers working in accordance with the national regulations of a country other than that specified in Block 1, must ensure that their regulations recognize certifications from the country specified.
3. Statements in Blocks 13a or 14a do not constitute installation certification. In all case's, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.