

PART 80 COMPLIANCE REPORT

REVISIONS			
Revision Level	Approval	Date	Description
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A			

ACR ELECTRONICS INC
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DRAWN. Bill Cox		9/4/2000
CHECKED.		
ENG Bill Cox		10/10/2000
APVD		
A	18560	Sheet 1
SIZE	CODE IDENT NO	Of 4

**Amended [2]
ACR South Africa
TELLUSART MKII
FCC Part 80.1101
Compliance Report**

Compliance Report

A-3

To: Bill Cox, ACR Electronics, Inc.
From: Errol Chang
echang@fcc.gov
FCC Application Processing Branch

Re: **FCC ID 05HNAT-SARTII**

Applicant: Northern Airborne Technology, Inc.
Correspondence Reference Number: 16421,
731 Confirmation Number: EA98330
Date of Original E-Mail: 10/03/2000

Re: **FCC ID B66ACR-SART-3**

Applicant: ACR Electronics Inc
Correspondence Reference Number: 16423
731 Confirmation Number: EA98354
Date of Original E-Mail: 10/03/2000

1. No bandwidth data - please provide
2. Provide details regarding how the output power was measured and state units.
3. Please provide letter requesting confidentiality as requested in section 0.459 of the rules.
Note that items such as photos and test report cannot be kept confidential
4. Cannot verify fee - please clarify or contact Bette Taube (btaub@fcc.gov) for assistance with fee payment

Part 2 compliance matrix Section 2.1046

2.1046 - Measurements required: RF power output. - Unit complies.

- a) Transmitter was tuned per SART acceptance TP.pdf to give the values within the specified range of paragraph 3.3.1 of acceptance test procedure. The electrical load was 50 ohm during initial alignment then after matched antenna is installed the power was then checked again radiated at 1 meter and results are recorded in appendix A of test procedure.
Test voltage was 12.0 Vdc.
Current in transmit mode was 120mA.
Output power was 28 dBm

- b) Not applicable

Test method and calculations for power were done by outside lab pursuant to ITU-R M.628-1 standard using IEC 1097-1 Radar Transponder Marine search and rescue methods of testing and required test results. All data is in Test Report 1.pdf page 15-16.

Details regarding how the radiated output power was measured and units.

Specification- 400mW E.I.R.P (26 dBm) Minimum.

A radar test signal at a 1kHz rate was used to interrogate the SART transponder. The SART was rotated 360 degrees in the horizontal plane and the signal levels were recorded every 22.5° at an elevation of ±12.5°.

The variation from the Calibration test signal (that was at 26 dBm) was recorded in test report 1, page 16 in dBm. Then the units were added to 26 dBm and the final power levels were recorded on page 16.

Bandwidth Data: occupied bandwidth was measured and the results are in Test report1.pdf, none of the examples and methods in this chapter paragraph apply. See spectral plot below of bandwidth.

- 1.) The SART by specification sweeps constantly over the band of 9.2 GHz (+0/-60MHz) to 9.5 GHz (+60/-0MHz) every time the transponder is interrogated. The performance of this sweep is verified over the temperature range -20 to + 55 degrees.

See compliance data in test report 1.pdf

LOW temperature data on page 10.

High Temperature data on Page 9.

Ambient data on page 14.

- 2.) SPECTRAL PLOT OF BANDWIDTH

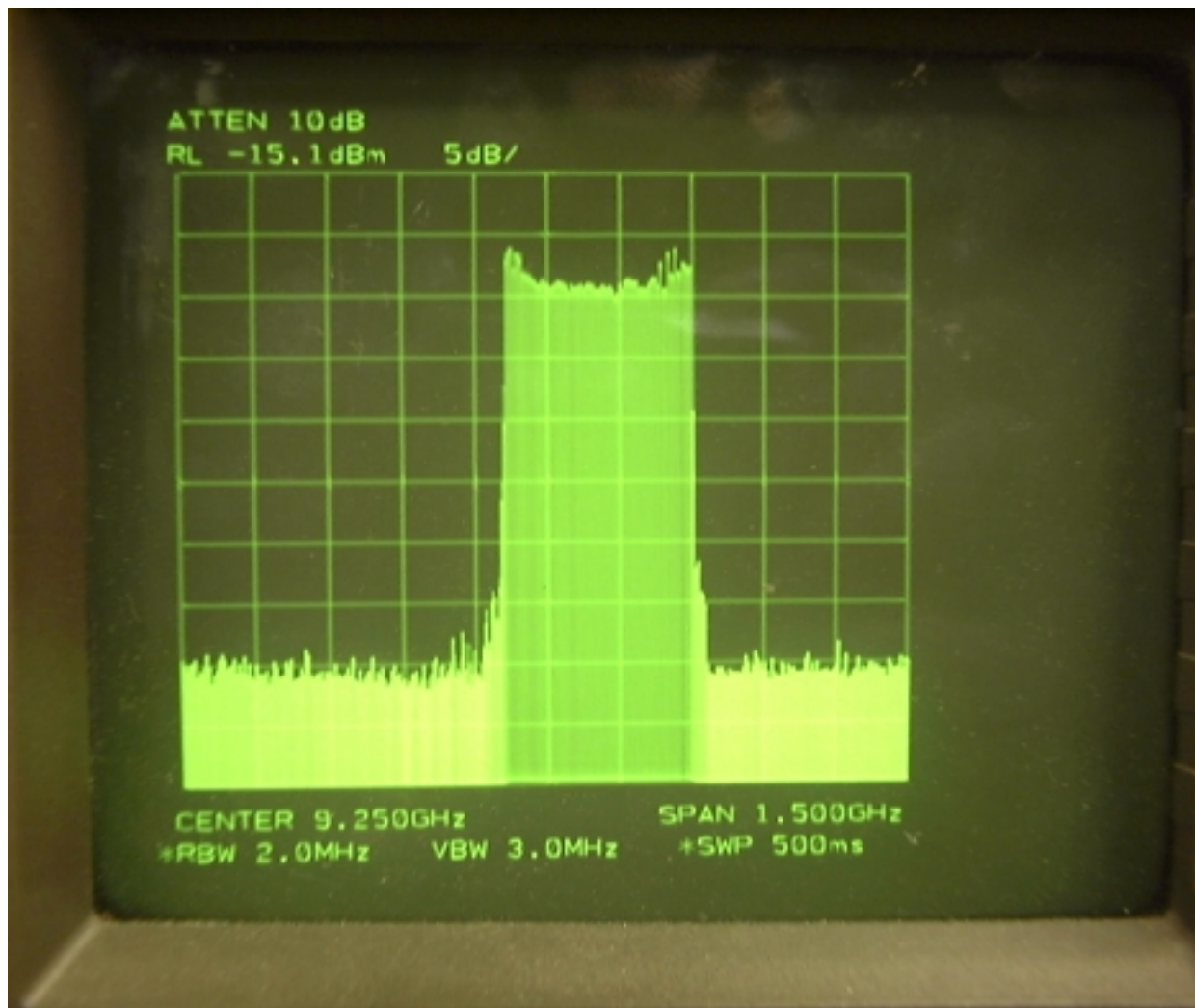
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NO
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-2-

TEST PROCEDURE
**Part 80 compliance
SART**

REV
A-3



SPECTRAL PLOT OF SART BANDWIDTH.

- 3.) Confidentiality- was only meant to be applied to the schematic diagrams, it was an inadvertent mistake to mark any test report confidential. Please mark accordingly.
- 4.) Fees. According to the FCC Remittance Advice it required us to pay a total of \$655 in which we have done so. We mailed a check (#016305) in the amount of \$610 which covered the EBC fee of \$135 and also the EFT fee of \$475. Payment for the EAG fee of \$45 was paid by a personal credit card. Remittance ID# 66644, Authorization number: 307942.

Best Regards,
Bill Cox
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ACR ELECTRONICS INC.	CODE IDENT NO 18560	SHEET -3-	TEST PROCEDURE Part 80 compliance SART	REV A-3
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