

*FCC Class II
Permissive Change
Test Report*



**FCC Class II Permissive Change
Test Report
for
PAT America
FCC ID: RMH3001**

December 8, 2003

Prepared for:

**PAT America
1665 Orchard Drive
Chambersburg, PA 17201**

Prepared By:

**Washington Laboratories, Ltd.
7560 Lindbergh Drive
Gaithersburg, Maryland 20879**

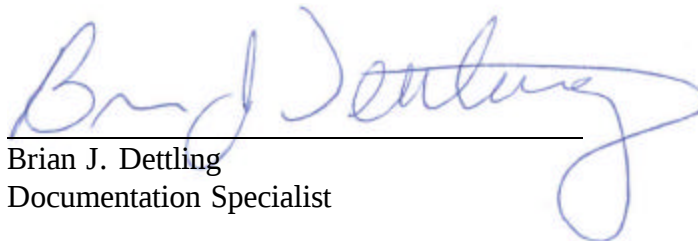


FCC Class II Permissive Change Test Report
for the
PAT America
PATB2 Warning Transmitter
RMH3001

December 8, 2003

WLL JOB# 7866

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Abstract

This report has been prepared on behalf of PAT America to support the attached Application for a Class II Permissive Change to existing certified equipment. The test report and application are submitted for a Intentional Radiator under Part 15.249 of the FCC Rules and Regulations. This Federal Communication Commission (FCC) Class II Permissive Change Test Report documents the test configuration and test results for a PAT America PATB2 Warning Transmitter.

Testing was performed on an Open Area Test Site (OATS) of Washington Laboratories, Ltd, 7560 Lindbergh Drive, Gaithersburg, MD 20879. Site description and site attenuation data have been placed on file with the FCC's Sampling and Measurements Branch at the FCC laboratory in Columbia, MD. Washington Laboratories, Ltd. has been accepted by the FCC and approved by NIST NVLAP (NVLAP Lab Code: 200066-0) as an independent FCC test laboratory.

The PAT America PATB2 Warning Transmitter complies with the limits for an Intentional Radiator device under Part 15.249 of the FCC Rules and Regulations.

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1 Introduction

1.1 Compliance Statement

The PAT America PATB2 Warning Transmitter complies with the limits for an Intentional Radiator device under Part 15.249 of the FCC Rules and Regulations.

1.2 Test Scope

Tests for radiated emissions were performed. All measurements were performed according to the 2001 version of ANSI C63.4. The measurement equipment conforms to ANSI C63.2 Specifications for Electromagnetic Noise and Field Strength Instrumentation.

1.3 Contract Information

Customer: PAT America
1665 Orchard Drive
Chambersburg, PA 17201

Quotation Number: 61254

1.4 Test Dates

Testing was performed on November 18, 2003.

1.5 Test and Support Personnel

Washington Laboratories, LTD	James Ritter
Client Representative	Paul Eyster, Michael Coons

1.6 Abbreviations

A	Ampere
Ac	alternating current
AM	Amplitude Modulation
Amps	Amperes
b/s	bits per second
BW	Bandwidth
CE	Conducted Emission
cm	Centimeter
CW	Continuous Wave
dB	Decibel
dc	direct current
EMI	Electromagnetic Interference
EUT	Equipment Under Test
FM	Frequency Modulation
G	giga - prefix for 10^9 multiplier
Hz	Hertz
IF	Intermediate Frequency
k	kilo - prefix for 10^3 multiplier
M	Mega - prefix for 10^6 multiplier
m	Meter
μ	micro - prefix for 10^{-6} multiplier
NB	Narrowband
LISN	Line Impedance Stabilization Network
RE	Radiated Emissions
RF	Radio Frequency
rms	root-mean-square
SN	Serial Number
S/A	Spectrum Analyzer
V	Volt

2 Equipment Under Test

2.1 EUT Identification & Description

The PAT America PATB2 Warning Transmitter is an Anti-Two-block System that has been designed to warn the crane operator of a two-blocking condition of the crane. If a two-blocking condition is approached, the system will warn the operator by sounding an audible alarm, lighting a warning light and locking out those functions which may aggravate the crane's condition, whenever applicable.

The term "two-block" is a crane term that refers to a condition when the load handling device comes in contact with the boom head. This condition, if not prevented, may cause the wire rope to break, allowing the load to fall. Either raising the load into the boom head, or telescoping the boom out without paying attention to the hoist line can cause a "two-block" condition.

2.2 Discussion of Product Changes

The PATB2 has been production modified from the original configuration certified under FCC ID: RMH3001. The addition of a 1/2 wave whip style antenna was incorporated to enable reliable operation in a high RF level environment.

Table 1. Device Summary

ITEM	DESCRIPTION
Manufacturer:	PAT America
FCC ID Number	RMH3001
EUT Name:	Warning Transmitter
Model:	PATB2
FCC Rule Parts:	§15.249
Frequency Range:	902 – 928 MHz
Maximum Output Power:	<1mW
Modulation:	FSK
Occupied Bandwidth:	314 kHz
Keying:	Automatic
Type of Information:	Control
Number of Channels:	3
Antenna Type	1/2Wave Whip, Reverse SMA Connector
Interface Cables:	None
Power Source & Voltage:	6 Vdc from 4 "C" batteries

2.3 Test Configuration

The PATB2 was tested in a stand-alone configuration. The EUT was positioned on the test site turn-table as it will be mounted in use.

2.4 Testing Algorithm

The PATB2 was set for continuous transmission on the three channels.

Worst case emission levels are provided in the test results data.

2.5 Test Location

All measurements herein were performed at Washington Laboratories, Ltd. test center in Gaithersburg, MD. Site description and site attenuation data have been placed on file with the FCC's Sampling and Measurements Branch at the FCC laboratory in Columbia, MD. Washington Laboratories, Ltd. has been accepted by the FCC and approved by NIST NVLAP (NVLAP Lab Code: 200066-0) as an independent FCC test laboratory.

2.6 Measurements

2.6.1 References

ANSI C63.2 Specifications for Electromagnetic Noise and Field Strength Instrumentation

ANSI C63.4 American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

Land Mobile FM or PM Communications Equipment Measurement and Performance Standards (ANSI/TIA/EIA-603-93)

2.7 Measurement Uncertainty

All results reported herein relate only to the equipment tested. For the purposes of the measurements performed by Washington Laboratories, the measurement uncertainty is ± 2.3 dB. This has been calculated for a *worst-case situation* (radiated emissions measurements performed on an open area test site).

The following measurement uncertainty calculation is provided:

$$\text{Total Uncertainty} = (A^2 + B^2 + C^2)^{1/2}/(n-1)$$

where:

A = Antenna calibration uncertainty, in dB = 2 dB

B = Spectrum Analyzer uncertainty, in dB = 1 dB

C = Site uncertainty, in dB = 4 dB

n = number of factors in uncertainty calculation = 3

Thus, Total Uncertainty = $0.5 (2^2 + 1^2 + 4^2)^{1/2} = \pm 2.3$ dB.

3 Test Equipment

Table 2 shows a list of the test equipment used for measurements along with the calibration information.

Table 2: Test Equipment List

Manufacturer	Model/Type	Function	Identification	Cal. Due
HP	8568B	Spectrum Analyzer	2634A02888	7/07/04
HP	85650A	Quasi-Peak Adapter	3303A01786	7/08/04
ARA	LPB-2520	BiconiLog Antenna	1044	6/20/04
HP	85685A	RF Preselector	3221A01395	7/07/04
EMCO	3110B	Biconical Antenna	9808-1078	6/20/04
EMCO	3146A	Log Periodic Antenna	8912-1129	6/20/04
HP	8564E	Spectrum Analyzer	3643A00657	5/22/04
ARA	DRG-118/A	Horn Antenna	1010	12/28/2003
HP	8449B	Pre-Amplifier	3008A00729	2/11/04

4 Test Results

4.1 Band Edge Measurements:

Band edge plots at 902MHz and 928MHz were made with the unit transmitting in the Low channel (906.35MHz) and the High channel (921.35MHz) respectively. The marker on the graph is located at the 902MHz and 928MHz band edge respectively. The emissions were made on the OATS and no correction factors have been applied to the levels indicated on the plots. However, Table 3 lists the corrected levels of the emissions at the band edge for comparison to the limit. Figure 1 and Figure 2 are plots of the band edge emissions.

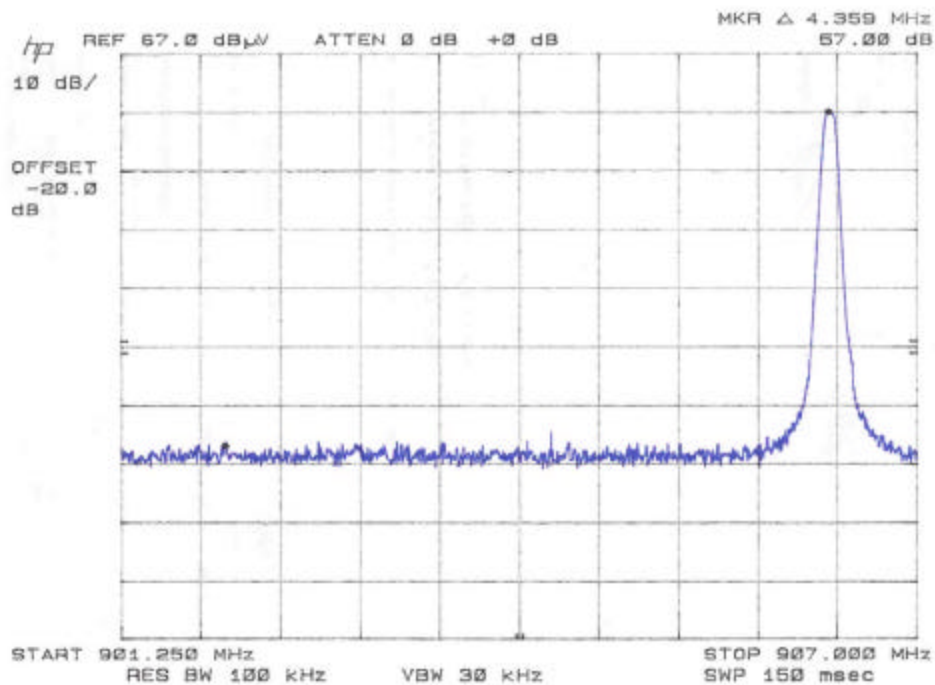


Figure 1: 901MHz Band Edge Plot

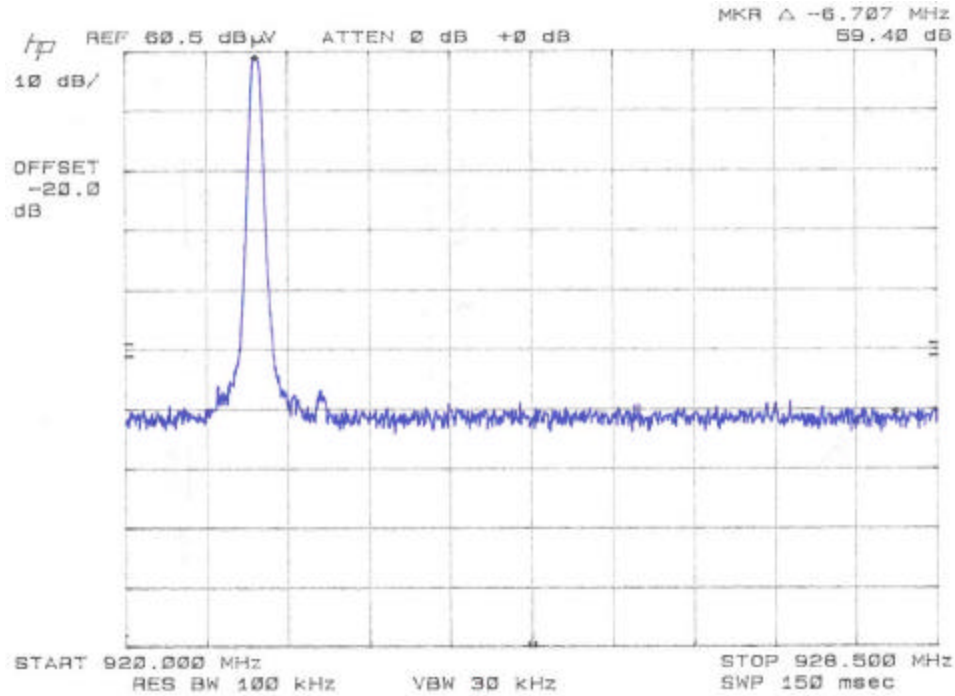


Figure 2: 920MHz Band Edge Plot

4.2 Radiated Emissions: (FCC Part §2.1053)

The EUT must comply with the radiated emission limits of 15.249(a). The limits are as shown in the following table.

Table 3. Radiated Emissions Limits

Fundamental Frequency	Field Strength of Fundamental ($\mu\text{V/m}$)	Field Strength of Harmonics ($\mu\text{V/m}$)
902 – 928 MHz	50,000	500
2400 – 2483.5 MHz	50,000	500
5725 – 5875 MHz	50,000	500
24.00 – 24.25 GHz	250,000	2500

4.2.1 Test Procedure

The EUT was placed on motorized turntable for radiated testing on a 3-meter open field test site. The emissions from the EUT were measured continuously at every azimuth by

Table 4. Radiated Emissions Test Data, Fundamental Frequencies

CLIENT:	PAT America	DATE:	11/18/03
TESTER:	James Ritter	JOB #:	7866
<u>EUT Information:</u>		<u>Test Requirements:</u>	
EUT:	PATB2	TEST STANDARD:	FCC Part 15.249
CONFIGURATION:	Constant Transmit	DISTANCE:	3m
CLOCKS:	906, 912.38, 912.4 MHz	CLASS:	B
S/N:	1027405 with new antenna		
<u>Test Equipment/Limit:</u>			
ANTENNA:	A_00007	CABLE:	CSITE2_3m
LIMIT:	LFCC_3m_Class_B	AMPLIFIER (dB)	None

Quasi-Peak Data :

Frequency	Polarity	Azimuth	Ant. Hght	SA Level (QP)	Ant. Corr.	Cable Corr.	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Degree	(m)	(dBµV)	(dB/m)	(dB)	(dBµV/m)	(µV/m)	(µV/m)	dB
906.00	H	165.0	1.3	54.1	21.7	4.5	80.2	10260.4	50000.0	-13.8
906.00	V	190.0	1.8	58.2	21.7	4.5	84.3	16450.0	50000.0	-9.7
912.38	H	125.0	2.2	51.2	22.0	4.5	77.7	7640.1	50000.0	-16.3
912.38	V	190.0	1.6	59.2	22.0	4.5	85.7	19191.1	50000.0	-8.3
921.38	H	160.0	2.2	53.7	22.4	4.6	80.6	10743.1	50000.0	-13.4
921.38	V	190.0	1.7	61.3	22.4	4.6	88.2	25771.0	50000.0	-5.8

Table 5. Radiated Emissions Data, Channel 1 Harmonics

CLIENT:	PAT America	DATE:	11/18/03
TESTER:	James Ritter	JOB #:	7866
<u>EUT Information:</u>		<u>Test Requirements:</u>	
EUT:	PATB2	TEST STANDARD:	FCC Part 15.249
CONFIGURATION:	Constant Transmit	DISTANCE:	3m
CLOCKS:	906 MHz	CLASS:	B
S/N:	1027405		
<u>Test Equipment/Limit:</u>			
ANTENNA:	A_00425	CABLE:	CSITE2_HF
LIMIT:	LFCC_3m_Class_B	AMPLIFIER (dB)	A_00066

Average Data:

Frequency (MHz)	Polarity H/V	Azimuth Degree	Ant. Hght (m)	SA Level (Avg.) (dBµV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp Gain (dB)	Corr. Level (dBµV/m)	Corr. Level (µV/m)	Limit (µV/m)	Margin dB
1812.76	H	180.0	1.0	46.2	28.6	3.1	35.6	42.3	130.0	500.0	-11.7
2719.14	H	180.0	1.0	46.5	30.3	2.9	35.6	44.1	160.5	500.0	-9.9
3625.52	H	180.0	1.0	43.0	31.0	2.8	35.5	41.3	116.2	500.0	-12.7
4531.90	H	0.0	1.0	34.9	32.6	3.7	35.7	35.5	59.2	500.0	-18.5
5438.28	H	45.0	1.0	33.5	34.4	4.3	35.8	36.4	66.0	500.0	-17.6
6344.66	H	180.0	1.0	33.0	36.0	4.2	35.6	37.6	75.6	500.0	-16.4 a
7251.04	H	200.0	1.0	34.5	37.6	4.5	35.9	40.8	109.5	500.0	-13.2 a
8157.42	H	190.0	1.0	34.8	38.4	4.9	36.1	42.0	125.4	500.0	-12.0 a
9063.80	H	180.0	1.0	34.3	39.1	4.9	36.2	42.1	127.4	500.0	-11.9 a
1812.76	V	45.0	1.0	47.3	28.6	3.1	35.6	43.4	148.5	500.0	-10.5
2719.14	V	90.0	1.0	41.7	30.3	2.9	35.6	39.3	92.0	500.0	-14.7
3625.52	V	0.0	1.0	46.0	31.0	2.8	35.5	44.3	164.1	500.0	-9.7
4531.90	V	65.0	1.0	41.5	32.6	3.7	35.7	42.1	127.1	500.0	-11.9
5438.28	V	280.0	1.0	33.0	34.4	4.3	35.8	35.9	62.3	500.0	-18.1
6344.66	V	180.0	1.0	32.7	36.0	4.2	35.6	37.2	72.8	500.0	-16.7 a
7251.04	V	270.0	1.0	34.5	37.6	4.5	35.9	40.8	109.5	500.0	-13.2 a
8157.42	V	0.0	1.0	34.8	38.4	4.9	36.1	41.9	125.0	500.0	-12.0 a
9063.80	V	0.0	1.0	34.3	39.1	4.9	36.2	42.1	127.4	500.0	-11.9 a

a = ambient

Table 5. Radiated Emissions Data, Channel 1 Harmonics continued

Peak Data, Channel 1:

Frequency (MHz)	Polarity H/V	Azimuth Degree	Ant. Hght (m)	SA Level (Peak) (dBμV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp Gain (dB)	Corr. Level (dBμV/m)	Corr. Level (μV/m)	Limit (μV/m)	Margin dB
1812.76	H	180.0	1.0	51.7	28.6	3.1	35.6	47.8	244.8	5000.0	-26.2
2719.14	H	180.0	1.0	51.7	30.3	2.9	35.6	49.3	291.0	5000.0	-24.7
3625.52	H	180.0	1.0	50.2	31.0	2.8	35.5	48.5	265.2	5000.0	-25.5
4531.90	H	0.0	1.0	45.3	32.6	3.7	35.7	45.9	197.5	5000.0	-28.1
5438.28	H	45.0	1.0	47.0	34.4	4.3	35.8	49.9	312.2	5000.0	-24.1
6344.66	H	180.0	1.0	47.0	36.0	4.2	35.6	51.6	379.0	5000.0	-22.4
7251.04	H	200.0	1.0	46.5	37.6	4.5	35.9	52.8	435.8	5000.0	-21.2 a
8157.42	H	190.0	1.0	47.0	38.4	4.9	36.1	54.1	509.3	5000.0	-19.8 a
9063.80	H	180.0	1.0	45.7	39.1	4.9	36.2	53.4	470.2	5000.0	-20.5 a
1812.76	V	45.0	1.0	52.3	28.6	3.1	35.6	48.4	264.1	5000.0	-25.5
2719.14	V	90.0	1.0	49.0	30.3	2.9	35.6	46.6	214.0	5000.0	-27.4
3625.52	V	0.0	1.0	52.2	31.0	2.8	35.5	50.5	333.9	5000.0	-23.5
4531.90	V	65.0	1.0	48.5	32.6	3.7	35.7	49.1	284.5	5000.0	-24.9
5438.28	V	280.0	1.0	44.8	34.4	4.3	35.8	47.7	243.1	5000.0	-26.3
6344.66	V	180.0	1.0	46.5	36.0	4.2	35.6	51.1	357.8	5000.0	-22.9
7251.04	V	270.0	1.0	48.2	37.6	4.5	35.9	54.5	528.2	5000.0	-19.5 a
8157.42	V	0.0	1.0	48.7	38.4	4.9	36.1	55.8	617.2	5000.0	-18.2 a
9063.80	V	0.0	1.0	48.3	39.1	4.9	36.2	56.1	638.7	5000.0	-17.9 a

a = ambient

Table 6. Radiated Emissions Data, Channel 2 Harmonics

CLIENT:	PAT America	DATE:	11/18/03
TESTER:	James Ritter	JOB #:	7866

<u>EUT Information:</u>		<u>Test Requirements:</u>	
EUT:	PATB2	TEST STANDARD:	FCC Part 15.249
CONFIGURATION:	Constant Transmit	DISTANCE:	3m
CLOCKS:	912.38 MHz	CLASS:	B
S/N:	1027405		

<u>Test Equipment/Limit:</u>			
ANTENNA:	A_00425	CABLE:	CSITE2_HF
LIMIT:	LFCC_3m_Class_B	AMPLIFIER (dB)	A_00066

Average Data:

Frequency (MHz)	Polarity H/V	Azimuth Degree	Ant. Hght (m)	SA Level (Avg.) (dBµV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp Gain (dB)	Corr. Level (dBµV/m)	Corr. Level (µV/m)	Limit (µV/m)	Margin dB
1824.76	H	180.0	1.0	43.5	28.7	3.1	35.6	39.7	96.4	500.0	-14.3
2737.14	H	200.0	1.0	45.3	30.4	2.9	35.6	42.9	140.4	500.0	-11.0
3649.52	H	180.0	1.0	43.0	31.0	2.8	35.5	41.3	116.4	500.0	-12.7
4561.90	H	190.0	1.0	32.1	32.7	3.8	35.8	32.8	43.6	500.0	-21.2
5474.28	H	160.0	1.0	33.1	34.4	4.3	35.8	36.0	63.4	500.0	-17.9
6386.66	H	90.0	1.0	33.1	36.1	4.2	35.6	37.8	77.4	500.0	-16.2 a
7299.04	H	180.0	1.0	34.5	37.7	4.6	35.9	40.8	110.1	500.0	-13.1
8211.42	H	90.0	1.0	34.7	38.5	4.9	36.1	41.8	123.7	500.0	-12.1 a
9123.80	H	180.0	1.0	34.8	39.1	4.9	36.2	42.7	136.3	500.0	-11.3 a
1824.76	V	180.0	1.0	46.7	28.7	3.1	35.6	42.8	138.8	500.0	-11.1
2737.14	V	45.0	1.0	44.2	30.4	2.9	35.6	41.8	122.8	500.0	-12.2
3649.52	V	0.0	1.0	49.5	31.0	2.8	35.5	47.8	246.1	500.0	-6.2
4561.90	V	90.0	1.0	36.7	32.7	3.8	35.8	37.4	74.0	500.0	-16.6
5474.28	V	0.0	1.0	34.1	34.4	4.3	35.8	37.0	71.2	500.0	-16.9
6386.66	V	10.0	1.0	32.8	36.1	4.2	35.6	37.5	75.0	500.0	-16.5 a
7299.04	V	0.0	1.0	34.7	37.7	4.6	35.9	41.0	112.3	500.0	-13.0 a
8211.42	V	200.0	1.0	34.7	38.5	4.9	36.1	41.8	123.7	500.0	-12.1 a
9123.80	V	0.0	1.0	34.0	39.1	4.9	36.2	41.9	123.8	500.0	-12.1 a

a = ambient

Table 6. Radiated Emissions Data, Channel 2 Harmonics continued

Peak Data, Channel 2:

Frequency (MHz)	Polarity H/V	Azimuth Degree	Ant. Hght (m)	SA Level (Peak) (dB μ V)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp Gain (dB)	Corr. Level (dB μ V/m)	Corr. Level (μ V/m)	Limit (μ V/m)	Margin dB
1824.76	H	180.0	1.0	50.7	28.7	3.1	35.6	46.8	220.0	5000.0	-27.1
2737.14	H	200.0	1.0	51.1	30.4	2.9	35.6	48.7	272.8	5000.0	-25.3
3649.52	H	180.0	1.0	51.0	31.0	2.8	35.5	49.3	292.5	5000.0	-24.7
4561.90	H	190.0	1.0	43.0	32.7	3.8	35.8	43.7	152.9	5000.0	-30.3
5474.28	H	160.0	1.0	37.2	34.4	4.3	35.8	40.1	101.3	5000.0	-33.9
6386.66	H	90.0	1.0	42.0	36.1	4.2	35.6	46.7	215.5	5000.0	-27.3 a
7299.04	H	180.0	1.0	48.3	37.7	4.6	35.9	54.7	541.2	5000.0	-19.3
8211.42	H	90.0	1.0	46.0	38.5	4.9	36.1	53.2	455.8	5000.0	-20.8 a
9123.80	H	180.0	1.0	46.6	39.1	4.9	36.2	54.5	528.3	5000.0	-19.5 a
1824.76	V	180.0	1.0	51.7	28.7	3.1	35.6	47.8	246.8	5000.0	-26.1
2737.14	V	45.0	1.0	50.0	30.4	2.9	35.6	47.6	240.3	5000.0	-26.4
3649.52	V	0.0	1.0	53.7	31.0	2.8	35.5	52.0	397.8	5000.0	-22.0
4561.90	V	90.0	1.0	46.2	32.7	3.8	35.8	46.9	220.2	5000.0	-27.1
5474.28	V	0.0	1.0	45.8	34.4	4.3	35.8	48.7	273.7	5000.0	-25.2
6386.66	V	10.0	1.0	46.3	36.1	4.2	35.6	51.0	354.8	5000.0	-23.0
7299.04	V	0.0	1.0	47.0	37.7	4.6	35.9	53.3	464.3	5000.0	-20.6 a
8211.42	V	200.0	1.0	47.7	38.5	4.9	36.1	54.8	552.5	5000.0	-19.1 a
9123.80	V	0.0	1.0	47.7	39.1	4.9	36.2	55.5	597.5	5000.0	-18.5 a

a = ambient

Table 7. Radiated Emissions Data, Channel 3 Harmonics

CLIENT:	PAT America	DATE:	11/18/03
TESTER:	James Ritter	JOB #:	7866
<u>EUT Information:</u>		<u>Test Requirements:</u>	
EUT:	PATB2	TEST STANDARD:	FCC Part 15.249
CONFIGURATION:	Constant Transmit	DISTANCE:	3m
CLOCKS:	921.38MHz	CLASS:	B
S/N:	1027405		
<u>Test Equipment/Limit:</u>			
ANTENNA:	A_00425	CABLE:	CSITE2_HF
LIMIT:	LFCC_3m_Class_B	AMPLIFIER (dB)	A_00066

Average Data:

Frequency (MHz)	Polarity H/V	Azimuth Degree	Ant. Hght (m)	SA Level (Avg) (dBµV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp Gain (dB)	Corr. Level (dBµV/m)	Corr. Level (µV/m)	Limit (µV/m)	Margin dB
1842.76	H	180.0	1.0	40.8	28.7	3.2	35.6	37.1	71.7	500.0	-16.9
2764.14	H	190.0	1.0	49.2	30.4	2.9	35.7	46.8	218.8	500.0	-7.2
3685.52	H	180.0	1.0	46.3	31.1	2.8	35.5	44.7	171.4	500.0	-9.3
4606.90	H	90.0	1.0	36.0	32.8	3.9	35.8	36.8	69.5	500.0	-17.1
5528.28	H	180.0	1.0	32.5	34.5	4.2	35.7	35.5	59.8	500.0	-18.4
6449.66	H	180.0	1.0	33.0	36.2	4.2	35.6	37.8	77.8	500.0	-16.2 a
7371.04	H	270.0	1.0	34.3	37.7	4.6	35.9	40.7	108.9	500.0	-13.2 a
8292.42	H	0.0	1.0	35.2	38.5	4.9	36.1	42.4	131.8	500.0	-11.6 a
9213.80	H	10.0	1.0	34.7	39.2	5.0	36.3	42.6	135.6	500.0	-11.3 a
1842.76	V	20.0	1.0	40.8	28.7	3.2	35.6	37.1	71.5	500.0	-16.9
2764.14	V	90.0	1.0	41.0	30.4	2.9	35.7	38.6	85.4	500.0	-15.3
3685.52	V	0.0	1.0	51.0	31.1	2.8	35.5	49.4	293.5	500.0	-4.6
4606.90	V	90.0	1.0	35.8	32.8	3.9	35.8	36.7	68.2	500.0	-17.3
5528.28	V	0.0	1.0	33.3	34.5	4.2	35.7	36.4	65.8	500.0	-17.6
6449.66	V	90.0	1.0	33.2	36.2	4.2	35.6	38.0	79.3	500.0	-16.0 a
7371.04	V	270.0	1.0	34.3	37.7	4.6	35.9	40.7	108.9	500.0	-13.2 a
8292.42	V	180.0	1.0	35.0	38.5	4.9	36.1	42.2	129.3	500.0	-11.7 a
9213.80	V	180.0	1.0	34.8	39.2	5.0	36.3	42.8	138.2	500.0	-11.2 a

a = ambient

Table 7. Radiated Emissions Data, Channel 3 Harmonics, continued
Peak Data, Channel 3:

Frequency (MHz)	Polarity H/V	Azimuth Degree	Ant. Hght (m)	SA Level (Peak) (dB μ V)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp Gain (dB)	Corr. Level (dB μ V/m)	Corr. Level (μ V/m)	Limit (μ V/m)	Margin dB
1842.76	H	180.0	1.0	49.8	28.7	3.2	35.6	46.1	201.4	5000.0	-27.9
2764.14	H	190.0	1.0	53.8	30.4	2.9	35.7	51.5	374.1	5000.0	-22.5
3685.52	H	180.0	1.0	51.7	31.1	2.8	35.5	50.0	317.0	5000.0	-24.0
4606.90	H	90.0	1.0	47.0	32.8	3.9	35.8	47.8	246.7	5000.0	-26.1
5528.28	H	180.0	1.0	45.6	34.5	4.2	35.7	48.6	270.1	5000.0	-25.3
6449.66	H	180.0	1.0	44.3	36.2	4.2	35.6	49.1	285.6	5000.0	-24.9
7371.04	H	270.0	1.0	47.8	37.7	4.6	35.9	54.2	515.3	5000.0	-19.7 a
8292.42	H	0.0	1.0	47.7	38.5	4.9	36.1	54.9	557.9	5000.0	-19.0 a
9213.80	H	10.0	1.0	48.5	39.2	5.0	36.3	56.5	666.6	5000.0	-17.5 a
1842.76	V	20.0	1.0	50.1	28.7	3.2	35.6	46.4	208.5	5000.0	-27.6
2764.14	V	90.0	1.0	49.8	30.4	2.9	35.7	47.5	236.1	5000.0	-26.5
3685.52	V	0.0	1.0	54.5	31.1	2.8	35.5	52.9	439.1	5000.0	-21.1
4606.90	V	90.0	1.0	46.3	32.8	3.9	35.8	47.2	228.4	5000.0	-26.8
5528.28	V	0.0	1.0	46.1	34.5	4.2	35.7	49.1	286.1	5000.0	-24.8
6449.66	V	90.0	1.0	45.8	36.2	4.2	35.6	50.6	340.6	5000.0	-23.3
7371.04	V	270.0	1.0	46.7	37.7	4.6	35.9	53.1	450.9	5000.0	-20.9 a
8292.42	V	180.0	1.0	47.3	38.5	4.9	36.1	54.6	534.6	5000.0	-19.4 a
9213.80	V	180.0	1.0	46.5	39.2	5.0	36.3	54.5	529.5	5000.0	-19.5 a

a = ambient