

## TABLE OF CONTENTS LIST

APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

### TEST REPORT:

|      |                                                            |
|------|------------------------------------------------------------|
| PAGE | 1.....COVER SHEET - GENERAL INFORMATION & TECHNICAL DESCR. |
| PAGE | 2.....TECHNICAL DESCRIPTION CONTINUED                      |
| PAGE | 3.....RF POWER OUTPUT                                      |
| PAGE | 4.....MODULATION CHARACTERISTICS                           |
| PAGE | 5.....AUDIO FREQUENCY RESPONSE GRAPH                       |
| PAGE | 6.....MODULATION LIMITING GRAPH - 300Hz                    |
| PAGE | 7.....MODULATION LIMITING GRAPH - 1000Hz                   |
| PAGE | 8.....MODULATION LIMITING GRAPH - 2500Hz                   |
| PAGE | 9.....AUDIO LOW PASS FILTER GRAPH                          |
| PAGE | 10.....OCCUPIED BANDWIDTH                                  |
| PAGE | 11.....OCCUPIED BANDWIDTH PLOT                             |
| PAGE | 12.....OCCUPIED BANDWIDTH PLOT - CW                        |
| PAGE | 13.....SPURIOUS EMISSIONS AT ANTENNA TERMINALS             |
| PAGE | 14.....UNWANTED RADIATION                                  |
| PAGE | 15.....METHOD OF MEASURING RADIATED SPURIOUS EMISSIONS     |
| PAGE | 16.....FREQUENCY STABILITY                                 |
| PAGE | 17-19..LIST OF TEST EQUIPMENT                              |

### EXHIBITS CONTAINING:

|         |                            |
|---------|----------------------------|
| EXHIBIT | 1.....FCC ID LABEL SAMPLE  |
| EXHIBIT | 2.....LABEL LOCATION       |
| EXHIBIT | 3.....EXTERNAL PHOTOGRAPHS |
| EXHIBIT | 4.....INTERNAL PHOTOGRAPHS |
| EXHIBIT | 5.....BLOCK DIAGRAM        |
| EXHIBIT | 6.....SCHEMATICS           |
| EXHIBIT | 7.....USER'S MANUAL        |
| EXHIBIT | 8.....CIRCUIT DESCRIPTION  |
| EXHIBIT | 9.....TUNING PROCEDURE     |
| EXHIBIT | 10.....PARTS LIST          |
| EXHIBIT | 11.....TEST SET UP PHOTO   |

APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc

TABLE OF CONTENTS

GENERAL INFORMATION REQUIRED  
FOR CERTIFICATION

2.1033(c)(1)(2) HEADLINE INFORMATION & COMMUNICATIONS LTD. will manufacture the FCCID: QRE211901 GMRS/FRS COMBINATION TRANSCEIVER in quantity, for use under FCC RULES PART 95.

HEADLINE INFORMATION & COMMUNICATIONS LTD.  
100 THROCKMORTON ST. SUITE 1300  
FT. WORTH, TX 76102-2802

2.1033 (c) TECHNICAL DESCRIPTION

2.1033(c)(3) Instruction book. A draft copy of the instruction manual is included as EXHIBIT 7.

2.1033(c) (4) Type of Emission: 9K8F3E  
95.631

$B_n = 2M + 2DK$

$M = 2500$

$D = 2.4k$

$B_n = 2(2500) + 2(2400) = 9800$

GMRS Authorized Bandwidth 20.0 kHz

2.1033(c)(5) GMRS Frequency Range: 1. 462.5500 13. 462.7000  
95.621 2. 462.5625 14. 462.7125  
3. 462.5750 15. 462.7250  
4. 462.5875 16. 467.5500  
5. 462.6000 17. 467.5750  
6. 462.6125 18. 467.6000  
7. 462.6250 19. 467.6250  
8. 462.6375 20. 467.6500  
9. 462.6500 21. 467.6750  
10. 462.6625 22. 467.7000  
11. 462.6750 23. 467.7250  
12. 462.6875

2.10311c)(6)(7) The Maximum Output Power Rating:  
GMRS - .23 Watts ERP  
FRS - .13 Watts ERP

FRS Authorized Bandwidth 12.5KHz

2.1033(c)(5) FRS Frequency Range: 1. 462.5625 8. 467.5625  
95.627 2. 462.5875 9. 467.5875  
3. 462.6125 10. 467.6125  
4. 462.6375 11. 467.6375  
5. 462.6625 12. 467.6625  
6. 462.6875 13. 467.6875  
7. 462.7125 14. 467.7125 MHz

2.1033(c)(6)(7) Power Output shall not exceed 0.50 Watts effective  
95.639 radiated power. There can be no provisions for  
95.649 increasing the power or varying the power.

2.1033(c)(8) DC Voltages and Current into Final Amplifier:  
FINAL AMPLIFIER ONLY

FOR LOW POWER SETTING INPUT POWER:  $(4.5V)(.274A) = 1.233$  Watts  
FOR HIGH POWER SETTING INPUT POWER:  $(4.5V)(.326A) = 1.467$  Watts

2.1033(c)(9) Tune-up procedure. The tune-up procedure is included  
as EXHIBIT # 9.

2.1033(c)(10) Complete Circuit Diagrams: The circuit diagram is  
included as EXHIBIT 6 of this report. The block  
diagrams are included as EXHIBIT 5 of this  
report.

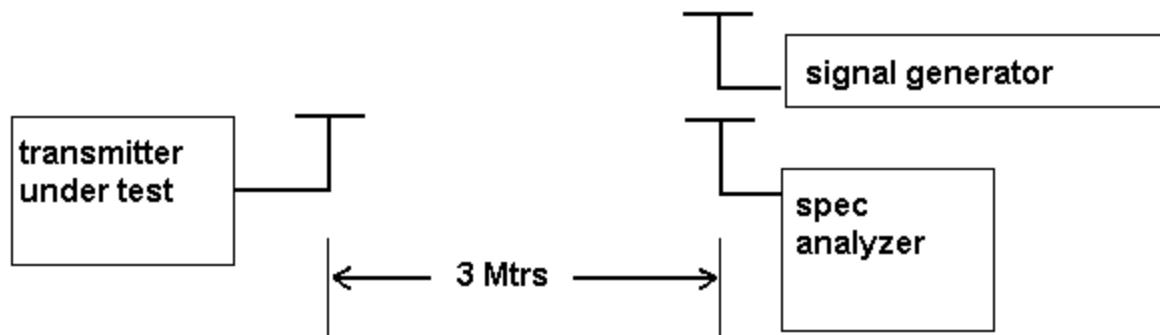
2.1033(c)(11) A photograph or a drawing of the equipment  
identification label is included as exhibit No. 1.

2.1033(c)(12) Photographs(8"X10") of the equipment of sufficient  
clarity to reveal equipment construction and layout,  
including meters, labels for controls, including any  
view under shields. See exhibits 3-4.

2.1033(c)(13) Digital modulation is not allowed.

2.1033(c)(14) The data required by 2.1046 through 2.1057 is  
submitted below.

- 95.639 Power Output shall not exceed 50.0 Watts effective radiated power. There can be no provisions for increasing the power or varying the power.
- 95.649
- 2.1046(a) RF power is measured by the substitution method as outlined in TIA/EIA - 603. With a nominal battery voltage of 4.5 V, and the transmitter properly adjusted the RF output measures:
- OUTPUT POWER: HIGH: .23 Watts ERP  
LOW: .13 Watts ERP
- 2.1046(a) RF power output. The test procedure used was TIA/EIA-603 S2



2.1047(a)(b)      Modulation characteristics:

AUDIO FREQUENCY RESPONSE

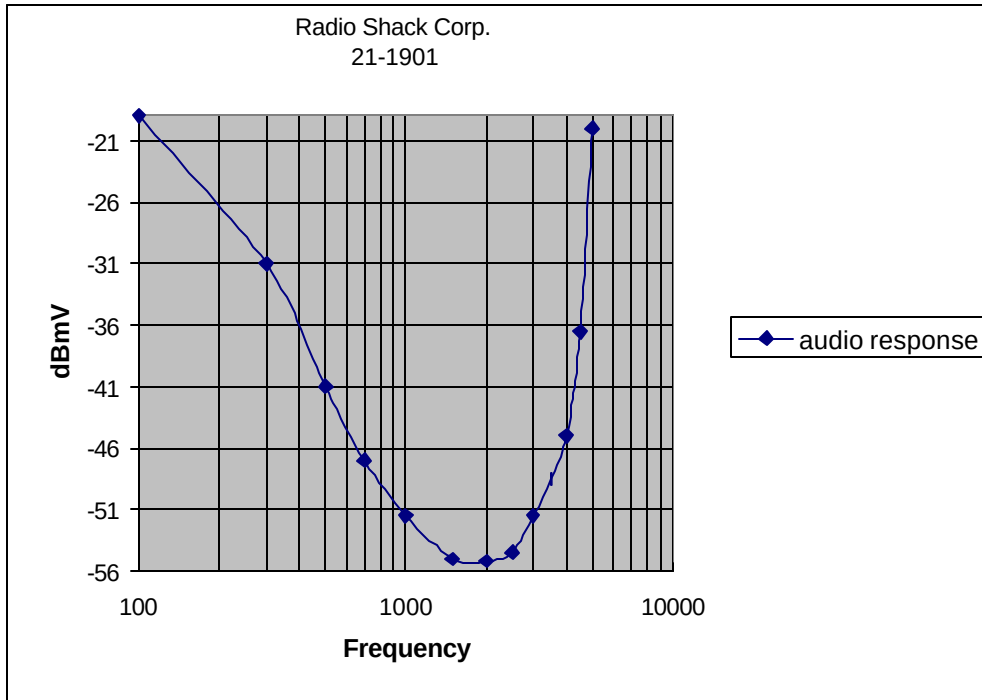
The audio frequency response was measured in accordance with TIA/EIA Specification 603. The audio frequency response curve is shown on the next page. The audio signal was fed into a dummy microphone circuit and into the microphone connector. The input required to produce 30 percent modulation level was measured. See Page 5 of report.

2.1047(b)      Audio input versus modulation

The audio input level needed for a particular percentage of modulation was measured in accordance with TIA/EIA Specification 603. The audio input curves versus modulation are on the following pages. Curves are provided for audio input frequencies of 300, 1000, and 2500 Hz. See Pages 6,7 & 8 of report.

95.637      Post Limiter Filter Each GMRS transmitter, except a mobile station transmitter with a power of 2.5Watts or less, must be equipped with an audio low pass filter. At any frequency between 3 & 20 kHz the filter must have an attenuation of  $60\log(f/3)$  greater than the attenuation at 1 kHz. See Page 9 of report.

### AUDIO FREQUENCY RESPONSE GRAPH



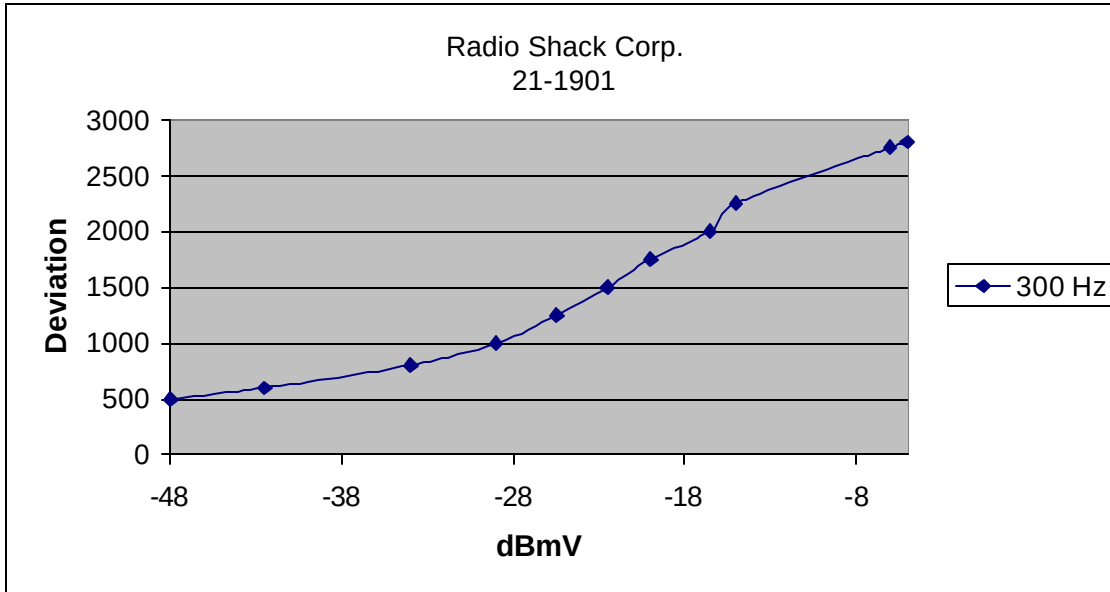
APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc

Page 5 of 19

**MODULATION LIMITING GRAPH - 300 Hz**



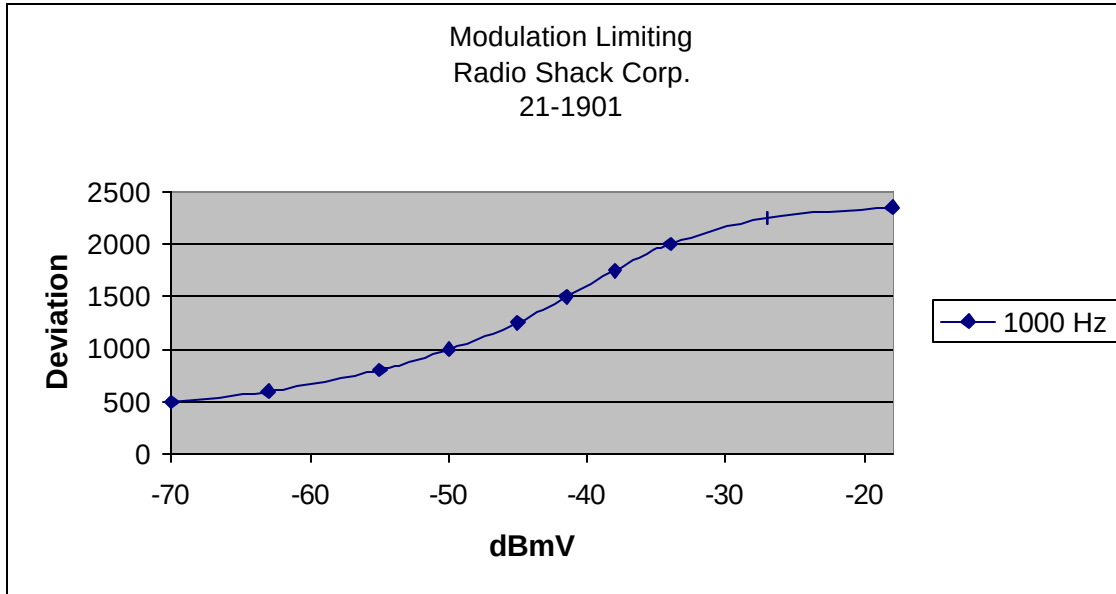
APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc

Page 6 of 19

# MODULATION LIMITING GRAPH - 1000 Hz



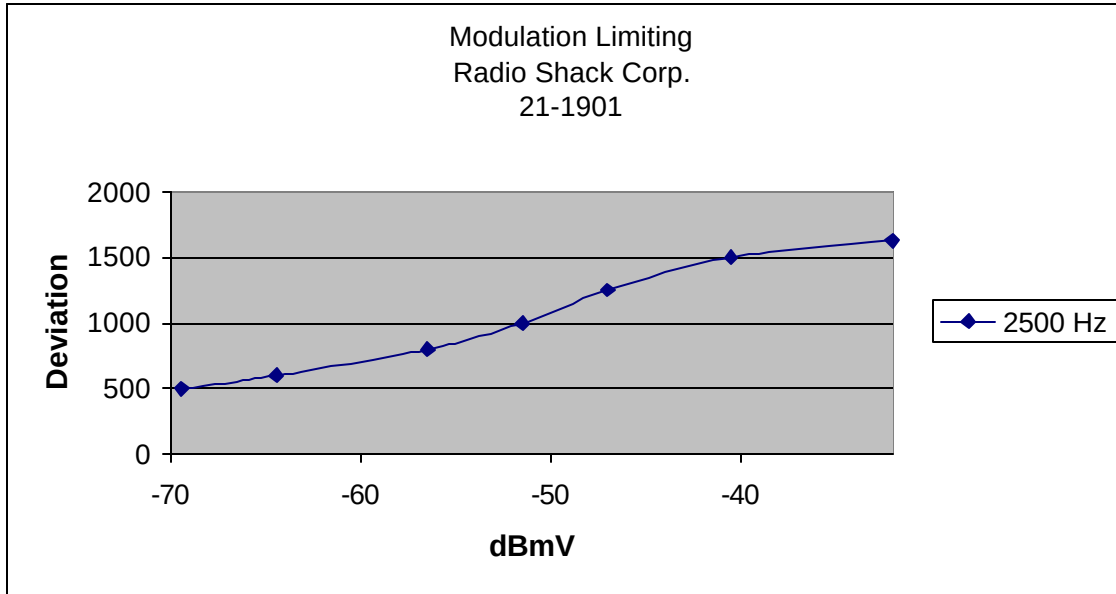
APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc

Page 7 of 19

# MODULATION LIMITING GRAPH - 2500 Hz



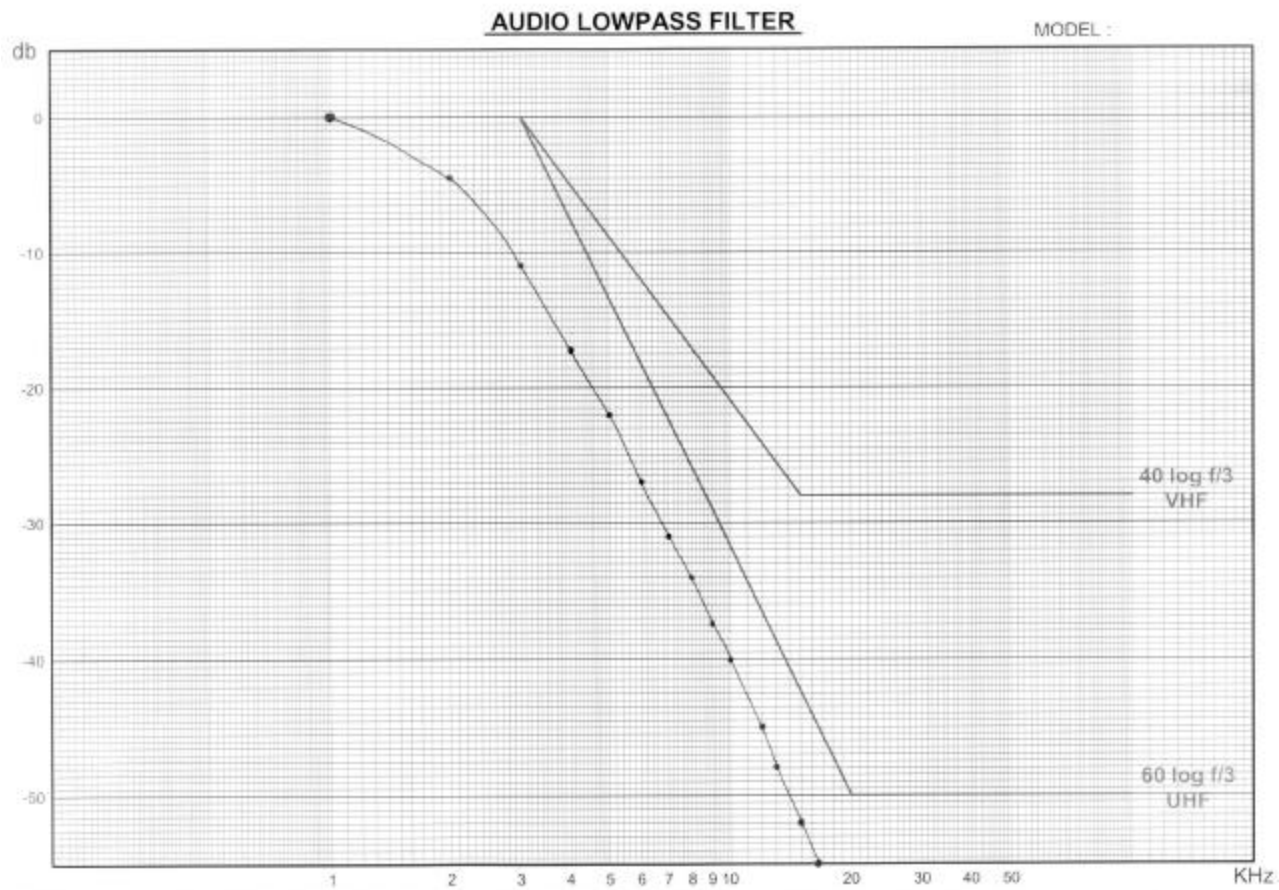
APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc

Page 8 of 19

## AUDIO LOW PASS FILTER GRAPH



APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc

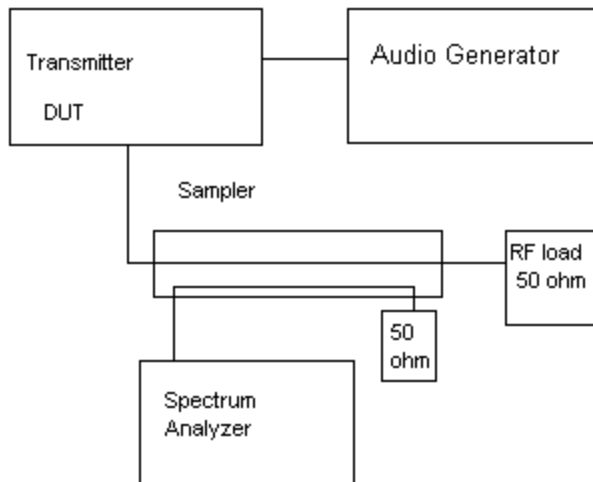
Page 9 of 19

2.1049 Occupied bandwidth:

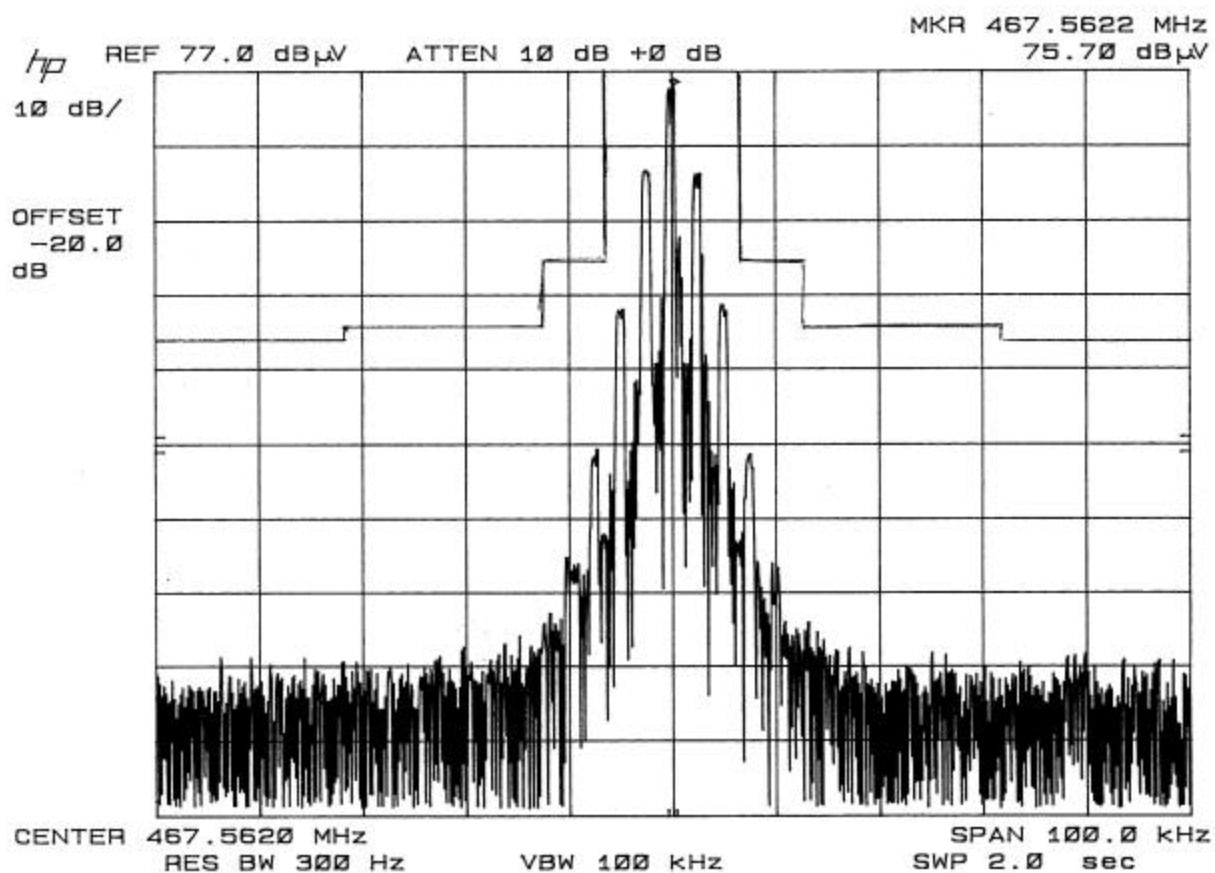
95.635(b)(1)(3)(7)

At least 25dB on any frequency removed from the center of the authorized bandwidth by more than 50% up to and including 100% of the authorized bandwidth. At least 35 dB on any frequency removed from the center of the authorized BW by more than 100% up to and including 250% of the authorized BW. At least  $43 + \log_{10}(TP)$  dB on any frequency removed from the center of the authorized bandwidth by more than 250%. See plots on pages 11 and 12.

Occupied BW Test Equipment Setup



# OCCUPIED BANDWIDTH PLOT



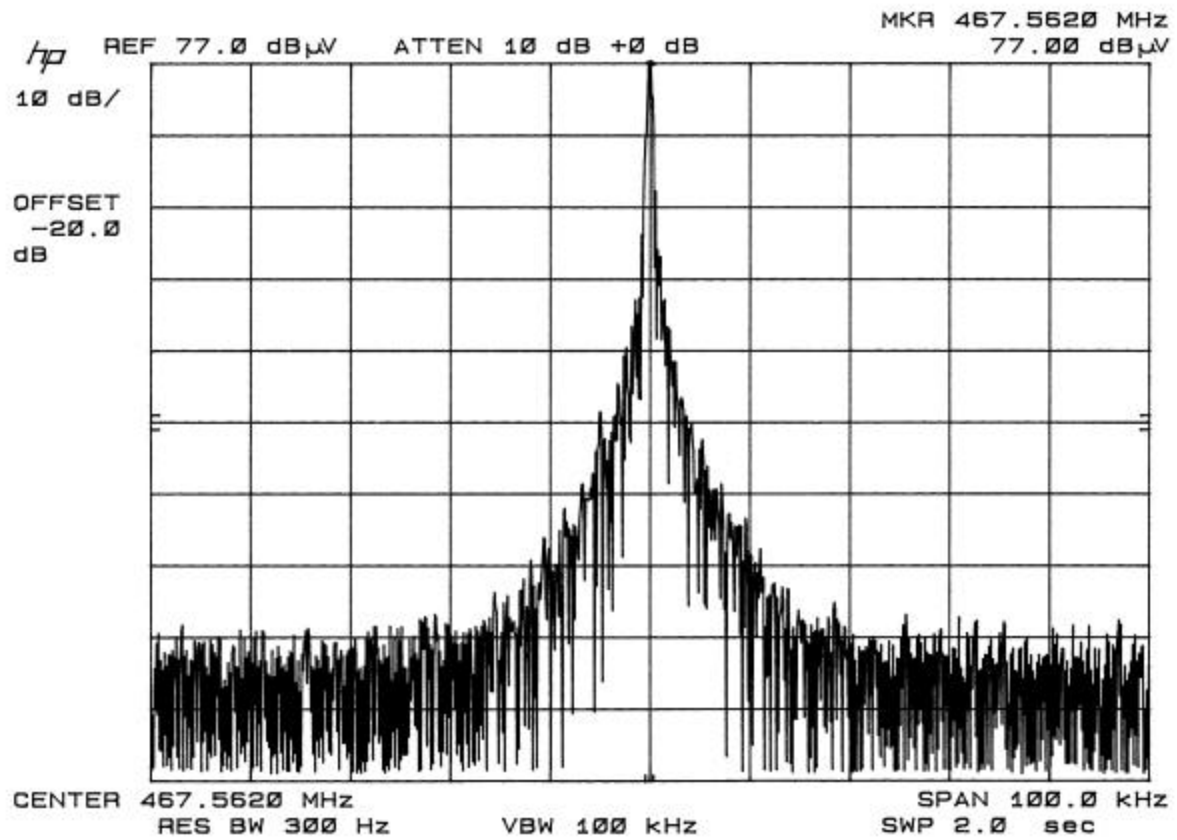
APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc

Page 11 of 19

# OCCUPIED BANDWIDTH CW PLOT



APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

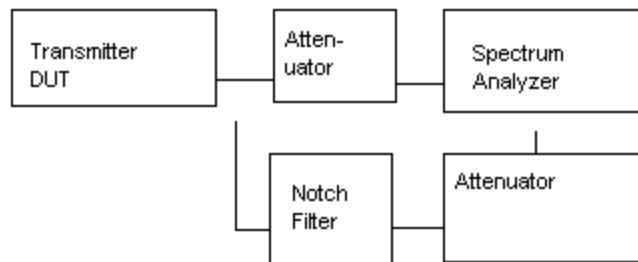
REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc

Page 12 of 19

2.1051

Spurious emissions at antenna terminals(conducted):  
The following data shows the level of conducted spurious responses at the antenna terminal. The test procedure used was TIA/EIA 603 S2.2.13 with the exception that the emissions were recorded in dBc. The spectrum was scanned from 0.4 to at least the 10th harmonic of the fundamental.

Spurious Emissions at  
Antenna Terminals



#### Method of Measuring Conducted Spurious Emissions

2.1051 Spurious emissions at the Antenna Terminals

NAME OF TEST: SPURIOUS EMISSIONS AT ANTENNA TERMINALS

2.1051 Not Applicable, no antenna terminal allowed.

2.1053  
95.635(b)(7)

UNWANTED RADIATION:

The tabulated Data shows the results of the radiated field strength emissions test. The spectrum was scanned from 30 to at least the 10th harmonic of the fundamental. This test was conducted per ANSI C63.4-1992.

REQUIREMENTS: GMRS:  $43 + 10\log(.23) = 37$  dB  
FRS:  $43 + 10\log(.13) = 34$  dB

TEST DATA (GMRS):

| Emission<br>Frequency<br>MHz | ATTN<br>dBc | dBm  | Margin<br>dB |
|------------------------------|-------------|------|--------------|
| 462.70                       | 0.00        | 23.6 | 0.00         |
| 925.40                       | 57          | -33  | 20.00        |
| 1,388.20                     | 55          | -31  | 18.00        |
| 1,850.90                     | 58          | -34  | 21.00        |
| 2,313.70                     | 54          | -30  | 17.00        |
| 2,776.40                     | 60          | -36  | 23.00        |
| 3,239.10                     | 53          | -29  | 16.00        |
| 3,701.90                     | 51          | -27  | 14.00        |
| 4,164.60                     | 61          | -37  | 24.00        |
| 4,627.40                     | 62          | -38  | 25.00        |

(FRS):

| Emission<br>Frequency<br>MHz | ATTN<br>dBc | dBm  | Margin<br>dB |
|------------------------------|-------------|------|--------------|
| 467.50                       | 0.00        | 21.1 | 0.00         |
| 935.10                       | 55          | -34  | 21.00        |
| 1,402.70                     | 53          | -32  | 19.00        |
| 1,870.20                     | 58          | -37  | 24.00        |
| 2,337.80                     | 45          | -24  | 11.00        |
| 2,805.40                     | 57          | -36  | 23.00        |
| 3,272.90                     | 48          | -27  | 14.00        |
| 3,740.50                     | 53          | -32  | 19.00        |
| 4,208.10                     | 59          | -38  | 25.00        |
| 4,675.70                     | 55          | -34  | 21.00        |

METHOD OF MEASUREMENT: The tabulated data shows the results of the radiated field strength emissions test. The spectrum was scanned from 30 to at least the tenth harmonic of the fundamental. This test was conducted per TIA/EIA STANDARD 603 using the substitution method. Measurements were made at the open field test site of TIMCO ENGINEERING, INC. located at 849 NW State Road 45, Newberry, FL 32669.

APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

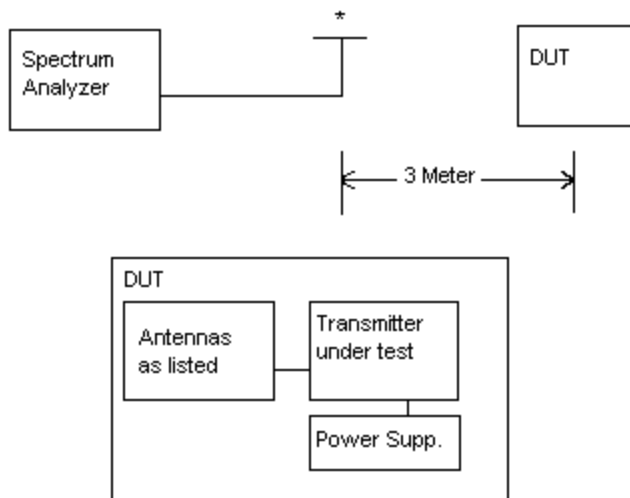
FCC ID: QRE211901

REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc

APPLICANT : HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID : QRE211901

### Method of Measuring Radiated Spurious Emissions



Equipment placed 80 cm above ground  
on a rotatable platform.

\* Appropriate antenna raised from 1 to 4 M.

2.1055  
95.621(b)

#### Frequency stability:

Temperature and voltage tests were performed to verify that the frequency remains within the 0.0005%, 5 ppm specification limit. The test was conducted as follows: The transmitter was placed in the temperature chamber at 25 degrees C and allowed to stabilize for one hour. The transmitter was keyed ON for one minute during which four frequency readings were recorded at 15 second intervals. The worse case number was taken for temperature plotting. The assigned channel frequency was considered to be the reference frequency. The temperature was then reduced to -30 degrees C after which the transmitter was again allowed to stabilize for one hour. The transmitter was keyed ON for one minute, and again frequency readings were noted at 15 second intervals. The worst case number was recorded for temperature plotting. This procedure was repeated in 10 degree increments up to + 50 degrees C.

Readings were also taken at the end point of the battery voltage of 4.5 VDC.

#### MEASUREMENT DATA:

Assigned Frequency (Ref. Frequency): 462.562704

| Temperature C   | Frequency Mhz | PPM   |
|-----------------|---------------|-------|
| -30             | 462.563030    | 0.70  |
| -20             | 462.563052    | 0.75  |
| -10             | 462.563366    | 1.43  |
| 0.00            | 462.563586    | 1.91  |
| 10              | 462.563650    | 2.05  |
| 20              | 462.563240    | 1.16  |
| 30              | 462.562704    | 0.00  |
| 40              | 462.562568    | -0.29 |
| 50              | 462.562960    | 0.55  |
| Suply voltage % | suply voltage | PPM   |
| 0.85            | 3.83          | -1.23 |

RESULTS OF MEASUREMENTS: The maximum frequency variation over the temperature range was -0.29 ppm to +2.05 ppm. The maximum frequency variation with voltage was -1.23 ppm.

Note: This EUT meets the frequency stability requirement for a FRS: +/- 2.5ppm over temp range of -20 degrees C to +50 degrees C. It also meets the GMRS frequency stability requirements: +/- 5ppm over the temp range -30 degrees C to +50 degrees C.

# EMC Equipment List

|   | DEVICE                                        | MFGR             | MODEL         | SERNO                    | CAL/CHAR DATE   | DUE DATE or STATUS |
|---|-----------------------------------------------|------------------|---------------|--------------------------|-----------------|--------------------|
| X | 3-Meter OATS                                  | TEI              | N/A           | N/A                      | Listed 12/22/99 | 12/22/02           |
|   | 3/10-Meter OATS                               | TEI              | N/A           | N/A                      | Listed 3/26/01  | 3/26/04            |
|   | Receiver, Beige Tower Spectrum Analyzer (Tan) | HP               | 8566B Opt 462 | 3138A07786<br>3144A20661 | CAL 8/31/01     | 8/31/03            |
|   | RF Preselector (Tan)                          | HP               | 85685A        | 3221A01400               | CAL 8/31/01     | 8/31/03            |
|   | Quasi-Peak Adapter (Tan)                      | HP               | 85650A        | 3303A01690               | CAL 8/31/01     | 8/31/03            |
| X | Receiver, Blue Tower Spectrum Analyzer (Blue) | HP               | 8568B         | 2928A04729<br>2848A18049 | CHAR 10/22/01   | 10/22/03           |
| X | RF Preselector (Blue)                         | HP               | 85685A        | 2926A00983               | CHAR 10/22/01   | 10/22/03           |
| X | Quasi-Peak Adapter (Blue)                     | HP               | 85650A        | 2811A01279               | CHAR 10/22/01   | 10/22/03           |
| X | Biconnical Antenna                            | Electro-Metrics  | BIA-25        | 1171                     | CAL 4/26/01     | 4/26/03            |
|   | Biconnical Antenna                            | Eaton            | 94455-1       | 1096                     | CAL 10/1/01     | 10/1/03            |
|   | Biconnical Antenna                            | Eaton            | 94455-1       | 1057                     | CHAR 3/15/00    | 3/15/02            |
|   | BiconiLog Antenna                             | EMCO             | 3143          | 9409-1043                |                 |                    |
| X | Log-Periodic Antenna                          | Electro-Metrics  | LPA-25        | 1122                     | CAL 10/2/01     | 10/2/03            |
|   | Log-Periodic Antenna                          | Electro-Metrics  | EM-6950       | 632                      | CHAR 10/15/01   | 10/15/03           |
|   | Log-Periodic Antenna                          | Electro-Metrics  | LPA-30        | 409                      | CHAR 10/16/01   | 10/16/03           |
|   | Dipole Antenna Kit                            | Electro-Metrics  | TDA-30/1-4    | 152                      | CAL 3/21/01     | 3/21/04            |
|   | Dipole Antenna Kit                            | Electro-Metrics  | TDA-30/1-4    | 153                      | CHAR 11/24/00   | 11/24/03           |
|   | Double-Ridged Horn Antenna                    | Electro-Metrics  | RGA -180      | 2319                     | CAL 12/19/01    | 12/19/03           |
|   | Horn Antenna                                  | Electro-Metrics  | EM-6961       | 6246                     | CAL 3/21/01     | 3/21/03            |
|   | Horn Antenna                                  | ATM              | 19-443-6R     | None                     | No Cal Required |                    |
|   | Passive Loop Antenna                          | EMC Test Systems | EMCO 6512     | 9706-1211                | CHAR 7/10/01    | 7/10/03            |
|   | Line Impedance Stabilization . . .            | Electro-Metrics  | ANS-25/2      | 2604                     | CAL 10/9/01     | 10/9/03            |

APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc

Page 17 of 19

|   | DEVICE                                | MFGR                           | MODEL               | SERNO      | CAL/CHAR<br>DATE | DUE DATE<br>or STATUS |
|---|---------------------------------------|--------------------------------|---------------------|------------|------------------|-----------------------|
|   | Line Impedance<br>Stabilization . . . | Electro-Metrics                | EM-7820             | 2682       | CAL<br>3/16/01   | 3/16/03               |
|   | Termaline Wattmeter                   | Bird Electronic<br>Corporation | 611                 | 16405      | CAL<br>5/25/99   | 5/25/01               |
|   | Termaline Wattmeter                   | Bird Electronic<br>Corporation | 6104                | 1926       | CAL<br>12/12/01  | 12/12/03              |
|   | Oscilloscope                          | Tektronix                      | 2230                | 300572     | CHAR<br>2/1/01   | 2/1/03                |
| X | Temperature Chamber                   | Tenney Engineering             | TTRC                | 11717-7    | CHAR<br>1/22/02  | 1/22/04               |
| X | AC Voltmeter                          | HP                             | 400FL               | 2213A14499 | CAL<br>10/9/01   | 10/9/03               |
|   | AC Voltmeter                          | HP                             | 400FL               | 2213A14261 | CHAR<br>10/15/01 | 10/15/03              |
|   | AC Voltmeter                          | HP                             | 400FL               | 2213A14728 | CHAR<br>10/15/01 | 10/15/03              |
| X | Digital Multimeter                    | Fluke                          | 77                  | 35053830   | CHAR<br>1/8/02   | 1/8/04                |
|   | Digital Multimeter                    | Fluke                          | 77                  | 43850817   | CHAR<br>1/8/02   | 1/8/04                |
|   | Digital Multimeter                    | HP                             | E2377A              | 2927J05849 | CHAR<br>1/8/02   | 1/8/04                |
|   | Multimeter                            | Fluke                          | FLUKE-77-3          | 79510405   | CAL<br>9/26/01   | 9/26/03               |
|   | Peak Power Meter                      | HP                             | 8900C               | 2131A00545 | CHAR<br>1/26/01  | 1/26/03               |
|   | Digital Thermometer                   | Fluke                          | 2166A               | 42032      | CAL<br>1/16/02   | 1/16/04               |
|   | Thermometer                           | Traulsen                       | SK-128              |            | CHAR<br>1/22/02  | 1/22/04               |
| X | Temp/Humidity gauge                   | EXTech                         | 44577F              | E000901    | CHAR<br>1/22/02  | 1/22/04               |
|   | Frequency Counter                     | HP                             | 5352B               | 2632A00165 | CAL<br>11/28/01  | 11/28/03              |
|   | Power Sensor                          | Agilent<br>Technologies        | 84811A              | 2551A02705 | CAL<br>1/26/01   | 1/26/03               |
|   | Service Monitor                       | IFR                            | FM/AM 500A          | 5182       | CAL<br>11/22/00  | 11/22/02              |
|   | Comm. Serv. Monitor                   | IFR                            | FM/AM 1200S         | 6593       | CAL<br>5/12/02   | 5/12/04               |
|   | Signal Generator                      | HP                             | 8640B               | 2308A21464 | CAL<br>11/15/01  | 11/15/03              |
|   | Modulation Analyzer                   | HP                             | 8901A               | 3435A06868 | CAL<br>9/5/01    | 9/5/03                |
|   | Near Field Probe                      | HP                             | HP11940A            | 2650A02748 | CHAR<br>2/1/01   | 2/1/03                |
|   | BandReject Filter                     | Lorch Microwave                | 5BR4-2400/<br>60-N  | Z1         | CHAR<br>3/2/01   | 3/2/03                |
|   | BandReject Filter                     | Lorch<br>Microwave             | 6BR6-2442/<br>300-N | Z1         | CHAR<br>3/2/01   | 3/2/03                |

APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc

Page 18 of 19

|  | DEVICE               | MFGR                | MODEL                | SERNO      | CAL/CHAR<br>DATE | DUE DATE<br>or STATUS |
|--|----------------------|---------------------|----------------------|------------|------------------|-----------------------|
|  | BandReject Filter    | Lorch<br>Microwave  | 5BR4-10525/<br>900-S | Z1         | CHAR<br>3/2/01   | 3/2/03                |
|  | High Pas Filter      | Microlab            | HA-10N               |            | CHAR<br>10/4/01  | 10/4/03               |
|  | Audio Oscillator     | HP                  | 653A                 | 832-00260  | CHAR<br>3/1/01   | 3/1/03                |
|  | Frequency Counter    | HP                  | 5382A                | 1620A03535 | CHAR<br>3/2/01   | 3/2/03                |
|  | Frequency Counter    | HP                  | 5385A                | 3242A07460 | CHAR<br>12/11/01 | 12/11/03              |
|  | Preamplifier         | HP                  | 8449B-H02            | 3008A00372 | CHAR<br>3/4/01   | 3/4/03                |
|  | Amplifier            | HP                  | 11975A               | 2738A01969 | CHAR<br>3/1/01   | 3/1/03                |
|  | Egg Timer            | Unk                 |                      |            | CHAR<br>8/31/01  | 8/31/03               |
|  | Measuring Tape, 20M  | Kraftixx            | 0631-20              |            | CHAR<br>2/1/02   | 2/1/04                |
|  | Measuring Tape, 7.5M | Kraftixx            | 7.5M PROFI           |            | 2/1/02           | 2/1/04                |
|  | Coaxial Cable #51    | Insulated Wire Inc. | NPS 2251-2880        | Timco #51  | CHAR<br>1/23/02  | 1/23/04               |
|  | Coaxial Cable #64    | Semflex Inc.        | 60637                | Timco #64  | CHAR<br>1/24/02  | 1/24/04               |
|  | Coaxial Cable #65    | General Cable Co.   | E9917 RG233/U        | Timco #65  | CHAR<br>1/23/02  | 1/23/04               |
|  | Coaxial Cable #106   | Unknown             | Unknown              | Timco #106 | CHAR<br>1/23/02  | 1/23/04               |

APPLICANT: HEADLINE INFORMATION & COMMUNICATIONS LTD.

FCC ID: QRE211901

REPORT #: R\Radsh\_AAO\994AUT2\994AUT2TestReport.doc