TEST REPORT
for
APPLICATION of CERTIFICATION

For

BECKER FLUGFUNKWERK GMBH
Baden Airpark
Building B108
D77836 Rheinmuenster
Germany

Contact Person
Klaus Jaegel

MODELS: RT3209-(11)
FREQUENCY: 118.0-136.975 MHz

FCC ID: B54RT320911

Test Date: March 24, 1999

Certifying Engineer: Scot D Rogers
Scot D. Rogers
ROGERS LABS, INC.
4405 West 259th Terrace
Louisburg, KS 66053
Phone: (913) 837-3214
FAX: (913) 837-3214

TABLE OF CONTENTS

FORWARD:

In accordance with the Federal Communications Code of Federal Regulations, dated October 1, 1998, Part 2 Subpart J, Paragraphs 2.907, 2.911, 2.913, 2.915, 2.925, 2.926, 2.1031 through 2.1057, Part 87, Subchapter D, Paragraphs 87.131 through 87.147, and FCC document FCC98-58, the following is submitted:

Equipment Tested:

Equipment	Model/Part#	FCC ID#
EUT	RT 3209-(11)	B54RT320911

Two models were tested with the worst case data shown in this report. The electronics are similar with the exception that one unit has a remote mounted control and display assembly. The other unit is wholly self-contained. The test results in this report relate only to the items tested.

List of Test Equipment

A Hewlett Packard 8591EM and or 8562A Spectrum Analyzer was used as the measuring device for the emissions testing. The analyzer settings used are described in the following table. Refer to the Appendix for a complete list of Test Equipment.

HP 8591EM SPECTRUM ANALYZER SETTINGS		
CONDUCTED EMISSIONS:		
RBW	AVG. BW	DETECTOR FUNCTION
9 kHz	30 kHz	Peak/Quasi Peak
RADIATED EMISSIONS (30 - 1000 MHz):		
RBW	AVG. BW	DETECTOR FUNCTION
120 kHz	300 kHz	Peak/Quasi Peak
HP 8562A SPECTRUM ANALYZER SETTINGS		
RADIATED EMISSIONS (1 - 40 GHz):		
RBW	AVG. BW	DETECTOR FUNCTION
1 MHz	1 MHz	Peak/Average
ANTENNA CONDUCTED EMISSIONS:		
RBW	AVG. BW	DETECTOR FUNCTION
120 kHz	300 kHz	Peak

2.1033(c) Application for Certification

(1) Manufacturer: BECKER FLUGFUNKWERK GMBH
Baden Airpark
Building B108
D77836 Rheinmuenster
Germany

(2) FCC Identification: Model: RT3209-(11)
FCC I.D.: B54RT320911

(3) Refer to Exhibit for Installation and Operating Manuals:

(4) Emission Type: 8K00A3E

(5) Frequency Range: 118.0 - 136.975 MHz,
Adjustable in 25 kHz steps.

(6) Operating Power Level:

14 Watts

(7) Max P_o: 15 Watts

(8) Power into final amplifier: 46.7 Watts (27.5V @ 1.7A).

(9) Tune Up Procedure for Output Power:

Refer to Exhibit for Transceiver Alignment Procedure.

(10) Description of the Circuitry and Devices Provided for Determining and Stabilizing Frequency:

The complete set of schematic diagrams for the Transceiver RT3209-(11) is part of the equipment manual.

AR4201 RX Board

Number	Type	Function
T1	BC857	Lock-Detect Switch
T9	BC857	VCO Switch
T10	SST310	Voltage Controlled Oscillator
T11	BF996	Buffer Amplifier
T12	BF996	Buffer Amplifier
T13	BFR92	Buffer Amplifier
IC1	TL431ID	Adjustable Voltage Reference
IC2	MB1504LPF	Synthesizer
Q1	Crystal	6.400 MHz

Processor Board

Number	Type	Function
IC1	MC33164D-5	Power Supply Supervisor
IC2	68HC705B16	Microprocessor

The transmitter is designed to be wideband over the 118.000 MHz to 136.975 MHz range.

The oscillator frequency of the receiver and the transmitting frequency of the transmitter are generated by VCO(voltage controlled oscillator) T10. This VCO is part of the digital frequency synthesizer IC2 that is controlled by microprocessor IC2 located on the processor board. Crystal Q1(6.400 MHz) determines the reference frequency.

The channel frequency is displayed by means of a liquid crystal display on the control unit. The operating frequency is to be selected using the MHz and kHz frequency selector switches. The MHz rotary switch engages at 1 MHz steps and the kHz rotary switch at 25 kHz steps.

Description of the Circuits and Devices Used for Suppression of Spurious Radiation:

The antenna filter is a LC-coupled band-pass filter comprising capacitors C41, C43, C44, C45, C46 and inductors L18 to L22.

The low-pass filter consisting of capacitors C101 to C105 and inductors L28 and L29 is intended to obtain additional suppression of harmonics.

Description of the Circuits and Devices Used for Limiting of Modulation:

The microphone inputs are designed for both dynamic and standard microphones. The output of the microphone input amplifiers (IC3a for dynamic mike and IC3b for standard mike) are fed to a dynamic compressor (IC5A, IC6A, and IC6b) which keeps the modulation voltage constant over a wide input voltage range. The voice filter comprising high-pass filter IC9A and low-pass filters IC9a, IC10a and IC10b determines the audio frequency response of the modulation signal.

This constant modulation voltage is fed to modulation amplifier IC2b on the TX board.

The modulation depth can be adjusted using trimmer potentiometer r54 on the Tx board. The VSWR MODULATION CONTROL IC1b keeps the modulation depth constant even when the output power of the transmitter varies dues to changing VSWR at the transmitter output.

(11) Photograph or drawing of the Identification Plate:

Refer to Exhibit for Drawing of Identification Plate.

(12) Drawings of Construction and Layout:

Refer to Appendix for pictures of Component Layout and Chassis Assembly.

(13) Detail Description of Digital Modulation:

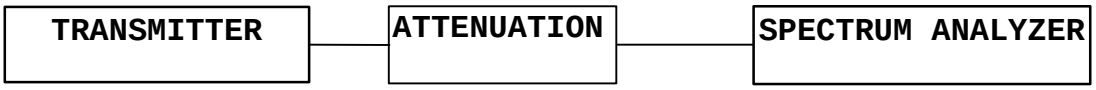
Not Applicable.

2.1046 RF Power Output

Measurements Required:

Measurements shall be made to establish the radio frequency power delivered by the transmitter into the standard output termination. The power output shall be monitored and recorded and no adjustment shall be made to the transmitter after the test has begun, except as noted below:
If the power output is adjustable, measurements shall be made for the highest and lowest power levels.

Test Arrangement:



The radio frequency power output was measured at the antenna terminal by replacing the antenna with a spectrum analyzer, 40-dB attenuation and cable (1 dB loss). The spectrum analyzer had an impedance of 50Ω to match the impedance of the standard antenna. A HP 8591EM Spectrum Analyzer was used to measure the radio frequency power at the antenna port. The data was taken in dBm and converted to watts as shown in the following Table. Refer to Figures 1 through 3 showing the output power of the transmitter. Data taken per Paragraph 2.1046(a) and applicable parts of Part 87.

P_{dBm} = power in dB above 1 milliwatt.
Milliwatts = $10^{(PdBm/10)}$
Watts = (Milliwatts)(0.001)(W/mW)

41.4 dBm = $10^{(41.4/10)}$
= 12,883 mW
= 13 Watts

Results:

REQUENCY	P_{dBm}	P_{mw}	P_{w}
118.0	41.4	12883	13
127.5	41.2	13182	13
136.975	41.5	14125	14

The specifications of Paragraph 2.1046(a) and applicable Parts of 87 are met. There are no deviations to the specifications.

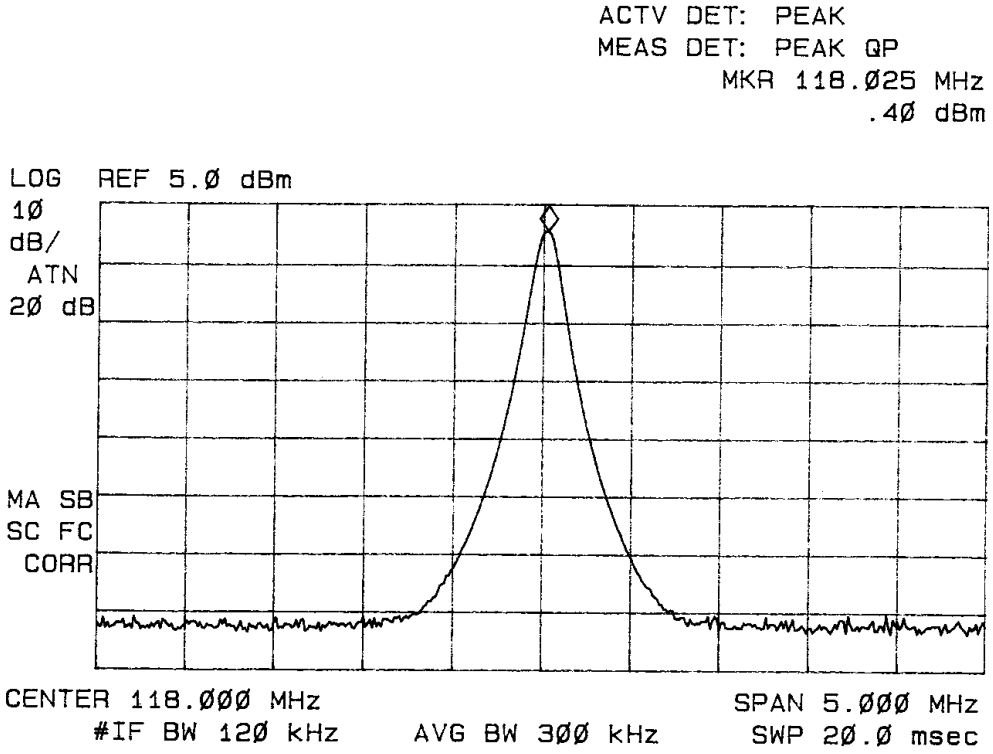


Figure 1: Power Output Channel 118.00

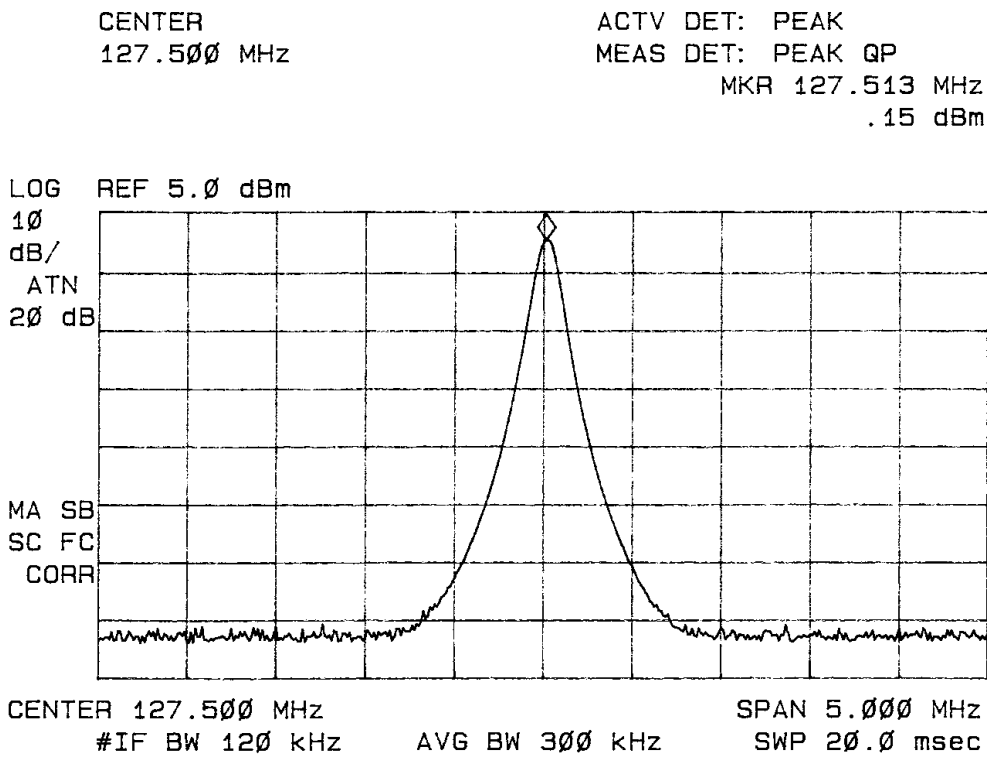


Figure 2: Power Output Channel 127.500

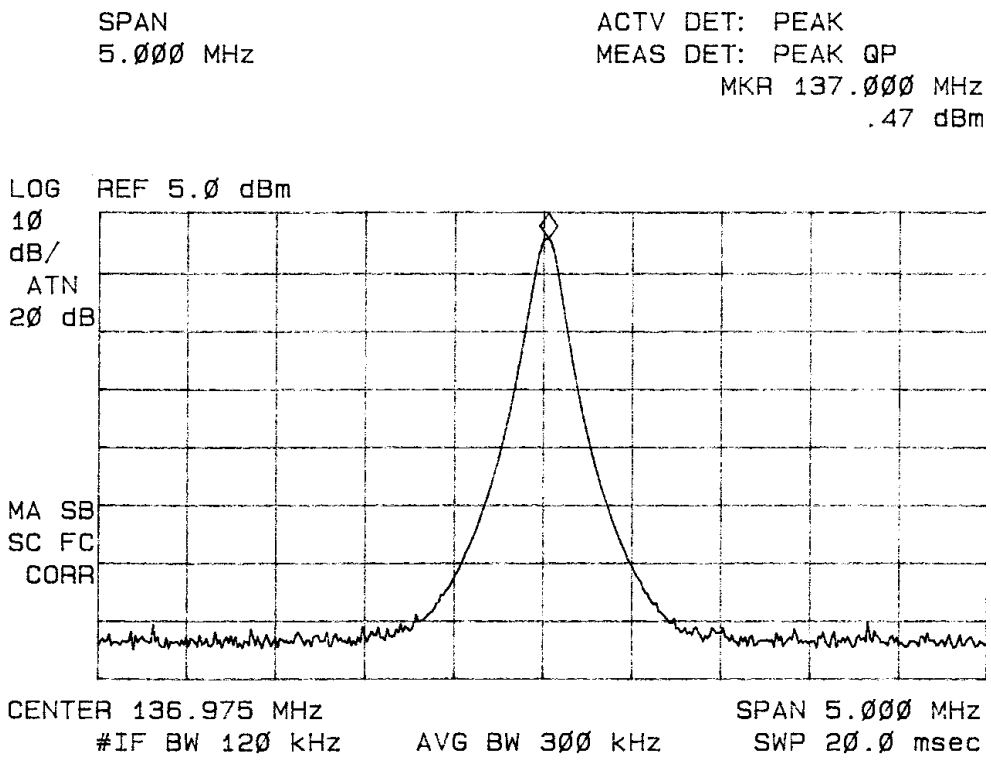


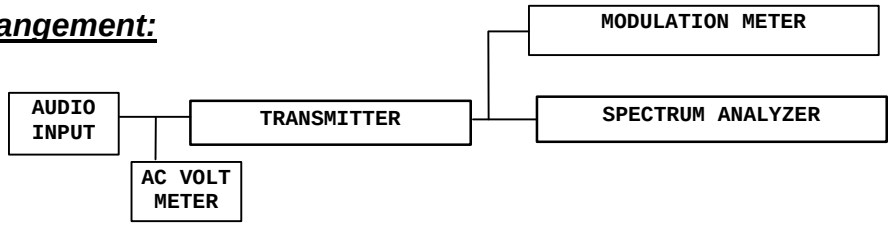
Figure 3: Power Output Channel 136.975

2.1047 Modulation Characteristics

Measurements Required:

A curve or equivalent data, which shows that the equipment will meet the modulation requirements of the rules, under which the equipment is to be licensed, shall be submitted.

Test Arrangement:



The radio frequency output was coupled to a HP Spectrum Analyzer and a modulation meter. The spectrum analyzer was used to observe the radio frequency spectrum with the transmitter operating in its various modes. The modulation meter was used to measure the percent modulation.

Results:

Figure 4 displays the graph made showing the audio frequency response of the modulator. The frequency generator was set to 1 kHz and injected into the audio input port of the EUT. The amplitude was adjusted to obtain 50% modulation at 1000 Hz. This level was then taken as the 0-dB reference. The frequency of the generator was then varied. The generator output level was recorded while maintaining the 50% modulation.

Audio Frequency (Hz)	Response normalized to 1000 Hz (dB)
100	-14.0
200	-7.0
500	-4.0
1000	0
2000	-1.0
3000	-40

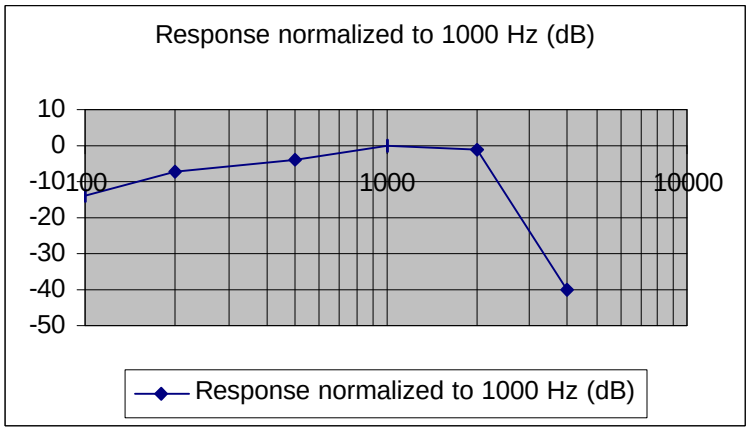


Figure 4: Audio Response Characteristics.

Figure 5 shows the modulation response for each of three tones while the input voltage was varied. The frequency is held constant the input voltage is varied and the modulation is read from the modulation meter. The specifications of Paragraph 2.987(b) and applicable parts of 87 are met.

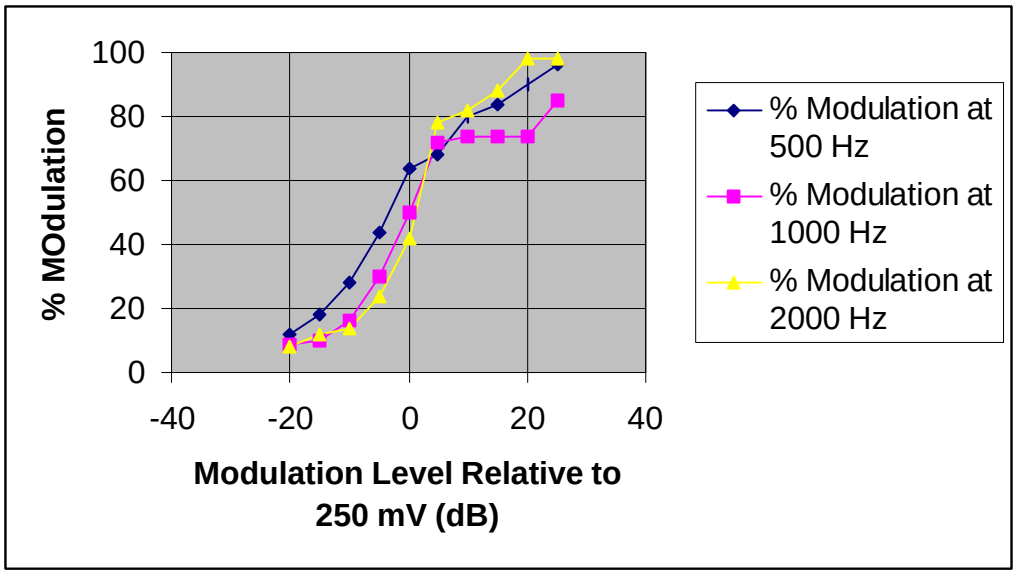


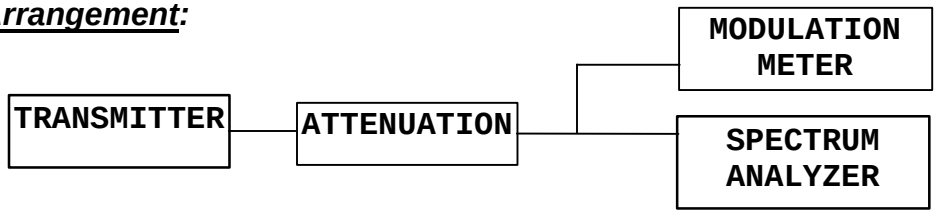
Figure 5: Modulation Characteristics.

2.1049 Occupied Bandwidth

Measurements Required:

The occupied bandwidth, that is the frequency bandwidth such that below its lower and above its upper frequency limits, the mean powers radiated are equal to 0.5 percent of the total mean power radiated by a given emission.

Test Arrangement:



Results:

f_c	O.B. kHz
118.0	7.75
127.5	7.95
136.975	5.75

Refer to Figure 6.

A spectrum analyzer was used to observe the radio frequency spectrum with the transmitter operating in a normal mode, modulated by a frequency of 2500 Hz at a level 16 dB above 50% modulation. The power ratio in dB representing 99.5% of the total mean power was recorded from the spectrum analyzer.

Requirements of 2.1049(c)(1) and applicable paragraphs of Part 87 are met. There are no deviations to the specifications.

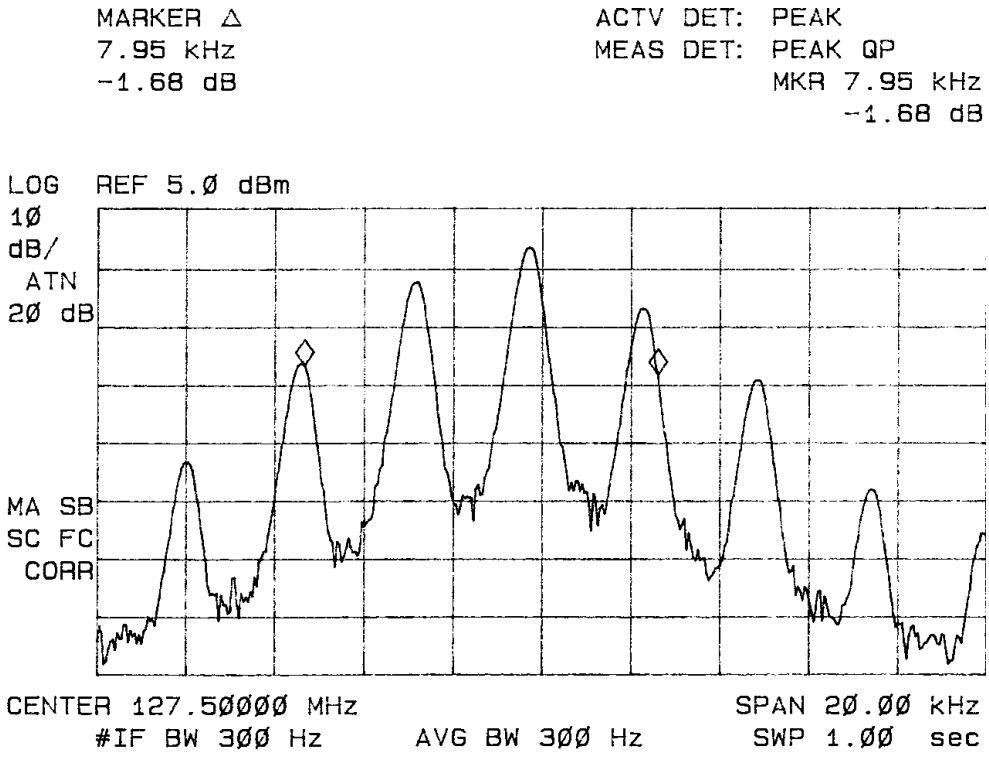


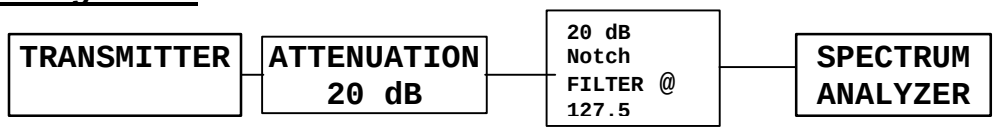
Figure 6: Occupied BandWidth

2.1051 Spurious Emissions at Antenna Terminals

Measurements Required:

The radio frequency voltage or power generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna.

Test Arrangement:



The radio frequency output was coupled to a HP 8591EM Spectrum Analyzer. The spectrum analyzer was used to observe the radio frequency spectrum with the transmitter operated in a normal mode. The frequency spectrum from 10 MHz to 1.5 GHz was observed and a plot produced of the frequency spectrum. Figure 7 represents data for the RT3209-(11). Data taken per 2.1051, 2.1057, and applicable paragraphs of Part 87.

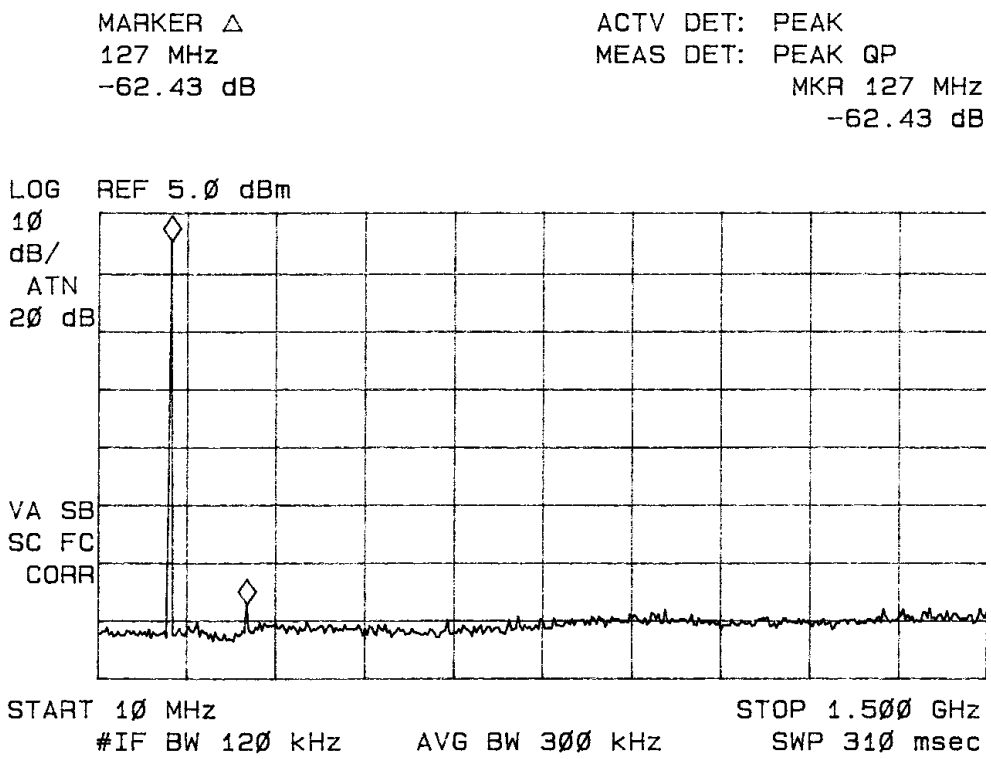


Figure 7: Emissions at Antenna Terminal

Results:

The output of the unit was coupled to a HP Spectrum Analyzer and the frequency emissions were measured. Data was taken as per 2.1051 and applicable paragraphs of Part 87. Specifications of Paragraphs 2.1051, 2.1057 and applicable parts of 87 are met. There are no deviations to the specifications.

FCC Limit:
11 Watt = 43 + 10 LOG(P_o)
= 43 + 10 LOG(15)
= 54.8
Level below carrier:
Amplitude of carrier less amplitude of harmonic
= 41.4 – (-63.8)
= 123.1

CHANNEL MHz	SPURIOUS FREQ. (MHz)	SPURIOUS AMPLITUDE (dB)	LEVEL BELOW CARRIED (dB)
118.000 @ 41.4 dBm	236.0	105.2	-63.8
	354.0	109.1	-67.7
	472.0	<116.2	<-75.1

CHANNEL MHz	SPURIOUS FREQ. (MHz)	SPURIOUS AMPLITUDE (dB)	LEVEL BELOW CARRIER (dB)
127.500 @ 41.15 dBm	255.0	106.7	-65.5
	382.5	105.5	-64.3
	510.0	<115.2	<-74.0

CHANNEL MHz	SPURIOUS FREQ. (MHz)	SPURIOUS AMPLITUDE (dB)	LEVEL BELOW CARRIER (dB)
136.975 @ 41.4 dBm	273.95	105.7	-64.3
	410.93	112.0	-70.6
	547.90	<121.4	<-80.0

2.1053 Field Strength of Spurious Radiation

Measurements Required:

Measurements shall be made to detect spurious emissions that may be radiated directly from the cabinet, control circuits, power leads, or intermediate circuit elements under normal conditions of installation and operation.

Test Arrangement:

The transmitter was placed on a wooden turntable 0.8 meters above the ground plane and at a distance of 3 meters from the FSM antenna. The turntable was rotated though 360 degrees to locate the position registering the highest amplitude emission. The frequency spectrum was then searched for spurious emissions generated from the transmitter. The amplitude of each spurious emission was maximized by raising and lowering the FSM antenna and rotating the turntable before data was recorded. A log periodic antenna was used for frequencies of 200 MHz to 5 GHz and pyramidal horn

antennas were used for frequencies of 5 GHz to 40 GHz. Emission levels were measured and recorded from the spectrum analyzer in dBµV. This level was then added to the antenna factor to calculate the field strength at 3 meters. Data was taken at the ROGERS LABS, INC. 3 meters open area test site (OATS). A description of the test facility is on file with the FCC, Reference 31040/SIT, 1300F2, dated February 6, 1998. The testing procedures used conform to the procedures stated in the ANSI 63.4-1992 document.

Calculations made are as follows:

CFS = Calculated Field Strength
FSM = Field Strength Measurement
CFS = FSM + Antenna Factor
CFS = 54.5 + 13.8 - 35
CFS = 33.3

The limit for emissions are defined by the following equations:

Limit = Amplitude of spurious emission must be attenuated by this amount below the level of the fundamental.

Calculating the field strength at 3 meters for the 15-watt transmitter was done as follows:

$E = \frac{5.5\sqrt{PG}}{3}$ where E is V/m, P is Watts, G = 1.64 and d is meters.

$E = \frac{5.5\sqrt{15(1.64)}}{3}$ = 9.09 V/m = 9.09E6µV/m at 3 meters.

This was converted to dBµV/m using (20*log µV/m) for convenience.

20*Log(9.09E6) = 139.2 dBµV/m @ 3 meters

On any frequency removed from the assigned frequency by more than 250% of the authorized bandwidth: at least 43 + 10 Log (P_o) dB.

Attenuation = 43 + 10 $Log_{10}(P_w)$
= 43 + 10 $Log_{10}(15)$
= 54.8 dB

Limit = 139.2 - 54.8
= 84.4

Results:

Channel 118.000 MHz

Frequency (MHz)	FSM Horz. (dBµV)	FSM Vert. (dBµV)	Ant. Factor (dB)	Amp. Gain (dB)	CFS Horz. @ 3m (dBµV/m)	CFS Vert. @ 3m (dBµV/m)	Limit
236.0	54.5	56.2	13.8	35	33.3	35.0	84.4
354.0	48.9	51.1	18.7	35	32.6	34.8	84.4
472.0	48.4	54.7	22.6	35	36.0	42.3	84.4
590.0	55.0	56.6	22.6	35	42.6	44.2	84.4
708.0	46.3	51.2	22.6	35	33.9	38.8	84.4
826.0	47.4	47.0	22.6	35	35.0	34.6	84.4

Channel 127.500 MHz

Frequency (MHz)	FSM Horz. (dBµV)	FSM Vert. (dBµV)	Ant. Factor (dB)	Amp. Gain (dB)	CFS Horz. @ 3m (dBµV/m)	CFS Vert. @ 3m (dBµV/m)	Limit
255.0	61.7	51.0	12.5	35	39.2	28.5	84.4
382.5	51.0	52.7	15.8	35	31.8	33.5	84.4
510.0	45.5	49.2	17.4	35	27.9	31.6	84.4
637.5	51.3	34.8	18.9	35	35.2	18.7	84.4
765.0	44.0	38.9	20.9	35	29.9	24.8	84.4
892.5	37.3	40.2	22.3	35	24.6	27.5	84.4

Channel 136.975 MHz

Frequency (MHz)	FSM Horz. (dBµV)	FSM Vert. (dBµV)	Ant. Factor (dB)	Amp. Gain (dB)	CFS Horz. @ 3m (dBµV/m)	CFS Vert. @ 3m (dBµV/m)	Limit
274.0	46.4	48.2	13.1	35	24.5	26.3	84.4
410.9	35.5	59.9	16.2	35	16.7	41.1	84.4
547.9	55.4	57.6	17.9	35	38.3	40.5	84.4
685.0	56.6	52.7	19.7	35	41.3	37.4	84.4
821.9	39.0	53.3	21.9	35	25.9	40.2	84.4
958.8	47.8	46.8	22.7	35	35.5	34.5	84.4

Specifications of Paragraph 2.1053, 2.1057 and 87.139 are met. There are no deviations to the specifications.

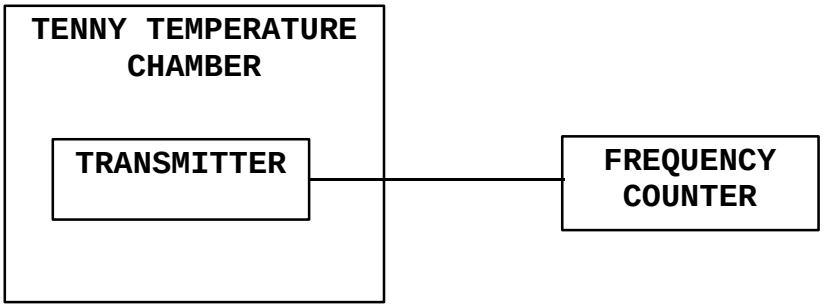
2.1055 Frequency Stability

Measurements Required:

The frequency stability shall be measured with variations of ambient temperature from -30° to +50° centigrade. Measurements shall be made at the extremes of the temperature range and at intervals of not more than 10° centigrade through the range. A period of time sufficient to stabilize all of the components of the oscillator circuit at each temperature level shall be allowed prior to frequency measurement. In addition to temperature stability the frequency stability shall be measured with variation of primary supply voltage as follows:

(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.
(2) For hand carried, batteries powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.
(3) The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

Test Arrangement:



The measurement procedure outlined below shall be followed:

Steps 1: The transmitter shall be installed in an environmental test chamber whose temperature is controllable. Provision shall be made to measure the frequency of the transmitter.
Step 2: With the transmitter inoperative (power switched "OFF"), the temperature of the test chamber shall be adjusted to +25°C. After a temperature stabilization period of one hour at +25°C, the transmitter shall be switched "ON" with standard test voltage applied.
Step 3: The carrier shall be keyed "ON", and the transmitter shall be operated unmodulated at full radio frequency power output at the duty cycle, for which it is rated, for a duration of at least 5 minutes. The radio frequency carrier frequency shall be monitored and measurements shall be recorded.
Step 4: The test procedures outlined in Steps 2 and 3, shall be repeated after stabilizing the transmitter at the environmental temperatures specified, -30°C to 50°C in 10 degree increments.

The frequency stability was measured with variations in the power supply voltage from 85 to 115 percent of the nominal value. A Sorenson DC Power Supply was used to vary the dc voltage for the power input from 23.8 Vdc to 32.2 Vdc. The frequency was measured and the variation in parts per million was calculated. Data was taken per Paragraphs 2.1055 and 87.133.

Results:

FREQ. (MHz)	FREQUENCY STABILITY VS TEMPERATURE IN PARTS PER MILLION (PPM)								
	Temperature in °C								
	-30	-20	-10	0	+10	+20	+30	+40	+50
118.000	-12.7	-11.8	-8.4	-3.4	0	0	0.8	0.8	-3.4
127.500	-11.7	-11.7	-7.8	-3.9	0	0	0.8	0.8	-3.1
136.975	-12.4	-11.6	-8.0	-3.6	0	0	0.7	-1.4	-2.9

FREQUENCY IN MHz	**STABILITY VS VOLTAGE VARIATION (15%) IN PPM INPUT VOLTAGE**		
	23.4 V_{dc}	**27.5 V_{dc}**	**31.6 V_{dc}**
118.000	0	0	0
127.500	0	0	0
136.975	0	0	0

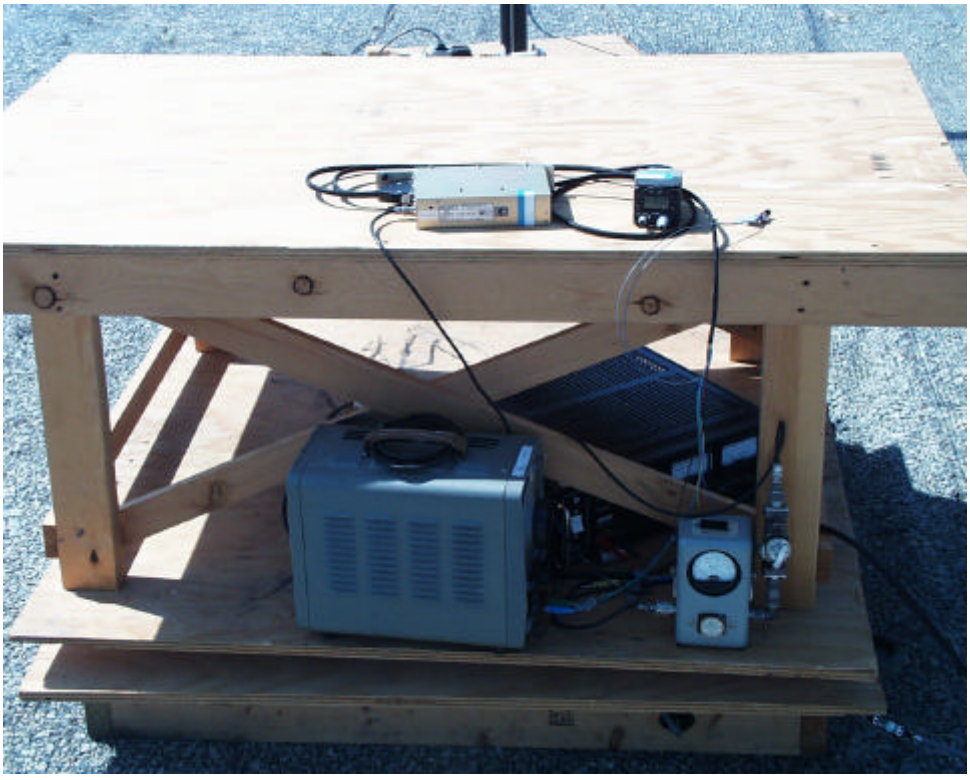
Specifications of Paragraphs 2.1055 and applicable parts of 87 are met. There are no deviations to the specifications.

APPENDIX

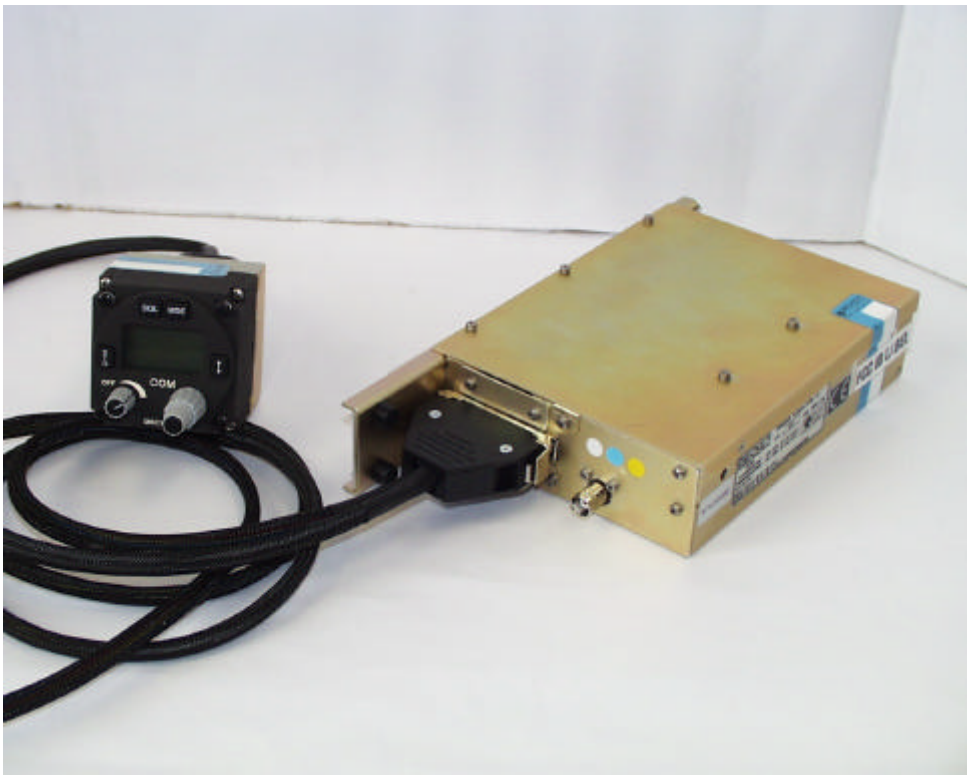
Model: RT3209-(11)

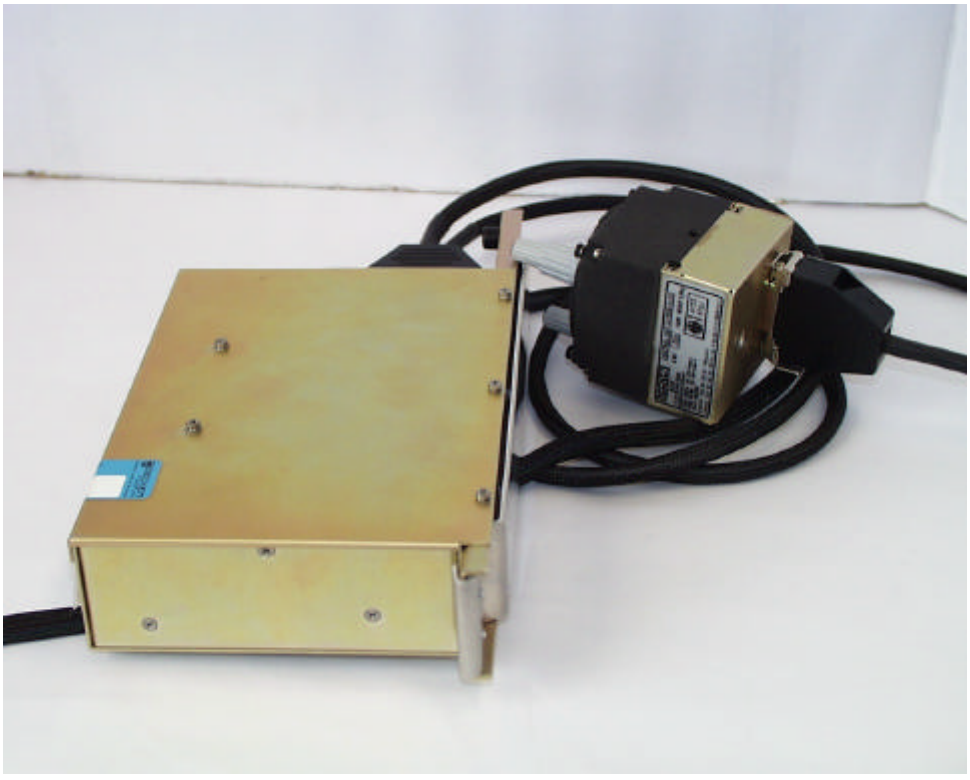
1. Photos of Radiated Emissions Test Set Up.
2. Photos Case front and back.
3. Photo FCC ID Label Location.
4. Photo Inside Unit
5. Photos Transmitter PC Board
6. Test Equipment List.
7. Rogers Qualifications.
8. FCC Site Approval Letter.

BECKER FLUGFUNKWERK GMBH
Model: RT3209-(11)
Photos Radiated Emissions



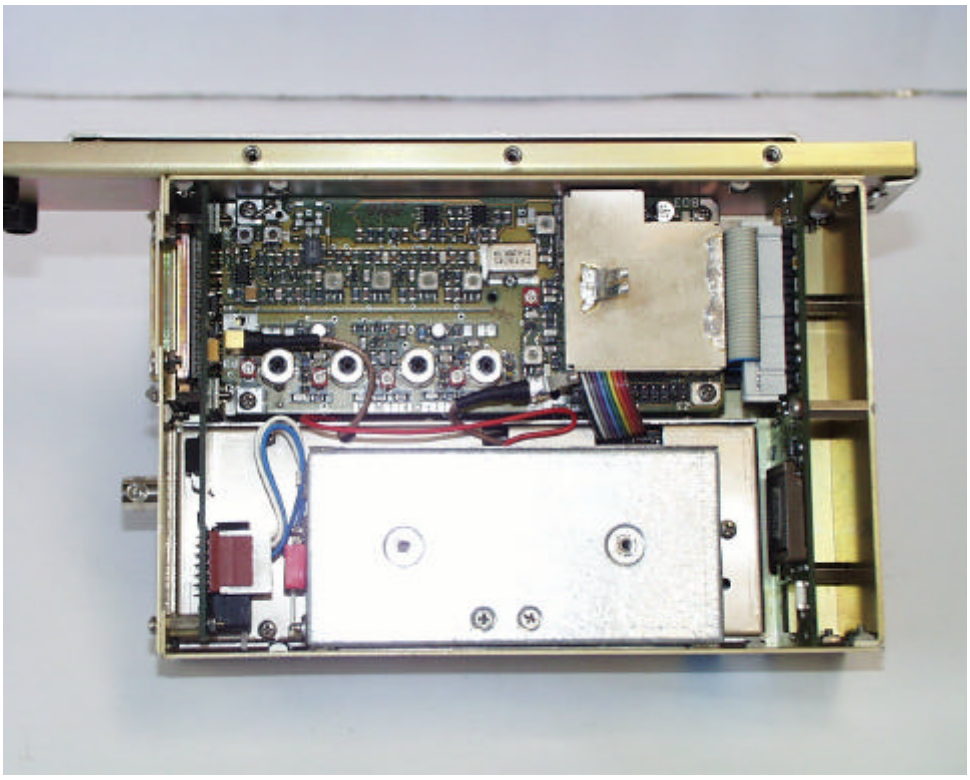
Becker Flugfunkwerk GMBH
Model: RT3209-(11)
Photos Case Front and Back



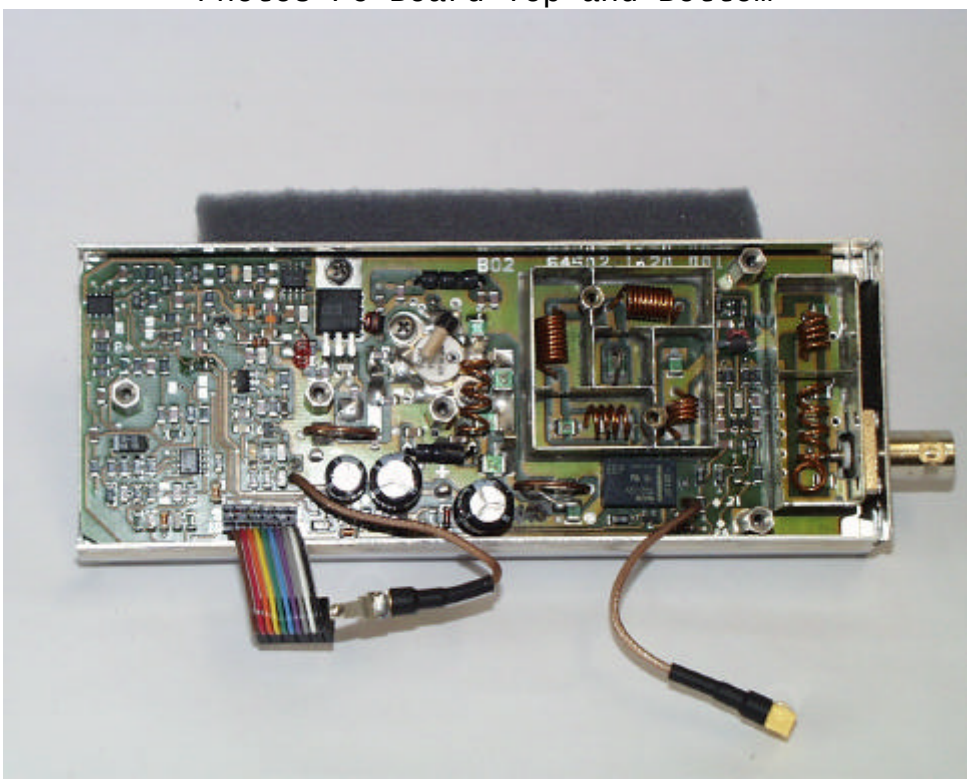


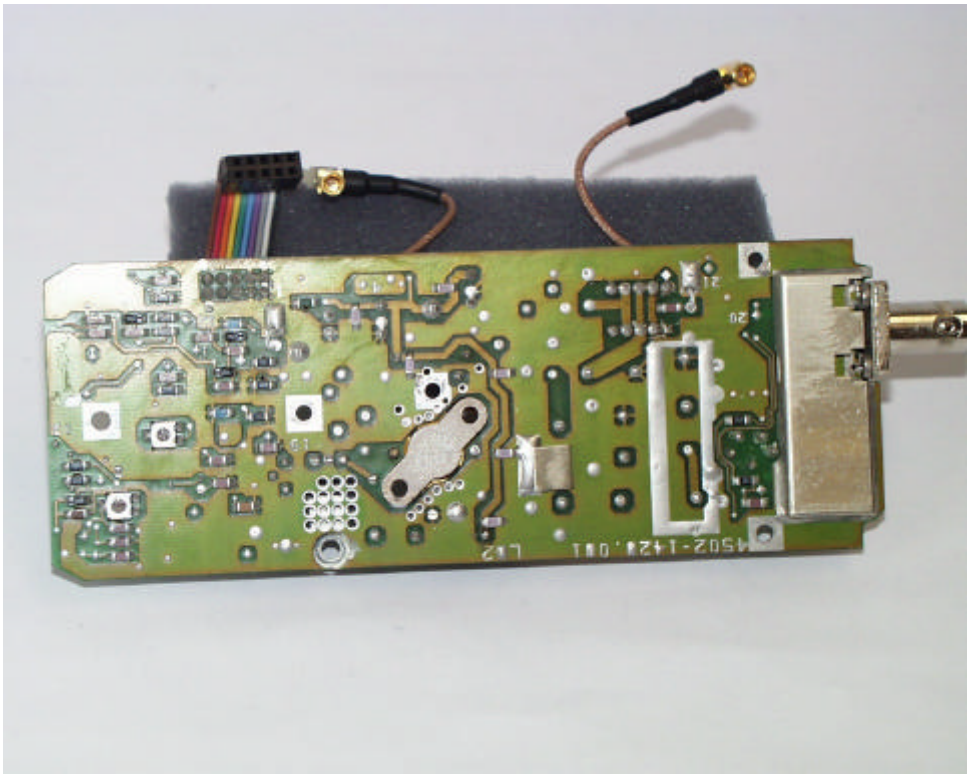
Becker Flugfunkwerk GMBH
Model: RT3209-(11)
FCC ID Label Location

Becker Flugfunkwerk GMBH
Model: RT3209-(11)
Photo Inside of Unit



Becker Flugfunkwerk GMBH
Model: RT3209-(11)
Photos PC Board Top and Bottom





TEST EQUIPMENT LIST FOR ROGERS LABS, INC.

The equipment is used daily and kept in good calibration and operating condition. Calibration of critical items are checked for accuracy each time used.

List of Test Equipment:	Calibration Date:
Scope: Tektronix 2230	2/98
Wattmeter: Bird 43 with Load Bird 8085	2/98
Power Supplies: Sorensen SRL 20-25, DCR 150, DCR 140	2/98
H/V Power Supply: Fluke Model: 408B (SN: 573)	2/98
R.F. Generator: Boonton 102F	2/98
R.F. Generator: HP 606A	2/98
R.F. Generator: HP 8614A	2/98
R.F. Generator: HP 8640B	2/98
Spectrum Analyzer: HP 8562A, Mixers: 11517A, 11980A & 11980K HP Adapters: 11518, 11519, 11520	2/98
Spectrum Analyzer: HP 8591 EM	6/98
Frequency Counter: Weston 1255	2/98
Frequency Counter: Leader LDC 825	2/98
Antenna: EMCO Log Periodic	9/98
Antenna: BCD 235/BNC Antenna Research	9/98
Antenna: EMCO Dipole Set 3121C	2/98
Antenna: C.D. B-100	2/98
Antenna: Solar 9229-1 & 9230-1	2/98
Antenna: EMCO 6509	2/98
Microline Freq. Meter: Model 27B	2/98
Dana Modulation Meter: Model 9008	2/98
Audio Oscillator: H.P. 200CD	2/98
R.F. Power Amp 65W Model: 470-A-1000	9/97
R.F. Power Amp 50W M185- 10-500	9/97
R.F. PreAmp CPPA-102	9/97
Shielded Room 5 M x 3 M x 3.0 M (100 dB Integrity)	
LISN 50 µHy/50 ohm/0.1 µf	9/98
LISN Compliance Eng. 240/20	2/98
SCS Power Amp Model: 2350A	2/98
Power Amp A.R. Model: 10W 1000M7	2/98
Linear Amp Mini Circuits: ZHL-1A (2 Units)	2/98
Combiner Unit Mini Circuits: ZSC-2-1 (2 Units)	2/98
ELGAR Model: 1751	2/98
ELGAR Model: TG 704A-3D	2/98
ELGAR Model: 400SD (PB)	2/98
ESD Test Set 2000i	10/95
Fast Transient Burst Generator Model: EFT/B-100	10/95
Current Probe: Singer CP-105	8/97
Current Probe: Solar 9108-1N	8/97
Field Intensity Meter: EFM-018	10/95

10/01/98

QUALIFICATIONS

Of

SCOT D. ROGERS, ENGINEER

ROGERS LABS, INC.

Mr. Rogers has approximately 12 years experience in the field of electronics. Six years working in the automated controls industry and 6 years working with the design, development and testing of radio communications and electronic equipment.

POSITIONS HELD:

Systems Engineer:	A/C Controls Mfg. Co., Inc. 6 Years
Electrical Engineer:	Rogers Consulting Labs, Inc. 5 Years
Electrical Engineer:	Rogers Labs, Inc. Current

EDUCATIONAL BACKGROUND:

1) Bachelor of Science Degree in Electrical Engineering from Kansas State University.

2) Bachelor of Science Degree in Business Administration Kansas State University.

3) Several Specialized Training courses and seminars pertaining to Microprocessors and Software programming.

Scot D Rogers

Scot D. Rogers

July 19, 1999
Date

1/11/99

FEDERAL COMMUNICATIONS COMMISSION

7435 Oakland Mills Road
Columbia, MD 21046
Telephone: 301-725-1585 (ext-218)
Facsimile: 301-344-2050

February 6, 1998

IN REPLY REFER TO
31040/SIT
1300F2

Rogers Labs, Inc.
4405 West 259th Terrace
Louisburg, KS 66053

Attention: Scot D. Rogers

Re: Measurement facility located at above address
(3 and 10 meter site)

Gentlemen:

Your submission of the description of the subject measurement facility has been reviewed and found to be in compliance with the requirements of Section 2.948 of the FCC Rules. The description has, therefore, been placed on file and the name of your organization added to the Commission's list of facilities whose measurement data will be accepted in conjunction with applications for certification or notification under Parts 15 or 18 of the Commission's Rules. Our list will also indicate that the facility complies with the radiated and AC line conducted test site criteria in ANSI C63.4-1992. Please note that this filing must be updated for any changes made to the facility, and at least every three years the data on file must be certified as current.

Per your request, the above mentioned facility has been also added to our list of those who perform these measurement services for the public on a fee basis. This list is updated monthly and is available on the Laboratory's Public Access Link (PAL) at 301-725-1072, and also on the Internet at the FCC Website www.fcc.gov/oet/info/database/testsite/.

Sincerely,

Thomas W. Phillips
Electronics Engineer
Customer Service Branch