December 14, 1998

Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road Columbia, MD 21046

Attention: Mr Richard Fabina

Applicant: Balogh
7699 Kensington Court
Brighton, MI 48116-8561

Equipment: ERC-85 Transceiver

FCC ID: G8630ERC85
Confirmation Number: EA91889
Reference: FCC Correspondence ID: 4790 and Correspondence ID: 4505

Dear Examiner:

The following information is provided in response to item number 1 of your inquiry on reference FCC ID: G8630ERC85, on behalf of Balogh TAG, Inc., for the Certification of their ERC-85 Transceiver.

Enclosed, please find a complete data and documentation package demonstrating that this device complies with the technical requirements of 47 CFR, Part 15.207, for a AC Line Conducted Emissions.

Sincerely,

Chris Harvey
Director, EMC Laboratory

FCC ID: G8630ERC85

MET Laboratories, Inc. ***Safety Certification - EMI - Telecom Environmental Simulation***

914 WEST PATAPSCO AVENUE • BALTIMORE, MARYLAND 21230-3432 • PHONE (410) 354-3300 • FAX (410) 354-3313

ENGINEERING ADDENDUM TEST REPORT

in support of the CERTIFICATION
Application for Grant of Equipment Authorization

EQUIPMENT:	ERC-85 Transceiver
FCC ID::	G8630ERC85
Specification:	47 CFR 15c
On Behalf of the Applicant:	Balogh 7699 Kensington Court Brighton, MI 48116-8561
Manufacturer:	Balogh 7699 Kensington Court Brighton, MI 48116-8561
Manufacturer's Representative	Mr. Joseph G. Tomashik
Test Date(s):	December 7, 1998

ENGINEERING STATEMENT

I ATTEST: the measurements shown in this report were made in accordance with the procedures indicated, and that the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements. On the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of Part 15c of the FCC Rules under normal use and maintenance.

1.0 INTRODUCTION

The following data is presented on behalf of the Applicant, Balogh, as verification of the compliance of the ERC-85 Transceiver, to the requirements of 47CFR15c.

2.0 TEST SITE

All testing was conducted at MET Laboratories, Inc., 914 West Patapsco Avenue, Baltimore, Maryland 21230-3493. Radiated emissions measurements were performed on a three-meter open area test site (OATS). A complete site description is on file with the FCC Laboratory Division as 31040/SIT/MET.

3.0 TEST EQUIPMENT USED

Manufacturer	Equipment	Calibration Due	Cal. Interval
Hewlett Packard	8594EM Analyzer	12/1/99	annual
Solar	LISN	6/30/99	annual

4.0 EQUIPMENT UNDER TEST CONFIGURATION

The ERC-85 Transceiver is a low power transceiver operating at 1.5MHz and intended for use in industrial environments. Balogh Transceivers are modular components compatible with various tags. The transceiver provides energy for data transmission and reception between the Tag and Transceiver. An electromagnetic field generated by the transceiver determines the dimensions of the transmission zone. As a tag enters the transmission zone, data transfer takes place without contact through an inductive field established by the transceiver. This transmission is independent of the direction and speed of the tag. The read/write tags are remotely read or written to when the tag is in the transmission zone. Read/write tags are available with 64 byte, 2 Kbyte, or 8 Kbyte memory capacities. the front panel LED's were visual monitored to determine the presents or absence of a tag, or a T/R fault if the T/R is not operational.

5.0 TEST TYPE(S)

5.1 AC Line Conducted Emissions: 47CFR15.207

6.0 TEST RESULTS

6.4.1 TECHNICAL SPECIFICATION: 15.107(b)

6.4.2 TEST DATE(S): 7 Dec 1998

6.4.3 MEASUREMENT PROCEDURES:

The measurements were performed over the frequency range of 0.45 MHZ to 30 MHZ using a 50 Ω/50 µH LISN as the input transducer to an EMI/Field Intensity Meter. The measurements were made with the detector set for "peak" amplitude within an IF bandwidth of 10 kHz or for "quasi-peak" within a bandwidth of 9 kHz. The tests were conducted in a RF-shielded enclosure.

6.4.4 RESULTS:

Equipment complies with Section 15.107(b)

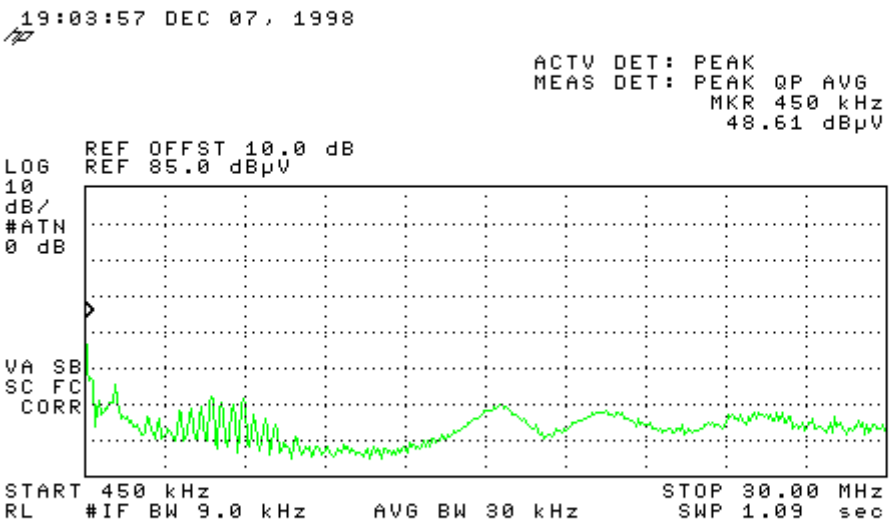
SUMMARY OF SPURIOUS EMISSIONS AT AC Mains Terminals - Phase

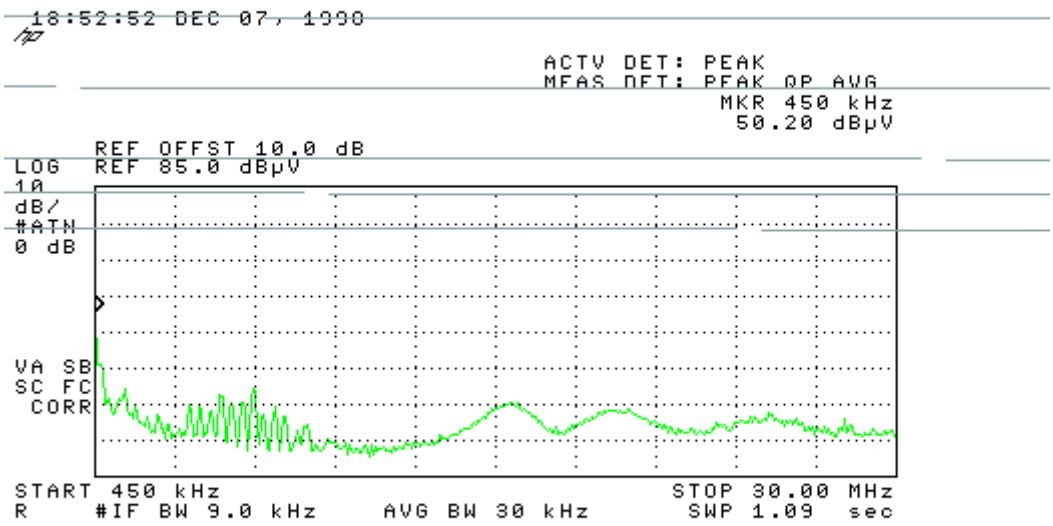
Frequency (MHZ)	Emission Quasi-Peak Level (dBuV)	Limit (dBuV)
0.458	40.9	48.0
0.462	40.6	48.0
0.466	40.0	48.0

SUMMARY OF SPURIOUS EMISSIONS AT AC Mains Terminals - Neutral

Frequency (MHZ)	Emission Quasi-Peak Level (dBuv)	Limit (dBuV)
0.458	42.8	48.0
0.462	38.5	48.0
0.467	39.6	48.0

Plots follow are included in this application as file attachments: cen.jpg and cep.jpg


19:03:57 DEC 07, 1998
ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 450 kHz
48.61 dBµV
REF OFFST 10.0 dB
LOG REF 85.0 dBµV
10
dB/
#ATN
0 dB
VA SB
SC FC
CORR
START 450 kHz
STOP 30.00 MHz
RL #IF BW 9.0 kHz
AVG BW 30 kHz
SWP 1.09 sec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ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 450 kHz
50.20 dBµV
REF OFFST 10.0 dB
LOG REF 85.0 dBµV
10
dB/
#ATN
0 dB
VA SB
SC FC
CORR
START 450 kHz
STOP 30.00 MHz
R #IF BW 9.0 kHz
AVG BW 30 kHz
SWP 1.09 sec