#### University Of Michigan



COLLEGE OF ENGINEERING
THE RADIATION LABORATORY
DEPARTMENT OF ELECTRICAL ENGINEERING
AND COMPUTER SCIENCE

3228 EECS BUILDING 1301 BEAL AVENUE ANN ARBOR, MICHIGAN 48109-2122 734 764-0500 FAX 734 647-2106 http://www.eecs.umich.edu/RADLAB/

Re: Certification for Raven Transmitter

FCC ID: KSME1004600 IC: 2004A-E1004600

# REQUEST FOR CONFIDENTIALITY

Pursuant to 47 CRF 0.457(d) and 0.459, Raven requests that a part of the subject application be held confidential

Type of Confidentiality Requested		Exhibit	
☐ Short Term	Permanent	(1)	ID Label & Location
☐ Short Term	Permanent	(3)	External Photos
☐ Short Term	Permanent	(4)	Block Diagram
☐ Short Term	⊠Permanent	(5)	Schematics
☐ Short Term	Permanent	(7)	Test Setup Photos
☐ Short Term	Permanent	(8)	User's Manual
☐ Short Term	Permanent	(9)	Internal Photos
☐ Short Term	⊠Permanent	(10)	Parts List & Placement
☐ Short Term	Permanent	(11)	RF Exposure
Short Term	Permanent	(12)	Description of Operation

Raven has spent substantial effort in developing this product and it is one of the first of its kind in industry. Having the subject information easily available to "competition" would negate the advantage they have achieved by developing this product. Not protecting the details of the design will result in financial hardship.

## **Permanent Confidentiality:**

Raven requests the exhibits listed above as permanently confidential be permanently withheld from public review.

# **Short-Term Confidentiality:**

Raven requests the exhibits selected above as short term confidential be withheld from public view for a period of 45 days from the date of the Grant of Equipment Authorization and prior to marketing.

If there are any questions regarding this request, please contact me at the above address or call 734-483-4211, fax 734-647-2106 or e-mail liepa@umich.edu.

Sincerely,

Valdis V. Liepa, Research Scientist

University of Michigan

Vald? V. Lipa

# University Of Michigan College Of Engineering



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June 17, 2007

Re: Certification for Raven Transmitter

Model/PN(s): E1003930, E1003931, E1003932

FCC ID: KSME1004600 IC: 2004A-E1004600

# STATEMENT OF MODIFICATIONS

There were no modifications made to the DUT by this test laboratory. (Also see Section 3.1 of the attached Test Report).

Valdis V. Liepa
Research Scientist

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# GENERAL PRODUCT INFORMATION

The device, for which certification is pursued, has been designed by:

Raven Industries
4372 Green Ash Drive, Earth City, MO 63045
Contact: Darren Hacker
darren.hacker@ravenind.com
Tel: 314 291 2712 x 3034

Fax: 314 291 0773

It will be manufactured by:

Raven Industries
4372 Green Ash Drive, Earth City, MO 63045
Contact: Darren Hacker
darren.hacker@ravenind.com
Tel: 314 291 2712 x 3034

Fax: 314 291 0773

Canadian Contact:

Globe Spring Co.
25 Doney Crescent
Concord, Ontario L4K 1P6
Contact: Larry Marcus
darren.hacker@ravenind.com

Tel: 416-669-9681 Fax:314 291 0773

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# **POWER OF ATTORNEY**

A letter granting Valdis V. Liepa the Power of Attorney is on file and can be provided when so requested.



April 19, 2007

Industry Canada 1241 Clyde Ave. Ottawa, Ontario K2C 1Y3

Re: Power of Attorney for Valdis V. Liepa

To Whom It May Concern:

Raven Industries has this day, April 19, 2007, appointed Valdis V. Liepa, located at the University of Michigan, Department of Engineering and Computer Science, Ann Arbor, Michigan 48109-2122 as the agent to act for Raven Industries in the Industry Canada certification process for the Ultramatic Single Board Hand Wand.

**Engineering Manager** 

Applicant: Raven Industries 4372 Green Ash Dr Earth City, MO 63045



Raven Industries 4372 Green Ash Dr Earth City, MO 63045

Federal Communications Commission Applications Processing Branch 7435 Oakland Mills Road Colombia, MD 21046

Re: Letter of Agency for FCC Compliance Testing of Ultramatic Series Wireless Hand Wand

I, Darren W. Hacker, the Engineering Manager for the above mentioned systems, do hereby authorize Professor Valdis V. Liepa of the University of Michigan, Department of Electrical Engineering and Computer Science, Ann Arbor, Michigan, to act on Raven Industries behalf in front of the Federal Communications Commission with respect to all matters relating to the certification of the above said systems.

#### Anti-Drug Abuse Certification:

I further certify that no party (as defined in 1.2002 of CFR47, 1992) to this application, including myself is subject to a denial of federal benefits, that includes FCC benefits, pursuant to Section 5301 of the Anit Drug Abuse Act of 1988, 21 U.S.C. 853(a).

Dated this 19 Day of April, 2007 -04-19

Darren W. Hacker



Attn: Director of Certification

# **Authority to Act as Agent**

I appoint Valdis V. Liepa to act as our agent in the preparation of this application for equipment certification. I certify that submitted documents properly describe the device or system for which equipment certification is sought. I also certify that each unit manufactured, imported or marketed, as defined in Industry Canada's regulations will have affixed to it a label identical to that submitted for approval with this application.

For instances where our authorized agent signs the application for certification on our behalf, I acknowledge that all responsibility for complying with the terms and conditions for Certification, as specified by American TCB, still resides with Raven Industries, 4372 Green Ash Drive, Earth City, MO 63045.

Dated this twentieth day of April 2007.

Agency Agreement Expiration Date: 12 months

Ву:	Daw W Midly (Signature)	Darren W. Hacker (Print Name)
Title:	Engineering Manager	
Email:	Darren.Hacker@ravenind.com	
On behalf of:	Raven Industries (Company Name)	
Telephone:	314-291-2712	



American TCB 6731 Whittier Ave. McLean, VA 22101

# **Acknowledgement of IC Listing Requirements**

By signing this document, we acknowledge that any information specified on the ATCB <a href="Application and Agreement Form for Industry Canada Certification Services">Application and Agreement Form for Industry Canada Certification Services</a> provided with this application may be provided to Industry Canada. We acknowledge that this information may be posted in the Radio Equipment List (REL) on the Department's Web Site. Additionally, we understand that we must inform ATCB of any changes to the information submitted.

We further acknowledge that the Certified product shall not be distributed, leased, or offered for sale in Canada prior to its listing on the Industry Canada Radio Equipment List (REL). We are aware that we may verify the status of this listing at the following web address:

http://strategis.ic.gc.ca/cgi-bin/sc\_mrksv/spectrum/reltelSearch/search.pl?lang=e&db=rel

By:

Darren W. Hacker
(Signature)

Title:

Engineering Manager

Email:

Darren.Hacker@ravenind.com

On behalf of:

Raven Industries
(Company Name)

Telephone:

314-291-2712