

800 Independence Ave., SW. Washington, DC 20591

## FEB 0 8 2006

Mr. Andy Leimer Federal Communications Commission 7435 Oakland Mills Road Columbia, MD 21046

Dear Mr. Leimer:

We have reviewed the Honeywell International Inc. letter dated January 18, 2006, regarding modifications to the aviation Data Transceiver ID - No. ASY MCX-100A manufactures model number MCX-1000A that extends data operation from the Federal Communications Commission (FCC) authorized frequency band 128.825 MHz to 132.000 MHz to the extended frequency band of 136.500 MHz to 136.975 MHz. Having completed the subject review, we have no objection to FCC certification of the terminal.

Honeywell International Inc., as all applicants for FCC certification, should be aware that it is likely that aircraft will employ Global Navigation Satellite System (GNSS) receivers along with very high frequency (VHF) transceivers. It is also likely that without proper filtering, of the VHF transceiver harmonic emissions (as per (draft) TSO-C37e), there is a potential for interference to be caused by the VHF transceiver to the GNSS receiver.

If you require any additional information, please contact Ms. Annette Allender, Spectrum Planning and International Office, at (202) 267-3893.

Sincerely,

Oscar Alvarez

Acting Director

ATC Spectrum Engineering Services

cc:

M. Flom Associates, Inc. 3356 N. San Marcos Place, Suite 107 Chandler, Arizona 85225-7176 Fax (480) 926-3598 CC# AJWE FY06-15 Honeywell

Aerospace Electronic Systems Honeywell One Technology Center 23500 W. 105th Street Olathe, KS 66061 913 782-0400

FCC-06-1213

January 18, 2006

FAA Office of Spectrum Policy and Management AJW-6 800 Independence Avenue SW (Room 715) Washington, DC 20591

Subject: FAA Notification of Honeywell Application for FCC Certification of MCX-1000A VHF Transceiver

Dear Mr. Oscar Alvarez:

Honeywell International Inc. is currently developing modifications to a VHF transceiver assembly within our Airborne Flight Information System (AFIS) Data Management Unit (DMU) product in order to extend data operation from the original FCC authorized frequency band of 128.825MHz to 132.000MHz to an extended frequency band of 136.500MHz to 136.975MHz. Hence, the changes (i.e., modifications) in the certificated equipment were extensive enough to require a new application.

As required by Title 47 CFR 87.147(d), Honeywell International Inc. hereby submits notification of FCC Certification application for the MCX-1000A VHF transceiver. The equipment characteristics are as follows:

MCX-1000A VHF Transceiver Assembly (Part Number: 42455-1)

Manufacturer's Identification: Honeywell International Inc. FCC ID No. ASYMCX-1000A

• Antenna Characteristics: Conventional 50 ohm Vertically Polarized Omni-directional

• Rated Output Power: 20 Watts, nominal (16 Watts minimum, 24 Watts maximum)

Emission Type: 13k0A2D

• Emission Characteristic: Data modulated AM (MSK, 2400 bps)

• Frequency: 128.825 to 132.000 MHz, 136.500 to 136.975 MHz

• Essential receiver characteristics if protection is required: No protection is required.

If you require any additional information, please contact myself (Mr. Jack Glecier) via telephone at (913) 712-2352.

As you know, the FCC will not act until it receives the FAA's determination regarding whether it objects to the application for equipment authorization. Therefore, eleven (11) enclosures form a part of this submittal in order to facilitate the FAA determination.

Thank you for your prompt attention to this notification.

Sincerely

Jack Glecier, FCC Coordinator Honeywell International Inc.

23500 W. 105th Street (Mailstop #37)

Olathe, KS 66061

#### **Enclosures:**

- Test Report For Application of Certification dated December 12, 2005 (23 pages)
   Test Setup Photographs for MCX-1000A (1 page)
- 3. FCC ID Label and Label Placement Information for MCX-1000A (2 pages)
- 4. External Photographs of Equipment Under Test for MCX-1000A (2 pages)
- 5. Internal Photographs of MCX-1000A (6 pages)
- 6. MCX-1000A BLOCK DIAGRAM
- 7. 152-0240-000(AD), MCX-1000 CHASSIS (A1) SCHEMATIC (1 sheet)
- 8. 152-0209-000(V), R/T MODULE (A2) SCHEMATIC (1 sheet)
- 9. 152-0241-000(AB), MCX-1000 AUDIO MODULE (A3) SCHEMATIC (1 sheet)
- 10. TCB Application Form 731 (3 pages)
- 11. Confidentiality Letter from ROGERS LABS, INC. to FCC dated January 10, 2006 (2 pages)

# APPLICATION SUBMITTAL

## FOR FCC GRANT OF CERTIFICATION Per Part 87

## **FOR**

MODEL: MCX-1000A 128.825-132.000, 136.500-136.975 MHz VHF Aviation Data Transmitter FCC ID: ASY MCX-1000A

## **FOR**

## Honeywell International Inc.

Business and General Aviation Division One Technology Center, 23500 West 105<sup>th</sup> Street Olathe, KS 66061



## ROGERS LABS, INC.

4405 West 259th Terrace Louisburg, KS 66053 Phone / Fax (913) 837-3214

## TEST REPORT

#### For

## APPLICATION of CERTIFICATION

For

#### HONEYWELL INTERNATIONAL INC.

Business and General Aviation Division One Technology Center 23500 West 105th Street OLATHE, KS 66061 Phone: (913) 712-2352

> Jack Glecier FCC Coordinator

VHF AVIATION DATA TRANSCEIVER

Model: MCX-1000A Part Number: 42455-1

Frequency Range: 128.825-132.000, 136.500-136.975 MHz

FCC ID: ASY MCX-1000A

Test Date: December 12, 2005

Certifying Engineer:

Scot D Rogers

Scot D. Rogers ROGERS LABS, INC.

4405 West 259th Terrace Louisburg, KS 66053 Phone: (913) 837-3214 (913) 837-3214 FAX:

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ROGERS LABS, INC. 4405 West 259<sup>th</sup> Terrace

Honeywell International Inc. PN: 42455-1

Louisburg, KS 66053 Test #: 051212 Phone/Fax: (913) 837-3214 Test to: FCC Parts 2, 15 and 87

MODEL: MCX-1000 SN: Y1139

FCC ID#: ASY MCX-1000A Page 2 of 23 Honeywell MCX1000A Test Feport 12-16/2005

NVLAP Lab Code: 200087-0

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 ROGERS LABS, INC.
 Honeywell International Inc.
 MODEL: MCX-1000

 4405 West 259<sup>th</sup> Terrace
 PN: 42455-1
 SN: Y1139

 Louisburg, KS 66053
 Test #: 051212
 FCC ID#: ASY MCI

 Phone/Fax: (913) 837-3214
 Test to: FCC Parts 2, 15 and 87
 Page 1000

SN: Y1139 FCC ID#: ASY MCX-1000A Page 3 of 23
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