



**M. Flom Associates, Inc. - Global Compliance Center**  
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September 24<sup>th</sup>, 2003.

Federal Communications Commission  
 Wireless Bureau ELT  
 P.O. Box 358994  
 Pittsburgh, PA 15251-5994

Reference: HONEYWELL INTERNATIONAL INC. FCC ID: GB8HS-700 EA162179  
 Subject: Request for Waiver to FCC Rule Part 1.925

Gentlemen:

1. Attached copy of Fee Form 159 for \$150.00
2. Following is a description of the referenced unit, which is a High-Speed Data Unit

#### DESCRIPTION

The present device is a single channel high-speed data unit, meant to operate under FCC Rule Part 87.131 with a frequency band of 1626.5 to 1660.5 MHz and 16 QAM modulation. R.F. power output is 40 watts.

The HS-700 High speed data system is designed to form part of the MCS-7000 Aero H/H + Satellite Communication (SATCOM) System. The MCS-7000 multi-channel SATCOM system includes a SD-700 Satellite Data Unit (SDU) HP-600 High Power Amplifier (HPA) and an Aero H/H+ High Gain Antenna (HGA).

The HS-700 High Speed Data Unit (HSU) provides an additional dedicated 64 kbps integrated services digital network (ISDN) or mobile packet data service (MPDS) channel that can be operated simultaneously with the MCS-700 SATCOM System. The HSU is operated as a slave to the MCS-700 SYSTEM IN A COOPERATIVE MODE. The SD-700 controls the HSU through a high speed ARINC 429 bus.

The HSU is a terminal for data, fax and voice communications through the Inmarsat Global Area Network (GAN). It provides the services of this network to the user.

The HS-700 HSD System provides two modes of communication: circuit-mode and packet mode.

Modulation types and Interference.

The SDU and the HSU work in conjunction to ensure that no multi-channel SATCOM RF transmission occur that would result in generation of intermodulation products, which would interfere with on-aircraft operation of the GNSS.

This is accomplished by performing a check of all candidate transmit frequencies prior to tuning the channel using the algorithm referred to in Section 10.2.2.4.2.6 of DO-210D AMSS MOPS Change 1.

Candidate transmit frequencies include all those associated with channel units in the SDU and those in the HSU.

**APPROVED**

DEC 24 2003

Public Safety & Private  
Wireless Division

for the reasons  
indicated herein  
Jul 30th

Prior to tuning to a new HSD carrier frequency, the HSU will request the SDU to check GNSS interference risk by taking into account this new frequency in the algorithm described on page I. When there is an interference risk, the SDU shall reject the HSU request with the reason of 'GNSS interference frequency check error'.

Section 87.39 of the Commission Rules require:

1. THAT U.S. registered aircraft employ type-certified communication equipment.
2. THAT communication equipment must meet the technical requirements of Part 87 Subpart D.
3. THAT Subpart D contains a list of authorized emissions (87.131, 87.137) for use in the radio navigation bands
4. THAT there is no provision in the Commission's rules for the use of 16QAM (33.6 KPS, emission designator 38KOFD1W).
5. THAT aircraft must have the capability to communicate with other aircraft and Ground stations, and the capability would be in the public interest. Thus the capability of U.S. registered aircraft would be reduced.

As advised, the Form 159, with authorization to charge our credit card in the amount of \$150.00 has been attached. Please process in the manner acceptable to the Commission.

Also attached is a copy of the Applicant's Agent Authorization letter to this company.

FYI: This device has received F.A.A. APPROVAL as of July 21st, 2003 - copy attached.

FCC certification under the referenced EA162179 awaits only the granting of the present request for Waiver.

Accordingly, the Applicant is requesting a Waiver to the Commission's Rules 47CFR, sections 1.925, 87.131, 87.137(a) as applicable.

Your early attention to this request is respectfully requested.

Sincerely yours,



Morton Flom, P. Eng.  
M. FLOM ASSOCIATES, INC.  
(MF;mgf)

cc: [ALEIMER@fcc.gov](mailto:ALEIMER@fcc.gov)  
cc: [James.Shaffer@fcc.gov](mailto:James.Shaffer@fcc.gov)



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

800 Independence Ave., S.W.  
Washington, D.C. 20591

JUL 21 2003

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

Dear Mr. Leimer:

We have reviewed the M. Flom Associates, Inc letter dated April 30, 2003, and have completed the subject review with no objection to Federal Communications Commission (FCC) certification of the High Speed Data Unit, Model HS-700 designed to form part of the MCS-7000 Aero H/H+ Satellite Communication system; FCC ID: GB8HS-700.

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

Sincerely,

A handwritten signature in black ink, appearing to read "George K. Sakai".

George K. Sakai  
Program Director for Spectrum  
Policy and Management

CC:

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