

Attn: Linda Sadler, 1745 Jefferson Davis Highway, Arlington, VA 22202

United States of America
FEDERAL COMMUNICATIONS COMMISSION

EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION

EXPERIMENTAL
(Nature of Service)

K E 2 X A G
(Call Sign)

XD MD
(Class of station)

S-1797-EX-95
(File number)

NAME ROCKWELL INTERNATIONAL CORPORATION

Continental United States
(Location of station)

Special Temporary Authority is hereby granted to operate the radio transmitting apparatus described below:

Frequency MHz	Authorized Power (watts)	Emission Designator
1626.5-1646.5	16 (ERP)	20K0G1D

Equipment: Two Thrane and Thrane TT-3024A, Inmarsat Type No. IT-04-035-01/A

This special temporary authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This special temporary authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control by the Government of the United States conferred by Section 706 of the Communications Act of 1934.

This authorization effective April 24, 1995 and
will expire 3:00 A.M. EST. October 24, 1995



Rockwell International Corporation
Washington Office
1745 Jefferson Davis Highway
Arlington, Virginia 22202



June 9, 1995

Kimberly Baum
Federal Communications Commission
OET - Experimental Licensing Branch
2000 M Street NW
Washington, D.C. 20554

Dear Ms. Baum:

Per our telephone conversation on June 8, Rockwell International Corporation (Rockwell) seeks to make a simple modification to its special temporary authorization (STA) for experimental radio station call sign KE2XAG. The STA currently authorizes Rockwell to conduct GPS-based air traffic control experiments and demonstrations using an Inmarsat Aero-C terminal aboard a Rockwell corporate aircraft (see enclosed copies of Rockwell's original application and the Commission's authorization). Rockwell seeks to modify the STA by adding another mobile Inmarsat Aero-C terminal, that would be operated aboard a separate Rockwell corporate aircraft, to the experimental air traffic control system.

The proposed second terminal is a Thrane and Thrane TT-3024A, Inmarsat Type No. IT-04-035-01/A, identical to the equipment currently authorized under the STA. The proposed second aircraft is a Gulfstream 2 corporate jet, tail number N4NR, owned and operated by Rockwell. The Inmarsat mobile number corresponding to the second terminal and aircraft is 493 134 077. All other aspects of the operations under this STA will be unaffected by the proposed addition of the second mobile unit.

Your prompt consideration of this matter is appreciated. Please address any questions to the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "M. Brett Wilson". The signature is fluid and cursive, with a long horizontal stroke at the end.

M. Brett Wilson
Regulatory Affairs Assistant
(703) 412-6635

Enclosure

cc: Frank Wright, FCC
Linda C. Sadler, Rockwell
Loney R. Duncan, Rockwell

Rockwell International Corporation
Washington Office
1745 Jefferson Davis Highway
Arlington, Virginia 22202



December 22, 1994

Federal Communications Commission
Experimental Radio Service
P.O. Box 358320
Pittsburgh, PA 15251-5320

Gentlemen:

Pursuant to Sections 5.202 and 5.56 of the Commission's Rules and Regulations, Rockwell International Corporation (Rockwell) hereby requests a Special Temporary Authorization (STA) to utilize station KE2XAG for INMARSAT AERO-C mobile aeronautical satellite transmissions in support of GPS-based air traffic control and tracking experiments.

1. The applicant is Rockwell International Corporation, 1745 Jefferson Davis Highway, Arlington, VA 22202.
2. This STA is needed to allow immediate licensed operation of a standard INMARSAT AERO-C mobile earth terminal. INMARSAT has already authorized Rockwell for the proposed operations, Rockwell's INMARSAT mobile number is 493 132 032.
3. The type of operation will conform to standard INMARSAT AERO-C parameters for mobile earth stations.
4. The purpose of operation is to support experimental GPS-based tracking of a Sabre 65 corporate jet, N82CR (owned and operated by Rockwell International), during flight operations by linking the aircraft and ground control points through INMARSAT. The system will also be operated for technical demonstrations.
5. Operations under this STA will be sporadic and non-continuous 24 hours a day from January 9, 1995 to June 9, 1995.
6. The STA is requested for experimental radio station call sign KE2XAG, a XD FX class station used for experimental satellite communications.
7. Operations under the STA may be conducted anywhere within the Continental United States.
8. The equipment to be used will be standard INMARSAT AERO-C mobile earth station equipment - a Thrane and Thrane TT-

mobile earth station equipment - a Thrane and Thrane TT-3024A, serial number 9306329, INMARSAT Type No. IT-04-035-01\A.

9. Rockwell has been authorized by INMARSAT to use standard INMARSAT C frequencies, 1626.5 - 1646.5 MHz (See No. 2 above).
10. The transmitter complies with INMARSAT C guidelines, operating with 12 dBW-EIRP at the antenna.
11. The emission type also complies with INMARSAT C guidelines using Binary Phase Shift Keying (BPSK) modulation.
12. The overall height of the antenna above ground at any given time will be determined by the attitude of the aircraft.

A form 159 is enclosed along with our check for \$45.00. It is requested that a date-stamped copy of this letter be returned to the undersigned. A duplicate copy of this letter and a stamped envelope are enclosed for this purpose.

Please direct any questions to the undersigned at (703) 412-6696.

Respectfully submitted,



Linda C. Sadler
Manager, Governmental Affairs

cc: H.F. Wright, FCC
L.R. Duncan, 460-530