

**FEDERAL COMMUNICATIONS COMMISSION  
445 TWELFTH STREET SW  
WASHINGTON DC 20554**

**INTERNATIONAL BUREAU  
SATELLITE RADIOCOMMUNICATIONS  
SATELLITE ENGINEERING BRANCH  
HOME PAGE: WWW.FCC.GOV/IB  
APPLICATION STATUS: (202) 418-2222**

**PROCESSING ENGINEER: HSING LIU  
TELEPHONE: (202) 418-0759  
FACSIMILE: (202) 418-0748  
MAIL STOP: 7-A431  
E-MAIL ADDRESS: HLIU@FCC.GOV**

April 25, 2003

Robert J. Miller, Esq.  
Gardere Wynne Sewell LLP  
1601 Elm Street, Suite 3000  
Dallas, TX 75201

Re: Call Sign: E020303  
File No. SES-LIC-20021028-01926  
Schlumberger Omnes, Inc. ("SOI")

Dear Counsel:

We have under consideration the above-captioned license application filed on behalf of SOI. For the reason stated below, we require SOI to submit additional information.

In this application, SOI seeks blanket authorization for 300 Ku-band VSAT Earth Stations on Vessel (ESV) with antennas mounted on river barges traveling along the United States Inland Waterway systems. As barges traveling in water, the onboard antenna mounts can be inherently unstable. There are concerns on antenna pointing errors which to the satellite it desires to communicate and to the neighboring satellites it may adversely interfere. SOI attempted to address this issue in its application. However, the paragraph was too brief and lacked detailed explanation. Therefore, we ask SOI to submit additional information in the following for further review:

- 1) Describe, with functional block diagram and schematic, the operation of "carrier detect", "transmit mute", "de-activate" and "re-activate". List the operation criteria and specifications. Describe if additional stability control devices are equipped (e.g. gyro antenna platform);
- 2) Describe if any multiple access (MA) scheme and/or random access (RA) protocol to be used in the VSAT network. If so, explain how the traffic and power loading are regulated in compliance with the FCC Rules;
- 3) Submit antenna gain pattern plots as specified in CFR47 Sect. 25.209 for the receive and transmit antennas;
- 4) Submit field test report to demonstrate the proposed operation will not cause spectral interferences to other satellite communications.

Further action on the subject application will be withheld for a period of thirty days from the date of this letter to provide SOI an opportunity to respond. Failure to respond within this time period will result in the dismissal of the application pursuant to 47 CFR §25.112(c). Please note that any amendment must be submitted to the Office of the Secretary in triplicate and signed in the same manner as the original application.

Sincerely,

Hsing Liu  
Electronics Engineer