SES AMERICOM
An SES GLOBAL Company

February 18, 2004

Federal Communications Commission – International Bureau
445 12th Street, S.W.
Washington, D.C. 20554

Subject: Engineering Certification of SES Americom

To whom it may concern:

This letter certifies that SES Americom Inc. ("SES") is aware of the application filed by Armer Communications ("Armer"), on behalf of BJ Services Company, USA, (FCC File No. SES LIC 2002 032 600479) (the "Application"), to operate a Ku-band FSS VSAT network serving earth stations on vessels ("ESVs") along the U.S. Inland Waterway system. Armer is seeking FCC authorization to utilize the SES Americom satellite AMC-6 at 72 degrees W.L. licensed by the Federal Communications Commission ("FCC"). SES has provided PanAmSat with a list of SES transponders currently assigned to support transmissions from these antennas and, for purposes of inter-system coordination, will promptly provide PanAmSat with relevant information for any additional or different transponders provided by SES.[1]

The Ku-Band terminal uses the SeaTel Model 4669, antenna with an aperture of 1.2 meter. SES-Americom understands that this antenna complies with the requirements of Section 25.209 of the FCC's rules. This antenna will tilt in order to maintain the long axis tangent to the orbital arc, and correct polarization, when the longitudinal difference between the intended satellite and the earth station location is greater than zero degree. These antennas will maintain a nominal pointing accuracy of +/-0.2 degrees and will be operated at a maximum input power density at the antenna waveguide flange of –17.0 dBw/4kHz, compliant with the -14.0 dBW/4kHz FCC maximum for 2-degree compliant systems and routine licensing[2]. Transmission will be inhibited upon loss of receiver lock or at pointing offset larger than 0.5 Degrees.

SES Americom and Armer acknowledges that these antennas will be installed in compliance with the technical, operational and performance requirements of Part

[1] PanAmSat agrees to keep all transponder specific information it acquires from SES confidentially and shall not disclose such information to any third parties.
[2] 47 CFR § 25.134

25 of the FCC rules and any requirements set forth in the licenses granted by the FCC for Armer. The above antennas will be installed by professional installers and aligned with the intended satellite to less than or equal to the tolerance as stated in this letter.
The undersigned further certifies that the maximum downlink Satellite EIRP density of 6 dBw/4kHz, operational level of the Ku-Band VSAT network operated by Armer, is within the levels coordinated with PanAmSat.

SES Americom acknowledges that the use of the above antenna system by Armer, installed and operated in accordance with the above conditions, should not cause unacceptable interference into adjacent satellites and that Armer will accept interference from adjacent satellites to the degree to which harmful interference would not be expected to be caused to an earth station employing an antenna conforming to the reference patterns defined in Section 25.209 of FCC rules. If the use of this antenna should cause interference into other systems, Armer has agreed that it will terminate transmissions immediately upon notice from the affected parties.

Furthermore, should other satellites be positioned at the aforementioned orbital locations, the transponder assignments coordinated pursuant to this letter will remain the same.

Sincerely,

Jaime Londono
Satellite Market Development, Director

SES Americom

Acceptance by PanAmSat:

PanAmSat agrees to the SeaTel Model 4669, Ku-Band antenna with an aperture of 1.2 meter, with their respective azimuth angle alignment tolerances toward AMC-6 and the power density levels into the antenna flange as stated in this letter, with respect to Galaxy satellite transponders that are within +/- 6 degrees orbital spacing from AMC-6 at 72 degrees W.L.

Mohammad Marashi
Vice President
Customer Support Engineering
PanAmSat Corporation

Acceptance by Armer:

Exec. V.P. for B. Mitchell

Brian Mitchell
Project Engineer
Armer Communications