

January 17, 2018

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Engineering Certification of Intelsat License LLC

Dear Ms. Dortch:

Intelsat License LLC (“Intelsat”) provides this letter in support of Panasonic Avionics Corporation (“Panasonic”) modification to its blanket authorization¹ from the Federal Communications Commission (“FCC”). Specifically, Panasonic’s planned modification will seek to operate technically identical Ku-band transmit/receive earth stations aboard aircraft (“ESAA”), Call Sign E100089, with the Intelsat 14 satellite (Call Sign S2785) at 45.0° W.L., Intelsat 33e (Call Sign S2939) at 60.0° E.L, Intelsat 15 satellite (Call Sign S2789) at 85.15° E.L., and Intelsat 21 satellite (Call Sign S2863) at 58.0° W.L.

Intelsat understands that Panasonic will file the modification application pursuant to the FCC rules governing ESAA operations to increase the maximum EIRP spectral density associated with individual ESAA emissions with the Intelsat 14, Intelsat 33e, Intelsat 15 and Intelsat 21 satellites. Intelsat understands that this modification is related to a change in Panasonic’s approach to ESAA uplink power limits that will enhance throughput and efficiency by considering ESAA skew angle and location in the beam to set maximum power levels for ESAA terminal uplink transmissions. Specifically, the ESAA terminals will transmit at a higher power at lower skew angles (resulting in narrower beamwidths/greater off-axis discrimination) and at lower powers when at higher skew angles (resulting in wider beamwidths/lower off-axis discrimination). Nonetheless, at all times Panasonic will operate consistent with the coordinated off-axis EIRP spectral density levels of the serving satellites.

Intelsat certifies that the proposed operation of the ESAA transmit/receive terminals at the power density levels provided by Panasonic to Intelsat, adjusted as necessary to compensate for skew angles, is consistent with existing operator-to-operator coordination agreements with all adjacent satellite operators within +/- 6 degrees of orbital separation from the Intelsat 14, Intelsat 33e, Intelsat 15, and Intelsat 21 satellites. Intelsat also acknowledges that the proposed operation of the Panasonic ESAA terminals has the potential to receive harmful interference from adjacent satellite networks that may be unacceptable. If the FCC authorizes the operations proposed by Panasonic, Intelsat will include the power density levels specified by Panasonic and agreed by Intelsat in all future satellite network coordinations with other adjacent satellite operators.

¹ See *Policy Branch Information; Actions Taken*, Report No. SES-01979, File No. SES-MFS-20170312-00255 (Aug. 2, 2017) (Public Notice).

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Sincerely,

A handwritten signature in blue ink, appearing to read 'Alan Yates', with a long horizontal flourish extending to the right.

Alan Yates

Senior Manager, Spectrum Engineering