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December 3, 1999

Via Hand Delivery

Magalie Roman Salas, Secretary
Federal Communications Commission
445 12th St., S.W., Room TW-B204
Washington, D.C. 20554

**Re: Written Ex Parte Communication in ET Docket
No. 98-206, RM-9147, and RM-9245**

Dear Ms. Salas:

SkyBridge L.L.C. hereby submits, for inclusion in the record of the above-referenced proceeding, certain documents relating to the outcome of the recently concluded Conference Preparatory Meeting ("CPM") held in preparation for the World Radiocommunications Conference scheduled for next year ("WRC-2000").

As the Commission is aware, the CPM reached consensus on power limits and related provisions to facilitate frequency sharing in the Ku-band between new Non-Geostationary Orbit ("NGSO") Fixed-Satellite Service ("FSS") systems and Geostationary Orbit ("GSO") FSS, GSO Broadcasting-Satellite Service ("BSS") and Fixed Service ("FS") systems. The agreements reached at the CPM will be proposed to WRC-2000 for inclusion in the ITU Radio Regulations. Because the issues resolved at the CPM relate to many of the issues currently being addressed by the Commission in the instant proceeding, SkyBridge is submitting the relevant portions of the "CPM Report," as well as copies of relevant submissions and outputs of the various ITU-R study groups^{1/} that contributed to this landmark agreement; other

^{1/} WRC-97 established an international task group -- Joint Task Group 4-9-11 ("JTG 4-9-11") -- to undertake these sharing studies and report its findings to WRC-00. Several other ITU-R bodies have also contributed to this effort, including Working Party 4A ("WP 4A"), Joint Working Party 10-11S ("JWP 10-11S"), Working Party 4-9S ("WP 4-9S") and Working Party 9A

(continued...)

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documents relating to the various undertakings of JTG 4-9-11 have previously been filed with the Commission.^{2/}

The following outline lists the documents being submitted, in the order in which they are attached:^{3/}

CPM Documents

- **Chapter 3 ("Non-GSO FSS Issues") of the CPM Report** on technical, operational, and regulatory/procedural matters to be considered by the 2000 World Radiocommunication Conference, Geneva, 1999 (the "CPM Report").
- Selected contributions to the CPM:
 - **CPM99-2/67** (EPFD_{down} limits for protection of GSO BSS carriers)
 - **CPM99-2/107** (sharing with Radiolocation and Space Sciences in the 13.75-14.0 GHz band)
 - **CPM99-2/111** (operational limits for the protection of GSO FSS carriers)
 - **CPM99-2/112** (EPFD_{down} limits for protection of GSO FSS carriers)
 - **CPM99-2/120** (protection of very large GSO earth stations)
 - **CPM99-2/122** (considerations relating to BR validation software)
 - **CPM99-2/124** (characteristics of NGSO FSS interference into GSO earth stations)

^{1/} (...continued)
("WP 9A"). WP 4A and JWP 10-11S have studied issues relating to NGSO FSS sharing with GSO FSS and GSO BSS, respectively. WP 4-9S and WP 9A have studied NGSO FSS sharing with FS and other terrestrial services.

^{2/} See, e.g., Attachments to Letter dated July 29, 1999, from the Satellite Coalition. In addition to documents relating to the power limits for the protection of GSO FSS, GSO BSS, and FS, documents on other topics covered in Chapter 3 of the CPM Report -- such as NGSO FSS sharing with Radiolocation and Space Sciences, and reverse-band sharing between NGSO FSS and BSS in the 17 GHz band -- are also included in this filing for completeness.

^{3/} For the convenience of the Commission's staff, a CD rom version of these documents will be provided to the individuals listed at the conclusion of this letter. However, a few of the attached documents are not currently available in electronic form and, therefore, have not been included on the CD rom. Those that are not included on the CD rom are indicated by a notation to that effect in the list of documents set out in this letter.

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- **CPM99-2/142** (sensitivity of GSO carriers in JTG 4-9-11 database)

Study Group 4 Documents

- **4/69** (rev.2) (Draft Revision of Recommendation ITU-R S.1323, on methodologies for deriving $EPFD_{down}$ limits for protection of GSO FSS systems)
- **4/68** (rev.1) (Draft New Recommendation, on $EPFD_{up}$ and $EPFD_{is}$)
- **4/57** (rev.1) (Draft New Recommendation, on GSO FSS earth station antenna patterns)
- **4/60** (rev. 1) (Draft New Recommendation, on determining the coordination area for earth stations of NGSO FSS systems with respect to earth stations operating in the reverse direction)
- **4/66** (rev.1) (Revision of Recommendation ITU-R S.524-5, on maximum permissible off-axis EIRP from GSO earth stations)

JTG 4-9-11 Documents

- **4/74 (Chairman's Report)** of the May 1999 JTG 4-9-11 meeting, Geneva)
- Selected contributions to the May 1999 JTG 4-9-11 meeting:
 - **JTG 4-9-11/407** (characteristics of NGSO FSS interference into GSO earth stations)
 - **JTG 4-9-11/409** (sharing with Radiolocation and Space Sciences)
- **JTG 4-9-11/367 (Chairman's Report)** of the January 1999 JTG-4-9-11 meeting, Long Beach)
- Selected contributions to the January 1999 JTG 4-9-11 meeting:
 - **JTG 4-9-11/230** (overview)
 - **JTG 4-9-11/233** (FS protection criteria)
 - **JTG 4-9-11/235** (impact of multiple NGSO FSS systems on FS systems)
 - **JTG 4-9-11/236** (including addendum) (PFD limits to protect FS systems)
 - **JTG 4-9-11/240** (PFD limits to protect FS systems)
 - **JTG 4-9-11/241** (sharing with Radiolocation and Space Sciences)
 - **JTG 4-9-11/242** (sharing with Radiolocation and Space Sciences)
 - **JTG 4-9-11/243** (simulations of interference from an NGSO FSS system in operation)
 - **JTG 4-9-11/245** (interference for that NGSO FSS system as computed with the BR software)

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- **JTG 4-9-11/246** (method for computing the worst-case configuration for NGSO FSS interference into a GSO earth station)
 - **JTG 4-9-11/248** (GSO sync loss thresholds)
 - **JTG 4-9-11/250** (measurements of the impact of NGSO FSS interference into GSO BSS earth stations)
 - **JTG 4-9-11/251** (impact of multiple NGSO FSS systems on GSO earth stations)
 - **JTG 4-9-11/252** (characteristics of interference from multiple NGSO FSS systems)
 - **JTG 4-9-11/253** (Procedure D for deriving EPFD_{down} limits for protection of GSO FSS and BSS systems)
 - **JTG 4-9-11/254** (including 3 addenda) (derivation of EPFD_{down} limits for protection of GSO BSS systems)
 - **JTG 4-9-11/255** (derivation of EPFD_{down} limits for protection of GSO FSS systems)
 - **JTG 4-9-11/257** (EPFD_{up})
 - **JTG 4-9-11/260** (characteristics of an NGSO FSS system)
 - **JTG 4-9-11/262** (impact of GSO interference on NGSO FSS systems)
 - **JTG 4-9-11/264** (GSO earth station off-axis EIRP)
 - **JTG 4-9-11/266** (impact of GSO interference on NGSO FSS systems, and the constraints imposed on NGSO FSS systems)
 - **JTG 4-9-11/267** (worst case assumptions used in the studies)
 - **JTG 4-9-11/268** (characteristics of NGSO FSS interference into GSO earth stations)
 - **JTG 4-9-11/270** (protection of slightly-inclined GSO systems)
 - **JTG 4-9-11/271** (sharing between NGSO FSS and GSO BSS in the 17 GHz band)
 - **JTG 4-9-11/272** (including two addenda) (impact of NGSO FSS interference on GSO systems)
 - **JTG 4-9-11/273** (regulatory considerations)
 - **JTG 4-9-11/274** (computation of EPFD)
 - **JTG 4-9-11/362** (GSO antenna patterns) (no electronic version available)
- **JTG 4-9-11/211 (Chairman's Report** of the June 1998 JTG 4-9-11 meeting, Toulouse) (including corrigendum)

WP 4A Documents

- **4A/422 (Chairman's Report** of the April-May 1999 WP 4A meeting, Geneva)
- Selected contributions to the April-May 1999 WP 4A meeting:
 - **4A/269** (GSO interference into NGSO FSS systems)

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- **4A/272** (GSO FSS earth station antenna patterns)
- **4A/273** (methodologies for derivation of EPFD_{down} limits)
- **4A/274** (including addendum) (derivation of EPFD_{down} limits for protection of GSO FSS systems)
- **4A/276** (including addendum 1) (sync loss in GSO FSS earth stations)
- **4A/290** (sharing with Radiolocation and Space Sciences)
- **4A/296** (sharing with Radiolocation and Space Sciences)
- **4A/339** (characteristics of NGSO FSS interference from multiple NGSO FSS systems)
- **4A/340** (protection of slightly-inclined GSO FSS systems)
- **4A/344** (methodologies for derivation of EPFD_{down} limits for protection of GSO FSS systems)
- **4A/345** (GSO FSS earth station antenna patterns)
- **4A/349** (reference bandwidth used for EPFD limits)
- **4A/352** (protection of very large GSO earth stations)
- **4A/353** (characteristics of NGSO FSS interference into GSO earth stations)
- **4A/355** (characteristics of NGSO FSS interference into GSO earth stations, particularly in relation to sync loss) (no electronic version available)
- **4A/356** (sensitivity of GSO FSS carriers in JTG 4-9-11 database)
- **4A/357** (including corrigendum) (sharing with Radiolocation and Space Sciences)
- **4A/358** (impact of GSO interference on NGSO FSS systems, and constraints caused on NGSO FSS systems)
- **4A/364** (regulatory considerations)
- **4A/372** (EPFD_{up})
- **4A/373** (EPFD_{down} limits for protection of GSO FSS systems)
- **4A/375** (GSO earth station off-axis EIRP)
- **4A/376** (impact of sun interference on GSO FSS availability)
- **4A/377** (system impact of NGSO FSS interference on GSO FSS networks)
- **4A/378** (sensitivity of GSO FSS carriers in JTG 4-9-11 database)
- **4A/379** (impact of multiple NGSO FSS systems)
- **4A/381** (NGSO/NGSO sharing, and the number of NGSO FSS systems that can share)
- **4A/382** (worst-case assumptions used in the studies)
- **4A/383** (impact of sun interference on GSO FSS availability)
- **4A/390** (constraints on NGSO FSS systems)
- **4A/INFO12** (characteristics of NGSO FSS interference into GSO FSS earth stations, particularly in relation to sync loss) (no electronic version available)

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- **4A/INFO14** (EPFD_{down} limits for protection of GSO FSS carriers) (no electronic version available)

Study Group 11 Documents

- **11/138** (rev.1) (Draft New Recommendation on methodologies for deriving EPFD_{down} limits for protection of GSO BSS systems)
- **11/137** (rev.1) (Draft New Recommendation on GSO BSS earth station antenna patterns)
- **11/136** (rev.1) (Draft New Recommendation on BR software)

JWP 10-11S Documents

- **11/167 (Chairman's Report)** of the October 1999 meeting of JWP 10-11S, Geneva)
- Selected outputs from the October 1999 JWP 10-11S meeting:
 - **11/153** (BR software specification)
 - **11/152** (methodology for evaluating the impact of solar interference on BSS link performance)
- Selected contributions to the October 1999 JWP 10-11S meeting:
 - **10-11S/245** (methodology for deriving EPFD_{down} limits for protection of BSS earth stations)
 - **10-11S/246** (derivation of EPFD_{down} limits for protection of BSS earth stations)
 - **10-11S/248** (coordination area around BSS receive earth stations, particularly in the 17 GHz band)
- **10-11S/209 (Chairman's Report)** of the May 1999 meeting of JWP 10-11S, Geneva)
- Selected contributions to the May 1999 JWP 10-11S meeting:
 - **10-11S/125** (see 4A/349) (reference bandwidth used for EPFD limits)
 - **10-11S/157** (impact of GSO BSS interference on NGSO FSS systems, and the constraints caused to NGSO FSS systems)
 - **10-11S/158** (regulatory considerations)
 - **10-11S/179** (impact of multiple NGSO FSS systems on GSO BSS systems)
 - **10-11S/182** (methodologies for derivation of EPFD_{down} limits for protection of GSO BSS systems)

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- **10-11S/186** (characteristics of GSO BSS carriers)
- **10-11S/187** (impact of sun interference on GSO BSS antennas)
- **10-11S/188** (worst case assumptions used in the studies)
- **10-11S/189** (protection of slightly-inclined GSO systems)
- **10-11S/190** (EPFD_{down} limits for protection of GSO BSS systems)
- **10-11S/191** (derivation of EPFD_{down} limits for protection of GSO BSS systems)
- **10-11S/193** (reverse-band sharing between NGSO FSS and GSO BSS systems in the 17 GHz band)
- **10-11S/194** (sensitivity of GSO BSS carriers in JTG 4-9-11 database)
- **10-11S/196** (EPFD_{up})
- **10-11S/197** (characteristics of NGSO FSS interference)
- **10-11S/198** (including corrigendum) (GSO BSS earth station antenna patterns)
- **10-11S/199** (measurements of impact of NGSO interference on GSO BSS earth stations in Region 2)
- **10-11S/200** (impact of sun interference on GSO BSS earth stations)
- **10-11S/201** (methodologies for deriving EPFD_{down} limits for protection of GSO BSS systems)
- **10-11S/202** (characteristics of NGSO FSS interference into GSO BSS earth stations)
- **10-11S/204** (derivation of EPFD_{down} limits for protection of GSO BSS systems)
- **10-11S/206** (sensitivity of GSO BSS carriers in JTG 4-9-11 database)

WP 4-9S and WP 9A Documents

- **4-9S/178 (Chairman's Report** from April 1999 WP 4-9S meeting, Geneva)
- Selected contributions to the May 1999 WP 4-9S meeting:
 - **4-9S/129** (impact of GSO interference in addition to the aggregate interference from NGSO FSS systems into FS systems)
 - **4-9S/157** (interference into NGSO FSS satellites from FS systems)
 - **4-9S/131** (PFD limits for protection of FS systems)
- Selected contributions to the April 1999 WP 9A meeting:
 - **9A/95** (FS protection criteria)

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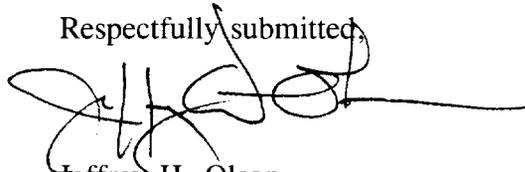
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TG 1-6 Document

- **TG 1-6/93 (Chairman's Report** from May 1999 TG 1-6 meeting, Paris; including a preliminary draft new recommendation on the coordination area around earth stations, including those communicating with NGSO FSS satellites)

If there are any questions regarding this matter, please contact the undersigned.

Respectfully submitted,



Jeffrey H. Olson
Diane C. Gaylor
Attorneys for
SkyBridge LLC

cc:^{4/} Dale Hatfield
Julius Knapp
Thomas Derenge
Donald Abelson
Thomas Tycz
Harry Ng

^{4/} Without hardcopy attachments. CD rom versions of this filing will be provided to these individuals. See supra note 3.

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