

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)		
)		
PANAMSAT CORPORATION)	File Nos.	47-DSS-P/LA-94
)		CSS-94-018
For authority to launch and operate)		63-SAT-AMEND-97
the Galaxy VIII(I) fixed communications)		
satellite)		

ORDER AND AUTHORIZATION

Adopted: December 5, 1997 Released: December 8, 1997

By the Chief, Satellite and Radiocommunication Division:

1. By this order we authorize PanAmSat Corporation ("PanAmSat") to launch and operate its Galaxy VIII(I) fixed communications satellite at the 95° W.L. geostationary satellite orbital position.¹

I. Background

2. As a result of the merger set forth in note 1, supra, PanAmSat now operates a

¹ On April 4, 1997, the Commission authorized the merger of Hughes Communications Galaxy's satellite fleet with the PanAmSat satellite system. See Hughes Communications, Inc. and Affiliated Companies, FCC 97-121, (released April 4, 1997). The transaction was consummated on May 16, 1997. On November 19, 1997, Hughes Communications Galaxy, Inc. and PanAmSat amended the Galaxy VIII(I) application to substitute PanAmSat for Hughes Communications Galaxy, Inc. as the applicant. On November 24, 1997, PanAmSat requested special temporary authority to operate Galaxy VIII(I) temporarily at the 79° W.L. orbital location for a period of not less than 60 days to conduct in-orbit testing.

fleet of satellites used primarily for domestic communications services. The fleet is comprised of the in-orbit Galaxy I-R(S), V-W, VI and IX C-band satellites, the in-orbit SBS-4, SBS-5 and SBS-6 Ku-band satellites and the in-orbit hybrid Galaxy III(H), IV(H) and VII(H) satellites.² These satellites allow for the provision of commercial television and radio distribution, teleconferencing, video backhaul, high speed image transmission and private data networks.

3. PanAmSat states that the Galaxy VIII(I) satellite will provide affordable international communications at Ku-band between and among the United States and Mexico, the Caribbean, Central America and South America to a wide range of commercial and residential users. Although the satellite will be capable of providing a wide range of video, audio and data services, PanAmSat anticipates that the satellite will be used primarily for video distribution. The Galaxy VIII(I) satellite system will consist of a space segment and a ground segment. The satellite will be located at 95° W.L. and will provide coverage to Mexico, the Caribbean, South America and Central America at 13.75-14.0 GHz (uplink) and 11.45-11.70 GHz (downlink).³ The Galaxy VIII(I)'s ground segment will consist of: (1) earth stations to perform telemetry, tracking and command functions for the spacecraft; and (2) transmit/receive or receive-only earth stations to provide communications services.

4. In an amendment filed on April 30, 1997, PanAmSat requested authority to make certain technical changes to the satellite. Specifically, PanAmSat requests authority to utilize on Galaxy VIII(I) certain frequencies currently in use in the same coverage area on the Galaxy III(H) satellite. The Galaxy III(H) satellite operates at 95° W.L. and is authorized to provide C-band (3700-4200 MHz and 5925-6425 MHz) satellite services to the United States and Ku-band (11.7-12.2 MHz and 14.0-14.5 MHz) satellite services to either Latin America or the United States through a switchable satellite antenna beam capability. At Ku-band, the Galaxy III(H) satellite transmits in the 11.7-12.2 GHz band and receives transmissions in the 14.0-14.5 GHz band. The Ku-band payload of Galaxy III(H) currently is fully committed to Galaxy Latin America ("GLA"), a joint venture between an affiliate of Hughes and three Latin American partners, which provides direct-to-home ("DTH") video and audio satellite services to Latin America. In its amendment, PanAmSat seeks authority to utilize on Galaxy VIII(I) 250 MHz of downlink spectrum in the 11.7-11.95 GHz band that Galaxy III(H) currently uses to provide service to Latin America, in addition to the 250 MHz of downlink

² An affiliated company, PanAmSat Licensee Corp., holds the licenses for the PanAmSat satellite system.

³ The Ku-band encompasses 10.7-12.2/12.75-14.5 GHz. With the exception of the Galaxy VIII(I) satellite, all satellites in the Galaxy system operate in the traditional Ku-band frequencies (11.7-12.2 and 14.0-14.5 MHz). The Commission recently adopted rules governing the allocation of the 13.75-14.0 GHz band for the Fixed Satellite Service. See Amendment of Parts 2, 25 and 90 of the Commission's Rules to Allocate the 13.75-14.0 GHz Band to the Fixed-Satellite Service, ET Docket No. 96-20, Report and Order, FCC 96-377 (released September 26, 1996). PanAmSat's earth station operations are expected to comply with parameters for Fixed Satellite Service ("FSS") operations in order to share those frequencies with U.S. Government operations. Any U.S. FSS earth station application operating in these bands will need to be coordinated with NTIA/IRAC.

spectrum at 11.45-11.7 GHz set forth in the original Galaxy VIII(I) application. PanAmSat states that Galaxy VIII(I) requires access to a full 500 MHz of downlink spectrum in order to ensure sufficient capacity to meet existing and expected future needs of GLA's customers.

5. PanAmSat states that it will use the same 250 MHz of uplink spectrum (13.75-14.0 GHz) with the additional 11.7-11.95 GHz downlink beam on Galaxy VIII(I) as it already proposed to use with the 11.45-11.7 GHz downlink beam to serve Latin America.⁴ According to PanAmSat, this reuse of the uplink band is possible as long as the earth station uplinks are geographically separated by sufficient distance. PanAmSat states that no party would be adversely affected by Commission authorization to use the 11.7-11.95 GHz band on Galaxy VIII(I) for Latin American service because it is already authorized to use, and is using, spectrum at 11.7-11.95 GHz on Galaxy III(H) for service to the same area.

6. The total cost of the space and ground segments for Galaxy VIII(I) is projected to be \$230 million, which includes the construction cost of the spacecraft and the launch, launch vehicle service, launch insurance, associated ground equipment, and pre-operating expenses.

II. Discussion

7. We find that PanAmSat is legally and technically qualified to launch and operate the Galaxy VIII(I) satellite. PanAmSat's legal and technical qualifications are evidenced by its well-documented experience and that of its predecessors-in-interest in establishing and operating a domestic satellite system.

8. We also find that PanAmSat is financially qualified to receive a final authorization for the Galaxy VIII(I) satellite. The Commission's rules governing applications to construct and operate fixed-satellite systems require that an applicant demonstrate its current financial ability to meet construction, launch and first year operating costs.⁵ This requirement is intended to ensure that the orbit-spectrum resource is not tied up by entities unable to ultimately finance their proposals.⁶ An applicant relying on internal financing must submit a current balance sheet documenting current assets and operating income sufficient to cover its costs.

⁴ We note that since the Galaxy 8 satellite will be providing international service only, the use of the 11.45-11.7 GHz band is consistent with Non-Government ("NG") footnote NG104 to the Table of Frequency Allocations that limits the use of the bands 10.7-11.7 and 12.75-13.25 GHz in the fixed-satellite service to international systems.

⁵ 47 C.F.R. § 25.140 (c).

⁶ Notice of Proposed Rulemaking, CC Docket 92-76, FCC 93-28, released February 10, 1993.

9. PanAmSat is a public company. Hughes Electronic Corporation ("HE"), an aerospace, electronics manufacturing, and satellite communications company formerly known as GM Hughes Electronics Corporation, indirectly owns over 70% of the issued and outstanding stock of PanAmSat. HE is, in turn, wholly-owned by General Motors Corporation ("GM"). In support of the application, PanAmSat submitted the consolidated financial statement of HE, which demonstrates that HE has sufficient current assets to fund the construction, launch and first-year operating costs of the satellite system.

10. We also find that the proposed use of the extended Ku-band frequencies 11.45-11.7 GHz and 13.75-14.0 GHz on Galaxy VIII(I) is in the public interest.⁷ In addition, we find that PanAmSat's use of the 11.7-11.95 GHz band on Galaxy VIII(I) for Latin American service will not adversely affect any other party because PanAmSat is already authorized to use, and is using, spectrum at 11.7-11.95 GHz on Galaxy III(H) for service to the same area.

11. Accordingly, IT IS ORDERED that PanAmSat is granted final authority to launch and operate its Galaxy VIII(I) satellite at 95° W.L. in accordance with the technical specifications set forth in its application, as amended.

12. IT IS FURTHER ORDERED that special temporary authority is granted for PanAmSat to operate the Galaxy VIII(I) satellite at the 79° W.L. orbital location for a period of 60 days to conduct in-orbit testing.

13. IT IS FURTHER ORDERED that PanAmSat shall prepare the necessary information as may be required for submission to the ITU to initiate and complete the advance publication, international coordination, and notification process of this space station in accordance with the ITU Radio Regulations. PanAmSat shall submit the ITU Appendix S4 information within thirty (30) days from the release date of this order. We also remind all licensees that no protection from interference caused by radio stations authorized by other Administrations is guaranteed unless coordination procedures are timely completed or, with respect to individual administrations, by successfully completing coordination agreements. Any radio station authorization for which coordination has not been completed may be subject to additional terms and conditions as required to effect coordination of the frequency assignments of other Administrations, 47 C.F.R. § 25.111(b). Operation of the Galaxy VIII(I) satellite system in the 13.75-14.0 GHz band will need to be coordinated with U.S. Government operations in conformance with ITU Radio Regulations.

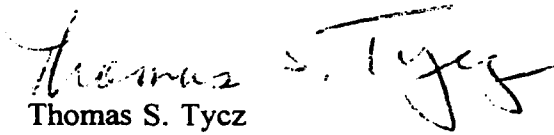
14. PanAmSat is afforded thirty days from the date of release of this order and authorization to decline this authorization as conditioned. Failure to respond within this

⁷ While not the subject of this order, we also note that PanAmSat will be responsible for successfully coordinating earth stations before beginning their operation with Galaxy VIII(I) in the band 13.75-14.0 GHz in the United States to avoid interfering with U.S. Government operated satellite and terrestrial systems.

period will constitute formal acceptance of the authorization as conditioned.

15. The Order is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon adoption. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the date of the release of this order (see 47 C.F.R. § 1.4(b)(2)).

FEDERAL COMMUNICATIONS COMMISSION

A handwritten signature in black ink, appearing to read "Thomas S. Tycz". The signature is written in a cursive style with a horizontal line above the "T" and "y".

Thomas S. Tycz
Chief, Satellite and Radiocommunication Division