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APR 10 2002

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April 10, 2002

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APR 15 2002

Satellite Policy Branch
International Bureau

Ms. Fern J. Jarmulnek
Deputy Chief, Satellite Division
International Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

**Re: ASTROLINK International LLC, File Nos. 182 through 186
SAT-P/LA-95 & SAT-MOD-19971222-00200**

Dear Ms. Jarmulnek:

As requested by your letter of March 27, 2002 in the above-referenced matter, 1/ ASTROLINK International LLC ("Astrolink") hereby submits additional information to demonstrate that it has fully satisfied its construction commencement milestone, and that it will be able to complete construction of and launch its satellite by the required June 2005 milestone. 2/

Astrolink has made very substantial progress in constructing its first satellite. Long before its actual deadline for construction commencement, the company entered into a non-contingent construction contract, effective July 20, 1999, with Lockheed Martin Corporation, through Lockheed Martin Commercial Space Systems. Indeed, as of its January 2002 milestone deadline, Astrolink already had completed approximately 90 percent of the spacecraft. Specifically, the payload hardware and software is 100 percent complete, as is the antenna. A "dry-run" testing of acceptance procedures was successfully completed on the payload last year, and it is now ready for the official "run for the record" testing. Similarly, preliminary tests

1/ The letter specified a response date of April 3, 2002. On April 2, 2002, Astrolink filed a letter requesting a one-week extension of time in which to respond. The Satellite Division subsequently granted that request.

2/ The milestone is specified in Astrolink's amended authorization. *See Astrolink International LLC, Application for Authority to Construct, Launch and Operate a Ka-band Satellite System in the Fixed-Satellite Service, Order and Authorization, 16 FCC Rcd 2421, 2430 (IB Jan. 31, 2001).*

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performed on the completed antenna indicate that it is meeting or exceeding specifications. Attached as Exhibits 1 and 2 are photographs of the completed payload assembly and antenna, respectively.

Furthermore, approximately 95% of the spacecraft bus hardware and software is complete, and all necessary remaining parts are on hand. Overall, about 75% of the non-recurring engineering effort in system integration and testing has been completed. Exhibit 3, the Flight 1 Program Schedule, graphically illustrates the progress that has been made on the satellite's major systems.

In October 2001, one of Astrolink's investors announced that it would provide no additional funding to the company. In order to cease incurring liabilities until substitute financing could be arranged, the construction contract was terminated on October 31, 2002. Pursuant to Paragraph C of Article 23 ("Termination for Convenience") of the Contract, "all inventory generated under this Contract which would have been deliverable under the terms of this Contract, except that specified in paragraph B2, shall become the property of Buyer." ^{3/} The "inventory" in question includes the completed payload, antenna and all of the unassembled component parts of the spacecraft. The payload and antenna have not been moved and are being maintained at TRW's highbay facility in Redondo Beach, California. The payload is still set up in test configuration, providing for an efficient resumption of final acceptance testing upon re-instatement of a contract.

Currently, Astrolink's owners are in active negotiations to restructure the business, which will include modification of ownership positions in the company, provisions for substitute funding, and renegotiation of procurement contracts. Once the restructuring is finished and contracts renegotiated, final work by vendors can resume and the remaining tasks for launch can be completed.

After the restructuring, Astrolink conservatively estimates that it will be in a position to complete and launch its satellite within 16 to 20 months. This estimate is based, first of all, on the pre-existing integration schedule (attached as

^{3/} Paragraph B2 pertains to items of inventory "not desired by Buyer and which Seller elects to retain for its use."

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Exhibit 4), 4/ illustrating that the remaining vendor construction and testing tasks to be performed – as of Q4 2001 when the vendor work was halted – should require no more than 12 months. 5/ An additional two months are allowed for shipping and launch preparations. Using this existing integration schedule as a baseline, Astrolink's current estimate also allows for several months of "ramp-up" time to re-establish the vendor teams and to account for other delays associated with post-restructuring activity not reflected in the attached integration schedule. Thus, the 16-20 month timeframe is a conservative estimate that is sufficiently "padded" to account for unexpected complications. It is important to note that this is a normal-paced schedule. Many of the individual tasks on the timeline could be expedited, if necessary, by the expenditure of additional resources.

Astrolink's first satellite is designed for the 97° W.L. orbital location. Astrolink's license requires it to place a satellite into operation at this location by June 25, 2005. 6/ Assuming a worst-case 20 month completion and launch schedule, Astrolink vendors would need to resume work on the satellite itself by late October 2003. It is a testament to Astrolink's early diligence in contracting for and constructing its satellite that Astrolink can comfortably weather its current financing complications without concern that it is in jeopardy of missing its ultimate launch

4/ The schedule shown in Exhibit 4 is taken from an actual internal working document that was in use when the contract was still active. This is not a timeline generated for the purpose of this filing.

5/ In broad categories, these remaining steps include delivery of the payload to the spacecraft bus vendor, completion of the bus, integration of the payload module and antenna into the bus, and environmental testing of the spacecraft (sine vibe/acoustic, thermal vacuum, functional and alignment tests).

6/ Once in orbit at this location, Astrolink's satellite will be able to provide service to the vast majority of CONUS with availability rates of 99 percent or greater. When slightly lower availability rates are considered, it will be able to cover virtually the entire CONUS. Exhibit 5 shows the 99%+ availability coverage area prediction, based on detailed mathematical calculations using the latest ITU rain fade model and actual data derived from the antenna range and payload electronics testing conducted last year.

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deadline. ^{7/} Despite this generous safety cushion of time, Astrolink anticipates that its restructuring will be completed long before October 2003.

As the FCC stated just last year, “the Commission has consistently held that, *at a minimum*, an FSS licensee must execute a non-contingent satellite construction contract to satisfy the commencement of construction milestone.” ^{8/} The Commission also has repeatedly stated that the intent behind the non-contingent contract requirement is to ensure that there will be no “significant delays between the execution of the contract and the *actual commencement* of construction . . .” ^{9/} In this case, Astrolink satisfied the minimum construction commencement milestone requirement for its spacecraft in 1999, long before it was required to do so. Indeed, Astrolink has gone far beyond the minimum requirements for construction commencement, and already built a satellite that is now some 90 percent finished. The company is positioned to complete construction on a timely basis prior to its next license milestone, which requires launch of the spacecraft by June 2005.

^{7/} Obviously, the Commission would reach an illogical result if it were to penalize Astrolink for its early start and vigorous work on construction by finding that it had not met the construction commencement milestone in these circumstances. Put simply, Astrolink met the milestone long before the deadline. Certainly the Commission does not want to discourage satellite companies from expediting their efforts to put spacecraft in service by starting work earlier than required. In addition, the Commission would be unfairly and substantially hindering Astrolink’s efforts to restructure its business, and could disadvantage Astrolink in its negotiations related to the restructuring.

^{8/} *Morning Star Satellite Company, L.L.C.*, Memorandum Opinion and Order, 16 FCC Rcd 11550, 11554 (May 25, 2001) at ¶ 9 (emphasis added).

^{9/} *PanAmSat Licensee Corp.*, Memorandum Opinion and Order, 16 FCC Rcd 11534, 11539 (May 25, 2001) at ¶16 (emphasis added). Moreover, the Commission has consistently held that the actual commencement of construction is evidence of a licensee’s “firm commitment to proceed with its business plan.” *NetSat 28 Company, LLC*, Memorandum Opinion and Order, 16 FCC Rcd 11025, 11031-32 (May 25, 2001) at ¶ 21 (granting an extension of a construction completion milestone relying, *inter alia*, on the fact that the licensee had expended over \$10 million on system development and had over 50 people working on construction).

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Astrolink hopes that the detailed information provided herein fully responds to the Division's questions. Please contact the undersigned if you require any additional information.

Respectfully submitted,

A handwritten signature in blue ink, appearing to be "Peter A. Rohrbach" or "David L. Martin", written in a cursive style.

Peter A. Rohrbach
David L. Martin

Counsel for ASTROLINK International LLC

cc: William F. Caton, Acting Secretary
Thomas Tycz
Alyssa Roberts



EXHIBIT 1

ASTROLINK

Flight 1 Payload Electronics Complete

- Flight 1 payload (less antenna) shown in TRW's Redondo Beach highbay
- Form, Fit, and Function payload verification model shown in background
- Payload is fully assembled and in test—meeting all requirements
- This portion of payload is common to all orbits





EXHIBIT 2 ASTROLINK

Payload 1 Antenna Complete and In Test

- Shown in TRW's Highbay
- Over performing against specification
- Unique design to each orbit—feed layout and waveguide runs only

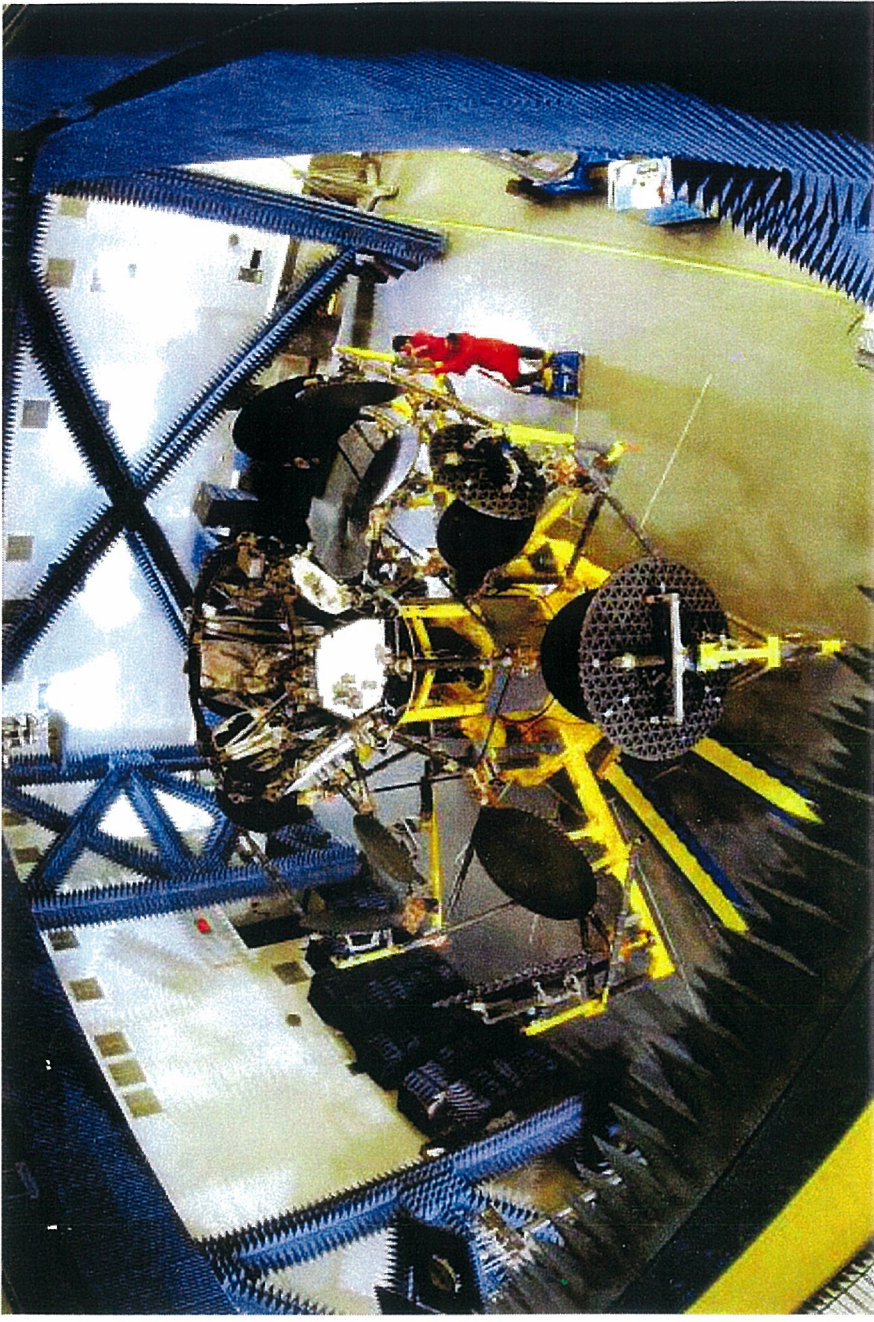
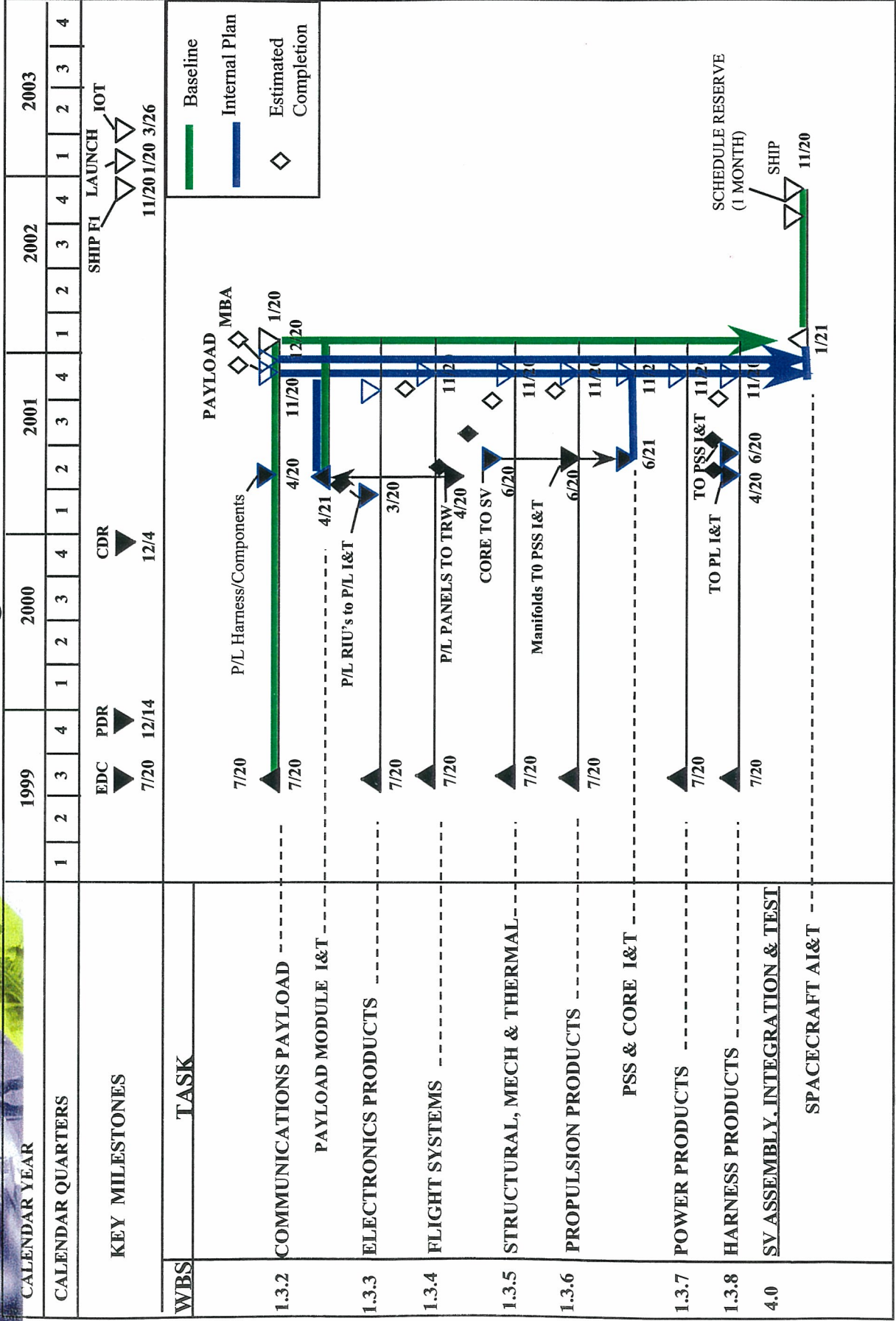




EXHIBIT 3

Program Schedule



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EXHIBIT 5 ASTROLINK

Flight 1 Predicted Performance

Performance Model

- Spacecraft predicted performance from test data
- Attenuation performance from latest ITU rain fade model
- Terminal performance assuming 1 meter specified performance

Results

- Very high availabilities predicted for most of US—enabling smaller, cheaper terminals if customer desires
- Covers virtually all of US if availability rates below 99% are considered

