# SAT-MOD-20070911-00123

11- 52119 Grant Date 02/14/08

Chief, Satellite Policy Branch

See condition\* | Approved by OMB

3060-0678

Date & Time Filed: Sep 11 2007 2:17:20:013PM File Number: SAT-MOD-20070911-00123

subject to conditions

| FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD - MAIN FORM | FCC Use Only |
|--|--------------|
| FCC 312 MAIN FORM FOR OFFICIAL USE ONLY                            |              |
|  |              |

#### **APPLICANT INFORMATION**

Enter a description of this application to identify it on the main menu:

Modification of XM-2 license

| 1-8. Legal Name of Applicar | 1-8. | Legal | Name | of Applicant |
|-----------------------------|------|-------|------|--------------|
|-----------------------------|------|-------|------|--------------|

Name:

XM Radio Inc.

**Phone Number:** 

202-380-4000

**DBA** 

Fax Number:

202-380-4500

Name: Street:

1500 Eckington Place, NE

E-Mail:

james.blitz@xmradio.com

City:

Washington

State:

DC

Country:

USA

Zipcode:

20002

Attention:

James S Blitz

# XM Radio Inc. Application for Modification

IBFS File Nos. SAT-MOD-20070911-00123, SAT-AMD-20071113-00158, SAT-AMD-20080129-00032 (XM-2, Call Sign S2119)

The application of XM Radio Inc. (XM Radio) to modify its authorization to operate the Satellite Digital Audio Radio Service (SDARS) satellite, XM-2 (Call Sign S2119), and to co-locate the satellite with the XM-1 (Call Sign S2118) and the XM-3 (Call Sign S2617) satellites at the 85° W.L. orbital location IS GRANTED. Accordingly, XM Radio is authorized to operate XM-2 as an in-orbit spare at the 85.217° W.L. orbital location, subject to the Commission's rules, the terms of its authorization, as amended, the technical specifications set forth in its applications, and the conditions set forth below.

- 1. XM Radio is authorized to operate the XM-2 satellite at the 85.217° W.L. orbital location as a non-transmitting (except for telemetry transmissions in the 2332.5-2345 MHz frequency band) in-orbit spare for the duration of the license term of the XM-2 satellite. Pursuant to its initial authorization, the license term for the XM-2 satellite expires on March 31, 2009.
- 2. XM Radio is authorized to operate XM-2 at the 85.217° W.L. orbital location with an East-West station-keeping tolerance of  $\pm 0.05$  degrees, pursuant to Section 25.210(j) of the Commission's rules, 47 C.F.R. § 25.210(j). XM Radio is permitted to operate XM-2 with a smaller station-keeping tolerance of  $\pm 0.033$  degrees in order to facilitate the safe-flight profile of its satellites.
- 3. XM Radio may activate the communications payloads XM-2 in the 2332.5-2345 MHz frequency band in the event of a service outage of the XM-3 or XM-4 satellites (Call Signs S2617 and S2616).
- 4. In the event XM Radio activates the communications payloads of the XM-2 satellite pursuant to condition 3 above, XM Radio must notify the Commission, in writing, of such activation within three business days of the start of the activation.
- 5. XM Radio must operate the XM-2 satellite in compliance with international coordination agreements with Canada and Mexico that limit the power flux density level from U.S.-licensed DARS satellites into Canada and Mexico.
- 6. XM Radio has 30 days from the date of this grant to decline this authorization as conditioned.

7. This grant is issued pursuant to 47 C.F.R. § 0.261, the Commission's rules on delegated authority, and is effective upon release.

S2119

02/14/08

see condition #1, above

subject to conditions

Name: Bruce D. Jacobs Phone Number: 2026638077

Company: Pillsbury Winthrop Shaw Pittman Fax Number: 2026638007

LLP

9-16. Name of Contact Representative

Street: 2300 N Street NW E-Mail: bruce.jacobs@pillsburylaw.com

City: Washington State: DC

Country: USA Zipcode: 20037-

Attention: Relationship: Legal Counsel

**CLASSIFICATION OF FILING** 

| 17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.  | (N/A) b1. Application for License of New Station (N/A) b2. Application for Registration of New Domestic Receive—Only Station b3. Amendment to a Pending Application   |
|--|---|
| a1. Earth Station a2. Space Station  | <ul> <li>b4. Modification of License or Registration</li> <li>b5. Assignment of License or Registration</li> <li>b6. Transfer of Control of License or Registration</li> <li>b7. Notification of Minor Modification</li> <li>(N/A) b8. Application for License of New Receive—Only Station Using Non—U.S. Licensed Satellite</li> <li>(N/A) b9. Letter of Intent to Use Non—U.S. Licensed Satellite to Provide Service in the United States</li> <li>(N/A) b10. Other (Please specify)</li> <li>(N/A) b11. Application for Earth Station to Access a Non—U.S.satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States</li> <li>(N/A) b12. Application for Database Entry</li> <li>b13. Amendment to a Pending Database Entry Application</li> <li>b14. Modification of Database Entry</li> </ul> |
| 17c. Is a fee submitted with this application of the submitted with th | 159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).  |
| 17d.  Fee Classification BFY - Space Station M   | odification(Geostationary)  |

| 18. If this filing is in reference to an existing station, enter:  | 19. If this filing is an ame modification please enter |                      | ng application enter both fields, if this filing is a er: |
|--|--|----------------------|---|
| (a) Call sign of station:  | (a) Date pending applicat                              | ion was filed:       | (b) File number:  |
| S2119  |  |                      | SATMOD2005030700058                                       |
| TYPE OF SERVICE  |  |                      |   |
| 20. NATURE OF SERVICE: This filing is  | for an authorization to provi                          | de or use the follow | ving type(s) of service(s): Select all that apply:        |
| a. Fixed Satellite b. Mobile Satellite c. Radiodetermination Satellite d. Earth Exploration Satellite e. Direct to Home Fixed Satellite f. Digital Audio Radio Service g. Other (please specify) |  |                      |   |
| 21. STATUS: Choose the button next to the only one.  |  | l l                  | on applicant, check all that apply. icensed satellites    |
| Common Carrier Non-Common  | n Carrier  | Using Non-           | U.S. licensed satellites                                  |
| facilities:  |  |                      | ctions regarding Sec. 214 filings. Choose one. Are these  |
| O Connected to a Public Switched Netwo   | ork Not connected to a                                 | a Public Switched I  | Network 👩 N/A   |

| AA EDECLIENCY DAND (C) DI               |                                       | 1: 11 0 1 1/)  |
|---|---------------------------------------|--|
| 24. FREQUENCY BAND(S): Place            | • • •                                 | pplicable frequency band(s).                             |
|   | u-Band (12/14 GHz)                    |  |
| c.Other (Please specify upper and       | l lower frequencies in MHz.)          |  |
| Frequency Lower: 2332.5                 | Frequency Upper: 2345                 | (Please specify additional frequencies in an attachment) |
|   |                                       |  |
| TYPE OF STATION                         |                                       |  |
| 25. CLASS OF STATION: Choose the        | e button next to the class of station | that applies. Choose only one.                           |
| a. Fixed Earth Station                  |                                       |  |
| <b>b.</b> Temporary–Fixed Earth Station | 1                                     |  |
| o c. 12/14 GHz VSAT Network             |                                       |  |
| o d. Mobile Earth Station               |                                       |  |
| e. Geostationary Space Station          |                                       |  |
| of. Non-Geostationary Space Stati       | on                                    |  |
| og. Other (please specify)              |                                       |  |
|   |                                       |  |
| 26. TYPE OF EARTH STATION FAC           | EILITY:                               |  |
| Transmit/Receive Transmit               | -Only O Receive-Only O                | , N/A  |
| "For Space Station applications, select | N/A."                                 |  |

## PURPOSE OF MODIFICATION

| <del></del>   |
|---|
| 27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)  |
| a — authorization to add new emission designator and related service  |
| b — authorization to change emission designator and related service   |
| c — authorization to increase EIRP and EIRP density   |
| d — authorization to replace antenna  |
| e — authorization to add antenna  |
| f — authorization to relocate fixed station   |
| g — authorization to change frequency(ies)  |
| h — authorization to add frequency  |
| i — authorization to add Points of Communication (satellites & Double |
| j — authorization to change Points of Communication (satellites & amp; countries)   |
| k — authorization for facilities for which environmental assessment and   |
| radiation hazard reporting is required  |
| l — authorization to change orbit location  |
| m — authorization to perform fleet management   |
| n — authorization to extend milestones  |
| o Other (Please specify)  |
|   |

### **ENVIRONMENTAL POLICY**

| 28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments. | 0     | Yes   | <b>⊗</b> ` | No    |   |     |
|--|-------|-------|------------|-------|---|-----|
| ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeron aeronautical fixed radio station services are not required to respond to Items 30–34.   | autic | al en | rou        | te or |   |     |
| 29. Is the applicant a foreign government or the representative of any foreign government?   | 0     | Yes   | •          | No    |   |     |
| 30. Is the applicant an alien or the representative of an alien?   | 0     | Yes   | 0          | No    | • | N/A |
| 31. Is the applicant a corporation organized under the laws of any foreign government?   | 0     | Yes   | 0          | No    | • | N/A |
| 32. Is the applicant a corporation of which more than one—fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?  | 0     | Yes   | 0          | No    | • | N/A |

| 33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one—fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?       | O Yes (     | o No ⊚ N/A    |
|--|-------------|---------------|
| 34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.  |             |               |
| BASIC QUALIFICATIONS   |             |               |
| 35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.   | <b>○</b> Ye | s <b>@</b> No |
| 36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances. | O Ye        | s <b>o</b> No |

| 37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances.  | <b>⊘</b> Yes | <b>⊚</b> No |
|--|--------------|-------------|
| 38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances  | ○ Yes        | <b>⊚</b> No |
| 39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhinit, an explanation of the circumstances.   | O Yes        | No          |
| 40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer. | Exhibit B    |             |

| 41. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes. | Yes           | O No       |
|--|---------------|------------|
| 42a. Does the applicant intend to use a non-U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.  | ○ Yes         | No         |
| 42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, we coordinated or is in the process of coordinating the space station?  | hat administr | ration has |

43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Applicant requests a modification of its license to specify the operation of XM-2 at the 85.217 degrees W.L. orbital location and activate the communications payload of the satellite without additional authority in the event of a failure of an XM-3 or XM-4 service outage.

Application

| 43a. Geographic Service Rule Certification By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.   | O A        |
|--|------------|
| By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.   | <b>⊗</b> B |
| By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached. | <b>o</b> c |

#### **CERTIFICATION**

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

| 44. Applicant is a (an): (Choose the button next to applicable response.) |  |
|---|--|
| O Individual  |  |
| O Unincorporated Association  |  |
| O Partnership   |  |
| © Corporation   |  |
| O Governmental Entity   |  |
| Other (please specify)  | ļ  |
|   |  |
| 45. Name of Person Signing  | 46. Title of Person Signing  |
| James Blitz   | Vice President, Regulatory Counsel   |
| >   |  |
| (U.S. Code, Title 18, Section 1001), AND/OR R                             | M ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT<br>EVOCATION OF ANY STATION AUTHORIZATION<br>& FORFEITURE (U.S. Code, Title 47, Section 503). |

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