#### SUPPORTING STATEMENT

#### A. Justification:

1. Circumstances that make collection necessary. The Federal Communications Commission requests that the Office of Management and Budget (OMB) approve a revision of the information collection titled "Part 25 of the Federal Communications Commission's Rules Governing the Licensing of, and Spectrum Usage By, Commercial Earth Stations and Space Stations" under OMB Control No. 3060-0678, as a result of a recent rulemaking discussed below.

On August 2, 2019, the Commission released a Report and Order, FCC 19-81, in IB Docket No. 18-86, titled "Streamlining Licensing Procedures for Small Satellites" (Small Satellite Report and Order). In this Report and Order, the Commission adopted a new alternative, optional licensing process for small satellites and spacecraft, called the "Part 25 streamlined small satellite process." This new process allows qualifying applicants for small satellites and spacecraft to take advantage of an easier application process, a lower application fee, and a shorter timeline for review than currently exists for applicants under the Commission's existing Part 25 satellite licensing rules. The Commission limited the regulatory burdens borne by applicants, while promoting orbital debris mitigation and efficient use of spectrum. The Commission's action supports and encourages the increasing innovation in the small satellite sector and helps to preserve U.S. leadership in space-based services and operations. This information collection will provide the Commission and the public with necessary information about the operations of this growing area of satellite operations. While this information collection represents an overall increase in the burden hours, the increase is due to an anticipated overall increase in number of applications as a result of additional applications being filed under the streamlined process adopted in the Small Satellite Report and *Order*. This information collection represents a decrease in the paperwork burdens for individual operators of non-geostationary orbit (NGSO) satellites who may now qualify for streamlined processing as small satellites, and serves the public interest by streamlining the collection of information and allowing the Commission to authorize small satellites and spacecraft under the new process established in the Report and Order.

Specifically, FCC 19-81 contains new or modified information collection requirements listed below:

- (1) Space station application requirements for qualifying small satellites and small spacecraft have been specified in new sections 25.122 and 25.123, respectively. These new sections, including the certifications, incorporate some existing information requirements from other sections, but eliminate the need for small satellite and spacecraft applicants to provide much of the information that part 25 space station applicants would typically be required to provide in narrative format under section 25.114(d). The new or modified informational requirements in sections 25.122 and 25.123 are listed as follows:
  - a. For small satellite applications filed under section 25.122, a certification that the space stations will operate in non-geostationary orbit, or for small spacecraft applications filed under section 25.123, a certification that the space station(s) will operate and be disposed of beyond Earth's orbit.
  - b. A certification that the total in-orbit lifetime for any individual space station will be six vears or less.
  - For small satellite applications filed under 25.122, a certification that the space station(s) will either be deployed at an orbital altitude of 600 km or below, or will maintain a propulsions system and have the ability to make collision avoidance and deorbit maneuvers using propulsion. This certification will not apply to small spacecraft applications filed under section 25.123.

- d. A certification that each space station will be identifiable by a unique signal-based telemetry marker distinguishing it from other space stations or space objects.
- e. A certification that the space station(s) will release no operational debris.
- A certification that the space station operator has assessed and limited the probability of accidental explosions resulting from the conversion of energy sources on board the space station(s) into energy that fragments the spacecraft.
- A certification that the probability of a collision between each space station and any other large object (10 centimeters or larger) during the orbital lifetime of the space station is 0.001 or less as calculated using current NASA software or other higher fidelity model.
- h. For small satellite applications filed under section 25.122, a certification that the space station(s) will be disposed of through atmospheric re-entry, and that the probability of human casualty from portions of the spacecraft surviving re-entry and reaching the surface of the Earth is zero as calculated using current NASA software or higher fidelity models. This certification will not apply to small spacecraft applications filed under section 25.123.
- A certification that operations of the space station(s) will be compatible with existing operations in the authorized frequency band(s) and will not materially constrain future space station entrants from using the authorized frequency bands.
- A certification that the space station(s) can be commanded by command originating from the ground to immediately cease transmissions and the licensee will have the capability to eliminate harmful interference when required under the terms of the license or other applicable regulations.
- k. A certification that each space station is 10 cm or larger in its smallest dimension.
- For small satellite applications filed under section 25.122, a certification that each space station will have a mass of 180 kg or less, including any propellant. For small spacecraft applications filed under section 25.123, a certification that each space station will have a mass of 500 kg of less, including any propellant.
- m. A description of means by which requested spectrum could be shared with both current and future operators (e.g., how ephemeris data will be shared, antenna design, earth station geographic locations) thereby not materially constraining other operations in the requested frequency bands.
- For space stations with any means of maneuverability, including both active and passive means, a description of the design and operation of maneuverability and deorbit systems, and a description of the anticipated evolution over time of the orbit of the proposed satellite or satellites.
- In any instances where spacecraft capable of having crew aboard will be located at or below the deployment orbital altitude of the space station seeking a license, a description of the design and operational strategies that will be used to avoid in-orbit collision with such crewed spacecraft shall be furnished at the time of application. This narrative requirement will not apply to space stations that will operate beyond Earth's orbit.
- A list of the FCC file numbers or call signs for any known applications or Commission grants related to the proposed operations (e.g., experimental license grants, other space station or earth station applications or grants).
- (2) The informational requirements listed in section 25.137 for requests for U.S.-market access through non-U.S.-licensed space stations were also modified to refer to sections 25.122 and 25.123 for those applicants seeking U.S. market access under the small satellite or spacecraft process.

### Part 25 of the Federal Communications Commission's Rules OMB Control No. 3060-0678 Governing the Licensing of, and Spectrum Usage by, **Commercial Earth Stations and Space Stations**

September 2020

The forms that are included in this collection are FCC Forms 312, 312 EZ, 312-R, and Schedules A, B, and S.

The statutory authority for this information collection is contained in 47 U.S.C. §§ 154, 301, 302, 303. 307, 309, 310, 319, 332, 605, and 721.

The information collection requirements do not affect individuals or households; therefore, there are no impacts under the Privacy Act.

2. *Use of information*. This collection is used by the Commission's staff in carrying out its statutory duties to regulate satellite communications in the public interest, as generally provided under 47 U.S.C. §§ 154, 301, 302, 303, 307, 309, 310, 319, 332, 605, and 721. This collection is also used by staff in carrying out United States treaty obligations under the World Trade Organization Basic Telecom Agreement. The information collected is used for the practical and necessary purposes of assessing the legal, technical, and other qualifications of applicants; determining compliance by applicants, licensees, and other grantees with Commission rules and the terms and conditions of their grants; and concluding whether, and under what conditions, grant of an authorization will serve the public interest, convenience, and necessity.

For example, collected information is used by the Commission:

- To determine the qualifications of applicants and petitioners to provide satellite service, including applicants that are affiliated with foreign entities and petitioners that seek to provide service to the U.S. market from non-U.S.-licensed satellites.
- To facilitate technical coordination of systems among applicants and licensees in various frequency bands. Without such information, the Commission could not implement band plans as set forth in the Table of Allocations, 47 C.F.R. § 2.106.
- To facilitate the Commission's efforts to use spectrum more efficiently and to better accommodate the operational needs of licensees.
- To provide operators with greater flexibility while ensuring that their operations do not cause harmful interference to the operations of other service providers.
- To examine requests for authority to change a controlling interest in the ownership of a space station or earth station licensee.
- To assist the Commission in considering whether its rules require modification to accommodate the changing market.
- To ensure that licensees comply with all Commission rules and the terms and conditions of their licenses.
- 3. Technological collection techniques. Applicants are required to complete and file the "Application for Satellite Space and Earth Station Authorizations" (FCC Form 312, including associated Schedules A, B, or S where appropriate), FCC Form 312 EZ, or FCC Form 312-R with the Commission electronically via the International Bureau Filing System (IBFS). Applicants seeking to assign an authorization, or to transfer control of an authorization holder, must complete FCC Form 312, Schedule A. Earth station applicants must complete Form 312, Schedule B. Space station applicants must complete Form 312, Schedule S.

In addition, applicants are required to file narrative information that describes how they have met or will meet certain requirements. For example, applicants file narratives to describe what measures they have

undertaken and will undertake to mitigate the creation of orbital debris. The majority of this narrative information can be filed electronically in IBFS.

In December 2006, the Commission received approval for mandatory electronic filing of surrenders of authorizations under Part 25. In September 2007, the OMB approved mandatory electronic filing of consummations of assignments and transfers of control of licenses for all satellite services. A total of 100% of that collection involves the use of electronic collection techniques. In addition, Satellite Digital Audio Radio Service (SDARS) licensees may provide required notification of terrestrial repeater deployment to Wireless Communications Services licensees via electronic mail or other electronic media. If requested to do so, SDARS licensees may also transmit inventories of their repeater networks to Commission staff via electronic mail or other electronic media. Consequently, 100% of the information provided under those rules can be submitted electronically.

- 4. Efforts to identify duplication. The Commission does not impose similar information collection requirements on the respondents.
- 5. Impact on small entities. In conformance with the PRA, the Commission is making an effort to minimize the burden on all respondents, regardless of size. The Commission has endeavored to limit the information collection requirements to those that are necessary to evaluate and process an application, to deter possible abuses of the licensing process, and otherwise to fulfill the Commission's statutory obligations. Concerning the information collection in the Small Satellite Report and Order, the Commission considered the burden of the collection on small entities, particularly applicants seeking authorization for small satellites or systems, and minimized the scope of the information collection to the extent possible. Indeed, the streamlined changes reduce the overall burden on operators.
- 6. Consequences if information is not collected. If the various data in this collection were collected less frequently or not filed in accordance with our rules, then, among other harms:
  - The Commission would not be able to carry out its mandate to determine that grant of an application is in the public interest, as required by statute.
  - The Commission would not be able to ensure that licensees are operating in accordance with Commission rules.
  - The Commission would not be able to determine whether a satellite system could operate without causing harmful interference to stations in other services.
  - The Commission would not be able to advance its goals of managing spectrum efficiently and promoting broadband technologies to benefit American consumers throughout the United States.
  - The Commission would not be able to mitigate the potential harmful effects of orbital debris accumulation. Without such information collection requirements, the growth in the orbital debris population may limit the usefulness of space for communications and other uses in the future by raising the costs and lowering the reliability of space-based systems.
  - The Commission would not have essential information to determine whether approval of a change in a controlling interest in the ownership of a license serves the public interest, as required by statute.
- 7. Special circumstances. The Commission does not have any new or amended information collection requirements that are inconsistent with the general information collection guidelines in 5 C.F.R. § 1320.5.
- 8. Federal Register notice; efforts to consult with persons outside the Commission. On October 25, 2019, the Commission published a notice in the Federal Register seeking comments from the public on

the information collection requirements contained in this collection (see 84 Fed. Reg. 57424). No comments were received from the public in response to this notice.

- 9. *Payments or gifts to respondents*. No payment or gift will be given to respondents in connection with these information collection requirements.
- 10. Assurances of confidentiality. Certain information collected regarding international coordination of satellite systems is not routinely available for public inspection pursuant to 5 U.S.C. § 552(b) and 47 C.F.R. § 0.457(d)(vii).
- 11. *Questions of a sensitive nature*. This information collection does not address any matters of a private or sensitive nature.
- 12. Estimates of the hour burden of the collection to respondents. The following represents the frequency of response, <sup>1</sup> time per response, total annual burden hours, and an explanation for the estimated **6,524** respondents and **6,573** responses to this information collection. To provide these estimates, we reviewed filings with the Commission over the past several years and also estimated how many applications for space stations we are likely to receive under the new streamlined small satellite and spacecraft process adopted in FCC 19-81. In addition, review of the previous information collection, approved by OMB on July 17, 2019, FCC 18-138, revealed a minor miscalculation of the total number of respondents, responses, and total burden hours. The calculation that follows has also been revised to correct those numbers.

#### I. Applications for Initial Licenses or Registrations and Requests for U.S. Market Access

- **A. Space Stations** (Form 312, Schedule S)
  - **1. General requirements** (47 C.F.R. §§ 25.110(b), 25.111(b) or (c), (d), 25.114(a)-(c), (d)(1)-(6), (d)(14); *see also* 47 C.F.R. § 0.457(d)(1)(vii)(C))
- (1) <u>Number of respondents</u>: 23. Nine applications per year for U.S. space station licenses, 8 requests per year to serve the U.S. market with a non-U.S.-licensed space station, and 6 applications per year for a U.S. earth station to communicate with a non-U.S.-licensed space station that has not been previously granted U.S. market access.
- (2) Number of responses: 23.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual burden is 1,357 hours (23 responses x 59 hours/response = 1,357 hours).
  - 2. Additional Service-Specific Requirements
    - a. Geostationary-Satellite Orbit (GSO) Fixed-Satellite Service (FSS) Applications (47 C.F.R. § 25.140(a))
- (2) Number of respondents: 15.
- (3) Number of responses: 15.

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<sup>&</sup>lt;sup>1</sup> Throughout this document, we report the frequency of response for each information requirement. This reflects the number of times a particular respondent is required to submit that particular information. Thus, the term "one time" refers to a collection where a respondent need only submit that particular information once. Over the course of any year, however, one or more other respondents will be required to submit the same type of information. We use the term "on occasion" to refer to a collection where each respondent may be required to submit particular information more than once, but there is no requirement that they submit that information on a regular basis. We use the term "annually" to describe information that respondents must submit to us once each year.

- (4) <u>Frequency of response</u>: One time.
- (5) <u>Annual hour burden</u>: The total annual hour burden is 30 hours (15 responses x 2 hours/response = 30 hours).
  - **b.** NGSO FSS Applications (47 C.F.R. §§ 25.114(d)(12), 25.146)
- (1) Number of respondents: 4.
- (2) Number of responses: 4.
- (3) <u>Frequency of response</u>: One time and on occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 16 hours (4 responses x 4 hours/response = 16 hours).
  - **c. Direct Broadcast Satellite (DBS) Applications** (47 C.F.R. §§ 25.114(d)(11), (13), (18), 25.148)
- (1) Number of respondents: 1.
- (2) Number of responses: 1.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 8 hours (1 response x 8 hours/response = 8 hours).
  - **d. 17/24 GHz Broadcasting-Satellite Service (BSS) Applications** (47 C.F.R. §§ 25.114(d) (7), (15)-(18), 25.140(b), (c), 25.264)
- (1) Number of respondents: 2.
- (2) Number of responses: 2.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 156 hours (2 responses x 78 hours/response = 156 hours).
  - e. **SDARS Applications** (47 C.F.R. § 25.144(a))
- (1) Number of respondents: 1.
- (2) Number of responses: 1.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 1 hour (1 respondent x 1 hour/response = 1 hour).
  - **f. GSO MSS Applications** (47 C.F.R. § 25.143(b))
- (1) Number of respondents: 1.
- (2) Number of responses: 1.
- (3) Frequency of response: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 4 hours (1 response x 4 hours/response = 4 hours).

- **g.** NGSO MSS Applications (47 C.F.R. §§ 25.142(a), (b)(2)(ii), 25.143(b), 25.250(b), 25.279)
- (1) Number of respondents: 1.
- (2) Number of responses: 1.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 6 hours (1 response x 6 hours/response = 6 hours).
  - **h. Ancillary Terrestrial Component (ATC) Applications** (47 C.F.R. §§ 25.149, 25.252, 25.253, 25.254)
- (1) Number of respondents: 1.
- (2) Number of responses: 1.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 50 hours (1 response x 50 hours/response = 50 hours).
  - **3. Request for Filing of Advance Publication Information** (Letter, 47 C.F.R. § 25.111(e); *see also* 47 C.F.R. § 0.457(d)(1)(vii)(C))
- (1) Number of respondents: 5.
- (2) Number of responses: 5.
- (3) Frequency of response: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 10 hours (5 responses x 2 hours/response = 10 hours).
  - **B.** Small Satellites or Small Spacecraft (Form 312, Schedule S, 47 C.F.R. § 25.122 or 47 C.F.R. § 25.123)
- (1) Number of respondents: 5.
- (2) Number of responses: 5.
- (3) Frequency of response: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 175 hours (5 responses x 35 hours/response = 175 hours).
  - C. Earth Stations (Form 312, Schedule B)
    - **1. General Requirements** (47 C.F.R. §§ 25.110, 25.115(a)(5)-(10), (b)(1)-(9), 25.209, 25.211, 25.212, 25.218, 25.220, 25.203, 25.204(e)(1))
- (1) Number of respondents: 1,493.
- (2) Number of responses: 1,493.
- (3) <u>Frequency of response</u>: One time and Third Party Disclosure in accordance with 47 C.F.R. § 25.203.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Of the estimated 8 hours per response, the one-time filing accounts for approximately 7 hours per response and the third-party disclosure accounts for approximately 1 hour per response.

- (4) <u>Annual hour burden</u>: The total annual hour burden is 11,944 (1,493 responses x 8 hours/response = 11,944 hours).
  - 2. Applications Eligible for Autogrant Licensing (Form 312 EZ, 47 C.F.R. § 25.115(a)(2))
- (1) Number of respondents: 50.
- (2) Number of responses: 50.
- (3) Frequency of response: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 300 hours (50 responses x 6 hours = 300 hours).
  - **3. Applications Not Eligible for Autogrant Licensing** (47 C.F.R. § 25.115(a)(1), (f); *see also* General Requirements above)
- (1) Number of respondents: 1,443.
- (2) Number of responses: 1,443.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 8,658 hours (1,443 responses x 6 hours/response = 8,658 hours).
  - **4. Applications Requesting Market Access for Non-U.S. Licensed Space Stations** (Form 312, Schedule S, 47 C.F.R. §§ 25.114, 25.137)
- (1) Number of respondents: 39.
- (2) Number of responses: 39.
- (3) <u>Frequency of response:</u> One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 3,042 hours (39 responses x 78 hours/response = 3,042 hours).
  - 5. Applications to Register Receive-Only Earth Stations (47 C.F.R. §§ 25.115(b))
- (1) Number of respondents: 400.
- (2) Number of responses: 400.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 1,600 hours (400 responses x 4 hours/response = 1,600 hours).
  - 6. Additional Application Requirements for Other Types of Earth Stations
    - a. Blanket Licensed Earth Station Networks in the 3700-4200 MHz and 5925-6425 MHz Bands (47 C.F.R. § 25.115(c)(2)(i))
- (1) Number of respondents: 10.
- (2) Number of responses: 10.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 400 hours (10 responses x 40 hours/response = 400).

- **b.** Blanket Licensed Earth Station Networks within the 10.7-20.2GHz Bands (47 C.F.R. § 25.115(c)(1), (e), (f))
- (1) Number of respondents: 50.
- (2) Number of responses: 50.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual burden hours is 1,000 hours (50 responses  $\times$  20 hours/response = 1,000).
  - c. Blanket Licensed Earth Station Networks within the 27.5-30 GHz Bands (47 C.F.R. § 25.115(c)(1), (e), (f))
  - (1) Number of respondents: 12.
- (2) Number of responses: 12.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual burden hours is 240 hours (12 responses x 20 hours/response = 40).
  - d. Earth Stations In Motion (ESIM) (47 C.F.R. § 25.228)
    - A. Earth Stations on Vessels (ESV) (47 C.F.R. § 25.228)
- (1) Number of respondents: 5.
- (2) Number of responses: 5.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 300 hours (5 responses x 60 hours/response = 300 hours).
  - **B.** Vehicle-Mounted Earth Stations (VMES) (47 C.F.R. § 25.228)
- (1) Number of respondents: 4.
- (2) Number of responses: 4.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 240 hours (4 responses x 60 hours/response = 240 hours).
  - C. Earth Stations aboard Aircraft (ESAA) (47 C.F.R. § 25.228)
- (1) Number of respondents: 9.
- (2) Number of responses: 9.
- (3) Frequency of response: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 720 hours (9 responses x 80 hours/response = 720 hours).
  - **e. Temporary-Fixed** (47 C.F.R. §§ 25.110, 25.277)

- (1) Number of respondents: 20.
- (2) Number of responses: 20.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 160 hours (20 responses x 8 hours/response = 160 hours).
  - **f. MSS** (47 C.F.R. §§ 25.115(d), 25.129(c), 25.135, 25.257, 25.258(c))
- (1) Number of respondents: 2.
- (2) Number of responses: 2.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 16 hours (2 responses x 8 hours/response = 16 hours).
  - **g.** 17/24 GHz BSS (47 C.F.R. § 25.115(g))
- (1) Number of respondents: 3.
- (2) Number of responses: 3.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 24 hours (3 responses x 8 hours/response = 24 hours).
  - h. 12/17 GHz DBS (47 C.F.R. §25.203(m))
- (1) Number of respondents: 3.
- (2) Number of responses: 3.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 24 hours (3 responses x 8 hours/response = 24 hours).
  - **i. SDARS Terrestrial Repeaters** (47 C.F.R. §§ 25.144(e), 25.263(b), (c), 25.403, 25.404; *see also* FCC 10-82, para. 278)
- (1) Number of respondents: 1.
- (2) Number of responses: 1.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 4 hours (1 response x 4 hours/response = 4 hours).
- **II. Modifications of Existing Licenses and Market Access Grants** (Form 312)
  - **A. Space Station** (47 C.F.R. § 25.117)
- (1) Number of respondents: 29.
- (2) Number of responses: 29.
- (3) <u>Frequency of response</u>: On occasion.

- (4) <u>Annual hour burden</u>: The total annual hour burden is 464 hours (29 responses x 16 hours/response = 464 hours).
  - **B.** Earth Station (47 C.F.R. § 25.117)
- (1) Number of respondents: 149.
- (2) Number of responses: 149.
- (3) <u>Frequency of response</u>: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 2,980 hours (149 responses x 20 hours/response = 2,980 hours).
- **III. Amendments of Pending Applications and Petitions** (Form 312)
  - **A. Space Station** (47 C.F.R. §§ 25.116, 25.137(e))
- (1) Number of respondents: 10.
- (2) Number of responses. 10.
- (3) Frequency of response: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 55 hours (10 responses x 5.5 hours/response = 55 hours).
  - **B.** Earth Station (47 C.F.R. §§ 25.116, 25.137(e))
- (1) Number of respondents: 57.
- (2) Number of responses: 57.
- (3) <u>Frequency of response</u>: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 228 hours (57 responses x 4 hours/response = 228 hours).
- **IV. Transfers of Control or Assignments** (Form 312 and Schedule A)
  - **A.** Transfers of Control (47 C.F.R. §§ 25.119, 25.137(g))
    - 1. Space Station
- (1) Number of respondents: 4.
- (2) Number of responses: 4.
- (3) Frequency of response: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 36 hours (4 responses x 9 hours/response = 36 hours).
  - 2. Earth Station
- (1) Number of respondents: 131.
- (2) Number of responses: 131.
- (3) <u>Frequency of response</u>: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 1,179 hours (131 responses x 9 hours/response = 1,179 hours).

#### **B.** Assignments (47 C.F.R. §§ 25.119, 25.137(g))

#### 1. Space Station

- (1) Number of respondents: 3.
- (2) Number of responses: 3.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 27 hours (3 operators x 9 hours/response = 27 hours).

#### 2. Earth Station

- (1) Number of respondents: 120.
- (2) Number of responses: 120.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 1,080 hours (120 responses x 9 hours/response = 1,080 hours).

### V. Applications for Special Temporary Authority (Form 312) (47 C.F.R. § 25.120)

#### A. Space Station

- (1) Number of respondents: 54.
- (2) Number of responses: 54.
- (3) Frequency of response: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 432 hours (54 responses x 8 hours/response = 432 hours).

#### **B.** Earth Station

- (5) Number of respondents: 296.
- (6) Number of responses: 296.
- (7) <u>Frequency of response</u>: On occasion.
- (8) <u>Annual hour burden</u>: The total annual hour burden is 2,368 hours (296 responses x 8 hours/response = 2,368 hours).

#### VI. Earth Station License Renewals (FCC Form 312-R) (47 C.F.R. §§ 25.115(b)(7), 25.121(e))

- (1) Number of respondents: 399.
- (2) Number of responses: 399.
- (3) <u>Frequency of response</u>: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 798 hours (399 operators x 2 hours/response = 798 hours).

#### VII. Surrenders of Authorizations

#### A. Space Station

- (1) Number of respondents: 1.
- (2) Number of responses: 1.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 1 hour (1 response x 1 hour/response y 1 hour).

#### **B.** Earth Station

- (1) Number of respondents: 208.
- (2) Number of responses: 208.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 208 hours (208 responses x 1 hour/response = 208 hours).

#### VIII. Annual Reporting Requirements for Space Station Operators (47 C.F.R. § 25.170)

- (1) Number of respondents: 38.
- (2) Number of responses: 38.
- (3) <u>Frequency of response</u>: Annual.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 304 hours (38 responses x 8 hours = 304 hours).

#### IX. General Notification Requirements

#### A. Commence Construction at Own Risk (47 C.F.R. §§ 25.113(b) and (f))

- (1) Number of respondents: 4.
- (2) Number of responses: 4.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 4 hours (4 responses x 1 hour/response = 4 hours).

#### **B.** Bringing In-Orbit Spare into Use (47 C.F.R. § 25.113(h))

- (1) Number of respondents: 3.
- (2) Number of responses: 3.
- (3) <u>Frequency of response</u>: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 1.5 hours (3 responses x .5 hours/response = 1.5 hours).

#### C. NGSO Replacement Satellites (47 C.F.R. § 25.113(i))

- (1) Number of respondents: 4.
- (2) Number of responses: 4.
- (3) <u>Frequency of response</u>: On occasion.

- (4) <u>Annual hour burden</u>: The total annual hour burden is 8 hours (4 responses x 2 hours/response = 8 hours).
  - **D.** Modification of Space Station Operation Not Requiring Prior Authorization (47 C.F.R. § 25.118(e), (f))
- (1) Number of respondents: 4.
- (2) Number of responses: 4.
- (3) Frequency of response: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 8 hours (4 responses x 2 hours/response = 8 hours).
  - **E.** Modifications of Earth Station Operation Not Requiring Prior Authorization (47 C.F.R. § 25.118(a))
- (1) Number of respondents: 10.
- (2) Number of responses: 10.
- (3) Frequency of response: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 80 hours (10 responses x 8 hours/response = 80 hours).
  - F. Temporary-Fixed Operation Local Coordination Reports (47 C.F.R. § 25.277(c))
- (1) Number of respondents: 100.
- (2) Number of responses: 100.
- (3) <u>Frequency of response</u>: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 800 hours (100 responses x 8 hours/response = 800 hours).
  - **G.** Completion of Earth Station Construction (47 C.F.R. §§ 25.133(b) and (d))
- (1) Number of respondents: 699.
- (2) Number of responses: 699.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 699 hours (699 responses x 1 hour/response = 699 hours).
  - H. ATC Service Initiation Notice (47 C.F.R. § 25.149(f))
- (1) <u>Number of respondents</u>: 1.
- (2) Number of responses: 1.
- (3) Frequency of response: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 1 hour (1 response x 1 hour/response = 1 hour).
  - I. Ka-Band Space Station Operators' Notification (47 C.F.R. § 25.258; see also FCC 96-311)

- (1) Number of respondents: 6.
- (2) Number of responses: 6.
- (3) <u>Frequency of response</u>: Third party disclosure.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 6 hours (6 responses x 1 hour/response = 6 hours).

### J. Consummation of Transfer and Control or Assignment (47 C.F.R. § 25.119(f))

- (1) Number of respondents: 365.
- (2) Number of responses: 365.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 365 hours (365 responses x 1 hour/response = 365 hours).

#### K. Results of In-Orbit Testing (47 C.F.R. § 25.173)

- (1) Number of respondents: 5.
- (2) Number of responses: 5.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 5 hours (5 responses x 1 hour/response = 5 hours).

#### L. Contact Information Update (47 C.F.R. §§ 25.171, 25.172, 25.259(b), 25.260(b), 25.271(f))

- (1) Number of respondents: 25.
- (2) Number of responses: 25.
- (3) <u>Frequency of response</u>: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 12.5 hours (25 responses x .5 hour/response = 12.5 hours).

#### M. Notification of Non-Routine Space Station Operation (47 C.F.R. § 25.140(d))

- (1) Number of respondents: 6.
- (2) Number of responses: 6.
- (3) Frequency of response: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 12 hours (6 responses x 2 hours/response = 12 hours).

#### N. Third Party Disclosures Requirements

- 1. SDARS (47 C.F.R. § 25.263(b))
- (1) Number of respondents: 1.
- (2) Number of responses: 25.
- (3) <u>Frequency of response</u>: Third party disclosure.

- (4) <u>Annual hour burden</u>: The total annual hour burden is 25 hours (1 respondent x 25 responses x 1 hour/response = 25 hours).
  - 2. **ATC** (47 C.F.R. § 25.149)
- (1) Number of respondents: 1.
- (2) Number of responses: 25.
- (3) <u>Frequency of response</u>: Third party disclosure.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 25 hours (1 respondent x 25 responses x 1 hour/response = 25 hours).
  - **3. ESIM (**47 C.F.R. § 25.228)
  - **A. ESV** (47 C.F.R. § 25.228(e))
- (1) Number of respondents: 5.
- (2) Number of responses: 5.
- (3) Frequency of response: Third party disclosure.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 5 hours (5 responses x 1 hour/response = 5 hours).
  - **B.** VMES (47 C.F.R. § 25.228(f))
- (1) Number of respondents: 4.
- (2) Number of responses: 4.
- (3) Frequency of response: Third party disclosure.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 4 hours (4 responses x 1 hour/response = 4 hours).
  - C. ESAA (47 C.F.R. § 25.228(g))
- (1) Number of respondents: 9.
- (2) Number of responses: 9.
- (3) Frequency of response: Third party disclosure.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 9 hours (9 responses x 1 hour/response = 9 hours).
  - **4. 17/24 GHz DBS** (47 C.F.R. §25.203(m))
- (1) Number of respondents: 3.
- (2) Number of responses: 3.
- (3) Frequency of responses: Once.
- (4) Annual hour burden: The total annual hour burden is 12 hours (3 responses x 4 hours = 12 hours).
- X. Milestones and Bonds
  - A. GSO Launch and Operate Milestone (47 C.F.R. § 25.164(f))

- (1) Number of respondents: 5.
- (2) Number of responses: 5.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 5 hours (5 responses x 1 hour/response = 5 hours).

#### **B.** NGSO Launch and Operate Milestone (47 C.F.R. § 25.164(f))

- (1) Number of respondents: 1.
- (2) Number of responses: 2.
- (3) <u>Frequency of response</u>: Two time.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 2 hours (2 response x 1 hour/response = 2 hours).

#### C. Application-Stage Bond (47 C.F.R. § 25.165(f))

- (1) Number of respondents: 29.
- (2) Number of responses: 29.
- (3) <u>Frequency of response</u>: One time.
- (4) <u>Annual hour burden per respondent</u>: The total annual hour burden is 58 hours (29 responses x 2 hours/response = 58 hours).

#### **D. Post-Licensing Bond** (47 C.F.R. § 25.165(a))

- (1) Number of respondents: 5.
- (2) Number of responses: 5.
- (3) <u>Frequency of response</u>: On occasion.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 10 hours (5 responses x 2 hours/response = 10 hours).

#### XI. Global Mobile Personal Communications by Satellite/E911 Call Centers (47 C.F.R. § 25.284)

- (1) Number of respondents: 4.
- (2) Number of responses: 4.
- (3) Frequency of response: Annual.
- (4) <u>Annual hour burden</u>: The total annual hour burden is 4 hours (4 responses x 1 hour/response = 4 hours).

#### **XII. Recordkeeping Requirement** (47 C.F.R. §§ 25.115(e)(2), (f), (g)(1), 25.263(c), 25.284)

- (1) Number of respondents: 4.
- (2) Number of responses: 4.
- (3) Frequency of response: Recordkeeping requirement.
- (4) Annual hour burden: The total annual hour burden is 2 hours (4 responses x .5 hours = 2 hours).

#### XIII. **3.7-4.2 GHz Information Collection Order** (FCC 18-91)

- A. Additional Information on Temporary Fixed Earth Stations in 3.7-4.2 GHz (FCC 18-91)
- (1) Number of respondents: 70.
- (2) Number of responses: 70.
- (3) <u>Frequency of response</u>: One time.
- (4) Annual hour burden: The total annual hour burden is 420 hours (70 responses x = 6 hours/response = 420 hours).
  - **B.** Additional Information on Space Stations in 3.7-4.2 GHz (FCC 18-91)
- (1) Number of respondents: 49.3
- (2) Number of responses: 49.
- (3) <u>Frequency of response</u>: One time.
- (4) Annual hour burden: The total annual hour burden is 1,960 hours (49 responses x 40 hours/response = 1,960 hours).

#### XIV. TOTALS: (COMPLETE)

Total number of respondents: 6,524.

Total number of responses: 6,573.

Range of hours per response: .5-80.

Total number of burden hours: 44,988

**TOTAL "In-house Cost"** – In-house staff who will be working on the information collection requirements contained in the chart above is estimated to have an hourly salary of \$60/hour. Therefore, the in-house costs to respondents are **44,988** (total burden hours) x \$60/hour = \$2,699,280.

13. Estimates of the cost burden of the collection to respondents. Respondents are assumed to use outside legal or engineering assistance to complete their filing with the Commission. This is because, in addition to their in-house legal and engineering staffs, space station and earth station operators often rely on outside attorneys and engineers to assist with some of the information collection requirements in Part 25. We estimate that the hourly rates for outside legal and engineering assistance are \$300/hour and \$250/hour, respectively. These figures are based on a small survey of local firms in the Washington, D.C. area and are conservative estimates. Because outside attorneys and engineers are used in approximately equal proportions, we use an average rate of \$275/hour to arrive at the cost burden for outside assistance. The amount of hourly work performed by outside parties varies with the type and complexity of the application. Based on our experience, we estimate that operators will engage outside attorneys and engineers in preparing 1,171 of the total number of responses filed annually, with an average of 8.8 hours spent per response. Consequently, the total cost burden for outside assistance is \$2,833,820 (\$275 x 1,171 responses x 8.8 hours per response).

**Application Filing Fees**<sup>4</sup>: \$13,778,766. This estimate is based on actual Commission filings over the past several years, as well as estimates of the number of filings under the new small satellite

<sup>&</sup>lt;sup>3</sup> Respondents are calculated on a per-space station basis.

<sup>&</sup>lt;sup>4</sup> *See* Appendix A for a table of calculations.

and spacecraft application fee category adopted in FCC 19-81. The estimate was adjusted to reflect the current application filing fee schedule. For the space station application filing fees, the estimate was also adjusted to correct the number of estimated GSO and NGSO applications for initial licenses. For earth station application filing fees, an average of the range of application filing fees was used.

#### **Total Annualized Cost:**

Total Costs to the Industry	Totals
Estimated Application Filing Fees	\$13,778,766
Estimated Cost of Outside Legal/Engineering Assistance	\$2,833,820
Total Cost to Respondents	\$16,612,586

#### 14. Estimate of Annualized Cost to the Federal Government.

The estimate of annualized cost to the Federal government is summarized in the chart below.

As shown in the chart, the annualized costs to the Federal government are \$2,350,669.44.

The chart contains total staff salaries, burden hours, and annualized costs.

	Number	Salary Per	Annual Burden	Annualized
Federal Government Staff	of Staff	Hour	Hours	Costs
GS-15/Step 5 Attorney	6	\$74.86	1,514	\$680,028.24
GS-14/Step 5 Attorney	3	\$63.64	1,517	\$289,625.64
GS-13/Step 5 Attorney	1	\$53.85	1,517	\$81,690.45
GS-12/Step 5 Attorney	1	\$45.29	1,517	\$68,704.93
GS-15/Step 5 Engineer	11	\$74.86	694	\$571,481.24
GS-14/Step 5 Engineer	3	\$63.64	2,022	\$386,040.24
GS-12/Step 5 Paralegal	1	\$45.29	500	\$22,645.00
GS-12/Step 5 Industry				
Analyst	1	\$45.29	1,508	\$68,297.32
GS-12/Step 5 Telecom				
Specialist	2	\$45.29	2,011	\$182,156.38

Part 25 of the Federal Communications Commission's Rules OMB Control No. 3060-0678 Governing the Licensing of, and Spectrum Usage by, **Commercial Earth Stations and Space Stations** 

September 2020

29 12,800 **Total** \$2,350,669.44

15. *Program changes or adjustments.* The Commission has the following program changes to this collection as a result of the information collection requirements adopted in FCC 19-81: +8 to the number of respondents, +8 to the total annual responses and +148 to the annual burden hours, and -\$311,895 to the annual cost. We estimate that there will be approximately 8 additional respondents as a result of the program changes adopted in FCC 19-81, and 8 corresponding additional responses. Although the overall annual burden hours have increased as a result of the additional number of responses, we expect that some respondents will experience a decrease in burden hours on an individualized basis from what they would have experienced prior to the program changes adopted in FCC 19-81. The program changes resulting in a change to the annual cost of -\$311,895 include: (1) a change to the estimated cost of outside legal or engineering assistance of +\$9,680 to reflect the increased number of overall estimated respondents and responses; and (2) a change to estimated application filing fees of -\$321,575 to reflect the creation of a new application fee category which may result in some applicants paying a lower filing fee in this new application fee category than the applicants would have paid under the prior application fee schedule.

This collection was also adjusted as follows: +4 to the number of respondents, +4 to the total annual responses, -192 to the annual burden hours, and -\$180,722 to the annual cost. The adjustments to the number of respondents, responses, and burden hours are a result of corrections to the numbers specified in the existing information collection. The adjustments resulting in a change to the annual cost of -\$180,722 include: (1) an adjustment of +\$838,572 to reflect the application fee costs from the most current application fee filing schedule; and (2) an adjustment of -\$1,019,295 to reflect a correction in the number of estimated application fee filers for FSS GSO and FSS NGSO initial space station licenses to reflect only applicants for U.S.-licenses, consistent with the description for the number of respondents in these categories.

- 16. Collections of information whose results will be published. The data will not be published for statistical use.
- 17. Display of expiration date for OMB approval of information collection. We continue to seek a waiver of the requirement to display the expiration date of OMB approval on the FCC Form 312 (including associated Schedules A, B, and S), FCC Form 312 EZ, and FCC Form 312-R and wish to instead display an edition date. If these forms remain unchanged when it is time to renew OMB approval for this collection, the Commission would be required to destroy all stock on hand displaying the old expiration dates and then reprint and redistribute the forms with the new expiration date. Additionally, it would require the Commission to modify the electronic versions as well. This would be an undue burden on Commission resources and may lead to confusion among licensees.
- 18. Exceptions to the certification statement for Paperwork Reduction Act submissions. There are no exceptions to the Certification Statement.

#### В. **Collections of Information Employing Statistical Methods:**

No statistical methods are employed.

### APPENDIX **Application Costs** (in Dollars)<sup>5</sup>

Type of Filing	No. of Applications	Filing Fee	Subtotals	Totals
I. Applications for Initial Licenses				
- Control Stations				
a. Space Stations:	C	126 020 00	021 500 00	
GSO	6	136,930.00	821,580.00	
NGSO	3	471,575.00	1,414,725.00	
Small Satellite	5	30,000.00	150,000.00	
				2,386,305.00
b. Earth Stations:				
Single		2,985.00		
Lead		6,615.00		
Blanket		11,015.00		
(average earth station application fee)	1,493	6,871.67		10,259,403.31
II. Modifications of Existing Licenses				
a. Space Station				
GSO	27	9,785.00	264,195.00	
NGSO	2	33,685.00	67,370.00	
				331,565.00
b. Earth Station	149	210.00		31,290.00
III. Amendments of Pending Applications				
a. Space Station				
GSO	8	1,960.00	15,680.00	
NGSO	2	6,740.00	13,480.00	
				29,160.00
b. Earth Station	57	210.00		11,970.00

<sup>&</sup>lt;sup>5</sup> See 47 C.F.R. § 1.1107.

IV. Transfers of Control and				
Assignments A. Transfers of Control (T/C)				
a. Space Station				
GSO	3	9,785.00	29,355.00	
NGSO	1	13,480.00	13,480.00	
				42,835.00
b. Earth Station		590.00		
		2,945.00		
(average earth station T/C fee)	131	1,767.50		231,542.50
B. Assignments				
-				
a. Space Station	3	9,785.00		29,355.00
b. Earth Station	120	1,767.50		212,100.00
V. Applications for Special Temporary Authority				
a. Space Station				
GSO	48	980.00	47,040.00	
NGSO	6	3,375.00	20,250.00	
				67,290.00
b. Earth Station	296	210.00		62,160.00
VI. Earth Station License Renewals	399	210.00		83,790.00
Totals				\$13,778,765.81 <sup>6</sup>

<sup>&</sup>lt;sup>6</sup> \$13,778,765.81 was rounded to \$13,778,766.