SUPPORTING STATEMENT

A. Justification:

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

The Commission is seeking an extension of the "Experimental Radio Service" (ERS) information collection in order to obtain the full three-year clearance from the Office of Management and Budget (OMB). The Commission also seeks an update to the current title in ROCIS from "Application for New or Modified Radio Station Authorization Under Part 5 of FCC Rules - Experimental Radio Service (Other than Broadcast)" to reflect "Applications for New Authorization or Modification of Existing Authorization Under Part 5 of FCC Rules - Experimental Radio Service".

On March 15, 2019, the Commission adopted a First Report and Order, in ET Docket No. 18-21; FCC 19-19, which updates 47 CFR Part 5, —" Experimental Radio Service" (ERS).¹ The *Spectrum Horizons Order* provided a new and unique ERS license type—the Spectrum Horizons Experimental Radio license (or "Spectrum Horizons License") that would be available for experiments and demonstrations of equipment designed to operate exclusively on any frequency above 95 GHz .

The Commission accommodated this new license, we adopted change to several generally applicable existing Part 5 ERS rules and added rules in a new subpart I that are only applicable to Spectrum Horizons Licenses. Thus, the existing collection of information requirements made necessary by 47 CFR Sections 5.59, 5.77, and 5.121 has been modified and unique Spectrum Horizons License requirements has been added at 47 CFR Sections 5.702, 5.703, 5.704, and 5.705.

§ 5.59 Forms to be used.

(a) Application for conventional, program, medical, compliance testing, and Spectrum Horizons experimental radio licenses. (1) Application for new authorization or modification of existing authorization. Entities must submit FCC Form 442.

§ 5.77 Change in equipment and emission characteristics.

(a) The licensee of a conventional, broadcast, or Spectrum Horizons experimental radio station may make any changes in equipment that are deemed desirable or necessary provided:

* * *

(b) For conventional or Spectrum Horizons experimental radio stations, the changes permitted in paragraph (a) of this section may be made without prior authorization from the Commission provided that the licensee supplements its application file with a description of such change. If

¹ Spectrum Horizons, First Report and Order, 34 FCC Rcd 1605(2) (2019)(Spectrum Horizons Order).

the licensee wants these emission changes to become a permanent part of the license, an application for modification must be filed.

§ 5.121 Station record requirements.

- (a)(1) For conventional, program, medical testing, compliance testing experimental radio stations, the current original authorization or a clearly legible photocopy for each station shall be retained as a permanent part of the station records but need not be posted. Station records are required to be kept for a period of at least one year after license expiration.
- (a)(2) For Spectrum Horizons experimental radio stations, the licensee is solely responsible for retaining the current authorization as a permanent part of the station records but need not be posted. Station records are required to be kept for a period of at least one year after license expiration.

§ 5.702 Licensing requirement – necessary showing.

Each application must include a narrative statement describing in detail how its experiment could lead to the development of innovative devices and/or services on frequencies above 95 GHz and describe, as applicable, its plans for marketing such devices. This statement must sufficiently explain the proposed new technology/potential new service and incorporate an interference analysis that explains how the proposed experiment would not cause harmful interference to other services. The statement should include technical details, including the requested frequency band(s), maximum power, emission designators, area(s) of operation, and type(s) of device(s) to be used.

§ 5.703 Responsible party.

- (a) Each Spectrum Horizons experimental radio applicant must identify a single point of contact responsible for all experiments conducted under the license and ensuring compliance with all applicable FCC rules.
- (b) The responsible individual will serve as the initial point of contact for all matters involving interference resolution and must have the authority to discontinue any and all experiments being conducted under the license, if necessary.
- (c) The license application must include the name of the responsible individual and contact information at which the person can be reached at any time of the day; this information will be listed on the license. Licensees are required to keep this information current.

§ 5.704 Marketing of devices under Spectrum Horizons experimental radio licenses.

Unless otherwise stated in the instrument of authorization, devices operating in accordance with a Spectrum Horizons experimental radio license may be marketed subject to the following conditions:

- (a) Marketing of devices (as defined in §2.803 of this chapter) and provision of services for hire is permitted before the radio frequency device has been authorized by the Commission.
- (b) Licensees are required to ensure that experimental devices are either rendered inoperable or retrieved by them from trial participants at the conclusion of the trial. Licensees are required to notify experiment participants in advance of the trial that operation of the experimental device is

subject to this condition. Each device sold under this program must be labeled as "Authorized Under An Experimental License and May be Subject to Further Conditions Including Termination of Operation" and carry a licensee assigned equipment ID number.

(c) The size and scope of operations under a Spectrum Horizons experimental license are subject to limitations as the Commission shall establish on a case-by-case basis.

§ 5.705 Interim report.

Licensee must submit to the Commission an interim progress report 5 years after grant of its license. If a licensee requests non-disclosure of proprietary information, requests shall follow the procedures for submission set forth in §0.459 of this chapter.

History of Information Collection Requirements that were Previously Approved

• On June 29, 2016, the Commission adopted a Second Report and Order, in ET Docket No. 10-36 and 06-155; FCC 16-86, which updated a section of Part 5 of the CFR – "Experimental Radio Service" (ERS). ² The Commission's recent R&O revised and streamlined the rule part under for the ERS. This rule change allowed licensees operation under frequency bands mentioned in Section 5.303 and as stated within rule part 15.205(a).

§ 5.303 Frequencies.

- (a) Licensees may operate in any frequency band, including those above 38.6 GHz, except for frequency bands exclusively allocated to the passive services (including the radio astronomy service). In addition, licensees may not use any frequency or frequency band below 38.6 GHz that is listed in § 15.205(a) of this chapter.
- (b) Exception: Licensees may use frequencies listed in § 15.205(a) of this chapter for testing medical devices (as defined in § 5.402(b) of this chapter), if the device is designed to comply with all applicable service rules in Part 18, Industrial, Scientific, and Medical Equipment; Part 95, Personal Radio Services Subpart H Wireless Medical Telemetry Service; or Part 95, Subpart I Medical Device Radiocommunication Service.
 - On January 31, 2013, the Commission adopted a Report and Order, in ET Docket No. 10-236 and 06-155; FCC 13-15, which updated Part 5 of the CFR 47 "Experimental Radio Service" (ERS). The Commission's recent Report and Order revised and streamlined rules under for the Experimental Radio Service (ERS). These rule changes updated procedures used to obtain and use an experimental license.

² *See* In the Matter of Promoting Expanded Opportunities for Radio Experimentation and Market Trials Under Part 5 of the Commission's Rules and Streamlining Other Related Rules, ET Docket No. 10-236; 2006 Biennial Review of Telecommunications Regulations – Part 2, Administered by the Office of Engineering and Technology (OET), ET Docket No. 06-155; 31 FCC Rcd 7529 (2016), FCC 16-86.

The Commission has determined that because of the rule changes adopted from ET Docket No. 10-26, FCC 13-15, information collections 3060-0065 and 3060-0758 contained duplicative information collection requirements and some of the requirements in 3060-0758 were eliminated because of the rule changes. We found that it was to the Commission's advantage to merge OMB Control No. 3060-0758 under OMB Control No. 3060-0065 rather than have two separate information collections.

Therefore, the Commission received OMB approval on March 31, 2016 to discontinue OMB Control No. 3060-0758. All of the information collection requirements are contained in this collection.

The rules provided additional license categories to potential licensees. The license categories are:

- Program Experimental Radio License -- This type of license is issued to qualified
 institutions to conduct an ongoing program of research and experimentation under a
 single experimental authorization. Program experimental radio licenses are available to
 colleges, universities, research laboratories, manufacturers of radio frequency equipment,
 manufacturers that integrate radio frequency equipment into their end products, and
 medical research institutions.
- Medical Program Experimental Radio License -- This type of license is issued to
 hospitals and health care institutions that demonstrate expertise in testing and operation
 of experimental medical devices that use wireless telecommunications technology or
 communications functions in clinical trials for diagnosis, treatment, or patient
 monitoring.
- **Compliance testing experimental radio license** -- This type of license will be issued to laboratories recognized by the FCC to perform:
 - (i) Product testing of radio frequency equipment, and
 - (ii) Testing of radio frequency equipment in an Open Area Test Site.

To accomplish this transition, the Commission updated the current "Experimental Licensing Radio" electronic filing system. The existing ELS Form 442 interface was modified; and the ELS database was modified to facilitate inter-operability with the new ELS notification website. The updated information can be accessed from the Office of Engineering and Technology's website http://www.fcc.gov/els

• The Second Report and Order adopted on June 29, 2016 facilitates access to spectrum that can be used under a program experimental radio license (program license), to improve the utility of this type of licensing scheme for those entities experimenting with RF-based medical devices. The Commission previously updated the Experimental Licensing Radio electronic filing system and new ELS notification website. Therefore, no changes have been made to the forms/screenshots since the last OMB Approval.

The collections of information that are contained in 47 CFR Part 5 are made necessary by 47 CFR Sections 5.59, 5.61, 5.63, 5.64, 5.65, 5.73, 5.79, 5.81, 5.107, 5.115, 5.121, 5.123, 5.205, 5.207, 5.217(b), 5.307, 5.308, 5.309, 5.311, 5.404, 5.405, 5.406, 5.504, 5.602, 5.702, 5.703, 5.704, and 5.705) of the Commission's rules.

- (1) <u>Application for new authorization or modification of existing authorization</u>. Entities must submit FCC Form 442 (OMB 3060-0065).
- (2) <u>Application for renewal of experimental authorization</u>. Application for renewal of station license shall be submitted on FCC Form 405. Unless otherwise directed by the Commission, each application for renewal of license shall be filed at least 60 days prior to the expiration date of the license to be renewed (OMB 3060-0093).
- (3) Application for consent to assign an experimental authorization. Application for consent to assign shall be submitted on FCC Form 702 when the legal right to control the use and operation of a station is to be transferred as a result of a voluntary act (contract or other agreement) or an involuntary act (death or legal disability) of the grantee of a station authorization or by involuntary assignment of the physical property constituting the station under a court decree in bankruptcy proceedings, or other court order, or by operation of law in any other manner (OMB 3060-0053).
- (4) <u>Application for consent to transfer control of Corporation holding experimental authorization</u>. Application for consent to transfer control shall be submitted on FCC Form 703 whenever it is proposed to change the control of a corporation holding a station authorization (OMB 3060-0053).
- (5) <u>Application for product development and market trials</u>. Application for product development and market trials shall be submitted on FCC Form 442 (OMB 3060-0053).
- (b) Applications for broadcast experimental radio license.
- (1) <u>Application for new authorization or modification of existing authorization</u>. An application for a construction permit for a new broadcast experimental station or modification of an existing broadcast experimental station must be submitted on FCC Form 309.
- (2) <u>Application for a license</u>. An application for a license to cover a construction permit for a broadcast experimental station must be submitted on FCC Form 310.
- (3) <u>Application for renewal of license</u>. An application for renewal of station license for a broadcast experimental station must be submitted on FCC Form 311. Unless otherwise directed by the Commission, each application for renewal of license shall be filed at least 60 days prior to the expiration date of the license to be renewed.

Please note that FCC Forms 309, 310 and 311, are approved under OMB control number 3060-1035, are currently shared between the Media Bureau and the International Bureau. The forms are used by the Media Bureau for experimental broadcast licenses and by the International Bureau for international broadcast stations. They are not filed electronically but by paper.

§ 5.61 Procedure for obtaining a special temporary authorization.

- (a)(1) An applicant may request a Special Temporary Authorization (STA) for operation of a conventional experimental radio service station during a period of time not to exceed 6 months.
- (2) Applications for STA must be submitted electronically through the Office of Engineering and Technology website http://www.fcc.gov/els at least 10 days prior to the proposed operation. Applications filed less than 10 days prior to the proposed operation date will be accepted only upon a showing of good cause.
- (3) In special situations, as defined in § 1.915(b)(1) of this chapter, a request for STA may be made by telephone or electronic media provided a properly signed application is filed within 10 days of such request.
- (b) An application for STA shall contain the following information:
- (1) Name, address, phone number (also e-mail address and facsimile number, if available) of the applicant.³
- (2) Explanation of why an STA is needed.
- (3) Description of the operation to be conducted and its purpose.
- (4) Time and dates of proposed operation.
- (5) Class(es) of station (e.g. fixed, mobile, or both) and call sign of station (if applicable).
- (6) Description of the location(s) and, if applicable, geographical coordinates of the proposed operation.
- (7) Equipment to be used, including name of manufacturer, model and number of units.
- (8) Frequency (or frequency bands) requested.
- (9) Maximum effective radiated power (ERP) or equivalent isotropically radiated power (EIRP).
- (10) Emission designator (see §2.201 of this chapter) or describe emission (bandwidth, modulation, etc.)
- (11) Overall height of antenna structure above the ground (if greater than 6 meters above the ground or an existing structure, see part 17 of this chapter concerning notification to the FAA).

³ The FCC's system of records (SORN), FCC/OET-1, "Experimental Radio Station License Files," provides various safeguards that protect the collection, maintenance, storage, uses, and disposal of the personal information that individual applicants must provide to the FCC as part of the application process to obtain an experimental radio authorization. This SORN was published in the *Federal Register* on April 6, 2006 (71 FR 17234, 17241). The FCC completed a Privacy Impact Assessment (PIA) as required by OMB Memorandum, M-03-22 (September 22, 2003) on June 9, 2009. The PIA may be viewed on the FCC's Privacy Act webpage at: http://www.fcc.gov/omd/privacyact/System_of_records/pia-experimental-radio.pdf>.

(c) Extensions of an STA may be granted provided that an application for a conventional experimental license that is consistent with the terms and conditions of that STA (*i.e.*, there is no increase in interference potential to authorized services) has been filed at least 15 days prior to the expiration of the licensee's STA. When such an application is timely filed, operations may continue in accordance with the other terms and conditions of the STA pending disposition of the application, unless the applicant is notified otherwise by the Commission.

§ 5.63 Supplemental statements required.

Applicants must provide the information set forth on the applicable form as specified in § 5.59. In addition, applicants must provide supplemental information as described below:

- (a) If installation and/or operation of the equipment may significantly impact the environment (see § 1.1307 of this chapter) an environmental assessment as defined in §1.1311 of this chapter must be submitted with the application.
- (b) If an applicant requests non-disclosure of proprietary information, requests shall follow the procedures for submission set forth in § 0.459 of this chapter.
- (c) For conventional and broadcast experimental radio licenses, each application must include:
- (1) A narrative statement describing in detail the program of research and experimentation proposed, the specific objectives sought to be accomplished; and how the program of experimentation has a reasonable promise of contribution to the development, extension, or expansion, or use of the radio art, or is along lines not already investigated.
- (2) If the authorization is to be used for the purpose of fulfilling the requirements of a contract with an agency of the United States Government, a narrative statement describing the project, the name of the contracting agency, and the contract number.
- (3) If the authorization is to be used for the sole purpose of developing equipment for exportation to be employed by stations under the jurisdiction of a foreign government, a narrative statement describing the project, any associated contract number, and the name of the foreign government concerned.
- (4) If the authorization is to be used with a satellite system, a narrative statement containing the information required in §5.64.
- (d) For program experimental radio licenses, each application must include:
- (1) A narrative statement describing how the applicant meets the eligibility criteria set forth in subpart E of this part.
- (2) If the authorization is to be used for the purpose of fulfilling the requirements of a contract with an agency of the United States Government, a narrative statement describing the project, the name of the contracting agency, and the contract number.
- (3) If the authorization is to be used for the sole purpose of developing equipment for exportation to be employed by stations under the jurisdiction of a foreign government, a narrative statement

describing the project, any associated contract number, and the name of the foreign government concerned.

(e) For medical testing and compliance testing experimental radio licenses, each application must include a narrative statement describing how the applicant meets the eligibility criteria set forth in §§5.402(a) and 5.502 respectively.

§5.64 Special provisions for satellite systems.

- (a) Construction of proposed experimental satellite facilities may begin prior to Commission grant of an authorization. Such construction is entirely at the applicant's risk and does not entitle the applicant to any assurances that its proposed experiment will be subsequently approved or regular services subsequently authorized. The applicant must notify the Commission's Office of Engineering and Technology in writing that it plans to begin construction at its own risk.
- (b) Except where the satellite system has already been authorized by the FCC, applicants for an experimental authorization involving a satellite system must submit a description of the design and operational strategies the satellite system will use to mitigate orbital debris, including the following information:
- (1) A statement that the space station operator has assessed and limited the amount of debris released in a planned manner during normal operations, and has assessed and limited the probability of the space station becoming a source of debris by collisions with small debris or meteoroids that could cause loss of control and prevent post-mission disposal;
- (2) A statement that the space station operator has assessed and limited the probability of accidental explosions during and after completion of mission operations. This statement must include a demonstration that debris generation will not result from the conversion of energy sources on board the spacecraft into energy that fragments the spacecraft. Energy sources include chemical, pressure, and kinetic energy. This demonstration shall address whether stored energy will be removed at the spacecraft's end of life, by depleting residual fuel and leaving all fuel line valves open, venting any pressurized system, leaving all batteries in a permanent discharge state, and removing any remaining source of stored energy, or through other equivalent procedures specifically disclosed in the application;
- (3) A statement that the space station operator has assessed and limited the probability of the space station becoming a source of debris by collisions with large debris or other operational space stations. Where a space station will be launched into a low-Earth orbit that is identical, or very similar, to an orbit used by other space stations, the statement must include an analysis of the potential risk of collision and a description of what measures the space station operator plans to take to avoid in-orbit collisions. If the space station operator is relying on coordination with another system, the statement shall indicate what steps have been taken to contact, and ascertain the likelihood of successful coordination of physical operations with, the other system. The statement must disclose the accuracy—if any—with which orbital parameters of non-geostationary satellite orbit space stations will be maintained, including apogee, perigee, inclination, and the right ascension of the ascending node(s). In the event that a system is not able to maintain orbital tolerances, i.e., it lacks a propulsion system for orbital maintenance, a statement disclosing that fact shall be included in the debris mitigation disclosure. Such systems shall also indicate the anticipated evolution over time of the orbit of the proposed satellite or satellites. Where a space station operator requests the assignment of a geostationary-Earth orbit

location, it shall assess whether there are any known satellites located at, or reasonably expected to be located at, the requested orbital location, or assigned in the vicinity of that location, such that the station keeping volumes of the respective satellites might overlap. If so, the statement shall identify those parties and describe the measures that will be taken to prevent collisions;

(4) A statement detailing the post-mission disposal plans for the space station at end of life, including the quantity of fuel —if any—that will be reserved for post-mission disposal maneuvers. For geostationary-Earth orbit space stations, the statement shall disclose the altitude selected for a post-mission disposal orbit and the calculations that are used in deriving the disposal altitude. The statement shall also include a casualty risk assessment if planned post-mission disposal involves atmospheric re-entry of the space station. An assessment shall include a statement as to the likelihood that portions of the spacecraft will survive re-entry and reach the surface of the Earth, and the probability of human casualty as a result.

§ 5.65 Defective applications.

- (a) Applications that are defective with respect to completeness of answers to required questions, execution or other matters of a purely formal character may be found to be unacceptable for filing by the Commission, and may be returned to the applicant with a brief statement as to the omissions.
- (b) If an applicant is requested by the Commission to file any documents or information not included in the prescribed application form, failure to comply with such request will constitute a defect in the application.
- (c) Applications not in accordance with the Commission's rules, regulations, or other requirements will be considered defective unless accompanied either by:
- (1) A petition to amend any rule, regulation, or requirement with which the application is in conflict; or
- (2) A request for waiver of any rule, regulation, or requirement with which the application is in conflict. Such request shall show the nature of the waiver desired and set forth the reasons in support thereof.

§ 5.73 Experimental report.

- (a) The following provisions apply to conventional experimental radio licenses and to medical testing experimental licenses that operate under part 15, Radio Frequency Devices; part 18, Industrial, Scientific, and Medical Equipment, part 95, Personal Radio Services subpart H Wireless Medical Telemetry Service; or part 95, subpart I Medical Device Radiocommunication Service:
- (1) The Commission may, as a condition of authorization, request that the licensee forward periodic reports in order to evaluate the progress of the experimental program.
- (2) An applicant may request that the Commission withhold from the public certain reports and associated material and the Commission will do so unless the public interest requires otherwise. These requests should follow the procedures for submission set forth in § 0.459 of this chapter.

- (b) The provisions in § 5.207 apply to broadcast experimental radio licenses.
- (c) The provisions in § 5.309 apply to program experimental licenses and to medical testing experimental licenses that do not operate under part 15, Radio Frequency Devices; part 18, Industrial, Scientific, and Medical Equipment, part 95, Personal Radio Services subpart H Wireless Medical Telemetry Service; or part 95, subpart I Medical Device Radiocommunication Service.

§ 5.79 Transfer and assignment of station authorization for conventional, program, medical testing, and compliance testing experimental radio licenses.

- (a) A station authorization for a conventional experimental radio license, the frequencies authorized to be used by the grantee of such authorization, and the rights therein granted by such authorization shall not be transferred, assigned, or in any manner either voluntarily or involuntarily disposed of, unless the Commission decides that such a transfer is in the public interest and gives its consent in writing.
- (b) A station authorization for a program, medical testing, or compliance testing experimental radio license, the frequencies authorized to be used by the grantees of such authorizations, and the rights therein granted by such authorizations shall not be transferred, assigned, or in any manner either voluntarily or involuntarily disposed of.

§ 5.81 Discontinuance of station operation.

In case of permanent discontinuance of operation of a station in the Experimental Radio Service prior to the license expiration date, the licensee shall notify the Commission. Licensees who willfully fail to do so may be subject to disciplinary action, including monetary fines, by the Commission.

§ 5.107 Transmitter control requirements.

Each licensee shall be responsible for maintaining control of the transmitter authorized under its station authorization, including the ability to terminate transmissions should interference occur.

- (a) <u>Conventional experimental radio stations</u>. The licensee shall ensure that transmissions are in conformance with the operating characteristics prescribed in the station authorization and that the station is operated only by persons duly authorized by the licensee.
- (b) <u>Program experimental radio stations</u>. The licensee shall ensure that transmissions are in conformance with the requirements in subpart E of this part and that the station is operated only by persons duly authorized by the licensee.
- (c) <u>Medical testing experimental radio stations</u>. The licensee shall ensure that transmissions are in conformance with the requirements in subpart F of this part and that the station is operated only by persons duly authorized by the licensee.
- (d) <u>Compliance testing experimental radio stations</u>. The licensee shall ensure that transmissions are in conformance with the requirements in subpart G of this part and that the station is operated only by persons duly authorized by the licensee.

(e) <u>Broadcast experimental stations</u>. Except where unattended operation is specifically permitted, the licensee of each station authorized under the provisions of this part shall designate a person or persons to activate and control its transmitter. At the discretion of the station licensee, persons so designated may be employed for other duties and for operation of other transmitting stations if such other duties will not interfere with the proper operation of the station transmission systems.

§ 5.115 Station identification.

- (a) <u>Conventional experimental radio licenses</u>. A licensee, unless specifically exempted by the terms of the station authorization, shall transmit its assigned call sign at the end of each complete transmission: Provided, however, that the transmission of the call sign at the end of each transmission is not required for projects requiring continuous, frequent, or extended use of the transmitting apparatus, if, during such periods and in connection with such use, the call sign is transmitted at least once every thirty minutes. The station identification shall be transmitted in clear voice or Morse code. All digital encoding and digital modulation shall be disabled during station identification.
- (b) <u>Broadcast experimental licenses</u>. Each experimental broadcast station must transmit aural or visual announcements of its call letters and location at the beginning and end of each period of operation, and at least once every hour during operation.
- (c) <u>Program experimental radio licenses</u>. Program experimental radio licenses shall comply with either paragraph (c)(1) or (c)(2):
- (1) Stations may transmit identifying information sufficient to identify the license holder and the geographic coordinates of the station. This information shall be transmitted at the end of each complete transmission except that: this information is not required at the end of each transmission for projects requiring continuous, frequent, or extended use of the transmitting apparatus, if, during such periods and in connection with such use, the information is transmitted at least once every thirty minutes. The station identification shall be transmitted in clear voice or Morse code. All digital encoding and digital modulation shall be disabled during station identification; or
- (2) Stations may post information sufficient to identify it on the Commission's program experimental registration website.

§ 5.121 Station record requirements.

- (a) * * *
- (b) For Broadcast experimental radio stations, the license must be available at the transmitter site. The licensee of each experimental broadcast station must maintain and retain for a period of two years, adequate records of the operation, including:
- (1) Information concerning the nature of the experimental operation and the periods in which it is being conducted; and
- (2) Information concerning any specific data requested by the FCC.

§ 5.123 Inspection of stations.

All stations and records of stations in the authorized under this part shall be made available for inspection at any time while the station is in operation or shall be made available for inspection upon reasonable request of an authorized representative of the Commission.

§ 5.205 Licensing requirements, necessary showing.

- (a) An applicant for a new experimental broadcast station, change in facilities of any existing station, or modification of license is required to make a satisfactory showing of compliance with the general requirements of the Communications Act of 1934, as amended, as well as the following:
- (1) That the applicant has a definite program of research and experimentation in the technical phases of broadcasting which indicates reasonable promise of substantial contribution to the developments of the broadcasting art.
- (2) That upon the authorization of the proposed station the applicant can and will proceed immediately with its program of research and experimentation.
- (3) That the transmission of signals by radio is essential to the proposed program of research and experimentation.
- (4) That the program of research and experimentation will be conducted by qualified personnel.
- (b) A license for an experimental broadcast station will be issued only on the condition that no objectionable interference to the regular program transmissions of broadcast stations will result from the transmissions of the experimental stations.
- (c) <u>Special provision for broadcast experimental radio station applications</u>. For purposes of the definition of "experimental authorization" in Section II.A.6 of the Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process set forth in Appendix C to Part 1 of this chapter, a Broadcast Experimental Radio Station authorized under this Subpart shall be considered an "Experimental Broadcast Station authorized under part 74 of the Commission's Rules."

§ 5.207 Supplemental reports with application for renewal of license.

A report shall be filed with each application for renewal of experimental broadcast station license which shall include a statement of each of the following:

- (a) Number of hours operated.
- (b) Full data on research and experimentation conducted including the types of transmitting and studio equipment used and their mode of operation.
- (c) Data on expense of research and operation during the period covered.

- (d) Power employed, field intensity measurements and visual and aural observations and the types of instruments and receivers utilized to determine the station service area and the efficiency of the respective types of transmissions.
- (e) Estimated degree of public participation in reception and the results of observations as to the effectiveness of types of transmission.
- (f) Conclusions, tentative and final.
- (g) Program of further developments in broadcasting.
- (h) All developments and major changes in equipment.
- (i) Any other pertinent developments.

§ 5.217 Rebroadcasts.

(b) No licensee of a broadcast experimental radio station may retransmit the program of another U.S. broadcast station without the express authority of the originating station. A copy of the written consent of the licensee originating the program must be kept by the licensee of the broadcast experimental radio station retransmitting such program and made available to the FCC upon request.

§ 5.307 Responsible party.

- (a) Each program experimental radio applicant must identify a single point of contact responsible for all experiments conducted under the license, including
- (1) Ensuring compliance with the notification requirements of § 5.309 of this part; and
- (2) Ensuring compliance with all applicable FCC rules.
- (b) The responsible individual will serve as the initial point of contact for all matters involving interference resolution and must have the authority to discontinue any and all experiments being conducted under the license, if necessary.
- (c) The license application must include the name of the responsible individual and contact information at which the person can be reached at any time of the day; this information will be listed on the license. Licensees are required to keep this information current.

§ 5.308 Stop buzzer.

A "Stop Buzzer" point of contact must be identified and available at all times during operation of each experiment conducted under a program license. A "stop buzzer" point of contact is a person who can address interference concerns and cease all transmissions immediately if interference occurs.

§ 5.309 Notification requirements.

- (a) At least ten calendar days prior to commencement of any experiment, program experimental licensees must provide the following information to the Commission's program experimental registration website.
- (1) A narrative statement describing the experiment, including a description and explanation of measures taken to avoid causing harmful interference to any existing service licensee;
- (2) Contact information for the researcher-in-charge of the described experiment;
- (3) Contact information for a "stop buzzer"; and
- (4) Technical details including:
- (i) The frequency or frequency bands;
- (ii) The maximum equivalent isotropically radiated power (EIRP) or effective radiated power (ERP) under consideration;
- (iii) The emission designators to be used;
- (iv) A description of the geographic area in which the test will be conducted;
- (v) The number of units to be used; and
- (vi) A mitigation plan as required by § 5.311, if necessary.
- (5) For program license experiments that may affect frequency bands used for the provision of commercial mobile services, emergency notifications, or public safety purposes, a list of those critical service licensees that are authorized to operate in the same bands and geographic area of the planned experiment.
- (b) Experiments may commence without specific approval or authorization once ten calendar days have elapsed from the time of posting to the above website. During that ten-day period, the licensee of an authorized service may contact the program licensee to resolve any objections to an experiment. It is expected that parties will work in good faith to resolve such objections, including modifying experiments if necessary to reach an agreeable resolution. However, only the Commission has the authority to prevent a program licensee from beginning operations (or to order the cessation of operations). Therefore, if an incumbent licensee believes that it will suffer interference (or in fact, has experienced interference), it must bring its concerns to the Commission for action. In such an event, the Commission will evaluate the concerns, and determine whether a planned experiment should be permitted to commence as proposed (or be terminated, if the experiment has commenced).
- (c) The Commission can prohibit or require modification of specific experiments under a program experimental radio license at any time without notice or hearing if in its discretion the need for such action arises.
- (d) Within 30 days after completion of each experiment conducted under a program experimental radio license, the licensee shall file a narrative statement describing the results of the experiment, including any interference incidents and steps taken to resolve them. This narrative statement

must be filed to the Commission's program experimental registration website and be associated with the materials described in paragraphs (a) and (b) of this section.

- (e)(1) The Commission may ask licensees for additional information to resolve an interference incident, gain a better understanding of new technology development, or for auditing purposes to ensure that licensees are actually conducting experiments. Failure to comply with a Commission request for additional information under this section, or if, upon review of such information, the Commission determines that a licensee is not actually conducting experimentation, could result in forfeiture of the program license and loss of privilege of obtaining such a license in the future.
- (2) All information submitted pursuant to this section will be treated as routinely available for publicly inspection, within the meaning of § 0.459 of this chapter. Licensees are permitted to request that information requested by the Commission pursuant to this section be withheld from public inspection. The Commission will consider such requests pursuant to the procedures set forth in § 0.459 of this chapter.

§ 5.311 Additional requirements related to safety of the public.

In addition to the notification requirements of § 5.309, for experiments that may affect frequency bands used for the provision of commercial mobile services, emergency notifications, or public safety purposes, the program experimental radio licensee shall, prior to commencing transmissions, develop a specific plan to avoid interference to these bands. The plan must include provisions for:

- (a) Providing notice to parties, including other Commission licensees that are authorized to operate in the same bands and geographic area as the planned experiment and, as appropriate, their end users;
- (b) Rapid identification, and elimination, of any harm the experiment may cause; and
- (c) Identifying an alternate means for accomplishing potentially-affected vital public safety functions during the experiment.

§ 5.404 Area of operation.

Applications must specify, and the Commission will grant authorizations for, a geographic area that is inclusive of an institution's real-property facilities where the experimentation will be conducted and that is under the applicant's control. Applications also may specify, and the Commission will grant authorizations for, defined geographic areas beyond the institution's real-property facilities that will be included in clinical trials and monitored by the licensee. In general, operations will be permitted where the likelihood of harmful interference being caused to authorized services is minimal.

§ 5.405 Yearly report.

Medical testing licensees must file a yearly report detailing the activity that has been performed under the license. This report is to be filed electronically to the Commission's program experimental registration website and must, at a minimum, include:

(a) A list of each test performed and the testing period; and

- (b) A Description of each test, including equipment tested; and
- (c) The results of the test including any interference incidents and their resolution.

§ 5.406 Responsible party, "stop-buzzer," and notification requirements, and additional requirements related to safety of the public.

- (a) Medical testing licensees must identify a single point of contact responsible for all experiments conducted under the license and must also identify a "stop buzzer" point of contact for all experiments, consistent with subpart E, §§ 5.307 and 5.308.
- (b) Medical testing licensees must meet the notification and safety of the public requirements of subpart E, §§ 5.309 and 5.311.

§ 5.504 Responsible party.

Compliance testing licensees must identify a single point of contact responsible for all experiments conducted under the license, including ensuring compliance with all applicable FCC rules:

- (a) The responsible individual will serve as the initial point of contact for all matters involving interference resolution and must have the authority to discontinue any and all experiments being conducted under the license, if necessary.
- (b) The name of the responsible individual, along with contact information, such as a phone number and e-mail address at which he or she can be reached at any time of the day, must be identified on the license application, and this information will be listed on the license. Licensees are required to keep this information current.

§ 5.602 Market trials.

Unless otherwise stated in the instrument of authorization, experimental radio licenses granted for the purpose of market trials pursuant to § 5.3(k) are subject to the following conditions:

- (a) Marketing of devices (as defined in § 2.803 of this chapter) and provision of services for hire is permitted before the radio frequency device has been authorized by the Commission, subject to the ownership provisions in paragraph (d) of this section and provided that the device will be operated in compliance with existing Commission rules, waivers of such rules that are in effect at the time of operation, or rules that have been adopted by the Commission but that have not yet become effective.
- (b) The operation of all radio frequency devices that are included in a market trial must be authorized under this rule section, including those devices that are designed to operate under parts 15, 18, or 95 of this chapter.
- (c) If more than one entity will be responsible for conducting the same market trial <u>e.g.</u>, manufacturer and service provider, each entity will be authorized under a separate license. If more than one licensee is authorized, the licensees or the Commission shall designate one as the responsible party for the trial.

- (d) All transmitting and/or receiving equipment used in the study shall be owned by the experimental licensees. Marketing of devices is only permitted as follows:
- (1) The licensees may sell equipment to each other, e.g., manufacturer to service provider,
- (2) The licensees may lease equipment to trial participants for purposes of the study, and
- (3) The number of devices to be marketed shall be the minimum quantity of devices necessary to conduct the market trial as approved by the Commission.
- (e) Licensees are required to ensure that trial devices are either rendered inoperable or retrieved by them from trial participants at the conclusion of the trial. Licensees are required to notify trial participants in advance that operation of the trial device is subject to this condition.
- (f) The size and scope of the experiment are subject to limitations as the Commission shall establish on a case-by-case basis. If the Commission subsequently determines that a market trial is not so limited, the trial shall be immediately terminated.
- (g) Broadcast experimental station applicants and licensees must also meet the requirements of § 5.205.

The Commission has authority for this information collection pursuant to Sections 4, 302, 303, 307, 336, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 302, 303, 307, 336. Interpret or apply sec. 301, 48 Stat. 1081, as amended; 47 U.S.C. 301.

This information collection affects individuals or households. The Commission has a System of Records, FCC/OET-1 "Experimental Radio Station License Files" which covers the personally identifiable information (PII) that individual applicants may include in their submissions for experimental radio authorizations. The system of records notice (SORN) was published in the Federal Register on April 5, 2006, <u>see</u> 71 FR 17234, 17241. The SORN may be viewed at https://www.fcc.gov/general/privacy-act-information.

2. Indicate how, by whom and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

These rules provide the conditions by which the radio frequency spectrum may be used for experimentation, product development and market trials. Authorizations for stations in the "Experimental Radio Service will be issued only to persons qualified to conduct the types of operations permitted in § 5.3 of the Commission's rules.

Applicants applying to the FCC for authorization to operate a new or modified experimental radio station (including a Spectrum Horizons License) are required to file FCC Form 442, under 47 CFR §§ 5.3, 5.51 through 5.59, 5.77, 5.121. and 5.702 through 5.705 of the FCC Rules and Regulations.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

Except for classified applications, all experimental license applications are filed electronically on the Experimental Licensing System (ELS). Classified applications involve the use of facilities for which technical information is classified and thus the applications could not be filed electronically on ELS.

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in item 2 above.

The Commission is the only agency that issues experimental radio authorizations; therefore, no duplication exists.

5. If the collection of information impacts small businesses or other small entities describe any methods used to minimize burden.

Although small entities and 3rd party notifications are subject to these reporting requirements, the FCC imposes these requirements to protect public safety and life and to prevent the potentially harmful and detrimental consequences that radio interference can cause the public. The information collected is the minimum required by the FCC to make the determination to issue an experimental authorization.

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

If the collection is not conducted, the information will not be available elsewhere in the Federal Government. Applicants applying to the FCC for authorization to operate a new or modified experimental radio station (including a Spectrum Horizons License) are required to file FCC Form 442, under 47 CFR §§ 5.3, 5.51 through 5.59, 5.77, 5.121. and 5.702 through 5.705 of the FCC Rules and Regulations.

If the information is not collected the application cannot be granted and there will be no experimental radio stations.

If the collection is not conducted or is conducted less frequently, applicants for experimental licenses will either not be granted the licenses or will not be timely granted the licenses. Information collected is critical to assessing the impact of a potential grant of experimental license and assuring that operation under the license will not interfere with the operation of other licensed services. The primary purpose of experimental licenses is to provide for experimental uses of radio frequencies and development of techniques and systems that are not otherwise permitted under existing service rules. Experimental licenses foster innovation by providing opportunity for manufacturers, inventors, entrepreneurs, and students to experiment with new radio technologies, new equipment designs, characteristics of radio wave propagation, or new

service concepts related to the use of the radio spectrum while assuring that non-experimental uses of wireless technologies are protected. As such, the consequences of not collecting the information or collecting the information less frequently could lead to denial of experimental licenses to applicants for experimental use of radio frequencies and this denial will fail to benefit the development of new technologies, expedite their introduction to the marketplace, and unleash the full power of innovators to keep the United States at the forefront of the communications industry.

- 7. Explain any special circumstances that cause an information collection to be conducted in a manner:
- * requiring respondents to report information to the agency more often than quarterly;
- *requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
- *requiring respondents to submit more than an original and two copies of any document;
- *requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

This collection of information is consistent with the specified guidelines in 5 CFR § 1320.5(d)(2).

- 8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information prior to submission to OMB.
- -Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

The Commission published a notice in the *Federal Register* on March 16, 2023 (88 FR 16252) to solicit the views of industry and the general public. The Commission has received no comments in response to the Notice in the *Federal Register*. The notice is referenced in the submission to the OMB.

9. Explain any decision to provide any payment or gift to respondents, other than reenumeration of contractors or grantees.

Respondents will not be receiving any payment or gift.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation or agency policy.

The Experimental Licensing System database is publicly accessible and in general, respondents do not have any assurances of confidentiality. However, applicants may request that certain

portions of their application be kept confidential. In these instances, the Commission has established rules in Section 0.459 regarding how to file such requests.

Any personally identifiable information that individual applicants provide is covered by a system of records, FCC/OET-1, "Experimental Radio Station License Files." The FCC completed a Privacy Impact Assessment (PIA) as required by OMB Memorandum, M-03-22 (September 22, 2003) on June 9, 2009. The PIA may be viewed on the FCC's Privacy Act webpage at: http://www.fcc.gov/omd/privacyact/System_of_records/pia-experimental-radio.pdf>.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

This information collection does not include any questions of a sensitive nature. This information is required for the FCC to evaluate and to approve an application for an experimental radio service license, including use of one or more of these FCC Forms: Form 442, Form 405, Form 702, and/or Form 703.

12. Provide estimates of the hour burden of the collection of information. The statement should indicate the number of respondents, frequency of responses, annual hour burden, and an explanation of how the burden was estimated. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance.

1. Approximately 405 respondents filing Form 442 per year:

- (a) We estimate that it will take a respondent (applicant) approximately three hours to read the directions, to perform any necessary calculations, to answer the questions regarding significant environmental impact, to describe the program of experimentation, and to read the instructions for the fee processing data.
- (b) The estimated time to type information into FCC Form 442 on the FCC Internet Web page http://www.fcc.gov is 1 hour. The Electronic Filing System (ELS) automatically generates the date/data when the response is created by the respondent known as the "Date Entered" and another date known as "Receipt Date" when it is submitted by the respondent for processing.
- (c) Therefore, the average estimated time required to complete the form is 4 hours:
 - 3 hours/reading & reviewing form +1 hour/entering data into the system = 4 hours/FCC Form 442

2. An average of 655 responses filed annually.

3. <u>Based on calculations below, Total Annual Burden Hours to the respondents is 3,475 hours.</u>

The corresponding burden hours per category for third party notifications are as follows:

(a) Businesses and other "for profit" entities:

(1) An estimated average of 20 of experimental responses filed for public safety (PS) frequencies.

Public safety actions for experimental authorization responses may require 3 coordinations by a licensee per request at 0.25 hours per coordination:

 $0.25 \times 3 = 0.75 \text{ hour (avg.)}$

20 responses \times 0.75 hour (avg.) = **15 hours**;

(2) An estimated average of 535 of experimental responses filed by private corporations.

Private corporation entities required to coordinate with other licensees may require 5 coordinations per request at 0.25 hours per coordination:

 0.25×5 coordinations = 1.25 hours (avg)

530 responses x 1.25 hour (avg) = **663 hours (rounded up)**;

(3) An estimated average of 35 of experimental responses filed for market tests.

Market tests requiring notification to participants are estimated to be 25 notifications at 0.1 hour per notification:

 0.1×25 licensee participants = 2.5 hours

35 responses x = 2.5 hour (avg) = **88 hours (rounded up).**

(b) Individuals:

An estimated average of 30 of experimental responses filed by individual entities.

Individuals required to coordinate with other licensees may require 5 coordinations per request at 0.25 hours per coordination:

 0.25×5 coordinations = 1.25 hours (avg)

30 responses x 1.25 hour (avg) = **38 hours (rounded up).**

(c) Not-for-profit institutions:

An estimated average of 40 of experimental responses filed by state entities.

Fee-exempt entities required to coordinate with other licensees may require 5 coordinations per request at 0.25 hours per coordination:

 0.25×5 coordinations = 1.25 hours (avg)

40 responses x 1.25 hour (avg) = **50 hours.**

Annual Burden Hours for coordination: 15 + 663 + 88 + 38 + 50 = 854 hours. Annual Burden Hours for filing Form 442: 655 responses x 4 hours = 2,620 hours

Total Annual Burden Hours to the respondents: 2,620 + 854 = 3,474 hours

We estimate the following in house cost to respondents:

- (a) Businesses and other "for profit" entities:
- (1) The cost for the respondents to convey information back to licensee for public safety requests a technical person
- @ \$71.88 per hour x 0.75 = \$53.91 per response x 20 experimental authorizations = **\$1,078.20**
- (2) The corporate entities required to coordinate with the licensees a technical person:
- @ \$71.88 per hour x 1.25 = \$89.85 per response x 530 frequency responses = **\$47,620.50**
- (3) The cost of market test notifications a clerical person:
- @ \$28.84 per hour x 2.5 = \$72.10 per response x 35 market test responses = **\$2,523.50**
- (b) Not-for-profit institutions:

The fee-exempt entities required to coordinate with the licensees – a technical person:

- @ \$71.88 per hour x 1.25 = \$89.85 per response x 30 frequency responses = \$2,695.50
- (c) The individuals required to coordinate with the licensees a technical person:
- @ \$71.88 per hour x 1.25 = \$89.85 per response x 40 frequency responses = \$3,594

Total "In House" Cost: \$1,078.20 + \$47,620.50 + \$2,523.50 + 2,695.50 + 3,594 = \$57,511.70

- 13. Provide an estimate for the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in items 12 and 14).
 - (a) Total annualized capital/startup costs: None
 - (b) Total annual costs (O&M): \$52,150.00

Each response must include a \$70.00 response fee. There is an additional \$70.00 fee per response if the respondent requests confidentiality.

Respondents file 655 FCC Form 442 responses annually x \$70.00 filing fee(s) per response; 14% or 90 of those responses will request confidentiality, and the fee for confidentiality is an additional \$70.00 filing fee per response:

565 responses x \$70.00 = \$39,550.00

90 responses x (\$70.00 + \$70.00) = \$12,600.00

\$39,550.00+12,600.00 = \$52,150.00

- (c) Total annualized cost requested: \$52,150.00
- 14. Provide estimates of annualized costs to the Federal government. Also provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), any other expenses that would not have been incurred without this collection of information.

We make the following estimates for the total annual cost to the Federal Government:

- (a) The Commission will use a Supervisory Electronics Engineer (GS-15, Step 5: \$84.55/hour), 4 FCC staff Engineers (GS 14, Step 5: \$71.88/hour) and an FCC Staff Information Technician (GS 7, Step 5: \$28.84/hour).
- (b) These FCC staff will spend approximately one-quarter of their annual work time or $2,080 \times 0.25 = 520$ hours. Thus, the annual cost is estimated as follows:

Sup. Electronics Engineer at \$84.55/hr.	\$84.55 x 520 =	\$43,966.00
Engineer at \$71.88/hr.	\$71.88 x 520 =	\$37,377.60
Engineer at \$71.88/hr.	\$71.88 x 520 =	\$37,377.60
Engineer at \$71.88/hr.	\$71.88 x 520 =	\$37,377.60
Engineer at \$71.88/hr.	\$71.88 x 520 =	\$37,377.60
Information Technician at \$28.84/hr.	$$28.84 \times 520 =$	<u>\$14,996.80</u>
		\$208,473.20

30% Overhead \$62,541.96

Total Annual Cost to the Federal Government:

\$271,015.16

15. Explain the reasons for any program changes or adjustments reported.

There are no program changes or adjustments to this information collection.

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

This collection of information is intended to ensure compliance with applicable Commission rules. The data are not compiled, published, or otherwise reported to the public.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

The Commission is requesting a waiver from displaying the OMB expiration date on FCC Form 442. Granting this waiver will prevent the Commission from having to update the on-line application, upon OMB approval of this information collection.

18. Explain any exceptions to the Certification Statement.

There are no exceptions to the Certification Statement.

B. Collection of Information Employing Statistical Methods:

This information collection does not employ any statistical methods.