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RULES AND REGULATIONS

(TITLE 47—TELECOMMUNICATION—CHAPTER I)

PART 5

RULES AND REGULATIONS GOVERNING EXPERIMENTAL RADIO SERVICES

EFFECTIVE OCTOBER 1, 1939

(Revised to January 16, 1948)



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FEDERAL COMMUNICATIONS COMMISSION

RULES AND REGULATIONS

GOVERNING THE OPERATION OF

PART 2

RULES AND REGULATIONS GOVERNING
EXPERIMENTAL RADIO SERVICE

ISSUED OCTOBER 1, 1920

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PREFACE TO THE RULES AND REGULATIONS OF THE FEDERAL COMMUNICATIONS COMMISSION

The "Rules and Regulations of the Federal Communications Commission" incorporate all the rules and regulations of a general or permanent nature in force as of the effective date appearing at the beginning of each part. The title, "Title 47—Telecommunication," has been adopted for all the rules to correspond with the codification thereof under the provisions of the Federal Register Act, and also to correspond with the title under which the Communications Act is printed in the United States Code.

In preparing this compilation, the Commission has had in mind the necessity for an arrangement which would make the rules conveniently accessible and one which would also make provision for future amendments. To this end all the existing rules have been logically arranged under 34 parts, which have been suitably subdivided, employing nonconsecutive part numbers from 1 to 65, making provision for substitutions and additions.

The various parts are independently numbered, each part beginning with the principal section

number allocated for the purpose and in keeping with the system of numbering which has been used, and these section numbers run consecutively only within the part. The first section of each part begins with ".1." Gaps are left in the numbering throughout so that new and amendatory provisions may be inserted with due regard to their relation to the compilation as a whole.

Each part has been printed and bound in separate pamphlet form, and each contains a title page listing the part numbers and titles of all the Rules and Regulations. In addition, explanatory footnotes have been included referring to statutes or treaties applicable to particular services and, so far as practicable, to other applicable parts.

It is intended that future amendments will be made available in such form that the substitute or added pages may be readily inserted within the part.

Provisions of the rules may be cited thus: "Section or § 5.1 Federal Communications Commission Rules."

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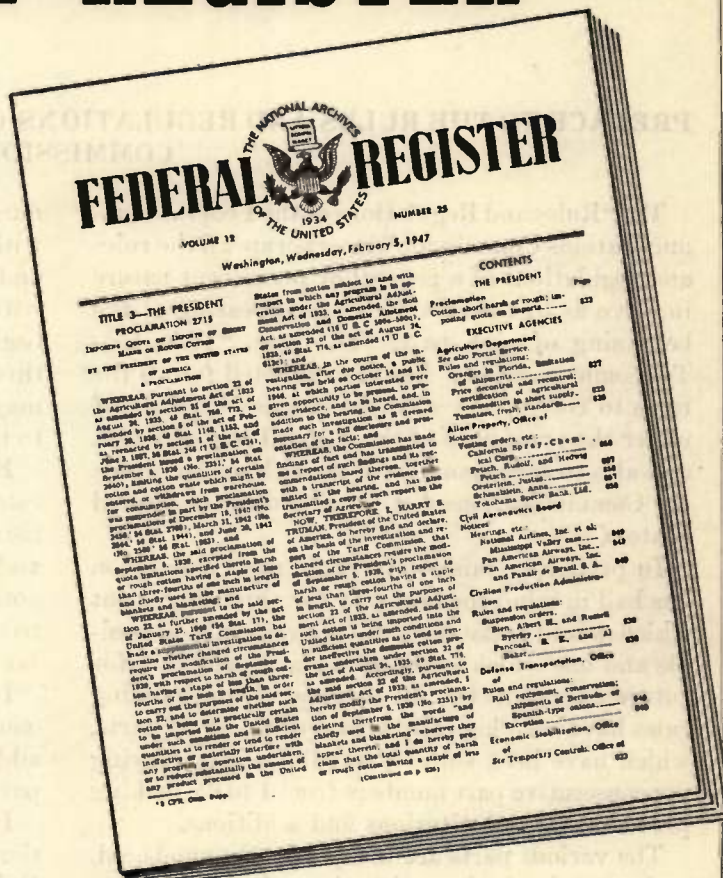
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The Rules and Regulations of the Federal Communications Commission are published in separate pamphlets numbered and titled as follows:

Part No.

1. Rules Relating to Organization and Practice and Procedure.
2. General Rules and Regulations.
3. Rules Governing Radio Broadcast Services.
4. Rules Governing Experimental and Auxiliary Broadcast Services.
5. Rules Governing Experimental Radio Services.
6. Rules Governing Fixed Public Radio Services.
7. Rules Governing Coastal and Marine Relay Services.
8. Rules Governing Ship Service.
9. Rules Governing Aeronautical Services.
10. Rules Governing Emergency Radio Services.
11. Rules Governing Miscellaneous Radio Services.
12. Rules Governing Amateur Radio Service.
13. Rules Governing Commercial Radio Operators.
14. Rules Governing Radio Stations in Alaska (Other than Amateur and Broadcast).
15. Rules and Regulations Governing All Radio Stations in the War Emergency Radio Service.
16. Rules and Regulations Governing Railroad Radio Service.
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18. Rules and Regulations Relating to Industrial, Scientific and Medical Service.
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- 31-32. Uniform System of Accounts, Class A and Class B Telephone Companies—Units of Property Class A and Class B Telephone Companies.
33. Uniform System of Accounts for Class C Telephone Companies.
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PART 5.—RULES AND REGULATIONS GOVERNING EXPERIMENTAL RADIO SERVICES

DEFINITIONS

§ 5.1 **Experimental service.**—The term “experimental service” means a service conducted by a station engaged in research and experimentation for the advancement of the radio art. (There are three classes of experimental stations, namely, Class 1, Class 2, and Class 3.)

§ 5.2 **Class 1 experimental station.**—The term “Class 1 experimental station” means a station licensed in the experimental service but not authorized to operate in a proposed or established radio service.

§ 5.3 **Class 2 experimental station.**—The term “Class 2 experimental station” means a station licensed in the experimental service and authorized to operate in a proposed or established radio service.

§ 5.4 **Class 3 experimental station.**—The term “Class 3 experimental station” means a station licensed to a citizen interested in radio technique solely with a personal aim to conduct experiments on his own behalf, requiring the use of radio facilities for a limited time.¹

GENERAL

§ 5.11 **Persons eligible.**—Experimental licenses may be granted to persons engaged in fundamental, general, or specific radio research experimentation; developing, testing, or calibrating radio equipment; developing new services; or extending or perfecting new systems in established services.

§ 5.12 **Showing required.**—Licenses for Class 1 and Class 2 experimental stations will be issued only after a satisfactory showing has been made in regard to the following, among others:

(a) That the applicant has an organized plan of research leading to a specific objective.

(b) That the applicant has a program of research and development that has reached a stage in the laboratory where actual transmission by radio is essential to the further progress of the experimental program.

(c) That the program of research has reasonable promise of substantial contribution to the expansion or extension of the radio art or is along lines not already investigated.

(d) That the program of research and experimentation will be conducted by qualified personnel.

(e) That the applicant is legally and financially qualified and possesses adequate technical facilities to carry forward the program and has made adequate financial appropriations toward this end.

(f) That experimental stations shall be operated only in such a manner and at such times as to preclude interference with established stations or services.

(g) That the requirements for obtaining a license for the particular class of experimental station applied for will be met. (See sections governing each class.)

(h) That the public interest, convenience, and necessity will be served through the operation of the proposed station.

§ 5.13 **Licenses required for separate experimental projects.**—A separate experimental station license may be issued for each main class of experimental station. When different subclasses or widely divergent developments or projects are proposed, a separate license will be required for each such project.

§ 5.14 **Limitations on use.**—Experimental stations shall not be used:

(a) to conduct general message traffic of any kind;

(b) to demonstrate equipment for prospective sales purposes;

(c) to transmit programs for direct entertainment;

¹ See sections 5.91 to 5.97 governing this class of station in addition to sections 5.11 to 5.33.

(d) to transmit the programs of any other station, except in conjunction with experimental program; or

(e) to render any commercial communication service or communications involving advertising, either directly or indirectly; except under specific limitations and restrictions which may be prescribed in individual cases by the Commission. This authority will be granted only for special reasons to obtain information or data which gives promise of being of benefit to the radio art.

§ 5.15 Nonexclusive use of frequencies; interference.—No licensee of an experimental station shall have exclusive use of any frequency. In case interference will be caused by simultaneous operation, licensees shall endeavor to arrange satisfactory time division. If such an agreement cannot be reached, the Commission will determine and specify the time division upon request of either licensee.

§ 5.16 Special requirements.—The Commission may, from time to time, require the licensee of an experimental station to conduct experiments that are deemed desirable and reasonable for the development of the radio art.

§ 5.17 Adherence to program of research.—The program of research and experimentation as offered by an applicant in its application for construction permit or license for an experimental station or in the instrument of authorization shall be substantially adhered to unless the licensee is authorized to do otherwise by the Commission. The general program of experimentation will be specified in the instrument of authorization.

§ 5.18 Operating schedule.—A licensee of an experimental station is not required to adhere to a regular schedule of operation, but shall actively conduct a program of research and experimentation: *Provided, however,* When the program of research involves only intermittent experiments,

such as to develop and test radio equipment, the station may be operated only when there is a need therefor.

§ 5.19 Additional orders as needed.—In case all the general rules and regulations and the detailed rules governing each class of experimental station do not cover all phases of operations or experimentation with respect to external effects, the Commission may make supplemental or additional orders in each case as deemed necessary for operation in the public interest, convenience, and/or necessity.

§ 5.20 Supplementary statement.—A supplementary statement shall be filed with and made a part of each application for construction permit for an experimental station confirming the applicant's understanding:

(a) That all operation on the frequencies requested will be on an experimental basis.

(b) That the granting of the authority requested shall not be construed as a finding on the part of the Commission:

(1) that the frequencies authorized are the best suited to the particular purpose to be served by the station;

(2) that in the event the experimentation proves successful, either the particular frequencies authorized or any others will be allocated to the service developed for use on a permanent or commercial basis;

(3) that the applicant is qualified to operate a station in the service on any basis other than experimental;

(c) That the applicant desires and is willing to conduct and finance the experimental program with full knowledge and understanding of the provisions of this section.

§ 5.21 Frequencies.—(a) The following frequencies are allocated for assignment to Class 1 experimental radio stations:

Center frequency	Channel width	Center frequency	Channel width	Center frequency	Channel width	Center frequency	Channel width
1614 kc	4 kc	17310 kc	20 kc	30. 74 Mc	40 kc	72. 22 Mc	40 kc
2398	4	23100	25	30. 78	40	154. 49	60
3492.5	5	27. 455Mc*	50	30. 82	40	154. 57	100
4797.5	5	30. 58	40	33. 14	40	158. 31	60
6425	10	30. 62	40	35. 02	40	Above 30, 000 Mc	
9135	10	30. 66	40	42. 98	40		
12862.5	15	30. 70	40	72. 18	40		

*This service recognizes that interference to its operations on this frequency may result from the emissions on the frequency 27.320 Mc of industrial, scientific, and medical devices and from stations in the fixed and mobile services operating on frequencies between 27.430 Mc and 27.480 Mc.

(b) Class 2 experimental stations may be authorized on non-government frequencies allocated to that service in which the experimental station is to operate or on frequencies allocated for use by a proposed new service in which the experimental station is to operate. In cases where no frequencies have been allocated, the Commission may, upon a proper showing of need, authorize Class 2 experimental stations to use frequencies listed in subsection (a) hereof.

(c) The following frequencies are allocated for assignment to Class 3 experimental stations:

Center frequency	Channel width	Center frequency	Channel width
2398 kc 3492.5	4 kc 5	30.66 Mc Above 30,000 Mc	40 kc

(d) Class 1 experimental stations may be authorized on frequencies other than those listed in subsection (a) except for frequencies allocated to the amateur service and except for those frequencies the use of which, in the opinion of the Commission, may result in interference to stations engaged in safety or emergency communications provided:

(1) The need for the other frequencies is fully stated by the applicant.

(2) A satisfactory showing is made that the frequencies assigned for use by the experimental service are unsuitable for the proposed experimental program.

(3) No interference will be caused to the stations regularly assigned the frequencies requested.

(e) In any case where there is a possibility of interference with the regular service of existing licensees on the frequencies sought to be used experimentally, the applicant may submit a statement from the licensees of stations on such frequency, or in the case of a frequency on which transmissions are received in the United States, a statement from the person receiving signals on that frequency, that no interference will be caused by the experimental use of the frequency as requested which will adversely affect the use of the frequency by such licensee.

§ 5.22 **Tolerance.**—(a) The operating frequency of the experimental stations shall be maintained within plus or minus the percentage of the

assigned frequency as given in Table I, unless otherwise specified by the Commission.

TABLE I

	Frequency tolerance (percent)
Experimental frequencies within the range:	
1614 kc-450 Mc-----	0.01
450 Mc and above-----	.05

(b) The frequency of a Class 2 experimental station, operating on frequencies not allocated specifically for experimental stations shall be maintained in accordance with the rules and regulations governing the service regularly assigned the frequency in the event such tolerance is less than specified in Table I.

(c) Less restrictive tolerances than that specified in paragraph (a) of this section may be authorized for experimental stations provided the applicant presents satisfactory evidence that the program of research can and will be conducted without causing interference to any other radio service.

§ 5.23 **Frequency measuring or calibrating apparatus.**—(a) The license of each experimental station shall operate at the transmitter a frequency measuring device independent of the frequency control of the transmitter.

(b) The frequency measuring device shall be designed and constructed in accordance with good engineering practice, and shall have an accuracy sufficient to determine that the operating frequency is within one-half of the allowed tolerance.

(c) The operating frequencies of each experimental station shall be checked and adjusted, if necessary, at the beginning of each period of operation and as often thereafter as necessary to maintain the frequency within the specified tolerance.

(d) Exceptions to the above provisions may be made, provided:

(1) The applicant makes a satisfactory showing that the nature of the proposed program precludes compliance with the above provisions.

(2) A satisfactory alternative method of maintaining the operating frequency within the allowed tolerance will be employed.

§ 5.24 **Power restrictions.**—(a) The maximum carrier power requested by an applicant shall not be in excess of the maximum obtainable

carrier power output of the transmitter consistent with satisfactory technical operation.

(b) No experimental station shall operate at any time with power in excess of that necessary to carry on the authorized program of research and in no event greater than the authorized power.

§ 5.25 **Changes in equipment.**—The licensee of each class of experimental station may make any changes in the equipment that are deemed desirable or necessary unless specifically prohibited from doing so by the terms of the instrument of authorization, *Provided*:

(a) That the operating frequency is not permitted to deviate more than the allowed tolerance.

(b) That the emissions are not permitted outside the authorized band.

(c) And that the power output complies with the regulations governing the same.

§ 5.26 **Licensed operator requirements.**—(a) A licensed operator shall be on duty and in charge of the transmitter during all transmissions in the case of radiotelegraph stations employing manual operation and in all other cases except:

(1) Stations operated by remote control in accordance with section 2.53 of the Commission's General Rules and Regulations.

(2) Portable or mobile stations operating on frequencies above 25 megacycles.

(3) Portable and mobile stations operating on frequencies below 25 megacycles the operation of which is subject to control by a licensed operator of an associated land station operated by the same licensee.

(4) Stations for which the terms of the instrument of authorization permit operation otherwise.

(b) Any needed adjustments of the transmitter that may affect the proper operation of the station must be regularly made by or in the presence of an operator holding a first or second class license, either telephone or telegraph, who shall be responsible for the proper operation of the equipment.

§ 5.27 **Equipment and service tests.**—(a) Equipment and service tests as authorized in sections 2.42 and 2.43 may be conducted provided the necessary precautions are taken to avoid interference. Tests of stations operating on frequencies other than those listed in section 5.21 (a) shall also comply with the rules and regulations

governing equipment and service tests for that particular service in which they operate.

(b) The licensees of all classes of experimental stations are authorized to make such routine tests as may be required for the proper maintenance of the station in accordance with section 2.47 provided they are conducted in conformity with the rules and regulations governing the class of station.

§ 5.28 **Records of operation.**—(a) The licensees of each experimental station shall maintain adequate records of operation including:

(1) Hours of operation.

(2) Frequency and frequency check.

(3) Power.

(4) Types of emission. Program transmitted in case of broadcast station.

(5) Research and experimentation conducted.

(6) The name of the operator on duty.

(b) Where an antenna or antenna supporting structure(s) is required to be illuminated the licensee shall make entries in the radio station log appropriate to the requirements of section 2.82 (a), (b), and (c) as follows:

(1) The time the tower lights are turned on and off if manually controlled.

(2) The time the daily visual observation of the tower lights was made.

(3) In the event of any observed failure of a tower light,

(i) Nature of such failure.

(ii) Time the failure was observed.

(iii) Time and nature of the adjustments, repairs or replacements made.

(iv) Airways Communication Station (CAA) notified of the failure of any tower light not corrected within thirty minutes and the time such notice was given.

(v) Time notice was given to the Airways Communication Station (CAA) that the required illumination was resumed.

(4) Upon completion of the periodic inspection required at least once each three months,

(i) The date of the inspection and the condition of all tower lights and associated tower lighting control devices.

(ii) Any adjustments, replacements or repairs made to insure compliance with the lighting requirements.

§ 5.29 Display of station license and transmitter identification cards.—(a) The current authorization for each mobile or portable station shall be retained as a permanent part of the station record. An executed Transmitter Identification Card (FCC Form No. 452-C, Revised) shall be affixed to each mobile and each portable transmitter or associated control equipment. When the transmitter is not in view of and readily accessible to the operator, it is preferred that the identification card be affixed to the control equipment at the transmitter operating position. The following information shall be entered on the card by the permittee or licensee: (1) Name of the permittee or licensee; (2) Station call signal assigned by the Commission; (3) Exact location or locations of the transmitter records; (4) Frequency or frequencies on which the transmitter to which attached is adjusted to operate; and (5) Signature of the permittee or licensee, or a responsible official thereof.

(b) The current authorization for each land or fixed station shall be displayed at the principal control position of that station. At all other control points listed on the station authorization, a photocopy of the authorization shall be displayed. In addition, an executed Transmitter Identification Card (FCC Form No. 452-C, Revised) shall be affixed to each transmitter or associated equipment operated at a fixed location, when the transmitter is not in view of, and readily accessible to, the operator at the principal control position.

§ 5.30 Operator's license.—The original license or verification card of each station operator shall be posted or kept in his possession so as to be readily available for inspection when required: *Provided, however*, that if the operator on duty holds a restricted radiotelephone operator permit of the card form (as distinguished from the diploma form) he shall not post that permit but shall keep it in his personal possession.

§ 5.31 Experimental report.—A report on the results of the experimental program as specified hereinafter for each class of experimental station shall be filed with and made a part of each application for renewal of license: *Provided, however*, That matters which the applicant does not wish to publicly disclose may be submitted as a supplementary report. Such supplementary reports will

be kept solely for the Commission's information, and their contents will not be disclosed without permission of the licensee.

§ 5.32 License period.—(a) Licenses for Class 1 and Class 2 experimental stations will be issued for a period of 1 year unless otherwise stated in the instrument of authorization. The dates of expiration of licenses for Class 1 experimental stations and Class 2 experimental stations operating in a service other than broadcast shall be the 1st day of October and the 1st day of November, respectively, of each year. The date of expiration of licenses of Class 2 experimental stations operating in the broadcast service will be governed by the rules and regulations governing that service.

(b) Licenses for Class 3 experimental stations will be issued for a period commensurate with the proposed program of experimentation but in no event for a period greater than 1 year.

(c) Each licensee of an experimental station shall submit the application for renewal of license at least 60 days prior to the expiration date (section 1.320 of the Rules Relating to Organization and Practice and Procedure).

§ 5.33 Special temporary authorizations.—In making requests for special temporary authorizations, the licensees of all experimental stations shall, in addition to complying with section 1.324 of the Rules Relating to Organization and Practice and Procedure, specify in detail in the request the following:

- (a) Frequency.
- (b) Power.
- (c) Type of emission.
- (d) Location of station.
- (e) Class of station.
- (f) Time and dates of operation.
- (g) Purpose of operation.
- (h) Need for special action without filing formal application.

(i) Statement that formal application for construction permit and license will be filed immediately if the operation is to continue.

(j) When frequencies other than those assigned for use by the experimental service in section 5.21 are requested, the applicant shall also submit with its request the information and statements as required by section 5.20.

CLASS 1—EXPERIMENTAL STATIONS

§ 5.51 **Persons eligible.**—Persons qualified to conduct fundamental, general, or specific radio research, and experimentation directed toward the advancement of the radio art, are eligible for a Class 1 experimental station¹ authorization.

§ 5.52 **Showing required.**—A license for a Class 1 experimental station will be issued after a satisfactory showing in regard to the following in addition to the general requirements set out in section 5.12:

(a) That the applicant is primarily engaged either in:

(1) Fundamental research on unsolved technical problems and unproved scientific theories;

(2) Developing, testing, or calibrating of radio equipment;

(3) Or general research, experimentation, and development of the radio art.

(b) That the applicant is a corporation, institution, manufacturer, research and design laboratory, or an association or individual particularly qualified to carry forward the proposed program of research.

§ 5.53 **Limitations.**—(a) A Class 1 experimental station may not transmit general message traffic of any kind; demonstrate radio equipment for prospective sales purposes; transmit programs intended for public reception, or render any commercial communication service.

(b) Only such test messages as are necessary and directly related to the experimental program may be transmitted by a Class 1 experimental station.

(c) A Class 1 experimental station may be used for transmissions directly relating to field strength surveys, which may include test messages, essential to the installation, extension or development of a radiocommunication facility only under the following conditions:

(1) That the licensee of the station submit to the Commission and the engineer in charge of the district in which the survey is to be conducted, at least ten days prior to each specific survey, complete and detailed information, including:

(i) Time, date and duration.

(ii) Location of transmitter and geographic area to be covered.

(iii) Purpose of the survey.

(iv) Method and equipment to be used.

(v) Names and addresses of the persons for whom the survey is conducted if other than the licensee of the experimental station.

(2) That the licensee of the station shall submit to the Commission a comprehensive report of all data obtained, within one month after the completion of the survey.

Provided, however, that upon notice from the Commission the licensee shall suspend or cancel such operation, or proposed operation, or conduct the same upon such conditions as the Commission may deem to be in the public interest.

§ 5.54 **Cancellation without notice or hearing.**—The applicant for a Class 1 experimental station accepts the license with the express understanding that the authority to use the frequency or frequencies requested is granted upon an experimental basis only and upon the express condition that said grant is subject to change or cancellation by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises.

§ 5.55 **Experimental report.**—The experimental report for Class 1 experimental stations shall include comprehensive information on the following in the order designated:

(a) Final objective of experimental program.

(b) Report on the research and experiments conducted.

(c) Detailed analysis of the results obtained.

(d) Copies of any published reports on the experimental work.

(e) A list of the patent numbers of any patents during the license period as a result of the experimental work accomplished in this or previous periods.

(f) Any major changes made in the equipment.

(g) Any other pertinent information.

(h) The need for the continuation of the experimental program of research and the necessity for the renewal of the station license.

(i) Total number of hours of operation on each frequency.

¹ See section 5.2 for definition of Class 1 experimental stations.

CLASS 2—EXPERIMENTAL STATIONS

§ 5.71 **Persons eligible.**—Class 2 experimental stations¹ may be authorized to persons engaged in research and experimentation in radio directed toward the development of a new or proposed radio service, or some phase of an established radio service.

§ 5.72 **Showing required.**—A license for a Class 2 experimental station will be issued after a satisfactory showing in regard to the following in addition to the general requirements set out in section 5.12:

(a) That the applicant is primarily interested in research and experimentation in radio directed toward the development of a new or proposed radio service or some phase of an established radio service.

(b) That the requirements set out for experimental operation under the service involved will be met. (See rules governing the individual service involved.)

§ 5.73 **Subclasses.**—(a) Class 2 experimental stations may be divided into subclasses with the name of each such class of station established by the rules governing experimental operation in each radio service in which experimental operation is authorized.

(b) Class 2 experimental stations operating in an established service will be further governed by the provisions of the rules concerning experimental operation in such service. (See rules governing experimental operation of broadcast stations, police stations, etc.)

(c) Class 2 experimental stations operating to develop a new service will be governed by tentative rules governing such service and/or the condition and limitation of the operation will be specified in the instrument of authorization.

§ 5.74 **Limitations.**—The applicant for a Class

2 experimental station accepts the license on the express understanding that:

(a) Interference will not be caused to other stations regularly licensed;

(b) The frequencies allocated for Class 2 experimental stations under section 5.21 (d) (4) may not be final and are subject to change or cancellation by the Commission at any time without advance notice or hearing.

§ 5.75 **Experimental report.**—The experimental report for a Class 2 station shall state the particular service investigated and include comprehensive information on the following in the order designated:

(a) The final objective.

(b) Report on the experiment conducted.

(c) Detailed analysis of the results obtained.

(d) Copies of any published reports.

(e) List of the patent numbers of any patents issued during the license period as a result of the experimental work of this or previous periods.

(f) Any major changes made in the equipment.

(g) If the experimental program is sufficiently advanced, statements as to:

(1) Frequencies believed to be more suitable and reasons therefor;

(2) Probable public support and methods of its determination;

(3) Practicability of service conditions;

(4) Interference encountered;

(5) Pertinent information relative to merits of proposed service;

(6) Propagation characteristics of frequencies used, particularly with respect to service objective;

(7) Type of signals or communications employed in the experimental work.

(h) The need for continuation for the experimental program of research and the necessity for the renewal of the station license.

(i) Total number of hours of operation on each frequency.

¹ See section 5.3 for definition of Class 2 experimental stations and subclasses.

CLASS 3—EXPERIMENTAL STATIONS

§ 5.91 **Persons eligible.**—Class 3 experimental stations¹ may be authorized to a citizen interested in radio technique solely with a personal aim to conduct an experimental program on his own behalf, requiring the use of radio for a limited time.

§ 5.92 **Showing required.**—A license for a Class 3 experimental station will be issued after a satisfactory showing in regard to the following in addition to the general requirements of section 5.12 which are not inconsistent with the provisions below:

(a) That the applicant has a definite program requiring the use of radio and facilities necessary to carry forward the program as proposed.

(b) That the proposed experiments may be conducted on the frequencies assigned for this class of station.

(c) That the experiments can be completed in a reasonably short time and that applications for renewal will not normally be necessary.

(d) That the applicant is a citizen interested in radio technique with a personal aim to conduct an experimental program on his own behalf requiring the use of radio for a limited time.

§ 5.93 **Limitations.**—Licenses to operate Class 3 experimental stations will be issued under such limitations and restrictions as the Commission may specify which will be set out in each instrument of authorization.

§ 5.94 **Cancellation without notice or hearing.**—Licenses to operate all Class 3 experimental stations will be granted on a temporary basis only, subject to the condition that the applicant agrees to accept the license with the express understanding that the authority to use the frequency or fre-

quencies may be canceled without advance notice or hearing.

§ 5.95 **Conditions of operation.**—(a) Each licensee of a Class 3 experimental station shall not operate its station at such times and in such manner as to cause interference to any existing radio service.

(b) Each licensee of a Class 3 experimental station shall conduct listening tests on the frequencies to be used, immediately before and during each test period, and at least once each 15 minutes to insure that no interference will be caused to stations in other services by the operation of its station.

(c) Each licensee of a Class 3 experimental station shall give priority to all other classes of experimental stations and shall remain silent during such periods as are found necessary to avoid causing interference.

§ 5.96 **Limitations as to communication.**—Licensees of Class 3 experimental stations shall not carry on two-way radio communication by means of such stations. Only such test messages as are necessary to conduct the experimental program may be transmitted by this class of station.

§ 5.97 **Renewals.**—Renewal of license for Class 3 experimental stations may be granted provided an application therefor is filed giving:

(a) A complete technical description of the objective and results of the experimental program conducted;

(b) A satisfactory showing that the objective of the experimental program has not been attained and that the results indicate the possibility of completing the program within a reasonably short time.

¹ See section 5.4 for definition of Class 3 experimental stations.