

F.C.C. 63-184

BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C.

<p style="text-align: center;">In the Matter of AMENDMENT OF SECTIONS 3.111(b), 3.281 (b), 3.581(b), AND 3.663(b) OF THE COMMISSION'S RULES AND REGULATIONS SO AS TO PERMIT THE USE OF AUTOMATIC LOGGING DEVICES</p>	}	<p>Docket No. 14661 RM-227</p>
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REPORT AND ORDER

BY THE COMMISSION: CHAIRMAN MINOW ABSENT.

1. On June 6, 1962, the Commission adopted a Notice of Proposed Rule Making, FCC 62-609, in the above entitled matter which was published in the Federal Register on June 13, 1962 (27 FR 5614).

2. Commission rules require that each standard, FM and TV broadcast station maintain, in addition to other records, program and operating logs. By action taken on October 3, 1962, the Commission amended Sections 3.111, 3.281, 3.581 and 3.663 of its Rules to permit the maintenance of *program* logs by automatic means. The subject proceeding involves the next successive step; i.e., the maintenance of the *operating* log by automatic means.

3. On January 13, 1961, the National Association of Broadcasters (NAB) filed a petition for the institution of rule making in this matter. In adopting the Notice of Proposed Rule Making we noted that the information to be entered in the operating log was contained in various sections of the rules. As an aid to the proper maintenance of the technical logs we also proposed to amend the rules to require both an operating log and a maintenance log and to repeat in these requirements all of the information to be logged. We indicated, in addition, our concern with the laxity in compliance with operating requirements and equipment performance standards and proposed that a supervising radio operator make entries concerning the maintenance and operation of the station equipment in the maintenance log on a daily basis.

4. Only a few of the comments received were opposed to the use of automatic logging devices. Many comments of a helpful nature were received from broadcast licensees and equipment manufacturers. In general, the majority of comments were addressed to our proposal that the supervisory radio operator conduct an inspection of all transmitting equipment once each day and were

opposed to such a requirement for more than five days per week.<sup>1</sup> Some of the comments and suggestions were on matters beyond the scope of this proceeding and were therefore not considered herein.

5. We have proposed a requirement (Section 3.111(b) (2), 3.281(b) (2), 3.581(b) (2) and 3.663(b) (2)) of an entry for each interruption of the carrier wave, its cause and duration, followed by the signature of the person restoring operation. The University of Missouri, among others, points out that the operator on duty, who normally restores operation, is required to sign the log at the beginning and end of his tour of duty and that a signature should be required only if some other person restores operation. It is also suggested that for momentary overloads where restoration is automatic, no entry be required. We believe these suggestions have merit and modify the pertinent sections accordingly.

6. The National Broadcasting Company, Inc. (NBC) notes that the requirement to log certain values "each half-hour" could be construed as requiring that these readings be made precisely on the hour and half hour during busy periods. They suggest that the section be so worded to provide for the taking of readings at the commencement of operation and thereafter at intervals not to exceed a half-hour. We believe that this suggestion will provide greater clarity to the rule and the language is so modified.

7. It has been suggested that proposed Section 3.111(b) (3), etc. require the logging of readings after adjustment of primary line voltage and after all readings are taken. With this we cannot agree. If line voltage fluctuations are of such magnitude as to indicate improper operation, correction of this condition before the taking of readings will destroy one desirable feature of log keeping, i.e., the indication of improper operation.

8. In Section 3.111, it is proposed to continue the requirement of logging final stage plate voltage and plate current and also antenna or common point current. While the rules do not specifically so state, it has always been intended and presumably understood that antenna current readings are to be taken during the absence of modulation. This is so because standard broadcast stations are allocated on the basis of carrier power. While we recognize that the continuance of this requirement may make

<sup>1</sup> The parties filing comments and data were as follows: Radio Brazosport, Inc., KBRZ, Freeport Texas; Bauer Electronics Corp., San Carlos, Calif.; Bell Broadcasting Co., KTEM, Temple, Texas; Mitchell Broadcasting Ass'n., Inc., KORN, Mitchell, S.D.; Meredith Broadcasting Co., KCMO, Kansas City, Mo.; General Electronics Laboratories, Inc., Cambridge, Mass.; Fisher's Blend Station, Inc., KOMO, Seattle, Wash.; Mesabi Western Corp., KIDO, Boise, Idaho; Capitol Broadcasting Corp., WCAW, Charleston, W. Va.; American Broadcasting Company; National Association of Broadcasting; Springfield Broadcasting Company, KGBX, Springfield, Mass.; A. Earl Cullum, Jr., Dallas, Texas; Texas Association of Broadcasters; International Good Music, Inc., KGMI, Bellingham, Wash.; WKAN Radio Kankakee, Ill.; Golden Gate Broadcasting Corp., KSAN, San Francisco, Calif.; Curators of the University of Missouri, KOMU-TV, Columbia, Mo.; WHAS, Inc., Louisville, Ky.; Columbia Pictures Electronics Co., Inc., KCPX, Salt Lake City, Utah; WAPA-TV Broadcasting Corp., WAPA-TV, San Juan, P.R.; The Washington Post Company, WTOP, Washington, D.C.; Newhouse Broadcasting Corp., WSYR, Syracuse, N.Y.; General Electric Company; Radio Station KNOW, Austin, Texas; Por Favor, Inc., KUKA, San Antonio, Texas; National Association of Broadcast Employees and Technicians, Chicago, Ill.; Taft Broadcasting Co., WKRC, Cincinnati, Ohio; Columbia Broadcasting Company; The Evening News Ass'n., WWJ, Detroit, Michigan; WWDC, Inc., Washington, D.C.; Time-Life Broadcast, Inc.; WKY Television System, Inc., WKY, Oklahoma City, Oklahoma, Radio Station WHBL, Sheboygan, Wis.; WBC, Inc.; Chem-Air, Inc., KPAM, Portland, Oregon. Letters were also received from the following parties: Esterline Angus Instrument Co., Inc., Indianapolis, Ind.; Melvin L. Aldridge, Detroit, Mich.; WVMC Radio, Mt. Carmel, Ill.; WCER, Charlotte, Mich.; Daystrom, Inc., Archbald, Pa.; The Forman Company, Monmouth, Ill.

automatic logging of these particular parameters a bit more difficult, we are convinced that the problem is not without solution and therefore will amend this section to provide that these readings be made without modulation.

9. As noted in the Notice of Proposed Rule Making, we have rejected the proposal that the logging of frequency monitor readings for AM and FM stations be relaxed. However, many comments relating to frequency monitor requirements for TV stations were received, the majority opposing proposed Sections 3.663(c) (1) and (4) on this subject. In view of the outstanding proceeding (Docket No. 13854) relating to the subject TV frequency monitors, we are deleting these proposed sections.

10. As previously mentioned the majority of comments received were directed toward the proposal that an operator holding a radio-telephone first class operator's license (or second-class for certain non-commercial educational FM stations) at each standard-broadcast and FM station be required to make a daily inspection of all transmitting equipment. Many viewed this proposal as expensive and unnecessary. Many more, however, objected to the *daily* inspection when, under present practice, the "chief engineer" of a station is normally on duty five (or at most six) days a week and, hence, stations would be forced to hire an additional employee to satisfy this one requirement. By our proposal, we did not intend to increase the number of technical operators employed at a station, but simply to insist, that more time and attention be paid to the technical details of station operation. As a first step in this direction, we will require a radio-telephone first-class operator, in effect, to certify that the operation is in accordance with the Commission Rules and the station authorizations or the extent to which compliance is not attained. We will, however, modify our proposal to provide that the inspection be made in no event less than five days each week. In this regard some parties point out that there appears to be a discrepancy between the intent of the notice (paragraph 9) and the rules as proposed. They state that the intention was to require a daily inspection only for those stations presently exempted from the requirement of a first-class operator on duty at all times but that the rules appear to require this daily inspection at *all* stations. Others urge that in any event stations which have a first-class operator on duty or are authorized remote control operation be excluded from this requirement. Our intention in this matter was to require the daily inspection at all stations and we are rewording the rule to clarify this.

11. We come now to the subject of automatic devices for recording entries in the operating log. Technically, such devices are quite feasible and the only consideration from our viewpoint is the necessary assurance that the equipment is capable of proper accuracy. This problem we believe is adequately handled by the wording of the rule we are adopting. Two comments have been submitted in this area which should be considered. First, it has been suggested that the present length of scale requirement of 2 3/10 inches<sup>2</sup> be modified for automatic logging devices to permit

<sup>2</sup> See, for example, Section 3.39(a) (1).

the use of widely available charts which have a scale of only 2 inches. We do not believe that a reduction in scale length of  $\frac{3}{10}$  of an inch will greatly affect the accuracy of readings so long as the remaining requirements of the sections pertaining to indicating instruments are met and, accordingly, we are modifying the requirements for automatic logging devices to permit the use of charts having scale length of 2 inches. Secondly, it has been suggested that we permit the use of arbitrary scales or readings which are calibrated as "percentage of normal". To this we cannot agree. The use of arbitrary scales in some present remote control equipment may be partially justified when it is considered that, in the usual installation, the person required to log readings at the remote control point is also engaged in programming as well as other duties. With the use of automatic logging devices, more time should be available for proper interpretation of readings.

12. As we have proposed in the paragraphs dealing with automatic logging devices, these devices are to be located in the near vicinity of the operator on duty and are to be inspected periodically during the broadcast day. Hence, we are not requiring in this instance that the indicating instruments be directly in the operator's view as is presently required. We have therefore required that automatic logging devices be equipped with *alarm circuits* which will indicate readings which exceed allowable tolerances. In addition, since logging devices will only be checked periodically during the broadcast day we will require that, in those instances where the device does not record each parameter continuously, and so cannot activate the alarm circuit continuously, the automatic logging instrument shall read the entries required not less than once each ten minute period. It is recommended that manufacturers of this equipment submit information and data prior to use at broadcast stations so that it can be determined whether the equipment will conform to the adopted rules.

13. Comments were received from some parties which indicate some confusion with respect to the use of automatic logging devices as a means of replacing transmitter operators. It should be stressed that we are not in this proceeding making any change in operator requirements presently contained in our rules. The National Association of Broadcast Employees and Technicians has requested that we schedule public hearings "before taking any further actions towards relaxing the rules in the area of replacing qualified licensed operators with remote control or automatic devices." Since we are not making changes in the operator requirements and since public hearings in this matter would serve no useful purpose this request IS HEREBY DENIED.

14 We mention, to avoid confusion, that we have reexamined our proposal and find that the logging rules may be further clarified by rearranging and changing the numbering of certain paragraphs. No fundamental changes have been made by this action but study of the rearrangement will clearly indicate its desirability. In this connection we have rewritten subparagraph (a) (1) of Section 3.114 in order to remove any misunderstandings as to its meaning.

15. The program logging requirements of the Commission are under study and new Sections 3.112, 3.282, 3.582 and 3.670 in the attached Appendix merely repeat the present program log requirements.

16. Authority for the adoption of the amendments herein is contained in Sections 4(i) and 303(j) of the Communications Act of 1934 as amended.

17 In view of the foregoing, **IT IS ORDERED**, That effective April 8, 1963, Part 3 of the Commission's Rules and Regulations is amended in accordance with the attached Appendix.

Adopted February 20, 1963.

FEDERAL COMMUNICATIONS COMMISSION,

BEN F. WAPLE, *Acting Secretary*.

NOTE: Rules changes herein will be covered by T.S. III(61)-8.

#### APPENDIX

Part 3 of the Commission's rules is amended as follows:

1. Section 3.39 is amended by deleting the text of paragraph (h) and inserting "[Reserved]" as follows:

§ 3.56 *Indicating instruments—specifications.*

\* \* \* \* \*

(h) [Reserved]

2. Section 3.56(b) (1) is amended to read:

§ 3.56 *Modulation monitors.*

\* \* \* \* \*

(b) \* \* \*

(1) Appropriate entries shall be made in the maintenance log of the station showing the date and time the monitor was removed from and restored to service.

3. Section 3.58(b) (1) is amended to read:

§ 3.58 *Indicating instruments.*

\* \* \* \* \*

(b) \* \* \*

(1) Appropriate entries shall be made in the maintenance log of the station showing the date and time the meter was removed from and restored to service.

4. Section 3.60(b) (1) is amended to read:

§ 3.60 *Frequency monitor.*

\* \* \* \* \*

(b) \* \* \*

(1) Appropriate entries shall be made in the maintenance log of the station showing the date and time the monitor was removed from and restored to service.

5. Sections 3.111 through 3.116 are revised and rearranged to read as follows:

§ 3.111. *General requirements relating to logs.*

(a) The licensee or permittee of each standard broadcast station shall maintain program, operating, and maintenance logs as set forth in §§ 3.112, 3.113 and 3.114. Each log shall be kept by the person or persons competent to do so, having actual knowledge of the facts required, who shall sign the appropriate log when starting duty and again when going off duty.

(b) The logs shall be kept in an orderly and legible manner, in suitable form, and in such detail that the data required for the particular class of station concerned is readily available. Key letters or abbreviations may be used if proper meaning or explanation is contained elsewhere in the log. Each sheet shall be numbered and dated. Time entries shall be either in local standard or daylight saving time and shall be indicated accordingly.

(c) No log or portion thereof shall be erased, obliterated, or willfully destroyed within the period of retention provided by the provisions of this part. Any necessary correction may be made only by the person originating the entry who shall strike out the erroneous portion, initial the correction made, and indicate the date of correction.

(d) Original data may be recorded in rough form and later transcribed into the log, but in such case all portions of the original memoranda shall be preserved as a part of the complete log.

§ 3.112 *Program log.*

(a) The following entries shall be made in the program log:

(1) An entry of the time each station identification announcement (call letters and location) is made.

(2) An entry briefly describing each program broadcast, such as "music," "drama," "speech," etc., together with the name or title thereof, and the sponsor's name, with the time of the beginning and ending of the complete program. If a mechanical record is used, the entry shall show the exact nature thereof, such as "record," "transcription," etc., and the time it is announced as a mechanical record. If a speech is made by political candidate, the name and political affiliations of such speaker shall be entered.

(3) An entry showing that each sponsored program broadcast has been announced as sponsored, paid for, or furnished by the sponsor.

(4) An entry showing for each program of network origin, the name of the network originating the program.

(b) No provision of this section shall be construed as prohibiting the recording or other automatic maintenance of data required for program logs. However, where such automatic logging is used, the licensee must comply with the following requirements:

(1) The licensee, whether employing manual or automatic logging or a combination thereof, must be able accurately to furnish the Commission with all information required to be logged;

(2) Each recording, tape, or other means employed shall be accompanied by a certificate of the operator or other responsible person on duty at the time or other duly authorized agent of the licensee, to the effect that it accurately reflects what was actually broadcast. Any information required to be logged which cannot be incorporated in the automatic process shall be maintained in a separate record which shall be similarly authenticated;

(3) The licensee shall extract any required information from the recording for the days specified by the Commission or its duly authorized representative and submit it in written log form, together with the underlying recording, tape or other means employed.

§ 3.113 *Operating log.*

(a) The following entries shall be made in the operating log:

(1) An entry of the time the station begins to supply power to the antenna and the time it stops.

(2) An entry of each interruption of the carrier wave, where restoration is not automatic, its cause and duration followed by the signature of the person restoring operation (if licensed operator other than the licensed operator on duty).

(3) An entry, at the beginning of operation and at intervals not exceeding one-half hour, of the following (actual readings observed prior to making any adjustments to the equipment) and, when appropriate, an indication of corrections made to restore parameters to normal operating values:

(i) Operating constants of last radio stage (total plate voltage and plate current).

(ii) Antenna current or common point current (if directional) without modulation.

(iii) Frequency monitor reading.

(4) An entry each day of the following where applicable:

(i) Antenna base current(s) without modulation for each mode of operation:

(a) Where remote antenna meters or a remote common point meter are normally employed but are defective.

(b) Where required by the station license for directional antenna operation.

(ii) Where there is remote control operation of a directional antenna station, readings for each pattern taken at the transmitter (within two hours of commencement of operation with each pattern) of:

- (a) Common point current without modulation.
- (b) Base current(s) without modulation.
- (c) Phase monitor sample loop current(s) without modulation.
- (d) Phase indications.
- (5) Any other entries required by the instrument of authorization or the provisions of this part.

(b) Automatic devices accurately calibrated and with appropriate time, date and circuit functions may be utilized to record the entries in the operating log: *Provided, That:*

(1) They do not affect the operation of circuits or accuracy of indicating instruments of the equipment being recorded;

(2) The recording devices have an accuracy equivalent to the accuracy of the indicating instruments;

(3) The calibration is checked against the original indicators at least once a week and the results noted in the maintenance log;

(4) Provision is made to actuate automatically an aural alarm circuit located near the operator on duty if any of the automatic log readings are not within the tolerances or other requirements specified in the rules or instrument of authorization;

(5) Devices which record each parameter in sequence must read each parameter at least once during each 10-minute period and clearly indicate the parameter being recorded;

(6) The automatic logging equipment is located at the remote control point if the transmitter is remotely controlled, or at the transmitter location if the transmitter is manually controlled;

(7) The automatic logging equipment is located in the near vicinity of the operator on duty and is inspected by him periodically during the broadcast day; and

(8) The indicating equipment conforms with the requirements of § 3.39 except that the scales need not exceed 2 inches in length and arbitrary scales may not be used.

#### § 3.114 *Maintenance log.*

The following entries shall be made in the maintenance log:

(a) An entry, each week, of the following where applicable:

(1) A notation indicating the readings of the tower base current ammeter(s) and the associated remote antenna ammeter(s) (actual readings observed prior to remote antenna ammeter recalibration) and indicating calibration of the remote ammeter(s) against the tower base ammeter(s).

(2) Time and result of test of auxiliary transmitter.

(3) A notation of all frequency checks and measurements made independently of the frequency monitor and of the correlation of these measurements with frequency monitor indications.

(4) A notation of the calibration check of automatic recording devices as required by § 3.113 (b) (3).

(b) An entry of the date and time of removal from and restoration to service of any of the following equipment in the event it becomes defective:

(1) Modulation monitor.

(2) Frequency monitor.

(3) Final stage plate voltmeter.

(4) Final stage plate ammeter.

(5) Base current ammeter(s).

(6) Common point ammeter.

(c) Record of tower light inspections where required by § 17.38 of this chapter (Part 17—Construction, Marking, and Lighting of Antenna Structures).

(d) Entries made so as to describe fully any experimental operation during the experimental period.

(e) An inspection of all transmitting equipment in use shall be made at least 5 days each week and at intervals of at least 12 hours by an operator holding a valid radiotelephone first-class operator license, upon completion of which the operator shall enter a signed statement that the required inspection has been made and noting in detail the repairs and maintenance work which were accomplished in order to ensure operation in accordance with the provisions of this part and the current instrument of authorization of that station. If complete repair could not be effected, the statement shall set forth in detail

the items of equipment concerned, the manner and degree in which they are defective, and the reasons for failure to make satisfactory repairs.

(f) Any other entries required by the instrument of authorization or the provisions of this part.

§ 3.115 Logs; retention of.

Logs of standard broadcast stations shall be retained by the licensee or permittee for a period of 2 years; *Provided, however,* That logs involving communications incident to a disaster or which include communications incident to or involved in an investigation by the Commission and concerning which the licensee or permittee has been notified, shall be retained by the licensee or permittee until he is specifically authorized in writing by the Commission to destroy them:

*Provided, further,* That logs incident to or involved in any claim or complaint of which the licensee or permittee has notice shall be retained by the licensee or permittee until such claim or complaint has been fully satisfied or until the same has been barred by statute limiting the time for the filing of suits upon such claims.

NOTE: Application forms for licenses and other authorizations require that certain operating and program data be supplied. It is suggested that these application forms be kept in mind in connection with maintenance of station program and operating records.

§ 3.116 Availability of logs and records.

The following shall be made available upon request by an authorized representative of the Commission:

- (a) Program, operating and maintenance logs.
- (b) Equipment performance measurements required by § 3.47.
- (c) Copy of most recent antenna resistance or common-point impedance measurements submitted to the Commission.
- (d) Copy of most recent field intensity measurements to establish performance of directional antennas required by § 3.151.

6. Section 3.252 (b) (1) is amended to read:

§ 3.252 Frequency monitor.

\* \* \* \* \*

(b) \* \* \*

(1) Appropriate entries shall be made in the maintenance log of the station showing the date and time the monitor was removed from and restored to service.

7. Section 3.253 (b) (1) is amended to read:

§ 3.253 Modulation monitor.

\* \* \* \* \*

(b) \* \* \*

(1) Appropriate entries shall be made in the maintenance log of the station showing the date and time the monitor was removed from and restored to service.

8. Section 3.258 (b) (1) is amended to read:

§ 3.258 Indicating instruments.

\* \* \* \* \*

(b) \* \* \*

(1) Appropriate entries shall be made in the maintenance log of the station showing the date and time the meter was removed from and restored to service

9. Sections 3.281 through 3.286 are revised and rearranged to read as follows:

§ 3.281 General requirements relating to logs.

(a) The licensee or permittee of each FM broadcast station shall maintain program, operating, and maintenance logs as set forth in §§ 3.282, 3.283 and 3.284. Each log shall be kept by the person or persons competent to do so, having actual knowledge of the facts required, who shall sign the appropriate log when starting duty and again when going off duty.

(b) The logs shall be kept in an orderly and legible manner, in suitable form, and in such detail that the data required for the particular class of station concerned is readily available. Key letters or abbreviations may be used if proper meaning or explanation is contained elsewhere in the log. Each sheet shall be numbered and dated. Time entries shall be either in local standard or daylight saving time and shall be indicated accordingly.

(c) No log or portion thereof shall be erased, obliterated, or willfully destroyed within the period of retention provided by the provisions of this part. Any necessary correction may be made only by the person originating the entry who shall strike out the erroneous portion, initial the correction made, and indicate the date of correction.

(d) Original data may be recorded in rough form and later transcribed into the log, but in such case all portions of the original memoranda shall be preserved as a part of the complete log.

§ 3.282 *Program log.*

(a) The following entries shall be made in the program log:

(1) An entry of the time each station identification announcement (call letters and location) is made.

(2) An entry briefly describing each program broadcast, such as "music," "drama," "speech," etc., together with the name or title thereof and the sponsor's name, with the time of the beginning and ending of the complete program. If a mechanical record is used, the entry shall show the exact nature thereof, such as "record," "transcription," etc., and the time it is announced as a mechanical reproduction. If a speech is made by a political candidate, the name and political affiliations of such speaker shall be entered.

(3) An entry showing that each sponsored program broadcast has been announced as sponsored, paid for, or furnished by the sponsor.

(4) An entry showing, for each program of network origin, the name of the network originating the program.

(b) No provision of this section shall be construed as prohibiting the recording or other automatic maintenance of data required for program logs. However, where such automatic logging is used, the licensee must comply with the following requirements:

(1) The licensee, whether employing manual or automatic logging or a combination thereof, must be able accurately to furnish the Commission with all information required to be logged;

(2) Each recording, tape, or other means employed shall be accompanied by a certificate of the operator or other responsible person on duty at the time or other duly authorized agent of the licensee, to the effect that it accurately reflects what was actually broadcast. Any information required to be logged which cannot be incorporated in the automatic process shall be maintained in a separate record which shall be similarly authenticated;

(3) The licensee shall extract any required information from the recording for the days specified by the Commission or its duly authorized representative and submit it in written log form together with the underlying recording, tape or other means employed.

§ 3.283 *Operating log.*

(a) The following entries shall be made in the operating log:

(1) An entry of the time the station begins to supply power to the antenna and the time it stops.

(2) An entry of each interruption of the carrier wave, where restoration is not automatic, its cause and duration followed by the signature of the person restoring operation (if licensed operator other than the licensed operator on duty).

(3) An entry, at the beginning of operation and at intervals not exceeding one-half hour, of the following (actual readings observed prior to making any adjustments to the equipment) and, when appropriate, an indication of corrections made to restore parameters to normal operating values:

(i) Operating constants of last radio stage (total plate voltage and plate current).

(ii) RF transmission line meter reading.

(iii) Frequency monitor reading.

(4) Any other entries required by the instrument of authorization or the provisions of this part.

(b) Automatic devices accurately calibrated and with appropriate time, date and circuit functions may be utilized to record the entries in the operating log: *Provided, That:*

(1) They do not affect the operation of circuits or accuracy of indicating instruments of the equipment being recorded;

(2) The recording devices have an accuracy equivalent to the accuracy of the indicating instruments;

(3) The calibration is checked against the original indicators at least once a week and the results noted in the maintenance log;

(4) Provision is made to actuate automatically an aural alarm circuit located near the operator on duty if any of the automatic log readings are not within the tolerances or other requirements specified in the rules or instrument of authorization;

(5) Devices which record each parameter in sequence must read each parameter at least once during each 10-minute period and clearly indicate the parameter being recorded;

(6) The automatic logging equipment is located at the remote control point if the transmitter is remotely controlled or at the transmitter location if the transmitter is manually controlled;

(7) The automatic logging equipment is located in the near vicinity of the operator on duty and inspected by him periodically during the broadcast day, and

(8) The indicating equipment conforms to the requirements of § 3.320 except that the scales need not exceed 2 inches in length.

#### § 3.284 *Maintenance Log.*

The following entries shall be made in the maintenance log:

(a) An entry each week of the time and result of test of auxiliary transmitter.

(b) A notation of all frequency checks and measurements made independently of the frequency monitor and of the correlation of these measurements with frequency monitor indications.

(c) A notation each week of the calibration check of automatic recording devices as required by § 3.283 (b) (3).

(d) An entry of the date and time of removal from and restoration to service of any of the following equipment in the event it becomes defective;

(1) Modulation monitor.

(2) Frequency monitor.

(3) Final stage plate voltmeter.

(4) Final stage plate ammeter.

(5) Transmission line radio frequency voltage current or power meter.

(e) Record of tower light inspections where required by § 17.38 of this chapter (Part 17—Construction, Marking, and Lighting of Antenna Structures).

(f) Entries shall be made so as to describe fully any experimental operation during the experimental period.

(g) An inspection of all transmitting equipment in use shall be made at least 5 days each week and at intervals of at least 12 hours by an operator holding a valid radiotelephone first-class operator license upon completion of which the operator shall enter a signed statement that the required inspection has been made and noting in detail the repairs and maintenance work which were accomplished in order to ensure operation in accordance with the provisions of this part and the current instrument of authorization for that station. If complete repair could not be effected, the statement shall set forth in detail the items of equipment concerned, the manner and degree in which they are defective, and the reasons for failure to make satisfactory repairs.

(h) Any other entries required by the instrument of authorization or the provisions of this part.

#### § 3.285 *Logs; retention of.*

Logs of FM broadcast stations shall be retained by the licensee or permittee for a period of 2 years: *Provided, however,* That logs involving communications incident to a disaster or which include communications incident to or involved in an investigation by the Commission and concerning which the licensee or permittee has been notified, shall be retained by the licensee or permittee until he is specifically authorized in writing by the Commission to destroy them: *Provided, further,* That logs incident to or involved in any claim or complaint of which the licensee or permittee has notice shall be retained by the licensee or permittee until such claim or complaint has been fully satisfied or until the same has been barred by statute limiting the time for the filing of suits upon such claims.

#### § 3.286 *Availability of logs and records.*

The following shall be made available upon request by an authorized representative of the Commission:

(a) Program, operating and maintenance logs.

(b) Equipment performance measurements required by § 3.254.  
 10. Section 3.320 is amended by deleting the text of paragraph (e) and inserting "[Reserved]" as follows:  
 § 3.320 *Indicating instruments—specifications.*

\* \* \* \* \*

(e) [Reserved]  
 11. Section 3.552(b) (1) is amended to read:  
 § 3.552 *Frequency monitor.*

\* \* \* \* \*

(b) \* \* \*  
 (1) Appropriate entries shall be made in the maintenance log of the station showing the date and time the monitor was removed from and restored to service.  
 12. Section 3.553(b) (1) is amended to read:  
 § 3.553 *Modulation monitor.*

\* \* \* \* \*

(b) \* \* \*  
 (1) Appropriate entries shall be made in the maintenance log of the station showing the date and time the monitor was removed from and restored to service.  
 13. Section 3.558(b) (1) is amended to read:  
 § 3.558 *Indicating instruments.*

\* \* \* \* \*

(b) \* \* \*  
 (1) Appropriate entries shall be made in the maintenance log of the station showing the date and time the meter was removed from and restored to service.  
 14. Sections 3.581 through 3.586 are revised and rearranged to read as follows:  
 § 3.581

*General requirements relating to logs.*

- (a) The licensee or permittee of each non-commercial FM broadcast station shall maintain program, operating, and maintenance logs as set forth in §§ 3.582, 3.583 and 3.584. Each log shall be kept by the person or persons competent to do so, having actual knowledge of the facts required, who shall sign the appropriate log when starting duty and again when going off duty.
  - (b) The logs shall be kept in an orderly and legible manner, in suitable form, and in such detail that the data required for the particular class of station concerned is readily available. Key letters or abbreviations may be used if proper meaning or explanation is contained elsewhere in the log. Each sheet shall be numbered and dated. Time entries shall be either in local standard or daylight saving time and shall be indicated accordingly.
  - (c) No log or portion thereof shall be erased, obliterated, or willfully destroyed within the period of retention provided by the provisions of this part. Any necessary correction may be made only by the person originating the entry who shall strike out the erroneous portions, initial the correction made, and indicate the date of correction.
  - (d) Original data may be recorded in rough form and later transcribed into the log, but in such case all portions of the original memoranda shall be preserved as a part of the complete log.
- § 3.582 *Program log.*

- (a) The following entries shall be made in the program log:
  - (1) An entry of the time each station identification announcement (call letters and location) is made.
  - (2) An entry briefly describing each program broadcast, such as "music," "drama," "speech," etc., together with the name or title thereof and the sponsor's name, with the time of the beginning and ending of the complete program. If a mechanical record is used, the entry shall show the exact nature thereof, such as "record," "transcription," etc., and the time it is announced as a mechanical reproduction. If a speech is made by a political candidate, the name and political affiliations of such speaker shall be entered.

(3) An entry showing that each sponsored program broadcast has been announced as sponsored, paid for, or furnished by the sponsor.

(4) An entry showing, for each program of network origin, the name of the network originating the program.

(b) No provision of this section shall be construed as prohibiting the recording or other automatic maintenance of data required for program logs. However, where such automatic logging is used, the licensee must comply with the following requirements:

(1) The licensee, whether employing manual or automatic logging or a combination thereof, must be able accurately to furnish the Commission with all information required to be logged;

(2) Each recording, tape, or other means employed shall be accompanied by a certificate of the operator or other responsible person on duty at the time or other duly authorized agent of the licensee, to the effect that it accurately reflects what was actually broadcast. Any information required to be logged which cannot be incorporated in the automatic process shall be maintained in a separate record which shall be similarly authenticated.

(3) The licensee shall extract any required information from the recording for the days specified by the Commission or its duly authorized representative and submit it in written log form, together with the underlying recording, tape or other means employed.

§ 3.583 *Operating log.*

(a) The following entries shall be made in the operating log:

(1) An entry of the time the station begins to supply power to the antenna and the time it stops.

(2) An entry of each interruption of the carrier wave, where restoration is not automatic, its cause and duration followed by the signature of the person restoring operation (if licensed operator other than the licensed operator on duty).

(3) An entry, at the beginning of operation and at intervals not exceeding one-half hour, of the following (actual readings observed prior to making any adjustments to the equipment) and, when appropriate, an indication of corrections made to restore parameters to normal operating values:

(i) Operating constants of last radio stage (total plate voltage and plate current).

(ii) RF transmission line meter reading.

(iii) Frequency monitor reading.

(4) Any other entries required by the instrument of authorization or the provisions of this part.

(b) Automatic devices accurately calibrated and with appropriate time, date and circuit functions may be utilized to record the entries in the operating log: *Provided*, That:

(1) They do not affect the operation of circuits or accuracy of indicating instruments of the equipment being recorded;

(2) The recording devices have an accuracy equivalent to the accuracy of the indicating instruments;

(3) The calibration is checked against the original indicators at least once a week and the results noted in the maintenance log;

(4) Provision is made to actuate automatically an aural alarm circuit located near the operator on duty if any of the automatic log readings are not within the tolerances or other requirements specified in the rules or instrument of authorization;

(5) Devices which record each parameter in sequence must read each parameter at least once during each 10-minute period and clearly indicate the parameter being recorded;

(6) The automatic logging equipment is located at the remote control point if the transmitter is remotely controlled, or at the transmitter location if the transmitter is manually controlled;

(7) The automatic logging equipment is located in the near vicinity of the operator on duty and is inspected by him periodically during the broadcast day; and

(8) The indicating equipment conforms to the requirements of § 3.320 except that the scales need not exceed 2 inches in length.

§ 3.584 *Maintenance log.*

The following entries shall be made in the maintenance log:

(a) An entry each week of the time and result of test of auxiliary transmitter.

(b) A notation of all frequency checks and measurements made independently of the frequency monitor and of the correlation of these measurements with frequency monitor indications.

(c) A notation each week of the calibration check of automatic recording devices as required by § 3.583 (b) (3).

(d) An entry of the date and time of removal from and restoration to service of any of the following equipment in the event it becomes defective:

(1) Modulation monitor.

(2) Frequency monitor.

(3) Final stage plate voltmeter.

(4) Final stage plate ammeter.

(5) Transmission line radio frequency voltage current or power meter.

(e) Record of tower light inspections where required by § 17.38 of this chapter (Part 17 Construction, Marking, and Lighting of Antenna Structures).

(f) Entries shall be made so as to describe fully any experimental operation during the experimental period.

(g) An inspection of all transmitting equipment in use shall be made at least 5 days each week and at intervals of at least 12 hours by an operator holding a valid radiotelephone first-class operator license, or a second-class operator license in the event the station operates with a transmitter power output of 1 kw or less, upon completion of which the operator shall enter a signed statement that the required inspection has been made and noting in detail the repairs and maintenance work which were accomplished in order to ensure operation in accordance with the provisions of this part and the current instrument of authorization for that station. If complete repairs could not be effected, the statement shall set forth in detail the items of equipment concerned, the manner and degree in which they are defective, and the reasons for failure to make satisfactory repairs.

(h) Any other entries required by the instrument of authorization or the provisions of this part.

§ 3.585 *Logs; retention of.*

Logs of noncommercial, educational FM broadcast stations shall be retained by the licensee or permittee for a period of 2 years: *Provided, however,* That logs involving communications incident to a disaster or which include communications incident to or involved in an investigation by the Commission and concerning which the licensee or permittee has been notified, shall be retained by the licensee or permittee until he is specifically authorized in writing by the Commission to destroy them: *Provided, further,* That logs incident to or involved in any claim or complaint of which the licensee or permittee has notice shall be retained by the licensee or permittee until such claim or complaint has been fully satisfied or until the same has been barred by statute limiting the time for the filing of suits upon such claims.

§ 3.586 *Availability of logs and records.*

The following shall be made available upon request by an authorized representative of the Commission:

(a) Program, operating and maintenance logs.

(b) Equipment performance measurements required by § 3.554.

15. Sections 3.663 and 3.664 are amended by deleting the text and inserting "[Reserved]" as follows:

§ 3.663 [Reserved]

§ 3.664 [Reserved]

16. Sections 3.669 through 3.674 are added to read as follows:

§ 3.669 *General requirements relating to logs.*

(a) The licensee or permittee of each television broadcast station shall maintain program, operating, and maintenance logs as set forth in §§ 3.670, 3.671 and 3.672. Each log shall be kept by the person or persons competent to do so, having actual knowledge of the facts required, who shall sign the appropriate log when starting duty and again when going off duty.

(b) The logs shall be kept in an orderly and legible manner, in suitable form, and in such detail that the data required for the particular class of station concerned is readily available. Key letters or abbreviations may be used if proper meaning or explanation is contained elsewhere in the log. Each sheet shall be numbered and dated. Time entries shall be either in local standard

or daylight saving time and shall be indicated accordingly.

(e) No log or portion thereof shall be erased, obliterated, or willfully destroyed within the period of retention provided by the rules. Any necessary correction may be made only by the person originating the entry who shall strike out the erroneous portion, initial the correction made, and indicate the date of correction.

(d) Original data may be recorded in rough form and later transcribed into the log, but in such case all portions of the original memoranda shall be preserved as a part of the complete log.

§ 3.670 *Program log.*

(a) The following entries shall be made in the program log:

(1) An entry of the time each station identification announcement (call letters and location) is made.

(2) An entry briefly describing each program broadcast, such as "music," "drama," "speech," etc., together with the name or title thereof and the sponsor's name, with the time of the beginning and ending of the complete program. If a mechanical reproduction, either visual or aural, is used, the entry shall show the exact nature thereof and the time it is announced as a mechanical reproduction. If a speech is made by a political candidate, the name and political affiliations of such speaker shall be entered.

(3) An entry showing that each sponsored program broadcast has been announced as sponsored, paid for, or furnished by the sponsor; or that the broadcast is under the auspices of a non-profit educational organization other than the licensee or permittee.

(4) An entry showing, for each program of network origin, the name of the network originating the program.

(b) No provision of this section shall be construed as prohibiting the recording or other automatic maintenance of data required for program logs. However, where such automatic logging is used, the licensee must comply with the following requirements:

(1) The licensee, whether employing manual or automatic logging or a combination thereof, must be able accurately to furnish the Commission with all information required to be logged;

(2) Each recording, tape, or other means employed shall be accompanied by a certificate of the operator or other responsible person on duty at the time or other duly authorized agent of the licensee, to the effect that it accurately reflects what was actually broadcast. Any information required to be logged which cannot be incorporated in the automatic process shall be maintained in a separate record which shall be similarly authenticated; and

(3) The licensee shall extract any required information from the recording for the days specified by the Commission or its duly authorized representative and submit it in written log form, together with the underlying recording, tape or other means employed.

§ 3.671 *Operating log.*

(a) The following entries shall be made in the operating log:

(1) An entry of the time the station begins to supply power to the antenna and the time it stops.

(2) An entry of each interruption of the carrier wave, where restoration is not automatic, its cause and duration followed by the signature of the person restoring operation (if licensed operator other than the licensed operator on duty).

(3) An entry, at the beginning of operation and at intervals not exceeding one-half hour, of the following (actual readings observed prior to making any adjustments to the equipment) and, when appropriate, an indication of corrections made to restore parameters to normal operating values:

(i) Operating constants of last radio stage of aural transmitter (total plate voltage and plate current).

(ii) Transmission line meter readings for both transmitters.

(4) Any other entries required by the instrument of authorization or the provisions of this part.

(b) Automatic devices accurately calibrated and with appropriate time, date and circuit functions may be utilized to record the entries in the operating log: *Provided*, That:

(1) They do not affect the operation of circuits or accuracy of indicating instruments of the equipment being recorded;

- (2) The recording devices have an accuracy equivalent to the accuracy of the indicating instruments;
- (3) The calibration is checked against the original indicators at least once a week and the results noted in the maintenance log;
- (4) Provision is made to actuate automatically an aural alarm circuit located near the operator on duty if any of the automatic log readings are not within the tolerances or other requirements specified in the rules or instrument of authorization;
- (5) Devices which record each parameter in sequence must read each parameter at least once during each 10-minute period and clearly indicate the parameter being recorded;
- (6) The automatic logging equipment is located in the near vicinity of the operator on duty and is inspected by him periodically during the broadcast day; and
- (7) The indicating equipment conforms to the requirements of § 3.681 except that the scales need not exceed 2 inches in length.

§ 3.672 *Maintenance log.*

The following entries shall be made in the maintenance log:

- (a) An entry each week of the time and result of test of auxiliary transmitters.
- (b) A notation each week of the calibration check of automatic recording devices as required by § 3.671(b) (3).
- (c) An entry of the method used and results of comparing the frequency deviation of the station with an external frequency source whenever the local visual or aural frequency reference source becomes defective.
- (d) An entry of the date and time of removal from and restoration to service of any of the following equipment in the event it becomes defective:
  - (1) Visual modulation monitoring equipment or aural modulation monitor.
  - (2) Visual or aural frequency monitor.
  - (3) Final stage plate voltmeters of aural and visual transmitters.
  - (4) Final stage plate ammeters of aural and visual transmitters.
  - (5) Visual and aural transmitter transmission line radio frequency voltage, current or power meter.
- (e) Record of tower light inspections where required by § 17.38 of this chapter (Part 17—Construction, Marking and Lighting of Antenna Structures).
- (f) Entries shall be made so as to describe fully any experimental operation.
- (g) Any other entries required by the instrument of authorization or the provisions of this part.

§ 3.673 *Logs; retention of.*

Logs of television broadcast stations shall be retained by the licensee or permittee for a period of 2 years: *Provided, however,* That logs involving communications incident to a disaster or which include communications incident to or involved in an investigation by the Commission and concerning which the licensee or permittee has been notified, shall be retained by the licensee or permittee until he is specifically authorized in writing by the Commission to destroy them. *Provided, further,* That logs incident to or involved in any claim or complaint of which the licensee or permittee has notice shall be retained by the licensee or permittee until such claim or complaint has been fully satisfied or until the same has been barred by statute limiting the time for the filing of suits upon such claims.

§ 3.674 *Availability of logs and records.*

The program, operating, and maintenance logs shall be made available upon request by an authorized representative of the Commission.

17. Section 3.688 is amended by deleting paragraph (d) and amending paragraph (f) (1) as follows:

§ 3.688 *Indicating instruments.*

\* \* \* \* \*

(d) [Reserved]

\* \* \* \* \*

(f) \* \* \*

- (1) Appropriate entries shall be made in the maintenance log of the station showing the date and time the meter was removed from and restored to service.

18. Section 3.690(b) (1) is amended to read:

§ 3.690 *Frequency monitors.*

\* \* \* \* \*

(b) \* \* \*

(1) Appropriate entries shall be made in the maintenance log of the station to show the date and time the equipment was removed from and restored to service.

19. Section 3.691(b) (1) is amended to read:

§ 3.691 *Modulation monitors.*

\* \* \* \* \*

(b) \* \* \*

(1) Appropriate entries shall be made in the maintenance log of the station showing the date and time the meter was removed from and restored to service.