

APPENDIX C: FINAL RULES

Part 64 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 64 - MISCELLANEOUS RULES RELATING TO COMMON CARRIERS

1. The authority citation for Part 64 continues to read as follows:

AUTHORITY: Sec. 4, 48 Stat. 1066, as amended; 47 U.S.C. 154, unless otherwise noted. Interpret or apply secs. 201, 218, 226, 228, 48 Stat. 1070, as amended, 1077; 47 U.S.C. §§ 201, 218, 226, 228, 610 unless otherwise noted.

2. Section 64.607 is amended to read as follows:

§ 64.607 Provision of hearing aid compatible telephones by exchange carriers

In the absence of alternative suppliers in an exchange area, an exchange carrier must provide a hearing aid compatible telephone, as defined in § 68.316, and provide related installation and maintenance services for such telephones on a detariffed basis to any customer with a hearing disability who requests such equipment or services.

Part 68 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 68 - CONNECTION OF TERMINAL EQUIPMENT TO THE TELEPHONE NETWORK

1. The authority citation for Part 68 continues to read as follows:

AUTHORITY: Secs. 1, 4, 5, 201-5, 208, 215, 218, 226, 227, 303, 313, 314, 403, 404, 410, 602 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154, 155, 201-5, 208, 215, 218, 226, 227, 303, 313, 314, 403, 404, 410, 602, 610.

2. Section 68.3 is amended by adding the following definition to the terms used in Part 68:

* * * * *

Hearing aid compatible: Except as used at §§ 68.4(a)(3) and 68.414 of these rules, the terms hearing aid compatible or hearing aid compatibility are used as defined in § 68.316, unless it is specifically stated that hearing aid compatibility volume control, as defined in § 68.317, is intended or is included in the definition.

3. Section 68.4 is amended to read as follows:

§ 68.4 Hearing aid compatible telephones.

(a)(1) Except for telephones used with public mobile services, telephones used with private radio services, and cordless and secure telephones, every telephone manufactured in the United States (other than for export) or imported for use in the United States after August 16, 1989, must be hearing aid compatible, as defined in § 68.316. Every cordless telephone manufactured in the United States (other than for export) or imported into the United States after August 16, 1991, must be hearing aid compatible, as defined in § 68.316.

(2) Unless otherwise stated and except for telephones used with public mobile services, telephones used with private radio services and secure telephones, every telephone listed in § 68.112 must be hearing aid compatible, as defined in § 68.316.

* * * * *

4. A new Section 68.6 is added as follows:

§ 68.6 Telephones with volume control.

As of November 1, 1998, all telephones, including cordless telephones, as defined in Section 15.3(j) of these rules, manufactured in the United States (other than for export) or imported for use in the United States, must have volume control in accordance with Section 68.317 of these rules. Secure telephones, as defined by Section 68.3 of these rules, are exempt from this section, as are telephones used with public mobile services or private radio services.

5. Section 68.112 is amended by revising paragraphs (b)(1), (b)(3), (b)(4) and (b)(5), and by revising paragraph (c), to read as Sections (b)(3), (b)(5) and (b)(6), respectively, as follows:

§ 68.112 Hearing Aid Compatibility

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(b) *Emergency use telephones.* Telephones "provided for emergency use" include the following:

(1) Telephones, except headsets, in places where a person with a hearing disability might be isolated in an emergency, including, but not limited to, elevators, highways, and tunnels for automobile, railway or subway, and workplace common areas. Note: Examples of workplace common areas include libraries, reception areas and similar locations where employees are reasonably expected to congregate.

(2) * * *

(3) Telephones, except headsets, in workplace non-common areas. Note: Examples of workplace non-common areas include private enclosed offices, open area individual work stations and mail rooms. Such non-common area telephones are required to be hearing aid compatible, as defined in Section 68.316, by January 1, 2000, except for (i) those telephones located in

establishments with fewer than fifteen employees; and (ii) those telephones purchased between January 1, 1985 through December 31, 1989, which are not required to be hearing aid compatible, as defined in Section 68.316, until January 1, 2005.

(A) Telephones, including headsets, made available to an employee with a hearing disability for use by that employee in his or her employment duty, shall, however, be hearing aid compatible, as defined in Section 68.316.

(B) As of January 1, 2000 or January 1, 2005, whichever date is applicable, there shall be a rebuttable presumption that all telephones located in the workplace are hearing aid compatible, as defined in Section 68.316. Any person who identifies a telephone as non-hearing aid-compatible, as defined in Section 68.316, may rebut this presumption. Such telephone must be replaced within fifteen working days with a hearing aid compatible telephone, as defined in Section 68.316, including, as of November 1, 1998, with volume control, as defined in Section 68.317.

(C) Telephones, not including headsets, except those headsets furnished under Section 68.112(b)(3)(A), that are purchased, or replaced with newly acquired telephones, must be:

(i) Hearing aid compatible, as defined in Section 68.316, after the effective date of Section 68.112(b)(3);

(ii) Including, as of November 1, 1998, with volume control, as defined in Section 68.317.

(D) When a telephone under Subsection (C) is replaced with a telephone from inventory existing before the effective date of amended Section 68.112(b)(3), any person may make a bona fide request that such telephone be hearing aid compatible, as defined in Section 68.316. If the replacement occurs as of November 1, 1998, the telephone must have volume control, as defined in Section 68.317. The telephone shall be provided within fifteen working days.

(E) During the period from the effective date of amended Section 68.112(b)(3) until the applicable date of January 1, 2000 or January 1, 2005, workplaces of fifteen or more employees also must provide and designate telephones for emergency use by employees with hearing disabilities through one or more of the following means:

(i) By having at least one coin-operated telephone, one common area telephone or one other designated hearing aid compatible telephone within a reasonable and accessible distance for an individual searching for a telephone from any point in the workplace; or

(ii) By providing wireless telephones that meet the definition for hearing aid compatible for wireline telephones, as defined in Section 68.316, for use by employees in their employment duty outside common areas and outside the offices of employees with hearing

disabilities.

* * * * *

(4) All credit card operated telephones, whether located on public property or in a semipublic location (e.g. drugstore, gas station, private club), unless a hearing aid compatible (as defined in § 68.316) coin-operated telephone providing similar services is nearby and readily available. However, regardless of coin-operated telephone availability, all credit card operated telephones must be made hearing aid-compatible, as defined in § 68.316, when replaced, or by May 1, 1991, which ever comes sooner.

* * * * *

(5) Telephones needed to signal life threatening or emergency situations in confined settings, including but not limited to, rooms in hospitals, residential health care facilities for senior citizens, and convalescent homes.

(A) A telephone that is hearing aid compatible, as defined in Section 68.316, is not required until:

(i) November 1, 1997, for establishments with fifty or more beds, unless replaced before that time; and

(ii) November 1, 1998, for all other establishments with fewer than fifty beds, unless replaced before that time.

(B) Telephones that are purchased, or replaced with newly acquired telephones, must be:

(i) Hearing aid compatible, as defined in Section 68.116, after the effective date of amended Section 68.112(b)(5);

(ii) Including, as of November 1, 1998, with volume control, as defined in Section 68.317.

(C) Unless a telephone in a confined setting is replaced pursuant to Section 68.112(b)(5)(B), a hearing aid compatible telephone shall not be required if:

(i) A telephone is both purchased and maintained by a resident for use in that resident's room in the establishment; or

(ii) The confined setting has an alternative means of signalling life-threatening or emergency situations that is available, working and monitored.

(6) Telephones in hotel and motel guest rooms, and in any other establishment open to the general public for the purpose of overnight accommodation for a fee. Such telephones are required to be hearing aid compatible, as defined in Section 68.316, except that, for establishments with eighty or more guest rooms, the telephones are not required to be hearing aid compatible, as defined in Section 68.316, until November 1, 1998; and for establishments with fewer than eighty guest rooms, the telephones are not required to be hearing aid compatible, as defined in Section 68.316, until November 1, 1999.

(A) Anytime after the effective date of amended Section 68.112(b)(6), if a hotel or motel room is renovated or newly constructed, or the telephone in a hotel or motel room or is replaced or substantially, internally repaired, the telephone in that room must be:

(i) Hearing aid compatible, as defined in Section 68.316, after the effective date of amended Section 68.112(b)(6);

(ii) Including, as of November 1, 1998, with volume control, as defined in Section 68.317.

(B) The telephones in at least twenty percent of the guest rooms in a hotel or motel must be hearing aid compatible, as defined in Section 68.316, as of April 1, 1997.

(C) Notwithstanding the requirements of Section 68.112(b)(6), hotels and motels which use telephones purchased during the period January 1, 1985 through December 31, 1989 may provide telephones that are hearing aid compatible, as defined in Section 68.316, in guest rooms according to the following schedule:

(i) The telephones in at least twenty percent of the guest rooms in a hotel or motel must be hearing aid compatible, as defined in Section 68.316, as of April 1, 1997;

(ii) The telephones in at least twenty-five percent of the guest rooms in a hotel or motel must be hearing aid compatible, as defined in Section 68.316, by November 1, 1999; and

(iii) The telephones in one-hundred percent of the guest rooms in a hotel or motel must be hearing aid compatible, as defined in Section 68.316, by January 1, 2001 for establishments with eighty or more guest rooms, and by January 1, 2004 for establishments with fewer than eighty guest rooms.

* * * * *

(c) *Telephones frequently needed by the hearing impaired.* Closed circuit telephones, i.e., telephones which cannot directly access the public switched network, such as telephones located in lobbies of hotels or apartment buildings; telephones in stores which are used by patrons to order merchandise; telephones in public transportation terminals which are used to call taxis or to reserve rental automobiles, need not be hearing aid compatible, as defined in § 68.316, until

replaced.

* * * * *

6. Section 68.224 is amended at subsection (a) to read as follows:

§ 68.224 Notice of non-hearing aid compatibility.

Every non-hearing aid compatible telephone offered for sale to the public on or after August 17, 1989, whether previously-registered, newly registered or refurbished, shall:

(a) Contain in a conspicuous location on the surface of its packaging a statement that the telephone is not hearing aid compatible, as is defined in §§ 68.4(a)(3) and 68.316 of these rules, or if offered for sale without a surrounding package, shall be affixed with a written statement that the telephone is not hearing aid-compatible, as defined in §§ 68.4(a)(3) and 68.316 of these rules; and

(b) * * *

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7. Section 68.300 is amended by adding a new subsection (c) as follows:

§ 68.300 Labelling requirements.

* * * * *

(c) As of April 1, 1997, all registered telephones, including cordless telephones, as defined in Section 15.3(j) of these rules, manufactured in the United States (other than for export) or imported for use in the United States, that are hearing aid compatible, as defined in Section 68.316, shall have the letters "HAC" permanently affixed thereto. "Permanently affixed" shall be defined as in Section 68.300(b)(5). Telephones used with public mobile services or private radio services, and secure telephones, as defined by Section 68.3 of these rules, are exempt from this requirement.

* * * * *8. Section 68.316 is amended in its title and its introductory paragraph to read as follows:

§ 68.316 Hearing aid compatibility magnetic field intensity requirements: technical standards.

A telephone handset is hearing aid compatible for the purposes of this section of Part 68 if it complies with the following standard, published by the Telecommunications Industry Association, copyright 1983, and reproduced by permission of the Telecommunications Industry

Association:

* * * * *

9. A new Section 68.317 is added as follows:

§ 68.317 Hearing aid compatibility volume control: technical standards.

(a) An analog telephone complies with the Commission's volume control requirements if the telephone is equipped with a receive volume control that provides, through the receiver in the handset or headset of the telephone, 12 dB of gain minimum and up to 18 dB of gain maximum, when measured in terms of Receive Objective Loudness Rating (ROLR), as defined in paragraph 4.1.2 of ANSI/EIA-470-A-1987 (Telephone Instruments With Loop Signaling) . The 12 dB of gain minimum must be achieved without significant clipping of the test signal. The telephone also shall comply with the upper and lower limits for ROLR given in Table 4.4 of ANSI/EIA-470-A-1987 when the receive volume control is set to its normal unamplified level.

Note: Paragraph 4.1.2 of ANSI/EIA-470-A-1987 identifies several characteristics related to the receive response of a telephone. It is only the normal unamplified ROLR level and the change in ROLR as a function of the volume control setting that are relevant to the specification of volume control as required by this section.

(b) The ROLR of an analog telephone shall be determined over the frequency range from 300 to 3300 HZ for short, average, and long loop conditions represented by 0, 2.7, and 4.6 km of 26 AWG nonloaded cable, respectively. The specified length of cable will be simulated by a complex impedance. (See Figure A.) The input level to the cable simulator shall be -10 dB with respect to 1 V open circuit from a 900 ohm source.

(c) A digital telephone complies with the Commission's volume control requirements if the telephone is equipped with a receive volume control that provides, through the receiver of the handset or headset of the telephone, 12 dB of gain minimum and up to 18 dB of gain maximum, when measured in terms of Receive Objective Loudness Rating (ROLR), as defined in paragraph 4.3.2 of ANSI/EIA/TIA-579-1991 (Acoustic-To-Digital and Digital-To-Acoustic Transmission Requirements for ISDN Terminals). The 12 dB of gain minimum must be achieved without significant clipping of the test signal. The telephone also shall comply with the limits on the range for ROLR given in paragraph 4.3.2.2 of ANSI/EIA/TIA-579-1991 when the receive volume control is set to its normal unamplified level.

(d) The ROLR of a digital telephone shall be determined over the frequency range from 300 to 3300 Hz using the method described in paragraph 4.3.2.1 of ANSI/EIA/TIA-579-1991. No variation in loop conditions is required for this measurement since the receive level of a digital telephone is independent of loop length.

(e)The ROLR for either an analog or digital telephone shall first be determined with the receive

volume control at its normal unamplified level. The minimum volume control setting shall be used for this measurement unless the manufacturer identifies a different setting for the nominal volume level. The ROLR shall then be determined with the receive volume control at its maximum volume setting. Since ROLR is a loudness rating value expressed in dB of loss, more positive values of ROLR represent lower receive levels. Therefore, the ROLR value determined for the maximum volume control setting should be subtracted from that determined for the nominal volume control setting to determine compliance with the gain requirement.

(f) The 18 dB of receive gain may be exceeded provided that the amplified receive capability automatically resets to nominal gain when the telephone is caused to pass through a proper on-hook transition in order to minimize the likelihood of damage to individuals with normal hearing.

(g) These incorporations by reference of paragraph 4.1.2 (including Table 4.4) of American National Standards Institute (ANSI) Standard ANSI/EIA-470-A-1987 and paragraph 4.3.2 of ANSI/EIA/TIA-579-1991 were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 C. F. R. Part 51. Copies of these publications may be purchased from the American National Standards Institute (ANSI), Sales Department, 11 West 42nd Street, 13th Floor, New York, NY 10036, (212) 642-4900. Copies also may be inspected during normal business hours at the following locations: Federal Communications Commission, 2000 M Street, N.W., Public Reference Room, Room 220, Washington, D.C. 20554; and Office of the Federal Register, 800 N. Capitol Street, N.W., suite 700, Washington, D.C.

APPENDIX D: STANDARDS INCORPORATED BY REFERENCE

The following standards are incorporated by reference into final rule Section 68.317 in Appendix C. These standards are in addition to the incorporation by reference into Section 68.317 of Paragraph 4.1.2 of ANSI/EIA-470-A-1987, provided in Appendix D to the Notice Of Proposed Rulemaking.

1) Paragraph 4.3.2 of ANSI/EIA/TIA-579-1991

2) IEEE Standard IEEE 661-1979

3) Section 7.4 of IEEE Standard IEEE 269-1991