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# ACOUSTALSOCIETY EXMERCI

## Index to Noise Standards

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Standards Secretaring

Acoustical Society of America 19

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## ACOUSTICAL SOCIETY OF AMERICA **Standards**

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## ACOUSTICAL SOCIETY OF AMERICA Index to Noise Standards

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#### ACOUSTICAL SOCIETY OF AMERICA STANDARDS

The Acoustical Society of American is the sponsor of American National Standards Committees S1 on Physical Acoustics, S2 on Mechanical Shock and Vibration, and S3 on Bioacoustics, Standards developed by these committees, which have wide representation from the technical community (manufacturers, consumers, and general-interest representatives) are published by the Acoustical Society of America as Acoustical Society standards after approval by its standards committee.

These standards are developed as a public service to provide standards useful to the public, industry, and consumers, and to Federal, State, and local governments.



#### **FOREWORD**

Progress in applying technology to the service of mankind usually requires the adoption of standards and regulations. These standards provide guidelines that help to direct a country's technology along useful channels by establishing agreed-upon methods for quantitative evaluations of the characteristics of commercial products and industrial processes.

Progress in noise control requires the stimulation of technology to develop methods for reducing the emissions of sound energy at the source. Standards and regulations on acoustical noise provide the stimulus for progress in the area of noise control. An important aspect of the application of technology to the reduction of noise is the availability of information. This Index is intended to provide access to the key national and international standards related to noise. This Index does not cover government regulations which are adequately compiled elsewhere (see, for example, *Noise Regulation Reporter*, published by the Bureau of National Affairs, Washington, DC).

Earlier compliations were published in the *Journal of the Acoustical Society of America* <sup>1,2</sup> and by the National Bureau of Standards. <sup>3</sup> This Index differs from earlier compliations in that it classifies the standards as follows:

Primary Noise Standards and Test Codes-methods of noise measurement and rating,

Instrumentation Standards-instruments used for the measurement and evaluation of noise,

Other Related Standards-terminology, physiological and psychological acoustics, etc.

This Index includes: (1) International Standards; (2) American National Standards; (3) other U.S. standards; and (4) other national standards (non-U.S.)

At the end of the Index, the reader will find the complete names and addresses of all standardization bodies. These addresses are arranged in three groups: (1) international organizations, (2) U.S. organizations, and (3) national organizations outside the U.S. The authors wish to extend their appreciation to the organizations that furnished information on the standards listed in this Index. It is planned that this Index will be revised as new standards become available.

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<sup>1&</sup>quot;List of Published Standards on Noise and Related Topics," J. Acoust. Soc. Am. 45, 795 (1969).
2W.W. Lang, "Noise Measurement Standards for Machines in situ," J. Acoust. Soc. Am. 54, 960 (1973).
3"Standards on Noise Measurements, Rating Schemes, and Definitions: A Compilation," U.S. Nat. Bur. Stand. Spec. Publ. 386 (Nov. 1973).

#### **USE OF THE INDEX**

The standards in this Index have been assigned a designator which consists of a prefix followed by the numerical or other identifier of the standard. For example, all United States Professional Organizations use the general prefix  $4\beta$ , and the prefix used by the Acoustical Society of America is  $4\lambda$ . In this Index, the standard identified by the Society as STD.5 carries the designator  $4\lambda$ .STD.5. Listed below are the prefixes for International Standards, American Standards, non-U.S. national standards, non-U.S. trade organizations and other organizations using ISO/IEC Standards as national standards.

In addition the standards are divided into the following categories: Primary Noise Standards and Test Codes, Instrumentation Standards and Other Related Standards. In the first category, a short description is given of each standard.

PREFIX	ORGANIZATION OR COUNTRY
1.0	INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)
20	INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)
30	AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
40	U.S. PROFESSIONAL ORGANIZATIONS
4A	Acoustical Society of America (ASA)
4B	American Society for Testing and Materials (ASTM)
4C	American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
4D	Instrument Society of America (ISA)
4E	Institute of Electrical and Electronic Engineers (IEEE)
4F	Society of Automotive Engineers (SAE)
5ø	U.S. TRADE ASSOCIATIONS AND INDUSTRY GROUPS
5A	Air Conditioning and Refrigeration Institute (ARI)
5B	Air Diffusion Council (ADC)
5C	Air Moving and Conditioning Association (AMCA)
5D	American Gear Manufacturers Association (AGMA)
5E	Anti-Friction Bearing Manufacturers Association, Inc. (AFBMA)
5F	Association of Home Appliance Manufacturers (AHAM)
5G	Compressed Air and Gas Institute (CAGI)
5H	Diesel Engine Manufacturers Association (DEMA)
5I	Home Ventilating Institute (HVI)
5J	National Electrical Manufacturers Association (NEMA)
5K	National Fluid Power Association (NFPA)
5L	National Machine Tool Builders Association (NMTBA)
5M	National School Supply and Equipment Association (NSSEA)
5N	Power Saw Manufacturers Association (PSMA)
50	Power Tool Institute (PTI)
6Ø	NATIONAL STANDARDS ORGANIZATIONS (NON-U.S.)
6A	Argentina
6B	Australia
6C	Austria
6D	Belgium
6E ·	Brazil
6F	Canada
6G	Czechoslovakia
6H	Finland
6I	France
6J	Germany
6K	Hungary
6L	India
пп	India

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PREFIX	ORGANIZATION OR COUNTRY
6M	Israel
6N	Japan
60	New Zealand
6P	Norway
6Q	Poland
6R	Portugal
6S	Romania
6T	South Africa
6U	Spain
6V	Sweden
6W	Switzerland
6X	United Kingdom
6Y	U.S.S.R.
7 <i>ø</i>	PROFESSIONAL ORGANIZATIONS, TRADE ASSOCIATIONS AND INDUSTRY GROUPS (NON-U.S.)
7A	International Council on Combustion Engines (CIMAC)
<b>7</b> B	European Committee of Manufacturers of Compressed Air Equipment (PNEUROP)
8ø	ORGANIZATIONS (NON-U.S.) USING ISO/IEC STANDARDS AS NATIONAL STANDARDS
8A	Danish Standards Association (DS)
8B	Finnish Standards Association (SFS)
8C	Acoustical Society of Iran (ASI)
8D	Institute for Industrial Research and Standards (IIRS)
8E	Italian National Standards Organization (UNI)
8F	Netherlands National Committee of the International Electrotechnical Commission (NEC)

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6 <b>Ø</b>	NATIONAL STANDARDS ORGANIZATIONS (NON-U.S.)  Primary Noise Standards and Test Codes  Australia (AS1047, AS1055, AS1217, AS1469), Austria (BB115, S5003, S5010, S5021, S5022, S5031, S5034), Belgium (S01-002, S01-301, S01-302, S01-303, S01-304, S01-305, S01-401, 576-08, 576-11), Brazil NB-95, Canada (Z107.2, Z107-3), Czechoslovakia (090862, 011603, 123062), Germany (DIN9756, DIN42540, DIN45632, DIN45635, DIN52218, TGL0-9756, TGL39-440, TGL39-703, TGL39-767, TGL39-852 Bl.11, TGL45-01248, TGL50-29034, TGL200-1584 Bl.8, TGL200-3110, TGL200-4504), France (S30-004, S30-006, S30-008, S30-010, S31-002, S31-006, S31-007, S31-008, S31-010, S31-011, S31-013, S31-014, S31-015, S31-016, S31-017, S31-018, S31-019, S31-020, S31-022, S31-023, S31-024, S31-025, S31-026, S31-028, S31-029, S31-030, S31-032, S31-033, S31-034, S31-035, S31-036, S31-037, S31-038, S31-039, S31-040, S31-047), Hungary (MSZ8888/23, MSZ18121, MSZ18159/4), India (IS:4242, IS:6098, IS:4758, IS:3028, IS:7194), Japan (B1753, B6004, Z8731), New Zealand NZS9201, Norway (NS4801, NS4805, NS4806, NS4808, NS4809, NS4811), Poland (M-55725, S-04051, S-04052, N-01300, E-06019, E-04257, M-43120, M-35200, M-78030, M-47015), Portugal (NP-302, NP-669, NP-708), Romania STAS6156, STAS6161/1, STAS6161/2, STAS6161/3, STAS6661, STAS6926/16, STAS7150, STAS8799, STAS9678, STAS9997, STAS10009, STAS1083/1, STAS10183/4), South Africa (SABS083, SABS0103, SABS097), Sweden (SIS025131, SEN590111), Spain UNE26231, United Kingdom (BS-5228, BS-4718, BS-4196, BS-4813, BS-3425, BS-4121, CP-3, BS-2750), U.S.S.R. (GOST11870-66, GOST11929-66)	10
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#### 10. INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

#### Primary Noise Standards and Test Codes

10.R362. ISO RECOMMENDATION R362.
MEASUREMENT OF NOISE EMITTED
BY VEHICLES (1964).

Describes method of determining the noise emitted by motor vehicles in motion. An acceleration test at full throttle from a stated running condition and two other methods of test are specified.

10.R495. ISO RECOMMENDATION R495. GENERAL REQUIREMENTS FOR THE PREPARATION OF TEST CODES FOR MEASURING THE NOISE EMITTED BY MACHINES (1966).

Describes procedures to be followed in the objective measurement of the noise emitted by machines. The goal is to indicate general principles by which specific test codes for noise measurements should be formulated.

10.R507. ISO RECOMMENDATION R507.
PROCEDURE FOR DESCRIBING
AIRCRAFT NOISE AROUND AN
AIRPORT (1970).

Provides a means for describing the noise on the ground around an airport produced by one or a number of aircraft; describes methods for measuring the noise, calculating tone-corrected perceived noise levels and mapping noise contours around an airport.

10.R1680. ISO RECOMMENDATION R1680.
TEST CODE FOR THE MEASUREMENT
OF THE AIRBORNE NOISE EMITTED
BY ROTATING ELECTRICAL
MACHINERY (1970).

Gives detailed instructions for conducting tests on rotating electrical machines such as motors and generators of all sizes without limitation of output or voltage.

10.R1761. ISO RECOMMENDATION R1761.
MONITORING AIRCRAFT NOISE
AROUND AN AIRPORT (1970).

Describes methods for monitoring on the ground the noise produced by aircraft around an airport. The noise levels to be reported are approximations to perceived noise level (PNL).

10.R1996, ISO RECOMMENDATION R1996.
ACOUSTICS, ASSESSMENT OF
NOISE WITH RESPECT TO COMMUNITY RESPONSE (1971).

Describes methods for measuring and rating noises in residential, industrial and traffic areas with respect to their interference with rest, working efficiency, social activities and tranquility. The equivalent steady sound level A is obtained by appropriate measurement of the fluctuating noise in a community or by duration corrections added to measured maximum sound levels. Further corrections are added to the equivalent steady sound level for impulsive or total character to determine the rating sound level. When corrective measures are required, a frequency analysis of the offending noise may be necessary and the resulting noise spectrum compared with noise-rating (NR) curves given in the Appendix.

10.R1999. ISO RECOMMENDATION R1999. ACOUSTICS, ASSESSMENT OF OCCUPATIONAL NOISE EXPOSURE FOR HEARING CONSERVATION PURPOSES (1971).

Provides a method for estimating risks of hearing impairment due to exposure to noise. It is intended to facilitate the setting of limits for tolerable exposure to noise during work and the institution of programs for conservation of hearing. The relationship is given between the equivalent continuous sound level and the risk of impairment of hearing that will occur solely as a result of exposure to noise during normal working periods up to 45 years in duration.

10.R2151. ISO RECOMMENDATION R2151.
MEASUREMENT OF AIRBORNE NOISE
EMITTED BY COMPRESSOR/PRIMEMOVER UNITS INTENDED FOR
OUTDOOR USE (1972).

Describes methods for measuring the airborne noise emitted by outdoor compressor/primemover units.

10.R2204. ISO RECOMMENDATION R2204. GUIDE TO THE MEASUREMENT OF ACOUSTICAL NOISE AND EVALUA-TION OF ITS EFFECT ON MAN (1973).

Describes general procedures for the measurement of noise and evaluation of its effects on man.

10.3741. ISO INTERNATIONAL STANDARD 3741. DETERMINATION OF SOUND POWER LEVELS OF NOISE SOURCES

- PRECISION METHOD FOR BROAD-BAND SOUND SOURCES OPERATING IN REVERBERATION ROOMS (1975). Specifies in detail a direct method and a comparison method for determining the sound power level produced by a source.

10.3742. ISO INTERNATIONAL STANDARD 3742. DETERMINATION OF SOUND POWER LEVELS OF NOISE SOURCES - PRECISION METHODS FOR DISCRETE-FREQUENCY AND NARROW-BAND SOUND SOURCES OPERATING IN REVERBERATION ROOMS (1975).

Specifies in detail two laboratory methods and the special requirements necessary for accurate determinations of the sound power level when discrete frequencies or narrow bands of noise are radiated by a source.

### Drafts of Primary Noise Standards and Test Codes

- 10.3740. ISO DRAFT INTERNATIONAL STAN-DARD 3740. DETERMINATION OF SOUND POWER LEVELS OF NOISE SOURCES -GUIDELINES FOR USE OF BASIC STANDARDS AND FOR PREPARATION OF NOISE TEST CODES.
- 10.3743. ISO DRAFT INTERNATIONAL STAN-DARD 3743. DETERMINATION OF SOUND POWER LEVELS OF NOISE SOURCES -ENGINEERING METHODS FOR SPECIAL REVERBERANT TEST ROOMS.
- 10.3744. ISO DRAFT INTERNATIONAL STAN-DARD 3744. DETERMINATION OF SOUND POWER LEVELS OF NOISE SOURCES -ENGINEERING METHODS FOR FREE-FIELD CONDITIONS OVER A REFLECTING PLANE.
- 10.3745. ISO DRAFT INTERNATIONAL STAN-DARD 3745. DETERMINATION OF SOUND POWER LEVELS OF NOISE SOURCES -PRECISION METHODS FOR SOURCES OPER-ATING IN ANECHOIC ROOMS.
- 10.3746. ISO DRAFT INTERNATIONAL STAN-DARD 3746. DETERMINATION OF SOUND POWER LEVELS OF NOISE SOURCES -SURVEY METHOD.

#### Other Related Standards

10.R31. ISO RECOMMENDATION R31 PART VII. QUANTITIES AND UNITS OF

ACOUSTICS (1965).

- 10.R131. ISO RECOMMENDATION R131. EXPRESSION OF THE PHYSICAL AND SUB-JECTIVE MAGNITUDES OF SOUND OR NOISE (1959).
- 10.R140. ISO RECOMMENDATION R140. FIELD AND LABORATORY MEASUREMENTS OF AIRBORNE AND IMPACT SOUND TRANSMISSION (1960).
- O.R226. ISO RECOMMENDATION R226. NORMAL EQUAL-LOUDNESS CONTOURS FOR PURE TONES AND NORMAL THRESHOLD OF HEARING UNDER FREE FIELD LISTENING CONDITIONS (1962).
- 10.R266. ISO RECOMMENDATION R266. PREFERRED FREQUENCIES FOR ACOUSTICAL MEASUREMENTS (1962).
- 10.R354. ISO RECOMMENDATION R354. MEASUREMENT OF ABSORPTION COEFFI-CIENTS IN A REVERBERATION ROOM (1963).
- 10.R357. ISO RECOMMENDATION R357 (SUP-PLEMTARY TO R131). EXPRESSION OF THE POWER AND INTENSITY LEVELS OF SOUND OR NOISE (1963).
- 10.R389. ISO RECOMMENDATION R389.
  STANDARD REFERENCE ZERO FOR THE CALIBRATION OF PURE-TONE AUDIOMETERS (1964).
  ISO RECOMMENDATION R389, ADDENDUM 1.
  STANDARD REFERENCE ZERO FOR THE CALIBRATION OF PURE-TONE AUDIOMETERS.
  ADDITIONAL DATA IN CONJUNCTION WITH THE 9-A COUPLER (1970).
- 10.R454. ISO RECOMMENDATION R454. RELATION BETWEEN SOUND PRESSURE LEVELS OF NARROW BANDS OF NOISE IN A DIFFUSE FIELD AND IN A FRONTALLY-INCIDENT FREE FIELD FOR EQUAL LOUDNESS (1965).
- 10.R512. ISO RECOMMENDATION R512. SOUND SIGNALLING DEVICES ON MOTOR VEHICLES, ACOUSTIC STANDARDS AND TECHNICAL SPECIFICATIONS (1966).
- 10.R532. ISO RECOMMENDATION R532. METHOD FOR CALCULATING LOUDNESS LEVEL (1966).
- 10.R717. ISO RECOMMENDATION R717. RATING OF SOUND INSULATION FOR DWELLINGS (1968).

#### 20, INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)

#### Instrumentation Standards

- 20.123. IEC RECOMMENDATION, PUBLICATION 123. RECOMMENDATIONS FOR SOUND LEVEL METERS (1961).
- 20.179. IEC RECOMMENDATION, PUBLICATION 179. PRECISION SOUND LEVEL METERS (1965).
- 20.225. IEC RECOMMENDATION, PUBLICATION 225. OCTAVE, HALF-OCTAVE AND THIRD-OCTAVE BAND FILTERS INTENDED FOR THE ANALYSIS OF SOUNDS AND VIBRATIONS (1966).
- 20.327. IEC RECOMMENDATION, PUBLICATION 327. PRECISION METHOD FOR THE PRESSURE CALIBRATION OF ONE-INCH STANDARD CONDENSER MICROPHONES BY THE RECIPROCITY TECHNIQUE (1970).
- 20.402. IEC RECOMMENDATION, PUBLICATION 402. SIMPLIFIED METHODS FOR PRESSURE CALIBRATION OF ONE-INCH CONDENSER MICROPHONES BY THE RECIPROCITY TECHNIQUE (1972).

#### Other Related Standards

- 20,50(08). IEC RECOMMENDATION, PUBLICA-TION 50(08). INTERNATIONAL ELECTRO-TECHNICAL VOCABULARY, ELECTRO-ACOUSTICS (1960).
- 20,177. IEC RECOMMENDATION, PUBLICATION 177. PURE TONE AUDIOMETERS FOR GENERAL DIAGNOSTIC PURPOSES (1965).
- 20.178. IEC RECOMMENDATION, PUBLICATION 178. PURE TONE SCREENING AUDIOMETERS (1965).
- 20.303. IEC REPORT, PUBLICATION 303. IEC PROVISIONAL REFERENCE COUPLER FOR THE CALIBRATION OF EARPHONES USED IN AUDIOMETRY (1970).
- 20.318. IEC RECOMMENDATION, PUBLICATION 318. AN IEC ARTIFICIAL EAR, OF THE WIDE BAND TYPE, FOR THE CALIBRATION OF EARPHONES USED IN AUDIOMETRY (1970).

#### 30. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

#### Primary Noise Standards and Test Codes

30.S1.2. ANSI S1.2-1962 (R1976). AMERICAN NATIONAL STANDARD METHOD FOR THE PHYSICAL MEASUREMENT OF SOUND (PARTIALLY REVISED BY S1.13-1971 AND BY S1.21-1972).

Describes sound pressure level measurements on noise sources in free-field and diffuse-field environments. Methods are given for calculating the sound power levels of sources. (This standard is under revision.)

30.S1.13. ANSI S1.13-1971 (R1976). AMERICAN NATIONAL STANDARD METHODS FOR THE MEASUREMENT OF SOUND PRESSURE LEVELS (PARTIAL REVISION OF S1.2-1962 (R1976)).

Provides uniform guidelines for measuring and reporting sound pressure levels observed under different environmental conditions. This standard is applicable to the many different types of sound pressure level measurements commonly encountered in practice.

30.S1.21. ANSI S1.21-1972. AMERICAN NATIONAL STANDARD METHODS FOR THE DETERMINATION OF SOUND POWER LEVELS OF SMALL SOURCES IN REVERBERATION ROOMS (REVISION OF SECTION 3.5 OF S1.2-1962 (R1976)).

Describes a direct method and a comparison method for determining the sound power level of a source. This standard contains test room requirements, source locations and operating conditions, instrumentation, and techniques for obtaining an estimate of the meansquare sound pressure from which the sound power level of the source in octave or one-third octave bands is calculated.

- 30.S1.23. ANSI S1.23-1976. AMERICAN NATIONAL STANDARD METHOD FOR THE DESIGNATION OF SOUND POWER BY MACHINERY AND EQUIPMENT. SEE 4A.STD.5.
- 30.S3.17. ANSI S3.17-1975. AMERICAN NATIONAL STANDARD METHOD FOR RATING THE SOUND POWER SPECTRA OF SMALL STATIONARY NOISE SOURCES. SEE 4A.STD.4.
- 30.55.1. ANSI 55.1-1971. AMERICAN NATIONAL STANDARD TEST CODE FOR

THE MEASUREMENT OF SOUND FROM PNEU-MATIC EQUIPMENT. SEE 5G.S5.1.

#### Instrumentation Standards

- 30.S1.4. ANSI S1.4-1971. AMERICAN NATIONAL SPECIFICATION FOR SOUND LEVEL METERS.
- 30.S1.10. ANSI S1.10-1966 (R1976).
  AMERICAN NATIONAL STANDARD METHOD
  FOR THE CALIBRATION OF MICROPHONES.
- 30.S1.11. ANSI S1.11-1966 (R1976).
  AMERICAN NATIONAL STANDARD SPECIFICATION FOR OCTAVE, HALF-OCTAVE, AND
  THIRD-OCTAVE BAND FILTER SETS.
- 30.S1.12. ANSI S1.12-1967 (R1972).
  AMERICAN NATIONAL STANDARD SPECIFICATIONS FOR LABORATORY STANDARD
  MICROPHONES.
- 30.S3.6. ANSI S3.6-1969 (R1973).
  AMERICAN NATIONAL STANDARD SPECIFICATIONS FOR AUDIOMETERS.
- 30.S3.7. ANSI S3.7-1973. AMERICAN NATIONAL STANDARD METHOD FOR COUPLER CALIBRATION OF EARPHONES.

#### Other Related Standards

- 30,S1.1. ANSI S1.1-1960 (R1976).
  AMERICAN NATIONAL STANDARD ACOUSTICAL
  TERMINOLOGY.
- 30.S1.6. ANSI S1.6-1967 (R1976).
  AMERICAN NATIONAL STANDARD PREFERRED FREQUENCIES AND BAND NUMBERS FOR ACOUSTICAL MEASUREMENTS.
- 30.S1.8. ANSI S1.8-1969 (R1974). AMERICAN NATIONAL STANDARD PREFERRED REFERENCE QUANTITIES FOR ACOUSTICAL LEVELS.
- 30.83.1. ANSI S3.1-1960 (R1971). AMERICAN NATIONAL STANDARD CRITERIA FOR BACKGROUND NOISE IN AUDIOMETER POOMS
- 30.53.2. ANSI S3.2-1960 (R1976).
  AMERICAN NATIONAL STANDARD METHOD
  FOR MEASUREMENT OF MONOSYLLABIC WORK
  INTELLIGIBILITY.
- 30.53.3. ANSI S3.3-1960 (R1976).

- AMERICAN NATIONAL STANDARD METHODS FOR MEASUREMENT OF ELECTROACOUSTICAL CHARACTERISTICS OF HEARING AIDS.
- 30.83.4. ANSI S3.4-1968 (R1972).
  AMERICAN NATIONAL STANDARD PROCEDURE
  FOR THE COMPUTATION OF LOUDNESS OF
  NOISE.
- 30.83.5. ANSI 83.5-1969 (R1976).
  AMERICAN NATIONAL STANDARD METHODS
  FOR THE CALCULATION OF THE ARTICU-LATION INDEX.
- 30.53.8. ANSI S3.8-1967 (R1976). AMERICAN NATIONAL STANDARD METHOD OF EXPRESSING HEARING AID PERFORMANCE.
- 30.53.13. ANSI S3.13-1972. AMERICAN

- NATIONAL STANDARD ARTIFICIAL HEAD-BONE FOR THE CALIBRATION OF AUDIOMETER BONE VIBRATORS.
- 30.S3.19. ANSI S3.19-1974. AMERICAN NATIONAL STANDARD METHOD FOR THE MEASUREMENT OF REAL-EAR PROTECTION OF HEARING PROTECTORS AND PHYSICAL ATTENUATION OF EARMUFFS. SEE 4A.STD.1.
- 30.Y10.11. ANSI Y10.11-1953. AMERICAN NATIONAL STANDARD LETTER SYMBOLS FOR ACQUISTICS.
- 30.Y32.18. ANSI Y32.18-1972. AMERICAN NATIONAL STANDARD SYMBOLS FOR MECHAN-ICAL AND ACOUSTICAL ELEMENTS AS USED IN SCHEMATIC DIAGRAMS.

#### Primary Noise Standards and Test Codes

4A.STD.3. ASA STD.3-1975. TEST-SITE MEASUREMENT OF NOISE EMITTED BY ENGINE POWERED EQUIPMENT. Gives test-site measurement methods for determining the maximum noise emitted by motor vehicles, public conveyances, construction and industrial machinery, and residential and recreational devices powered by engines operating on petroleum-based fuels, coal steam, electricity, or other sources of energy.

4A.STD.4. ASA STD.4-1975. METHOD FOR RATING THE SOUND POWER SPECTRA OF SMALL STATIONARY NOISE SOURCES (ANSI \$3.17). SEE 30.S3.17.

Provides a single number rating for the noise emitted by a small stationary noise source based on its sound power spectrum. The rating number is intended to be readily interpretable by the consumer as a measure of the unwantedness or noisiness of the sound emitted by various products which are basically stationary as opposed to those which are essentially mobile, such as vehicles for transportation, etc.

4A.STD.5. ASA STD.5-1976. METHOD FOR THE DESIGNATION OF SOUND POWER EMITTED BY MACHINERY AND EQUIPMENT (ANSI S1.23). SEE 30.S1.23.

Describes a method for expressing the noise emissions of machinery and equipment in a convenient manner. This standard applies to all machinery and equipment which is essentially stationary in nature and for which a power spectrum is obtainable. This standard will facilitate preparation of labels, equipment specifications, or other documentation that expresses, in quantative terms, the noise emission of a production device.

4C.36-72. ASHRAE STANDARD 36-72.
METHODS OF TESTING FOR SOUND
RATING HEATING, HEATING,
REFRIGERATING, AND AIR-CONDITIONING EQUIPMENT (SUPERSEDES ASHRAE STANDARDS 36-72,
36A-63 AND 36B-63

Establishes a method of determining the sound power levels in frequency bands of heating, refrigeration and air-conditioning equipment that radiates sound

directly either to a room or to the outdoors. The procedure used is commonly called the comparison method.

4E.85. IFEE 85. TEST PROCEDURE FOR AIRBORNE SOUND MEASUREMENTS ON ROTATING ELECTRIC MACHINERY (1973).

Describes test procedures for noise measurements on rotating electric machinery.

4F.J192a. SAE RECOMMENDED PRACTICE J192a.
EXTERIOR SOUND LEVEL FOR SNOWMOBILES (1973) (ANSI S6.2).

Establishes the maximum exterior sound level for snowmobiles and describes the test procedure, environment, and instrumentation for determining this sound level.

4F.J336a. SAE STANDARD J336a. SOUND LEVEL FOR TRUCK CAB INTERIOR (1973).

Recommends design criteria for maximum truck cab interior sound levels and describes the equipment of procedure for determining this sound level.

4F.J672a. SAE STANDARD J672a. EXTERIOR LOUDNESS EVALUATION OF HEAVY TRUCKS AND BUSES (1970).

Establishes the design criteria for loudness of highway trucks, buses and truck-tractors exceeding 6000 lb weight; describes the equipment, test environment, and procedure for determining the loudness.

4F.J919a. SAE RECOMMENDED PRACTICE J919a. SOUND LEVEL MEASUREMENTS AT THE OPERATOR STATION FOR AGRICULTURAL AND CONSTRUCTION EQUIPMENT (1971).

Recommends the instrumentation and procedure to be used in measuring sound levels at the operator station for agricultural and construction equipment, including mobile outdoor industrial equipment.

4F.J952b. SAE STANDARD J952b. SOUND LEVELS FOR ENGINE POWERED EQUIPMENT (1969).

Establishes maximum sound levels for engine-powered equipment and describes the test procedure, environment, and instrumentation for determining these sound levels.

4F.J986a, SAE STANDARD J986a, SOUND

LEVEL FOR PASSENGER CARS AND LIGHT TRUCKS (1973) (ANSI S6.3).

Establishes the maximum sound level for passenger cars and light trucks and describes the test procedure, environment, and instrumentation for determining this sound level.

4F.ARP796. SAE AEROSPACE RECOMMENDED PRACTICE ARP796. MEASUREMENT OF AIRCRAFT EXTERIOR NOISE IN THE FIELD (1965).

Defines measurement techniques and equipment for acquisition and reduction of basic data on aircraft exterior noise.

4F.ARP1071. SAE AEROSPACE RECOMMENDED PRACTICE ARP1071. DEFINITIONS AND PROCEDURES FOR COMPUTING THE EFFECTIVE PERCEIVED NOISE LEVEL FOR FLYOVER ATRCRAFT NOISE (1972) (ANSI S6.4).

Defines the procedure for calculating the effective perceived noise level from a time sequence of tone-adjusted perceived noise levels which are calculated from one-third octave band noise spectra.

4F.J88a. SAE STANDARD J88a. EXTERIOR SOUND LEVEL MEASUREMENT PROCEDURE FOR POWERED MOBILE CONSTRUCTION MACHINERY (1973).

Recommends the instrumentation and procedure to be used in measuring exterior sound levels for powered mobile construction equipment of 20 rated bhp and over.

#### Instrumentation Standards

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- 4D.S37.2. ISA S37.2. GUIDE FOR SPECI-FICATIONS AND TESTS FOR PIEZOELECTRIC ACCELERATION TRANSDUCERS FOR AERO-SPACE TESTING (1964).
- 4F.J184. SAE RECOMMENDED PRACTICE J184. QUALIFYING A SOUND DATA ACQUISITION SYSTEM (1973) (ANSI S6.1).

4F.ARP1080. SAE AEROSPACE RECOMMENDED PRACTICE ARP1080. FREQUENCY WEIGHT-ING NETWORK FOR APPROXIMATION OF PERCEIVED NOISE LEVEL FOR AIRCRAFT NOISE (1969).

#### Other Related Standards

- 4A.STD.1. ASA STD.1-1975. METHOD FOR THE MEASUREMENT OF REAL-EAR PROTECTION OF HEARING PROTECTORS AND PHYSICAL ATTENUATION OF EARMUFFS (ANSI S3.19). SEE 30.S3.19.
- 48.E90-70. ASTM DESIGNATION: E90-70. STANDARD RECOMMENDED PRACTICE FOR LABORATORY MEASUREMENT OF AIRBORNE SOUND TRANSMISSION LOSS OF BUILDING PARTITIONS.
- 4B.E336-71. ASTM DESIGNATION: E336-71. STANDARD RECOMMENDED PRACTICE FOR MEASUREMENT OF AIRBORNE SOUND INSULATION IN BUILDINGS.
- 48.E413-70. ASTM DESIGNATION: E413-70 (R1973). STANDARD CLASSIFICATION FOR DETERMINATION OF SOUND TRANSMISSION CLASS.
- 4F.J377. SAE STANDARD J377. PERFORMANCE OF VEHICLE TRAFFIC HORNS (1969).
- 4F.J994a. SAE RECOMMENDED PRACTICE J994a. CRITERIA FOR BACKUP ALARM DEVICES (1972).
- 4F.ARP865a. SAE AEROSPACE RECOMMENDED PRACTICE ARP865a. DEFINITIONS AND PROCEDURES FOR COMPUTING THE PERCEIVED NOISE LEVEL OF AIRCRAFT NOISE (1972) (ANSI S6.4).
- 4F.ARP866. SAE AEROSPACE RECOMMENDED PRACTICE ARP866. STANDARD VALUES OF ABSORPTION AS A FUNCTION OF TEMPERATURE AND HUMIDITY FOR USE IN EVALUATING AIRCRAFT FLYOVER NOISE (1964).

#### 5Ø. U.S. TRADE ASSOCIATIONS AND INDUSTRY GROUPS

#### Primary Noise Standards and Test Codes

5A.270. ARI STANDARD 270. STANDARD FOR SOUND RATING OF OUTDOOR UNITARY EQUIPMENT (1967).

Describes rating and evaluation of sound levels of outdoor unitary equipment in terms of rating numbers which may be used to predict expected sound pressure levels in a specified acoustical environment at a given distance with the equipment operating under specified conditions.

5A.275. ARI STANDARD 275. STANDARD FOR APPLICATION OF SOUND RATED OUTDOOR UNITARY EQUIPMENT (1969).

From the sound rating number obtained according to ARI Standard 270, a step-by-step procedure is given for predicting the sound level resulting from the operation of unitary air-conditioning and heat pump equipment given the distance to the point at which the equipment noise is to be predicted, the nature of the surroundings and of the installation.

5A.443. ARI STANDARD 443. STANDARD
FOR SOUND RATING OF ROOM FANCOIL AIR-CONDITIONERS (1970).
Requires measurement by one-third octave
bands according to ASHRAE Standard 36-62
and applies subjective corrections to
take into account complex sound spectra
produced by room fan-coil air-conditioners and other air-conditioning equipment.

5A.446. ARI STANDARD 446. STANDARD FOR SOUND RATING OF ROOM AIR-INDUCTION UNITS (1968).

Requires use of the appropriate ASHRAE standard to determine the sound power levels of room air-induction units as functions of both the primary air quantity and the damper pressure drop.

5B.1062R3. ADC TEST CODE 1062R3. EQUIP-MENT TEST CODE (1972). (REPLACES 1062R2).

Describes the techniques and facilities required for the measurement of performance of air distribution or air terminal devices.

5C.300. AMCA STANDARD 300-67. TEST CODE FOR SOUND RATING. Describes method of determining the sound level of an air moving device in a reverberant or semi-reverberant room.

5C.301. AMCA BULLETIN 301. STANDARD METHOD OF PUBLISHING SOUND RATINGS FOR AIR MOVING DEVICES

(1965).
Establishes a standard method of publishing sound ratings for centrifugal fans, axial and propeller fans, power roof and wall ventilators, and steam and hot water unit heaters.

5C.302. AMCA BULLETIN 302. APPLICATION OF SONE LOUDNESS RATINGS FOR NONDUCTED AIR MOVING DEVICES (1965).

Presents a procedure for calculating the loudness of fans at a distance of 1.5 m (5 ft) from the unit in free space with no nearby reflecting surfaces.

5C.303. AMCA PUBLICATION 303. APPLICATION OF SOUND POWER RATINGS
FOR DUCTED AIR MOVING DEVICES
(1965).

Prescribes use of sound power levels for ducted air moving devices operated within their normal operating ranges.

5C.311. AMCA PUBLICATION 311-67. CER-TIFIED SOUND RATINGS PROGRAM FOR AIR MOVING DEVICES.

Establishes standard testing and rating methods and assures the manufacturer that competitive ratings have been checked by an impartial authority.

5D.295.03. AGMA STANDARD 293.03. SPEC-IFICATION FOR MEASUREMENT OF SOUND ON HIGH SPEED HELICAL AND HERRINGBONE GEAR UNITS (1968).

Defines specifications, procedures for noise measurement and limiting values of airborne sound generated by a gear unit whose prime mover is not integral with the unit.

5E.13. AFBMA STANDARD NO. 13. ROLLING BEARING VIBRATION AND NOISE (1968).

Specifies selected methods for the measurement of the structure-borne vibration of certain types of ball bearings.

5F.RAC-2SR. AHAM STANDARD NO. RAC-2SR.
ROOM AIR CONDITIONER SOUND
RATING (1971).

Establishes uniform testing conditions for the sound rating of room air conditioners according to applicable ASHRAE standards.

5G.S5.1. S5.1-1971. CAGI-PNEUROP TEST CODE FOR THE MEASUREMENT OF SOUND FROM PNEUMATIC EQUIPMENT. Describes methods for measuring the sound pressure levels generated by pneumatic equipment.

5H.1972. DEMA TEST CODE FOR THE MEASURE-MENT OF SOUND FROM HEAVY-DUTY RECIPROCATING ENGINE (1972). (PROPOSED ANSI S11.1)

Establishes standard procedures for measuring, recording, and reporting data inside and outside a building housing an engine installation. This code applies to heavy-duty internal combustion engines and driven equipment such as generators, pumps or compressors.

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51.1968. HVI TEST PROCEDURE. SOUND TEST PROCEDURE (1968).

Describes a laboratory procedure for measuring the sound output of home ventilating equipment.

5J.SM33. NEMA STANDARD SM33-1964. GAS TURBINE SOUND AND ITS REDUCTION. Establishes a noise level certification Contains information relative to gas turbine inlet and exhaust sound pressure levels and sound reduction to satisfy surrounding neighborhood requirements.

5J.MG1-12.49, NEMA STANDARD MG1-12.49, MOTORS AND GENERATORS. METHODS OF MEASURING MACHINE NOISE (1972).

Describes test methods for measuring the noise levels associated with unloaded motors and generators according to IEEE 85.

NEMA STANDARD TR1-1972. TRANS-5J.TR1. FORMERS, REGULATORS AND REAC-TORS (SECTION 9-04 AUDIBLE SOUND LEVEL TESTS) .

Gives test conditions and measurement procedures for determining the audible sound levels produced by transformers under field conditions.

5K.T3.9.70.12. NFPA T3.9.70.12. METHOD OF MEASURING SOUND GENERATED

BY HYDRAULIC FLUID POWER PUMPS (1970).

Establishes a uniform basis for measuring, reporting and comparing the sound directly radiated from hydraulic fluid power pumps in terms of loudness, disregarding installation effects.

5K.T3.9.14. NFPA T3.9.14. METHOD OF MEASURING SOUND GENERATED BY HYDRAULIC FLUID POWER MOTORS (1971).

Establishes a uniform basis for measuring reporting, and comparing the sound directly radiated from hydraulic fluid power rotary pumps in terms of loudness, dis-regarding installation effects.

5L,1970, NMBTA TECHNIQUE, NOISE MEAS-UREMENT TECHNIQUES (1970). Recommends measuring techniques and procedures for determining the noise generated by machine tools.

5N.N1.1. PSMA STANDARD N1.1-66, NOISE LEVEL.

procedure for the noise emitted by power saws for infrequent commercial operation in residential areas.

5N.N2.1. PSMA STANDARD N2.1-67. NOISE OCTAVE BAND MEASUREMENT. Establishes a test procedure for measuring noise levels at the ear of a power saw operator.

#### Drafts of Primary Noise Standards and Test Codes

50.1974. PTI STANDARD FOR THE MEASURE-MENT OF SOUND EMITTED BY PORTABLE, STATIONARY AND FIXED ELECTRIC TOOLS (1974) (PROPOSED ANSI \$10.1).

#### Other Related Standards

5M.R1972. NSSEA TEST PROCEDURE. TESTING PROCEDURES FOR MEASURING SOUND TRANS-MISSION LOSS THROUGH MOVABLE AND FOLDING WALLS (R1972).

#### 6Ø. NATIONAL STANDARDS ORGANIZATIONS (NON-U.S.)

#### Primary Noise Standards and Test Codes

#### Australia

- 6B.AS1047. METHOD OF EXPRESSION OF THE PHYSICAL AND SUBJECTIVE MAGNITUDES OF SOUND OR NOISE (English) (1971).
- 6B.AS1055. CODE OF PRACTICE FOR NOISE ASSESSMENT IN RESIDENTIAL AREAS (English) (1973).
- 6B.AS1217. METHODS OF MEASUREMENT OF AIRBORNE SOUND EMITTED BY MACHINES (English) (1972).
- 6B.AS1469. CRITERIA CURVES FOR RATING NOISE AND ESTABLISHING ACOUSTIC ENVIRONMENT (English) (1973).

#### Aus<u>t</u>ria

- 6C.B8115. CIVIL ENGINEERING, NOISE-ABATEMENT AND AUDITORY ACUITY (German) (1959).
- 6C.S5003. BASICS FOR NOISE MEASURE-MENTS, PHYSICAL AND SUBJECTIVE MAGNITUDES OF SOUND (German).
- 6C.S5010. NOISE RADIATION FROM INDUS-TRIAL BUILDINGS; PROTECTION OF LOCAL RESIDENTS (German).
- 6C.S5021. PART 1: BASIC ACOUSTICAL PRINCIPLES FOR TOWN AND COUNTRY PLANNING (German) (1975).
- 6C.S5022. MEASUREMENT OF NOISE EMITTED BY VESSELS ON INLAND WATERWAYS -ACCORDING TO ISO 2922 (German) (1975).
- 6C.S5031. DETERMINATION OF SOUND POWER EMITTED BY SMALL NOISE SOURCES IN REVERBERATION ROOMS; BROAD-BAND SOUND SOURCES (German) (1975).
- 6C.S5034. DETERMINATION OF SOUND FOWER EMITTED BY NOISE SOURCES; FIELD MEAS-UREMENT OVER A REFLECTING PLANE (German) (1975).

#### Belgium

- 6D.S01-002. EXPRESSION OF THE PHYSICAL AND SUBJECTIVE MAGNITUDES OF SOUND OR NOISE (French) (1974).
- 6D.S01-301. METHOD FOR EVALUATING THE NOISE OF AN AIRCRAFT (French) (1974).

- 6D.S01-302. MEASUREMENT OF THE NOISE EMITTED BY VESSELS IN PORT (French) (DRAFT).
- 6D.S01-303. MEASUREMENT OF THE NOISE LEVEL ON BOARD SHIPS (French) (DRAFT).
- 6D.S01-304. MEASUREMENT OF THE NOISE LEVEL EMITTED BY RAIL-BOUND VEHICLES (French) (DRAFT).
- 6D.S01-305. MEASUREMENT OF THE NOISE IN THE INTERIOR OF RAIL-BOUND VEHICLES (French) (DRAFT).
- 6D.S01-401. ACOUSTICS LIMITING VALUES OF NOISE LEVELS IN BUILDINGS (French) (DRAFT).
- 6D.576-08. "IN SITU" MEASUREMENTS OF THE ACOUSTICS TRANSMISSION OF SHOCK NOISE (French) (1965).
- 6D.576-11. NOISE RATING CURVES
   (French) (1970).

#### Brazil

6E.NB-95. LEVELS OF ACCEPTABLE NOISE (Portuguese) (1966).

#### Canada

- 6F.Z107.2. METHODS FOR THE MEASUREMENT OF SOUND PRESSURE LEVELS (ANSI S1.13-1971) (English) (1973).
- 6F.2107-3. METHODS FOR THE DETERMINA-TION OF SOUND POWER LEVELS OF SMALL SOURCES IN REVERBERATION ROOMS (ANSI S1.21-1972) (English) (1974).

#### Czechoslovakia

- 6G.090862. NOISE OF COMPRESSION IGNITION (DIESEL) ENGINES (Czech) (1961).
- 6G.011603. METHODS FOR NOISE MEASURE-MENT (Czech) (1967).
- 6G.123062. FANS PRESCRIPTION FOR MEASUREMENT OF NOISE (Czech) (1972).

#### Germany

6J.DIN9756. MEASUREMENT OF THE LOUDNESS OF CALCULATORS (German/DBR)

- 6J.DIN42540. NOISE OF TRANSFORMERS; CHARACTERISTIC VALUES (SOUND LEVELS) (German/DBR).
- 6J.DIN45632. GUIDELINES FOR THE MEAS-UREMENT OF THE NOISE GENERATED BY ELECTRICAL MACHINES (German/DBR).
- 6J.DIN45635. NOISE MEASUREMENTS ON MACHINES (German/DBR).
- 6J.DIN52218. LABORATORY MEASUREMENTS OF THE NOISE GENERATED BY PLUMBING EQUIPMENT (German/DBR).
- 6J.TGL0-9756. MEASUREMENT OF THE LOUD-NESS OF CALCULATORS (German/DDR).
- 6J.TGL39-440. TEST REQUIREMENTS ON VEHICLE COMPONENTS (German/DDR).
- 6J.TGL39-703. TEST REQUIREMENTS FOR EXHAUST MUFFLERS (German/DDR).
- 6J.TGL39-767. TEST METHODS FOR NOISE MEASUREMENTS ON INTERNAL COMBUSTION ENGINES (German/DDR).
- 6J.TGL39-852 B1.11. INTERNAL NOISE LEVELS OF TRUCKS AND TRAILERS (German/DDR).
- 6J.TGL45-01248. NOISE MEASUREMENTS. MEASUREMENT OF THE SOUND LEVEL OF SEWING MACHINES (German/DDR).
- 6J.TGL50-29034. GUIDELINES FOR THE MEASUREMENT OF THE NOISE GENERATED BY ELECTRICAL MACHINES (German/DDR).
- 6J.TGL200-1584 B1.8. TESTING OF TRANS-FORMERS FROM 6.3 KILOVOLT-AMPERE (German/DDR).
- 6J.TGL200-3110. MEASUREMENT OF THE NOISE OF ELECTRICAL MACHINES (German/DDR).
- 6J.TGL200-4504. MEASUREMENT OF THE NOISE OF HOUSEHOLD ELECTRIC APPLI-ANCES (German/DDR).

#### France

- 61.S30-004. EXPRESSION OF THE PHYSICAL AND SUBJECTIVE MAGNITUDES OF SOUND OR NOISE (French) (1966).
- 61.S30-006. GENERAL REQUIREMENTS FOR THE PREPARATION OF TEST CODES FOR MEASURING THE NOISE EMITTED BY MACHINES (French) (1966).

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- 61.S30-008. GUIDE TO THE MEASUREMENT OF ACOUSTICAL NOISE AND EVALUATION OF ITS EFFECTS ON MAN (French) (1970).
- 61.830-010. NOISE RATING CURVES (French) (1974).
- 61.S31-002. FIELD AND LABORATORY MEASUREMENTS OF AIRBORNE AND IMPACT SOUND TRANSMISSION (French) (1956).
- 61.S31-006. TEST CODE FOR THE MEASURE-MENT OF THE AIRBORNE NOISE EMITTED BY ROTATING ELECTRICAL MACHINERY (French) (1966).
- GI.S31-007. MEASUREMENT OF NOISE EMITTED BY VEHICLES (French) (1965).
- 61.S31-008. PROCEDURE FOR DESCRIBING AIRCRAFT NOISE AROUND AN AIRPORT (French) (1973).
- 61.831-010. ASSESSMENT OF NOISE WITH RESPECT TO COMMUNITY RESPONSE (French) (1974).
- 61.S31-011. TEST CODE FOR THE LABORA-TORY DETERMINATION OF THE EFFICIENCY OF GROUND COATINGS IN REDUCING IMPACT NOISE (French) (1974).
- 61.S31-013. ASSESSMENT OF OCCUPATIONAL NOISE EXPOSURE FOR HEARING CONSERVATION PURPOSES (French) (1969).
- 61.S31-014. TEST CODE FOR THE MEASURE-MENT OF NOISE EMITTED BY WATER SUPPLY INSTALLATIONS (French) (1971).
- 61.S31-015. MEASUREMENT OF NOISE EMITTED BY SANITARY BRASS SOUNDING (French) (1971).
- 61.S31-016. MEASUREMENT OF NOISE EMITTED BY BUILDING BRASS SOUNDING (French) (1971).
- 61.S31-017. TEST CODE FOR MEASURING THE NOISE ON BOARD VESSELS (French) (1972).
- 61.S31-018. NOISE EMITTED BY SHIPS ON INLAND WATERWAYS (French) (1973).
- 61.S31-019. NOISE EMITTED BY RAILBOUND VEHICLES (French) (1973).
- 61.S31-020. MEASUREMENT OF AIRBORNE NOISE EMITTED BY MOTOR-COMPRESSORS FOR USE OUTDOORS (French) (1970).

- 61.S31-022 to 61.S31-025. DETERMINA-TION OF SOUND POWER LEVELS OF NOISE SOURCES (French).
- 61.S31-022. PART 1: PRECISION METHOD FOR BROAD-BAND SOUND SOURCES OPERA-TING IN REVERBERATION ROOMS (French) (1973).
- 61.S31-023. PART 2: PRECISION METHODS FOR DISCRETE-FREQUENCY AND NARROW-BAND SOUND SOURCES OPERATING IN REVERBERATION ROOMS (French) (1973).
- 61.s31-024, PART 3: ENGINEERING METHODS FOR SPECIAL REVERBERANT TEST ROOMS (French) (1973).
- 61.831-025. PART 4: ENGINEERING METHODS FOR FREE-FIELD CONDITIONS OVER A REFLECTING PLANE (French) (1973).
- 61.S31-026. PART 5: PRECISION METHOPS FOR SOURCES OPERATING IN ANECHOIC ROOMS (French) (1973).
- 61.S31-028. TEST CODE FOR THE MEASURE-MENT OF NOISE INSIDE RAILBOUND VEHICLES (French) (1974).
- 61.S31-029. DESCRIPTION AND MEASURE-MENT OF THE PHYSICAL PROPERTIES OF SONIC BOOMS (French) (1973).
- 61.S31-030. TEST CODE FOR THE MEASURE-MENT OF THE AIRBORNE NOISE EMITTED BY PICK-HAMMERS AND PAVING BREAKER (French) (1974).
- 61.831-032. MEASUREMENT OF THE NOISE EMITTED BY EARTH MOVING AND HOIST-ING DEVICE - GENERAL PRINCIPLES FOR THE APPLICATION OF TEST CODES (French) (1974).
- 61.S31-033. TEST CODE FOR THE MEASURE-MENT OF THE NOISE EMITTED BY THE MECHANICAL AND HYDRAULIC SHOVELS -CONDITIONS OF OPERATION AND MEASURE-MENT LOCATIONS (French) (1974).
- 61.S31-034. TEST CODE FOR THE MEASURE-MENT OF THE NOISE EMITTED BY THE LOADING MACHINES MOUNTED ON PNEU-MATIC TIRES - OPERATING CONDITIONS AND MEASUREMENT LOCATIONS (French) (1974).
- 61.831-035. TEST CODE FOR THE MEASURE-MENT OF THE NOISE EMITTED BY THE STATIONARY CONCRETE-MIXERS - OPER-ATING CONDITIONS AND MEASUREMENT

- LOCATIONS (French) (1974).
- 61.S31-036. TEST CODE FOR THE MEASURE-MENT OF THE NOISE EMITTED BY THE MOVABLE CONCRETE-MIXERS - OPERATING CONDITIONS AND MEASUREMENT LOCATIONS (French) (1974).
- 61.S31-037. TEST CODE FOR THE MEASURE-MENT OF THE NOISE EMITTED BY GENER-ATING SETS - OPERATING CONDITIONS AND MEASUREMENT LOCATIONS (French) (1974).
- 61.S31-038. TEST CODE FOR THE MEASURE-MENT OF THE NOISE EMITTED BY BULL-DOZERS - OPERATING CONDITIONS AND MEASUREMENT LOCATIONS (French) (1974).
- 61.S31-039. TEST CODE FOR THE MEASURE-MENT OF THE NOISE EMITTED BY LOADING MACHINES ON CHAINS - OPERATING CON-DITIONS AND MEASUREMENT LOCATIONS (French) (1974).
- 61.S31-040. TEST CODE FOR THE MEASURE-MENT OF THE NOISE IN THE INTERIOR OF MOTOR VEHICLES (French) (1975).
- 61.S31-047. EVALUATION OF INTELLIGIBIL-ITY IN A NOISY ENVIRONMENT (French) (1975).

#### Hungary

- 6K.MSZ8888/23. ENVIRONMENTAL TESTS. ACOUSTIC NOISE TEST (Hungarian) (1971).
- 6K.MSZ11121. NOISE TECHNIQUES. GEN-ERAL TERMS AND REQUIREMENTS (Hungarian) (1953).
- 6K.MSZ11131, NOISE MEASUREMENTS. METHODS OF MEASUREMENT. GENERAL SPECIFICATIONS (Hungarian) (1969).
- 6K.MSZ11143. TOLERATED NOISE LEVEL FOR MEDICAL APPARATUS AND APPLIANCES (Hungarian) (1970).
- 6K.MSZ18150. NOISE LEVELS TEST IN THE ENVIRONMENT AND IN THE ROOMS OF BUILDINGS (Hungarian) (1975).
- 6K.MSZ18151. NOISE LEVELS PERMITTED IN THE ENVIRONMENT AND IN THE ROOMS OF BUILDINGS (Hungarian) (1974).
- 6K.MSZ18154. ACOUSTICAL MEASUREMENT. FIELD AND LABORATORY MEASUREMENT OF AIRBORNE AND IMPACT SOUND TRANSMISSION

- (Hungarian) (1972).
- 6K.MSZ19158/2. NOISE OF VESSELS. MEASUREMENT OF NOISE EMITTED BY VESSELS (Hungarian) (1974).
- 6K.MSZ18159/2. NOISE OF VEHICLES WITH DETERMINED LINE. TEST OF NOISE EMITTED BY RAILWAY-VEHICLES (Hungarian).
- 6K.MSZ18159/4. TEST OF NOISE EMITTED BY PUBLIC MEANS OF CONVEYANCE (Hungarian).

#### India

- 6L.IS:4242. ACOUSTICAL NOISE EMITTED BY BALLASTS FOR GASEOUS DISCHARGE LAMPS, METHOD OF MEASUREMENT OF (English) (1967).
- 6L.IS:6098. AIR-BORNE NOISE EMITTED BY ROTATING ELECTRICAL MACHINERY, METHOD OF MEASUREMENT OF THE (English) (1971).
- 6L.IS:4758. NOISE EMITTED BY MACHINES, METHODS OF MEASUREMENT OF (English) (1968).
- 6L.IS:3028. NOISE EMITTED BY MOTOR VEHICLES, METHOD OF MEASUREMENT OF (English) (1965).
- 6L.IS:7194. SPECIFICATION FOR ASSESS-MENT OF NOISE-EXPOSURE DURING WORK FOR HEARING CONSERVATION PURPOSES (English) (1973).

#### Japan

- 6N.B1753. MEASURING METHOD OF NOISE OF GEARS (Japanese/available in English) (1971).
- 6N.B6004. METHOD OF SOUND LEVEL MEAS-UREMENT FOR MACHINE TOOLS (Japanese/ available in English) (1962).
- 6N.28731. METHODS FOR MEASUREMENT OF SOUND LEVEL (Japanese/available in English) (1966).

#### New Zealand

60.NZS9201: CHAPTER 20. MODEL GENERAL BYLAW FOR THE CONTROL OF NOISE (English) (1974).

#### Norway

6P.NS4801. EXPRESSION OF THE PHYSICAL

- AND SUBJECTIVE MAGNITUDES OF SOUND OR NOISE (Norwegian/same as ISO R131) (1973).
- 6P.NS4805. EXPRESSION OF THE POWER AND INTENSITY LEVELS OF SOUND OR NOISE (Norwegian/same as ISO R357) (1974).
- 6P.NS4806. MEASUREMENT OF NOISE EMITTED BY VEHICLES (English/same as ISO R362) (1970).
- 6P.NS4808. GENERAL REQUIREMENTS FOR THE PREPARATION OF TEST CODES FOR MEASURING THE NOISE EMITTED BY MACHINES (English/same as ISO R495) (1970).
- 6P.NS4809. PROCEDURE FOR DESCRIBING AIRCRAFT NOISE AROUND AN AIRPORT (English/same as ISO R507) (1970).
- 6P.NS4811. MONITORING AIRCRAFT NOISE AROUND AN AIRPORT (English/same as ISO R1761) (1970).

#### Poland

- 6Q.M-55725. MACHINE TOOLS FOR METALS. TEST METHODS AND ADMISSIBLE NOISE LEVELS (Polish) (1970).
- 6Q.S-04051. AUTOMOBILE VEHICLES. TEST METHODS AND ADMISSIBLE OUTSIDE NOISE LEVEL (Polish) (1971).
- GQ.S-04052. AUTOMOBILES. TEST METHODS AND ADMISSIBLE INSIDE NOISE LEVELS (Polish) (1971).
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SILENCERS FOR AIR DISTRIBUTION SYSTEMS (English).

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#### Australia

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