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June 28, 2011

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# AMERICAN NATIONAL STANDARD **IMPULSE SOUND PROPAGATION FOR ENVIRONMENTAL NOISE ASSESSMENT**

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ANSI S12.17-1996

Accredited Standards Committee S12, Noise

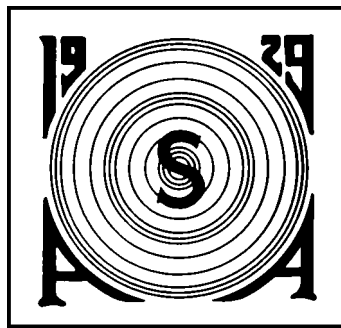
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AMERICAN NATIONAL STANDARD

# **Impulse Sound Propagation for Environmental Noise Assessment**

**Secretariat**  
**Acoustical Society of America**

**Approved 8 August 1996**  
**American National Standards Institute, Inc.**

## **ABSTRACT**

This Standard describes engineering methods to calculate the propagation of high-energy impulsive sounds through the atmosphere for purposes of assessment of environmental noise. The methods yield estimates for the mean *C*-weighted sound exposure level of impulsive sound at distances between the source and receiver ranging from 1 to 30 km. Equations to estimate the standard deviation about the mean *C*-weighted sound exposure levels are provided. The methods apply for explosive masses between 50 g and 1000 kg.

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## Foreword

[This Foreword is not part of ANSI S12.17-1997 *American National Standard Impulse Sound Propagation for Environmental Noise Assessment*.]

This standard contains three informative annexes.

This standard was developed under the jurisdiction of Accredited Standards Committee S12, Noise, which has the following scope:

*Standards, specifications, and terminology in the field of acoustic noise pertaining to methods of measurement, evaluation, and control; including biological safety, tolerance and comfort, and physical acoustics as related to environmental and occupational noise.*

At the time this standard was submitted to Accredited Standards Committee S12 for approval, the membership was as follows:

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