

**NONDESTRUCTIVE  
TESTING STANDARDS-**

*A Review*

**Harold Berger, *editor***

**STP 624**



**AMERICAN SOCIETY FOR TESTING AND MATERIALS**

# **NONDESTRUCTIVE TESTING STANDARDS— A REVIEW**

**A symposium  
sponsored by the National Bureau  
of Standards, American Society for Testing  
and Materials' Committee E-7 on Nondestructive  
Testing, and American Society for  
Nondestructive Testing  
Gaithersburg, Md., 19-21 May 1976**

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# Foreword

The Symposium on Nondestructive Testing Standards was held at the National Bureau of Standards (NBS) in Gaithersburg, Md., 19-21 May 1976. The meeting was sponsored by NBS, the American Society for Testing and Materials (ASTM), and the American Society for Nondestructive Testing (ASNT). The American National Standards Institute (ANSI) was a cooperating society. The sponsoring committee within ASTM was ASTM Committee E-7 on Nondestructive Testing.

Harold Berger, NBS, served as Chairman of the Symposium Organizing Committee and editor of this publication, and S. D. Hart, Naval Research Laboratory, served as Vice-Chairman. Members of the Symposium Organizing Committee were John Aman, E. I. duPont de Nemours and Co.; R. T. Anderson, ASNT; James Borucki, Magnaflux Corp.; Richard Buckley, Texas Instruments, Inc.; Lance Burgess, ASTM; D. L. Conn, ARMCO Steel Corp.; T. D. Cooper, Air Force Materials Laboratory; E. L. Criscuolo, Naval Surface Weapons Center; Donald Eitzen, NBS; T. J. Flaherty, Detek, Inc.; R. B. Johnson, NBS; Tracy McFarlan, Magnaflux Corp.; R. B. Moyer, Carpenter Technology Corp.; W. C. Plumstead, United States Testing Co.; Jane Wheeler, ASTM; and R. W. Zillman, Steel Founders Society of America.

The papers included in this volume were all presented at the symposium.

The assistance of R. B. Johnson, NBS, and his committee on symposium arrangements, and of Jane Wheeler and her staff at ASTM throughout the publication process, is acknowledged.

The contributions of the session chairmen at the meeting also are acknowledged. R. B. Moyer, John Aman, Richard Buckley, James Borucki, D. L. Conn and Donald Eitzen served as Session Chairmen.

## **Related ASTM Publications**

**Acoustic Emission, STP 505 (1972), 04-505000-22**

**Nondestructive Rapid Identification of Metals and Alloys by Spot Tests,  
STP 550 (1973), 04-550000-24**

**Monitoring Structural Integrity by Acoustic Emission, STP 571 (1975),  
04-571000-22**

**Practical Applications of Neutron Radiography and Gaging, STP 586  
(1976), 04-586000-22**

## A Note of Appreciation to Reviewers

This publication is made possible by the authors and, also, the unheralded efforts of the reviewers. This body of technical experts whose dedication, sacrifice of time and effort, and collective wisdom in reviewing the papers must be acknowledged. The quality level of ASTM publications is a direct function of their respected opinions. On behalf of ASTM we acknowledge their contribution with appreciation.

*ASTM Committee on Publications*

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