# relation of

# stp 423

and



american society for testing and materials

# RELATION OF TESTING AND SERVICE PERFORMANCE

A symposium presented at the Sixty-ninth Annual Meeting AMERICAN SOCIETY FOR TESTING AND MATERIALS Atlantic City, N. J., 26 June–1 July, 1966

#### ASTM SPECIAL TECHNICAL PUBLICATION NO. 423

List price \$7.50; 30 per cent discount to members



published by the AMERICAN SOCIETY FOR TESTING AND MATERIALS 1916 Race Street, Philadelphia, Pa. 19103 © BY AMERICAN SOCIETY FOR TESTING AND MATERIALS 1967 Library of Congress Catalog Card Number: 67-20036

#### NOTE

The Society is not responsible, as a body, for the statements and opinions advanced in this publication.

> Printed in Baltimore, Md. June, 1967

### Foreword

The Symposium on Relation of Testing and Service Performance was presented in two sessions during the 69th Annual Meeting of the Society, in Atlantic City, N. J., 26 June–1 July, 1966. The symposium was sponsored by the Administrative Committee on Simulated Service Testing. The symposium chairman was F. G. Tatnall, The Budd Co., who presided at both sessions of the symposium.

## Related ASTM Publications

Simulated Service Testing of Packaging, STP 324 (1963), \$2.50

Simulated Service Testing in the Plastics Industry, STP 375 (1965), \$3.00

## Contents

Introduction	1
Relation Between Testing and Performance of Structures for Deep Sea	
Vehicles—R. B. ALLNUTT	7
Inter-Industry Transference of Test Technology-stephen BLEICH	31
Testing for Satisfactory Life—FRANK NIXON	43
Corrosion Tests and Service Performance-F. L. LAQUE	61
Performance Concept in Building-R. F. LEGGET AND N. B. HUTCHEON	84

THIS PUBLICATION is one of many issued by the American Society for Testing and Materials in connection with its work of promoting knowledge of the properties of materials and developing standard specifications and tests for materials. Much of the data result from the voluntary contributions of many of the country's leading technical authorities from industry, scientific agencies, and government.

Over the years the Society has published many technical symposiums, reports, and special books. These may consist of a series of technical papers, reports by the ASTM technical committees, or compilations of data developed in special Society groups with many organizations cooperating. A list of ASTM publications and information on the work of the Society will be furnished on request.

