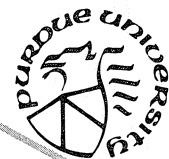
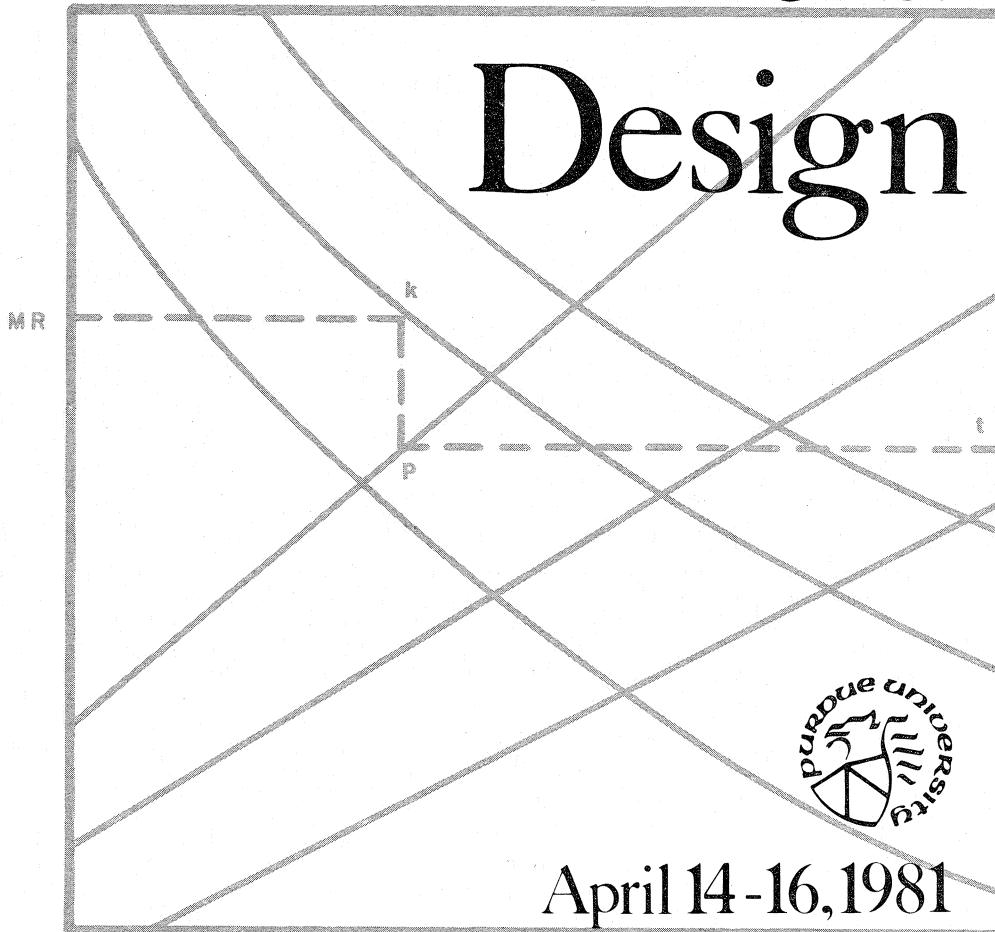


proceedings

2nd International  
Conference on

Concrete  
Pavement  
Design



April 14-16, 1981

**SECOND  
INTERNATIONAL  
CONFERENCE  
ON CONCRETE  
PAVEMENT  
DESIGN**

**APRIL 14-16, 1981  
PURDUE UNIVERSITY  
WEST LAFAYETTE,  
INDIANA, U.S.A.**

## FORWARD

The First International Conference on Concrete Pavement Design was held at Purdue University on February 15-17, 1977. The primary objective of the conference was to present the latest information on economical and practical aspects of PCC pavement design.

Papers prepared for the conference presented a summary of the state of the art, design principles for highway and airport pavements and design of bases and subgrades. The papers at the first conference dealt largely with design and state of the art, although they touched on maintenance, rehabilitation and repair.

The purpose of this conference is to present information on design that has been made available since the last conference in 1977. Also, it was the intent of the Planning Committee to emphasize techniques for planning maintenance and maintenance strategies.

The first call for papers was issued on January 1979. The response to the call for papers was enthusiastic. Papers presented at this conference were selected after being reviewed in two stages. First, a preliminary selection of papers was made based on the synopses submitted in the spring of 1980. At that time a tentative program was laid out, and the papers were grouped according to topic. Finally, each paper was reviewed, and the final selection of papers and the program were based upon this last review process.

Papers published in this proceedings have been organized into the same format as that of the general program, as follows:

- Session 1 — Historical Review and Design Principles
- Session 2 — General Design and Performance
- Session 3 — Composite Pavements
- Sessions 4 & 6 — Airport Pavements
- Sessions 5 & 7 — Highway Pavements
- Session 8 — Pavement Management
- Session 9 — Pavement Rehabilitation

The format of this conference permits the authors to present their own papers. In addition, ample time for discussion from the floor will be permitted after each presentation and the author is given time for a closing statement. The closing session allows some time for discussion of any topics on concrete pavements the participants may wish to give.

The compilation of this proceedings would not have been possible without the help of the Program Committee that assisted in review of the papers. The cooperating agencies and Program Committee are listed on a separate page. Special thanks are expressed to the Federal Highway Administration for financial assistance in publishing this preprint. The assistance of the authors in preparing and presenting their papers needs little comment. A great amount of time has been devoted by each in preparing camera-ready copy for the proceedings. My thanks are presented to the authors for their assistance in preparing the papers according to the instructions sent to them. This has given us uniformity of presentation, and it enhances the proceedings considerably. It is believed that the papers presented in these proceedings will constitute a useful reference tool for engineers engaged in design, construction and maintenance for many years to come.

Eldon J. Yoder, Chairman  
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## **SPONSORS AND SUPPORTING AGENCIES**

The Second International Conference on Concrete Pavement Design has been made possible by the cooperation of various organizations in the United States and other countries. The conference has been planned by a Program Committee representing the following agencies:

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## TABLE OF CONTENTS

FORWORD .....	ii
Eldon J. Yoder Purdue University	
SPONSORS AND SUPPORTING AGENCIES .....	iii
PROGRAM COMMITTEE .....	iii

### SESSION 1: HISTORICAL REVIEW, PRINCIPLES

35 Years of Pavement Design and Performance .....	3
Gordon K. Ray Portland Cement Association	
FHWA Rigid Pavement Research Program — A Historical Review .....	9
T. F. McMahon, R.A. McComb, and W.J. Kenis Federal Highway Administration	
The Analytical Design of Concrete Pavements .....	19
Dr. A. F. Stock University of Dundee, Scotland	
A European Synthesis on Drainage, Subbase Erodability, and Load Transfer in Concrete Pavements .....	27
Michel Ray Member, Technical Committee on Concrete Roads, Permanent International Association of Road Congresses and Algiers Institute of Public Works, Algeria	

### SESSION 2: GENERAL DESIGN AND PERFORMANCE

Mechanistic Overlay Design Procedures for Rigid Pavements .....	43
Kamran Majidzadeh Ohio State University and Resource International, Inc.  George J. Ilves Resource International Inc. and Richard W. May Federal Highway Administration	
Influence of Stress on Plain Concrete Pavement Fatigue Design .....	55
Lorenzo Domenichini and Aurelio Marchionna Universita di Roma, Italy	
Jointed Concrete Pavements in Michigan — Design Performance and Repair .....	67
Charles J. Arnold, Manuel A. Chiunti, and Kurt S. Bancroft Michigan Department of Transportation	

A Computer Program for Slabs With Discontinuities on Layered Elastic Solids .....	79
Y. T. Chou	
U.S. Army Engineer Waterways Experiment Station	
and	
Y. H. Huang	
University of Kentucky	
Mechanistic Design of Rigid Pavements .....	87
Kamran Majidzadeh	
Ohio State University and Resource International Inc.	
George J. Ilves	
Resource International Inc.	
and	
Richard McComb	
Federal Highway Administration	

### **SESSION 3: DESIGN OF COMPOSITE PAVEMENTS**

A Composite Pavement Design Procedure .....	99
T. J. Larsen	
Florida Department of Transportation	
Structural Design of Composite Concrete Pavements .....	107
Starr D. Kohn	
ERES, Inc.	
and	
Michael I. Darter	
University of Illinois at Urbana-Champaign	
Structural Design of Concrete Pavements With Lean Concrete Lower Course .....	119
Robert G. Packard	
Portland Cement Association	

### **SESSION 4: AIRPORT PAVEMENTS**

Introduction to a Rigid Pavement Design Procedure .....	135
Walter R. Barker	
U.S. Army Engineer Waterways Experiment Station	
Some New Construction Methods for Prestressed Concrete Airport Pavements .....	149
Katsuhisa Sato and Tsutomu Fukute	
Ministry of Transport, Japan	
and	
Haruo Inukai	
P.S. Concrete Co. Ltd., Japan	
Design of Airport Pavements as Affected by Load Transfer and Support Conditions .....	161
Ernest J. Barenberg	
University of Illinois	
and	
Donald M. Arntzen	
Airport Design Engineer, City of Chicago	

FAA National Runway Friction Measurement Program .....	171
Thomas H. Morrow Federal Aviation Administration	
Corps of Engineers Design Procedures for Rigid Airfield Pavements .....	185
Raymond S. Rollings Pavement Systems Division, U.S. Army Engineer Waterways Experiment Station	

## **SESSION 5: HIGHWAY PAVEMENTS**

Cement Concrete Pavements on Soft Soils Sensitive to Differential Settlements .....	201
Willy Wilk Betonstrassen AG, Wildegg/Switzerland	
Concrete Overlays for Concrete and Asphalt Pavements .....	211
Edwin C. Lokken Portland Cement Association	
Continuous Nondestructive Evaluation of Concrete Pavements — Some Aspects of the Method Used in France for Government Operated Roads .....	221
J. P. Christory Laboratoire Regional des Ponts et Chaussées de l'Ouest Parisien, France	
Design Procedure for CRCP Based on Theoretical Considerations and Service Behaviour .....	231
Edwin Haber Department of Main Roads, New South Wales, Australia and John Cruickshank Cement and Concrete Association of Australia	
CRCP Design Based on Theoretical and Field Performance .....	239
B. F. McCullough The University of Texas at Austin and Martin L. Cawley Associated Reinforcing Bar Producers	

## **SESSION 6: AIRPORT PAVEMENTS**

Performance of Thin Bonded Portland Cement Concrete Overlays on Military Airfields .....	255
Robert E. Boyer, and Paul T. Foxworthy United States Air Force Engineering and Services Center United States Air Force and William H. Highter Clarkson College of Technology	
Performance of 26 and 20 Years Old Prestressed Concrete Pavements at Algiers Houari Boumediene Airport .....	265
Mohamed Mellouk Bridges and Airports Division, Public Works Department, Algiers and Michel Ray Algiers Institute of Public Works	

The Application of Prestressed Concrete to the Construction of Airfield Pavements .....	277
H. van Noortwijk and A. van de Meent	
Schiphol Airport, Amsterdam, The Netherlands	
Status and Developments in the Construction of Prestressed Concrete	
Runways in European Airports .....	289
Fritz Klunker	
Dyckerhoff and Widmann AG, West Germany	
Pavement Evaluation at Dulles International Airport .....	301
Phil Smith and Harvey J. Treybig	
Austin Research Engineers	
and	
John Fowler	
Howard Needles Tammen and Bergendoff	

## **SESSION 7: HIGHWAY PAVEMENTS**

A Cracking Model for Plain Jointed Portland Cement Concrete Pavements .....	317
D. R. MacLeod	
Carleton University, Canada	
and	
C. L. Monismith	
University of California, Berkeley	
Portland Cement Concrete Shoulder Performance in the United States (1965-1980) .....	331
Charles Slavis	
Portland Cement Association	
Evaluation of Pavement Serviceability on the Interstate System in Oregon .....	343
Gordon Beecroft	
Oregon Department of Transportation	
and	
Lawrence C. Miller	
Portland Cement Association	
Non-Conventional vs. Conventional Concrete Pavements in Arizona .....	351
James P. Delton	
Arizona Department of Transportation	

## **SESSION 8: PAVEMENT MANAGEMENT**

Transportation Research Board Summary Report on National	
Workshops on Pavement Management .....	361
Fred N. Finn, Consultant	
and	
Carl L. Monismith	
University of California, Berkeley	
A Rigid Pavement Rehabilitation Design System .....	367
Stephen B. Seeds, W. Ronald Hudson, and B. Frank McCullough	
The University of Texas at Austin	



Performance of Concrete Pavements in Switzerland — A Check of the Validity of the AASHTO Interim Guide Design Method .....	377
Ivan F. Scazziga Federal Institute of Technology, Switzerland	
Experience with Nondestructive Structural Evaluation of Airport Pavements .....	385
Albert J. Bush, III and Jim H. Hall, Jr. U.S. Army Engineer Waterways Experiment Station	
Nationwide Evaluation of Concrete Pavements — Illinois Demonstration .....	399
Michael I. Darter and Mark B. Snyder University of Illinois at Urbana-Champaign and Roger E. Smith ERES, Inc.	

## **SESSION 9: PAVEMENT REHABILITATION**

Bonded Concrete Resurfacing .....	411
Harold J. Halm American Concrete Pavement Association	
Structural Maintenance of Cement Concrete Pavements, Assessment of Present Ideas — Results of French Experiments .....	421
Francois Verhée Service d'Etudes Techniques des Routes et Autoroutes, Division des Chaussées, France	
Recycling Portland Cement Concrete .....	431
William A. Yrjanson American Concrete Pavement Association	
Rehabilitation Design for Airfield PCC Pavements .....	445
M. Y. Shahin U.S. Army Construction Engineering Research Laboratory and M. I. Darter University of Illinois at Urbana-Champaign	