

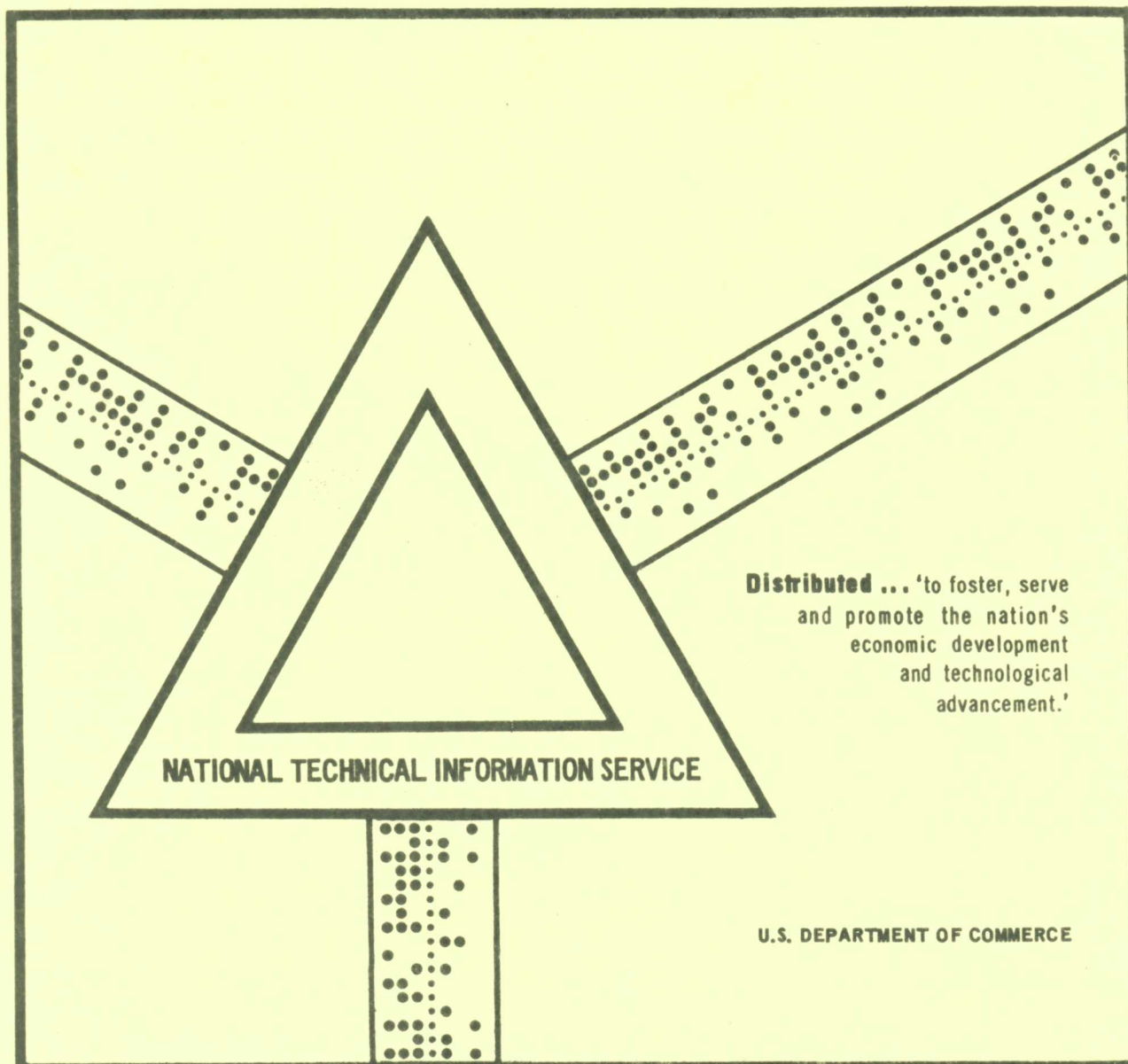
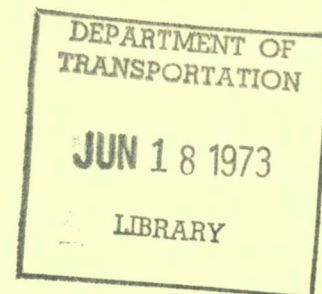
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RESEARCH BIBLIOGRAPHY VENTILATION AND ENVIRON-
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PHASE I

Kaiser Engineers
Oakland, California

August 1971



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Institute for Rapid Transit
Washington, D.C.

**RESEARCH BIBLIOGRAPHY
VENTILATION AND ENVIRONMENTAL
CONTROL IN SUBWAY
RAPID TRANSIT SYSTEMS
Phase I**

**ASSOCIATED ENGINEERS/A JOINT VENTURE
Parsons, Brinckerhoff, Quade & Douglas, Inc.
De Leuw, Cather & Company
Kaiser Engineers**

August 1971

**Prepared by
KAISER ENGINEERS
Consulting Engineers • Oakland, California**

**for
UNITED STATES DEPARTMENT OF TRANSPORTATION
Urban Mass Transportation Administration
Washington, D.C. 20590**

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PREFACE

This milestone report has been prepared for the Institute for Rapid Transit (IRT) in support of the Department of Transportation Project No. DC-MTD-7, "Ventilation and Environmental Control in Subway Rapid Transit Systems." This work is financed in part by Urban Mass Transit Administration Grant No. DOT-UT-290, and in part by matching funds from the membership of the IRT. The final product of this project will be "A Handbook for Subway Environmental Criteria Analysis and Control."

This report contains a research bibliography related to ventilation and environmental control in subways. This Phase I final milestone report supersedes two Phase I interim bibliographies issued in January and March 1971. The use of this report is to provide contractors to the IRT with an updated bibliography. It is anticipated that a more comprehensive bibliography will be issued in Phase II of this project, and that the bibliography will contain abstracts of the more pertinent references.

I. INTRODUCTION

This bibliography is the result of a literature search to encompass references in the fields of passenger comfort, subway environment, high-speed ground transportation and aerodynamics of vehicles in tubes. The extensiveness of the coverage of each subject field varies. The time period covered is generally 30 years, or as far back as 1940.

The passenger comfort area is as extensive as necessary to develop environmental criteria. Therefore, references in this area include those in the fields of physiology, human tolerance levels and preferences, and air conditioning.

The subway environment subject area includes references which reflect the state-of-the-art as well as those which discuss underground conditions, subway environmental conditions, problems and solutions to the problems.

The areas of high-speed ground transportation and the aerodynamics of vehicles in tubes include references which reflect representative, classic state-of-the-art articles.

It was initially intended that the bibliography be annotated. However, in order to provide unanticipated additional support to certain research activities conducted by another contractor to the IRT, some of the effort on this bibliography was reduced and deferred into Phase II; therefore, there are no abstracts in this Phase I milestone report.

A. RESOURCES USED

1. Libraries

University of California

Institute of Transportation and Traffic Engineering -- Richmond
Field Station

Public Health School -- Berkeley

Engineering -- Berkeley

Environmental Design -- Berkeley

Government Documents -- Berkeley

Jet Propulsion Laboratory

Oakland Public Library

Stanford Research Institute

2. Indexes and Bibliographies

GOVERNMENT REPORTS ANNOUNCEMENTS - (Prior to March 25, 1971, entitled U. S. GOVERNMENT RESEARCH AND DEVELOPMENT REPORTS. Currently these announcements include government research and development reports and technical publications disseminated by the National Technical Information Service.) 1965 to present.

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3. Others

MEDLARS mechanical literature search. 1966 to present. (A search of the medical literature which is indexed by the National Library of Medicine.)

Literature references from the co-venturers and IRT.

ASHRAE publications.

Defense Documentation Center Report Bibliographies. (A search of the indexed defense literature.)

B. RESULTS

The results, at this point, are references which have been culled from several thousand citations listed in the resources noted above. These references, listed on the following pages, are arranged alphabetically by author within the four subject areas: passenger comfort, subway environment, high-speed ground transportation and aerodynamics of vehicles in tubes.

All of the references listed, without an asterisk, will be available at the completion of the project from the Institute for Rapid Transit, 1612 K Street, N.W., Washington D.C. 20006. These references will be indexed by subject on 5- by 8-inch edge-notched cards.

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