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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Technical Report 32-1413

Supplement 1

*An Extensive English Language Bibliography
on Graph Theory and Its Applications*

Narsingh Deo

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JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA

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Preface

The work described in this report was performed under the cognizance of the Astrionics Division of the Jet Propulsion Laboratory.

In October of 1969 the Jet Propulsion Laboratory published a technical report entitled "An Extensive English Language Bibliography on Graph Theory and Its Applications," TR 32-1413. This report contains about 2200 entries, and a six-page guide "Where to Begin in Graph Theory."

The report was received with surprising enthusiasm, as evidenced by over three hundred requests for reprints.

This widespread interest in the original bibliography, the rapid growth of papers in graph theory, and its ever expanding scope of applications to such fields as computer sciences have prompted the author to put forth this supplement.

Most of the 841 listings cited in this supplement have appeared in the past two years. Some are papers that were overlooked in the original report. Dissertations or internal reports which were listed in the original bibliography but have been published in journals since are listed.

For the sake of space, only those sources which are in English—original or in translation—have been listed. Unpublished works, private communications, and technical reports not generally available have been omitted. Internal reports subsequently published in open literature, also have been left out. Names of authors have been arranged alphabetically, with their works first in chronological order and then in alphabetical order within the chronological order. Co-authors and their works directly follow the first author alphabetically as originally listed in the work. With this system, the reader may check for works co-authored by certain writers by quickly checking the second, third, or fourth author name throughout the alphabet.

It is hoped that this bibliography will be of service to students of graph theory—both applied and pure. Abbreviations for Journals are those used by *Mathematical Review*.

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During the preparation of this supplement, helpful comments and suggestions have been provided by many individuals. Included among these are: Professor Frank Harary, Professor I. G. Good, Dr. James Turner, Dr. T. C. Hu, Professor W. K. Chen, Professor Jurg Nievergelt, and Mr. Barry Shay. The author is thankful to Carol Sterkin of the JPL Library for her assistance in literature search and to Marie Sumpter for the typing of the final draft. Thanks are also due to Benn Martin and Tom Gottlieb for providing the proper atmosphere for this work to be undertaken. Finally the author would like to thank his wife, Karen, who assisted in sorting, verifying, and proofreading.

Contents

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