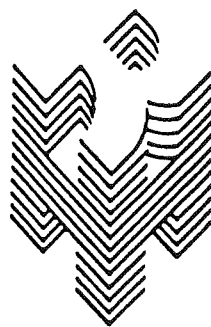


PROCEEDINGS OF
THE NINTH INTERNATIONAL
CONFERENCE ON
SYSTEMS ENGINEERING

July 14-16, 1993



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PREFACE

This important series of Conferences arose from technical cooperation between the Technical University of Wroclaw (Poland), Coventry Polytechnic (England), Wright State University (USA) and the University of Nevada, Las Vegas (USA). Prior to 1980 a series of International Conferences on Systems Science had been held in Wroclaw, Poland. In 1980, it was decided that the Conference would change venue on alternate years and be held in Coventry, England and, at the same time, change emphasis from Science to Engineering when hosted in England. Consequently the first and second International Conferences on Systems Engineering were held at Coventry, England in 1980 and 1982. In 1982 it was decided that the Engineering area of the series of Conferences would also be held in the USA each third year. The third and fifth International Conferences on Systems Engineering were held in Dayton, Ohio, USA. The Seventh International Conference on Systems Engineering was held in Las Vegas, Nevada, USA. This year, 1993, the Ninth International Conference on Systems Engineering is held in Las Vegas, Nevada, USA.

The University of Nevada, Las Vegas is very pleased to host this Ninth International Conference of Systems Engineering. Research in Systems Engineering is a very important concept in the advancement of engineering sciences. It attempts to integrate many of the traditional engineering disciplines to solve complex functioning engineering systems dependent on components from all the disciplines. The research papers contained in these proceedings reflect the state of the art in systems engineering from all over the world and should serve as vital references to researchers to follow.

I wish to thank the authors of papers, the Program Committee, the Organizing Committee, Industrial Sponsors and all others who have contributed to the success of the Conference.

William R. Wells
Conference Chairman

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Acknowledgment

The Organizing Committee wishes to express its appreciation to Sprint Telephone Company for its contribution to the Conference through the publication of the Proceedings.

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