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AN EVALUATION OF A RESPONSE SPECTRUM APPROACH TO SEISMIC DESIGN OF BUILDINGS

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FOREWORD

The study described in this report was conducted as part of the Cooperative Federal Program in Building Practices for Disaster Mitigation initiated in the Spring of 1972 under the leadership of the National Bureau of Standards. The cooperative program, with funding provided by the National Science Foundation and the National Bureau of Standards, seeks to integrate the extensive activities and resources in Federal agencies with the work of professional organizations, private practitioners, and state and local governments in support of improved building practices.

"An Evaluation of a Response Spectrum Approach to Seismic Design of Buildings" was a study project only. In terms of scope, it was defined as an evaluation of the applicability and costs of new-type procedures such as the response spectrum approach to seismic design, which had been proposed by various segments of the engineering profession.

Design procedures outlined in the report were selected as appropriate for specific buildings under examination and were not intended as procedures recommended for general use. Similarly, the values of parameters set forth were "trial run" values only.

Applied Technology Council and National Bureau of Standards intend that the procedures and values set forth here should in no way be interpreted or understood to be more than test concepts. The purpose of this study was to attempt to evaluate certain design procedures for future application. The procedures reported on should not be adopted without recognition of the various aspects of the design procedures outlined and the completion of the further research where needed as recommended in Chapter VI.

The views expressed in this report are those of the Engineering Panel and Principal Investigator engaged by the Applied Technology Council and do not necessarily reflect the views of the sponsoring agencies or their consultants.

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