
Guide Specification and Commentary for Vessel Collision Design of Highway Bridges

Volume I: Final Report

February 1991

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Published by the

American Association of
State Highway and
Transportation
Officials



444 North Capitol Street, N.W., Suite 225
Washington, D.C. 20001

PREFACE

This document contains specifications for the vessel collision design of highway bridges. The specifications are the recommendations of a team of internationally recognized experts, composed of consulting engineers, state highway engineers and federal agency representatives from throughout the United States. The specifications are comprehensive in nature and embody new concepts which have not been included in previous design provisions. They are based on both the observed performance of bridges during past vessel collisions and on recent research conducted in the United States and abroad. A commentary documenting the basis for the specifications and examples illustrating their use are included.

This document was prepared for the Federal Highway Administration (FHWA), Office of Research, Structures Division, under pooled fund contract DTFH61-88-C-00011 and was sponsored by eleven (11) States. The Specifications were developed by Greiner, Inc., Irving, Texas, a consulting engineering firm under contract to the FHWA. The principal investigator for Greiner was Mr. Michael A. Knott. Subconsultants to Greiner were Cowiconsult Ltd., Copenhagen, Denmark (Mr. Ole Damgaard Larsen); Rowe Research and Engineering, Inc., Alexandria, Virginia (Dr. William Rowe); and Mr. Gerhard Woisin, a consulting naval architect from Hamburg, West Germany.

To ensure representative input and adequate consideration of the many factors involved, two technical committees were established to review and comment on the Specification as it was being developed.

The first review committee consisted of FHWA representative Mr. Eric Munley, and members from each of the pooled-fund sponsoring states as listed below:

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