NOTICE OF CHANGE MIL-HDBK-1002/2A NOTICE 1 5 June 1997

MILITARY HANDBOOK

LOADS

TO ALL HOLDERS OF MIL-HDBK-1002/2A:

1. THE FOLLOWING PAGES OF MIL-HDBK-1002/2A HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

NEW PAGE	DATE	SUPERSEDED PAGE	DATE
105 106	15 October 1996 5 June 1997	No Change 106	15 October 1996
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- 2. RETAIN THIS NOTICE AND INSERT BEFORE TABLE OF CONTENTS.
- 3. Holders of MIL-HDBK-1002/2A will verify that page changes and additions indicated above have been entered. This notice page will be retained as a check sheet. This issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the military handbook is completely revised or canceled.

CUSTODIAN PREPARING ACTIVITY
NAVY -YD2 NAVY -YD2

PROJECT NO. FACR-1166

AMSC N/A AREA FACR

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MIL-HDBK-1002/2A

avoid vortex-shedding phenomenon, rectangular beams and girders should have a width (parallel to wind direction)-to-depth (perpendicular to wind direction) ratio of less than 0.75 or greater than 3.5.

7.6.5 <u>Cranes and Derricks</u>. For non-operating conditions, design cranes and derricks for external wind pressures as described above. For criteria for operating conditions, refer to DM-38.01.

Section 8: EARTHQUAKE FORCES

- 8.1 <u>Class A Structures</u>. The provisions of the AASHTO design standard apply.
- 8.2 <u>Class B Structures</u>. Design buildings in seismic areas in accordance with NAVFAC P-355, <u>Seismic Design for Buildings</u>. Design essential buildings according to NAVFAC P-355.1, <u>Seismic Design Guidelines for Essential Buildings</u>. In no case shall the requirements be less than those in NAVFAC P-355.
- 8.2.1 Serviceability. The criteria in NAVFAC P-355 are intended to provide for reasonable life safety. However, structures designed to this criteria may sustain appreciable damage if exposed to a large earthquake (site acceleration .3g or greater). Designs should incorporate materials and details of construction to minimize damage that would result from strong ground motion and the corresponding destruction and displacement in the structure. If there is a stated requirement for the structure to remain functional after a large earthquake, devote additional attention to the design (refer to NAVFAC P-355.1).
- 8.2.2 <u>Parts or Components</u>. For forces on parts or components of a structure, use the value computed in accordance with NAVFAC P-355.
- 8.2.3 <u>Earthquake Zones</u>. Earthquake zones are indicated in NAVFAC P-355.
- 8.2.4 Existing Structures . Existing buildings (except steel braced frames and special moment resisting frames) are considered seismically adequate if designed and constructed in accordance with NAVFAC P-355 (1982 edition or later). Other buildings are seismically adequate if they meet the Federal Emergency Management Agency (FEMA) 178, NEHRP Handbook for the Seismic Evaluation of Existing Buildings , June 1992, evaluation. Buildings are normally evaluated for 85 percent of the demand for new construction. Essential buildings are designed to provide

increased performance capability. (Guidelines are available from the Naval Facilities Engineering Service Center (NFESC), Code ESCOOCE9.)

8.3 <u>Class C Structures</u>. Criteria relating to earthquake forces on piers and wharves are presented in MIL-HDBK-1025/1. Criteria relating to other types of Class C structures await development. In the interim, criteria for Class B structures should be used to the extent applicable.

NAVFAC P-397

Structures to Resist the Effects of Accidental Explosions.

(Unless otherwise indicated, copies are available from Naval Publications and Forms Center, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

TM 5-809-1

Load Assump tions for Buildings

(Unless otherwise indicated, copies are available from U.S. Army Publications Distribution Center, 1655 Woodson Road, St. Louis, MO 63114.)

NON-GOVERNMENT PUBLICATIONS :

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

HB-13 Standard Specifications for Highway Bridges.

(Unless otherwise indicated, copies are available from American Association of State Highway and Transportation Officials (AASHTO), 444 N. Capitol Street, N.W., Washington, DC 20001.)

AMERICAN CONCRETE INSTITUTE (ACI)

ACI-318 Building Code Requirements for Reinforced Concrete.

(Unless otherwise indicated, copies are available from American Concrete Institute (ACI), 22400 W. Seven Mile Road, Box 19150, Redford Station, Detroit, MI 48219.)

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC Manual of Steel Construction.

(Unless otherwise indicated, copies are available from American Institute of Steel Construction (AISC), 1 East Wacker Drive, Suite 3100, Chicago, IL 60601.)

AMERICAN RAILWAY ENGINEERING ASSOCIATION (AREA)

AREA Manual for Railway Engineering.

(Unless otherwise indicated, copies are available from American Railway Engineering Association (AREA), 50 F Street, N.W., Suite 7702, Washington, DC 20001.)

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

Wind-Induced Vibrations in Antenna Members.

(Unless otherwise indicated, copies are available from American Society of Civil Engineers (ASCE), 345 East 47th Street, New York, NY 10017.)

BUILDING SEISMIC SAFETY COUNCIL (BSSC)

FEMA 178 NEHRP Handbook for the Seismic Evaluation of Existing Buildings.

(Unless otherwise indicated, copies are available from Building Seismic Safety Council (BSSC), 1201 L Street, N.W., Suite 400, Washington, DC 20005.)

INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS (ICBO)

Uniform Building Code

(Unless otherwise indicated, subscriptions are available from International Conference of Building Officials, 5360 S. Workman Mill Road, Whittier, CA 90601.)

American Civil Engineering Practice, Volume II, R. W. Abbett, John Wiley and Sons, Inc., New York, NY 10016.

Structural Dynamics, Mario Paz, Van Nostrand Reinhold, New York, NY.

Dynamics of Ice Forces on Piers and Piles, Canadian Journal of Civil Engineering, Volume 3, pp. 305-341.

Mark's Standard Handbook for Mechanical Engineers, Avallona and Baumeister, McGraw-Hill Book Co., New York, NY, 9th Ed., 1987.

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