

Northern
Harbors
& Small
Ports
Operation and
Maintenance

Alan Sorum

Published by
Alaska Sea Grant College Program
University of Alaska Fairbanks

MAB-56
\$20.00

Elmer E. Rasmuson Library Cataloging in Publication Data:

Sorum, Alan.

Northern harbors and small ports : operation and maintenance / Alan Sorum. -
Fairbanks, Alaska : Alaska Sea Grant College Program, University of Alaska
Fairbanks, 2006.

162 p. : ill. ; 22 cm. - (MAB ; 56) Includes bibliographical references and index.

1. Harbors—Cold weather conditions. 2. Harbors—Maintenance and repair—Cold
weather conditions. 3. Harbor masters—Cold weather conditions. 4. Marinas—Cold
weather conditions. I. Title. II. Sorum, Alan. III. Series: Marine advisory bulletin ; 56.

TC209.S67 2006

ISBN 1-56612-102-7

Credits

This book is published by the Alaska Sea Grant College Program, supported by the U.S. Department of Commerce, NOAA National Sea Grant Office, grant NA16RG2321, projects A/161-01 and A/152-20; and by the University of Alaska Fairbanks with state funds. The University of Alaska is an affirmative action/equal opportunity employer and educational institution. Funds for publishing were provided by the Alaska Department of Transportation and Public Safety, ADN no. 2553411.

Sea Grant is a unique partnership with public and private sectors combining research, education, and technology transfer for public service. This national network of universities meets changing environmental and economic needs of people in our coastal, ocean, and Great Lakes regions.

Book design is by Jen Gunderson, cover design is by Dave Partee, and editing is by Sue Keller. Front cover photo of Valdez, Alaska, and back cover photo of Sitka, Alaska, are by Kurt Byers.

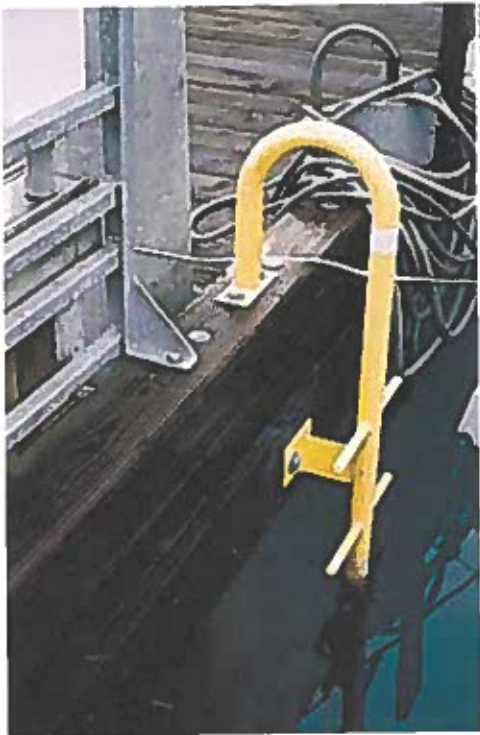


Alaska Sea Grant College Program
University of Alaska Fairbanks
P.O. Box 755040
Fairbanks, Alaska 99775-5040
Toll free (888) 789-0090
(907) 474-6707 • Fax (907) 474-6285
www.alaskaseagrant.org

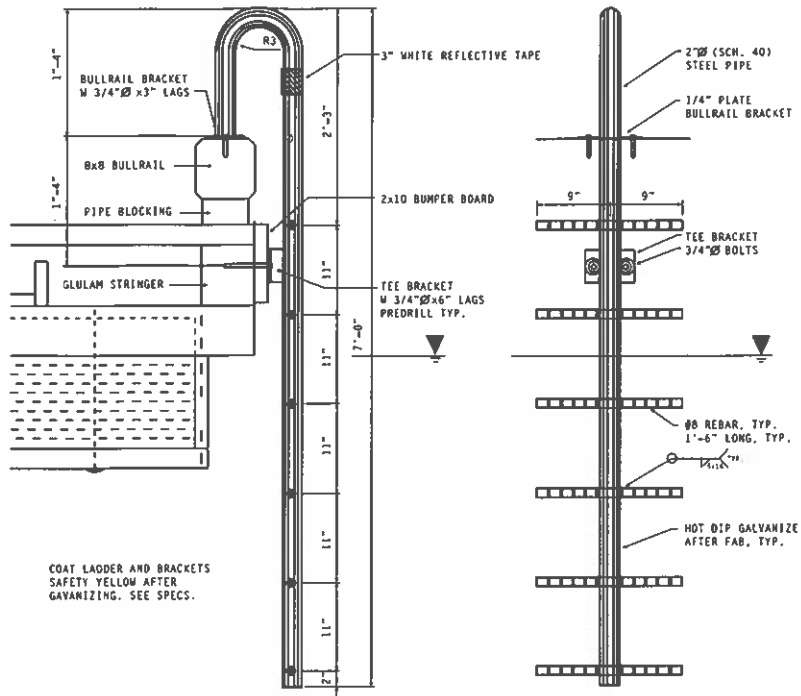
Water rescue equipment

Harbors are increasingly providing more equipment on their docks to help rescue a person who has fallen in the water. A traditional tool is the ring life buoy (RLB) with an attached line. RLBs should be installed in highly visible cabinets spaced about 75 feet apart. Another useful tool is called a throw bag. Throw bags contain between 40 and 60 feet of high-strength line that can be thrown easily to a person in the water. Harbor staff members who are given a little practice can consistently hit a target 40 feet away twice within 20 seconds. This performance is much better than can be accomplished with a ring life buoy.

Provide time for harbor staff to train with ring life buoys and throw bags every six months. This training improves the chance of a successful water rescue, and looks good on your OSHA safety training log. It also insures that equipment is occasionally removed



Safety ladder, installed according to Transpac Marinas mechanical drawing, in Valdez Harbor, Alaska.



This safety ladder is very effective for self-rescue of people who fall in the water. Floating docks have a freeboard height of over 16 inches, and they make it difficult to climb out of the water. These ladders can cost around \$150 each, installed. Courtesy Transpac Marinas.

from its container, inspected, and used. Most coastal community fire departments have a dive or swift water rescue team that would likely enjoy training with the local harbor staff.

Safety ladders are becoming more popular in Alaska and along the Pacific Northwest coast. The design shown here, from Transpac Marinas, is very simple to build, easy to install, and works well.

Personal protective equipment

Harbor employees should always wear a personal flotation device (PFD) while on board skiffs or when conducting work that requires them to hang over a dock. Recent PFD designs are greatly improved, and many harbor employees routinely wear USCG approved float coats as a matter of course. Both the Stearns and