

COMMERCIAL DIVER TRAINING MANUAL

6TH EDITION

HAL LOMAX

“At the very core of commercial diver training are two essentials: Going up and down in the water column safely and performing useful and effective work underwater. This textbook is the first to combine both of these objectives into a single, well-written resource. The author combines vast and diverse skill sets gleaned from decades of experience with the fundamental foundations of the *U.S. Navy Diving Manual*. This text is a must for the diving library of any working diver or entry-level trainee worldwide.”

— Don Barthelmess, Professor, Santa Barbara City College
Marine Diving Technology Department

“This informative and superb 6th edition of the *Commercial Diving Training Manual* represents a labor of love and a commitment to the industry and divers from an individual who has spent most of his life learning and perfecting the craft of commercial diving.

Hal Lomax, in this manual, has combined his knowledge and the knowledge of many persons throughout history experienced in commercial diving. Read it, follow its guidance, stay safe and (as Hal would advise), live it! You, the commercial diver, are or will become engaged in a hazardous though inherently safe occupation if you study the contents of this manual. Follow the guidance contained within and always keep safety as your guiding light.”

— Dr. Ross Saxon, LCDR USN (Ret)

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INTRODUCTION

The 6th Edition of the *Commercial Diver Training Manual* represents an almost total rewrite. Where previous editions were designed to be utilized in conjunction either with the *NOAA Diving Manual* or the *U.S. Navy Diving Manual*, the 6th Edition has been written as a stand-alone work that covers history, physics, physiology, diving medicine, and first aid in addition to those chapters devoted to diving technique, diving equipment, and working underwater.

This manual is presented with the understanding that fully qualified instructors experienced in underwater work will provide any further explanation required by the reader. At the same time, the intent was to provide a manual to enhance both the theoretical and the practical training of the diver, with a vision of producing graduates that are more knowledgeable and well-informed in their chosen trade, performing their assigned tasks in a safe and productive manner. To that end, this manual strives to present the following: diving physics in a clear, concise manner; the latest theory and procedure in physiology and diving medicine; the latest in practice and procedure both inland and offshore; and the most commonly used diving and support equipment accepted for use in today's industry.

While it is understood it would require several volumes to address every conceivable task performed on every type of underwater project employing commercial divers, this manual endeavors to cover the most commonly performed tasks and the most common underwater operations. By presenting these more common projects and tasks in detail, it is hoped the reader will be better informed and better prepared for a career underwater. In addition, by further illustrating both technique and safety concerns with case studies and personal accounts from the author's career, the manual shows the reader these are more than just words being presented: suggestions help the reader become more proficient and safety guidelines keep the reader from injury or death. That is the real intent of this manual.