HOW TO USE THIS BOOK

This book is a collection of problems categorized by subject. Just as a fish is born knowing how to swim, you probably feel that you already know how to use this book. Actually, there are several ways to use it, and some of them are even pretty good. Only one way, however, will maximize the return on your investment in time.

At one end of the effort spectrum are people who will work through the book from beginning to end, studying every detail, duplicating every calculation, and making sure that they "know" the underlying subject. At the other end of the effort spectrum are people who will simply take the book into the exam with them hoping to find a similar problem whose solution steps they can mimic.

Some will only study from this book. Others will use it in conjunction with the *Mechanical Engineering Reference Manual*.

Some will go through this book from beginning to end, using it as a secondary review. Others will go in and out of it, alternating their time between this book and others.

Admittedly, when I wrote the book, I had a vision of how it would be used. I was pretty certain that most people would study a chapter from the *Mechanical Engineering Reference Manual*, solve all the practice problems in *Practice Problems for the Mechanical Engineering PE Exam*, and then turn to this book for additional exposure to exam-level problems. Then they would return to their *Reference Manual* to study the next chapter.

This book was never intended to cover every type of exam problem or to be an all-in-one review. Though I tried to include extremely targeted problems, I did not write this book to be a diagnostic tool. You shouldn't solve these problems and then design your review around what you didn't know. If you don't do well on a particular problem, I wouldn't want you to spend the next three months preparing for that type of problem.

The tried-and-true method of exam preparation is a systematic, thorough, and complete approach based on long-term exam trends, not based on transient and odd-ball fads. That's what the *Mechanical Engineering Reference Manual* is intended to provide.

The value of a collection of problems such as this does not lie in its ability to guide your preparation. Rather, the value is in giving you an opportunity to bring together all of your knowledge and to practice your test-taking skills.

The three most important skills are (1) learning which questions to work and which to skip, (2) organizing your references and other resources, and (3) managing your time. That means you have to attempt the problems when you are ready to practice those skills: after you have studied the underlying subject matter.