

INTRODUCTION TO FIRE PROTECTION



INTRODUCTION TO FIRE PROTECTION

Third Edition

Robert W. Klinoff

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Introduction to Fire Protection, Third Edition

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P R E F A C E

The study of fire technology is multifaceted. It involves the study of the complete fire protection system, including fire department resources, private resources and systems, chemistry and physics of fire, safety, fire department management, emergency management, the legal environment, and prevention.

ABOUT THIS BOOK

This text introduces the student to the many areas of fire protection. It is primarily intended for the person who wishes to become a firefighter. An overview of aspects of the selection process is presented to assist the student in preparing for this very competitive process. Fire protection careers other than firefighter in the public and private sector are presented as well.

This text introduces the student to the concept of the systems approach to fire protection by presenting the system components of modern fire department responsibility, including suppression, prevention, public education, emergency medical service, hazardous materials response, and urban search and rescue.

Throughout this text, safety and professionalism are stressed. Other concepts emphasized are incident effectiveness, customer service, physical fitness, training, and fire prevention.

This text meets the FESHE Guidelines for *Principles of Emergency Services*.

HOW TO USE THIS BOOK

First, this book presents the requirements for and advantages of a degree in fire technology. Then it describes the selection process and gives job descriptions to help the student decide if this is a career he or she is interested in and can qualify for.

The text can be divided into seven areas: fire protection as a career (Chapters 1 and 2), the history and future of the fire protection system (Chap. 3), chemistry and physics (Chap. 4), support functions (Chapters 7, 8, 9, and 10), the legal environment (Chap. 11), systems and equipment (Chap. 12), and emergency operations (Chapters 13 and 14). The areas of the text can be taught out of sequence, but each area should be kept together as a unit for better understanding. The chapters on emergency operations are presented last as they require a base of knowledge developed in the preceding chapters. The text is designed to be presented over either a quarter or semester length course schedule.

FEATURES OF THIS BOOK

- A list of **learning objectives** at the beginning of each chapter identifies what the student is supposed to accomplish
- Throughout the chapters, **notes** highlight important information and **safety** issues are identified
- In the Notes section, applicable **National Fire Protection Association standards** are identified. Identified throughout the text, and contained in a glossary at the back of the book, are **key terms** that may be unfamiliar to the student. These should be reviewed before the chapter is read to aid the student in understanding the text
- Also included at the end of each chapter is a list of **review** and **discussion questions** for the student to use as a review of the material presented
- **Appendices** provide further reference material, including a list of acronyms commonly used in the fire service, a list of National Fire Protection Association Standards, Incident Command System resource typing, fire loss statistics, a representative physical ability test, a metric conversion list, and fire-related Web sites.

NEW TO THIS EDITION

In revising this book, the focus was placed on ensuring the information within the text remained current, as well as on introducing new advances or technologies in the fire services from recent years. Consequently, the third edition provides a comprehensive look at the world of the fire service today:

- A **New Section on Goal Setting** provides practical advice to students on how to effectively plan, set, and reach goals in order to be successful in a career in the fire service
- Up to date information on **Mobile Data Computers (MDC)** and **Thermal Imaging Cameras** is included to ensure that students remain current with the latest technologies in the fire service
- **New Sections on Life Safety Initiatives & Training Safety** stress the importance of safe actions to reduce injury and duty deaths among firefighters
- **New Section on National Incident Management System (NIMS)** provides an overview to this new Homeland Security Presidential Directive, which creates a nationwide approach to prevent, prepare, respond to, and recover from domestic incidents
- **Updated Statistics, Examples & References** offers students a handy resource for current information in order to be better equipped to enter the fire service

SUPPLEMENT PACKAGE

To assist instructors in classroom preparation and training, Thomson Delmar Learning offers an **e.resource CD-ROM** to accompany this book, which contains:

- An electronic **Instructor's Guide** including lesson plans for each chapter, as well as Answers to the Review Questions

- Updated **PowerPoint Presentations** including integrated art to enhance classroom presentations
- An **ExamView Testbank** to enable instructors to generate quizzes and exams
- **Case Scenarios** that depict actual incidents throughout the U.S. and can be utilized to promote classroom participation and discussion of important topics facing the fire service
- A **FESHE Correlation Grid** highlights the National Fire Academy key course outcomes for *Principles of Emergency Services* and references the chapter in which content is covered in the book

ABOUT THE AUTHOR



Robert W. Klinoff is a California Certified Chief Officer, National Fire Academy Executive Fire Officer, and Chief Deputy Fire Chief with the Kern County Fire Department. He is a 28-year fire service veteran. His background includes experience as a firefighter while a student at Columbia College, as an ambulance driver, as a firefighter with the U.S. Forest Service, as a firefighter with the City of San Gabriel, California, and 26 years with the Kern County Fire Department. He has served the Kern County Fire Department in Operations and as a Training Officer and Fire Marshal.

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