

Ifsta Pumping Apparatus Study Guide

FSTA NEW Editions Streamline Driver/Operator Training The new editions of these bestselling IFSTA fire apparatus driver/operator training materials mark a new approach to training driver/operators. Previously, IFSTA published two separate manuals with student and instructor support materials: Pumping Apparatus Driver/Operator Handbook and Aerial Apparatus Driver/Operator Handbook. Fire departments with both types of apparatus needed two manuals, two curriculum and driver/operator trainees needed two exam preps to study for tests. The release of the 3rd edition of these manuals streamlines the IFSTA training resources. The Pumping Apparatus Driver/Operator Handbook, 3rd Edition covers pumping apparatus only, the second book in the pair, Pumping and Aerial Apparatus Driver/Operator Handbook, 3rd Edition contains the same 15 chapters as the pumping apparatus textbook, plus an additional 5 chapters relevant to aerial apparatus. Personnel on departments that operate both types of apparatus now only need one manual and one curriculum for training. Students only need one exam prep to prepare for testing. If a fire department does not use aerial apparatus, they use the Pumping Apparatus Driver/Operator Handbook, 3rd Edition and omit the aerial sections of the curriculum and exam prep which include all 20 chapters. Chapters 2 and 3 are especially beneficial for all driver/operators: Inspection and Maintenance and Safety and Operating Emergency Vehicles. Pumping Apparatus Driver/Operator Handbook, 3rd edition Skill Sheets now included in the manual Key Terms added The new Fire Apparatus Manufacturer's Association (FAMA) standardized safety signs for fire apparatus are highlighted Hydraulic calculations presented in a logical sequence making teaching and learning easier Customary and metric calculations in one chapter NEW case histories introduce each chapter NFPA® 1002 JPR Correlation Matrix Arabic edition of Pumping Apparatus Driver/ Operator Handbook, 3rd Edition now available. Visit <http://www.afssac.edu.sa/arhome/arabic.pado> for ordering instructions.

This text is designed to educate the driver/operator who is responsible for operating fire apparatus equipped with aerial devices, which include aerial ladders, aerial ladder platforms, articulating elevating platforms, telescoping elevating platforms, and water towers. -- From preface.

Tankers account for the largest number of firefighter crash deaths of all types of fire department vehicles. This report examines the various causal factors that have been identified as problematic for tankers and their drivers.

Brannigan's Building Construction for the Fire Service, Fourth Edition is a must read for fire fighters, prospective fire fighters, and fire science students. This edition continues the Brannigan tradition of using plain language to describe technical information about different building types and their unique hazards. This text ensures that critical fire fighting information is easy-to-understand and gives valuable experience to fire fighters before stepping onto the fireground. The first edition of Building Construction for the Fire Service was published in 1971. Frank Brannigan was compelled to write the most comprehensive building construction text for the fire service so that he could save fire fighters' lives. His passion for detail and extensive practical experience helped him to develop the most popular text on the market. His motto of: "Know your buildings," informs every aspect of this new edition of the text. Listen to a Podcast with Brannigan's Building Construction for the Fire Service, Fourth Edition co-author Glenn Corbett to learn more about this training program! Glenn discusses his relationship with the late Frank Brannigan, the dangers of heavy construction timber, occupancy specific hazards, and other areas of emphasis within the Fourth Edition. To listen now, visit: http://d2jw81rkebrcvk.cloudfront.net/assets/multimedia/audio/Building_Construction.mp3.

"The 6th edition is completely revised for today's firefighters and begins the next 35 years of excellence for the manual and for the firefighters who use it. The 6th edition contains all the information and skills needed to meet the requirements for NFPA® 1001: Standard for Fire Fighter Professional Qualifications, 2013 Edition. This manual includes: all new learning objectives, key terms noted in boxes in the margins of each chapter, case histories, and all new review questions in each chapter designed to enhance a student's understanding. The content is presented in a single column format proven most effective for reading comprehension for adult learners. Warnings, Cautions, and Safety Alerts emphasize safety at all times for new firefighters mastering basic skills. Skill sheets show safe methods for performing each firefighter skill. Each chapter clearly delineates Fire Fighter I knowledge and skills from Fire Fighter II addressing each in separate sections of the chapters. Photographs are enhanced with graphics, all illustrations are new and improved there are additional tables to make content more relevant for visual learners. Appendix A is a correlation matrix for all NFPA® 1001 JPRs referenced to page numbers for each knowledge and skill requirement."

The Fire Chief's Handbook, 7th Edition continues Fire Engineering's 82-year tradition of publishing the definitive resource for advanced fire service training. The text has been completely updated to meet the changing environment and added responsibilities of the fire service. Returning authors have rewritten their chapter to address today's leadership and administrative concerns, while new authors are also introduced to offer new perspectives. This comprehensive guidebook is designed for firefighters, company officers, and chief officers of all ranks and department types who want the latest information on the fundamentals of leadership in the fire service, as well as managing the day-to-day operations of a fire department.

The National Fire Protection Association (NFPA) and Jones & Bartlett Learning are pleased to bring you the fourth edition of Engine Company Fireground Operations. This expanded edition incorporates the latest recommendations from UL and the National Institute of Standards and Technology (NIST) into every aspect of fire attack and ventilation and presents an extensive study of engine company fire ground operations. This new edition is an ideal resource for fire service personnel preparing for promotion or studying for a civil service examination. Firefighters and company officers will gain knowledge in fire science, building construction, and the effects of burning modern fuels that result in extreme fire behavior. Specific features include: Detailed illustrations that show the tactics and approaches described in each chapter Case studies of strategies and tactics that resulted in firefighter line of duty deaths, as well as those that were successful, incorporated into the recommended practices of engine company fire attack, rescue, and ventilation Detailed information on size-up that applies risk management principles to the Value-Time-Size method, which considers survivability profiling and threshold limits, identifying problems, selecting strategies and tactics, developing a quick incident action plan, and applying a functional accountability system for safety A significant emphasis on attacking residential and commercial basement fires A one-of-its-kind chapter on fireground operations and responsibilities for company level high-rise firefighting, with special attention paid to fire behavior within high-rise buildings In-depth coverage of all the basic engine company responsibilities, including: Equipment Initial hose lays and water supplies The deployment of attack, back-up, and exposure hose lines Rapid intervention teams Search and rescue Master streams Fire protection systems Standpipe operations Salvage and overhaul

Exam Prep: Fire Instructor I & II is designed to thoroughly prepare you for a Fire Instructor I & II certification, promotion, or training examination by including the same type of multiple-choice questions that you are likely to encounter on the actual exam. By completing the practice questions in this manual, you will be able to identify weak areas you may have, allowing you to adjust accordingly. The manual follows the Systematic Approach to Examination Preparation, developed by Dr. Ben. A. Hirst, to help improve examination scores. The practice examinations were written by fire and emergency services personnel and the content was validated through current reference materials and technical review committees.

This text deals with the basics of wildland and forest firefighting. It has been totally revised and is now in full color.

The Second Edition of Exam Prep: Fire Department Apparatus Driver/Operator is designed to thoroughly prepare you for a Driver/Operator certification, promotion, or training examination by including the same type of multiple-choice questions you are likely to encounter on the actual exam. To help improve examination scores, this preparation guide follows Performance Training Systems, Inc.'s Systematic Approach to Examination Preparation. Exam Prep: Fire Apparatus Driver Operator, Second Edition is written by fire personnel explicitly for fire personnel, and all content has been verified with the latest reference materials and by a technical review committee. Benefits of the Systematic Approach to Examination Preparation include: Emphasizing areas of weakness Providing immediate feedback Learning material through context and association Exam Prep: Fire Department Apparatus Driver/Operator, Second Edition includes: Fire Apparatus Driver/Operator practice examinations Self-scoring guide with page references for further study Winning test-taking tips and helpful hints Coverage of NFPA 1002, Fire Apparatus Driver/Operator Professional Qualifications, 2009 Edition

Few cities are without highrise buildings. Yet through no fault of their own, few fire departments really know much about managing highrise emergencies. They tend to treat them as big house fires, rushing to get water on the fire with no consideration of building occupants. They equip engine companies with standard hose packs that are incompatible with some of their standpipe systems. They calculate their pump pressures using formulas intended for old dry pipe systems, resulting in ineffective streams. They don't prepare firefighters for the intricacies of elevator systems. Their firefighters know nothing of the smoke control systems they are expected to interface with. They know nothing of the possibly debilitating nature of PRVs, of redundant power systems, of the threat smoke towers may impose on them. Highrise fires don't happen often. A firefighter or officer may only get one chance at it. This book gives him/her the tools needed to perform intelligently and professionally.

Author John Mittendorf has completely rewritten his best-selling book, Truck Company Operations, a must-have for all firefighters who are assigned to the truck and who have responsibilities for the truck on the fireground. The new second edition covers the many aspects, tasks, and functions of a truck company, and contains new and expanded information related to search, reading a building, reading smoke, the Ten Commandments of truck company operations, operating truck apparatus, and more--all from a truck company perspective.

Drive to Survive: The Art of Wheeling the Rig provides an in-depth examination of fire apparatus vehicle dynamics. This is not your average "driver training" textbook. Fire apparatus operators must understand how a vehicle maneuvers at roadway speed, and more importantly...why does it crash? Just as a doctor cannot heal the human body without a thorough understanding of anatomy and physiology, an emergency vehicle operator cannot safely drive a fire apparatus without an in-depth knowledge of vehicle dynamics. Drive to Survive fills in the gaps between vehicle dynamics and crash causation. After 15 years of training and research, Chris Daly developed a training program combining his fire service and crash reconstruction training experience. Fire apparatus operators will learn the limits of driving an emergency vehicle and will understand that no matter how long they have been driving or how good they think they are, at some point physics will take over and the vehicle will lose control. Drive to Survive goes beyond talking about pump operations, aerial operations, and preventative maintenance. We can reduce the number of emergency vehicle crashes throughout the world by addressing key issues and providing emergency vehicle operations course (EVO) instructors with methods to convey these concepts. Concepts you learn in this book relate to more than just driving a fire apparatus. These principles apply to anyone who drives a vehicle, including your family members and loved ones.

Learn to safely and effectively drive and operate an apparatus with fire pumpers with the new Fire Service Pump Operator: Principles and Practice! This text is the core of a complete teaching and learning system that thoroughly supports instructors and prepares students for the job. The text includes up-to-date coverage the 2009 Edition of NFPA 1002, Standard for Fire Apparatus Driver/Operator Professional Qualifications. This text provides a thorough understanding of the types of fire apparatus equipped with pumps, how to safely drive them, and how to properly maintain these vehicles through inspection and testing programs. Students will also learn how to operate fire pumps by gaining an understanding of water supply, nozzles and flow rates, optimal positioning, and more.

Safe and effective structural firefighting requires a complex thought process. It is not a simple matter of "how to." Decisions depend on many factors, from the type of building, to the likelihood of occupancy, to the water supply. The third edition of Structural Firefighting: Strategy and Tactics leads readers through all phases of planning, evaluation and implementation to enable them to effectively manage structure fire incidents safe and effective manner, regardless of size or complexity. The third edition has been revised to thoroughly cover the practical applications and limitations of the latest research from Underwriters Laboratories (UL) and National Institute of Standards and Technology (NIST).

The 1st edition of Structural Fire Fighting: Initial Strategy and Tactics is intended to provide fire personnel with the knowledge needed to deploy resources in the first 10 minutes of any structural fire incident. The manual is designed to help the reader develop a logical decision-making process for determining incident priorities, strategies, and tactics regardless of the available resources or configuration of the emergency services organization. Scenarios for residential, commercial, and special hazard incidents are included with recommended best practices and considerations. Training officers can use these scenarios, modified to local resources and realities, to develop classroom discussions or field simulations. This manual is a companion to Structural Fire Fighting: Truck Company Skills and Tactics, 2nd edition and the soon to be released Structural Fire Fighting: High Rise Fire Fighting. Each chapter of the manual contains learning objectives, key terms, and review questions to assist the reader in understanding the material.

The 3rd edition of Principles of Vehicle Extrication contains updated information on the hazards presented by extrication operations, vehicle extrication incident management, vehicle anatomy, passenger restraint systems, vehicle extrication tools and equipment, hybrid-powered vehicles, machinery extrication situations and procedures, and emergency medical system considerations at extrications operations.

This new IFSTA manual details the training required of Company Officers according to NFPA® 1021, Standard for Fire Officer Professional Qualifications, 2014 Edition. The manual is divided into two sections to make a clear distinction between the information needed for Fire Officer Level I and Fire Officer Level II. Both print and eBook formats are available. There is no shortage of issues that a company officer might face in the everyday operation of a fire company or unit. This manual addresses the wide range of topics and issues encountered by a company officer, from leadership and supervision to health and safety issues. Great attention was given to focus on the job performance requirements of NFPA® 1021. The fifth edition of Fire and Emergency Services Company Officer builds on the previous edition of the manual while presenting the material in a more concise manner to make it easier for students to read and instructors to teach. By merging related topics, the number of chapters was reduced from 32 in the fourth edition to 17 in the new manual while preserving the material related to the NFPA® standard. The number

of appendices was reduced from 20 to 4 by removing information that can be found in other media. Along with reducing the volume of material from the fourth edition, the fifth edition of Fire and Emergency Services Company Officer offers several new features. The manual features a new look with IFSTA's single-column format and upgraded and updated curriculum components. Learning activities are included to help instructors present the material to their students. Case Histories open each chapter to illustrate important lessons learned in the real world. Photographs, illustrations, and tables are included throughout the manual to illustrate key points and improve the overall instructional value of the material.

1. General collapse information 2. Terms of construction and building design 3. Building construction: firefighting problems and structural hazards 4. Masonry wall collapse 5. Collapse dangers of parapet walls 6. Wood floor collapse 7. Sloping peak roof collapse 8. Timber truss roof collapse 9. Flat roof collapse 10. Lightweight steel roof and floor collapse 11. Lightweight wood truss collapse 12. Ceiling collapse 13. Stairway collapse 14. Fire escape dangers 15. Wood-frame building collapse 16. Collapse hazards of buildings under construction 17. Collapse caused by master stream operations 18. Search-and-rescue at a building collapse 19. Safety precautions prior to collapse 20. Why the World Trade Center Towers collapsed 21. High-rise building collapse 22. Post-fire analysis 23. Early floor collapse
EPILOGUE: Are architects, engineers, and code-writing officials friends of the firefighters?

This version includes all 21 chapters of Essentials of Fire Fighting, 6th Edition and adds three chapters written and validated to meet the emergency medical and hazardous materials requirements of NFPA® 1001, 2013 Edition. Chapter 22 specifically addresses the Firefighter I and Firefighter II knowledge and skills requirements for the emergency medical care competencies identified in NFPA® 1001, 2013 Edition Chapter 4. Chapters 23 and 24 meet the First Responder Awareness and Operations Levels for Responders according to NFPA® 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, 2012 Edition and OSHA 1910.120. The chapters also provide validated content to meet Section 6.6, Mission-Specific Competencies: Product Control, of NFPA® 472. The hazardous materials information is adapted from the IFSTA Hazardous Materials for First Responders, 4th Edition.

Protect against the life-threatening dangers of building collapse! Brannigan's book can save your life! Extensively updated, revised, and expanded, this 3rd edition text shows you how to recognize the signs of building collapse before it happens--so you can get out while there's still time. You'll be informed about critical topics such as: The toxic combustion products of vermin- and moisture-resistant treated wood The outcome of multi-million-dollar lawsuits involving some fire-retardant treated plywood The total collapse hazard to post-tensioned concrete buildings under construction The dynamics of the "stack effect", and more! Photographs and illustrations help you visualize key concepts, so you can spot dangers on the job. A "must" for fire fighters, engineers, and all those concerned with building collapse, this book gives you the facts you need to avoid construction hazards. Work smart... order today!

Make sure that you have the training and certification needed to provide the best risk reduction to your community. Reducing community risk requires trained individuals to verify that a locality adheres to locally adopted fire and life-safety standards for structural safety components in construction and renovations. Fire Inspection and Code Enforcement, 8th Edition, provides fire and emergency services personnel and civilian inspectors with the basic information necessary to meet the job performance requirements (JPRs) of NFPA® 1031 for Level I and Level II Fire Inspectors. Chapters are delineated with two clearly marked sections: the first section for Level I information followed by a second section for Level II information. Arabic edition of Arabic edition of Fire Inspection and Code Enforcement Handbook, 8th Edition now available. Visit <http://www.afssac.edu.sa/arhome/FICE-8-AR> for ordering instructions.

Information in this manual is intended to meet the requirements of the 2015 edition of NFPA® 1003, Standard for Airport Fire Fighter Professional Qualifications. Additional material addresses the airport fire fighting apparatus covered in Chapter 9 of the 2014 edition of NFPA® 1002, Standard on Fire Apparatus Driver/Operator Professional Qualifications. Key parts of NFPA® 402, Guide for Aircraft Rescue and Fire-Fighting Operations (2013 edition), and NFPA® 403, Standard for Aircraft Rescue and Fire-Fighting Services at Airports (2014 edition), are also covered in this manual. Other materials included in this manual are those subjects included in the training requirements of Federal Aviation Regulations (FARs) 139.315, 139.317, and 139.319.

The third edition of Fire Department Incident Safety Officer has been thoroughly updated to cover the latest trends, information, and best-practices needed by current and aspiring Incident Safety Officers (ISO's). Developed in partnership with the Fire Department Safety Officer's Association and based on the 2015 Edition of NFPA 1521, Standard for Fire Department Safety Officer Professional Qualifications, this authoritative resource focuses uniquely on the roles, responsibilities, and duties for fire service officers assigned to the incident command staff position of safety officer. From smoke reading to alternative energy sources to green construction buildings, Fire Department Incident Safety Officer, Third Edition is loaded with up-to-date information needed to keep fire department members safe, including: A new chapter dedicated to the Incident Safety Officer at Training Drills and Special Events Entire chapters devoted to important topics like reading smoke, reading buildings,

At head of title: International Association of Fire Chiefs.

This report was developed through a cooperative agreement between the USFA and the International Fire service Training Association (IFSTA) at Oklahoma State University (OSU).

The National Fire Protection Association (NFPA) And The International Association Of Fire Chiefs (IAFC) Are Pleased To Bring You The Second Edition Of Fire Officer: Principles And Practice, A Modern Integrated Teaching And Learning System For The Fire Officer I And II Levels. Fire Officers Need To Know How To Make The Transition From Fire Fighter To Leader. Fire Officer: Principles And Practice, Second Edition Is Designed To Help Fire Fighters Make A Smooth Transition To Fire Officer. Covering The Entire Scope Of NFPA 1021, Standard For Fire Officer Professional Qualifications, 2009 Edition, Fire Officer Combines Current Content With Dynamic Features And Interactive Technology To Better Support Instructors And Help Prepare Future Fire Officers For Any Situation That May Arise. Safety Is Principle! The Second Edition Features A Laser-Like Focus On Fire Fighter Safety. Reducing Fire Fighter Injuries And Deaths Requires The Dedicated Efforts Of Every Fire Fighter, Fire Officer, Fire Department, And The Entire Fire Community Working Together. It Is With This Goal In Mind That We Have Integrated The 16 Firefighter Life Safety Initiatives Developed By The National Fallen Firefighters Foundation Into The Text. Likewise, In Each Of The Chapters, Actual National Fire Fighter Near-Miss Reporting System Cases Are Discussed To Drive Home Safety And The Lessons Learned From Those Incidents. Some Of The Guiding Principles Added To The New Edition Include:

- Description Of The "Everybody Goes Home" And The National Fire Fighter Near-Miss Reporting System, Including Over A Dozen Company Officer Near-Miss Examples Throughout The Text.
- Description Of The IAFC/IAFF Firefighter Safety And Deployment Study.
- The Latest Fire Fighter Death And Injury Issues As Reported By The NFPA? National Fallen Firefighters Foundation, IAFC, And IAFF, Including Results Of A Thirty-Year Retrospective Study.
- Changes In Fire-Ground Accountability And Rapid Intervention Practices.
- Results Of National Institute Of Standards And Technology Research On Wind-Driven Fires, Thermal Imaging Cameras, And Fire Dynamics As Related To Fire Fighter Survival.
- The Latest Developments In Crew Resource Management.

The Second Edition Also Reflects The Latest Developments In: •Building A Personal Development Plan Through Education, Training, Self-Development, And

Experience, Including A Description Of The Fire And Emergency Services Higher Education (FESHE) Program. •The Impact Of Blogs, Video Sharing, And Social Networks. •How To Budget For A Grant. •Changes In The National Response Framework And National Incident Management System. Additional Items Related To Fire Fighter Safety And Health Are Included.

This second edition of Fire Service Pump Operator has been thoroughly updated to serve as a complete training solution that addresses pump operation, safe driving techniques, tiller and aerial apparatus operation, and water supply considerations. From basic apparatus maintenance to fire pump theory and advanced hydraulic calculations, this single manual covers everything a fire service driver/operator needs to know. Fire Service Pump Operator: Pump, Aerial, Tiller, and Mobile Water Supply, Second Edition meets and exceeds the job performance requirements of Chapters 4, 5, and 10 of NFPA 1002, Fire Apparatus Driver/Operator Professional Qualifications, 2014 Edition. It also addresses all of the course outcomes from the National Fire Academy's Fire and Emergency Services Higher Education (FESHE) Associates (Core) Fire Protection Hydraulics and Water Supply course.

This book has been revised and expanded to include new material on decentralization, further incident reporting, and post-control activities, estate homes, New Millennium multiple dwellings, storage occupancies, strategic considerations of renovation and more."--BOOK JACKET.

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