

Courtesy of:
HQ AFRC/CEXF
155 2nd Street
Robins AFB GA 31098-1635

DOD FIREFIGHTER

CERTIFICATION SYSTEM

STUDENT STUDY GUIDE

FIRE OFFICER III

CDC 10213

PERFACE

We're pleased that you are progressing well through the certification program and encourage you to continue your efforts in order to complete this CDC and obtain your Fire Officer III certification. This Student Study Guide is designed to give you not only the references required to obtain this certification but the page numbers and some explanation. This study guide is not exclusive. You must still do some research through the reference books.

These requirements are extracted from 1992 NFPA 1021, Fire Officer Professional Qualification. The relevant NFPA standard is listed in each section of the certification materials. Each section is to be used in conjunction with the NFPA standard to ensure all information is covered.

Learning Objective (LO) numbers shown in the extreme left column of this student study guide is for ECI tracking purposes. They are also used by the instructor and student to check areas the student has missed once he/she has completed the CDC written test and have received their ECI score card.

To get an immediate response to your questions concerning the subject matter contained in this CDC course, call the OPR: Mr Hugh Pike at DSN 523-6214/6221 between 0700-1600 hours (CST), Monday-Friday. Otherwise, write the OPR at HQ AFCESA/CEXF, 139 Barnes Drive, Suite 1, Tyndall AFB, FL 32403-5319 to point out technical errors you find. Sending subject matter questions directly to ECI slows response time. When you call, please have the LO/OBJ number and listed reference available.

For any questions or concerns dealing with this student study guide, contact a AFRC Training Committee member.

NOTE:

Do not use the Suggestion Program to submit corrections for printing or typographical errors. Consult your training officer or NCO if you have questions on course enrollment or administration.

Material in this student study guide is reviewed annually for technical accuracy, adequacy and currency.

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The AFRC Fire Protection Training Committee compiled the study guide that follows. If there are any errors or omissions, please contact on eof the members. The mail addresses are located on the AFRC Fire Protection home page (<http://www.afrc.af.mil/~fire/pages/firehome.htm>)

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- NFPA 906, Guide for Fire Incident Field Notes, 1993, National Fire Protection Association, Quincy, Massachusetts
- NFPA, Management in the Fire Service, 1989, National Fire Protection Association, Quincy, Massachusetts

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UNIT 1

HUMAN RESOURCE MANAGEMENT

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

LO/OBJ

CONTENT

REFERENCE

001 4-2.1

Prepare a duty roster

NFPA 1021

Ch 4, para 4.2.1

A. *Personnel assignments based on* - Establish personnel assignment to maximize efficiency, given knowledge, training and experience to the member available in accordance with policies and procedures.

1. *Knowledge*

2. *Training*

3. *Experience*

4. *Standard Operating Procedures*

IFSTA Fire Company
Officer
pg 48

Development and use of the SOP format allows an organization to make the best use of human resources. Having the basic point of reference helps all members of the organization perform to a measurable standard. Having one specific SOP on the subject reduces misunderstandings and procedures.

SOP's provide the methods by which specific achievement is taken. They are the basis of all skills training and are the building blocks with which the entire organization is constructed.

002 4-2.2

Functions of a fire officer

IFSTA Chief Officer
pg 31
Managing the Fire
Service
pg 79-99

A. *Summary of functions of a fire officer*

1. *Develop a system of planning jobs*

Planning is a function of top management and could be entirely delegated. You must establish a favorable climate for planning, be sure the design of the planning process fits the department, be accessible to planning leaders, get involved and keep superiors informed.

- a. Set goals – What should the department be doing? – Identification of real needs.
- b. Evaluate the planning process.
- c. Establish policy – Establish objectives that will accomplish the goal.

- d. Match goals with department and city philosophy.
- e. Establish policy – Develop a plan of action to guide policy.
- f. Planning the organizational structure – Develop a framework that helps people pull together in accordance with strategy, philosophy and policies.
- g. Providing personnel recruit, select and develop people qualified to fill position in the organization.
- h. Establish procedure.
- i. Provide facilities and funding.
- j. Set standard.
- k. Establish management programs and operational plans.
- l. Design standard of accountability.

Types of Plans:

- a. Long range or master planning – Evaluating and changing the fire protection system to meet the needs of a changing environment.
 - 1) define problems.
 - 2) Identify solutions.
 - 3) Provide a plan to implement standards.
- b. Operational planning – To make system work on a day-to-day basis, it administrates by nature, response planning, mutual aid planning and improvement planning.
- c. Tactical planning – Detailed planning that focuses on achieving, specific objectives such as pre-fire planning.

2.. *Describe procedures for organizing work*

3. *Describe how work is directed*

- a. *Delegation* – A manager who routinely passes considerable authority and responsibility downward is likely to benefit from developing employees, abilities increasing productivity and freeing up administrators to deal with long term considerations such as planning

Delegation provides growth opportunity to individual members

- b. *Initiating*

- c. *Evaluating* – The regular collection of data and analysis of information about efficiency, economy and effectiveness of departmental services and other activities. The purpose of evaluation is to help managers improve the implementation of programs, allocate scarce resources and choose among programs and levels of various activities.

003 4-2.3 *Describe evaluation and counseling of members*

A. Evaluation

Evaluation is need because:

- 1) It encourages good performers to do better and will help poor performers to improve.
- 2). To determine those who should be transferred to other work and those who should be promoted.
- 3) To determine salary increases, etc.
- 4) So employees know how supervisors feel they are doing.

Evaluations - start the day a person accepts the position employees and supervisors together should set goals, standards and criteria for measuring employee performance. Supervisors must guide the goal setting process to make sure that goals fit with the realities of the work group, department and government.

Formal Evaluation – Should be conducted at least once a year, when accompanied by periodic, informal discussions, throughout the year to measure progress, give feed back on problems.

B. Counseling – skills can help you develop your employees and build a positive relationship with them. Counseling is a face to face communication or interview that can be used for a wide range of situations;

- 1) Performance appraisals
- 2) Work progress
- 3) Personal problems
- 4) Employee performance problems

While in your role as a supervisory counselor, you act as a reporter, observer, someone who can help the employee, with out directing.

Counseling Checklist:

- 1) Give that person your undivided attention
- 2) Give workers the respect due
- 3) Put yourself in the workers place
- 4) Don't assume the worker will react to a situation in the way that you would.
- 5) Help your worker explore feelings, sincere feelings are an important part of every problem situation.
- 6) Repeat what you think the worker is saying
- 7) Help worker through various alternatives
- 8) Do not minimize a workers problem
- 9) Arrange professional help
- 10) Keep communication confidential

004 4-2.4

Describe supervising and evaluating promotional programs

A. Evaluation

The fire department shall establish a documented job related personnel evaluation program for internal and lateral entry promotion for various ranks.

Applicant must meet requirements for the officer rank in which they have applied

B. Counseling

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UNIT 2

COMMUNITY AWARENESS/PUBLIC RELATIONS

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

LO/OBJ

CONTENT

REFERENCE

005 4-3

Prepare department wide public relation program

IFSTA Chief Officer
pg 193-195

Prior to attempting to increase the department's visibility, make sure the department is unified internally. Establish clear and regular communications with department personnel and union representatives.

A department is known for its immaculate, well-maintained stations, friendly and professional crew and interest in the community will have easier time justifying its request.

Do not wait for the community to come to you, get the fire department out to the community. Every time a member of the department interacts with someone in the community, there is a potential for creating good will.

Hold regular social events to which the public is invited.

Get the media on your side invite the local newspaper in to talks or ask about writing columns on fire safety for the paper.

Take an active role in community affairs.

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UNIT 3

ORGANIZATIONAL STRUCTURE

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

LO/OBJ

CONTENT

REFERENCE

006 4-4.1

Fire service organizations

Fire Protection
Handbook
pg 1-4 thru 1-6

A. National trends and developments

1. Finance – Table 1-1a and Figure 1-1a through 1-10 show that the number of fires and associated losses, leveled off – or reached a plateau – around 1982. Reported fires have been within a 6 percent of 2.4 million every year from 1982 – 1988. Civilian fire deaths have been within ½ percent of 6,000 every year from 1982 – 1988 except for 1984. Civilian fire injuries have been within 7 percent of 30,000, every year from 1977 – 1988, except for 1986 and after adjustment for inflation. Direct property damage has fallen within 9 percent of \$5.5 billion in 1980 every year from 1981 – 1982.

B. Member developments

007 4-4.2

National organizations that support fire protection services

IFSTA Orientation and
Indoctrination
pg 46-50

A. Public – IAFC, IAFF, IAAI, ISASI, FMANA, etc

1. Functions – The nations fire problems has been a concern of many organization over the years. The interest are activity of there groups have done much in fire prevention and control. Through their efforts, the attack on the fire problem has been one of increasing vigor. This section is designed to aquatint firefighters with their organizations and their functions.

Federal – USFS, FEMA, USFA, NFA, etc – The concern of the National Government is the safety of the public has resulted in the formation of numerous federal agencies that are dedicated to decreasing the number of deaths and injuries, caused by fire. These agencies are supported by public funds and are administrated by public officials. The purpose of this section is to introduce some of the more important agencies and their functions.

B. Private

1. Functions –

008 4-4.3 *State/provincial organizations that support fire protection services*

IFSTA Orientation and
Indoctrination
pg 34

A. Public – State

1. Functions – The concern about the fire problem has encouraged establishing state fire protection agencies. The majority are operated and maintained by state government, although some are independent. Brief descriptions of the most common are presented in this section to make firefighters aware of the organization that may exist in their state.

B. Private

1. Functions –

009 4-4.4 *Local organizations that support fire protection services*

IFSTA Orientation and
Indoctrination

A. Public – State

1. Functions – Firefighters will mostly be involved with organizations at the local level. These people and groups will be familiar because firefighters will have day-to-day interactions with them and they will after be topics of discussion. In this section, some of these groups will be reviewed to provide firefighters an over view of their functions.

B. Private

1. Functions –

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UNIT 4

ADMINISTRATION

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

LO/OBJ

CONTENT

REFERENCE

010 4-5.1	<i>Equal employment opportunity program</i> A. <i>Components</i> There are four parts to the EEO; Management commitment to affirmative action Written affirmative action plan Nondiscriminatory hiring, promotion and termination practices Affirmative action documentation	<u>IFSTA Chief Officer</u> pg 35
011 4-5.2	<i>Methods of selecting, hiring and promoting personnel</i> A. <i>Applicable codes</i> Fire personnel selection means choosing human talent for the fire service in accordance with the task/duties of the job. As suggested earlier, the selection process actually begins with recruitment. The succeeding stages are examination, certification and assignment (placement). Traditionally, emphasis falls on examination. The primary purpose of an examination or test is to identify those applicants who possess or are likely to possess the highest degree of SKA/TB's needed to fulfill the job requirements. It should be remembered that tests throughout the recruitment sequence – both before and after the training or academy program – must be validated and must be planned in relation to the training skills taught. B. <i>Ordinances</i> C. <i>Rulings</i>	<u>Managing Fire Services</u> pg 271
012 4-5.3	<i>Rights and responsibilities of fire protection organizations</i> A. <i>Federal laws</i> 1. Section 1981 of the Civil Rights Act of 1866 2. Section 1982 of Title 42 of the USC based on the Civil Rights Act of 1871 3. 14 th Amendment to US Constitution 4. Title VII of the Civil Rights Act of 1964 as amended by EEO at 1972 B. <i>State Laws</i>	<u>Managing Fire Services</u> pg 264

C. Local Laws

- 013 4-5.4 *Policies related to evaluation and development of personnel* Managing Fire Services
pg 275
- Personnel development program essentially integrated recruitment, selection, training and education, career planning, career counseling, performance appraisal, and other human resources consideration (Health, Safety, etc) into a signal system and unit as a consequence, the traditional responsibilities of the department manager are expanded to encompass managing personal development. In addition, the area of personnel might include a careful program of management development for top decision-makers. This area is also of vital significance, especially in the fire service.
- 014 4-5.5 *Incentive program* Managing Fire Services
pg 172
- A. Stimulate individual initiative* – Incentive programs are techniques for rewarding employees on the bases of performance equal to or above preestablished levels.
- B. Stimulate group initiative* – Informal organizational factor include group dynamic and cohesiveness and peer standards.

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UNIT 5

BUDGET

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

LO/OBJ

CONTENT

REFERENCE

015 4-6.1	<i>Budget preparation</i> A. <i>Determine and justify supplies</i> 1. <i>Existing programs</i> 2. <i>New programs</i> B. <i>Determine and justify need for major repairs</i> 1. <i>Buildings</i> 2. <i>Equipment</i> C. <i>Determine and justify need for new equipment</i> D. <i>Operating budget for apparatus maintenance</i>	<u>Managing Fire Services</u> pg 197-221 <u>Management in the Fire Service</u>
016 4-6.2	<i>Develop a system of budget controls</i> A. <i>Fiscal policies</i> B. <i>Financial policies</i>	
017 4-6.3	<i>Prepare a budget summary report</i> A. <i>Revenue to date</i> B. <i>Anticipated revenue and source</i> C. <i>expenditures to date</i> D. <i>encumbered amounts</i> E. <i>Anticipated expenditures</i>	
018 4-6.4	<i>Describe a system for soliciting bids</i> A. <i>Ensure meeting established specifications</i> B. <i>Enable competitive bidding</i>	

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UNIT 6

GOVERNMENT STRUCTURE

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

LO/OBJ

CONTENT

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No requirements for Fire Officer III

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UNIT 7

COMMUNICATION SKILLS

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

LO/OBJ

CONTENT

REFERENCE

No requirements for Fire Officer III

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UNIT 8

INFORMATION MANAGEMENT

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

<u>LO/OBJ</u>	<u>CONTENT</u>	<u>REFERENCE</u>
019 4-9.1	<p><i>Apparatus standards and specification</i></p> <p>A. <i>National agency specifications</i></p> <p>B. <i>Site agency specifications</i></p> <p>GVW & Specifics for geographical location</p> <p>Winterization system, etc</p>	<p><u>IFSTA FD Pumping Apparatus</u> pg 1-2 <u>NFPA 1901</u></p>
020 4-9.2	<p><i>Electronic data processing</i></p> <p>A. <i>Capabilities</i></p> <p>1. <i>Base on</i></p> <p>a. <i>Capabilities –</i></p> <ol style="list-style-type: none">1). Hold large amounts of data in a single location (centralized).2). Simple computer systems for storage of data of the same type: Example – Financial information, rosters, and personnel.3). Advanced software for data based management systems and financial spreadsheets allows the user to manipulate the data in a wide variety of ways.4). The more advanced software – packages utilize data from several files simultaneously.5). Expert systems – Store decision processes of experts in a certain field. Interactive for user to ask questions on best course of action in certain incidents. <p>b. <i>Limitations –</i></p> <ol style="list-style-type: none">1). Types of information stored2). Level of detail3). Actual information input into the system <p>c. <i>Summary of goals and objectives of data processing services –</i></p> <ol style="list-style-type: none">1). What information is to be stored2). How will it be stored	<p><u>IFSTA Chief Officer</u> pg 1-2</p>

- 3). Hardware/Software needs
- 4). Purchase/Lease options

d. Systems –

- 1). Who will use it
- 2). How frequent will it be used
- 3). Primary & Secondary users
- 4). Hardware/Software needs
- 5). Lost effectiveness

e. Components –

- 1). Up to date information
- 2). Accurate data input
- 3). Review of data
- 4). Compiling information
- 5). Analyzing trends

f. Operational principles of data processing equipment–

- 1). Complete data for easy retrieval for use in a day-to-day operation
- 2). Annual budget request, fires, injuries, safety information, etc

021 4-9.3

Department record keeping system

Managing Fire Services
Ch 6 – pg 129-166

Having good information that is readily available is essential to managing a fire department of any size. Good information is needed not only to help fire service managers make decisions, but also to back up those decisions with hard data that can stand the scrutiny of city managers, budget analysts, the press and others.

A. Development

Types of management information systems - The fire chief has choices as to the type and capabilities of the department's management information system. The chief can store information in a simple set of files or use computers to store and retrieve data for analysis.

Simple computer system with separate files – system that imitates a manual system, except that the data are stored electronically in less space and can be recalled, displayed, scanned and printed out much faster than with a manual system.

Computer systems with advanced software – specialized software for manipulating the data, i.e. data base management systems and financial spreadsheets.

Expert systems – In these systems the computer stores the decision processes of experts in a given field – What data they use and how they make their judgments.

Types of Information – The task of specifying the data to be collected and stored for a MIS can be approached from two directions:

Defining what information is required and then identifying the means of collecting it.

Considering the readily available sources and the most that can reasonably be obtained from them.

It is useful to consider data in two groups:

Those collected by the fire department

Those that come from outside sources.

Policy Decisions – A series of questions must be answered when a fire department starts to design or improve a management information system.

Should a computer be used at all?

What is the purpose of the system?

Information to be stored

Standard outputs and frequency of use

Flexibility for special reports and analyses

Organization of data

Access to the system

Security requirements

Accuracy requirements

Choosing a computer and computer services

Purchase or lease

Number and type of terminals

Software decisions

Implementation

B. Maintenance

C. Evaluation –

022 4-9.4 *Principles of data processing*

Managing Fire Service
Pg 160 & Ch 8, pg 194-196

A. Data acquisition, implementation and retrieval of information

1. Applied to record process

Management information system has a wide variety of uses:

Day-to-day department management

Day-to-day operational decisions

Policy planning

Budget requests

Program evaluation

Bargaining agreements

A final word

2. *Applied to budgetary processes*

The MIS can support budget requests by providing information on workloads, such as the number of calls by type of call and upward or downward trends.

023 4-9.5

Fire Department records system

Managing Fire Services
pg 111-124
IFSTA Chief Officer
Ch 5, pg 91-108

- A. *Analyze records and data* – Analysis of the data may be accomplished by several approaches.

The department may hire an organization specializing in computer analysis to provide the service.

The department may hire a consultant.

- B. *Interpret records and data and determine validity*

- C. *Evaluate data and recommend improvements* – A good initial evaluation of fire defenses should provide the basis for an improved protection system for the community and the process of evaluation should bring together for discussion a variety of people whose continuing involvement with the planning process is necessary.

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UNIT 9

PLANNING

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

LO/OBJ

CONTENT

REFERENCE

024 4-10

Model plan for utilization of resources

IFSTA Chief Officer
Ch 1, pg 9-32
Management in the Fire
Service

Planning is vital regardless of the size of the organization.

- A. *Given quantity of personnel* – Chief fire officers should realize that size will affect planning.
- B. *Given quantity of equipment*
- C. *Specified area to be protected*

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UNIT 10 **INSPECTION, INVESTIGATION, AND PUBLIC EDUCATION**

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

<u>LO/OBJ</u>	<u>CONTENT</u>	<u>REFERENCE</u>
025 4-11.1	<i>Fire investigation</i>	<u>IFSTA Intro to Fire Origin and Cause</u> Ch 5, pg 57-65

A. Determine point of origin

Four Steps

1. Interview witnesses and firefighters
 - a. Location, size and appearance of fire upon discovery
 - b. Any unusual circumstances before, during or after the fire
2. Examining structural fires
 - a. Examine exterior
 - 1). Corroborate and supplement information from interviews
 - 2). Look for anything unusual
 - 3). Match exterior burn patterns to interior
 - b. Examine interior
 - 1). Go inside to indicated area
 - 2). Work from least damaged to most damaged areas
 - 3). Indicators
 - a). Charring
 - (1). Burns in low areas
3. Examining vehicle fires
 - a. Examining the scene
 - 1). Speak to owner and compare to evidence found
 - 2). Conduct a thorough investigation
 - 3). Check for containers and evidence
 - 4). Check for tire tracks and foot prints
 - b. Examining the exterior
 - 1). Vehicle and owner ID
 - 2). Burn patterns
 - 3). Condition and position of doors and windows
 - 4). Condition of vehicle body
 - 5). Condition of accessories

- 6). Mismatched tires and rims
 - 7). Hubcaps and wheels
 - 8). Lug nuts
 - 9). Gas cap
 - 10). License plate
 - 11). Missing exterior parts
 - 12). Remnants of personal items
 - 13). Remains of spare
 - 14). Siphon hose
 - 15). Wicks
- c. Examining driver and passenger compartment
- 1). Ignition key
 - 2). Steering lock assembly
 - 3). Radio and accessories present and working
 - 4). Make inventory list
 - 5). Personal items inventory
 - 6). Check trunk and glovesbox for personal items
 - 7). Check for accelerates
 - 8). Check for timing or ignition devices
- d. Examining the engine compartment
- 1). Missing parts or tampering
 - 2). Ignition devices
 - 3). Obvious mechanical damage
 - 4). Drive train connections
 - 5). Component conditions
 - 6). Battery connected
- e. Examining the fuel system
- 1). Examine fuel system
 - 2). Loose connections
 - 3). Fuel in tank and cap on
 - 4). Examine carburetor or injection system
- f. Examining the electrical system
- 1). Electrical system fires not common
4. Wildland fires
- a. Principles of fire spread
- 1). Wind
 - 2). Slope

- 3). Fuels
- 4). Barriers
- b. Indicators
 - 1). Initial area of involvement
 - 2). Available evidence
 - 3). Determine point of origin
 - 4). Grass stem
 - 5). Protected fuel
 - 6). Cupping
 - 7). Char patterns
 - 8). Freezing or branches
 - 9). Staining
 - 10). Soot
- c. Methods of search
 - 1). Sectioning

B. Procedure used to determine loss

1. *Structure* – The fire department cannot always save structures from devastation caused by fire for a variety of reasons, which include;
 - a. Magnitude of fire
 - b. Duration of fire
 - c. Age of building
 - d. Contents of building
 - e. Firefighter safety concerns
2. *Contents* – A thorough, systematic examination of the remaining contents of the structure can help determine the following;
 - a. Locations of the contents before the fire
 - b. Temperature differences among the areas of the structures
 - c. Floor plans

026 4-11.2

Methods used by arsonists

IFSTA Intro to Fire
Origin and Cause
Ch 6, pg 89-95

A. Detecting

1. Juvenile firesetters are divided into fire categories:
 - a. Curiosity
 - b. Crisis
 - c. Delinquent
 - d. Strategic

e. Pathological

2. Adults who intentionally (or knowingly) and maliciously sets a fire is categorized as an “arsonist”.

The types of fires and the motives for setting the fires are varied; however, documented studies by professionals provide generalizations that assist in identifying the underlying reason the fire was set.

- a. Motives
- b. Revenge
- c. Vandalism
- d. Profit (Fraud)
- e. crime concealment
- f. Excitement (vanity)
- g. extremist (Terrorism)
- h. Pyromania

027 4-11.3 *Fire investigation record keeping system*

- A. *Use* – Thorough fire scene investigation and brilliant reconstruction of the origin and cause of a fire are of no value if the investigator cannot transmit the painstakingly gathered information to others.

Although some of this is done through verbal reports and court testimony, by far the most critically important means of communicating is through the written report.

B. *Maintenance*

028 4-11.4 *Construction features contributing to the spread of fire, heat, smoke*

- A. *Public assembly*
- B. *Educational*
 - 1. *Residential*
 - 2. *Nonresidential*
- C. *Institutional*
- D. *Residential*
- E. *Stores and offices*
- F. *Basic industry*
- G. *Manufacturing*
- H. *Storage*
- I. *Special properties*

IFSTA Intro to Fire

Origin and Cause

Ch 7-8, pg 89-95

Kirk’s Fire

Investigation

pg 187-196 & pg 431-433

NFPA 921

Ch 8, pg 53-65

NFPA 906.11

IFSTA Building

Construction in the Fire

Service

Kirks Fire

Investigation

Ch 7, pg 127-139

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UNIT 11

EMERGENCY SERVICE DELIVERY

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

<u>LO/OBJ</u>	<u>CONTENT</u>	<u>REFERENCE</u>
029 4-12.1	<i>Multiple company operations</i> <i>A. Resources required</i> <i>B. Assignment and placement of resources</i>	<u>IFSTA Fire Command</u>
030 4-12.2	<i>Delegation of authority at an emergency incident</i> The IC delegates duties to be performed by trained and qualified personnel. He/she does not have to perform or supervise these functions.	<u>Hazmat for the 1st Responders</u>
031 4-12.3	<i>Local Emergency Planning Committee</i> <i>A. Role</i> 1. Must address: a. Hazmat facilities and transportation routes b. Methods and procedures for handling hazmat incidents c. Methods to warn people at risk d. Hazmat equipment and information resources e. Evacuation plans f. Training of 1 st responder g. Schedule for exercising the local emergency response plan	<u>Hazmat for the 1st Responders</u>

DOD FIREFIGHTER CERTIFICATION SYSTEM
STUDENT STUDY GUIDE
FIRE OFFICER III

UNIT 12

SAFETY

OBJECTIVE: NFPA STANDARD 1021, CHAPTER 4

LO/OBJ

CONTENT

REFERENCE

032 4-13.1

Safety Programs

IFSTA Occupation
Safety
Ch 1, pg 3-11
IFSTA Chief Officer

A. *Development* – Commitment to a safety program must begin with a declaration of policy from the highest ranking official within the department.

A safety program sets standards, policies, procedures and precautions to safely purchase, operate and maintain the department's equipment and educate employees on how to protect themselves from personal injury.

B. *Plan*

Goals – The main goals of any good safety program should be to:

Prevent human suffering, deaths, injuries, illnesses and exposures to hazardous atmospheres and contagious diseases.

Prevent damage/loss of equipment.

Reduce the incidence and severity of accidents and hazardous exposures.

NFPA 1500 establishes these goals. NFPA 1500 is an outline of requirements or performance objectives for a safety program designed with these goals in mind.

The purpose of NFPA 1500's objectives is to help a department achieve the previously stated goals.

Objectives – Is a specific, measurable, achievable statement of intended accomplishment.

C. *Initiation*

IFSTA Occupation
Safety
Ch 1, pg 17-37

Occupational safety – Once the goals and objectives of the safety program have been determined and the preliminary plans resolved, the implementation phase of the program can begin.

Implementation involves the following;

1. Appoint a safety officer – Must be dedicated to the safety program and respected by peers.
2. Appoint a safety committee – Appoint individuals from various levels of the department hierarchy and allow them to participate in the decision making process.

3. Develop written health and safety policies – Then distribute to members of the fire department. Written policies provide a measurable standard of performance.
4. Establish an accident/injury record-keeping system – This cannot be over emphasized.
5. Institute a safety-monitoring program – An ongoing monitoring program can assist in evaluating the effectiveness of the safety program and through regular inspections can prevent accidents caused by the unsafe conditions of equipment and facilities.
6. Institute a physical fitness program – Physical fitness is very important to safety.
7. Institute a research and evaluation program – This assist the department in the selection of proper procedures and equipment to meet its needs.

D. Administration

NFPA 1500
Ch 1

The purpose of safety administration is to help prevent accidents, injuries and exposures and to reduce the severity of those accidents, injuries and exposures that do occur.

E. Records

NFPA 1500
Ch 2-7

The fire department shall establish a data collection system and maintain permanent records of all accidents, injuries, illnesses or death that are or might be job related. It should maintain individual records of any occupational exposure to known or suspected toxic products or infectious or contagious diseases. A confidential health record, will be maintained for each member. Training records to include dates, subjects covered, satisfactory completion and certificates. In addition, equipment inspection, maintenance, repair and service records are maintained.

F. Reports

IFSTA Occupation
Safety
Ch 1, pg 30

There are four major factors, which cause or lead to accidents:

1. Social environment
2. Human factors
3. Unsafe acts
4. Unsafe conditions

An accident investigation pinpoints which of these factors was responsibly for causing or contributing to the accident. Accident analysis will reveal patterns and specific problems that need to be corrected.

G. Federal, state and local requirements

033 4-13.2

Accident prevention program

NFPA 1500
para 2-5

- A. *Officer duty assignment* – Duties of the safety officer explained in NFPA 1501, *Standard For Fire Department Safety Officer*.

Safety Officers are responsible for statistic and worker compensation control, follow up corrective measures, conduct safety inspections, provide technical advice, be present on fire grounds, major accidents and monitor operations.

B. Specific hazards

IFSTA Occupation
Safety
Ch 10, pg 287-329

Incidents involving special hazards must be treated with special care with regard to safety.

Basic procedures should include such measures as the following:

Always establish a perimeter or danger zones(s) around the hazardous area.

Control access to the danger zone.

Always work in teams of two or more within the hazardous area.

Keep at least one person outside the hazardous area to monitor operations within the zone.

Provide backup personnel for rescue or assistance to personnel within the hazardous area in the event of equipment failure or life threatening occurrences.

Have qualified EMS personnel standing by with transportation capabilities.

034 4-13.3

Prevention measures

NFPA 1500
para 2-7.1

A. Accident reports.

The fire department shall establish a data collection system and maintain permanent records of all accidents, injuries, illnesses, exposures to infectious agents and communicable diseases or death that are or might be job related.

The data collection system shall also maintain individual records of any occupational exposure to known or suspected toxic products or infectious or communicable diseases.

The fire department shall assure that a confidential health record for each member and a health database is maintained.

The fire department shall maintain training records for each member indicating dates, subjects covered, satisfactory completion, and, if any, certifications achieved.

The fire department shall assure that inspection, maintenance repair and service records are maintained for all vehicles and equipment used for emergency operations and training.

Courtesy of:
HQ AFRC/CEXF
155 2nd Street
Robins AFB GA 31098-1635
IFSTA Chief Officer
Pg 181-187

Documenting costs begins with an effective accident reporting system, which is essential to a safety program administration. Accident reporting is the foundation because it provides the reference for economic focus. In addition, administrators must know the type of injuries firefighters suffer in order to take corrective action. With a good record system, the fire department administration can document the need for economic support, administer the program and show firefighters its relevance.

B. Injury reports

IFSTA Occupation
Safety
pg 24-29

Injuries, such as fractures, burns, cuts, bruises, or scrapes are visible. Injuries can also include less visible ailments such as muscle strains, sprains, overexertion, breathing difficulty, electric shock, heart trouble, back pain, or even stress which may be the result of, or result in, any of the preceding ailments:

- Accidents
- Unsafe acts and conditions
- Human factors
- Social environment
- Physical environment