U.S. DEPARTMENT OF HOMELAND SECURITY

UNITED STATES FIRE ADMINISTRATION

NATIONAL FIRE ACADEMY

FOREWORD

The U.S. Fire Administration (USFA), an important component of the Department of Homeland Security (DHS), serves the leadership of this Nation as the DHS's fire protection and emergency response expert. The USFA is located at the National Emergency Training Center (NETC) in Emmitsburg, Maryland, and includes the National Fire Academy (NFA), National Fire Data Center (NFDC), and the National Preparedness Network (PREPnet). The USFA also provides oversight and management of the Noble Training Center in Anniston, Alabama. The mission of the USFA is to save lives and reduce economic losses due to fire and related emergencies through training, research, data collection and analysis, public education, and coordination with other Federal agencies and fire protection and emergency service personnel.

The USFA's National Fire Academy offers a diverse course delivery system, combining resident courses, off-campus deliveries in cooperation with State training organizations, weekend instruction, and online courses. The USFA maintains a blended learning approach to its course selections and course development. Resident courses are delivered at both the Emmitsburg campus and the Noble facility. Off-campus courses are delivered in cooperation with State and local fire training organizations to ensure this Nation's firefighters are prepared for the hazards they face.

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**UNIT 2: INTEGRATION OF THE NATIONAL INCIDENT MANAGEMENT   
SYSTEM TO FIREGROUND MANAGEMENT** IG 2-1

**UNIT 3: FIREGROUND DECISION MAKING** IG 3-1

**UNIT 4: BUILDING CONSTRUCTION TYPES** IG 4-1

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**UNIT 6: BURN TIME CONSIDERATIONS AND LINE-OF-DUTY DEATHS   
FROM COLLAPSE INCIDENTS** IG 6-1

**UNIT 7: FIREGROUND DECISION MAKING EXERCISES** IG 7-1

Handouts

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instructional aids

Slides

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**Total Slides** 857

Handouts

Handout 7-1: Pre-exercise Information Forms

Handout 7-2: Exercise #1 Messages

Handout 7-3: Exercise #2 Messages

Handout 7-4: Exercise #3 Messages

Handout 7-5: Exercise #4 Messages

Handout 7-6: Exercise #5 Messages

Handout 7-7: Exercise #6 Messages

Handout 7-8: Exercise #7 Messages

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course schedule

Unit 1: Introduction 1 hr.

Unit 2: Integration of the National Incident Management System to Fireground   
Management 1 hr.

Unit 3: Fireground Decision Making 1 hr.

Unit 4: Building Construction Types 2 hr., 25 min.

Unit 5: The Analytical Sizeup Process 3 hr., 30 min.

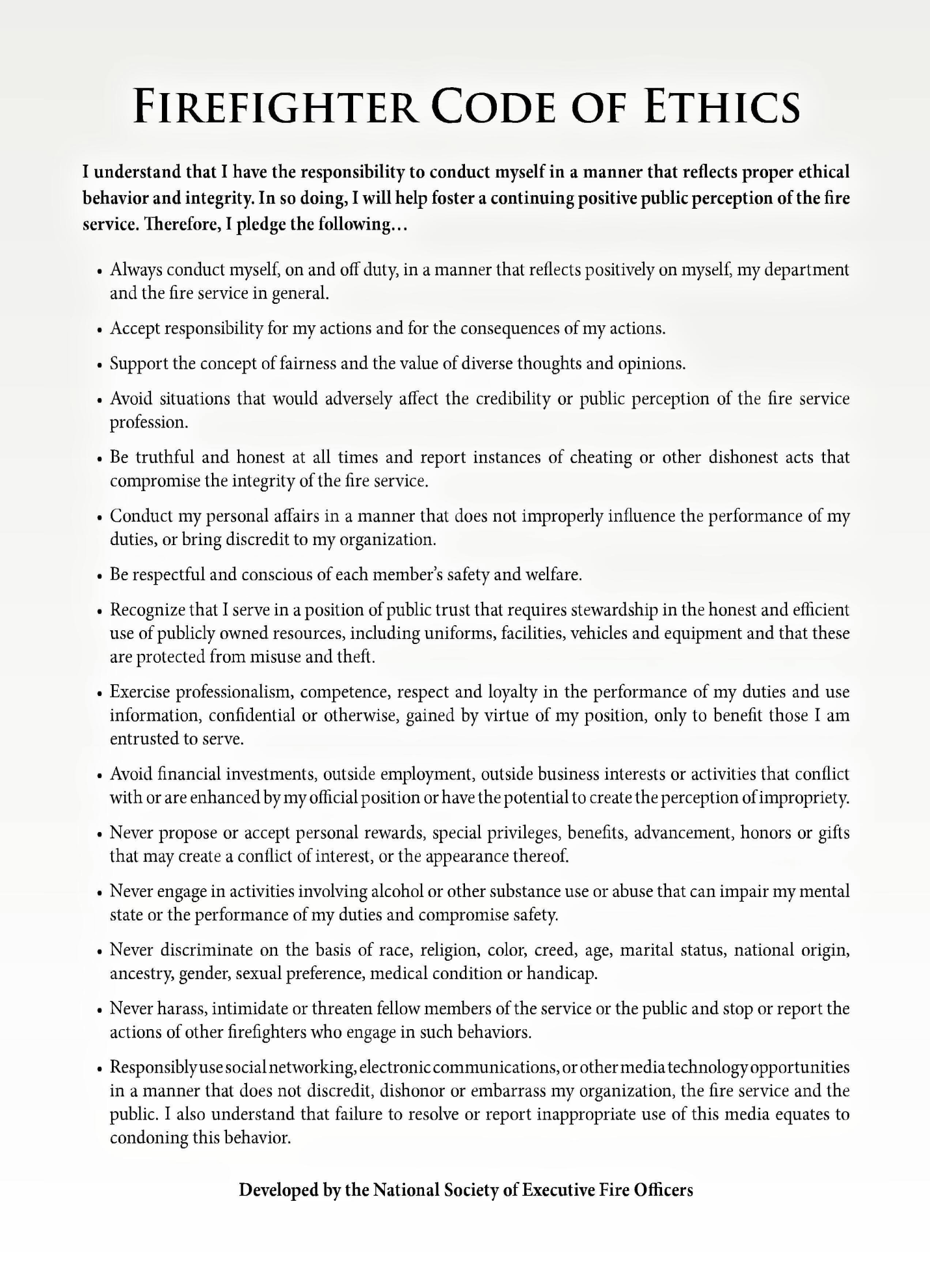
Unit 6: Burn Time Considerations and Line-of-Duty Deaths from Collapse   
Incidents 2 hr., 15 min.

Unit 7: Fireground Decision Making Exercises 2 hr., 45 min.

**Total Time** 13 hr., 55 min.

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Name: Date:

final examination

**Multiple-Choice Directions:** *Read each question carefully, and choose the best answer from the four choices.*

1. What primary factor is not pertinent for Initial Company Officer (ICO) sizeup?

* 1. Determining occupant life safety issues.
  2. Identifying firefighter safety issues.
  3. Estimating burn time.
  4. Establishing a demobilization plan.

2. Incident Priorities such as Life Safety--Incident Stabilization--Property Conservationdetermine

a. Incident Objectives.

b. Incident Strategy.

c. Incident Tactics.

d. all of the above.

3. How many types of building construction have been identified according to the National Fire Protection Association(NFPA)?

a. Six.

b. Five.

c. Four.

d. None of the above.

4. According to empirical testing completed in 2005 by the National Institute of Standards and Technology (NIST),whenlightweight building construction was exposed to fire conditions, fire progress was unabated. An approximate burn time was identified in order to determine structural collapselimitations.Four similar buildings were used in the testing. What was the approximate time that each building suffered structural collapse?

a. Twenty-two minutes.

b. Twenty-five minutes.

c. Seventeen minutes.

d. Thirteen minutes.

5. When does burn timebegin for determining safe operating timeframes on an incident?

a. Ignition time.

b. Flashover time.

c. Arrival time.

d. Tactical deployment time.

6. Tests have shown that flashovermay occur in a residential property with a 10- to 15-pound fuel load in approximately how many minutes after ignition?

a. Fifteen to 18 minutes.

b. Twelve to 15 minutes.

c. Six to 8 minutes.

d. Four to 6 minutes.

7. According to the NFPA Classification for Building Construction, a Type III classification implies what type of construction?

a. Fire-resistive.

b. Wood-frame.

c. Heavy timber/Mill.

d. Ordinary.

8. An Incident Objective for an operational period should be

a. attainable.

b. flexible.

c. measurable.

d. all of the above.

9. According to NFPA data gathered from 1994 to 2003, line-of-duty deaths (LODDs) due to structural collapse incidents occurred most frequently in what type of occupancy?

a. Store/Office.

b. Public building.

c. Residential.

d. Manufacturing.

10. In modern highrise building construction, the gap between the outside curtain wall and interior wall is known as

a. interior gap.

b. safing gap.

c. perpendicular gap

d. carmichael gap.

11. An Incident Strategyis defined as a

a. statement of guidance.

b. plan of action (POA).

c. tactical deployment.

d. none of the above.

12. According to NFPA data gathered from 1994 to 2003, regarding structural collapse incidents resulting in LODDs, what timeframe period had the highest group of LODDs?

a. 12 a.m. to 4 a.m.

b. 4 a.m. to 8 a.m.

c. 8 p.m. to 12 a.m.

d. 8 a.m. to 12 p.m.

13. An Incident Tactic is defined as

a. what needs to be accomplished by a deployed resource.

b. a broad statement regarding resource flexibility.

c. how an assignment will be accomplished by a deployed resource.

d. establishing a Demobilization Plan for incident resources.

14. What type of firefighting operations resulted in the highest number of LODDs due to structural collapse between 1994 to 2003?

a. Search and rescue.

b. Ventilation.

c. Advancing a hoseline/fire attack.

d. Forcible entry.

15. What 3-month period recorded the most LODDs due to structural collapse between 1994 to 2003 according to NFPA data?

a. January-February-March.

b. April-May-June.

c. July-August-September.

d. October-November-December.

16. NIST testing conducted during 2005 for a Type III--Ordinary Construction occupancy with a truss roof assembly indicated structural collapse occurred in how many minutes from time of ignition of fire when fire progress was unabated?

a. Twenty-two to 25 minutes.

b. Twenty-six to 29 minutes.

c. Nineteen to 22 minutes.

d. Fifteen to 18 minutes.

17. What Incident Command System (ICS) form is recommended for the ICO to document the transfer ofCommand process during an incident?

a. ICS Form 201, *Incident Briefing*.

b. ICS Form 209, *Incident Status Summary*.

c. ICS Form 213, *General Message*.

d. ICS Form 215, *Operational Planning Worksheet*.

18. An ICO best friend kitshould contain

a. Primary Factor Chart.

b. Personal Incident Clock.

c. Incident Evaluation Chart.

d. all of the above.

19. If an ICO responds to a residential occupancy with lightweight construction and estimates burn time at 8 minutes upon arrival, approximately how much time does the ICO have to interrupt fire progress before structural collapsemay occur?

a. Seventeen minutes.

b. Thirteen minutes.

c. Nine minutes.

d. None of the above.

20. What ICS form is an important tool for the IC to maintain for documentation purposes during an incident?

a. ICS Form 207, *Incident Organization Chart*.

b. ICS Form 209, *Incident Status Summary*.

c. ICS Form 213, *General Message*.

d. ICS Form 214, *Unit Log*.

21. The four General Staff positions are

a. Plans Chief, Operations Chief, Fire Chief, Logistics Chief, Administrative Chief.

b. Operations Chief, Plans Chief, Logistics Chief, Finance/Administrative Chief.

c. Operations Chief, Fire Chief, Plans Chief, Situation Chief, Finance/ Administrative Chief.

d. Public Information Officer (PIO), Safety Officer, Liaison, Operations Chief, Plans Chief.

22. The three Command Staff positions are

a. Safety Officer, Logistics Officer, Liaison Officer.

b. Plans Chief, PIO, Liaison Officer.

c. Safety Officer, PIO, Liaison Officer.

d. Rapid Intervention Crew (RIC) Officer, PIO, Liaison Officer.

23. Planning

a. collects and evaluates information needed for the action plan preparation.

b. is responsible for the fiscal documentation.

c. provided equipment for maintenance and refueling.

d. directs all tactical operations.

24. Finance/Administration

a. collects and evaluates information needed for the action plan preparation.

b. is responsible for the fiscal documentation.

c. provided equipment for maintenance and refueling.

d. directs all tactical operations.

25. Operations

a. collects and evaluates information needed for the action plan preparation.

b. is responsible for the fiscal documentation.

c. provided equipment for maintenance and refueling.

d. directs all tactical operations.

26. Command is

a. responsible for overall management of the incident.

b. establishes the strategy and tactics for the incident.

c. responsible for firefighter safety.

d. all of the above.

27. Branches, division, or groups may be functional or geographic.

a. True.

b. False.

28. The intelligence/investigation function may be

a. a separate General Staff Position.

b. a unit within the Planning Section.

c. a branch within the Operations Section.

d. all of the above.

29. The Safety Officer is

a. responsible for coordinating with assisting agencies.

b. responsible for monitoring and assessing safety hazards.

c. responsible for establishing the press area for the PIO.

d. none of the above.

30. The PIO is responsible for development of accurate and complete information regarding the incident but must obtain the IC's approval prior to releasing the information.

a. True.

b. False.

31. Classical decision making

a. is done within seconds.

b. is an instinctive decision making process.

c. follows a specific sequence of steps, problem identification, evaluation, selection.

d. seeks a "good enough" solution.

32. In fire-resistive construction, walls and structural members are made of noncombustible materials with a minimum of a 4-hour fire-resistive rating?

a. True.

b. False.

33. The major objectives of fire operations are to

a. confine.

b. control.

c. extinguish.

d. all of the above.

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Name: Date:

final EXAMINATION ANSWER sheet

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final examination answer key

**Multiple-Choice Directions:** *Read each question carefully, and choose the best answer from the four choices.*

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final examination ANSWER SHEET key

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