



National Fire Academy

**R0297 – Command and Control Decision Making at Multiple Alarm Incidents
Version: 2nd Edition, 12th Printing, December 2015**

Quarter:

ACE Credit: In the upper division baccalaureate degree category, three semester hours in fire science or emergency management.

IACET Continuing Education Units: 4.2

Length of Course: 6 Days (68 hr. 20 min. contact hours, Sunday – Friday)

Prerequisite: Yes

Curriculum: Incident Management

Training Specialist: Richard Sexton

Instructor:

Instructor email/phone:

Classroom: J-

Meeting Time: 8 AM – 5 PM

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Course Description (Catalog)

R0297 – Command and Control Decision Making at Multiple Alarm Incidents. This six-day course is simulation-intensive and focuses on the command officer's responsibility while conducting major operations involving multialarm units. Emphasis is placed on rapid fireground decision-making, advanced incident command, command and control, safety, personnel accountability, and communications.

Through the use of simulations, students are taught to recognize critical cues specific to various types of complex emergency incidents. The students also are taught the proper command and

control procedures necessary to bring these incidents to closure. A wide range of simulations is used to duplicate emergency incidents that require the student to evaluate multiple hazards. Fire department emergencies involving multifamily occupancies, hotels, commercial occupancies, large shopping malls, railroads, wildland, and high-rise are just some of the incidents that are simulated.

The course is interactive, using lecture, simulations and student participation as instructional methods. A Web-based pre-course is used that includes self-paced instruction and simulation training.

Student Qualifications (Primary and Secondary Audience)

This course is designed for first-level chief officers who command multialarm incidents and those Company Officers (COs) who initially command several units during the early stages of multialarm incidents.

Course Scope (Goal)

To provide students with a training methodology that significantly improves incident scene decision making.

Course Objectives (Course Learning Outcomes – TLOs)

Course Delivery Method

The National Fire Academy (NFA) offers specialized training courses and advanced management programs of national impact in an academic classroom environment [on campus at the National Emergency Training Center \(NETC\) in Emmitsburg, Maryland](#). This classroom course is designed for the national level fire service officer from State and local fire service organizations. During this 6-day delivery, students will reside in dormitories provided on campus with classes conducted in classrooms designed for critical student/instructor interaction. All course materials are designed for interactive classroom environments, in either paper notebook or electronic formats.

Course Schedule

The purpose of the course schedule is to give you, at a glance, the required preparation, activities, and evaluation components of your course.

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM	Unit 1: Introduction Unit 2: Incident Command System Review Unit 3: Decision Making Review	Simulation 3 (Mandatory): Strip Shopping Centers Frontload Strip Shopping Simulation Simulation 4 (Mandatory): Lumberyard Frontload	Simulation 6 (Mandatory): Hazardous Materials Facilities Frontload Hazardous Materials Facilities Simulation Simulation 7 (Mandatory): Commercial Building Frontload	Optional Simulation Enclosed Mall Simulation Optional Simulation	Simulation 11 (Mandatory): Planning Process: Developing an Incident Action Plan	Highrise Frontload (cont'd) Highrise Simulation
Lunch						
PM	Unit 4: Walkthrough Simulation 1: Warehouse Simulation 2 (Mandatory): Garden Apartments Frontload Garden Apartments Simulation	Lumberyard Simulation Simulation 5 (Mandatory): Vacant Commercial Frontload Vacant Commercial Simulation	Commercial Building Simulation Optional Simulation Optional Simulation Walk-thru, QAP, and Assignments	Simulation 10 (Mandatory): Transportation Accident Frontload Transportation Accident Simulation	Simulation 12 (Mandatory): Highrise Frontload Course Evaluations	Course Summary Clean-up Graduation
Evening	Do all frontloads for Monday.	Do all frontloads for Tuesday.	Do all frontloads for Wednesday.	Do all frontloads for Thursday.		
<p>Instructor note: You must do Simulations in order through 1430 hours Wednesday, and the IAP Meeting and Highrise frontload on Thursday. You may use any two of the optional simulations where indicated on the schedule. Instructor must give the students the names of the optional simulation that will be done on the first day.</p>						

Course Resources (Instructional Materials)

In order to be fully prepared, obtain a copy of the required textbooks and other instructional materials prior to the first day of class.

Required Readings

The student must complete required readings during the course to be able to thoughtfully participate in discussions and activities.

None.

Suggested Reading/Resources

Suggested readings and resources are not evaluated, but may enhance the student's understanding, serve as additional sources for citation and promote discussion of course material.

None.

Required Resources (Course Textbook)

Student Manual.

Supplemental Resources (Supplemental Course Textbook)

None.

Grading Methodology (Evaluation Procedures)

Required Reading Assignments

Student completion of reading assignments will be done via evaluation of their class participation and will not be a separately graded activity.

Suggested Readings

Suggested readings are not evaluated, but may enhance the student's understanding and promote discussion of course material.

Course Outline

Unit 1: Introduction (Day 1)

Objectives

The students will enhance their skills and abilities to manage fire department operations effectively at multialarm incidents.

Unit 2: Incident Command System Review (Day 1)

Objectives

The students will:

1. Determine an appropriate Incident Command System (ICS) Operations Section organization for a fire situation.
2. Determine an appropriate ICS Operations Section organization for a multialarm incident.

Unit 3: Decision Making Review (Day 1)

Objectives

The students will:

1. Understand the difference between classical and Naturalistic Decision Making.
2. Know how to determine whether classical or Naturalistic Decision Making is the appropriate decision making model to use at a particular incident.

Unit 4: Walkthrough Simulation 1: Warehouse (Day 1)

Objectives

The students will:

1. Know the mechanics of performing a simulation.
2. Perform a walkthrough simulation to gain familiarity with the mechanics of simulations.
3. Know the fire departments and resources that are available for the simulation incidents.
4. Perform the simulations for each unit of the course as scheduled.

Simulation 2: Garden Apartments (Day 1)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management tasks at fires involving garden apartments.
2. Perform the management functions required of the Command Officer at fires in garden apartments.

Simulation 3: Strip Shopping Centers (Day 2)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management tasks at fires involving strip shopping centers.
2. Perform the management functions required at fires in strip shopping centers.

Simulation 4: Lumberyard (Day 2)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management functions at lumberyard fires.
2. Apply the knowledge, skills, and abilities discussed to manage a simulated lumberyard fire.

Simulation 5: Vacant Commercial (Day 2)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management functions at fires involving vacant commercial structures.
2. Apply the knowledge, skills, and abilities discussed to manage a simulated fire situation involving a vacant commercial structure.

Simulation 6: Hazardous Materials Facilities (Day 3)

Objectives

The students will:

1. Develop their knowledge, skills, and abilities relating to hazardous materials (haz mat) facilities.
2. Apply the knowledge, skills, and abilities while performing a haz mat facility simulation.

Simulation 7: Commercial Building (Day 3)

Objectives

The students will:

1. Develop their knowledge, skills, and abilities relating to a commercial building during a fire.
2. Apply the knowledge, skills, and abilities while performing a commercial building simulation.

Simulation 8: Small Hotel (Optional)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management functions at fires involving small hotels.
2. Apply the knowledge, skills, and abilities discussed to manage a simulated fire situation involving a small hotel.

Simulation 9: Enclosed Mall (Optional)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management tasks at fires involving enclosed malls.
2. Perform the management functions required of the Command Officer at fires in enclosed malls.

Simulation 10: Transportation Accident (Day 4)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management tasks at fires involving transportation incidents.
2. Perform the management functions required of the Command Officer at fires at transportation incidents.

Simulation 11: Planning Process: Developing an Incident Action Plan (Day 5)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to organize and conduct a Planning Meeting for the purpose of supporting an ongoing incident and developing an Incident Action Plan (IAP).
2. Perform the management functions required of the General and Command Staffs, including use of the appropriate Incident Command System (ICS) forms.
3. Conduct a Planning Meeting, concluding the activities with a completed IAP for a specific incident.

Simulation 12: Highrise (Day 5)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management tasks at fires involving highrise buildings.
2. Apply the knowledge, skills, and abilities discussed to manage a simulated fire situation involving a highrise building.

Simulation 13: Industrial Building (Optional)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management tasks at fires involving industrial buildings.
2. Perform the management functions required of the assigned Incident Command System (ICS) positions at fires in industrial buildings.

Simulation 14: Dinner Club (Optional)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management tasks at fires involving dinner clubs.
2. Perform the management functions required of the Command Officer at fires in dinner clubs.

Simulation 15: Warehouse (Optional)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management functions at warehouse fires.
2. Apply the knowledge, skills, and abilities discussed to manage a simulated warehouse fire.

Simulation 16: Nursing Homes (Optional)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management tasks at fires involving nursing homes.
2. Perform the management functions required of the Command Officer at fires in nursing homes.

Simulation 17: Bulk Propane Facility (Optional)

Objectives

The students will:

1. Understand the application of preincident planning to include hazardous materials (haz mat) contingencies specific to liquefied propane gas (LPG) facilities.
2. Understand the importance of sizeup and the implementation of the Command Sequence.
3. Understand the ability to assess and predict fire behavior relative to large open-space buildings and pressurized liquid/gas vessels (tanks).
4. Understand the importance of immediate Incident Command System (ICS) and implementation of an organizational structure to support a long-term incident.
5. Understand how to address incident scene safety issues including: safety implementation, Rapid Intervention Crew (RIC), Boiling Liquid Expanding Vapor Explosion (BLEVE)/container breach potential, and personnel accountability.

Simulation 18: School Complex (Optional)

Objectives

The students will:

1. Develop their knowledge, skills, and abilities relating to a school complex.
2. Apply the knowledge, skills, and abilities while performing a school complex simulation.

Simulation 19: Courthouse (Optional)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management tasks at incidents involving dirty bombs.
2. Perform the management functions required of the Incident Commander (IC) at dirty bomb incidents.

Simulation 20: Farm Complex (Optional)

Objectives

The students will:

1. Develop their knowledge, skills, and abilities relating to a farm complex.
2. Apply the knowledge, skills, and abilities while performing a farm complex simulation.

Simulation 21: Places of Worship (Optional)

Objectives

The students will:

1. Develop the knowledge, skills, and abilities to perform management functions at fires involving places of worship.
2. Apply the knowledge, skills, and abilities to manage a simulated fire situation involving a place of worship.

Simulation 22: Supermarkets (Optional)

Objectives

The students will:

1. Develop their knowledge, skills, and abilities related to emergency incidents involving supermarkets.
2. Apply the knowledge, skills, and abilities while performing a supermarket simulation.

Policies

Class Attendance and Cancellation Policy

Attendance

- You are required to attend all sessions of the course. If you do not, you may not receive a certificate, and your stipend may be denied.
- If you need to depart campus early and miss any portion of the course and/or graduation, you must make the request in writing to the NFA training specialist. The training specialist, in collaboration with the superintendent, may waive the attendance requirement in order to accommodate you with extraordinary circumstances as long as you complete all course requirements. If you receive approval for departing early, you must forward the approval to the Admissions Office so your stipend reimbursement is not limited.

Student Substitutions

Substitutions for NFA courses are made from waiting lists; your fire department can't send someone in your place.

Cancellations or No-Shows

NFA's mission for delivery of courses is impaired significantly by cancellations and no-shows. It is very difficult and costly to recruit students at the last minute. Currently there is a two-year ban on student attendance for students who are no-shows or cancel within 30 days of the course start date without a valid reason. If you receive such a restriction, your supervisor needs to send a letter to our Admissions Office explaining the cancellation/no-show.

Course Failure

If you fail an on-campus course, you will not be issued a stipend for that course. You can reapply for the failed course or any other NFA course and go through the random selection process. You don't have to successfully complete the failed course before attending another NFA course.

Student Code of Conduct Policy

Students, instructors and staff are expected to treat each other with respect at all times. Inappropriate behavior will not be tolerated and may result in removal from campus and denial of stipends.

Writing Expectations

Student writing will conform to the generally accepted academic standards for college papers. Papers will reflect the original work of the student and give appropriate credit through citations for ideas belonging to other authors, publications or organizations. Student written work should be free of grammatical and syntax errors, free of profanity or obscene language or ideas, and reflect critical thinking related to the course subject matter.

Citation and Reference Style

Attention Please: Students will follow the APA, Sixth Edition as the sole citation and reference style used in written work submitted as part of coursework to NFA. Assignments completed in a narrative essay, composition format, abstract, and discussion posts must follow the citation style cited in the APA, Sixth Edition.

Late Assignments

Students are expected to submit classroom assignments by the posted due date (11:59 p.m. EDT/EST) and to complete the course according to the published class schedule. As adults, students, and working professionals, you must manage competing demands on your time. Discussion board postings submitted within 3 days after the submission deadline will receive up to a 20% deduction. Those that do not submit their discussion board postings within this timeline will receive a “0” grade for the week. Final assignment papers will not be accepted after the deadline. Any paper submitted after the deadline will receive a “0” grade for that assignment.

Netiquette

Online learning promotes the advancement of knowledge through positive and constructive debate – both inside and outside the classroom. Forums on the Internet, however, can occasionally degenerate into needless insults and “flaming.” Such activity and the loss of good manners are not acceptable in a professional learning setting – basic academic rules of good behavior and proper “Netiquette” must persist. Remember that you are in a place for the rewards and excitement of learning which does not include descent to personal attacks or student attempts to stifle the forum of others.

- **Technology Limitations.** While you should feel free to explore the full-range of creative composition in your formal papers, keep e-mail layouts simple. The NFA Online classroom may not fully support MIME or HTML encoded messages, which means that bold face, italics, underlining, and a variety of color-coding or other visual effects will not translate in your e-mail messages.
- **Humor Note.** Despite the best of intentions, jokes and especially satire can easily get lost or taken seriously. If you feel the need for humor, you may wish to add “emoticons” to help alert your readers: ;-), :), ☺ .

Disclaimer Statement

Course content may vary from the outline to meet the needs of this particular group.

Grading

Please review the following rubrics that explain how grades will be awarded.

Students who do not complete the entire course will be awarded an Incomplete (I) grade. In accordance with National Fire Academy academic policies, an Incomplete (I) grade must be removed by the end of the next semester following the course, or it automatically becomes a Failing (F) grade.

If you fail an on-campus course, you will not be issued a stipend for that course. You can reapply for the failed course or any other NFA course and go through the random selection process. You don't have to successfully complete the failed course before attending another NFA course.

http://www.usfa.fema.gov/training/nfa/admissions/student_policies.html

Academic Honesty

Students are expected to exhibit exemplary ethical behavior and conduct as part of the NFA community and society as a whole. Acts of academic dishonesty including cheating, plagiarism, deliberate falsification, and other unethical behaviors will not be tolerated.

Students are expected to report academic misconduct when they witness a violation. All cases of academic misconduct shall be reported by the instructor to the Training Specialist.

If a student is found to have engaged in misconduct and the allegations are upheld, the penalties may include, but are not limited to one or a combination of the following:

- expulsion,
- withholding of stipend or forfeiture of stipend paid,
- exclusion from future classes for a specified period; depending on the severity it could range from 1-10 years, and/or
- forfeiture of certificate for course(s) enrolled in at NETC.

Refer to NFA-specific Standard Operating Procedure 700.1 – *Academic Code of Conduct and Ethics* for more information.

Grading Rubrics

STUDENT PERFORMANCE EVALUATION FORM

RATING INSTRUCTIONS

1. Each student shall be evaluated while acting in a command function. Additionally, each student will be observed while acting in other supervisory roles.
2. Each student position shall be rated by the instructor supervising the Incident Command Post (ICP).
3. Two instructors shall collaborate on rating the student's overall performance.

Evaluating the Incident Commander

Assigned Duties and Responsibility	Superior Value 4	Above Average Value 3	Average Value 2	Below Average Value 1
Establishes Command and gives initial report.				
Uses strategy focus prompter.				
Recognizes resource demands of incident.				
Determines appropriate strategy.				
Makes appropriate tactical assignments.				
Uses tactical worksheet.				
Recognizes safety concerns.				
Develops appropriate ICS organization.				
Establishes responder rehab and arranges personnel relief.				
Maintains personnel accountability.				
SUBTOTAL				

FINAL RATING CRITERIA

Rating Category	Criteria for Category	Definition of Rating	Recommendation
Superior	35 to 40 Total Value Points	Student fully understood the duties and responsibility of the position and demonstrated exceptional skills in the performance of these duties. Observed performance was over and above the average student application level and seldom duplicated.	ICS training should be sustained.
Above Average	25 to 34 Total Value Points	Student fully understood the duties and responsibility of the position and demonstrated above average skills in the performance of these duties. Observed performance was above the average student application level.	ICS training should be broadened.
Average	20 to 24 Total Value Points	Student understood the duties and responsibility of the position and demonstrated average skills in the performance of these duties. Observed performance met the minimum student application level.	ICS training should be extended.
Below Average	Below 20 Total Value Points	Student understood the duties and responsibility of the position and demonstrated below average skills in the performance of these duties. Observed performance did not meet the minimum student application level.	ICS training should be evaluated.

Calculating the total value points for each student:

Total Overall Instructor Value Points = _____

Final overall student evaluation for demonstrating the knowledge, skills, and abilities required of an **Incident Commander** is indicated below.

(Circle One)

SUPERIOR

ABOVE AVERAGE

AVERAGE

BELOW AVERAGE

INSTRUCTOR 1 Comments: _____

INSTRUCTOR 2 Comments: _____

**CASE STUDIES GRADE SHEET
(40 points)**

Student Name: _____

Course Date: _____

The student will participate as a team member in the case studies provided as part of the course material and provide the documentation required for each. This will include identifying key issues, required strategies and factors, determining responses to outside agencies, and determining other Incident Command System (ICS) functions required by the incident.

	Exceeds expectations	Meets expectations	Minor recommendations	Significant recommendations	Incomplete	
	5	4	3	2	1	Score
Technical Content						
1. Completed and submitted prescenario group homework assignment each day.						
2. Performed functions assigned and provided appropriate procedures and actions.						
3. When assigned command positions, followed appropriate procedures and actions.						
4. Was able to delegate responsibilities as appropriate for the incident.						
Final grade: (Total Possible = 40) TOTAL POINTS =						

Comments/Recommendations: _____

(continue on reverse if necessary)

Instructor: _____

Instructor: _____

COMMAND AND CONTROL DECISION MAKING AT MULTIPLE ALARM INCIDENTS EVALUATION MASTER SHEET

Student Name/Number	Group 1					Group 2					Group 3					Group 4				
Attendance	10																			
Precourse Assignment	10																			
Comprehensive answers to assigned questions																				
Address all issues within response																				
Case Studies Grade Sheet	40																			
Completed group homework																				
Performed function and provided docs - Sim 11																				
Command position																				
Delegation of responsibilities																				
Simulation Incident Learning Activities	40																			
Used appropriate strategy/tactics																				
Requested, used, rotated resources																				
Demonstrated an understanding of ICS																				
Exhibited communication/command skills																				
OVERALL SCORE/GRADE																				
Possible: 100 points																				

Precourse Assignment Grade Sheet

Student Name: _____

Course Date: _____

Read the article: The Emergency Operations Center: A Vital Preparedness Tool (pages 2-9)

Read the Precourse Reading: COMMAND AND GENERAL STAFF FUNCTIONS IN ICS. (pages 10-50)

Complete the workbook (pages 51-61) and bring the completed workbook to the first day of class. Instructors will collect the workbooks from each student. This is information that is a necessary prerequisite for participation in the in-class simulation activities.

	5 Meets expectations	4 Minor recommendations	3 Few recommendations	2 Significant recommendations	1 Incomplete	Score
Technical Content						
1. Did the student comprehensively answer the assigned questions?						
2. Did the student comprehensively address all issues within the response?						
Final grade: (Total Possible = 10)						

Comments/Recommendations:

(continue on reverse if necessary)

Instructor: _____

Instructor: _____

