



S-130 Unit 18: Incident Exercise

Summary:

This unit is a mandatory component to complete the S-130 Firefighter Training course. The intent is to provide a field exercise, tasking students with the application of all unit concepts, evaluating skill proficiency for course completion.

The information in this instructor guide is meant to aid coordinators and cadre in the development and facilitation of the incident exercise.

Incident Position Description (IPD) Alignment:

This unit aligns with the following FFT2 IPD specific duties (<https://www.nwccg.gov/positions/fft2/position-ipd>):

- Model leadership values and principles. Provide positive influence. Emphasize teamwork.
- Carry IRPG at all times and use it to guide actions.
- Look, listen, and learn. Ask questions when appropriate.

Objectives:

- Identify incident chain of command, communications, safety concerns, objectives and tactics provided in an incident briefing.
- Demonstrate ability to identify and mitigate hazards in the fire environment.
- Demonstrate hand line techniques as determined by fire behavior and fuel type.
- Demonstrate use of escape routes to promptly retreat to a safety zone.
- Demonstrate water use techniques as determined by fire behavior and fuel type
- Describe firing techniques as determined by fire behavior and fuel type.
- Demonstrate fire shelter deployment techniques as determined by fire behavior and fuel type.
- Demonstrate mop-up techniques as determined by fire behavior and fuel type.
- Participate in an After Action Review.

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Unit at a Glance:

Topics	Method	Duration
Exercise Development	Instructor Preparation	Specific to instructors
Incident Briefing	Incident Exercise	7 Hours
Tools and Equipment		
Handline Technique		
Water Use		
Firing Devices		
Mop Up		
Fire Shelter		
After Action Review		
Total Unit Duration		

Materials:

- *Incident Response Pocket Guide (IRPG)*, PMS 461, <https://www.nwcg.gov/publications/461>
- Optional unit 18 IAP, <https://www.nwcg.gov/publications/training-courses/s-130/course-materials>
- *Incident Command System forms*, <https://www.nwcg.gov/publications/ics-forms>.
- The tools and equipment presented in the course, as well as local area specific tools and equipment.
- Any other items or equipment needed to set up and operate the incident exercise such as flagging, signs, tape, markers etc.
- Required fireline PPE
- Handheld radios
- Transportation logistics
- Notebook for participants

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- Due to field design of this unit, there is no class presentation of this power point.

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Objectives

Students will be able to:

- Identify incident chain of command, communications, safety concerns, objectives and tactics provided in an incident briefing.
- Demonstrate ability to identify and mitigate hazards in the fire environment.
- Demonstrate hand line techniques as determined by fire behavior and fuel type.

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- Review unit objectives.

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Objectives

Students will be able to:

- Demonstrate use of escape routes to promptly retreat to a safety zone.
- Demonstrate water use techniques as determined by fire behavior and fuel type
- Describe firing techniques as determined by fire behavior and fuel type.

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- Review unit objectives.

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Objectives

Students will be able to:

- Demonstrate fire shelter deployment techniques as determined by fire behavior and fuel type.
- Demonstrate mop-up techniques as determined by fire behavior and fuel type.
- Participate in an After Action Review (AAR).

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- Review unit objectives.

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- Due to the course design, this exercise is mandatory and meant to be facilitated in the field.
 - It is the responsibility of the instructors to develop an exercise that represents the conditions of an actual fire situation based on local fuel and topographic characteristics. (use of sand tables to aid in exercise development can be useful)
 - The purpose of the exercise is to task students with the application of unit concepts to show proficiency and be evaluated. Instructors should only interject when deficiencies are identified and need correcting immediately.
 - Numerous qualified instructors may be needed to fill supervisory roles for the modules and the incident itself.
- Develop exercise to incorporate activities and actions that represent applicable objectives from each unit, tasks in the S-130 Student Evaluation Task Sheet, and the incident exercise objectives.
 - Simulate a dynamic fire environment to include:
 - Frequently growing and changing fire perimeter indicated by selective flagging,
 - Placement of spot fires prior to exercise, represented by pre-identified colored flagging in locations they will likely occur.
 - Pre-identify an exercise location that allows for the activities needed to complete objectives:
 - Capture travel time to and from the exercise location for agenda purposes.
 - Travel time to location should not diminish time allowed to complete exercise.
 - Provide enough radios to allow the students to manage inter-crew radio communications during the exercise, take a tactical pause, and then have students transfer radios and communication responsibilities to the students who have yet to have an opportunity.

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- Use applicable objectives from Unit 1: Briefings:
 - Describe briefings and their purpose.
 - Describe some of the common briefing components and their purpose.
 - Describe the elements of the briefing checklist and their purpose.
 - Describe the concept of debriefings, After Action Reviews (AARs), and their purpose.
- Provide an operational briefing based on an emerging incident.
- It is recommended to develop an IAP for the exercise which will help with facilitation of the briefing:
- Example IAP and blank ICS forms are available for download on the course site.
- Ensure the ICS 206 is used to brief on accident and injury procedures.
- Depending on the number of students and complexity of exercise, consider using division break outs to provide information specific to the individual tasks and portion of the incident crews will be working:
 - Chain of command
 - Communication and frequencies
 - Maps
 - Tasks
 - Directions
 - Lookout Locations
 - Safety zones and escape routes
 - Division breaks
 - Location of adjoining resources

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- Continually evaluate, throughout the exercise, the student's ability to follow the chain of command and how to use it for communication.

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- ❑ Evaluate applicable objectives from Unit 8: Tools and Equipment:
 - Describe and identify common hand tools.
 - Describe the appropriate tool for a specific task based on fuel type and ground cover.
 - Describe performing field maintenance, sharpening, and identify tools which need to be put out of service and replaced.
 - Demonstrate proper methods of carrying and passing tools.
 - Demonstrate proper tool use and appropriate spacing while using tools during suppression activities.
 - Describe the proper placement of the tool while working in an area when tool is not in use.
- ❑ Provide exercise content based on the applicable objectives:
 - Instructors filling in as module supervisors will direct students/crewmembers to select a tool and get into the appropriate order for the identified fuel type in the exercise or report to their engine and perform tasks identified in the IAP incident objectives.
 - Create a scenario within the exercise where the students will have to sharpen and refurbish tools and equipment.
 - Provide enough qualified instructors to perform supervisory positions during exercise.

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- ❑ Evaluate applicable objectives from Unit 9: Handline Techniques:
 - Discuss establishing an appropriate fireline location using topography, fuel conditions, current and forecasted fire behavior, and incident objectives.
 - Define and identify appropriate anchor point to start construction of handline.
 - Describe two kinds of coordinated crew techniques used for fireline construction.
 - Demonstrate the construction of a cup trench on a steep slope and describe its purpose.
 - Describe the purpose of organizing tools in a specific order.
 - Demonstrate maintaining a safe working distance from other crewmembers.
 - Demonstrate the ability to communicate changing conditions and needs during handline construction using common terminology.
 - Define and identify an appropriate line construction end point.
 - Describe the reason downhill fireline construction is considered a watch out situation.
- ❑ Provide exercise content based on the applicable objectives:
 - Include in exercise development, fire behavior, which at some point, would trigger resources to change methods of attack. (direct to indirect)
 - Find an opportunity and location with underslung line for the use of cup trenches.
 - Communicate with line leadership, to evaluate the appropriate use of common fireline commands such as RTO, Holding, and Moving.
 - Introduce a spot fire, where appropriate, to increase complexity and evaluate spot fire protocol.
 - Take advantage of student deficiencies such as incomplete line or poor cup trench to simulate a slop over.

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- During line digging activity find several opportunities to take tactical pauses for students to exchange tools in order to use them all.
- It may be necessary, depending on class size, to break students up into squads, individual modules, and possible divisions.
- Provide enough qualified Instructors to perform supervisory positions during exercise.
- Develop a portion of the exercise to simulate retardant and water drops on the line to evaluate aerial retardant safety procedures.
- Where possible, identify specific hazards that the students should be able to identify and communicate.

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- ❑ Evaluate applicable objectives from Unit 10: Water Use:
 - Demonstrate the operation and maintenance of a backpack pump.
 - Identify commonly used fittings/appliances and hose components, and their proper care.
 - Demonstrate the process of correctly unrolling and retrieving hose.
 - Demonstrate deploying the two common types of hose lays.
 - Demonstrate different water spray patterns and describe when to use them.
 - Discuss the proper setup and operation of a portable pump and responsibilities of the pump operator.
- ❑ Provide exercise content based on the applicable objectives:
 - Within the exercise, create situations that will trigger the use and evaluation of the unit tools, equipment, and concepts.
 - Provide a scenario that requires implementation of both simple and progressive hose lays.
 - Provide enough instructors to perform supervisory positions during exercise.

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- ❑ Evaluate applicable objectives from Unit 11: Firing Devices:
 - Identify commonly used firing devices.
 - Describe situations where the use of firing devices may be used.
 - Discuss the advantages and disadvantages of the different firing devices.
 - Describe hazards associated with use of common firing devices.
 - Demonstrate safe use and storage of firing devices.
 - Identify alternative devices for igniting fuels.
- ❑ Provide exercise content based on the applicable objectives:
 - Create a scenario where module leaders will lead a discussion with crewmembers regarding the need for a firing operation, what device to use, and which technique to burn with.
 - Make sure there are enough Instructors to perform supervisory positions during exercise.

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- Evaluate applicable objectives from Unit 12: Mop up:
 - Describe the cold trail method as it pertains to securing a control line.
 - Describe safety considerations present during mop up operations.
 - Describe the two mop up methods.
 - Demonstrate the process of mopup on a simulated fire.
 - Demonstrate the systematic process of conducting a grid to detect heat sources that remain in the black or spot fires in the green.
- Provide exercise content based on the applicable objectives:
 - Within the exercise, develop opportunity for students to perform dry and wet mopping, cold trailing, and gridding.
 - Make sure there are enough Instructors to perform supervisory positions during exercise.

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- Evaluate applicable objectives from Unit 16: Fire Shelters:
 - Describe deployment site characteristics and how they differ from a safety zone.
 - Discuss the purpose of fire shelters and how to correctly deploy.
 - Describe the necessity of using a practice shelter.
 - Discuss the inspection and care of the fire shelter.
 - Discuss the correct deployment procedures for the fire shelter.
- Ensure each student has a practice shelter placed in assigned line pack.
- Select a time and location for a shelter deployment drill during the exercise.
 - Do not include this information in any student briefings.
 - As the exercise develops based on changes in fire behavior and weather, have instructors notify module leaders that a deployment is necessary and to give the direction to use nearest escape route and safety zone to deploy.
 - Make sure there is enough Instructors to perform supervisory positions during exercise.

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- ❑ Using applicable objectives from Unit 1: Briefings:
 - Describe the concept of debriefings, After Action Reviews (AARs), and their purpose.
- ❑ Identify a volunteer or select a student to facilitate an AAR based the days events using the IRPG as a reference.
 - Instructors should avoid interjecting unless necessary to maintain momentum or answer questions.

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S-130 Student Evaluation Task Sheet	
 National Wildfire Coordinating Group Student Evaluation Task Sheet	
S-130 Student Evaluation Task Sheet Assigned To:	
Student Name:	
S-130 Student Evaluation Task Sheet Initiated By:	
Instructor Name:	

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- Direct students to review individual S-130 Student Evaluation Task Sheets for completion.

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Objectives

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- Demonstrate ability to identify and mitigate hazards in the fire environment.
- Demonstrate hand line techniques as determined by fire behavior and fuel type.

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- Review unit objectives.

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Objectives

Students will be able to:

- Demonstrate use of escape routes to promptly retreat to a safety zone.
- Demonstrate water use techniques as determined by fire behavior and fuel type
- Describe firing techniques as determined by fire behavior and fuel type.

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- Review unit objectives.

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Objectives

Students will be able to:

- Demonstrate fire shelter deployment techniques as determined by fire behavior and fuel type.
- Demonstrate mop-up techniques as determined by fire behavior and fuel type.
- Participate in an After Action Review (AAR).

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- Review unit objectives.