

Firefighter Type 1 Training

S-131



NFES 2791

Student Workbook

NOVEMBER, 2004



CERTIFICATION STATEMENT

on behalf of the

NATIONAL WILDFIRE COORDINATING GROUP

The following training material attains the standards prescribed for courses developed under the interagency curriculum established and coordinated by the National Wildfire Coordinating Group. The instruction is certified for interagency use and is known as:

Firefighter Type I Training, S-131
Certified at Level I

This product is part of an established NWCG curriculum. It meets the COURSE DEVELOPMENT AND FORMAT STANDARDS – Sixth Edition, 2003 and has received a technical review and a professional edit.

Member NWCG and Training Working Team Liaison

Date

11/15/04

Chairperson, Training Working Team

Date

11/10/04

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PREFACE

Firefighter Type 1, S-131 has been developed by an interagency development group with guidance from the Fire Training Group at the National Interagency Fire Center (NIFC), under the authority of the National Wildfire Coordinating Group (NWCG). The development group consists of the following individuals:

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Unit 0 – Introduction



Course Objectives:

1. Demonstrate the ability to use fireline reference tools to facilitate the communication and decision making processes.
2. Describe how to incorporate and maintain open lines of communication with appropriate personnel.
3. Demonstrate the ability to apply the standard operating procedures found in the Incident Response Pocket Guide (PMS 461).
4. Demonstrate the ability to apply the information found in the Fireline Handbook (PMS 410-1).

-Notes-

Course Overview:

- Interactive group exercises.
- Performance-based student evaluation.
- A written final test requiring 70% or higher.
- Exercises based on TDGS/STEX Workbook found online at:
www.fireleadership.gov
- To qualify as FFT1 you must pass this course and complete the Position Task Book.
- Exercises will emphasize principles found in the Incident Response Pocket Guide (IRPG) and the Fireline Handbook (FHB).

-Notes-

Transition from FFT2 to FFT1:

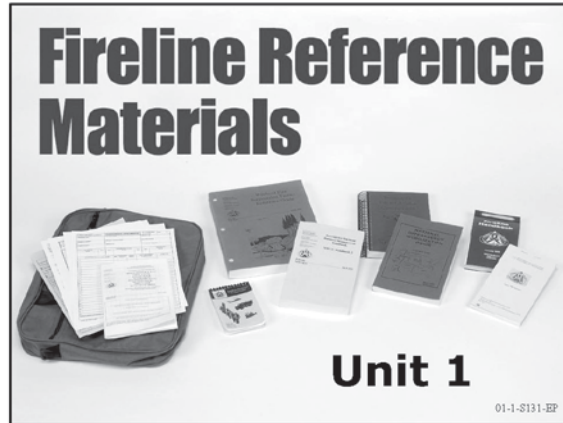
The first level of fireline leadership requires:

- Sharpening communication skills.
- Making sound tactical decisions.
- Coordinating with other resources.
- Being a leader.

-Notes-

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Unit 1 – Fireline Reference Materials



Objective: Demonstrate the ability to locate and apply standard operating procedures found in the Fireline Handbook (FHB) and Incident Response Pocket Guide (IRPG).

-Notes-

I. FIRELINE REFERENCE MATERIALS

A. Fireline Handbook (FHB)

1. Purpose

The intent of the FHB is to serve as a field reference guide for wildland fire agencies using the Incident Command System (ICS) in the control of wildland fires.

2. Features

- Priority information is located on the inside covers of the FHB.
- Sections are alternately colored for easy reference.
- The size of the FHB is intended to fit into field packs.

3. Chapters and Appendixes

Note that the flow of information starts with Safety and then follows the natural progression of fires from Initial Attack through Type 1 and Type 2 incidents.

-Notes-

B. Incident Response Pocket Guide (IRPG)

1. Purpose

Serves as a field reference guide that is comprised of checklists and other information that are considered to be standard operating procedures (SOPs) for wildland incidents.

2. Features

- Priority information is located on the covers of the IRPG.
- The size of the IRPG is intended to fit into a pocket.

3. Sections

Sections are color-coded for easy reference.

II. EXERCISES

Through the following hands-on exercises, you will gain familiarity with fireline reference tools which will help you perform fireline duties safely and efficiently.

-Notes-

Exercise 1

- Your squad reaches a point where you must begin building fireline downhill.



- Briefly identify your responsibilities using your reference tools.

01-1-S131-EP

-Notes-

Exercise 2

- After you have analyzed your downhill line assignment, you believe it is unsafe to proceed.
- What are some considerations to properly refuse this risk?



01-1-5131-EP

-Notes-

Exercise 3

- Your supervisor has acknowledged your reasons for refusing this assignment. He has given you another assignment.
- What information should you gather prior to accepting?



01-1-S131-EP

-Notes-

Exercise 4

- During your briefing you are told that potential hazards exist.
- What tool could you use to properly manage your risk?



01-1-S131-EP

-Notes-

Exercise 5

- You are an Incident Commander Type 5 on a one half acre fire that will require you to spend the night. You will be effectively in a “line spike” situation.



- What considerations would you make?

01-1-5131-EP

-Notes-

Exercise 6

- Dispatch notifies you that you are in a sensitive area and must implement Minimum Impact Suppression Tactics (MIST).

Briefly identify the specific tactics you could use.



01-1-S131-EP

-Notes-

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Unit 2 – Communication



Objectives:

1. Identify the communication and documentation responsibilities of a Firefighter Type 1 (FFT1).
2. Demonstrate the ability to give and receive a briefing following the Briefing Checklist found in the Incident Response Pocket Guide.

-Notes-

I. WHY IS COMMUNICATION IMPORTANT?

During many reviews of fatalities and near misses in wildland/prescribed fire incidents, communication is often the focal point as a major contributor to these disasters.

As a firefighter, it is your responsibility to understand the importance of establishing and maintaining fireline communication. Communication is vital to implementing the Risk Management Process.

The quality of communication will directly affect the success of completing an assignment in a safe and effective manner.

-Notes-

II. WHAT IS EFFECTIVE COMMUNICATION?

Effective communication is the transfer of information in terms understood by all parties.

Effective communication occurs when both parties are engaged as senders and receivers. Indicators could include: body language, paraphrasing, asking questions, utilizing checklists, etc.

III. COMMUNICATION

A. Five Communication Responsibilities:

1. Brief others (briefing checklist).
2. Debrief your actions (After Action Review).
3. Communicate hazards to others (Look Up, Look Down, and Look Around; Tactical Watch Outs).
4. Acknowledge messages and understand intent (Risk Management Process).
5. Ask if you don't know.

-Notes-

B. Types of Communication:

1. Oral communication

The most common forms of oral communication used during an incident are face-to-face, radios, and cell phones.

a. Face-to-face

- Perhaps the most effective and preferred method of communication.
- Logistical considerations often make this impractical.

b. Radios

One of the most efficient and practical methods used to communicate during fire suppression activities.

c. Cell phones

Cell phones should be used cautiously when making tactical decisions due to the potential of numerous people not being in the communication loop.

-Notes-

2. Visual communication

When oral methods of communication are not possible, visual methods can be utilized.

- a. Hand signals may be an appropriate means of communication when:
 - Distance between individuals is an issue.
 - High noise levels exist within the fire environment.
- b. Flagging and notes
 - Simple way of transferring information.
 - Enhances recall of information that had been previously discussed.
- c. Mirrors
 - A great tool of communication for those who work in remote areas.
 - Can be used to locate individuals.
 - Can be used for signaling to aid in air operations.
- d. Body language
 - Can be used to determine if an individual exhibits fatigue, understands the task, understands intent, etc.

-Notes-

IV. DOCUMENTATION

A. Importance of Documentation

- The importance of documenting cannot be under-estimated.
- Your records may be all that you can fall back on.
- Documentation provides relief forces with incident activities to date.

B. Types of Documentation

1. Written

- Unit Log (ICS-214), example on page 2.9.
- General Message (ICS-213), example on page 2.10.
- Incident Briefing (ICS-201), example on page 2.11 - 2.12.
- Pocket notebook (DI-5A pad, Ideas pad, etc.).
- Agency-specific forms.

2. Electronic

- Electronic devices (camera, GPS, PDA, computer).

-Notes-

C. What should be documented?

- Change in fire behavior.
- Weather observations.
- Inappropriate behavior (human resource issues).
- Change in assignment or location.
- Injuries/accidents.
- Adjacent resources and call numbers.
- Time of day when any of the above occurs.
- Spot fires – flagging.
- Deficiencies in individual/ squad performance.
- Additional training needed.
- Resources on scene upon arrival.
- Cutting fences for access into a fire.
- Property modifications during structure protection.
- Investigation of a point of origin or fire cause.
- Involvement with search and rescue, vehicle accidents, or law enforcement.
- Assignments/instructions/ directions, etc.
- Personnel time.

Any event that you think is significant enough to remember should be written down. Think of documentation as another tool to aid your memory.

GENERAL MESSAGE		
TO:		POSITION:
FROM:		POSITION:
SUBJECT:	DATE:	TIME:
MESSAGE:		
SIGNATURE:		POSITION:
REPLY:		
DATE:	TIME:	SIGNATURE/POSITION:

INCIDENT BRIEFING	1. Incident Name	2. Date	3. Time
4. Map Sketch			
5. Current Organization			
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 150px;">Incident Commander</div> <div style="border: 1px solid black; width: 150px; height: 20px; margin-top: 5px;"></div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 200px;">Safety Officer:</div> <div style="border: 1px solid black; padding: 5px; width: 200px;">Liaison Officer or Agency Rep:</div> <div style="border: 1px solid black; padding: 5px; width: 200px;">Information Officer:</div> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 100px;">Planning</div> <div style="border: 1px solid black; width: 100px; height: 20px; margin-top: 5px;"></div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 100px;">Operations</div> <div style="border: 1px solid black; width: 100px; height: 20px; margin-top: 5px;"></div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 100px;">Logistics</div> <div style="border: 1px solid black; width: 100px; height: 20px; margin-top: 5px;"></div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 100px;">Finance</div> <div style="border: 1px solid black; width: 100px; height: 20px; margin-top: 5px;"></div> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 100px;">Div. _____</div> <div style="border: 1px solid black; width: 100px; height: 40px; margin-top: 5px;"></div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 100px;">Div. _____</div> <div style="border: 1px solid black; width: 100px; height: 40px; margin-top: 5px;"></div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 100px;">Div. _____</div> <div style="border: 1px solid black; width: 100px; height: 40px; margin-top: 5px;"></div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 100px;">Div. _____</div> <div style="border: 1px solid black; width: 100px; height: 40px; margin-top: 5px;"></div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 150px;">Air</div> <div style="border: 1px solid black; padding: 5px; width: 150px;">Air Operations _____</div> <div style="border: 1px solid black; padding: 5px; width: 150px;">Air Support _____</div> <div style="border: 1px solid black; padding: 5px; width: 150px;">Air Attack _____</div> <div style="border: 1px solid black; padding: 5px; width: 150px;">Air Tanker Coord _____</div> <div style="border: 1px solid black; padding: 5px; width: 150px;">Helicopter Coord _____</div> </div> </div>			
Page 1 of	6. Prepared by (Name and Position)		

V. BRIEFING EXERCISE

Scenario:

You are one of two squad bosses on a 20-person crew and you work directly for the crew boss. It is July 30 and at 1330 your crew has arrived at the Goat Creek fire. The local fire officer, Bud Garland, is the Type 3 Incident Commander. Aside from Bud, your crew is the only resource currently on the fire. The following observations are made by the crew boss after sizing up the fire:

Fire size: 4 acres

Fuel Type: Pinyon/juniper with sage and grass understory

Temperature: 94 degrees

Relative Humidity: 22%

Wind Speed/Direction: Southwest, but direction variable and frequently shifting, average speed 7 mph gusting up to 15 mph with frequent changes in speed.

Fire Behavior: Active fire front with a defined head that shifts direction with the wind.

Flame Lengths: 4 feet in grass/sage with intermittent torching to 10 feet plus in PJ.

Rate of Spread: Approximately 20 - 25 chains per hour.

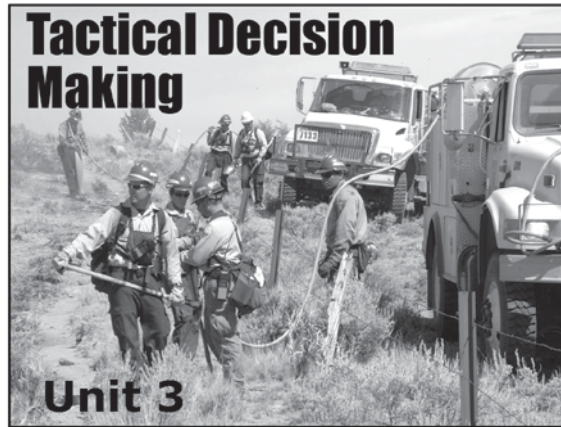
Topography: Rolling, gentle slopes of 10 - 20 percent.

The IC and the crew boss agree to split the crew, anchoring off at the road side using direct attack. Additional resources have been ordered including four Type 3 engines and one air tanker. The crew boss designates you as having the right flank and the other squad boss taking the left flank with his squad. Because of the intense situation your crew boss must leave the anchor point location. As he is leaving he re-emphasizes, “one foot in the black, monitor the air-to-ground frequency on 170.000, and to stay on tactical channel (3) 168.200.”

-Notes-

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Unit 3 – Tactical Decision Making



Objectives:

1. Demonstrate the ability to apply the Risk Management Process in a changing environment.
2. Demonstrate the ability to apply the principles of initial attack.
3. Demonstrate the ability to apply structure assessment and structure protection principles.
4. Demonstrate the ability to apply the principles of being a lookout.
5. Demonstrate the ability to apply the principles of downhill line construction.
6. Demonstrate the ability to apply the principles of retardant and bucket drops.

- Notes -

I. THE RISK MANAGEMENT PROCESS

The Risk Management Process helps firefighters organize their tactical decision making processes.

The Risk Management Process is located on the first page of the operational section of the IRPG for a reason—it is a critical decision making tool that every firefighter should be familiar with and use.

Tactical plans cannot be made without ensuring that the Standard Firefighting Orders are followed. In relatively low complexity assignments, this can be done intuitively based on experience. In more complex situations, firefighters need to have an organized decision making process that ensures the Standard Firefighting Orders are being followed and contingencies are being considered. In a changing environment, this is a continuous cycle of assessment and evaluation.

- *Notes* -

II. ELEMENTS OF THE RISK MANAGEMENT PROCESS

A. Situational Awareness

1. Objective(s)

Knowing objectives is critical. If you know what the end result needs to be, you are in a position of developing and altering tactics to meet those results.

2. Communication

Communication is vital to implementing the Risk Management Process.

3. Who's in charge?

This is usually evident when assigned to a module or crew. However, squads may be used independently for initial attack or special assignment purposes. This may require them to report to someone other than their immediate supervisor.

- *Notes* -

4. Scout the fire.

Know what your fire is doing.

5. Previous fire behavior.

Gives valuable insight as to what to expect. Also helps establish trigger points based on conditions.

6. Weather forecast.

Mandatory information; your actions must be based on current and forecasted weather.

7. Local factors.

Many areas have local weather factors that are unique. Ask questions about such factors and share information with appropriate personnel.

- *Notes* -

B. Hazard Assessment

- Fire behavior hazards
- Look Up, Look Down, and Look Around indicators
- Tactical Watch Outs
- 18 Watch Out Situations (cover of IRPG)
- General safety hazards not covered
- Severity vs. probability

C. Hazard Control

- Standard Firefighting Orders and LCES
- Anchor Points
- Downhill Checklist (if appropriate)
- Structure Protection Checklist
- Powerline Checklist
- Safety Zone Guidelines

- *Notes* -

D. Decision Point

- Are controls in place for identified hazards?
- Are selected tactics based on expected fire behavior?
- Have instructions been given and understood?

E. Evaluate

1. Personnel

- Fatigue
- Attitude
- Distractions
- Experience level

2. Situation

- Changing conditions
- Tactics effective
- Changing safety zones

- *Notes* -

Introduction to STEX/TDGS

The following exercises are designed to bring together concepts from the preceding units with emphasis on tactical decision making using the IRPG and FHB. All exercises are written to target individuals at the Firefighter Type 1 level.

Exercise 1: Aviation

Objective:

Students must decide how to utilize the proper procedures and tactics when an assignment involves directing helicopter bucket drops to support ground resources.

Scenario:

It is July 14 at 0900 hours and you are a squad boss on a Type 2 hand crew assigned to the Meadow Fire. It is your second shift on the fire. Your crew has been using direct attack handline with occasional helicopter bucket support.

The Meadow Fire is actively burning in timber and has a heavy fuel load of down timber. A helicopter has been requested to assist your squad to control a spot fire. It is starting to show more smoke and has potential to escape containment lines and move towards some ladder fuels near a tight timber canopy. You can hear the helicopter in the distance, but you cannot see it. A minute later you can see the helicopter dropping water and going directly away from you. What do you do now?

Fire size: Spot fire approximately 1 acre.

Fuel type: Timber

Fire Behavior: Creeping and smoldering. Maximum flame lengths of 2 feet. Rate of spread of 3 chains per hour.

Assignment: Your crew boss assigns you to control a spot that was previously contained by handline. You have directed your squad to reinforce the handline and to reduce the ladder fuels in key areas.

Resources assigned: You and your squad of five firefighters which have two radios and one Type 2 helicopter; the call sign is 912KW.

Hazards: Fire behavior includes potential torching and subsequent spotting, snags, air operations, working on a large spot fire away from the main fire.

Communication: Tactical 168.200, air to ground 170.000.

Exercise Evaluation Form

Exercise 1: Aviation

Team Leader: _____

Team Members: _____

ASSIGN POINTS BASED ON THE TEAM'S INITIATIVE TO APPLY AND ADHERE TO THE STANDARDS IN THE IRPG AND FHB. USE THE FOLLOWING SCALE TO RATE EXERCISE:

POSSIBLE POINTS

3 = DID NOT MEET INPUT OBJECTIVE

4 = MET INPUT OBJECTIVE

5 = EXCEEDED INPUT OBJECTIVE

STANDARDS	POINTS 3-5	REMARKS
1. Give general location on incident.		
2. Describe target from your location and explain mission.		
3. Assure pilot all personnel are safe and know aircraft intentions before the drop.		
4. Finalize location with: clock direction, position on slope, prominent landmarks, aspect etc.		
5. Establish anchor point and work from it.		
6. Maintain effective communication between ground and air.		
7. Give feedback to pilot about drop accuracy. Report low drops immediately. Be honest and constructive.		
TOTAL POINTS		

TIME TO COMPLETE _____

Exercise 2: Downhill Line

Objective:

Students must assess a downhill line construction assignment and determine how to proceed. Then they must communicate their decisions to the appropriate individuals.

Scenario:

It is August 2 at 0800 and you are a squad boss with the Rush Valley Regulars, a Type 2 crew assigned to the Willow Creek Fire which is being managed by a Type 2 incident management team. Your identifier is Squad B.

Your crew boss wanted to have the entire crew start at the bottom near the confluence of Pioche and Willow Creeks and work up hill going direct. However, due to local initial attack priorities the helicopter was released after only shuttling Squad A and the crew boss to the bottom. Squad B was left on the plateau at the end of the dozer line. There is no road access to the confluence of Willow and Pioche Creeks. Considering all information below, how do you proceed?

Fire size: Crew assigned to a segment of a 5,000 acre fire.

Fuel type: Primarily timber with a grass and brush mix.

Terrain: Steep with extremely rocky ridges with numerous rock outcrops.

Fire Behavior: Currently smoldering, however, yesterday during peak burning was 20 chains per hour and maximum flame lengths were 10 feet.

Observations: Temperature 70° F; RH 25%, Wind N/NW at 3-5 mph until mid afternoon, at that time, forecasted to shift to the W/SW.

Assignment: Hold the fire south of the main spur ridge between the confluence of Pioche and Willow Creeks and the end of the dozer line on the plateau. The crew boss now wants your squad to anchor at the dozer line on top and construct direct handline downhill as Squad A anchors at the bottom and works up.

Resources assigned: You have three experienced firefighters and three rookie firefighters on your squad.

Hazards: Downhill fireline, fire behavior, terrain.

Communication: Tactical 168.050

Exercise Evaluation Form

Exercise 2: Downhill Line

Team Leader: _____

Team Members: _____

ASSIGN POINTS BASED ON THE TEAM'S INITIATIVE TO APPLY AND ADHERE TO THE STANDARDS IN THE IRPG AND FHB. USE THE FOLLOWING SCALE TO RATE EXERCISE:

POSSIBLE POINTS

3 = DID NOT MEET INPUT OBJECTIVE

4 = MET INPUT OBJECTIVE

5 = EXCEEDED INPUT OBJECTIVE

STANDARDS	POINTS 3-5	REMARKS
1. Supervisor and overhead discussed assignment prior to commitment. TFLD or ICT4 qualified or better stays with job until complete.		
2. Decision made after proposed line is scouted by supervisor of involved crew.		
3. LCES coordinated for all personnel. Supervisor is in direct contact with lookout who can see the fire. Communication established between all crews. Rapid access to safety zones in case the fire crosses below.		
4. Direct attack used whenever possible. If not possible, line should be completed between two anchor points and fired out.		
5. Fireline will not lie in or adjacent to a chute or chimney.		
6. Starting point will be anchored for personnel building line down from the top.		
TOTAL POINTS		

TIME TO COMPLETE _____

Exercise 3: Structure Protection

Objective:

Students must assess a structure protection assignment and determine how to proceed. They must also communicate their decisions to the appropriate individuals.

Scenario:

It is September 7 at 0900 and you are the lead firefighter on Engine 76. Your engine is assigned to the Achin structure group on the Dutch Fire.

The Dutch Fire started the previous day and burned actively all day, pushed by a south wind. However, during the night, it slowed considerably with minimal spread. At the present time, the Flores Mine Road is holding the fire on the north flank.

The fire has good spread potential, as today's winds are expected to exceed 20 mph out of the south. Typical wind conditions for this area are out of the west, blowing downhill at 10 mph. At lower elevations the wind is typically cross-canyon, out of the south.

Achin Hills is comprised of approximately 47 residences situated on about 60 acres. Of the residences, about 17 are occupied year round—the remainder being vacation homes or vacant. All roads in this area are single-lane dirt roads. An extremely narrow substandard road with very few turnouts serves the area.

Considering the information below, how do you proceed?

Fuel type: Brush and grass, with scattered pines and scrub oaks.

Terrain: Achin Hills sits between 2,900 and 3,200 feet in elevation on an eastern aspect with an average slope of about 20% in and around the structures, and in excess of 30% in the adjacent hillsides. There are numerous drainages and gullies throughout the area.

Observations: Temperature, 75° F; RH, 20%; winds south, 2-3 mph.

Assignment: Your engine has been assigned to do structure protection along David Road. You are to check three structures and get back to your supervisor with your plan of action and if agreed to implement the plan.

Resources assigned: Engine 76 personnel include the engine boss, you (FFT1), an engine operator, and a rookie firefighter.

Hazards: Structures, access, roads, possible evacuations, entrapment, hazardous materials.

Communication: Tactical 168.050

Exercise Evaluation Form

Exercise 3: Structure Protection

Team Leader: _____

Team Members: _____

ASSIGN POINTS BASED ON THE TEAM'S INITIATIVE TO APPLY AND ADHERE TO THE STANDARDS IN THE IRPG AND FHB. USE THE FOLLOWING SCALE TO RATE EXERCISE:

POSSIBLE POINTS

3 = DID NOT MEET INPUT OBJECTIVE

4 = MET INPUT OBJECTIVE

5 = EXCEEDED INPUT OBJECTIVE

STANDARDS	POINTS 3-5	REMARKS
1. Determine if road access meets equipment needs (width, drivable surface, grade, clearance problems, bridges, turnouts and staging areas).		
2. Determine property address or ranch name, etc., and if residents are on site.		
3. Evaluate structural elements and debris such as the roof material, exposed wood siding, attached decks, windows facing heat source, wood piles, and other flammables.		
4. Determine if the structure has adequate defensible space.		
5. Determine if hazardous materials are present (pesticides, fuel, LPG tanks, etc.).		
6. Determine available water supply (hydrant, ponds, storage tanks, etc.).		
7. Estimate the type and number of resources needed to implement the protection plan.		
TOTAL POINTS		

TIME TO COMPLETE _____

Exercise 4: Initial Attack

Objective:

Students must assess an initial attack assignment and determine how to proceed. They must communicate their decisions to the appropriate personnel.

Scenario:

It is August 2 at 1730 hours, and your squad of five firefighters has put in a full day of falling hazard trees and hand-piling brush in Canyon Winds Campground. You report to dispatch that your squad is “returning to station.”

Just a few miles northeast of the campground on Highway 55, the squad comes across a vehicle accident. A car has run off the road and hit a boulder. The car is fully engulfed in flames and has started a wildfire. You notice that two elderly people, probably occupants, are out of the car and appear to be uninjured. They are obviously quite concerned about the situation. Traffic is backed up on the highway just past the local rural grocery store.

You are the only firefighters on scene, what do you do?

Fire size: ¼ acre

Fuel type: Primarily timber with a grass and brush mix.

Terrain: Slopes are steep, averaging 45% with valley to ridge elevation gains of 3,000 feet.

Fire Behavior: Flame lengths of 1 to 2 feet, rate of spread of 5 chains an hour.

Observations: Temperature 70° F; RH 25%, Wind W/SW at 5 mph.

Assignment: Determine type of initial attack and notify dispatch.

Resources assigned: You have five firefighters with hand tools and chain saws.

Hazards: Snags, fire behavior, terrain, traffic, hazardous materials.

Exercise Evaluation Form

Exercise 4: Initial Attack

Team Leader: _____

Team Members: _____

ASSIGN POINTS BASED ON THE TEAM'S INITIATIVE TO APPLY AND ADHERE TO THE STANDARDS IN THE FHB, ARRIVAL ON SCENE. USE THE FOLLOWING SCALE TO RATE EXERCISE:

POSSIBLE POINTS

3 = DID NOT MEET INPUT OBJECTIVE

4 = MET INPUT OBJECTIVE

5 = EXCEEDED INPUT OBJECTIVE

STANDARDS	POINTS 3-5	REMARKS
1. First arrival: size up fire and report to dispatch. Do not cross the head of the fire unless it can be done safely. Park vehicles in a safe place, pointing away from the fire, windows closed, and doors unlocked, and keys left in the ignition.		
2. Determine an initial attack plan based on the sizeup. Determine: escape routes and safety zones, anchor points, hazards, where to attack, direct or indirect, line specifications, additional needs, locate and preserve point of origin.		
3. Brief the crew and begin work. Make sure everyone understands their work assignment. Take prompt decisive actions during the early stages.		
4. Preview the Initial Attack Safety Checklist found in the FHB as needed.		
TOTAL POINTS		

TIME TO COMPLETE _____

Exercise 5: Initial Attack (support)

Objective:

Students must assess an initial attack assignment in unfamiliar territory and determine how to proceed. Then they must communicate their decisions to the appropriate individuals.

Scenario:

It is November 10 and you're a squad leader on a western Type 1 crew, which has recently arrived at the Coastal Heron Wildlife Sanctuary in Southern Mississippi to support IA efforts. This is the first time the crew has been dispatched to the southeast and the crew is excited to see the Gulf Coast. Your crew has been fighting fire all season in the Rockies and the superintendent has commented that you have great leadership skills, a good working knowledge of fire, and is going to count on you to perform more challenging tasks.

Coastal Heron Wildlife Sanctuary is a 40,000 acre wildlife management area bordered by residences, businesses, and highways. The area is made up of mostly "heavy" southern rough fuel types with scattered hardwood drainages, bogs, and long leaf pine savannahs.

The in-brief given by the Fire Management Officer (FMO) on the crew's arrival details the recent weather and fuel conditions. It is peak fire season for the area. Temperatures have been in the low 70s, and the humidity has been averaging 33 percent. The FMO makes a special point about the sea breeze taking effect around 1300 hours every day for the past week. He also mentions that the Keetch Byram Drought Index (KBDI) is almost 350; therefore, the drainages should be holding water. He mentions your task force leader will give more specifics if you have questions.

Fire size: 25 acres

Fuel type: Heavy southern rough

Terrain: Flat

Fire Behavior: Flame lengths are 6-8 foot and occasional torching in the pines is observed. Spotting is a factor.

Observations: Winds, northwest 5-7 mph, gusts to 10; Relative humidity, 31%.

Assignment: You are informed that your crew will be divided, and each squad will be assigned to a separate task force. Your squad is on Task Force Bravo, which was dispatched to initial attack a fire 25 minutes ago, and the FMO wants your squad to assist them as soon as possible.

Upon arrival at the fire, you radio your task force leader for instructions. His response is "Glad you're here. We have most of our folks on the right flank trying to corral this thing. Why don't you assist the tractor plow unit on the left flank. Contact is Tractor 49. Oh, and heads up, this thing is walking the dog!"

Resources assigned: Your squad, tractor 49, Task Force Leader Bravo, other miscellaneous resources unknown.

Hazards: Entrapment, traffic, erratic fire behavior, snags, fuel type, unfamiliar with tactics, unfamiliar with safety zones.

Exercise Evaluation Form

Exercise 5: Initial Attack (support)

Team Leader: _____

Team Members: _____

ASSIGN POINTS BASED ON THE TEAM'S INITIATIVE TO APPLY AND ADHERE TO THE STANDARDS IN THE IRPG AND FHB. USE THE FOLLOWING SCALE TO RATE EXERCISE:

POSSIBLE POINTS

3 = DID NOT MEET INPUT OBJECTIVE

4 = MET INPUT OBJECTIVE

5 = EXCEEDED INPUT OBJECTIVE

STANDARDS	POINTS 3-5	REMARKS
1. Situational Awareness: Objectives, communication, who's in charge, previous fire behavior, weather forecast, local factors.		
2. Hazard Assessment: Estimate potential fire behavior hazards, look up/down/around indicators, other safety hazards, consider severity vs. probability.		
3. Hazard Control: <u>Fire Orders</u> and the <u>LCES</u> checklist are mandatory; establish anchor points, downhill checklist if needed, other controls?		
4. Decision Point: Are hazard controls in place for identified hazards? Are tactics based on expected fire behavior? Have instructions been given and understood? If any of the above is <u>NO</u> , then reassess.		
5. Evaluate: <u>Personnel</u> and the <u>situation</u> . Factors: experience, distractions, fatigue, stress, attitude, conditions, etc.		
TOTAL POINTS		

TIME TO COMPLETE _____

Exercise 6: Lookout

Objective:

Students must assess a lookout assignment and determine how to proceed. Then they must communicate their decisions to the appropriate individuals.

Scenario:

It is October 24 at 0700 and your crew is assigned to Division Zulu (Z) on the Stanley Incident. Division Z can be described as having underslung handline through moderate to heavy chaparral brush on moderate terrain.

You have recently moved into one of the lead crew member slots with the Pinnacle Hotshots. Your supervisor has indicated that you have good potential to move up to more advanced positions in fire by keeping up the good work.

During the previous night shift hand crews made good progress but stopped short of an underslung segment below the road. The crew superintendent wants one squad to stay on the ridge top and finish the handline to the road. The other two squads will anchor at the road and pick up the underslung segment below the road. The crew superintendent feels it can be done prior to the onset of the peak burning conditions.

Fire size: 60,000 acres.

Fuel type: Chaparral brush combination of fuel model 4 and 5.

Terrain: Slopes average 30%.

Fire Behavior: Currently smoldering.

Observations: The weather forecast in the Incident Action Plan (IAP) indicates expected high temperature of 100° F; RH at 21%; wind, W-SW, 6-10 mph with the possibility of a slight Santa Ana wind condition. Currently it is 0700 with a temp of 65° F; RH 45% and no wind.

Assignment: You are the lookout for the crew today. Your crew's assignment is to contain the underslung segment of line before the heat of the day.

Resources assigned: One Type 1 crew.

Hazards: Snags, fire behavior, downhill line, entrapment.

The crew superintendent hurries away before taking time to brief you on where you are to be located. Looking around you notice a good vantage point on a larger hill adjacent to the fire. How do you proceed?

Exercise Evaluation Form

Exercise 6: Lookout

Team Leader: _____

Team Members: _____

ASSIGN POINTS BASED ON THE TEAM'S INITIATIVE TO APPLY AND ADHERE TO THE STANDARDS IN THE IRPG AND FHB. USE THE FOLLOWING SCALE TO RATE EXERCISE:

POSSIBLE POINTS

3 = DID NOT MEET INPUT OBJECTIVE

4 = MET INPUT OBJECTIVE

5 = EXCEEDED INPUT OBJECTIVE

STANDARDS	POINTS 3-5	REMARKS
1. Your location: is your location safe? Do you have access to an escape route and safety zone? Can you see the fire adequately?		
2. Crew's location: stay informed of crew location; have changing priorities or conditions changed the crew's location? Make positive confirmation (visual, mirror flash, etc.). Are multiple lookouts needed? Will smoke or terrain obscure view?		
3. Communication: establish and maintain communications, report changes in fire behavior, weather conditions and spot fires immediately.		
4. Escape routes and safety zone locations: know the location of the crew's Safety Zone(s) and Escape Route(s) and notify the crew should they become compromised.		
TOTAL POINTS		

TIME TO COMPLETE _____