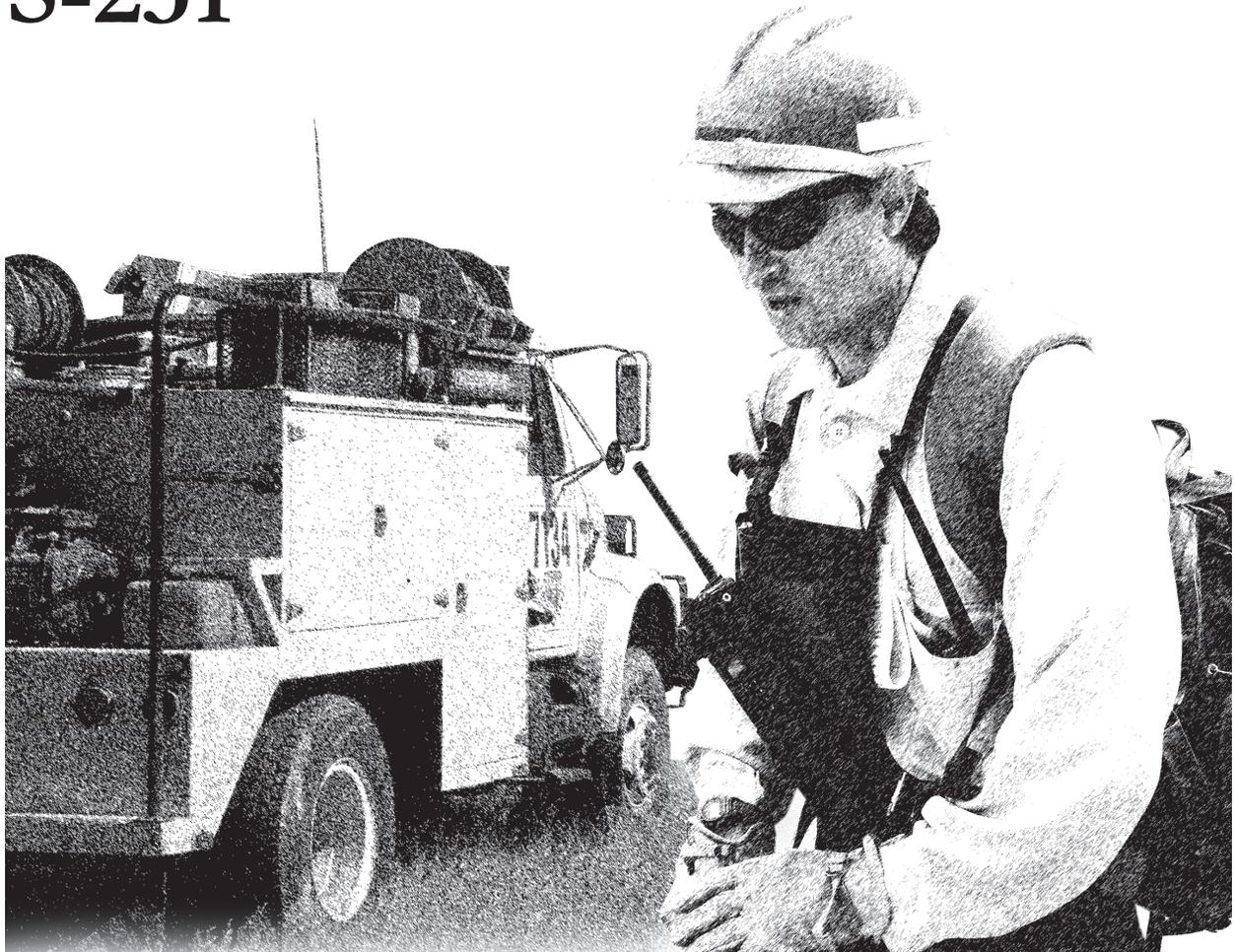


Engine Boss (Single Resource) (Blended) S-231



NFES 002972

Student Workbook
JANUARY 2012



CERTIFICATION STATEMENT

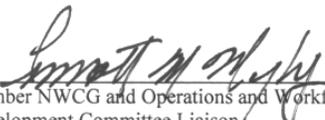
on behalf of the

NATIONAL WILDFIRE COORDINATING GROUP

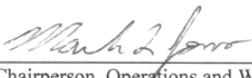
The following training material attains the standards prescribed for courses developed under the interagency curriculum established and coordinated by the National Wildfire Coordinating Group. The instruction is certified for interagency use and is known as:

Engine Boss (Single Resource) (Blended), S-231
Certified at Level I

This product is part of an established NWCG curriculum. It meets the requirements of the NWCG Curriculum Management Plan and has received a technical review and a professional edit.


Member NWCG and Operations and Workforce
Development Committee Liaison

Date 1.31.2012


Chairperson, Operations and Workforce Development
Committee

Date 1/27/12

S-231, Engine Boss

(Single Resource)

(Blended)

Student Workbook

JANUARY 2012

NFES 002972

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Additional copies of this publication may be ordered from National Interagency Fire Center,
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PREFACE

Engine Boss, S-231, is a required training course in the National Interagency Incident Management System: Wildland Fire Qualification System Guide (PMS 310-1). This course was developed by an interagency group of subject matter experts with direction and guidance from the National Wildfire Coordinating Group (NWCG) Training Branch. The primary participants in this development effort were:

BUREAU OF LAND MANAGEMENT

NATIONAL PARK SERVICE

U.S. FOREST SERVICE

NWCG TRAINING BRANCH

Distance Learning Unit
Instructional Media Unit
Evaluation Unit
Development Unit

ICF INTERNATIONAL

The NWCG appreciates the efforts of these personnel and all those who have contributed to the development of this training product.

CONTENTS

PREFACEi

INSTRUCTIONAL UNITS

Unit 0 – Introduction0.1

Unit 1 – Engine Boss Fundamentals1.1

Unit 2 – Tactical Decisions2.1

Engine Boss, S-231

Unit 0 – Introduction

OBJECTIVES:

During this unit the instructor will:

1. Introduce course coordinator, instructors, and students.
2. Discuss course logistics.
3. Present course overview.
4. Discuss course expectations.

I. INSTRUCTOR INTRODUCTIONS

II. STUDENT INTRODUCTIONS

Please present your:

- Name and job title.
- Agency, home unit.
- ICS qualifications.
- Experience relative to the position as either a trainee or a trainer/coach; both positive and negative.

III. COURSE LOGISTICS

IV. COURSE OVERVIEW

This course is designed to meet the training needs of an Engine Boss as outlined in the Wildland Fire Qualifications System Guide (PMS 310-1) and the position task book developed for the position.

The Engine Boss S-231 course is probably set up a little differently than you are accustomed to. It has been developed using a blended approach to learning, meaning that it contains a mix of face-to-face and online instruction. You were required to complete the online training portion of the course and pass an online assessment prior to taking the instructor-led training (ILT) portion. The focus of the online training was to teach knowledge and concepts.

The ILT portion will reinforce the content learned online and provide opportunities to apply this knowledge to real-world scenarios and practical exercises. Upon completion of the ILT portion, you must then take and pass a final assessment in order to receive credit for the course.

A. Course Objective

- Perform the tasks of an Engine Boss in making the tactical decisions required to safely manage an engine and personnel on an incident.

Note: Completing this course alone does not qualify you as an Engine Boss. You will be required to complete a practical assignment and will not become an Engine Boss until qualified or “red carded” by an NWCG member agency or fire department.

B. Instructional Methods

- “Fire-Away” game show-style review game
- Discussion
- Tactical decisions exercises

C. Student Assessment

To successfully complete the course, you must:

- Participate in all classroom discussion, exercises, and scenarios.
- Achieve 70% or higher on the final assessment.

D. Course Evaluation Form

You are expected to complete a course evaluation form at the end of the course.

V. COURSE EXPECTATIONS

A. Student Expectations

EXERCISE: Expectations

Write your group's responses to the following question on a flip chart:

- What do you expect to gain from this course?

Present your expectations to the class.

B. Instructor Expectations

You will:

1. Have an interest in becoming an Engine Boss.
2. Have completed the online portion of the course and passed the online assessment.
3. Exhibit mutual cooperation with the group.
4. Actively participate in all training exercises presented in the course.
5. Return to class at stated times.
6. Use what is presented in the course to effectively perform the duties of an Engine Boss.
7. Not leave the course with any unanswered questions.

Engine Boss, S-231

Unit 1 – Engine Boss Fundamentals

OBJECTIVES:

Upon completion of this unit, you will be able to:

1. Recall content provided in Modules 1-6 of the online course.
2. Apply knowledge and skills to scenario-based questions.

I. REVIEW OF ONLINE MODULES

A. Module 1: Your Role as an Engine Boss

As an Engine Boss, you will have additional responsibilities managing your crew and engine. These additional responsibilities will include: performing in the role of decision-maker and leader; understanding and implementing fire suppression tactics; using, managing, and protecting the equipment you have been assigned; and understanding and implementing fire suppression tactics in the wildland/urban interface.

B. Module 2: Engine/Crew Capabilities and Limitations

This module covered the Engine Boss's responsibility for knowing about his engine and crew's capabilities and limitations. These responsibilities include: maintaining inventory pre-incident, during an incident, and post-incident (including post-incident rehabilitation); performing daily and preventative engine maintenance; and identifying crew readiness based on experience, qualifications, and condition when deciding whether or not to attempt an assignment.

C. Module 3: Situation Awareness

This module addressed sources of information that an Engine Boss will use to complete a tactical assignment. It also reviewed the information an Engine Boss must obtain at the Supervisor Briefing and then what he/she should disseminate to subordinates during the Subordinate Briefing. Remember to use your IRPG Briefing Checklist as a guide both when gathering and disseminating information. Finally, remember that coordination and communication with other incident personnel is critical.

D. Module 4: Sizeup Considerations

The fire sizeup elements that an Engine Boss must consider en route to an incident include: smoke columns, fuels, terrain and topography, fire behavior, current and predicted weather, and smoke columns. Remember that you should also consider the fire history in an area and jurisdiction, which is especially important during communications with dispatch. Remember that certain areas or situations (e.g., cultural resources, wilderness areas) may require additional attention and consideration during fire sizeup.

Additionally, when en route to an incident pay attention to/think about: water sources, roads and vehicle access, and safety. Once on scene at an incident an Engine Boss may be required to make decisions regarding strategy and tactics, constructing the control line, and utilizing additional resources. Remember to stay in communication at all times.

E. Module 5: Tactics

This module covered topics such as personnel safety considerations, fuel groups and expected fire behavior, direct/indirect attack advantages/disadvantages, tactics, developing alternative plans based on equipment failures and/or personnel problems, and conducting an After Action Review (AAR).

Remember the four fuel groups (grass, shrub, timber litter, and logging slash). Within each fuel group, you should know about a fuel's rate of spread, reaction with water and additives, extent of mopup required, duration of heat and flame, most effective engine types, and most effective method of attack.

Recall that an Engine Boss should ask four questions during an AAR: what was planned, what actually happened, why it happened, and what can be done next time.

F. Module 6: Wildland/Urban Interface

This module discussed wildland/urban interface considerations including structure triage, safety concerns, and crew withdrawal decision-making. This module also reviewed several of the hazardous wildland/urban interface situations of which an Engine Boss should be especially cognizant.

Remember that these situations include: poor access and narrow one-way roads; bridge load limits; wooden construction and wood shake roofs, inadequate water supply; natural fuels 30 feet or closer to structures; structures in chimneys, canyons, or on slopes; extreme fire behavior, strong winds; evacuation of the public; power lines; petroleum and propane tanks; and outbuildings. These situations are also listed in your IRPG.

II. ENGINE BOSS FUNDAMENTALS

Exercise Directions:

1. Students will work in teams to answer questions in four topic areas: Situation Awareness and Fire Sizeup, Tactics, Wildland/Urban Interface, and Engine/Crew Capabilities.
2. The instructor will ask students to provide solutions and will provide additional debriefing as necessary.

A. SITUATION AWARENESS AND FIRE SIZEUP 10

1. Question

Name and describe the four fuel groups including the most effective engine type and method of attack for each one.

2. Answer and Debrief

B. SITUATION AWARENESS AND FIRE SIZEUP 20

1. Question

This type of fuel is most dominant in mountainous topography. It has a low to moderate rate of spread and moderate to high fireline intensity. It also has a longer duration of heat and flames than some other fuel groups, especially if it is deep. What type of fuel is this, and how will it affect your decision-making upon arrival at the incident?

2. Answer and Debrief

C. SITUATION AWARENESS AND FIRE SIZEUP 30

1. Question

On your way to an incident, you carefully monitor the current and predicted weather in relation to the time of year it is, the fuels in the area, where the fire is located, and what resources are already on scene. However, you forget to consider two essential fire sizeup elements. What elements did you forget, and how would they help you understand and respond to the incident to which you have been assigned?

2. Answer and Debrief

D. SITUATION AWARENESS AND FIRE SIZEUP 40

1. Question

In an effort to gather the information needed to complete your tactical assignment, you talk with your Fireline Supervisor and consult the Incident Action Plan (IAP) to get more information. What other sources should you consult to help you build a complete picture of the situation?

2. Answer and Debrief

E. SITUATION AWARENESS AND FIRE SIZEUP 50

1. Question

During a Subordinate Briefing, you explain to your crew that your team has been called to an incident in a nearby forest. Initial attack forces were not able to contain the fire within the first burn period, and a Type 2 Incident Management Team is transitioning in tomorrow. Your engine has been assigned to this incident and will be responsible for constructing a hoselay on the fire's eastern perimeter. You will be using Tac 2 for communications and will be working with two other engine crews.

Using your IRPG Briefing Checklist, list and summarize the items on the checklist that you have already covered. Then identify and provide sample response(s) for the other item(s) that need to be discussed before you can head out to the incident.

2. Answer and Debrief

F. TACTICS 10

1. Question

A good Engine Boss always has safety at the forefront of his or her mind. List five safety guidelines that can keep you and your crew safe while at an incident.

2. Answer and Debrief

G. TACTICS 20

1. Question

Watch the video of a close call. What factors do you think may have led up to this situation? How could it have been prevented and what would you do as an engine boss after this happened?

2. Answer and Debrief

H. TACTICS 30

1. Question

You are responding to a fire in light, flashy fuels on relatively flat ground. What is the best method of attack for this kind of fire? Explain your answer.

2. Answer and Debrief

I. TACTICS 40

1. Question

Your engine has been dispatched to an incident. As you arrive on scene and are briefed, you learn that fire behavior has been extreme in the afternoon with temperatures in the high 80s to low 90s and very low relative humidity. You are also told that ingress/egress has been an issue due to narrow roads and bridges en route to the fire.

As the Engine Boss, what can you do to prepare given these conditions?

2. Answer and Debrief

J. TACTICS 50

1. Question

As you arrive on scene, determine the appropriate tactics to be used in this situation and explain your reasoning.

2. Answer and Debrief

K. WILDLAND/URBAN INTERFACE 10

1. Question

Refer to the image. How would you triage this structure, and why?

2. Answer and Debrief

L. WILDLAND/URBAN INTERFACE 20

1. Question

Refer to the image. In this situation, what hazards do you see and how will they affect your operations?

2. Answer and Debrief

M. WILDLAND/URBAN INTERFACE 30

1. Question

You and your crew arrive on scene at an incident located near the neighboring town. Several structures are threatened by the approaching fire. During triage, what should you as an Engine Boss keep in mind regarding each of the following categories?

- Firefighter Safety
- Structure
- Surrounding Fuels
- Fire Behavior
- Alternate Water Sources

2. Answer and Debrief

N. WILDLAND/URBAN INTERFACE 40

1. Question

Your engine and crew are supporting a neighboring district's structure defense efforts. Several of the structures have been overtaken by the approaching fire and those that remain may need to be abandoned. As an Engine Boss, you are tasked with deciding whether or not it is time for your crew to withdraw.

Identify three conditions that would indicate that your attempts to save the remaining structures may be unsuccessful and/or too dangerous.

2. Answer and Debrief

O. WILDLAND/URBAN INTERFACE 50

1. Question

Lightning associated with a thunderstorm ignites several wildfires in a neighboring town. Your engine module, consisting of two Type 3 wildland engines, responds to the call from District Dispatch. Dispatch alerts you to the fact that the winds have picked up to 25 mph with gusts to 40 and that several structures located on the heavily wooded hillside are now threatened. You will also be coordinating with local law enforcement to evacuate the residents of the threatened homes.

Identify the wildland/urban interface hazards you will encounter in this situation and what you should keep in mind about each one.

2. Answer and Debrief

P. ENGINE/CREW CAPABILITIES 10

1. Question

A good Engine Boss always keeps his or her engine in a state of full readiness. When should you inventory your engine to make sure it is ready to respond to an incident? What is important about the inventory at that time?

2. Answer and Debrief

Q. ENGINE/CREW CAPABILITIES 20

1. Question

Crew qualifications and experience directly impact the types of assignments you can successfully handle. What impact on your capabilities does each of the following have:

- Firing Boss qualification
- Experience with large fires (extended attack)
- Faller qualification
- EMT qualification

2. Answer and Debrief

R. ENGINE/CREW CAPABILITIES 30

1. Question

You should always be aware of your engine capabilities in order to keep you and your crew safe. What factors impact your engine capabilities?

2. Answer and Debrief

S. ENGINE/CREW CAPABILITIES 40

1. Question

Watch the video. In what ways might you be limited in your engine capabilities in this scenario?

2. Answer and Debrief

T. ENGINE/CREW CAPABILITIES 50

1. Question

Your Type 4 engine is responding to a fire in late August. Extreme fire behavior has been predicted with above average temperatures and dry thunderstorms conditions expected. The fire is approximately 40 acres, burning mid-slope in grass and scattered pine trees. It is moving up the slope, pushed by winds. A small group of homes is located about 1/2 mile above the fire on a ridge top. You are assigned to set up for structure protection.

What capabilities and limitations should you consider when accepting this assignment? Under what circumstances can you safely complete this assignment?

2. Answer and Debrief

Engine Boss, S-231

Unit 2 – Tactical Decisions

OBJECTIVES:

Upon completion of this unit, students will be able to:

1. Exercise decision-making skills in a tactical context.
2. Practice communicating decisions.

I. TACTICAL FUEL GROUP EXERCISE

EXERCISE: Tactical Fuel Group Exercise

Purpose: Determine the best method of attack, placement of resources, and advantages, disadvantages, safety concerns, and considerations given a specific fuel group-related scenario.

Time: 1 hour

Format: Small groups

Materials Needed: Scenarios and maps for each scenario (SR 2-1)

Instructions:

During Exercise

Student groups will be in separate areas with sufficient space so that individual groups cannot hear the adjacent group.

A facilitator will be at each station to implement each scenario.

Each station will have a map with fire perimeter that corresponds with the scenario assigned.

The students in each group will review given scenarios and answer the accompanying questions.

Each student will have an IRPG.

Groups will complete one scenario at a time (e.g., all groups will work on Scenario #1; then all groups will move on to Scenario #2) and continue until all the scenarios have been presented and discussed.

Post Exercise

Instructor will review the intent of the exercise and encourage discussion.

End of Exercise.

II. TACTICAL SCENARIO EXERCISE

EXERCISE: Tactical Scenario Exercise

Purpose: Obtain essential information from the Incident Commander and brief crewmembers and adjoining forces, maintain LCES and standard safety procedures, and participate in an After Action Review.

Time: 3.5 hours

Format: Small groups

Materials Needed: Scenarios and scenario updates: (SR 2-2)

Use Riordan Fire Area Student Map to identify resources and changes in resources for each scenario.

Instructions:

During Exercise

Student groups will be in separate areas with sufficient space so that individual groups cannot hear the adjacent group.

A facilitator will be at each station to implement each scenario.

Students may use their Riordan Fire Area Student Map (SR 2-1) to assist in identifying resources and changes in resources for each scenario.

At the End of Each Scenario

A student will be selected to provide a solution for each scenario.

The selected student will issue the decision as instructions to other students assigned to “subordinate roles.”

The decision will be delivered as instructions. No theoretical “would have,” “should have,” or “could have” discussions allowed!

After instructions have been issued, the presenter needs to check role-playing subordinates' feedback to ensure instructions were understood.

After Action Review

Each group will conduct an After Action review (AAR) based on their knowledge of the ultimate outcome of the incident. Each group will select a spokesperson to present their findings to the class.

Use the four basic questions from the AAR format in the IRPG to facilitate the AAR.

- What was planned?
- What actually happened?
- Why did it happen?
- What can we do next time?

Remember, Tactical Decision Games shouldn't have a single solution. Keep the focus of the AAR on what was done and why.

Post Exercise

Instructor will review the intent of the exercise and encourage discussion.

End of Exercise.

TACTICAL FUEL GROUP EXERCISE – Scenario #1

Fuel Group: Grass.

Weather: Winds out of the southeast 5-10 mph.

Fire Behavior: Flame lengths approximately 5 ft at the head of the fire. Fire is moving in a northwest direction.

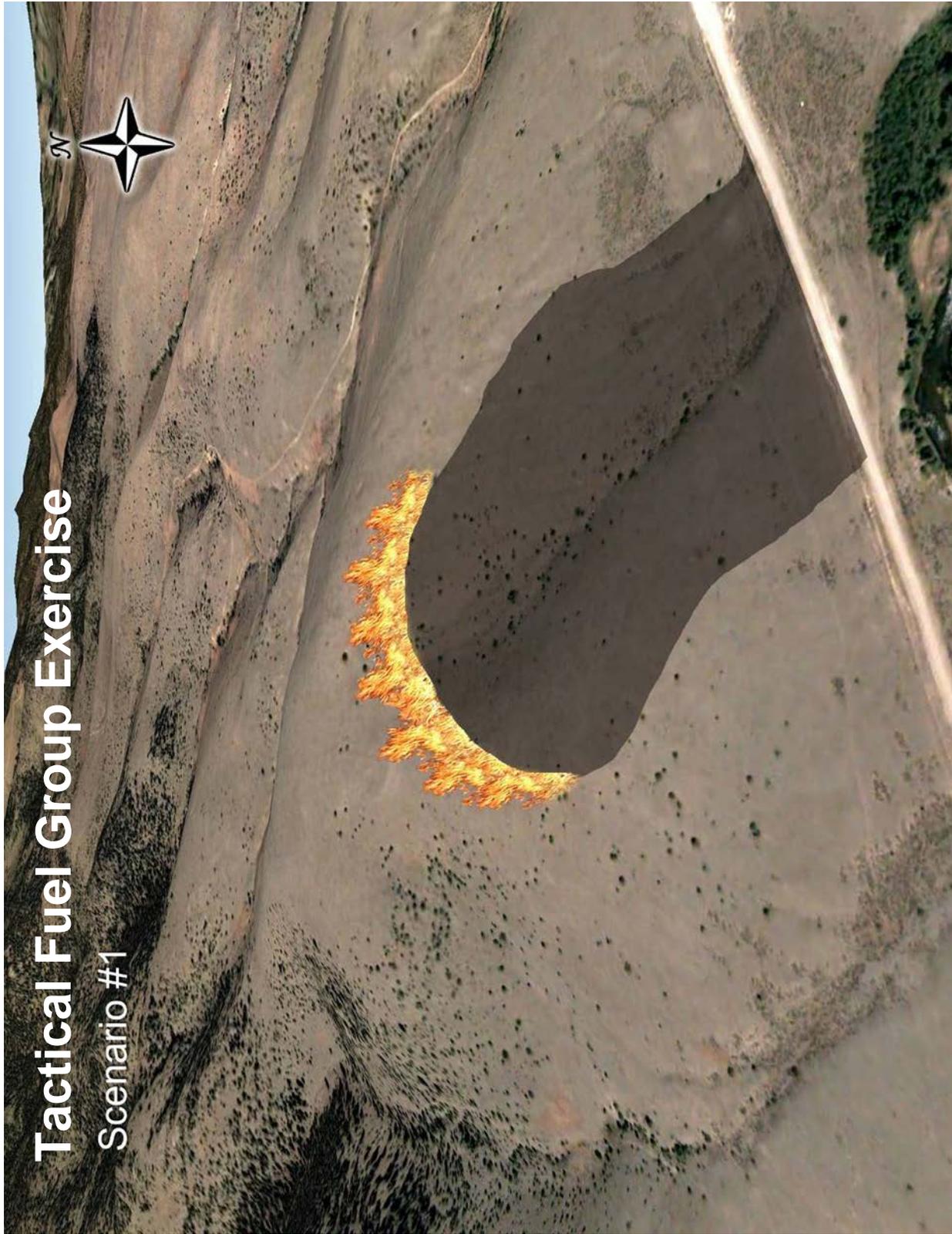
Topography: Relatively flat terrain.

Resources: You have arrived on scene with your engine and crew and will be working with another engine that is on scene.

Scenario: The fire is active at the head and running to the northwest. All available weather indicators appear that they will remain constant. The fire is approximately 10-15 acres. Using the available information and any other resources available, how will you coordinate with the other Engine Boss to best deploy your resources? Illustrate on the map and determine the tactics used.

Provide a solution for this scenario based on the following:

1. Best method of attack
2. Placement of resources
3. Advantages, disadvantages, safety concerns, and considerations



Tactical Fuel Group Exercise

Scenario #1

TACTICAL FUEL GROUP EXERCISE – Scenario #2

Fuel Group: Grass with pockets of brush.

Weather: Winds are variable with gusts to 15-20 mph.

Fire Behavior: Flame lengths are 6-8 ft on an uneven edge caused by pockets of brush. Flame lengths at the heads of the fire are 12-15 ft caused by the predominant winds.

Topography: Rolling terrain, negotiable by lighter engines.

Resources: Three Type 6 engines including yours.

Scenario: The fire is currently 15-20 acres. With the information given, how would you coordinate with other resources to best deploy available resources?

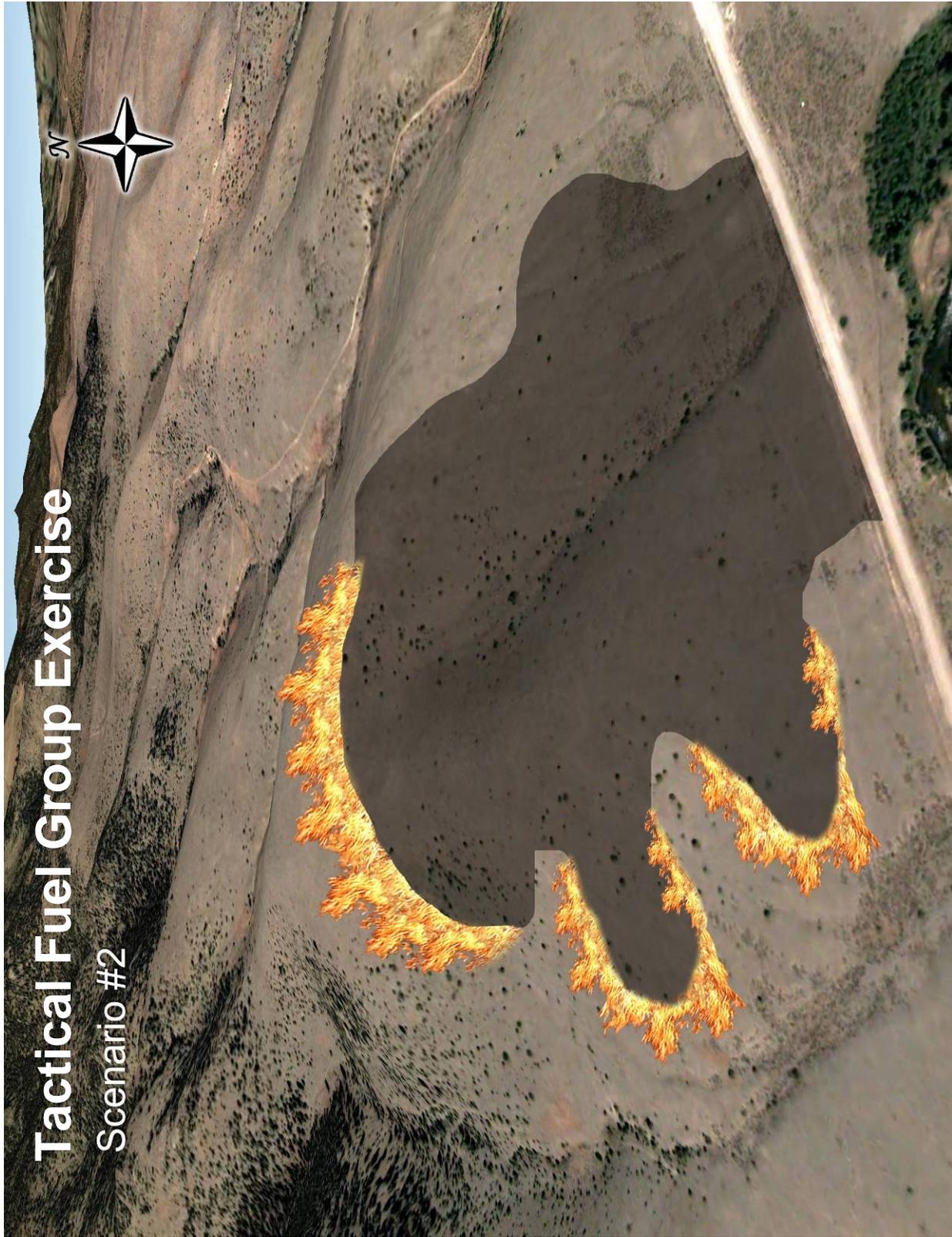
Provide a solution for this scenario based on the following:

1. Best method of attack
2. Placement of resources
3. Advantages, disadvantages, safety concerns, and considerations

TACTICAL FUEL GROUP EXERCISE – Scenario #2 (Cont.)

An engine crewmember has been stung by a bee and has gone into anaphylactic shock.

1. What are your responsibilities as an Engine Boss?
2. Whom would you contact?
3. How would this change your tactics?



Tactical Fuel Group Exercise

Scenario #2

TACTICAL FUEL GROUP EXERCISE – Scenario #3

Fuel Group: Grass and shrub.

Weather: Winds are light and variable from the south/southwest.

Fire Behavior: Flame lengths are approximately 4 ft on the flanks and 6 ft at the head of the fire. The fire is active at the head and on the flanks. The fire is moving actively through the grasses but not running at an extreme rate.

Topography: Mild rolling terrain.

Resources: You arrive on scene with your Type 5 engine and crew. Also arriving at the same time are four other engines and crews, two Type 4 engines and two Type 6 engines. These engines are multi-agency including a volunteer fire department.

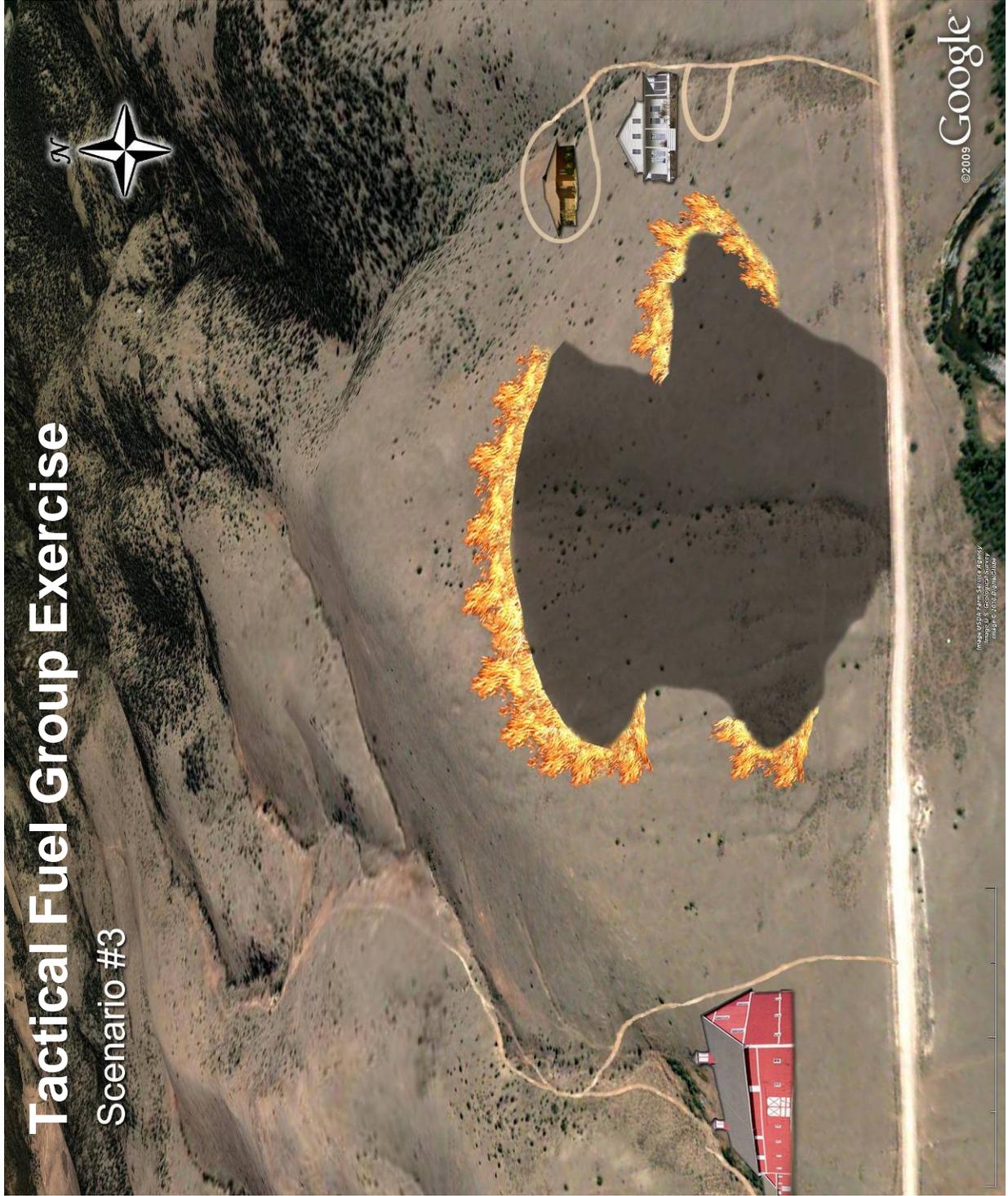
Scenario: The fire is currently 15-20 acres. The mild and rolling terrain is accessible by engines. The multiple spread on the flanks and head of the fire is causing immediate threats to the structures. How would you coordinate with other resources to best deploy the resources on scene?

Provide a solution for this scenario based on the following:

1. Best method of attack
2. Placement of resources
3. Advantages, disadvantages, safety concerns, and considerations

Tactical Fuel Group Exercise

Scenario #3



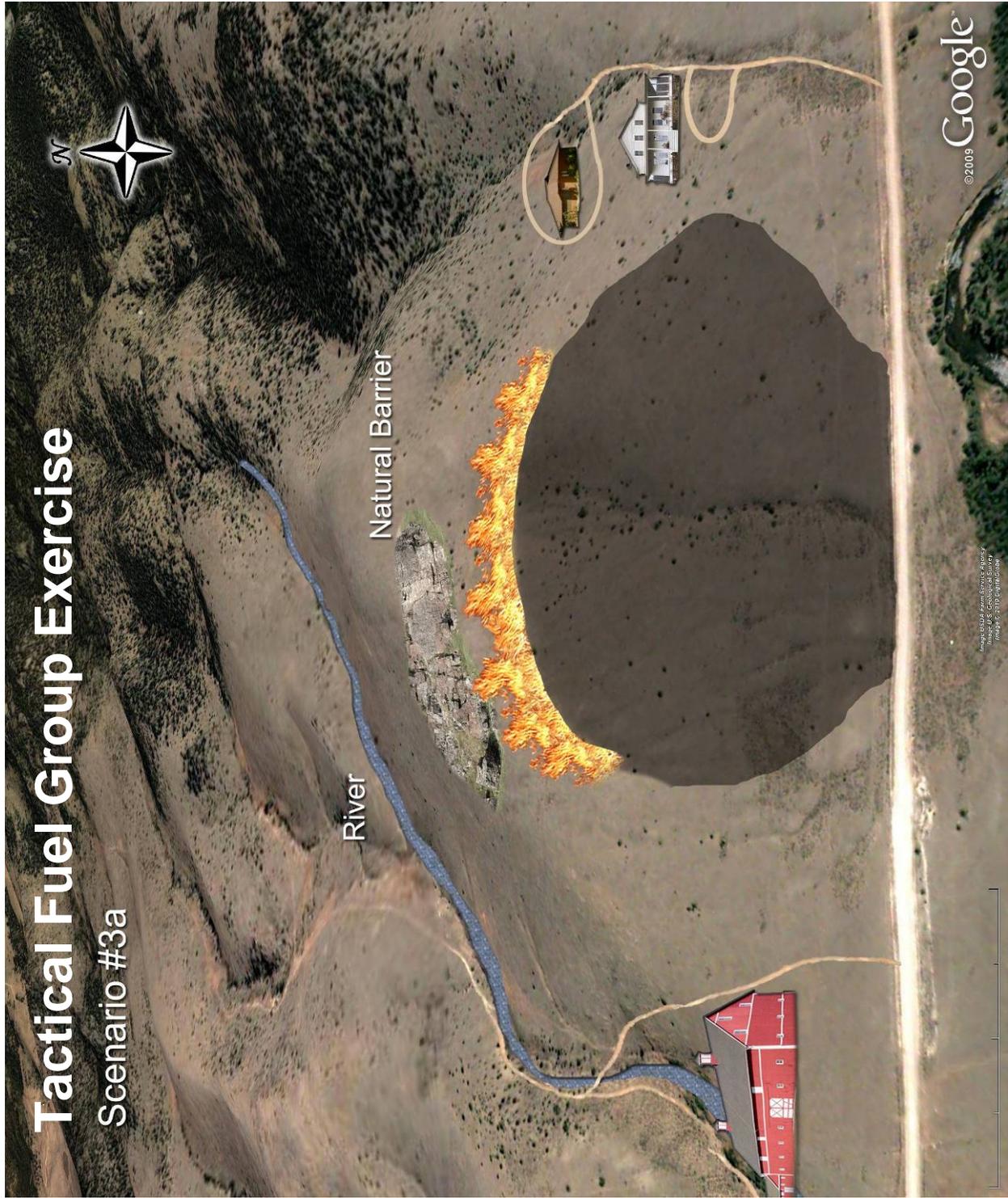
TACTICAL FUEL GROUP EXERCISE – Scenario #3 (Cont.)

Scenario #3a:

The fire continues on past the structures towards a road. Fuels and fire behavior are the same. How will you change your strategy?

Tactical Fuel Group Exercise

Scenario #3a



TACTICAL FUEL GROUP EXERCISE – Scenario #4

Fuel Group: Grasses and areas of timber litter.

Weather: Winds are 10-15 mph out of the southwest and erratic.

Fire Behavior: Fire is wind driven at the head and influenced by topography on the west and northwest sides. Some minor spotting is being caused by the erratic winds.

Topography: Terrain is steep on the west and northwest sides and rolling grass and sagebrush on the south and southeast sides.

Resources: Three Type 4 engines including yours are on scene.

Scenario: The fire is currently 10-15 acres. Fire is accessible by engines on the south flank. The west and northwest flanks are burning into steep terrain dominated by timber that will limit engine access where the terrain becomes steeper. How would you coordinate with the other resources to best deploy the available resources with the given information?

Provide a solution for this scenario based on the following:

1. Best method of attack
2. Placement of resources
3. Advantages, disadvantages, safety concerns, and considerations

Tactical Fuel Group Exercise

Scenario #4



Image USDA Farm Service Agency
Image © 2010 DigitalGlobe

TACTICAL SCENARIO EXERCISE – Time 1300

SCENARIO: Your position is Engine Boss on a Type 5 engine (2WD), and you are currently responding to a fire report on your district. It is the beginning of the fire season and you have only been with your crewmembers for 2 weeks. One person has one full season of fire experience, and the other is brand new. The initial report indicates a fire in grass and brush, on flat terrain, and with no estimate of acreage. The weather forecast for the day calls for temperatures in the high 80's, relative humidity in the 20's, winds to 15 mph. out of the southwest, and a Haines Index of 4. You were dispatched @ 1300.

Your engine is the first ground resource to reach the fire.

As you arrive at the fire location, you notice:

- You did not see any accessible water sources on the way to the fire, except for Johnson Creek.
- Fire is 10-15 acres, active at the head and running to the northeast. The flanks show only moderate activity.
- Wind is out of the southwest 10-15 mph, and indicators appear it will remain constant.
- Terrain at the origin is relatively flat, but turns into rolling hills and mountainous terrain with heavier fuel (brush and timber) to the north.
- The local fire operations specialist (FOS) has been dispatched as Incident Commander (IC), but informs dispatch he is 20 minutes away, on the other side of the district.
- You can see no structures in the immediate area that appear to be threatened.
- Another engine (Type 6 4X4) arrived on scene about the same time you did.
- A type 5 engine arrives 15 minutes after you did.

Given this information, the chosen Engine Boss from each group needs to:

- Describe who to coordinate with, what questions to ask, and which decisions are the immediate priorities.
- Determine the best method of attack and where to place resources.
- Describe your contingency planning process.

TACTICAL SCENARIO EXERCISE – Time 1500

SCENARIO: You have secured line on the left flank with two other engines as far as you could drive into the hills. Your engine and another Type 5 have started a hose lay up the hill, and the Type 6 engine is patrolling the line looking for slopovers and spots. Three other Type 6 engines have arrived and are working the left flank. The IC calls to inform you that a strike team of contract engines is coming in shortly to take over your section of line. He would like you and the other two engines you're with to move to another part of the fire and assist with structure protection. (At this point, the IC is using you as the contact point for the three engines). The fire has burned toward the northeast from off of the Johnson Creek Drainage into the mountains and is threatening a Historic Cabin and burning in the Trapper Flat Cabin area. The IC is currently with the assistant fire management officer (AFMO) and line officer, discussing staffing and tactics, but will be on the way to the cabin site as soon as possible. There is a resource advisor presently at the cabin site coordinating the situation.

Your engine is having trouble idling and quits running.

The wind has picked up with gusts of 20 mph, and your last weather reading indicated a temperature of 91 degrees Fahrenheit, and a relative humidity of 18%.

- Given this situation, list what other information you would want to have before proceeding with the order.
- Are there any other communication and coordination issues that need to be solved?
- Are there any changes in your contingency planning?
- How will you brief your crew?

TACTICAL SCENARIO EXERCISE – Time 1530

SCENARIO: You finally get your engine started, and it seems to be running OK. The air cleaner was very dirty. The strike team of contract engines has arrived, and you depart for the cabin site after you complete a thorough transition briefing that the IC strongly recommended. You are beginning to feel stressed by the delay in your departure. As your engine arrives in the cabin area, you observe the following:

- The cabins are located in a forested area with some dense undergrowth. You do notice some open, green meadows in the area.
- Roads between various cabins are narrow and winding.
- There are three or four rural volunteer engines of different types scattered around different cabins.
- The resource advisor appears to have little or no training or experience in wildland fire, and is busy trying to contact the local residents to get them to leave the area. A law enforcement officer is also in the area assisting in evacuations. He tells you he believes there are 15 cabins in the group, but there is a historical cabin up the road that is a sensitive site.
- The IC has been delayed as well, and is still 15 minutes from arriving. He believes the fire is still 1/2 mile away burning toward the cabin site. You only see a large column of smoke and the wind is blowing it in your direction.
 - Do you have enough information to safely take on this assignment?
 - If not, what are some other sources you could inquire or refer to?
 - What communication and coordination issues need to be resolved?
 - How would you brief your crew?
 - What new contingency issues have arisen?

TACTICAL SCENARIO EXERCISE – Time 1630

SCENARIO: After scouting the area and triaging several cabins, you and the other Type 4 engine find one with good defensible space, good parking spot, and a water source at the historic cabin. The water source is a well, and the cabin owner (who does not want to leave) tells you it is reliable. The IC has arrived in the area, but you have not talked to him face to face yet. The fire is getting closer to the Historical Cabin site, and the fire intensity is high with short range spotting. Air attack and a Type 1 air tanker are working putting in retardant drops in the area. There is a Type 3 helicopter working in the area doing bucket work. Over the radio, you understand that another heavy air tanker is en route.

- If your engine stays at this cabin site to protect it, what other major concerns do you have other than the ones stated?
 - What strategy and tactics would you employ to defend the structures?
 - Describe your risk analysis process.
 - If you decide not to defend any of the cabins, what procedures would you follow?
 - Describe your risk analysis process.
 - What new contingency issues have surfaced for both possibilities?
 - Reevaluate your situation awareness and LCES.
 - The household well may not work, and the household pressure would not be adequate to refill your tank.
 - Do you have contact with a lookout? Do you have contact with the air attack for a sizeup?
 - Check with adjoining forces for intelligence on egress roads in the area.
 - Monitor the weather.
 - Mitigate the hazards around the structures.
 - Make sure the engine is faced out and running.

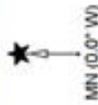
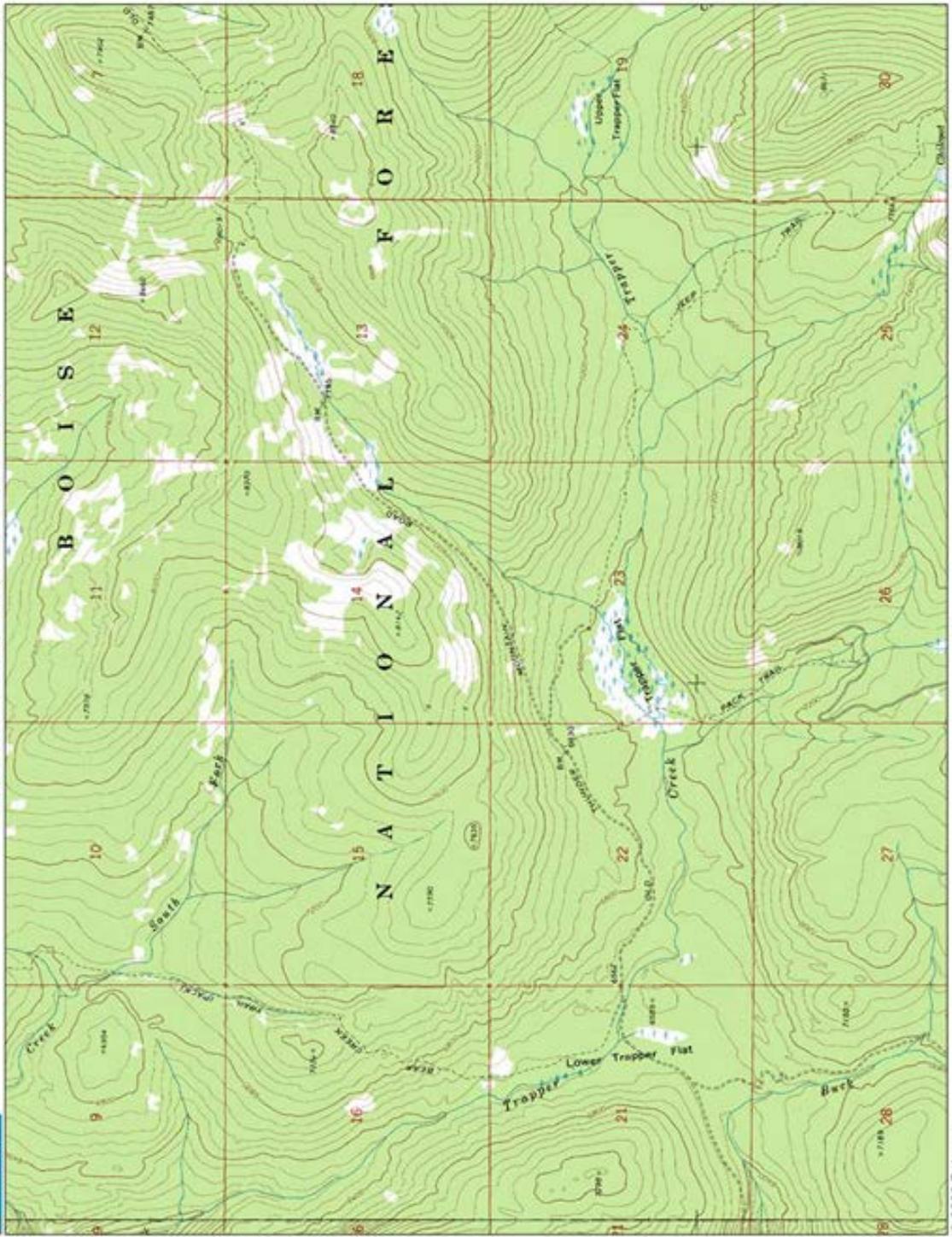
You decide to stay and defend the Historic Cabin site. The owner of the cabin is still there. You feel you can save the structures and maintain LCES. The IC decides that the conditions are too dangerous overall and orders: “All units in the area of Historic Cabin and Trapper Flat need to pull out. Proceed back to the Johnson Creek Road and meet at the Twin Bridges Campground.”

What is your response???

- Obey the orders from the IC.
- Notify the landowner that you and your crew are leaving.
- Leave the hose lay.
- Advise your fireline supervisor that you have left equipment there, ensuring an inventory of the items left is complete.

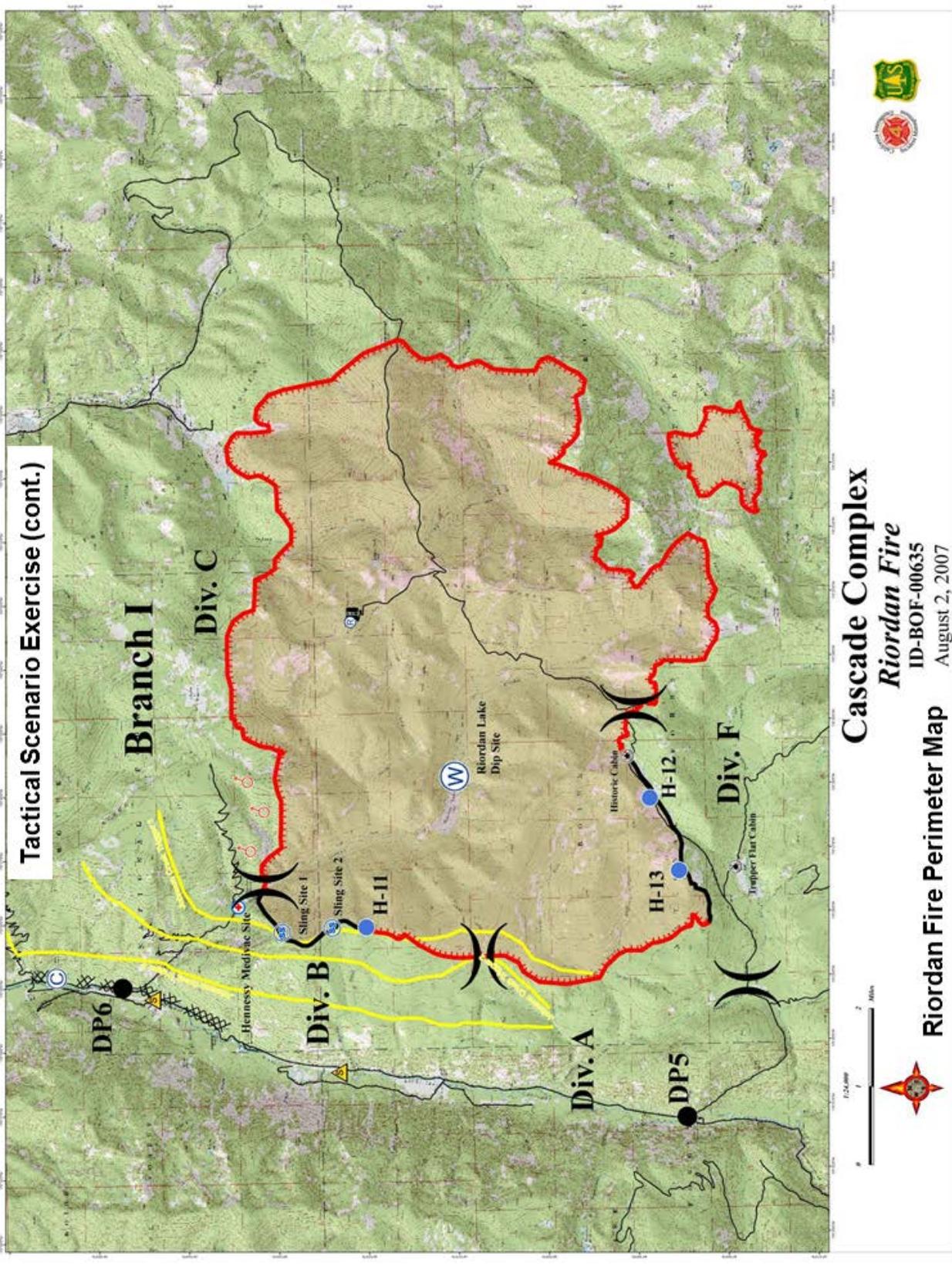
Tactical Scenario Exercise

XMap® 4.0



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Riordan Fire Area Student Map



Tactical Scenario Exercise (cont.)

Cascade Complex
 Riordan Fire
 ID-BOF-00635
 August 2, 2007
 Riordan Fire Perimeter Map

Tactical Scenario Exercise (cont.)

