

Crew Boss S-230

(Single Resource) (Blended)



NFES 002974

Instructor Guide
APRIL 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:

Crew Boss (Single Resource) (Blended), S-230
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

Chairperson, Operations and Workforce Development
Committee

Date

04.03.12

Date

3/28/2012

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For additional copies of this publication, go to Products at www.nwcg.gov.

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NWCG OPERATIONS AND WORKFORCE DEVELOPMENT COMMITTEE POSITION ON COURSE PRESENTATION AND MATERIALS

The recommended hours listed in the FMCG are developed by Subject Matter Experts based on their estimation of the time required to present all material needed to adequately teach the unit and course objectives. The hours listed may vary slightly due to factors such as number of students, types and complexity of course activities, and the addition of local materials.

NWCG does not approve of course delivery varying greatly from the recommended course hours. Instructors and students are cautioned that in order to be recognized as an NWCG-certified course, certain guidelines must be followed:

- Lead instructors are encouraged to enhance course materials to reflect the conditions, resources, and policies of the local unit and area as long as the objectives of the course and each unit are not compromised.
- Exercises can be modified to reflect local fuel types, resources, and conditions at the location where the student will likely fill incident assignments. The objectives and intent of the exercises must remain intact.
- Test questions may be added that reflect any local information that may have been added to the course. However, to ensure the accurate testing of course and unit objectives, test questions in the certified course materials should not be deleted.
- Test grades, used to determine successful completion of the course, shall be based only on the questions presented in the certified course materials.

If lead instructors feel that any course materials are inaccurate, information should be submitted either by accessing the online feedback form at training.nwcg.gov (select the “NWCG EVAL” button in the upper right corner) or by sending an email to the NWCG Training Branch at BLM_FA_NWCG_Evaluation@blm.gov. Materials submitted will be evaluated and, where and when appropriate, incorporated into the appropriate courses.

COURSE LENGTH FOR NWCG COURSES

Recommended course hours and the “NWCG Position on Course Presentation and Materials” above will be adhered to by the course instructors (see below for exception for criteria-based courses).

- Recommended unit times represent the allotted time to teach the unit and complete the exercises, simulations, and tests.
- Recommended course hours are provided to help the students and the course coordinator plan for travel, room reservations, and facilities usage. The recommended course hours represent the time estimated to present the NWCG-provided materials including time for breaks, lunch periods, to set up for field exercises or simulations, etc.
- Actual times for both the unit(s) and the course may vary based on number of students, types and complexity of course activities, and the addition of local instructional materials.

If the course is criteria based, e.g., L-380, and has been developed using NWCG course criteria, minimum course hour requirements have been established and must be adhered to by the course developer and course instructors.

Course hours for all NWCG courses can be found in the Field Manager’s Course Guide at www.nwcg.gov/pms/training/training.htm. If the hours are a minimum versus recommended, they will be stated as such.

PREFACE

Crew Boss (Single Resource), S-230, 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

ICF INTERNATIONAL

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

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- Appendix A – Course Ordering and Support Information
- Appendix B – PowerPoint Presentation
- Appendix C – Student Assessment
- Appendix D – Course Evaluation Forms

COURSE INSTRUCTIONS

This section contains instructions and information essential to the course coordinator and instructors in making an effective presentation. Cadre members must read this section and be thoroughly familiar with course procedures and material prior to presentation.

I. INTRODUCTION

The S-230 Crew Boss (Single Resource) course is designed to meet the training needs of a Crew Boss on an incident as outlined in the Wildland Fire Qualification System Guide (PMS 310-1) and the position task book developed for the position.

The Wildland Fire Qualification System Guide provides guidance and a national wildland fire standard for establishing minimum training, skills, knowledge, experience, and physical fitness requirements for the participating agencies of the NWCG.

The Course Coordinator's Guide (PMS 907) contains general information for presentation of NWCG courses. The course coordinator and instructors should be thoroughly familiar with this guide (online at <http://www.nwcg.gov/pms/training/training.htm>).

This S-230 course was developed using a blended approach to learning, meaning that it contains a mix of online and instructor-led training (ILT). Students were required to complete the online training portion of the course and pass an online assessment before taking the ILT. The focus of this online training was to teach knowledge and concepts. The ILT 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, students must then take and pass a final assessment to receive credit for the course. The final assessment covers content from both the online and ILT portions of the course.

To ensure that the most up-to-date material is being presented, instructors are encouraged to refer to the NWCG Training and Qualifications website. This website contains current updates for all NWCG courses. Go to <http://training.nwcg.gov>.

II. COURSE OBJECTIVES

Course objectives are stated in broad terms that define what students will be able to accomplish after completing the course. These objectives are addressed in both the online and ILT portions of this course.

At the successful completion of this course, students will be able to:

- Describe Crew Boss responsibilities before and during mobilization on the incident, and during demobilization.
- Identify the hazards and risks on various incidents and describe how to mitigate them.
- Describe tactics that are appropriate to various wildland fire situations and implement them through the chain of command.

III. INSTRUCTOR PREREQUISITES

Refer to the Field Manager's Course Guide (PMS 901-1) for instructor prerequisites specific to this course. This guide is accessible at <http://www.nwcg.gov/pms/pms.htm>.

This is a 200-level course. In addition to the course specific instructor prerequisites, all instructors are required to have 32 hours of instructor training, such as Facilitative Instructor (M-410) or an equivalent course, as stated in the Field Manager's Course Guide.

IV. INSTRUCTOR PREPARATION AND COURSE COORDINATION

A. General Information

The Course Coordinator's Guide (PMS 907) contains general information for presentation of NWCG courses. The course coordinator and instructors should be thoroughly familiar with this guide (online at <http://www.nwcg.gov/pms/pms.htm>).

B. Exercises and Other Pertinent Information

The material in this course is designed to be presented through a series of facilitated discussions and classroom exercises, including a review of the content that was provided in the online portion of the course and a tactical decision game. The instructors must work through the exercises together and agree upon the solutions. The instructors should also review the final examination to ensure that all material is covered.

Students will be formed into groups for the exercises in this course and intermixed according to experience level and geographic location of their home unit. Due to the nature of the exercises in this course, seating should allow for ease of discussion and interaction among the students.

Unit 1 gives the student an opportunity to not only review their knowledge but to also apply that knowledge to real-world situations. The unit contains a brief review of online Modules 1-8 and an instructional game, Crew Boss in Review. The Crew Boss in Review is a 16-question Jeopardy™-style review with audio clips, handouts, and scenarios.

Unit 2 includes a series of “What Would You Do?” questions and a tactical decision game, which contains four scenarios from across the United States. The cadre group can use one or all four scenarios depending upon the size of the student group. The scenarios can be implemented by using the accompanying topographic maps or set up in a sand table environment. Adequate space is needed so student groups will not be able to overhear adjacent scenarios. The lead instructor or course coordinator will need to ensure an adequate number of facilitators are available for each scenario station.

It is suggested that you use Google Earth© projected on a whiteboard or wall or use sand tables to add depth to the scenarios. For information on facilitating sand table exercises (STEX), refer to the Tactical Decision Games Library on the Wildland Fire Leadership Development Program website located at http://www.fireleadership.gov/toolbox/TDG_Library/default.htm.

V. COURSE MATERIALS

See Appendix A for course ordering and support information.

A. Instructor Guide

The Instructor Guide is designed as a teaching aid to assist instructors in presenting the information. Each unit begins with a Unit Overview that outlines the lesson's approximate delivery time, objectives, learning strategy, instructional methods, required materials, and evaluation criteria.

The lesson plan for each unit is organized in a two-column format:

- The Outline column contains the lesson content that supports the learning objectives. This column also contains notes to the instructor (directions for conducting an exercise, questions to ask students, etc.), which are in **bold boxes**.
- The Aids & Cues column lists references (slide numbers, handouts, publications, etc.) that remind instructors to display or refer to specific materials.

B. Course Materials CD

The CD contains complete copies of the Instructor Guide, Student Workbook, and Appendixes in bookmarked files in portable document format (pdf).

C. Student Workbook

Student Workbooks should be ordered before the beginning of the course, one for each student.

D. Student Reference Materials CD

The CD contains references and materials students will refer to throughout the course. Order one CD for each student.

E. Course Agenda

A sample course agenda is on page 15. Revise the agenda as appropriate. The agenda can be inserted into the Student Workbook before the beginning of class. Consider removing timeframes from the agenda that is given to students.

VI. STUDENT TARGET GROUP

This course is for personnel desiring to be qualified as a single resource boss. The concepts in this course are to be applied to all single resource boss positions, not just the Crew Boss of a hand crew. The target group for this course includes the following:

- Rural firefighters who are primarily volunteers sponsored by NWCG
- Municipal firefighters who are primarily full-time employees sponsored by NWCG
- NWCG Federal and state wildland firefighters

VII. STUDENT PREREQUISITES

Students must have successfully completed the online portion of S-230. Refer to the Field Manager's Course Guide (PMS 901-1) for current course prerequisites.

VIII. COURSE NOMINATION AND SELECTION LETTERS

Send a course nomination letter, along with the information about completing the required online course modules, to students at least 6 weeks before the ILT portion of the course begins. The letter will contain information on where to access the online modules. An example of the course nomination letter is located on page 11.

Send a course selection letter to students who successfully complete the online portion of the course. An example of the course selection letter is on page 13. This letter will contain the class start and end times, class location, and other required information. Refer to the Course Coordinator's Guide (PMS 907) for more information on selection letters.

IX. CADRE MEETINGS

Cadre meetings are an opportunity for instructors to meet, review the material, and discuss concerns with the course coordinator or lead instructor. The meetings are critical for instructors who do not have previous experience with the course.

After each day's presentation, hold a cadre meeting to discuss concerns and progress. At the end of the course, conduct a final cadre meeting to evaluate instructor performance and suggest modifications for future courses.

A cadre meeting in advance of the course presentation is suggested due to the relationship of the unit material (changing instructional materials in one unit may impact a later unit).

X. RECOMMENDED CLASS SIZE

The recommended class size is 30 students. The recommended student-to-instructor ratio is 6:1. Cadre members should be present for all instructional sessions. A minimum of three instructors should present this course; however, more are required if a field exercise is incorporated. This is to enable strong mentorship by the cadre to the students.

XI. SPACE AND CLASSROOM REQUIREMENTS

The characteristics of the classroom and supportive facilities have a significant impact on the learning environment. The classroom should be chosen and viewed well in advance of the presentation.

The following characteristics should be considered when choosing a location and classroom:

- Provide adequate room and flexibility for student work groups and equipment, including supportive facilities such as break areas, restrooms, etc.
- The classroom should be free from outside interruptions and interferences.

- The classroom should have controlled lighting, good acoustics, and good ventilation.
- Provide adequate access to copy and printing services.
- Provide adequate desk space and power outlets for laptop computers (one power strip for each table).
- A computer with projector and screen is needed to accommodate electronic presentations. Test the equipment before beginning class to ensure compatibility with software.
- If printing in the classroom, a laptop and driver for the printer will be needed.
- An area for sand tables and demonstrations appropriate for field exercises may be needed (cadre's discretion).

Refer to the Course Coordinator's Guide (PMS 907) for more information.

XII. STUDENT ASSESSMENT

The cadre has the discretion of evaluating student performance by any of the following methods:

A. Exercises and Quizzes

Exercises and quizzes are designed to demonstrate students' ability to meet lesson objectives. They are not graded but should be discussed upon completion by the entire class.

B. Final Exam

The final exam and answer key are in Appendix C.

XIII. EXAMINATION AND CERTIFICATION

All materials for the final exam are in Appendix C. Students must obtain a score of 70% or higher on the final assessment and complete the requirements in the following paragraph to receive a certificate of completion for this course.

Upon successful completion of the online and ILT portions of the S-230 Crew Boss (Single Resource) course, the student will receive a final certificate of completion from the instructor. This certificate indicates the student's successful completion of the training course only and does not qualify them as a Crew Boss. If the student wishes to become qualified as a Crew Boss as stated in the Wildland Fire Qualification System Guide, they must complete the tasks outlined in the position task book for Crew Boss (Single Resource).

XIV. COURSE EVALUATION FORMS

Copies of these forms are in Appendix D.

A. Training Course Evaluation Form

This is an opportunity for the course coordinator and instructors to comment on course design. These comments are used by the NWCG Training Branch to identify potential problems with courses and as a resource during the course revision process.

The course coordinator, lead instructor, or both can email comments to BLM_FA_NWCG_Evaluation@blm.gov.

B. Student Training Course Evaluation Form

This is an opportunity for students to comment on the course and the instructors for the purpose of improving future training sessions. Distribute the form at the beginning or end of the course.

XV. APPENDIXES

The following appendixes are on the Course Materials CD:

- Appendix A – Course Ordering and Support Information

This appendix identifies ordering procedures for required components of the course. It also lists additional support materials needed for course presentation.

- Appendix B – PowerPoint Presentations
- Appendix C – Student Assessment
- Appendix D – Course Evaluation Forms

Crew Boss (Single Resource), S-230
Sample Course Nomination Letter

To: *Nominee*

From: *Course Coordinator or Lead Instructor's Name*

Subject: Online Course Work for Crew Boss (Single Resource), S-230

You have been nominated to participate in the Crew Boss (Single Resource), S-230, blended learning course. This course focuses on the duties of an incident Crew Boss as outlined in the Wildland Fire Qualification System Guide (PMS 310-1) and the associated position task book. This course is presented using a blended approach to learning, combining online and instructor-led training. The online portion will teach knowledge and concepts. The instructor-led training part of the course will reinforce the concepts learned online and provide an opportunity to apply those concepts to real-life scenarios and practical exercises.

To attend S-230, you must be qualified as a Firefighter Type 1 (FFT1), have successfully completed Intermediate Wildland Fire Behavior (S-290), and completed the online portion of the S-230 Crew Boss (Single Resource) course before attending the instructor-led portion. To complete the online course modules, go to <http://training.nwcg.gov> and navigate to S-230 Crew Boss (Single Resource) (Blended).

You must pass the online exam with a minimum score of 70% to attend the instructor-led portion of the S-230 course. Submit by mail, email, or fax a copy of your certificate of completion from the online course modules to *course coordinator by date*. You will then receive a course selection letter with further instructions for attending the instructor-led portion of the course.

Thank you for your interest in attending the S-230 course.

Course Coordinator or Lead Instructor's Name
Contact Information (email address, postal address, and phone number)

Crew Boss (Single Resource), S-230
Sample Course Selection Letter

To: *Student's Name*

From: *Course Coordinator's Name*

Subject: Crew Boss (Single Resource), S-230

Congratulations! You have been selected to attend the Crew Boss (Single Resource), S-230, instructor-led training (ILT) to be held at (*location*). The course will begin promptly at (*time and date*) and end at (*time and date*).

The primary emphasis of this course focuses on duties of a Crew Boss, Single Resource (CRWB) within the Incident Command System.

The following training is mandatory before attending the ILT portion of the course:

- Successful completion of the online portion of the course and a score of 70% or higher on the online assessment.

Please bring the following references to class:

- Single Resource Boss, Crew (CRWB) Position Task Book (initiated at the home unit), located at <http://www.nwcg.gov/pms/pms.htm>.
- Fireline Handbook (PMS 410-1, NFES 0065), located at <http://www.nwcg.gov/pms/pubs/pubs.htm>.
- Incident Response Pocket Guide (PMS 461, NFES 1077), located at <http://www.nwcg.gov/pms/pubs/pubs.htm>.

If you wish to receive a certificate of completion for the course, please do not make travel arrangements to arrive after the scheduled start time or to depart before the scheduled course completion time.

In the event you cannot attend the course, please contact the course coordinator before the beginning of the class. This allows time for notifying people who may be on the waiting list to be contacted to fill the vacancy.

If you have any questions, please contact the course coordinator, *Name*, at *phone number* or *email address*.

Crew Boss (Single Resource), S-230
Sample Course Agenda

0800 Unit 0 – Introduction
0830 Unit 1 – Crew Boss in Review
0930 Break
0945 Unit 1 – Crew Boss in Review
1045 Break
1100 Unit 2 – Tactical Decisions

1200 Lunch

1300 Unit 2 – Tactical Decisions
1400 Break
1415 Unit 2 – Tactical Decisions
1545 Break
1600 Final Exam
1700 Closeout
1730 End of Session

Issue Course Certificates

Cadre Meeting (Course Closeout)

UNIT OVERVIEW

Course Crew Boss (Single Resource), S-230

Unit 0 – Introduction

Time .5 Hour

Objectives

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

Strategy

This unit is designed to be team taught by the course coordinator and the lead instructor. The course coordinator should present the material in the detailed lesson outline in Section II, Course Logistics. The lead instructor should present the remainder of the material in the unit.

As a reminder, this course is a blended approach to learning, meaning that it contains both face-to-face and online instruction. Students were required to complete the online training portion of the course and pass an online assessment before taking this instructor-led training (ILT) portion. The focus of the online training was to teach knowledge and concepts. This 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 this ILT portion, students must then take and pass a final exam in order to receive credit for the course.

In this unit, it is important to remind students that the purpose of the ILT portion of the course is to apply the knowledge they obtained in the online portion. During the first part of the day, students will be working in groups to answer questions in a Jeopardy™-style game called “Crew Boss in Review.” The second part of the day is comprised of scenario-based exercises, which will provide students an opportunity to practice decisionmaking skills in a tactical context.

For the purposes of this course, groups should be intermixed with students from different agencies; this will enable students to become familiar with one

another and the agencies they represent. Prepare name cards ahead of time and assign seats to students to encourage this interaction.

Instructional Methods

- Informal lecture
- Interactive group discussion

Instructional Aids

- Computer with LCD projector, presentation software, and screen
- Sign-in sheet
- Flip charts and markers
- Fireline Handbook
- Incident Response Pocket Guide (IRPG)
- Single Resource Boss Position Task Book
- Wildland Fire Qualification System Guide (PMS 310-1)

Exercise

- Expectations

Outline

- I. Introductions
- II. Course Logistics
- III. Course Overview
- IV. Course Expectations

Aids and Cues Codes

The codes in the Aids and Cues column are defined as follows:

IG – Instructor Guide	IR – Instructor Reference
SW – Student Workbook	SR – Student Reference
HO – Handout	Slide – PowerPoint

UNIT PRESENTATION

Course Crew Boss (Single Resource), S-230

Unit 0 – Introduction

OUTLINE	AIDS & CUES
<p>Present NWCG mission statement slide.</p> <p>Present course title slide.</p> <p>Welcome students to the course.</p>	<p>Slide 0-1</p> <p>Slide 0-2</p>
<p>I. INTRODUCTIONS</p>	
<p>Introduce course coordinator and instructors.</p> <p>For introductions, use any method desired.</p> <p>Have students give their:</p>	<p>Slide 0-3</p> <p>Slide 0-4</p>
<ul style="list-style-type: none">• Name and job title• Agency and home unit• Incident Command System (ICS) qualifications• Experience relative to the position as either a trainee or a trainer/coach, both positive and negative	

OUTLINE	AIDS & CUES
<p>II. COURSE LOGISTICS</p> <div style="border: 2px solid black; padding: 2px;">Discuss as appropriate:</div> <ul style="list-style-type: none"><li>• Course agenda<li>• Sign-in sheet<li>• Housekeeping<ul style="list-style-type: none"><li>– Message and telephone location<li>– Cell phone policy<li>– Facility locations (restrooms, vending machines, drinking fountains, smoking areas, evacuation policy, etc.)<li>– Local information (restaurants, local map, transportation)<li>– Computer use (no internet surfing, log on only when instructed, etc.)<li>– Punctuality, meals, and breaks<li>• Other concerns <div style="border: 2px solid black; padding: 2px;">Circulate the class registration form or a sign-in sheet for students to sign.</div>	<p>Slide 0-5</p>

OUTLINE	AIDS & CUES
<p>III. COURSE OVERVIEW</p> <p>This course is designed to meet the training needs of a Crew Boss (Single Resource) as outlined in the Wildland Fire Qualifications System Guide (PMS 310-1) and the position task book developed for the position.</p> <p>The S-230 Crew Boss (Single Resource) course is probably set up a little differently than students are accustomed to. It has been developed using a blended approach to learning, meaning that it contains both face-to-face and online instruction. Students were required to complete the online training portion of the course and pass an online assessment before taking this ILT portion. The focus of the online training was to teach knowledge and concepts.</p> <p>This 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, students must then take and pass a final exam to receive credit for the course.</p>	<p>Slide 0-6</p>
<p>A. Course Objectives</p> <p>At the successful completion of this course, students will be able to:</p> <ol style="list-style-type: none"> 1. Describe Crew Boss responsibilities before and during mobilization, on the incident. 2. Identify the hazards and risks on various incidents and describe how to mitigate them. 	<p>Slide 0-7</p>

OUTLINE	AIDS & CUES
<p>3. Describe tactics that are appropriate to various wildland fire situations, and implement them through the chain of command.</p> <p>Note: Completing this course alone does not qualify students as a Crew Boss. They will be required to complete a practical assignment and will not become a Crew Boss until qualified or “red carded” by an NWCG member agency or fire department.</p> <p>B. Instructional Methods</p> <ol style="list-style-type: none"> 1. Jeopardy™-style review game 2. Discussion 3. Tactical decision game exercise <p>C. Student Assessment</p> <p>To successfully complete the course, students must:</p> <ol style="list-style-type: none"> 1. Participate in all classroom discussions, exercises, and scenarios. 2. Achieve 70% or higher on the final exam. <p>D. Student Course Evaluation</p> <p>Students are given the opportunity to comment on the course and the quality of the instruction by completing a Student Training Course Evaluation form.</p>	<p>Slide 0-8</p> <p>Slide 0-9</p>

OUTLINE	AIDS & CUES
<p>IV. COURSE EXPECTATIONS</p> <p>A. Student Expectations</p> <p>EXERCISE: Expectations</p> <p><u>Purpose:</u> Students develop a list of their expectations for the course.</p> <p><u>Time:</u> 5 minutes</p> <p><u>Format:</u> Students work in small groups of 4 to 5.</p> <p><u>Materials Needed:</u> Flip charts and markers</p> <p><u>Instructions:</u></p> <ol style="list-style-type: none"> 1. Instruct groups to write their responses to the following question on a flip chart: <ul style="list-style-type: none"> • What do you expect to gain from this course? 2. When each group is finished, have the groups present their expectations to the class. 3. Answer any questions. 4. Post lists around the room and refer to them throughout the course to ensure students' expectations are being met. <p><u>End of Exercise.</u></p>	<p>Slide 0-10</p>

OUTLINE	AIDS & CUES
<p>B. Instructor Expectations</p> <p>Students will:</p> <ul style="list-style-type: none"> <li>• Have an interest in becoming a Crew Boss. <li>• Have completed the online portion of the course and passed the online assessment. <li>• Exhibit mutual cooperation with the group. <li>• Actively participate in all of the training exercises presented in the course. <li>• Return to class at stated times. <li>• Use what is presented in the course to effectively perform the duties of a Crew Boss. <li>• Not leave the course with any unanswered questions. 	<p>Slide 0-11</p>

UNIT OVERVIEW

Course Crew Boss (Single Resource), S-230

Unit 1 – Crew Boss in Review

Time 2 Hours

Objectives

1. Recall content provided in Modules 1-8 of the online course.
2. Apply knowledge and skills to scenario-based questions.

Strategy

This unit is designed to serve as a review of the content from the online portion of the course. The review is in the format of a Jeopardy™-style exercise. Students should stay in the same groups they were in for the expectations exercise in the previous unit.

Before starting the game, the instructor should review the general responsibilities of the Crew Boss to refresh the students' memories of the content they learned previously. In the game, there are four categories of questions: operational leadership, Crew Boss responsibilities, risk management, and safety and tactics. The categories span the topics covered in Modules 1-8 of the online portion of the course. The game will require students to apply their knowledge to a variety of scenarios.

The students who attend this course may have varied backgrounds and experience levels; consequently, the instructors who teach this course must be open to more than one way to perform the tasks of a Crew Boss. It is important to encourage the students to discuss items thoroughly and that differences of opinion are acceptable.

Instructional Methods

- Informal lecture
- Interactive group discussion

Instructional Aids

- Computer with LCD projector, presentation software, and screen
- Flip charts and markers
- Fireline Handbook
- Incident Response Pocket Guide (IRPG)
- Single Resource Boss Position Task Book
- Wildland Fire Qualification System Guide (PMS 310-1)

Exercise

- Crew Boss in Review

Outline

- I. Review of Online Modules
- II. Crew Boss in Review

Aids and Cues Codes

The codes in the Aids and Cues column are defined as follows:

IG – Instructor Guide
SW – Student Workbook
HO – Handout

IR – Instructor Reference
SR – Student Reference
Slide – PowerPoint

UNIT PRESENTATION

Course Crew Boss (Single Resource), S-230

Unit 1 – Crew Boss in Review

OUTLINE	AIDS & CUES
<p>Present unit title slide.</p> <p>Present unit objectives.</p>	Slide 1-1 Slide 1-2
<p>I. REVIEW OF ONLINE MODULES</p> <p>A. Module 1: Operational Leadership</p>	Slide 1-3
<p>Remind students that the Crew Boss is one of the first positions in the Incident Command System (ICS) where you need to make independent decisions based on your perception and knowledge of the situation as a supervisor.</p>	
<p>The decisions the Crew Boss makes have major impacts on both the safety and effectiveness of the crew.</p>	
<p>Leadership means providing purpose, direction, and motivation for wildland firefighters working to accomplish difficult tasks under dangerous and stressful circumstances.</p>	
<p>Emphasize the point that the Crew Boss is not alone and that they should consult their fireline supervisor whenever they have questions or need additional support.</p>	

OUTLINE	AIDS & CUES
<p>B. Module 2: Mobilization</p> <div style="border: 2px solid black; padding: 5px;"> <p>Remind students that this module covered the Crew Boss’s responsibilities in preparing the crew for mobilization. These responsibilities include, but are not limited to, preparing a Crew Boss Kit, obtaining information from dispatch, assessing crew readiness, establishing crew organization, and preparing appropriate documentation such as the Passenger and Cargo Manifest.</p> </div>	
<p>C. Module 3: Arrival at the Scene</p> <div style="border: 2px solid black; padding: 5px;"> <p>Remind students that this module addressed intra-crew coordination for the incident check-in processes as well as initial briefings and the Incident Action Plan (IAP). Explain how the information received at the initial briefings and IAP is important for the Crew Boss to assess the crew’s logistical needs for the operational period.</p> </div>	
<p>D. Module 4: Risk Management</p> <div style="border: 2px solid black; padding: 5px;"> <p>Remind students of the five steps of the risk management process: situation awareness, hazard assessment, hazard control, decision point, and evaluation.</p> </div>	
<p>E. Module 5: Situation Awareness for Entrapment Avoidance</p> <div style="border: 2px solid black; padding: 5px;"> <p>Remind students that this module covered topics such as identifying escape routes and safety zones, calculating safety margins, and the protocol for negotiating a perceived unsafe assignment.</p> </div>	

The keys to entrapment avoidance include good situation awareness, anticipating fire behavior, selecting effective strategies and tactics, making good decisions about when to engage a fire, and recognizing good safety zones and escape routes.

F. Module 6: Safety and Tactics

Remind students that this module discussed actions that are required when a crew is deployed for fire suppression activities. This module also covered safety precautions the Crew Boss must address in downhill and indirect fireline construction and rehabilitation.

G. Module 7: Offline Duties

Remind students that this module covered the responsibilities of the Crew Boss before returning to the incident base from a tactical assignment as well as at the incident base or camp and when the crew is out of service.

Emphasize that the Crew Boss is responsible for the safety and welfare of the crew at all times on assignment.

H. Module 8: Demobilization

Remind the students that this module covered the demobilization process and re-supply procedures.

OUTLINE	AIDS & CUES
<p>II. CREW BOSS IN REVIEW</p> <p>EXERCISE: Crew Boss in Review</p> <p><u>Purpose:</u> Students will review material covered in the online portion of the course.</p> <p><u>Time:</u> 1.75 hours</p> <p><u>Format:</u> Students work in small groups of 4 to 5.</p> <p><u>Materials Needed:</u> Flip charts and markers</p> <p><u>Instructions:</u></p> <ol style="list-style-type: none"> <li>1. Divide the students into equal groups and refer them to the exercise on page 1.5 of their Student Workbook. Each question and space for note taking is provided. <li>2. Explain that the purpose of the game is to help refresh students' memory of Modules 1-8 of the online portion of the course. The questions are also intended to get the students to begin applying these concepts to real-life scenarios. <li>3. Explain that, to play the game, the instructor selects a question from the board. Once the students have answered the question, the instructor selects the "Back to the board" button to go to the next question. <li>4. Note that the game was designed to be flexible to the needs of the instructor and the students. You have the option of going through all of the questions in order or having the students determine the order. You may also determine those questions you want to discuss as a class and those you want each team to respond to individually. 	<p>Slide 1-4</p>

OUTLINE	AIDS & CUES
<p>5. Possible answers are provided below each question in the Instructor Guide; however, you are encouraged to provide additional solutions where appropriate.</p> <p>6. The Student Workbook provides space below each question for students to take notes.</p> <p>7. When all of the questions have been selected and you are finished with the game board, click on the slide anywhere outside of the board to move on to the last slide of the unit.</p> <p>A. Leadership 10</p> <p>1. Question</p> <p>You have recently conducted a crew cohesion assessment on your crew for the last two months. It's been a highly active fire season and your crew has felt the stress of their assignments and time away from their families. Though you've been trying to help four new crewmembers get acclimated, there is still a pretty significant divide among the crew. You decided to use the Crew Cohesion Assessment to better identify your crew's strengths and weaknesses.</p> <p>Review the Sample Crew Cohesion Assessment on page 1.25. Then build a plan of action to improve upon the identified weaknesses, and plan ways to sustain the strengths.</p>	<p>Slide 1-5</p> <p>IR 1-1 SW p. 1.21</p>

OUTLINE	AIDS & CUES
<p>2. Answer and Debrief</p> <p>There is no single correct answer for this question. Students should identify the greatest weaknesses and determine how they can use their strengths to improve crew cohesion.</p> <p>The Crew Boss is one of the first positions in the ICS where you need to make independent decisions based on your perception and knowledge of the situation. Leadership means providing purpose, direction, and motivation for wildland firefighters to accomplish difficult tasks under dangerous and stressful circumstances.</p>	
<p>B. Leadership 20</p> <p>1. Question</p> <p>As the Crew Boss, you are responsible for the welfare of the entire crew. Identify the essential characteristics you will need to lead your crew effectively.</p> <p>2. Answer and Debrief</p> <p>Essential leadership characteristics of a Crew Boss include:</p> <ul style="list-style-type: none"> • Duty • Integrity • Respect 	<p>Slide 1-6</p>

OUTLINE	AIDS & CUES
<p>C. Leadership 30</p> <p>1. Question</p> <p>You have been put in a situation where you have limited time to conduct a crew briefing. What essential topics must you address?</p> <p>2. Answer and Debrief</p> <p>The Crew Boss is responsible for gathering as much practical information as necessary before assignments begin. The Crew Boss is also equally responsible for ensuring the crewmembers are properly briefed. The Crew Boss doesn't need to relay everything but must give the crew enough information to perform its assigned function safely and effectively.</p> <p>Essential topics to address include:</p> <ul style="list-style-type: none"> • Situation: Terrain, fuels, weather, and fire behavior • Mission and Execution: Assignment • Communications: Frequency • Service and Support: Other resources • Risk Management: Identify hazards; Lookout(s), Communication(s), Escape Route(s), and Safety Zone(s) (LCES); anchor points; trigger points • Questions and Concerns 	<p>Slide 1-7</p>
<div style="border: 2px solid black; padding: 5px; display: inline-block;"> <p>When the groups are finished, have them report back to discuss why certain items should be considered essential and why others are not.</p> </div>	

OUTLINE	AIDS & CUES
<p>D. Leadership 40</p> <p>1. Question</p> <p>You notice two crewmembers arguing throughout the day, and it is affecting crew cohesion. You know you need to do something to address the situation. What should you do?</p> <p>2. Answer and Debrief</p> <p>Try to resolve the situation at the lowest level possible. In this instance, it would mean taking the two crewmembers aside individually and getting both sides of the story. If resolving the situation at this level is not possible, ask your supervisor for assistance.</p>	<p>Slide 1-8</p>
<p>E. Crew Boss Responsibilities 10</p> <p>1. Question</p> <p>Hi, this is Justine Alexander from dispatch. We've just received a resource order through ROSS asking for a Type 2 Hand Crew to respond to the Hermit incident. We've assigned your Redding Crew #3. The fire number is P4D88G. The location of the fire is near Black Rock Mountain Ridge. You are to report to the ICP by 1300 on August 4. You are to transport the crew using your crew rigs. You should be receiving a copy of the resource order with this same information in a few minutes.</p>	<p>Slide 1-9</p>

OUTLINE	AIDS & CUES
<p>If you have any questions after reviewing the resource order, you can call us back at dispatch.</p> <p>What do you need to do to prepare your crew for mobilization?</p> <p>2. Answer and Debrief</p> <p>Sample responses include:</p> <ul style="list-style-type: none"> • Obtain resource order. • Notify your crew. • Determine travel plans. • Determine if you are going to have to remain over night somewhere (arrange for meals). • Review Department of Transportation travel regulations. • Prepare a Passenger and Cargo Manifest in case you need to travel by air; make sure everyone has their identification. • Deliver a crew conduct briefing. • Ensure individuals and vehicles are ready and stocked for two full weeks. <p>F. Crew Boss Responsibilities 20</p>	
<div style="border: 2px solid black; padding: 5px;"> <p>Determine which of these options you want the students to perform. For option 3, you will need to bring a Crew Boss Kit with you.</p> </div>	<p>Slide 1-10</p>

OUTLINE	AIDS & CUES
<p>1. Question</p> <p>A good Crew Boss is a prepared Crew Boss. Perform one of the following:</p> <ol style="list-style-type: none"> 1. Select a partner and identify any additional critical items that should be added to their Crew Boss Kit; 2. Create a list of critical items you will put into your Crew Boss Kit upon returning home; or 3. Identify the critical items missing from the Instructor's Crew Boss Kit. <p>2. Answer and Debrief</p> <p>Essential items to include in a Crew Boss Kit are the following:</p> <ul style="list-style-type: none"> • Radio Frequency Guide • Interagency Standards for Fire and Fire Aviation Operations • Interagency Incident Business Management Handbook • National Interagency Mobilization Guide • Incident Response Pocket Guide • Position Task Book • Red Card • Agency directives • Fireline Handbook • ICS 214, Unit Log • ICS 226, Individual Performance Rating • Crew Time Report • Emergency Firefighter Time Report 	

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Passenger and Cargo Manifest • Agency-specific forms • Accident forms <p>G. Crew Boss Responsibilities 30</p> <p>1. Question</p> <p>You have been notified that you will be demobilizing tomorrow. What actions must be completed prior to demobilization?</p> <p>2. Answer and Debrief</p> <p>Sample actions include:</p> <ul style="list-style-type: none"> • Determine the demobilization process. • Obtain all time reports from the Finance/Administration Section. • Obtain all medical injury paperwork. • Ensure drivers are well rested and vehicles are travel ready. • Schedule the travel routes and rest breaks. • Keep crewmembers informed. • Make sure all checked-out equipment is checked back in. 	<p>Slide 1-11</p>
<p>H. Crew Boss Responsibilities 40</p> <p>1. Question</p> <p>Your crew has been working on a Type 2 incident for 10 days in the southeast. Fuels are mostly in fuel model 6, the weather has been 70-80 degrees Fahrenheit every day, and the relative humidity has averaged</p>	<p>Slide 1-12</p>

OUTLINE	AIDS & CUES
<p>30-50 percent. Thunderstorm winds have caused control problems and hazards most afternoons. Today the fire is smoldering and the lines have been completed. You are now in the mop up phase of the fire.</p> <p>In addition to safety responsibilities, Crew Bosses must ensure that crewmembers function as effectively as possible. How can you ensure mopup is accomplished efficiently?</p> <p>2. Answer and Debrief</p> <p>To ensure mopup is accomplished effectively, the Crew Boss should:</p> <ul style="list-style-type: none"> • Obtain the proper mopup equipment. • Work the area in an organized and methodical manner. • Identify and initiate saw work early to prevent problems with large fuels later. • Assign the crew into pairs. • Ensure that you use a combination of water and hand tools to maximize mopup efficiency. • Use infrared heat detectors when possible. • Provide crewmembers with adequate rest periods. • Coordinate actions with adjoining forces. • Ensure novice firefighters receive on-the-job training. 	

OUTLINE	AIDS & CUES
<p style="text-align: center;">Consider that the crew may be starting to get complacent. This is when crew issues start to arise and the morale of the crew may start to decline.</p> <p>I. Risk Management 10</p> <p>1. Question</p> <p>You just received your morning briefing, and you were assigned a section of line you are not familiar with. What should you start thinking about to prepare for this assignment?</p> <p>2. Answer and Debrief</p> <p>To prepare for this assignment, the Crew Boss should ask questions such as:</p> <ul style="list-style-type: none"> • What is your next best place to establish a control line? • Have you scouted your contingency line or just looked at the map? • Are your logistical needs going to be met on time? • Can your resources get through the shift without additional support? • Should you make arrangements to get supplies yourself? 	<p>Slide 1-13</p>
<p>J. Risk Management 20</p> <p>1. Question</p> <p>In this situation, what are your concerns?</p>	<p>Slide 1-14</p>

OUTLINE	AIDS & CUES
<p>2. Answer and Debrief</p> <p>Concerns include the following:</p> <ul style="list-style-type: none"> • Power lines • Unburned fuel • Extreme fire behavior • Heavy smoke • Rapid rates of spread • Flashy fuels • Where is the anchor point? • Where is the safety zone? • What is the predicted weather? • Is this situation going to be short duration or is it going to continue? 	
<p>K. Risk Management 30</p> <p>1. Question</p> <p>If a fire were to occur in this area, what concerns would you have?</p> <p>2. Answer and Debrief</p> <p>Concerns include the following:</p> <ul style="list-style-type: none"> • Power lines • Ingress and egress • Limited road access • Hazmat and unknown material • Flashy fuels • Flammable roofing material • Structures on a slope • Highly populated area • Rugged terrain 	<p>Slide 1-15</p>

OUTLINE	AIDS & CUES
<p>L. Risk Management 40</p> <p>1. Question</p> <p>Your Assignment: It is August 23 and you have been dispatched as a Crew Boss for the Davis Fire. The fire is located in the Northern Rocky Mountains in Montana.</p> <p>Local Factors: Over the last couple of weeks, fires have burned quite actively after 1400. Today’s weather forecast calls for maximum temperature near 90 degrees, minimum relative humidity 18-20 percent, and northwest winds to 15 mph.</p> <p>Fire Situation: You arrive at the fire and have a safe anchor point to work from. The fire is about 3 acres. The fire currently has a moderate rate of spread in surface fuels. The time is 1030.</p> <p>What are your trigger points?</p> <p>2. Answer and Debrief</p> <p>Using the Look Up, Down and Around indicators in the Incident Response Pocket Guide (IRPG), you see that:</p> <ul style="list-style-type: none"> • Relative humidity below 25 percent is an indicator of low fuel moisture. • Temperature greater than 85 degrees Fahrenheit indicates high fuel temperature. 	<p>Slide 1-16</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Surface winds above 10 mph are significant. • Spotting indicates problem fire behavior. <p>If the conditions noted above materialize and you do not have the fire contained by 1300, you will reevaluate your strategy and tactics.</p> <p>M. Safety and Tactics 10</p> <p>1. Question</p> <p>Your crew is working in the southwest and has been assigned to assist with local initial attack activities. Lookouts in the area have reported 30 new starts from last night's lightning storm. The forecast today calls for increased temperatures and local gusty winds. As the Crew Boss, what can you do to prepare for this assignment?</p> <p>2. Answer and Debrief</p> <p>To prepare for the assignment, the Crew Boss should:</p> <ul style="list-style-type: none"> • Obtain a situation briefing for all crewmembers. • Establish a communication procedure with the local unit and obtain radios and frequencies, organizational charts, and local area maps. • Arrange for logistical support. • Organize crew into module sizes that meet the local unit needs. 	<p>Slide 1-17</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Ensure a qualified Initial Attack Incident Commander (IC) is assigned to each module. • Ensure crewmembers are prepared for field assignment up to 48 hours without re-supply. <p>N. Safety and Tactics 20</p> <p>1. Question</p> <p>Use the ICS 204 Assignment List on page 1.27 to develop a list of logistical concerns or needs that must be addressed to ensure the crew is able to function safely and effectively throughout the operational period.</p> <p>2. Answer and Debrief</p> <p>Sample questions include:</p> <ul style="list-style-type: none"> • What is the water source? • Do we need to set up portable water sources? • Are there pumps available? • Is there fuel available for the pump? • Are hose and fittings available, or do we need to pick them up? • How much do we need? • How long is the hose lay? • Who are the adjoining crews? • Do we have communication with them? <p>Remember, you can consult your fireline supervisor if you need help.</p>	<p>Slide 1-18</p> <p>IR 1-2 SW p. 1.23</p>

OUTLINE	AIDS & CUES
<p>O. Safety and Tactics 30</p> <p>1. Question</p> <p>Your Assignment: It is October 3 and your 20-person crew has been working on the 3,000 acre Madre fire for 2 days. The fire is located in the Coast Range of southern California. Your crew is one of four hand crews assigned to Division C.</p> <p>Local Factors: The fire is burning in chaparral about 10 feet tall. For the last 2 days, you have observed 20-foot-tall flame height on upslope runs during the peak of the burning period. It is 0700; conditions are the same today, and you are anticipating the same level of fire behavior.</p> <p>Fire Situation: The four crews in Division C are to construct indirect fireline up a ridge to tie into a dozer line on top. The fire has not yet established in the drainage adjacent to the proposed line location. You anticipate the fire will continue to make hooking upslope runs with the normal diurnal winds predicted for today.</p> <p>Proposed Safety Zone: You are at the anchor point, which is an area at the base of the ridge that has been cleared by a dozer. The cleared area is flat and about 200 feet wide by about 300 feet long. Brush surrounds the cleared area on all sides.</p> <p>Will it work for a safety zone? Why or why not?</p>	<p>Slide 1-19</p>

OUTLINE	AIDS & CUES
<p>2. Answer and Debrief</p> <p>Yes. The minimum distance separation requirement is met on all sides for protection from radiant heat.</p> <p>The safety zone must be at least 160 feet in diameter. The cleared area is a little over an acre in size and 200 feet wide on its narrowest side. So the minimum distance separation requirement is met on all sides for protection from radiant heat. This assumes there is no significant convective heat source to influence your safety zone.</p> <p>Consider whether the safety zone is big enough for all four crews. You should have a discussion with the other Crew Bosses and Division Superintendent before you begin constructing line.</p>	
<p>P. Safety and Tactics 40</p> <p>1. Question</p> <p>Your crew is assigned to Division A on a wildland fire incident. The crew is to fly to H-1 and then to construct direct line from H-1 to A-B Division boundary.</p> <ul style="list-style-type: none"> • Before the flight to H-1, what can you do to prepare for this assignment? • During the flight to H-1, what can you do to improve the situation awareness in this assignment? 	<p>Slide 1-20</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • After the crew has arrived, what actions should you take prior to making crew assignments? <p>2. Answer and Debrief</p> <p>Question 1 sample responses include:</p> <ul style="list-style-type: none"> • Prepare a Passenger and Cargo Manifest. • Ensure all crewmembers have the proper Personal Protective Equipment (PPE). • Ensure all loads include a squad boss. • Prepare tools for transport. • Request helitack to fly over the assigned work area. • Ensure you have visibility in the aircraft to see the fire area. • Have an incident map available. <p>Question 2 sample responses include:</p> <ul style="list-style-type: none"> • Get oriented by using the map. • Determine fuel characteristics. • Determine topographic characteristics. • Identify present and predicted weather conditions. • Consider LCES. • Determine overall size of area of responsibility. • If possible, ask pilot to fly you over your division. 	

OUTLINE	AIDS & CUES
<p>Question 3 sample responses include:</p> <ul style="list-style-type: none"><li>• Assign a squad boss to brief the crew when they arrive.<li>• Ensure squad bosses are briefed on LCES.<li>• Brief squad bosses on the anchor location.<li>• Initiate sizeup and flagging operations.<li>• Discuss specific tactics – direct, indirect, cold trail and use barriers. <p><u>End of Exercise.</u></p>	
<p>Review unit objectives.</p>	<p>Slide 1-21</p>

Sample Crew Cohesion Assessment

(blank ones located at http://www.fireleadership.gov/toolbox/documents/Crew_Cohesion_Assessment.pdf)

Communication

Crew leaders communicate intent clearly and crewmembers understand the intent of orders that are given.	1 2 3 (4) 5
Crewmembers are willing to bring up problems, successes, or issues with the leadership team.	1 2 (3) 4 5
Crewmembers communicate well with the other crewmembers.	1 2 (3) 4 5

Conflict

Crewmembers are willing to address conflicts with others when they occur.	1 2 (3) 4 5
Crewmembers focus on what is right, not who is right, when resolving conflict or other problems.	1 2 3 (4) 5
Conflicts between individuals on the crew are short-lived and do not persist over extended periods of time.	1 2 3 (4) 5

Trust

The crew environment allows and encourages all crewmembers to be heard.	1 2 3 (4) 5
Crewmembers complete assignments without excessive supervision.	1 2 3 (4) 5
Crewmembers implement decisions of the leadership team without delay.	1 2 3 (4) 5
Crewmembers are willing to experiment on new ideas without risking embarrassment.	1 2 (3) 4 5

Teamwork

Crewmembers show ownership in the crew's accomplishments or failures.	1 2 3 (4) 5
Crewmembers show a strong consciousness of the history, tradition, and lore of the crew.	1 2 (3) 4 5
Crewmembers anticipate the needs of others and act in anticipation of those needs, especially during high tempo operations.	1 2 (3) 4 5
The intensity of the work is determined more by the crewmembers than by direction from leaders.	1 2 3 (4) 5

Effectiveness

Crew remains focused on the quality of the services they provide, even when others do not hold them directly accountable for that service.	1 2 3 (4) 5
Crew works well with other resources to accomplish the mission.	1 2 3 (4) 5
Crew actively discusses situation awareness when planning and conducting operations.	1 2 3 4 (5)
Crewmembers can pause an action to clarify their situation awareness or voice concerns.	1 2 3 (4) 5
Crew recognizes and successfully transitions between high-stress and low-stress conditions.	1 2 3 (4) 5

Leadership

Crew has a complete set of standard operating procedures or crew handbook that is well understood and used.	1 2 3 (4) 5
Leaders demonstrate and adhere to a consistent set of values and standards.	1 2 3 (4) 5
Leaders conduct themselves in an ethical manner.	1 2 3 4 (5)
The leadership team speaks and acts with one voice and mind.	1 2 3 (4) 5

Learning

Crew debriefs daily as part of the standard operating routine.	1 2 3 4 (5)
Crew conducts impromptu on-the-job training events to build crew skill sets.	1 2 (3) 4 5
Crew conducts training to discuss lessons from other fires or other operations.	1 2 3 (4) 5
Training is conducted by more than just one or two crew leaders.	1 2 3 (4) 5
Crew leaders understand their responsibility to mentor crewmembers.	1 2 (3) 4 5

UNIT OVERVIEW

Course Crew Boss (Single Resource), S-230

Unit 2 – Tactical Decisions

Time 3.5 Hours

Objectives

1. Exercise decisionmaking skills in a tactical context.
2. Practice communicating decisions.

Strategy

This unit includes a variety of “What Would You Do?” questions that ask students to consider how they would respond as a Crew Boss. These questions are meant to engage the whole class in a dialog where a variety of perspectives should be considered.

The final exercise gives students the opportunity to practice decisionmaking skills in several different tactical contexts. Given a scenario, the student will act as the Crew Boss to decide how the assignment can be safely approached. The student will then communicate his or her decision to the appropriate individuals.

Students may have varied backgrounds and experience levels; consequently, the instructors must be open to more than one way to perform the tasks of a Crew Boss. It is important to encourage the students to discuss items thoroughly and that differences of opinion are acceptable.

Instructional Methods

- Interactive group discussion
- Exercise

Instructional Aids

- Computer with LCD projector, presentation software, and screen
- Flip charts and markers
- Fireline Handbook
- Incident Response Pocket Guide (IRPG)

- Single Resource Boss Position Task Book
- Wildland Fire Qualification System Guide (PMS 310-1)
- Topographic maps for each of the four scenarios

Exercise

- “What Would You Do?”
- Tactical Decisions

Outline

- I. “What Would You Do?” Exercise
- II. Tactical Decisions Exercise

Aids and Cues Codes

The codes in the Aids and Cues column are defined as follows:

IG – Instructor Guide
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HO – Handout

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Slide – PowerPoint

UNIT PRESENTATION

Course Crew Boss (Single Resource), S-230

Unit 2 – Tactical Decisions

OUTLINE	AIDS & CUES
<div style="border: 2px solid black; padding: 5px;"><p>Present unit title slide.</p><p>Present unit objectives.</p></div>	Slide 2-1
	Slide 2-2
<p>I. “WHAT WOULD YOU DO?” EXERCISE</p>	
<p>EXERCISE: “What Would You Do?”</p>	
<p><u>Purpose:</u> Discuss a variety of possible scenarios students may encounter as a Crew Boss.</p>	
<p><u>Time:</u> 30-40 minutes</p>	
<p><u>Format:</u> Full class</p>	
<p><u>Materials Needed:</u> None</p>	
<p><u>Instructions:</u></p>	
<p>1. This section should be facilitated by a panel or cadre of subject matter experts. The following questions provide students with thought-provoking situations. Instructors should feel free to use as many or as few of these questions for this exercise and add additional questions, as desired. This exercise may need to be limited to 30-40 minutes to allow time for the final exercise and exam.</p>	

OUTLINE	AIDS & CUES
<p>10. A swamper on your crew is cut by a sawyer on the leg, and the next day another swamper is cut by the same sawyer.</p>	<p>Slide 2-6</p>
<p>11. The bus driver who drove your crew to the fire is unsafe, in your estimation.</p>	
<p>12. You think the helicopter you are riding in had a rotor strike as the helicopter was landing.</p>	
<p>13. Your crew has been working for 15 hours on initial attack. The time is now 2300 hours, and you are informed that most of your crew is out of water.</p>	<p>Slide 2-7</p>
<p>14. You are out of your agency's jurisdiction, and two people on your crew do not have their red card with them.</p>	
<p>15. It is a dark night and your crew is digging line when a snag falls and hits one of your crewmembers on the head, knocking him or her unconscious.</p>	
<p>16. Your crew and another crew have been working together for 8 days. Your crew is doing all of the work.</p>	<p>Slide 2-8</p>
<p>17. Your crew arrives on a fire out of state. You were flown to the assignment, so you have no saw, gas, water, or fuses. You are driven straight to the fireline without any of your supplies and told to start work.</p>	

OUTLINE	AIDS & CUES
<p>18. You are 30 minutes out in front of your crew scouting line when your squad boss calls to inform you that one of your sawyers just fell off of a 12-foot ledge and is not moving.</p>	
<p>19. One of the people on your crew has a family emergency and must go home.</p>	Slide 2-9
<p>20. Two of your crewmembers inform you that they have lice. What are your responsibilities to the crew, the two crewmembers, and other people at the camp?</p>	
<p>21. Just before heading out of fire camp for day shift, your crew informs you that the supply unit is out of lunches.</p>	
<p>22. A pilot drops you and seven of your crewmembers off at the wrong helispot.</p>	Slide 2-10
<p>23. You lose communication with your squad boss who is your line scout. You have not heard from him in 2 hours.</p>	
<p>24. You are the only qualified Crew Boss on the crew, and you must leave the fire assignment because of a family emergency.</p>	
<p>25. You are en route to a fire, and your vehicle breaks down.</p>	Slide 2-11
<p>26. You are at the airport about to board your plane when you notice one of your crewmembers is missing.</p>	

OUTLINE	AIDS & CUES
<p>27. Your crew is off duty in town and three of your crewmembers are arrested. Your entire crew is to report to camp for an assignment in the morning.</p> <p>28. You were in an accident with another fire vehicle on your way back to camp. You cannot reach anyone on the radio.</p> <p>29. You receive an emergency message over the radio that one of your firefighters needs to contact the communications unit as soon as possible.</p> <p>30. You have been working on a fire for 8 days, and a shower unit has not been set up in fire camp.</p> <p>B. Student Questions</p> <p>Ask the students if they have any “What would you do?” questions for the instructors.</p> <p><u>End of Exercise.</u></p>	<p>Slide 2-12</p>
<p>II. TACTICAL DECISIONS EXERCISE</p> <p>EXERCISE: Tactical Decisions</p> <p><u>Purpose:</u> Discuss a variety of possible scenarios students may encounter as a Crew Boss.</p> <p><u>Time:</u> 3 hours</p> <p><u>Format:</u> Full class</p>	<p>Slide 2-13</p>

OUTLINE	AIDS & CUES
<p><u>Materials Needed:</u> Scenarios and topographic maps for each scenario</p> <ul style="list-style-type: none"> • Southern California Fire • Northwest Fire • Rocky Mountain Fire • Southwest Fire <p><u>Instructions:</u></p> <ol style="list-style-type: none"> 1. Divide the students into equal groups and refer them to the exercise on page 2.5 of their Student Workbook. A brief overview of each scenario and space for notetaking is provided. 2. Depending on the number of student groups, one or all four of the scenarios can be used. Have separate areas so that the student groups cannot hear the scenarios discussed in other groups. 3. Assign cadre members or subject matter experts to facilitate this exercise. A facilitator is needed at each station to implement the scenario. 	<p>Slide 2-14 Slide 2-15 IR 2-1</p> <p>Slide 2-16 Slide 2-17 IR 2-2</p> <p>Slide 18 Slide 19 IR 2-3</p> <p>Slide 20 Slide 21 IR 2-4</p>

OUTLINE	AIDS & CUES
<p>Before the Exercise</p> <ol style="list-style-type: none"> 1. Provide areas for student groups with sufficient space so that individual groups will not be able to hear the scenarios discussed in other groups. The exercises can be conducted outside on a table, hood of a vehicle, in a classroom, etc. The number of areas will depend on the number of student groups that will rotate through the scenarios. 2. Included in the course package are four scenarios. Any or all of these scenarios can be used. Example: For four student groups, use four scenarios and rotate the students through each scenario, allowing 15 minutes at each station. 3. Each station should have a topographic map with fire perimeter that corresponds with the scenario assigned. 4. Review given scenarios and prepare a briefing. Facilitators will play the roles of Division Supervisor, Incident Commander, or a district duty officer. 5. Ensure students have note taking material (located in the student workbook) and an IRPG. 6. Introduce students to exercise objectives and format. 7. Define “rules” of the exercise. <ul style="list-style-type: none"> • Time limit for each station (e.g., 15 minutes at each station, then rotate groups). • Decisions issued as clear instructions (briefings, radio communication, etc.). • No “school” solution. 	

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • If this exercise is to be conducted as a sand table exercise, refer to Tactical Decision Games Workbook located online in the Tactical Decision Games Library at www.fireleadership.gov/toolbox/toolbox.html. Under the title “Make Sound Decisions” are links to instructions on implementing the tactical decision games using sand tables. <p>During Exercise</p> <ol style="list-style-type: none"> 1. Introduce the scenarios. Avoid reading; issue a briefing. Maintain eye contact with students. 2. Anticipate and answer reasonable additional questions, but do not prolong scenario briefing. 3. Signal start of time limit. 4. Are you still answering questions or “coaching”? Allow students to critically think and formulate their responses. 5. Signal when time is up. 6. Select a student to provide a solution; do not rely on volunteers. 7. Direct selected student to issue their decision as instructions to other students assigned to “subordinate roles.” 8. Is the decision being delivered as instructions? No theoretical “would have,” “should have,” or “could have” discussions allowed! 9. After instructions have been issued, check role-playing subordinates’ feedback to ensure instructions were understood. 	

OUTLINE	AIDS & CUES
<p>10. Select students for additional solutions, repeating the process.</p> <p>After Action Review</p> <ol style="list-style-type: none"> 1. Question the student's thought process: <ul style="list-style-type: none"> • Why did you do this or that? • What was your situational assessment? • What would you have done if...? • What were your assumptions about the situation? • What is your biggest concern about your plan? 2. Are you dominating the discussion? Stop it! 3. Are you managing the entire group? Make sure all students are engaged! 4. Draw out lessons. Summarize and accentuate them. Facilitate and moderate constructive criticism and encourage debate. 5. Resist offering "Your Solution" unless that is the best avenue for a positive lesson. Your influence could wrongly infer there is only one right answer and inhibit independent solutions. <p>Post Exercise</p> <ol style="list-style-type: none"> 1. Review the intent of the exercise: <ul style="list-style-type: none"> • Exercise decisionmaking skills in a tactical context. • Practice communicating decisions. 2. Reinforce lessons learned by offering a historical account of similar scenarios. 	

OUTLINE	AIDS & CUES
<p>3. Encourage evaluation of your performance as facilitator.</p> <p>4. Encourage continued debate and replay.</p>	
<p><u>End of Exercise.</u></p>	
<p>Review unit objectives.</p>	<p>Slide 2-22</p>
<p>Prepare for the final exam.</p>	<p>Slide 2-23</p>

“SOUTHERN CALIFORNIA FIRE”

(Disclose actual fire upon completion: Inaja, 2001; 11 fatalities;

http://www.wildfirelessons.net/documents/Inaja_Forest_Fire_1956.pdf)

Training objective (Do not read this objective to the students before the exercise.)

Given the scenario below, the Crew Boss must decide how the assignment can be safely approached and then verbally communicate their decision to the appropriate individuals.

Resource and role players

- Area for student group to work scenario away from the other student groups
- Topographic map with fire perimeter associated with coordinating scenario
- Division Group Supervisor (group facilitator)

Scenario

You are the Crew Boss of a Type 1 hand crew assigned to construct indirect fireline downhill. Your crew has been working together all summer, and you feel confident in your troops. You are equipped with four chain saws, a full complement of hand tools, and seven programmable radios.

Facilitator Briefing

The night Division Group Supervisor (DIVS) is on scene when you first arrive with your crew. He provides you with a quick “face-to-face” briefing and then leaves to line out the other incoming resources. The specific information for your assignment is to anchor your line to a road at the top of the canyon and then progress indirect, down into the canyon towards the “inactive” main fire in the

bottom. His instructions are to “complete the line and drag fire with you. I will try to find a few engines to support you from your anchor point.”

Weather and Fuel Conditions

Temperature, low 70s Fahrenheit; relative humidity, mid teens; wind, light; fuel type is 3- to 8-foot-tall chaparral stands, under drought conditions.

During your travel out to the fireline, you notice that the fire looks like it is starting to “lay down” for the evening. You can see the main fire down in the canyon, and you notice a “cold edge” or some light smoke coming up from the inactive edge. It is mid-November, and the time is 2000 hours.

Facilitator “Murphy’s Law” Suggestions

The “Murphy’s Law” suggestions listed below can be added as “What Ifs” at any time during the scenario to raise the stress level of the leader, or use one of your own:

- The fuels make foot travel difficult.
- Rolling rocks become a problem.
- Cannot find a good location for the lookout.
- Wind shifts or increases.
- Other crewmembers voice differing opinions.
- The facilitator role plays a concerned Division Supervisor demanding feedback.

Facilitator’s Notes

This exercise should focus on the functions of Crew Boss-level decisionmaking and communication.

After Action Review (AAR)

Conduct an AAR with focus on the training objective. Use the AAR format found in the Incident Response Pocket Guide to facilitate the AAR. There are four basic questions in the AAR.

1. What was planned?
2. What actually happened?
3. Why did it happen?
4. What can we do next time?

Remember, the AAR should focus on the what and why, not the who. There is no single solution; keep the focus of the AAR on what was done and why.

Topographic Map Location

N33 02.190'

W116 41.980'

“NORTHWEST FIRE”

(Disclose actual fire upon completion: Thirtymile Fire, 2001; 4 fatalities)

Training objective (Do not read this objective to the students before the exercise.)

Given the scenario below, the Crew Boss must decide how the assignment can be safely approached and then verbally communicate his or her decision to the appropriate individuals.

Resource and role players

- Area for student group to work scenario away from the other student groups
- Topographic map with fire perimeter associated with coordinating scenario
- Incident Commander Type 3 (ICT3) (group facilitator)

Scenario

You are assigned as a Type 2 Crew Boss of a mixed crew made up of personnel from the BLM, U.S. Forest Service, and National Park Service. You and your crew are being dispatched to an extended attack fire on an adjoining forest. A Type 1 Incident Management Team has been ordered for this incident but is not going to be in place for 3 days due to a shortage of resources. A Type 3 Incident Commander (ICT3) with a supporting organization of two Division Group Supervisors (DIVS) and a Type 2 Safety Officer (SOF2) are managing the fire.

Facilitator Briefing

Upon arrival at the Incident Command Post, you are given a complete briefing by the ICT3. The ICT3 informs you that your crew, along with two additional Type 2 hand crews, are assigned to the east side of the fire. Your mission is to establish an anchor point at DP-2 and construct fireline along the east flank of the fire to H-2, approximately 1½ miles. The crew will spike out at H-2 and continue line construction from there.

Weather and Fuel Conditions

Temperature, 78; relative humidity, 23%; eye-level wind at the bottom of the fire, south at 5 mph; fuel model in the fire area, FM 8 and FM 10. The weather forecast calls for southwest ridgetop wind of 8-10 with gusts of 15-20 mph; minimum relative humidity in the low teens; high temperatures in the low 90s; Haines Index 6.

Current fire behavior is flame lengths of 1-3 feet with isolated torching and short range (50-100 feet) spotting uphill and downwind.

Facilitator “Murphy’s Law” Suggestions

The “Murphy’s Law” suggestions listed below can be added as “What Ifs” at any time during the scenario to raise the stress level of the leader, or use one of your own:

- The fuels make foot travel difficult.
- Time of day is later in the burning period.
- Fire has advanced into a large area of bug-killed timber.
- Wind shifts or increases.
- Other crewmembers voice differing opinions.
- The IC has decided to fly one crew (yours) into H-2 to build line to the southwest.

Facilitator's Notes

This exercise should focus on the functions of Crew Boss-level decisionmaking and communication.

After Action Review (AAR)

Conduct an AAR with focus on the training objective. Use the AAR format found in the Incident Response Pocket Guide to facilitate the AAR. There are four basic questions in the AAR.

1. What was planned?
2. What actually happened?
3. Why did it happen?
4. What can we do next time?

Remember, the AAR should focus on the what and why, not the who. There is no single solution; keep the focus of the AAR on what was done and why.

Topographic Map Location

http://www.fireleadership.gov/toolbox/staffride/downloads/lsr4/lsr4_ortho_map.jpg

“ROCKY MOUNTAIN FIRE”

(Disclose actual fire upon completion: South Canyon Fire, 1994; 14 fatalities;

http://www.fs.fed.us/rm/pubs/rmrs_rp009/)

Training objective (Do not read this objective to the students before the exercise.)

Given the scenario below, the Crew Boss must decide how the assignment can be safely approached and then verbally communicate his or her decision to the appropriate individuals.

Resource and role players

- Area for student group to work scenario away from the other student groups
- Topographic map with fire perimeter associated with coordinating scenario
- District duty officer (group facilitator)

Scenario

You are assigned as a Type 2 Crew Boss of a Type 2 hand crew. Your crew has been staged in Durango, Colorado, for the past 3 days. Your crew was sent to Colorado as a contingency crew because of the severe drought and extreme fire hazard conditions there. Your crew consists of two 10-person district initial attack modules from the Lincoln National Forest. You are familiar with a few of the crewmembers but not the squad leaders. The crew is starting to get anxious and bored waiting for a fire.

It is July 6 and, at 0600, you get a call to your motel room from dispatch to report to the fire center for a fire assignment. At 0700, you get your resource order and

driving directions to the fire. Your travel time is 5 hours. The fire you are going to started 2 days ago and is currently 100 acres.

Facilitator Briefing

At 1300, you arrive at the Incident Command Post (ICP) and receive a quick briefing from the district duty officer. The duty officer tells you to get your crew to the helibase immediately to fly to the fire; the crew on the fire needs your help. Your assignment is to fly to H-1 and assist in building the line from H-1 to the bottom of the fire. The crew on the fire hiked in, built the helispot, and started constructing line from that point on the northeast side of the fire yesterday.

Weather and Fuel Conditions

Temperature, 85; low relative humidity possible in the single digits and a Red Flag Warning; strong southwest wind in the afternoon; FM 4. Fire behavior is currently smoldering with occasional flareups. Slope is 50-100%.

Facilitator “Murphy’s Law” Suggestions

The “Murphy’s Law” suggestions listed below can be added as “What Ifs” at any time during the scenario to raise the stress level of the leader, or use one of your own:

- The fuels make foot travel difficult.
- Time of day is later in the burning period.
- Ten-foot-tall brush is underburned, with intact canopy.
- Wind shifts or increases.
- Other crewmembers voice differing opinions.
- The IC has decided to fly one crew (yours) into H-2 to build line to the southwest.

Facilitator's Notes

This exercise should focus on the functions of Crew Boss-level decisionmaking and communication.

After Action Review (AAR)

Conduct an AAR with focus on the training objective. Use the AAR format found in the Incident Response Pocket Guide to facilitate the AAR. There are four basic questions in the AAR.

1. What was planned?
2. What actually happened?
3. Why did it happen?
4. What can we do next time?

Remember, the AAR should focus on the what and why, not the who. There is no single solution; keep the focus of the AAR on what was done and why.

Topographic Map Location

Colorado

“SOUTHWEST FIRE”

(Disclose actual fire upon completion: Dude, 1990; 6 fatalities;

http://www.fireleadership.gov/toolbox/staffride/downloads/lsr11/lsr11_Dude%20Fire_Mike_Johns_2009.pdf)

Training objective (Do not read this objective to the students before the exercise.)

Given the scenario below, the Crew Boss must decide how the assignment can be safely approached and then verbally communicate his or her decision to the appropriate individuals.

Resource and role players

- Area for student group to work scenario away from the other student groups
- Topographic map with fire perimeter associated with coordinating scenario
- Division group supervisor (group facilitator)

Scenario

You are the Crew Boss of a Type 2 hand crew being assigned to support four Type 1 Hotshot crews on a burn out assignment. Your crew has not worked together for very long but you know they have been trained well, as you did it yourself. This is your crew’s first fire, and everyone is excited about getting out and throwing some dirt. The crew consists of you, 7 second-season firefighters, and 12 rookie firefighters. You are equipped with one chain saw, two backpack pumps, a full complement of hand tools, and four programmable radios.

Facilitator Briefing

The DIVS is swamped; he is dealing with five engine strike teams in the subdivision that your firing operation will protect, if successful. He calls you on the radio and gives you the specific information for your assignment. His instructions are to “work with the Hotshot crews; I’ll try to get you some help if you need it, but for now you are on your own. Hey! Let’s be careful out there.”

As you travel to the fire in your assigned contract bus, you note the weather and fuel conditions.

Weather and Fuel Conditions

Temperature, high 90s; relative humidity, low teens; gusty, erratic winds; fuel conditions are thick ponderosa pine stands.

Also, during your travel to the fireline, you notice that the fire looks like it is starting to build a nice smoke column. After arriving at the drop point, you see an indirect dozer line heading down the hill below you. You can’t see the main fire, but you notice smoke coming up from over the next ridge. It is July, and the time is 1000 hours.

Facilitator “Murphy’s Law” Suggestions

The “Murphy’s Law” suggestions listed below can be added as “What Ifs” at any time during the scenario to raise the stress level of the leader, or use one of your own:

- The fuels make foot travel difficult.
- Time of day is later in the burning period.
- Cannot see any sign of the fire during the approach.
- Wind shifts or increases.

- Other crewmembers voice differing opinions.
- The facilitator role plays a concerned DIVS demanding feedback.

Facilitator's Notes

This exercise should focus on the functions of Crew Boss-level decisionmaking and communication.

After Action Review (AAR)

Conduct an AAR with focus on the training objective. Use the AAR format found in the Incident Response Pocket Guide to facilitate the AAR. There are four basic questions in the AAR.

1. What was planned?
2. What actually happened?
3. Why did it happen?
4. What can we do next time?

Remember, the AAR should focus on the what and why, not the who. There is no single solution; keep the focus of the AAR on what was done and why.

Topographic Map Location

N34 22.009'

W111 14.333'

