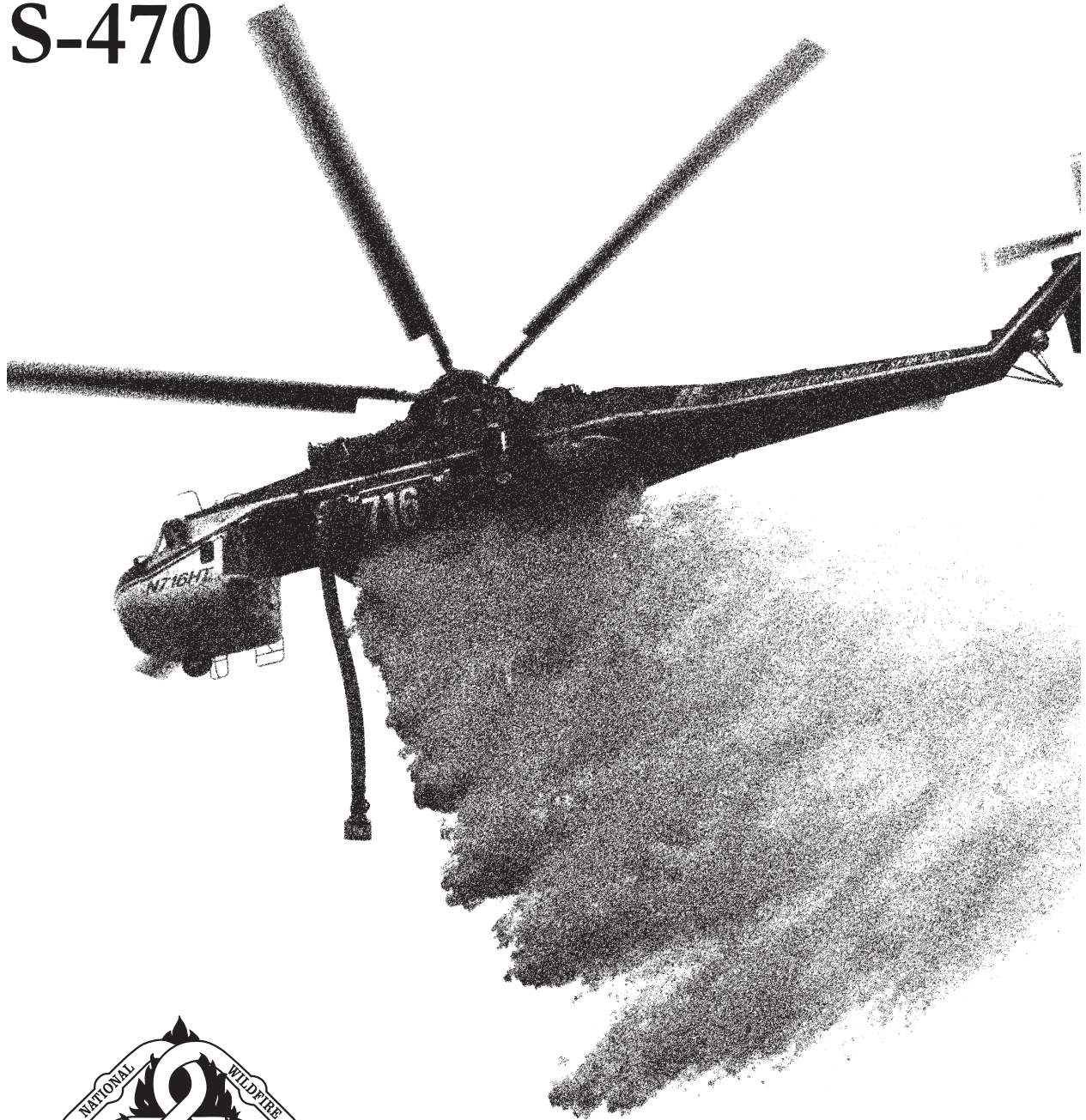


Air Operations Branch Director S-470



NFES 002143

Instructor Guide
AUGUST 2013



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:

Air Operations Branch Director, S-470
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.



NWCG Executive Board Chair



NWCG Training Branch Manager

Date

8/19/13

Date

Aug. 14, 2013

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 <http://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_training@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.

Air Operations

Branch Director

S-470

Instructor Guide
August 2013
NFES 002143

Sponsored for National Wildfire Coordinating Group (NWCG) publication by the NWCG Training Committee. Comments regarding the content of this publication should be directed to the NWCG Training Branch at BLM_FA_NWCG_Training@blm.gov.

For additional copies of this publication, go to Publications at <http://www.nwcg.gov>.

Previous editions: this product replaces NFES 1969, Air Operations Branch Director, August 2002.

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PREFACE

Air Operations Branch Director, S-470 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:

USDI BUREAU OF LAND MANAGEMENT

Glen Claypool – NIFC
Clark Tiecke – Salem District

USDA Forest Service

Rick Dunlap – NIFC
Darlene Hall – NIFC
Ron Hanks – NIFC

National Park Service

John Zeigler – Sequoia & Kings Canyon National Park

NWCG TRAINING BRANCH

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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The following appendixes are located on the Course Materials CD:

- Appendix A – Course Ordering and Support Information
- Appendix B – PowerPoint Presentations
- Appendix C – Student Assessment (Final Exam and Answer Key)
- 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 before presentation.

I. INTRODUCTION

The S-470, Air Operations Branch Director, course requires 24 hours for presentation. This course is designed to meet the training needs of an Air Operations Branch Director on an incident as outlined in the Interagency Incident Management System: Wildland Fire Qualification System Guide (PMS 310-1) and the position task book developed for the position.

The National Interagency Incident Management System Wildland Fire Qualification System Guide (PMS 310-1), developed under the sponsorship of the National Wildfire Coordinating Group (NWCG), is designed to establish minimum requirements for training, experience, physical fitness level, and currency standards for wildland fire positions, which all participating agencies have agreed to meet for national mobilization.

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.

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

- Perform the tasks required of an Air Operations Branch Director to mobilize and transition into an incident aviation environment, and be able to prepare for, manage, and oversee an aviation operation.

III. MINIMUM INSTRUCTOR QUALIFICATIONS

Refer to the Field Manager's Course Guide (PMS 901-1) for instructor prerequisites specific to this course (online at <http://training.nwcg.gov/>).

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://training.nwcg.gov/>).

B. Exercises and Other Pertinent Information

All instructors should be prepared to provide students with electronic files that will assist them with AOB duties (forms, references, websites, etc.)

Unit 4 – Panel Discussion. Panel members will need to be selected and notified in advance of the course. Panel members will need to be given copies of IR 4-1, 4-2, and 4-3.

C. Course Agenda

A sample agenda is on page 13. 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.

V. COURSE MATERIALS

The Course Materials CD contains the Instructor Guide, Student Workbook, and Appendixes in bookmarked files in portable document format (PDF).

A. Instructor Guide

The Instructor Guide is designed as a teaching aid to assist instructors in presenting the course.

Each unit begins with a Unit Overview that outlines the lesson's approximate delivery time, objectives, learning strategy, instructional methods, required materials (instructional aids), and evaluation criteria.

The Unit Presentation follows the Unit Overview, and contains the lesson plan for each unit, shown in a two-column format:

- The Outline column contains the lesson content that supports the learning objectives. The 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. Appendixes

The following appendixes are on the Course Materials CD:

- Appendix A – Course Ordering and Support Information

This appendix tells you how to order required components of the course and what additional support materials are needed for course presentation.

- Appendix B – PowerPoint Presentations

Test the equipment before the start of class to ensure compatibility with software.

Refer to the READ ME file, located on the CD, which provides information on:

- Minimum System Requirements to Successfully Run Microsoft PowerPoint 2010 Presentations

- Editing the original PowerPoint 2010 Files
- Troubleshooting
- Microsoft PowerPoint Viewer 2010
- References on Creating PowerPoint Slides

- Appendix C – Student Assessment

This appendix contains three files: Final Exam, Final Exam Supplemental Information and Final Exam Answer Key. Duplicate enough copies of the Final Exam and Final Exam Supplemental Information for every student to have one copy of each.

- Appendix D – Course Evaluation Forms

The Student Training Course Evaluation Form allows the students an opportunity 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.

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

The Online Course Evaluation Form also allows for feedback. Comments can also be submitted online at <http://training.nwcg.gov> by selecting the NWCG EVAL button in the upper right corner.

C. Student Workbook

In most cases, the Student Workbook contains the same course information as the Instructor Guide but without the instructor notes, aids and cues, and exercise answers. Student Workbooks should be ordered before the beginning of the course, one for each student.

VI. STUDENT TARGET GROUP

The target group should consist of individuals qualified as Air Support Group Supervisor (ASGS) desiring to become qualified Air Operations Branch Director (AOBD).

- It is recommended that students have completed I-400, Advanced ICS and L-480, Organizational Leadership in the Fire Service.

VII. COURSE PREREQUISITES

Refer to the Field Manager's Course Guide (PMS 901-1) for current course prerequisites.

VIII. PRE-SELECTION ASSESSMENT AND PRE-COURSE WORK

The pre-course materials are located online at <http://training.nwcg.gov>.

The course coordinator can provide the pre-course work to the students by referring nominees to the online pre-course work; list the website in the nomination or selection letter (<http://training.nwcg.gov>). Students should receive pre-course work information at least 6 weeks before beginning the course.

Refer to the FMCG for number of hours required to complete pre-course work.

IX. COURSE NOMINATION AND SELECTION LETTERS

A. Nomination Letter

Send a course nomination letter, along with the pre-course work information, to students at least 6 weeks before the course begins. The letter should instruct nominees to return the completed pre-course work materials to the course coordinator or lead instructor at least 2 weeks before beginning the course. An example course nomination letter is located on page 9.

B. Selection Letter

Send a course selection letter to students who successfully complete or pass the pre-course work or are selected to attend the course. This letter congratulates selected students and should explain class times, dates, and location. Refer to the Course Coordinator's Guide (PMS 907) for more information on selection letters. An example course selection letter is located on page 11.

X. 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. A cadre meeting checklist is located in the Course Coordinator's Guide (PMS 907).

A cadre meeting before each day's course presentation is recommended because of the interrelationship of the unit material (changing instructional materials in one unit may impact a later unit).

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.

XI. RECOMMENDED CLASS SIZE

The recommended class size is 25 to 30 students. The recommended student-to-instructor ratio is 5:1. Cadre members should be present for all instructional sessions. A minimum of three instructors should present this course; however, more instructors are required if a field exercise is incorporated. This is to enable strong mentorship by the cadre to the students.

XII. 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:

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

- 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).
- Be sure a computer with projector and screen is available to show electronic presentations.
- 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.

XIII. STUDENT ASSESSMENT AND CERTIFICATION

Students must obtain a score of 70% or higher on the student assessment evaluation method chosen to receive a certificate of completion for the course.

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 consists of 16 questions and should be completed within 2 hour(s). The final exam and answer key are in Appendix C.

Course Title, Course #
Sample Nomination Letter

To: *Student's Name*

From: *Course Coordinator's Name*

Subject: Air Operations Branch Director, S-470

Congratulations! You have been tentatively selected to attend S-470, Air Operations Branch Director to be held at *location* presented by *Name of Training Unit and location*. The course will begin promptly at *time and date* and end at *time and date*. Please arrange your travel accordingly, as you must attend the entire course to receive credit.

The primary emphasis of this course focuses on duties of Air Operations Branch Director within the Incident Command System.

The pre-course work package developed for S-470 is designed to help you prepare for and successfully complete the course, and to allow us to evaluate your readiness. The pre-course work package for the course (consisting of *reading, tutorials, and quizzes*) is provided at the NWCG Training Branch website: <http://training.nwcg.gov>. Visit the website to download instructions and materials.

Previous experience indicates it will take as much as (*enter #*) hours to complete the pre-course work *reading, lessons and quizzes*. You may be tempted to wait until a day or two before the deadline to complete your pre-course work, but it is highly recommended that you allow sufficient time to complete the work.

The pre-course work quizzes must be completed on the website no later than *enter date*. A score of 70% or higher is required on the pre-course work for acceptance into the classroom portion of the course. All nominees will be notified by *enter date* of their status, either accepted to continue in the course, or declined. Use the pre-course work checklist to make sure you have completed and returned everything required.

Bring the following items to class:

- *List items*

In the event that you cannot attend this course, please contact me no later than *enter date*, as there are typically several students on the course waitlist. Cancellations after this date may result in your home unit being charged for course tuition.

If you have any questions or concerns about the pre-course work or classroom session please feel free to contact Lead Instructor, *insert name* or Course Coordinator *insert name*. Their contact information is listed below.

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

Lead Instructor
Name
Phone number
Email address

Course Coordinator
Name
Phone number
Email address

Course Name, Course #
Sample Course Selection Letter

To: *Student's Name*

From: *Course Coordinator's Name*

Subject: Air Operations Branch Director, S-470

Congratulations, you have been selected to attend Air Operations Branch Director, S-470, 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 Air Operations Branch Director within the Incident Command System.

Please bring the following references to class:

- Unit Leader Position Task Book (initiated at the home unit), located at <http://www.nwcg.gov/pms/pms.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 students who may 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*.

Air Operations Branch Director, S-470
Sample Agenda

Day 1

Unit 0 – Introduction 1.5 hours
Unit 1 – AOBD Position Responsibilities 2.5 hours
Unit 2 – Risk Management 1 hour

Lunch

Unit 2 – Risk Management (con't) 4 hours

Cadre Meeting

Day 2

Unit 3 – Information Sharing/Management 3 hours
Unit 4 – Coordination and Leading Assigned Personnel 1 hour

Lunch

Unit 4 – Coordination and Leading Assigned Personnel (con't) 3 hours

Cadre Meeting

Day 3

Unit 5 – Daily Operations and Legal Requirements 1 hour
Unit 6 – Transition/Demobilization 2 hours
Final Exam 2 hours

Issue Course Certificates

Cadre Meeting (Course Closeout)

UNIT OVERVIEW

Course Air Operations Branch Director, S-470

Unit 0 – Introduction

Time 1.5 hours

Objectives

1. Introduce the course coordinator, instructors, and students.
2. Discuss course logistics.
3. Present course overview.
4. Discuss course expectations.
5. Identify course reference materials.
6. Discuss position responsibilities.
7. Review pre-course work.

Strategy

This unit is an introduction to the course. It involves student and cadre interaction through introductions and group exercises.

Instructional Method(s)

- Informal lecture
- Classroom discussion
- Interactive group discussion

Instructional Aids

- Computer with LCD projector, presentation software, and screen
- Sign-in sheet
- Flip charts and markers
- Position Task Book
- Incident Response Pocket Guide (IRPG)
- Interagency Standards for Fire and Fire Aviation Operations (Red Book)

Exercise(s)

- Student Expectations
- National Transportation Safety Board (NTSB) Accident Review

Evaluation Method(s)

- Participation

Outline

- I. Introductions
- II. Course Logistics
- III. Course Overview
- IV. Course Expectations
- V. Course Reference Materials
- VI. Position Responsibilities
- VII. Review Pre-Course Work

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: Air Operations Branch Director, S-470

UNIT: 0 – Introduction

OUTLINE	AIDS & CUES
<p>NWCG Mission Statement Slide.</p> <p>Course Title Slide.</p> <p>Welcome Students to the Course.</p> <p>Present Unit Objectives.</p>	<p>Slide 0-1</p> <p>Slide 0-2</p> <p>Slide 0-3</p>
<p>I. INTRODUCTIONS</p>	
<p>Introduce course coordinator, instructors, and students.</p> <p>Have students give their:</p>	<p>Slide 0-4</p>
<ul style="list-style-type: none">• 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.	

OUTLINE	AIDS & CUES
<p data-bbox="201 281 646 317">II. COURSE LOGISTICS</p> <div data-bbox="207 369 1052 428" style="border: 2px solid black; padding: 2px;">Discussion Points</div> <ul style="list-style-type: none"><li data-bbox="302 478 618 514">• Course agenda<li data-bbox="302 562 594 598">• Sign-in sheet<li data-bbox="302 646 610 682">• Housekeeping<ul style="list-style-type: none"><li data-bbox="396 730 967 766">– Message and telephone location<li data-bbox="396 814 911 850">– Cell phone and pager policy<li data-bbox="396 898 1040 1066">– Facility locations (restrooms, vending machines, drinking fountains, smoking areas, evacuation policy, etc.)<li data-bbox="396 1115 1032 1199">– Local information (restaurants, local map, transportation)<li data-bbox="396 1247 1003 1331">– Computer use (no internet surfing, log on only when instructed, etc.)<li data-bbox="396 1373 935 1409">– Punctuality, meals and breaks<li data-bbox="302 1457 621 1493">• Other concerns <div data-bbox="207 1545 1052 1646" style="border: 2px solid black; padding: 2px;">Circulate the class registration form or a sign-in sheet for students to sign.</div>	<p data-bbox="1081 281 1219 317">Slide 0-5</p>

OUTLINE	AIDS & CUES
<p>III. COURSE OVERVIEW</p> <p>This course is designed to meet the training needs of Air Operations Branch Director (AOBD) as outlined in the Wildland Fire Qualifications System Guide (PMS 310-1) and the position task book developed for the position.</p> <p>A. Course Objectives</p> <p>At the successful completion of this course, students will be able to:</p> <p>Perform the tasks required of an Air Operations Branch Director to mobilize and transition into an incident aviation environment, and be able to prepare for, manage, and oversee an aviation operation.</p> <p>B. Instructional Methods</p> <ol style="list-style-type: none"> 1. Facilitation/short lectures with PowerPoint 2. Discussion 3. Exercises <p>C. Student Assessment/Evaluation</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 assessment/scenario. 	<p>Slide 0-6</p>

OUTLINE	AIDS & CUES
<p>D. Course Evaluation Form</p> <p>Students are given the opportunity to comment on the course and the quality of the instruction.</p> <p>IV. COURSE EXPECTATIONS</p> <p>A. Student Expectations</p> <p>ADMINISTER EXERCISE: Student Expectations</p> <p><u>Purpose:</u> To allow students to provide their expectations for the course.</p> <p><u>Time:</u> 10 minutes</p> <p><u>Format:</u> Students work in small groups of 3 to 5</p> <p><u>Materials Needed:</u> Flip charts, 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 finished, have each group 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 0-7</p>

OUTLINE	AIDS & CUES
<p data-bbox="298 283 743 319">B. Instructor Expectations</p> <p data-bbox="394 367 602 403">Students will:</p> <ul data-bbox="394 451 1052 1474" style="list-style-type: none"><li data-bbox="394 451 1052 535">• Have an interest in becoming Air Operations Branch Director (AOBD).<li data-bbox="394 577 1052 661">• Have completed their pre-course work.<li data-bbox="394 703 1052 787">• Exhibit mutual cooperation with the group.<li data-bbox="394 829 1052 913">• Be open-minded to accomplishments during the course presentation.<li data-bbox="394 955 1052 1081">• Participate actively in all of the training exercises presented in the course.<li data-bbox="394 1123 1052 1165">• Return to class at stated times.<li data-bbox="394 1207 1052 1333">• Use what is presented in the course to effectively perform the duties of AOBD.<li data-bbox="394 1375 1052 1474">• Not leave the course with any unanswered questions.	

OUTLINE	AIDS & CUES
<p>V. COURSE REFERENCE MATERIALS</p> <p>Below is a list of materials that are referenced throughout the course:</p> <ul style="list-style-type: none"> • Incident Response Pocket Guide, PMS 461 • Wildland Fire Qualification System Guide, PMS 310-1 • Interagency Standards for Fire and Fire Aviation Operations (Red Book) • Aviation Risk Management Workbook • Interagency Helicopter Operations Guide (IHOG) <p>VI. POSITION RESPONSIBILITIES</p> <p>A. The Air Operations Branch Director (AOBD) in the Incident Command System</p> <ul style="list-style-type: none"> • The Air Operations Branch Director (AOBD) is typically designated as a primary member of an Incident Management Team (IMT). • The AOBD is supervised by the Operations Section Chief (OSC). 	<p>Slide 0-8</p>
<div style="border: 2px solid black; padding: 5px;">Review the ICS organizational chart in the PPT.</div>	<p>Slide 0-9</p>

OUTLINE	AIDS & CUES
<p>B. Position Task Book (PTB) Description</p> <p>Discuss the Behaviors, Competencies, and Tasks in the AOBD PTB.</p> <p>The PTB is the primary tool for observing and evaluating performance.</p> <p>In the current performance based system, trainees must complete the tasking in the PTB to become qualified as a AOBD.</p> <p>Prior to attending this course, students should have been issued a AOBD PTB by their supervisor.</p> <p>This PTB can only be initiated by the home unit, not at this course.</p>	
<p>VII. REVIEW PRE-COURSE WORK</p> <p>As a class, review the pre-course work. Some of the material will be discussed in-depth later in the course.</p> <p>A. Information Sharing</p> <p>One goal of this course is to facilitate information sharing between instructors and students. One of the tasks in the pre-course work was to gather electronic files (forms, guides, websites, etc.).</p> <p>Determine a central storage point to collect and distribute files at the completion of the course.</p>	<p>Slides 0-10 to 0-11</p>

OUTLINE	AIDS & CUES
<p>B. Document/Reference Review</p> <ul style="list-style-type: none"> • Position Task Book – <i>discussed earlier in this unit</i> • Introduction to Aviation Risk Management – <i>discussed during the Risk Management Unit</i> • Aviation Risk Management Workbook – <i>utilized during the Risk Management Unit</i> • DORA tool – <i>utilized during the Risk Management Unit</i> • Interagency Airspace Coordination Guide – <i>referenced throughout the course</i> • Military Use Handbook – <i>referenced throughout the course</i> • Red Book – <i>referenced throughout the course</i> • ICS 220 – <i>Discussed in-depth during the Information Sharing Unit</i> • ICS 213-Unit Log – <i>referenced throughout the course</i> • IHOG – <i>referenced throughout the course</i> • Emergency Helicopter Extraction Source List – <i>referenced throughout the course</i> • Interagency Technical Assistance Directory – <i>referenced throughout the course</i> • Automated Flight Following (AFF) – <i>referenced throughout the course</i> • Wesley WFDSS Decision 	

Discuss the student's findings in their review of the Wesley Fire WFDSS decision.

The students should have noted the following items from the WFDSS document:

High complexity fire management, multiple incident objectives, threatened and endangered species present, fire area has high impact on local community, retardant avoidance in multiple areas, cultural resources at risk, multiple agencies and cooperators, direct attack is not feasible, high amount of aviation assistance needed for cargo, personnel, etc.

C. Website Review

- National Transportation Safety Board (NTSB) website

ADMINISTER EXERCISE: NTSB Accident Review

Purpose: Allow students the opportunity to share findings from multiple aviation incidents and accidents.

Time: 20 minutes

Format: Students work in small groups of 3 to 5

Materials Needed: Flip charts, markers

Instructions:

1. Within small groups, students will discuss the aviation accidents and incidents they found on the NTSB website.
2. Group will select one aircraft incident and one spokesperson.

OUTLINE	AIDS & CUES
<p>3. The group spokesperson will give a 2-3 minute briefing to the whole class about their aviation incident. Briefing should be a general summary of the incident.</p> <p>4. Later in the course, the roles and responsibilities of the AOBD will be applied to the incidents and students will discuss how (if possible) the incidents could have been avoided.</p> <p><u>End of exercise.</u></p> <ul style="list-style-type: none"> • Wildland Fire Chemical Website <p>If there was fire chemical spill on your incident which forms would you need to use? Where would you find them?</p>	
<p>Answer any questions.</p>	
<p>Review Unit Objectives.</p>	<p>Slide 0-12</p>

UNIT OVERVIEW

Course Air Operations Branch Director, S-470

Unit 1 – AOBD Position Responsibilities

Time 2.5 hours

Objectives

1. Identify critical information the Air Operations Branch Director should receive during their initial briefings.
2. Describe the value of maintaining interpersonal and interagency working relationships.
3. Identify the line of authority and decision making process on an incident.
4. Assess organizational structure to meet mission objectives.
5. Assess resources to meet incident objectives.

Strategy

Apply the Air Operations Branch Director position responsibilities to an assignment beginning with an introductory briefing and leading to the development and analysis of an organization structure.

Instructional Method(s)

- Instructor led training
- Facilitated scenarios

Instructional Aids

- Personal computer with LCD projector and presentation software
- Flip charts and markers

Exercise(s)

- Agency Administrator Briefing Scenario
- Aviation Branch Meeting Scenario
- Assessing Organizational Structure and Resources Scenario

Evaluation Method(s)

- Receive an OSC briefing and determine the critical information.
- Given a situation (include incident objective) evaluate a current incident structure.
- Given current resources and incident objectives evaluate incident resources.

Outline

- I. Initial Information Gathering
- II. Initial Briefings
- III. Position Responsibilities
- IV. Interagency and Interpersonal Relationships
- V. Establish Line of Authority and Decision Making Process for the Air Branch
- VI. Assessing an Organizational Structure
- VII. Assessing Resources

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: Air Operations Branch Director, S-470

UNIT: 1 – AOBD Position Responsibilities

OUTLINE	AIDS & CUES
Unit Title Slide. Present Unit Objectives.	Slide 1-1 Slide 1-2
<p>I. INITIAL INFORMATION GATHERING</p> <p>In the time between initial dispatch and arrival at the incident, critical information can be gathered to help you prepare for the incident.</p> <p>What information might you have gathered prior to arrival at the incident?</p> <p>Who might you have contacted prior to arrival at the incident?</p>	
Discuss information gathered prior to arrival at the incident. Possible responses may include: <ul style="list-style-type: none">• Review orders in Resource Ordering and Status System (ROSS)• Contact current AOBD/Unit Aviation Officer• InciWeb• Check team FTP site• Incident Management Situation Report (IMSR)• Geographic Area Coordination Center (GACC), Unit, local dispatch	

Discuss the differences between mobilizing with an organized IMT and being ordered as a single resource.

II. INITIAL BRIEFINGS

Upon arrival at the incident there are several formal and informal meetings that will cover information critical to planning for and developing the air operations branch.

A. Agency Administrator Briefing

At this meeting, the local Agency Administrator (AA) addresses incident concerns and priorities.

On multi-jurisdictional incidents, more than one AA may be present.

The AOBD can usually gain valuable information at this briefing.

The AA Briefing provides an opportunity for the incoming AOBD to make contact with the Unit Aviation Officer and/or the transitioning AOBD.

The following topics may be addressed at the AA Briefing and may have an impact on the Air Operations Branch.

Slide 1-3

Under each numbered heading, discuss the following topics:

- **Who or where would the information is obtained from?**
- **Supporting documentation and their impact on the air operations branch.**

1. Political Concerns

- Urban interface
- Cultural resources
- Concerns from multiple agencies, including non-fire agencies
- Special interest groups

2. Environmental Concerns

- Water, wildlife, fisheries, plants, soil, trees, etc.
- Mitigation measures

3. Air Operations Branch Information

- Type of aircraft ordered, confirmed, and assigned
- Evaluation of effectiveness
- Base locations (fixed-wing and helicopter)
- Airspace issues (FAR 91.137)

Slide 1-4

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Hazard map • Smoke and visibility issues • Aviation Safety Assistance Team (ASAT) assigned or ordered? • Local concerns, e.g., water rights, livestock • Local assets/resources available for use on the incident • Activity external to your incident that may affect your operations <p>4. Initial Attack Responsibilities of Team</p> <ul style="list-style-type: none"> • As determined by the AA and Incident Commander (IC) • Ensure initial attack responsibilities and operational procedures are clearly understood. • Coordination with dispatch is critical. • Initial attack responsibilities may present some unique challenges related to airspace coordination. <p>5. Financial Considerations and Obligations</p> <ul style="list-style-type: none"> • Cost effectiveness of operations. Reference the Wildland Fire Decision Support System (WFDSS) for cost alternatives. 	

Review and discuss the Wesley WFDSS documents from the pre-course work.

- Cost constraints
- Cost apportionment

For additional information that may be covered in the briefing, review the AA's Briefing to Incident Management Team form found in the Interagency Standards for Fire Aviation Operations.

At the conclusion of the AA Briefing, the team may set a time and location for their next meeting. It is critical for the AOBD to know what information the Air Branch has, and more importantly, what information the Air Branch needs to gather prior to the team meeting.

At the conclusion of the AA Briefing, take the opportunity to gather additional information needed and communicate with your air staff. If the Air Tactical Group Supervisor (ATGS) has not flown the fire, they should begin as soon as possible. Air Support Group Supervisor (ASGS) should begin visiting air operations bases.

OUTLINE	AIDS & CUES
<p>EXERCISE: Agency Administrator Briefing Scenario</p> <p><u>Purpose:</u> Students will demonstrate the ability to identify key contacts, information, and documentation available at the Agency Administrator Briefing.</p> <p><u>Time:</u> 15 min</p> <p><u>Format:</u> Class discussion</p> <p><u>Materials Needed:</u> None</p> <p><u>Instructions:</u></p> <ul style="list-style-type: none"> • Read the scenario to students or have them read from the Student Workbook. • Allow students approximately 5 minutes to develop their response. • Have students give their answers and discuss. • Review the answers and provide feedback to the student's expectations. Example of analysis include: <ul style="list-style-type: none"> – Would a contact/document be available at the meeting? – What information would that contact/document provide? – What information is available but missing? 	<p>Slide 1-5</p>

OUTLINE	AIDS & CUES
<p><u>Scenario:</u> Due to a delay in travel to the incident, you are unable to attend the AA Briefing; however, your ASGS will be able to attend. The information that you have collected so far indicates this is a new incident transitioning from a local Type 3 IC to a Type 2 IMT, there is some urban interface, a major power line connecting the south end of the state to the north end, and there is potential to head into a wilderness area.</p> <p>Prepare a list of contact names and positions, critical information to listen for and documents you would like the ASGS to collect for you at the meeting.</p> <p><u>End of Exercise.</u></p> <p>B. Operations Section Chief Briefing</p> <p>This is an ongoing dialogue from the initial mobilization through formal transition. It may be a formal or informal meeting.</p> <p>The meeting has several purposes including:</p> <ul style="list-style-type: none"> • Receive direction and provide input on strategy and tactics. • Analyze risks associated with strategy and tactics. • Receive priority assignments from the OSC. Examples: reconnaissance flights, priority bucket work, crew shuttle. 	<p>Slide 1-6</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Discuss and identify additional or projected aviation needs (e.g., portable retardant plants, aerial ignition devices.) • Understand OSC's expectations • Provide pertinent aviation information to the OSC. <p>C. Team Meeting/Briefing</p> <p>Purpose of the Team Meeting is for Section Chiefs to share the intelligence they have gathered for their section with the rest of the team.</p> <p>Timing and format of this meeting may vary based on incident or team procedures.</p> <div style="border: 2px solid black; padding: 5px; margin: 10px 0;"> <p>Discuss experience you have had or protocols for this meeting.</p> </div> <ol style="list-style-type: none"> 1. General topics covered in the meeting include: <ul style="list-style-type: none"> • When will team assume control? • Initial Attack responsibility • Safety and risks • Meeting schedules and time frames for Incident Action Plan (IAP) inputs 	<p>Slide 1-7</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Strategy and objectives • Logistical information (will aviation resources be co-located?) <p>2. AOBD Specific input to the meeting</p> <ul style="list-style-type: none"> • Incident specific information that you have gathered; examples may include: <ul style="list-style-type: none"> – Adequate communications – Adequate airspace coordination – Ability to support initial strategy and tactics (aircraft capabilities and limitations) <p>EXERCISE: Aviation Branch Meeting Scenario</p> <p><u>Purpose:</u> Using information obtained from the OSC briefing and a team meeting, students will relay expectations for their staff and demonstrate knowledge of their staff's responsibilities.</p> <p><u>Time:</u> 30 min</p> <p><u>Format:</u> Group or individual exercise</p> <p><u>Materials Needed:</u> Flip charts and markers</p>	<p>Slide 1-8</p>

OUTLINE	AIDS & CUES
<p><u>Instructions:</u></p> <ul style="list-style-type: none"> • This exercise may be completed individually or in small groups. • Read the scenario to students or have them read from the Student Workbook. • Allow students approximately 10 minutes to develop their response. • Have students give their answers and record them on a flip chart or whiteboard at the front of the room. • When all responses have been recorded, review the answers and provide feedback to the student's expectations. Example of analysis include: <ul style="list-style-type: none"> – Are the expectations of the student in line with the responsibilities of the positions? – Do the student responses go beyond tactical considerations and include concepts such as leadership and meeting the needs of their subordinates? – Discuss solutions to the red flags the students identify. <p><u>Scenario:</u> After the team meeting and briefing from the OSC, you have gathered your staff for a quick meeting. The information from the team meeting was limited. You were informed that the team would take over the incident at 0600 the following morning and that all local resources would be released back to the hosting agency at the end of today's operational period.</p>	

OUTLINE	AIDS & CUES
<p>The team will have initial attack responsibilities within the current Temporary Flight Restriction (TFR) and the objectives in tomorrow's IAP will remain the same as today.</p> <p>Logistics is working on relocating ICP to a local fairground but did not have much additional information. Plans states that the team will be creating the IAP for tomorrow's shift and they need all input by 1700.</p> <p>The OSC stated that he would like to have a recon flight as soon as possible in the morning and bucket work will be needed throughout the day. In addition, expect to support at least two crews at a remote camp beginning tomorrow night.</p> <ul style="list-style-type: none">• What is the purpose of meeting with your staff?• The ASGS and the ATGS have been busy running around gathering information throughout the day. In <i>general terms</i>, what information do you expect them to have gathered to provide to this meeting?• As the ASGS and ATGS describe what they are working on, what red flags should you as a supervisor be looking for, e.g., duplication of effort, misunderstanding of intent, overloaded workers, etc.?• What information do you need from the ASGS and ATGS going forward in the day?• What additional information do you anticipate your staff will need from you? <p><u>End of Exercise.</u></p>	

OUTLINE	AIDS & CUES
<p data-bbox="298 283 1029 363">D. AOBD Meeting With the Aviation Branch Staff (ASGS and ATGS)</p> <p data-bbox="393 411 1052 533">The purpose of this meeting is to coordinate the efforts of the air staff and to delegate tasks that need to be completed.</p> <p data-bbox="393 581 1052 743">Depending on the situation, this short air operations branch staff meeting may or may not follow the team meeting and your discussion with the OSC.</p> <p data-bbox="393 793 951 915">However, it is essential that you have continuous communication and coordination with your staff.</p> <p data-bbox="393 963 805 1001">Avoid duplication of effort.</p> <p data-bbox="393 1050 1036 1129">Status of assigned resources (care, feeding, work area, sleeping area, etc.)</p> <div data-bbox="207 1180 1052 1407" style="border: 2px solid black; padding: 10px;"> <p data-bbox="220 1188 922 1268">Discuss with students their experiences with aviation branch staff meetings.</p> <p data-bbox="220 1316 987 1396">Instructors should provide personal experiences that they have found useful for the meetings.</p> </div>	<p data-bbox="1081 283 1218 321">Slide 1-9</p>

OUTLINE	AIDS & CUES
<p data-bbox="203 283 812 325">III. POSITION RESPONSIBILITIES</p> <p data-bbox="300 367 1006 409">A. Air Operations Branch Director (AOBD)</p> <p data-bbox="397 451 1023 703">The AOBD reports to the OSC and is primarily responsible for preparing the air operations section of the IAP, implementing its strategic aspects, and providing logistical support for aircraft operating on the incident.</p> <ul data-bbox="397 745 1055 1302" style="list-style-type: none"> <li data-bbox="397 745 998 829">• Be a leader by providing purpose, direction, and motivation. <li data-bbox="397 871 1023 913">• Discuss current situation and needs. <li data-bbox="397 955 1047 1123">• Follow up and close the communication loop on critical items identified during the AA Briefing, team meeting, and the OSC briefing. <li data-bbox="397 1165 1055 1302">• Assist with tasks the Aviation Branch staff is unable to perform due to workload. <p data-bbox="397 1344 1031 1596">While you, as the AOBD, are not directly involved with many of the issues that your staff is dealing with, you need to be aware of them and oversee your staff's progress towards getting organized and resolving any issues.</p> <p data-bbox="397 1638 998 1764">Issues such as airspace coordination and communication will require direct involvement.</p>	<p data-bbox="1079 283 1234 325">Slide 1-10</p> <p data-bbox="1079 745 1234 787">Slide 1-11</p>

OUTLINE	AIDS & CUES
<p data-bbox="298 283 980 321">B. Air Tactical Group Supervisor (ATGS)</p> <p data-bbox="394 369 1040 491">There are items the ATGS should be dealing with, regardless of his/her location during the initial transition at the local unit.</p> <ol style="list-style-type: none"> <li data-bbox="394 539 797 577">1. Air tactical platform <ul style="list-style-type: none"> <li data-bbox="492 625 1052 877">• Capabilities needed <ul style="list-style-type: none"> <li data-bbox="583 711 875 749">– High and hot <li data-bbox="583 753 946 791">– Training platform <li data-bbox="583 795 987 833">– Fixed-wing vs. rotor <li data-bbox="583 837 1052 875">– Communication package <li data-bbox="394 924 1029 1003">2. Airspace Coordination and Temporary Flight Restriction (TFR) <ul style="list-style-type: none"> <li data-bbox="492 1052 927 1089">• Accurate and adequate <li data-bbox="492 1138 1029 1218">• Communication (FAA, DOD, local airport authority, etc.) <li data-bbox="492 1266 927 1304">• Flight routes identified <li data-bbox="492 1352 1036 1432">• Location of nearby public and private airports, or airstrips <li data-bbox="394 1480 883 1560">3. Communications Plan and Frequencies <ul style="list-style-type: none"> <li data-bbox="492 1608 735 1646">• VHF-AM <li data-bbox="492 1694 729 1732">• VHF-FM <li data-bbox="492 1780 829 1818">• Flight following <li data-bbox="492 1866 784 1904">• Initial Attack 	<p data-bbox="1081 283 1235 321">Slide 1-12</p>

OUTLINE	AIDS & CUES
<p>4. Aircraft</p> <ul style="list-style-type: none"> • Availability • Ordering procedures <p>5. Retardant</p> <ul style="list-style-type: none"> • Retardant type • Base location • Flight routes <p>6. Track assigned resource status and availability</p>	
<div style="border: 2px solid black; padding: 5px;"> <p>Ask students to share experiences they have had as an ATGS, including typical responsibilities and items often delegated to them by the AOB. Discuss differences between a team ATGS and single resource ATGS.</p> </div>	
<p>C. Air Support Group Supervisor (ASGS)</p> <p>The ASGS is responsible for:</p> <ol style="list-style-type: none"> 1. Helibase operations 2. Fixed-Wing Air Base <ul style="list-style-type: none"> • Coordination with airtanker base managers. • Coordination with ATGS. 3. Portable Retardant Plants 	<p>Slide 1-13</p>

OUTLINE	AIDS & CUES
<p>4. Personnel management (ordering and demobilization)</p> <p>5. Track assigned resource status and availability</p> <p>6. Daily costs</p> <p>Ask students to share experiences they have had as an ASGS (e.g., typical responsibilities, items delegated to them by AOBD). Discuss differences between a team ASGS and single resource ASGS.</p>	
<p>IV. INTERAGENCY AND INTERPERSONAL RELATIONSHIPS</p> <p>Encourage student input and questions. Cadre should share personal experiences both positive and negative regarding building relationships.</p> <p>As a manager and as a critical component of the communication chain it is important to realize the role that strong interagency and interpersonal relationships play in the success of your position performance.</p> <p>The following topics are a general list of ideas for discussion on the importance of maintaining good relationships.</p> <p>A. Relationship With the Hosting Agency and/or Transitioning Team</p> <ul style="list-style-type: none"> • Initial meetings are critical to information gathering; make the most of them. 	<p>Slide 1-14</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Build rapport to help assure a smooth and efficient operation. • Know when you are in charge and when you are not. • The reason you are there is because the local unit has reached a situation where the complexity has exceeded their span of control. • Be sensitive and act professional. • Do not encroach on their facilities for your convenience. 	
<p>B. Key contacts</p>	
<p>Briefly discuss why it is important to foster a positive relationship with each of the following:</p>	
<ul style="list-style-type: none"> • Local dispatch • Unit aviation officer • Resource advisor • Expanded dispatch • Local contacts 	

C. Potential Consequences

Discuss with the students some of the potential consequences of poor relationships. Drawing from personal experiences and lessons learned can have a lasting impact in this discussion.

Poor relationships can have several adverse effects on the successful completion of an assignment.

- Chain of command/communication issues
- Misunderstanding of policy issues leading to violations
- Human resource issues/cultural differences
- Safety issues
- Poor relationship with local contacts can lead to request for removal.

As an AOBD, what skills do you look for in a trainee when evaluating their ability to create and maintain positive working relationships?

Discuss with the students.

OUTLINE	AIDS & CUES
<p>V. ESTABLISH LINE OF AUTHORITY AND DECISION MAKING PROCESS FOR THE AIR BRANCH</p> <p>The line of authority on the incident will be determined by the ICS organization. However, the decision making process may vary based on a variety of factors including the relationship between the AOBD and the OSC as well as the relationship between the AOBD and the air staff.</p> <p>A. Connection to OSC</p> <ul style="list-style-type: none"> • Establish open lines of communication and standard operating procedures. • Determine the information that needs to be relayed immediately vs. following the planning cycle. • Identify the events or changes in the air operations branch that need to be elevated or relayed to operations. <p>B. Decision Making Process</p> <ul style="list-style-type: none"> • Increased flexibility in decision making – “the buck stops here.” • Decisions represent the interest of the entire air operations branch. • The scope of decision and knowledge required expand to include fixed-wing and rotor-wing operations. 	<p>Slide 1-15</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Decision points may need to be researched with the GACC or Technical Representative before being elevated to the IC. <p>C. Adjusting to Your New Role and Setting the Tone</p> <p>As incident complexity increases so does the complexity of your new role. Several factors may play a role in determining your comfort level in the decision making process.</p> <ul style="list-style-type: none"> • Personal comfort level with staff involved. • Strength of staff involved. • Establish leader’s intent. • Experience level and capabilities of resources assigned. • High level of accessibility or be approachable – on radio or phone all the time. • Recognizing your role as a leader and having the ability to trust others in their area of expertise. • Maintain a positive attitude and professional image. • Give staff opportunity to critique and debrief. 	

Discuss experiences you have had relating to line of authority and decision making as a new AOBD and as an experienced AOBD working with the same team members over a period of time. Discuss the differences between mobilizing with a team and as a single resource.

VI. ASSESSING AN ORGANIZATIONAL STRUCTURE

It is important upon arrival at an incident as well as throughout the incident to assess the organizational structure to assure it will allow the air operations branch to function successfully and support the incident objectives.

Discuss with the students methods the cadre has used to gather information prior to arrival at an incident.

A. Prior to Arrival

There are several steps in gathering information to aid in assessing the current organizational structure.

1. Emerging Incident:

- Call local dispatch and request Aircraft Order #'s and Aviation Overhead #'s .
- Review the pre-order (evaluate and assess).
- Initial attack resources assigned?

Slide 1-16

Discuss having initial attack resources in the IA operation:

- Rules of engagement
 - Protocols
 - How long you can have them?
 - How many hours a day can we fly them?
 - Where positioned?
 - What is the ordering procedure?
 - How to integrate local aviation resources?
 - Contact OSC.
2. Team to team transition:
- IAP may be available on an FTP site. If available, review the objectives and resources assigned.
 - Contact current AOBD.
 - Request a copy of contact phone list.
 - Contact existing aviation bases.

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Contact local dispatch and request Aircraft Order #'s and Aviation Overhead #'s. • Review in-place teams glide path to identify excess resources and to establish time lines for critical needs. <p>B. Upon Arrival</p> <p>Upon arrival at the incident, validate the information already gathered as well as fill-in any missing information.</p> <ul style="list-style-type: none"> • Get information from initial briefings and meetings. • Determine level and capabilities of resources assigned. • Determine the size and the complexity of the aviation organization. • Look at span of control for entire air operations branch. 	

OUTLINE	AIDS & CUES
<p data-bbox="203 283 722 319">VII. ASSESSING RESOURCES</p> <p data-bbox="298 369 1032 533">From the beginning of the assignment to the end of the assignment, the AOBD will be expected to assess the capabilities and limitations of aircraft, people, and equipment assigned.</p> <p data-bbox="298 583 1024 701">This assessment will be based on the availability of resources to meet incident objectives and forecasted timeline.</p> <p data-bbox="298 751 997 831">Key factors that will influence assessments are safety, cost effectiveness, and efficiency.</p> <p data-bbox="298 882 954 961">Here are some action the AOBD can take to assess resources:</p> <ul data-bbox="298 1012 1024 1856" style="list-style-type: none"> <li data-bbox="298 1012 902 1047">• Develop and maintain glide paths. <li data-bbox="298 1098 573 1134">• Use I-Suite. <li data-bbox="298 1184 964 1264">• Compare existing resources to current incident objectives. <li data-bbox="298 1314 1024 1394">• Assess span-of-control within the aviation branch. <li data-bbox="298 1444 1024 1524">• Assess skill set and experience of existing aviation personnel and pilots. <li data-bbox="298 1575 719 1610">• Monitor resource use. <li data-bbox="298 1661 1016 1740">• Assess current and emerging fire aviation safety issues. <li data-bbox="298 1791 1008 1871">• Convey specific timeline for resources in order to meet mission objectives. 	<p data-bbox="1081 283 1235 319">Slide 1-17</p>

OUTLINE	AIDS & CUES
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- Match aircraft to meet mission objectives.
- Ensure agency cooperation, and negotiate to meet specific resource needs (IA priority, etc.).
- Assess nonaviation resources that support aviation operations.
- Answer the question: Does the aviation organization make sense in light of current and predicted incident objectives?

Ask students:

Have you worked out medevac procedures with the Medical Unit Leader and can you support them?

What other considerations are required?

EXERCISE: Assessing Organization Structure and Resources Scenario

Slide 1-18

Purpose: Students will assess an air operations organizational structure and assess assigned resources to determine if the requirements (objectives) of the incident can be met.

Time: 45 minutes

Format: Group or individual exercise

Supplies: Flip charts and markers

OUTLINE	AIDS & CUES
<p data-bbox="203 283 391 319"><u>Instructions:</u></p> <p data-bbox="203 323 1040 407">This exercise may be completed individually or in small groups.</p> <ul data-bbox="203 453 1040 1470" style="list-style-type: none"><li data-bbox="203 453 1040 537">• Read the scenario to students or have them read from the Student Workbook.<li data-bbox="203 583 1040 667">• Allow students approximately 20 minutes to develop their response.<li data-bbox="203 714 1040 831">• Have students give their answers and record them on a flipchart or whiteboard at the front of the room.<li data-bbox="203 877 1040 1344">• When all responses have been recorded, review the answers and provide feedback to the student's expectations. Example of analysis include:<ul data-bbox="292 1050 1040 1344" style="list-style-type: none"><li data-bbox="292 1050 1040 1134">– Are the expectations of the student in line with the responsibilities of the positions?<li data-bbox="292 1180 1040 1344">– Do the student responses go beyond tactical considerations and include concepts such as leadership and meeting the needs of their subordinates?<li data-bbox="203 1390 1040 1470">• Discuss solutions to the red flags the students identify.	

OUTLINE	AIDS & CUES
<p><u>Scenario:</u> You are the AOBD on a Type 1 Incident Management Team. Your team is managing a Type 1 incident and during the next operational period you will be taking over responsibility for an additional incident. Review the available information and answer the questions below.</p> <p>Sources of available information:</p> <ul style="list-style-type: none"> • Incident objectives (see below) • OSC input (see below) • ICS 220, 1 each for new and existing fires • Incident map <p>Incident Objectives:</p> <ul style="list-style-type: none"> • Provide for the safety of public and assigned personnel. • Minimize fire spread toward northeast and protect Red Mountain (threatened wildlife area). • Keep fire from moving south toward Miller Mountain. • New fire: Keep fire north of scenic route. <p>The OSC is requesting:</p> <ul style="list-style-type: none"> • Crew shuttle: Fly three crews from helibase to new fire. • Cargo mission: Retrieve five loads of backhaul from helispot on your Type 1 incident. 	<p>IR/SR 1-1</p> <p>IR/SR 1-1</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Recon/Admin flight: Governor is requesting a flight to look at both fires. • IA support: Local forest expecting aviation support for anticipated thunderstorms in the next 24 hours. <ol style="list-style-type: none"> 1) Are the current personnel and resources sufficient to support the incident (objectives, requirements)? 2) How did you determine your answer? 3) What are you going to order or release in addition to what you already have? <p><u>End of Exercise.</u></p>	
<div style="border: 2px solid black; padding: 5px; display: inline-block;">Review Unit Objectives.</div>	Slide 1-19

AIR OPERATIONS SUMMARYPrepared By: **Marv Claypool**

Prepared Date: 9/1-20XX

Prepared Time:2100

1. INCIDENT NAME: Existing Fire, T1 IMT	2. OPS PERIOD DATE: 9/2/20XX	START TIME: 0700	END TIME: 2100	SUNRISE: 0630	SUNSET: 1939
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3. REMARKS (Safety Notes, Hazards, Air Operations Special Equipment, etc.): Monitor air to air frequency. Heavy Air traffic en route to new fires. Practice SEE and AVOID. - Sling Loads off the fire should be labeled as to what fire it came from. - ROTATE DIPPING FROM VARIOUS PONDS TO AVOID HAVING TO RECHARGE. All retardant and foam drops need to be at least 300' away from drainages and riparian areas. ***BE AWARE OF FATIGUE, TAKE LONGER BREAKS WHEN FLYING IN SMOKEY CONDITIONS. Helibase N 44 18.34 by W 121 27.09	4. Medevac capable AIRCRAFT: See IAP Medical plan Helibase 58AH	5. Fire TFR: A- 21 Notam 6/6062 Altitude 10000 MSL Circular, Radius 7 NM Freq. 124.275 Center Pt: Lat N 44 19' 39" Long W 121 49' 31"

6. PERSONNEL	NAME	PHONE #	7. FREQUENCIES	AM	FM	8. FIXED-WING Avail/ Type/ Make-Model/ N#/ Base
AOBD	Marv Claypool	208-888-7588 541-777-0674	Air/Air FW A-15 LKG	124.275		Air Tactical: A-83 N112AA Aero commander
			Air/Air R/W A-33 LKG Cascade Crest	134.225		
AOBD(t)	Steve Landau	907-333-4609				
ATGS	Jeff Roberts	541-444-7549	Air/Air NF	132.1750		
ATGS	Gary Johnson	907-555-7014	A/G NF		169.2000	LEAD PLANES- order thru Air Attack or COID 541-416-6820
ATGS (T)			Nat'l. Flt Following		168.650	AIRTANKERS- order thru Air Attack or COID 541-416-6820
ASGS	Mike Gibbs	907-999-5814	Air/Ground – (A-33)		169.8125	
HEB1	Sally Dicker	541-000-1740	Air/Ground—Bucket (A-16)		172.1125	
HEB1(t)	Tracy Hobbs	406-222-5111				
Helibase FAX		541-333-1738	DECK		163.100	Water tenders E-130 at helibase
Maxwell Cargo		541-777-8472	TOLC A-35 LKG		173.825	
Santiam Cargo		907-222-7469	COMMAND	See IAP		Helibase Commo Trailer E- 96

Existing Fire, T1 IMT, continued

9. HELICOPTERS

FAA N#	T Y	MAKE/ MODEL	BASE	Start	Avail	REMARKS	FAA N#	T Y	MAKE/ MODEL	BASE	START	AVAIL	REMARKS
725HT	2	214	HB	0800	0830	A-49							
4263A	1	S-61	HB	0800	0830	A-54							
N58AH	2	S-58	HB	0800	0830	A-14							
N3181F	2	UH-1F	HB	0800	0830	A-70							
3913N	3	Bell L-3	HB	0800	0900	A-50							

10. TASK/ MISSION/ ASSIGNMENT (Type/ function includes: Air Tactical, Retardant, Recon, Personnel Transport, Bucket Operations, SAR, etc.)				
TYPE/FUNCTION	NAME OF PERSONNEL OR CARGO (If applicable) or instructions for tactical aircraft	MISSION START	FLY FROM	FLY TO
Recon	Operational Recon with 3 pax- Fly missions	1000	HB	Fire
Sling Support	Fire, misc. supplies	TBD	HB	Helispot
RECON	Review existing Helispots and new Spike camps	1100	HB	Fire Area
BACKHAUL	Pull hose, pump off line- Backhaul to HB--DIV Y and DIV Z	1100	Helispot	HB
Supply	All line orders- Order through supply via your Division			
Bucket/Retardant	Order through Air Attack or Helibase, include Division and Ground Contact.			

11. Helispot and Sling spot Information –Fire

Helispot #	Dip Site	Sling Site #	Division	Latitude	Longitude	Longline Minimum	Remarks
H-2				N 44 19.55	W 121 52.2		Type I, 5,000' HOGE
	Matthieu Lake			N 44 14.288	W 121 46.789	100'	Dip SE side
	George Lake			N 44 19.15	W 121 49.64	100'	20 – 25' deep
	Meadow Lake			N 44 23.43	W121 48.65	100'	Watch for campers
Yankee Spike	Unoccupied			N44 19.60	W121 51.21		T3 only HIGE 6000'

AIR OPERATIONS SUMMARYPrepared By: **Mark Smith**

Prepared Date: 9/1-20XX

Prepared Time:2100

1. INCIDENT NAME: New Fire	2. OPS PERIOD DATE: 9/2/20XX	START TIME: 0700	END TIME: 2100	SUNRISE: 0630	SUNSET: 1939
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<p>3. REMARKS (Safety Notes, Hazards, Air Operations Special Equipment, etc.):</p> <p>Monitor air to air frequency. Heavy Air traffic enroute to new fires. Practice SEE and AVOID.</p> <ul style="list-style-type: none"> - Air attack times out today, relief on order but no fill yet - Helicopters relocating to helibase on IMT 1 fire - Sling Loads off the fire should be labeled as to what fire it came from. <p>All retardant and foam drops need to be at least 300' away from drainages and riparian areas. ***BE AWARE OF FATIGUE, TAKE LONGER BREAKS WHEN FLYING IN SMOKEY CONDITIONS. Lake Helibase N 44 18.34 by W 121 27.09</p>	<p>4. Medevac capable AIRCRAFT:</p> <p>See IAP Medical plan</p> <p>Helibase 3854N</p>	<p>5. Fire TFR: A- 21 Notam 6/6062 Altitude 10000 MSL Circular, Radius 7 NM Freq. 124.275 Center Pt: Lat N 44 19' 39" Long W 121 49' 31"</p>
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6. PERSONNEL	NAME	PHONE #	7. FREQUENCIES	AM	FM	8. FIXED-WING Avail/ Type/ Make-Model/ N#/ Base
AOBD	Mark Smith	208-888-7588 541-777-0674	Air/Air FW A-15 LKG	124.275		Air Tactical: A-90 N159AF Aero commander
			Air/Air R/W A-33 LKG Cascade Crest	134.225		
AOBD(t)	Steve Nash	907-333-4609				
ATGS	Jeff Roberts	541-444-7549	Air/Air NF	132.1750		
ATGS	Gary Payton	907-555-7014	A/G NF		169.2000	LEAD PLANES- order thru Air Attack or COID 541-416-6820
ATGS (T)			Nat'l. Flt Following		168.650	AIRTANKERS- order thru Air Attack or COID 541-416-6820
ASGS	Mike Bryant	907-999-5814	Air/Ground – (A-33)		169.8125	
HEB1	Jane Hobbs	541-000-1740	Air/Ground—Bucket (A-16)		172.1125	
HEB1(t)		406-222-5111				
Helibase FAX		541-333-1738	DECK		163.100	Water tenders E-120 at helibase
Maxwell Cargo		541-777-8472	TOLC A-35 LKG		173.825	
Santiam Cargo		907-222-7469	COMMAND	See IAP		

New Fire, continued

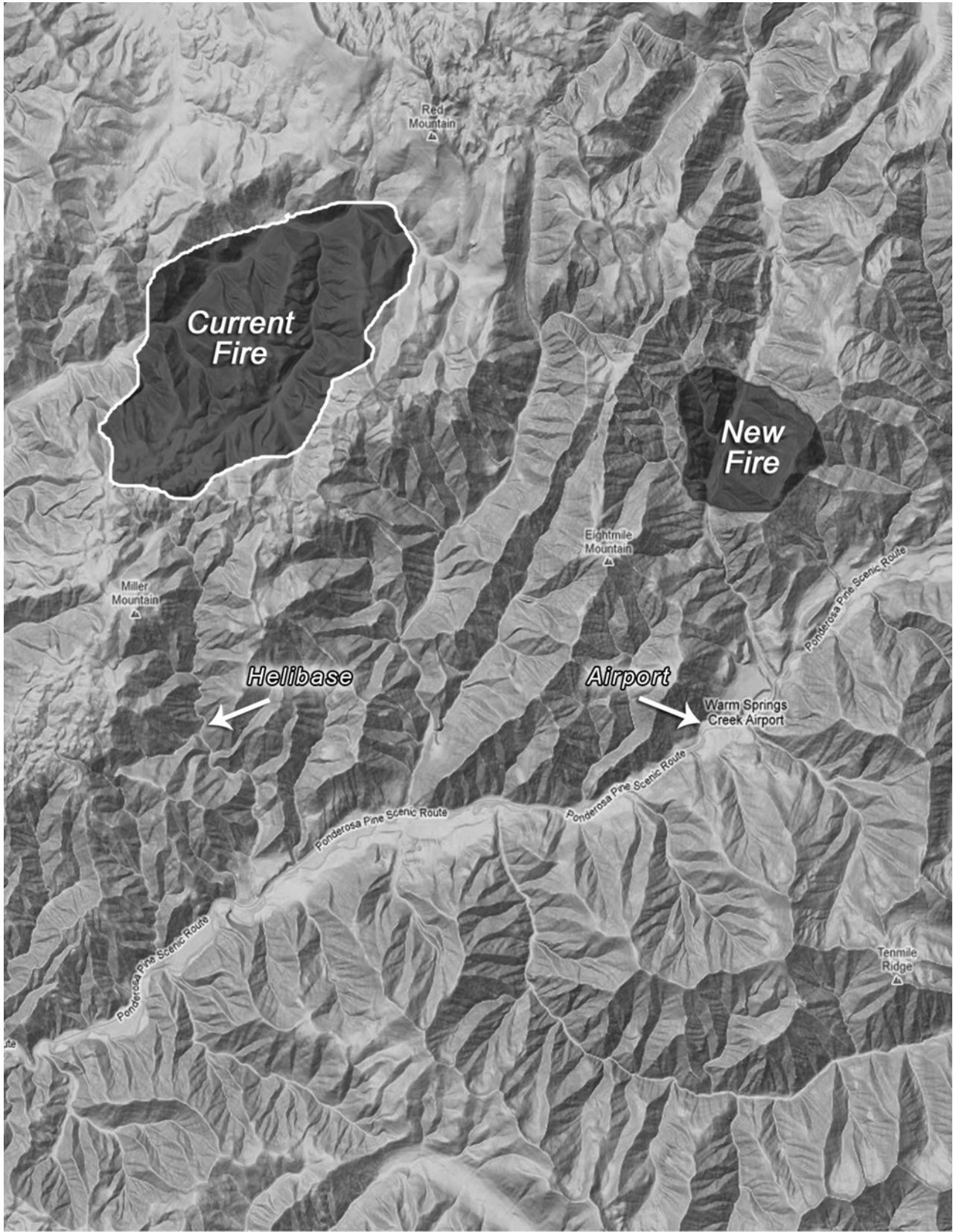
9. HELICOPTERS

FAA N#	T Y	MAKE/ MODEL	BASE	Start	Avail	REMARKS	FAA N#	T Y	MAKE/ MODEL	BASE	START	AVAIL	REMARKS
785HT	2	212	HB	0800	0830	A-22							
3854N	3	Astar B-2	HB	0800	0900	A-18							

10. TASK/ MISSION/ ASSIGNMENT (Type/ function includes: Air Tactical, Retardant, Recon, Personnel Transport, Bucket Operations, SAR, etc.)				
TYPE/FUNCTION	NAME OF PERSONNEL OR CARGO (If applicable) or instructions for tactical aircraft	MISSION START	FLY FROM	FLY TO
Crew mob	Mob three crews from HB to spike camp. Location TBD	TBD	HB	spike
Sling Support	Fire, misc. supplies	TBD	HB	Helispot
RECON	Review existing Helispots and new Spike camps	1100	HB	Fire Area
BACKHAUL	Pull hose, pump off line- Backhaul to HB	1100	Helispot	HB
Supply	All line orders- Order through supply via your Division			
Bucket/Retardant	Order through Air Attack or Helibase, include Division and Ground Contact.			

11. Helispot and Sling spot Information – Lake George Fire

<u>Helispot #</u>	<u>Dip Site</u>	<u>Sling Site #</u>	<u>Division</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Longline Minimum</u>	<u>Remarks</u>
H-1				N 44 19.55	W 121 52.2		Type 2, 6,000' HOGE
	Marin Lake			N 44 14.288	W 121 46.789	50'	Dip SE side
	Lucky Lake			N 44 19.15	W 121 49.64	100'	20 – 25' deep
Delta Spike	Unoccupied			N44 19.60	W121 51.21		T3 only HIGE 6000'



UNIT OVERVIEW

Course Air Operations Branch Director, S-470

Unit 2 – Risk Management

Time 5 hours

Objective

1. Analyze and evaluate the elements of the risk management process.
2. Develop skills for use of Operational Risk Management (ORM) tools.
3. Utilize the Aviation Risk Management Workbook for practical incident operations.

Strategy

The intent of this unit is to instruct new AOBDs on the use of current tools for aviation Daily Operational Risk Assessment (DORA) and more strategic planning processes using products found in the Workbook.

Moving from current situation towards long range planning for the upcoming operational periods. Capturing the ORM planning in the IAP development process. Discussion and application of Risk Management process from an AOBD perspective (How did RM change for you? How did your perspective change?)

Instructional Method(s)

- Guided instructional method and pre-course reading assignment. Ask questions in the instructional method to guide them to a greater understanding.

Instructional Aids

- Personal computer with LCD projector and presentation software
- Aviation Risk Management Workbook (**EACH student was asked to download and bring a copy during the pre-course work.**)
- Excel Spreadsheet: S-470_DORA.xlsx (**EACH student was asked to download and bring a copy during the pre-course work.**)
- Excel Spreadsheet: S-470_DORA_ANSWER.xlsx (Answer guide for the cadre.)

Exercise(s)

- Operational Risk Management – Big Creek Fire
- White Draw Fire Accident Review

Evaluation Method(s)

- Participation in exercises

Outline

- I. AOBD Role in Risk Management
- II. Risk Management Workbook Overview
- III. Risk Management: Assurance and Promotion

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: Air Operations Branch Director, S-470

UNIT: 2 – Risk Management

OUTLINE	AIDS & CUES
Present unit title slide. Present unit objectives.	Slide 2-1
Present unit objectives.	Slide 2-2
I. AOBD ROLE IN RISK MANAGEMENT	
<p>In all-risk environments the role of the AOBD should be that of aviation management with an emphasis in programmatic risk management. It is imperative to the success of the operation that the AOBD maintains the ability to provide safety oversight of the entire aviation operation and all the supporting systems.</p>	
<p>Management Considerations of Safety Management System (SMS): Four Pillars</p>	Slide 2-3
<ul style="list-style-type: none">• Safety Policy• Safety Risk Management• Safety Assurance• Safety Promotion	

OUTLINE	AIDS & CUES
<p>A. Safety Policy</p> <p>Who is the lead agency?</p> <p>There is existing policy in place that supports the foundation of SMS in aviation safety programs. The policy is reflected in multiple manuals, handbooks, and guides, (e.g., Red Book, Forest Service handbooks, departmental manuals).</p>	Slide 2-4
<p>B. Identification and Application of Supporting Systems</p> <p>1. Fixed-wing Planning Considerations:</p> <ul style="list-style-type: none"> • Management not always assigned to the team (local tanker base manager) • Remote operations (tanker base, SEAT base, etc.) • Daily communication problems • Lack of on-site management • Resource shortages/fatigue • Local politics 	Slide 2-5
<div style="border: 2px solid black; padding: 5px; text-align: center;"> <p>Have students discuss other planning considerations which may not have been covered.</p> </div>	

OUTLINE	AIDS & CUES
<p>2. Rotor-wing planning considerations:</p> <ul style="list-style-type: none"> • Management is assigned to the team. • Proximity of operations can lead to micromanagement of rotor-wing and neglect of fixed-wing. • Single resource with multiple uses and multiple risk exposure, e.g., Type 3 helicopter capable of IR, bucket, recon, aerial ignition. • Vulnerable to changing weather conditions. <p>C. Safety Risk Management – Identification of Systems, Hazards, and Mitigation</p> <p>The Risk Management Component has two elements:</p> <ul style="list-style-type: none"> • Planning: Risk Assessment • Operational: Risk Management <p>The Risk Management Workbook contains completed operational risk assessments for multiple missions and programs (Rappel/RADs, external loads, SEATs, heavy airtankers, forest health programs, etc.)</p>	<p>Slide 2-6</p>

OUTLINE	AIDS & CUES
<p>The IHOG outlines turn down protocols for aviation assignments. Learning how to properly refuse risk is an important component of risk management.</p>	<p>IHOG</p>
<p>II. RISK MANAGEMENT WORKBOOK OVERVIEW</p> <p>The objective of the SMS is to provide structure to control risk and assure quality in operations. Ideally, reducing the level of risk As Low As Reasonably Practical (ALARP). The Risk Management Workbook helps to establish the <i>Risk Management</i> portion of SMS.</p> <p>A. Operational Risk Management</p> <p>The tabbed section of the workbook contains individual Hazard Logs for each type of mission. The following terms are used in the workbook:</p> <ul style="list-style-type: none"> • Mission subsystems: Components or parts of a <i>system</i> which is defined as an integrated set of constituent elements that are combined in an operational or support environment to accomplish a defined objective. • Hazards: Any existing or potential condition that can lead to injury, illness, or death; damage to or loss of a system, equipment, or property; or damage to the environment. 	<p>Slide 2-7</p>

- Risk assessments: The process of measuring or judging the value or level of something.
- Suggested mitigations: Proposed action or plan to lessen or reduce an undesirable outcome or situation.

B. Risk Assessment Matrix and Definitions
(for a full-color version refer to Slide 2-8)

Slide 2-8

Risk Assessment Matrix				
Severity				
Likelihood	Negligible IV	Marginal III	Critical II	Catastrophic I
Frequent A				
Probable B				<i>High 4</i>
Occasional C			<i>Serious 3</i>	
Remote D		<i>Medium</i>	<i>2</i>	
Improbable E	<i>Low 1</i>			

Severity Scale Definitions	
Catastrophic	Results in fatalities and/or loss of the system.
Critical	Severe injury and/or major system damage.
Marginal	Minor injury and/or minor system damage.
Negligible	Less than minor injury and/or less than minor system damage.

Slide 2-9

Likelihood Scale Definitions		
Frequent	Individual Fleet	Likely to occur often. Continuously experienced.
Probable	Individual Fleet	Will occur several times. Will occur often.
Occasional	Individual Fleet	Likely to occur sometime. Will occur several times.
Remote	Individual Fleet	Unlikely to occur, but possible. Unlikely but can reasonably be expected to occur.
Improbable	Individual Fleet	So unlikely, it can be assumed it will not occur. Unlikely to occur, but possible.

Appropriate Management Level for Operational Risk Decisions		
Risk Level	Fire	Project
High	Incident Commander or Operations Chief	Line Officer/Manager
Serious	Incident Commander or Operations Chief	Line Officer/Manager
Medium	Air Operations Branch Director	Project Aviation Manager
Low	Base Manager	Helicopter or Flight Manager

Slide 2-10

Review and discuss the completed Safety Assessment Form in the PowerPoint.

Slide 2-11

OUTLINE	AIDS & CUES
<p data-bbox="204 285 932 359">ADMINISTER EXERCISE: Operational Risk Management – Big Creek Fire</p> <p data-bbox="204 415 964 573"><u>Purpose:</u> Students will develop a Risk Assessment based on information from the Interagency Risk Assessment Workbook and the Operational Risk Management spreadsheet.</p> <p data-bbox="204 630 422 661"><u>Time:</u> 2 hours</p> <p data-bbox="204 718 1003 833"><u>Materials Needed:</u> The Interagency Risk Assessment Workbook and Daily Operational Risk Assessment (DORA).</p> <p data-bbox="204 890 1049 1085"><u>Preparation:</u> Download the Interagency Risk Assessment Workbook and Daily Operational Risk Assessment (DORA) which is part of the pre-course materials. Refer to IR 2-1 which includes WFDSS information and the Big Creek Map.</p> <p data-bbox="204 1142 389 1173"><u>Instructions:</u></p> <ol data-bbox="204 1184 1049 1472" style="list-style-type: none">Given a scenario for the Big Creek fire, develop a Daily Operational Risk Assessment (DORA) for a Type 1 helicopter mission.Refer to the Interagency Risk Assessment Workbook for helicopter/airtanker hazards and mitigation measures. <p data-bbox="204 1528 438 1560"><u>Exercise Ends.</u></p>	<p data-bbox="1081 285 1235 317">Slide 2-12</p> <p data-bbox="1081 926 1357 999">IR/SR 2-1 S470_DORA.xlsx</p>

OUTLINE	AIDS & CUES
<p>ADMINISTER EXERCISE: White Draw Fire Accident Review</p> <p><u>Purpose:</u> Students will review the summary and findings from the White Draw Fire Report.</p> <p><u>Time:</u> 1 hour</p> <p><u>Materials Needed:</u> White Draw Fire Report</p> <p><u>Preparation:</u> The PowerPoint contains instructor notes that will facilitate in the discussion. Review them prior to the presentation. Refer to IR 2-2 and SR 2-2.</p> <p><u>Instructions:</u> Read the following summary:</p> <p>The incident involved one C-130H3 MAFFS and one lead plane (Bravo 5), Beechcraft King Air E90.</p> <p>Two incident reports were completed, one by the Department of Defense and one by the U.S. Forest Service.</p> <p>Refer to the following links for the summaries:</p> <p>http://wildfirelessons.net/documents/White_Draw_Fire_MAFFS_%20Report.pdf</p> <p>http://www.fs.fed.us/fire/av_safety/assurance/mishaps/index.html</p> <p><u>Exercise Ends.</u></p>	<p>Slides 2-13 thru 2-26 IR/SR 2-2</p>

OUTLINE	AIDS & CUES
<p>III. RISK MANAGEMENT: ASSURANCE AND PROMOTION</p> <p>A. Safety Assurance</p> <ul style="list-style-type: none"> • Aviation Safety and Technical Assistance Team (ASTAT), contract inspections, and agency policy. • Accident investigation, program reviews and numerous other tools monitor and report the health of agency prevention efforts. Work is ongoing towards implementing an aviation lessons learned website and aiming to become a “Reporting Culture.” <p>B. Safety Promotion</p> <ul style="list-style-type: none"> • Maintain internal awareness within your team. • Communicate externally through dispatch and agency contacts. • The goal is to implement change in this area by creating a positive “Learning Culture.” Communication is the key to success in this component. Training tools include: SAFECOMs, Safety Alerts, Technical Bulletins, Lessons Learned, tailgate sessions, etc. 	<p>Slide 2-27</p> <p>Slide 2-28</p>
<div style="border: 2px solid black; padding: 2px;">Review Unit Objectives.</div>	<p>Slide 2-29</p>

Operational Risk Management Scenario – Big Creek Fire

Review the following incident and weather information. The Wildland Fire Decision Support System (WFDSS) information and an incident map are located on pages 2.15 and 2.17 (SW pages 2.13 and 2.15). After assessing the information, address the two Operational Risk Assessment Exercise questions on page 2.14 (SW page 2.12).

Incident Information

Date and Time: Sunday, August 1

Location: 42.5 miles North East of McCall, ID

Operational Control: Forest Service, Region 4 @ Johnson Creek, ID

Procurement: Exclusive Use Contract

Type Mission: Type 1 helicopter water dropping

Persons Onboard: 2

Weather

McCall Regional Airport, Black Canyon RAWS 24hr report

Weather Condition: MVFR

Visibility: 2 smoke and haze

Temp: 88 °F

Altimeter: 29.73

Wind: S @ 28mph, gusts 36 at 270 degrees

Conditions at Big Creek ICP

Weather Condition: VFR

Visibility: 10 overcast

Temp: 98 °F

Altimeter: 29.77

Wind S @ 8mph, gusts 17 from 270 degrees

Elevation: 7,800 msl

Helibase: Obstruction – 110 ft. trees bordering safety circle on west side

Runway: 18 and 36 active, grass

SPECIAL WEATHER STATEMENT

NATIONAL WEATHER SERVICE MCCALL ID

0914 AM SUN AUG 1

AT 0910 ...NATIONAL WEATHER SERVICE DOPPLER RADAR WAS TRACKING A STRONG THUNDERSTORM 10 MILES SOUTHEAST OF MCCALL ID...OR 21 MILES SOUTHWEST OF JOHNSON CREEK...MOVING NORTHEAST AT 20 MPH.

HAIL UP TO THE SIZE OF NICKELS AND WIND GUSTS UP TO 50 MPH ARE POSSIBLE WITH THIS STORM...ALONG WITH FREQUENT DANGEROUS LIGHTNING.

LOCATIONS NEAR THE PATH OF THIS STORM INCLUDE...
MAINLY RURAL AREAS OF EXTREME EASTERN VALLEY COUNTY NORTH OF HIGHWAY 18 AND WEST OF JOHNSON CREEK.

THIS STORM MAY INTENSIFY...SO BE CERTAIN TO MONITOR LOCAL RADIO AND TV STATIONS FOR ADDITIONAL INFORMATION AND POSSIBLE WARNINGS FROM THE NATIONAL WEATHER SERVICE.

Narrative

On July 30, 2012, at 1846, an order was placed in Resource Order and Status System (ROSS) requesting Type I helicopter support on the fire near Johnson Creek, Idaho, for the following day that included “special needs, losing the fire, 15 structures immediately threatened.” Additionally, there are cultural values at risk. At 1847, you (the AOBD) started to plan for the next day (8/1/12) to request one EU Type I helicopter at Johnson Creek at 0900, order Lead Plane and 2 heavy air tankers to be over fire at 0830.”

On 1 August at 0708, you requested updates on 2 heavy air tankers; “Repeated air tankers ordered yesterday evening, would like them this morning early.” Message forwarded to aircraft desk at Great Basin Coordination Center (GBCC). At 0945, heavy air tanker request for Johnson Creek classified “Unable To Fill” (UTF’d).

At approximately 0900, the Johnson Creek Helibase communicated with 3 helicopters on station and Divisions concerning impending severe weather. They stated that “No thunder cells are currently visible on or near the fireline.”

Operational Risk Management (ORM) Exercise

1. Complete an ORM using the DORA spreadsheet for a Type I helicopter mission to deliver retardant from the Johnson Creek airstrip to the West Division of the Johnson Creek Fire (1.8 miles east).
2. Reference the Interagency Aviation Risk Management Workbook to develop local mitigations for existing conditions or contingencies. Use the blank risk assessment sheet found in the back of the workbook as necessary.

INSTRUCTOR NOTE: For suggested answers, refer to the spreadsheet – S-470_DORA_ANSWER.xlsx
--

WFDSS MAP Name: West Big Creek/Edwardsburg – Management Action Point

Condition:

West Big Creek/Edwardsburg

This MAP begins at the confluence of Big Creek and Smith Creek. The MAP follows Smith Creek to the headwaters of Smith Creek and South Fork. From South Fork the MAP extends to Mount Eldridge then follows Logan Creek to Big Creek Point. Big Creek/Edwardsburg is a parcel of private property owned by a variety of people on the western edge of the FC-RONRW. It consists of approximately 80+ dwellings and out buildings. The area is contained within a 2 mile-long and ½ mile-wide corridor along Big Creek.

Action:

Initial actions are to prevent fire from reaching structures and private property. Safe, aggressive actions may be required to accomplish this task. If fire is likely to threaten private property and structures, contact Idaho County Commissioners and Sherriff’s Department and inform them of fire threat to Edwardsburg. Continue with tactics to prevent fire from burning onto private property.

Structure Protection: Forest Service role and jurisdiction is to manage natural resources on public land. We may engage under cooperative agreement or unified command to use wildland tactics to keep fire away from structures. Forest Service will not be responsible for wrapping structures, setting up sprinkler systems or reducing fuels around private structures. Forest Service employees will act within their authority, training, and experience. The Forest Service shall not:

- Take direct suppression actions on structures other than those that tactically reduce the threat of fire spread to them.
- Enter structures or work on roofs of structures for the purpose of direct suppression actions.

If the above direction changes, see Big Creek Plan in the Structure Protection and Evacuation Plans Appendix.

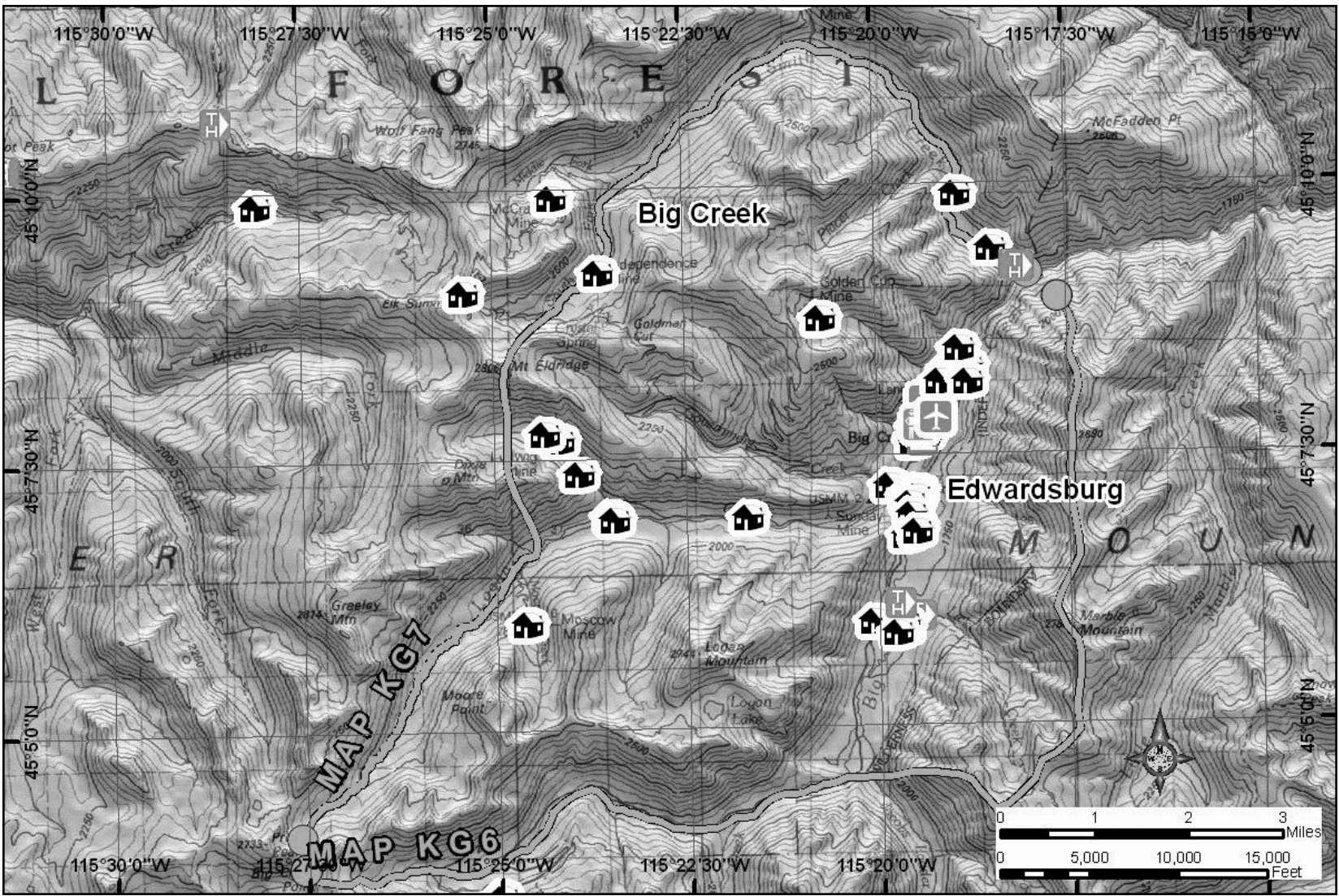
See Big Creek Plan in the Structure Protection and Evacuation Plan Appendix

Resources:

1– DIVS, 2 – SOF2, 1 – TFLD/STL, 1 – BCMG, 1 – T1 hand crew, 3 –Type IV/III Engines, 2 – Water Tenders (1000 gal), 1 – T3 Helicopter w/ Module, 1 – T2 Helicopter w/ Module, 2 – SEAT, 1 – T1 helicopter, 1 – T1 Airtanker, 3 – FUM, 1 – ATGS, 2 – Law Enforcement, 1 – EMT, 1 – PIO

Costs: (include explanation on where costs came from i.e., historic, SCI, etc.)

Cost: \$66,846.00/day. Aircraft use for 2 hours. Costs computed from R-4 Standard Cost Guide, FY09



White Draw Scenario Review

July 1, 2012
Black Hills National Forest
White Draw Fire
Edgemont, South Dakota
Beechcraft King Air E-90



Overview

- Providing retardant support for the White Draw (WD) fire approx. 20 miles NE of Edgemont, SD.
- On July 1st, 2012 at approximately 1736 hours, ASM was on final approach leading MAFFS for a second retardant drop when they experienced a severe wind shear (microburst).
- The pilot initiated escape procedures and called for the MAFFS unit to abort their run and drop their load.

Sequence of Events

- 1636 MAFFS departs Cheyenne, WY en route to the Arapahoe fire. Diverted to Highlands fire; diverted to WD fire.
- 1714 NWS issues special weather statement concerning strong t-storm approaching from west.
- 1717 MAFFS arrives WD fire
- 1721 ASM arrives WD fire
- 1726 WD Air attack (WDAA) arrives WD fire
- 1736 ASM, MAFFS, with WDAA in trail, on final for 2nd drop
- 1736 MAFFS impacts terrain
- 1811 911 call from MAFFS Survivor

Damage

MAFFS

- Aircraft destroyed (Air Force investigated).
- 4 fatalities.
- 2 crewmembers with critical injuries.

ASM

- Hot-Section inspection & First-Level Turbulent Air Inspections were complied with no discrepancies found.
- No injuries to the 2 crewmembers.

Findings

- ASM, MAFFS, and WDAA were operating within the leading-edge of a thunder cell.
- ASM Pilot & Air Tactical Supervisor was aware of the developing thunder cell 10-15 miles west of the fire.
- WDAA noted the thunder cell at approximately 10 miles away when they arrived at the fire.
- WDAA asked for and received lower altitude from ASM due to moderate to severe turbulence.
- ASM Pilot checked wx prior to launching in the afternoon.
- The helicopter crews (4), WDAA, and the fire AOBD were aware of the verbalized and executed “Severe WX Plan” developed by helibase management and helo crews (approx. 1600 hrs.).
- Lightning strikes, virga, and mammatus¹ clouds were observed in the area at the time of the wind shear (& downdraft).
- “Severe Wx Plan” was not communicated to ASM or MAFFS.

¹Meteorologist Jeff Haby, Professor of Geoscience and Meteorology, Mississippi State University: Mammatus are pouched shaped clouds that protrude downward from the thunderstorm's anvil. They form as negatively buoyant moisture laden air sinks. The cloud remains visible until the air sinks enough that the relative humidity falls below 100%. The portion that has a relative humidity of 100% remains visible. Theories to how they form include: 1) turbulent eddies mixing down moisture, 2) evaporative cooling with surrounding air causes pockets of sinking air, 3) pockets of precipitation falling out of the anvil that produce virga. Mammatus tend to be most prominent in extremely severe storms but can occur when storms are not severe also.

Findings (continued)

- MAFFS and ASM arrival time and proximity to thunder cells were discussed between AOBD and dispatch. Dispatch responded “it will be close.”
- The NWS issued a Special Weather Bulletin for strong thunderstorms at 1714 on the day of the incident, at that time placing the cell 21 miles SW of Edgemont, SD, or approximately 30 miles SW of the White Draw Fire.
- AOBD deferred decision to make retardant drop to ASM.
- ASM stated the retardant drop would be ineffective based on the size of the fire, limited number of airtankers available, and MAFFS would not have the duty time left to load and return.

Lessons Learned

- Retardant may arrive after it is no longer effective due to weather changes.
- Understand and follow all interagency policies and direction to discontinue tanker activity when in proximity of thunderstorms.
- Understanding aviation weather and good communications are essential under changing meteorological conditions.
- Risk Management is a continuous effort including short term planning and decision making as mission or environmental changes occur in the course of a flight.

UNIT OVERVIEW

Course Air Operations Branch Director, S-470

Unit 3 – Information Sharing/Management

Time 3 Hours

Objectives

1. Identify information to be included in meetings, briefings, debriefings, and After Action Reviews.
2. Demonstrate the completion of an ICS 220.
3. Demonstrate an effective Air Operations Briefing.
4. Discuss maintenance and disposition of documentation.

Strategy

In Unit 3 the students are implementing the plan by briefing the appropriate personnel and completing the appropriate documentation.

Trainee Expectation: Brief their resources on an incident. What is the new information related to this “new” position (AOBD vice ASGS) that they will have to give? The goal is not to have students just give a briefing (they already know how to give a briefing). Classroom presentations will help identify the “new” AOBD information and the tasks to be completed during an incident.

Instructional Method(s)

- Informal lecture

Instructional Aids

- Personal computer with LCD projector and presentation software
- Flip charts and markers
- Examples of ICS 220 forms

Exercise(s)

- Pre-planning Meeting
- ICS 220 Completion
- Morning Briefing

Evaluation Method(s)

- Group discussion and exercises

Outline

- I. Meetings
- II. ICS 220, Air Operations Summary
- III. Briefings and After Action Reviews
- IV. Documentation

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: Air Operations Brach Director, S-470

UNIT: 3 – Information Sharing/Management

OUTLINE	AIDS & CUES
Unit Title Slide.	Slide 3-1
Present Unit Objectives.	Slide 3-2
I. MEETINGS	
As an AOBD you will be expected to prepare for and participate in the planning cycle.	
A. Pre-planning Meeting	Slide 3-3
Your relationship and communication with the Command and General Staff throughout each operational period can be critical in preparation for meetings.	
1. Prior to the meeting: <ul style="list-style-type: none">• Identify changes in assigned aircraft resource status, e.g., maintenance, duty limitations.• Identify current fire situation and effectiveness of aviation resources.• Contact dispatch to determine status of ordered or en route resources, etc.	

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Know what you have available and the capabilities to support proposed plans, e.g., water/retardant delivery, cargo delivery, personnel delivery. <p>2. Be prepared to:</p> <ul style="list-style-type: none"> • Share and evaluate operational information. • Consider the overall plan being proposed. • Clarify any details. • Consider the type of air operation needed to implement and achieve objectives. • State whether a proposed air operation to support tactical or logistical objectives is possible or sensible in economic and risk management terms. • Discuss solutions to current issues, either within the air organization, in other sections, or with entities external to the incident (e.g., dispatch). • Stand your ground. Do not over commit your resources. 	

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Be realistic and honest in evaluation of your abilities to support the plan. Provide options of what you can do, not just what you can't do. <p>The objective and anticipated outcome of the pre-planning meeting is to have all sections support the proposed plan.</p> <p>EXERCISE: Pre-planning Meeting</p> <p><u>Purpose:</u> Students will evaluate resource information and mission requests to determine the ability of the aviation operation to support the needs of the incident. The scenario is intended to represent the decision making required in a pre-planning meeting.</p> <p><u>Time:</u> 20 minutes</p> <p><u>Format:</u> Group or individual exercise</p> <p><u>Materials Needed:</u> Flip charts and markers and completed ICS 220.</p> <p><u>Instructions:</u></p> <ol style="list-style-type: none"> 1. This exercise may be completed individually or in small groups. Refer to the ICS 220 on page 3.17. 2. Read the scenario inputs as if the students are attending a briefing. (Inputs are not in Student Workbook.) 3. Allow students approximately 10 minutes to develop their response. 	<p>Slide 3-4</p> <p>IR/SR 3-1</p>

OUTLINE	AIDS & CUES
<p>4. Document final decisions on a flip chart to be used in subsequent exercises.</p> <p><u>Scenario:</u> According to the information on the ICS 220 and inputs received from the aviation staff, provide responses to questions asked at the pre-planning meeting.</p> <p><u>ASGS input:</u> HT-718 will be down for scheduled maintenance at 0800 and is expected to take 4 hours.</p> <p><u>ATGS input:</u> Scheduled to leave incident at 1200 tomorrow. A new ATGS has been ordered and is scheduled to arrive at 1000 tomorrow.</p> <p><u>OSC input:</u> Need 6 crews with gear flown to H1 at 0830. Two major burnout operations scheduled for tomorrow at 1400 will require bucket support. Heavy air tanker support will be needed at the head of the fire to protect a small summer home community.</p> <p><u>LSC input:</u> Need meals for 100 personnel flown to Rattlesnake spike by 2000.</p> <p><u>COML input:</u> Need to replace the batteries and perform maintenance on the repeater which will take about an hour.</p> <p><u>IC input:</u> Requesting a recon flight with the Governor at 1200.</p> <p>Answer the following questions and discuss:</p> <ul style="list-style-type: none"> • What question do you have for each of the section chiefs and the IC? • How will their responses effect your decision? 	<p>Slide 3-5</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • What additional information do you need to make a decision? • Can you support the plan? • How will you prioritize the requests? <p>As a class, come to a decision on which missions you can support for the next operational period and document the decisions on a flip chart to be used in subsequent exercises.</p> <p><u>End of exercise.</u></p> <p>B. Planning Meeting</p> <p>Be prepared to:</p> <ul style="list-style-type: none"> • Bring to the Strategy and Planning Meeting all the information required to answer questions directed to the Air Branch. • Bring your questions and needs for other sections to support your operations. • Brief the current situation. • Present aviation hazards and mitigations. • Declare support for the plan and note any external influences that may affect the ability to support the plan. 	<p>Slide 3-6</p>

OUTLINE	AIDS & CUES
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- Answer questions presented by the Incident Commander and agency representatives.
- Work with the Planning Section Chief to identify the flow of the meeting and when he/she expects you to provide input.

Discuss topics or types of questions that can be expected to be asked by the agency representatives and other meeting attendees.

II. ICS 220, AIR OPERATIONS SUMMARY

Slide 3-7

The ICS 220, Air Operations Summary is the primary planning, documentation, and briefing tool for the aviation operation.

It is essential to get a completed ICS 220 to the RESL in a timely manner on a daily basis.

The ICS 220 is a component of the IAP and is an official document. Activities that are indicated on the ICS 220 need to reflect your actions.

Key points and helpful hints:

- Take detailed notes during the pre-planning meeting.
- The ICS 220 information is developed at the pre-planning meeting.
- Develop the ICS 220 in conjunction with ASGS, HEB1/2, and ATGS.

Be prepared to discuss information not found on the standard ICS 220 Form. Bring examples of ICS 220s from incidents you've been on. Review the form and provide additional tips or suggestions that make the form more useful.

- Use the proper format when documenting latitude and longitude (degrees, decimal minutes).
- Include TFR number and frequency.
- Try to include phone numbers of all air branch key staff.
- Document Victor frequency A numbers.
- Can use 'other' block to document equipment and E numbers assigned to the air branch (water tenders, helibase trailers, etc.).
- Document A numbers for aircraft.
- Make sure to document "special" missions (aerial ignition, rappel proficiencies, VIP recons) that are planned for the operational period.

OUTLINE	AIDS & CUES
<p>EXERCISE: ICS 220 Completion</p> <p><u>Purpose:</u> Students will complete an ICS 220 for the next operational period on the Twitchell Canyon Incident based on decisions made in the pre-planning meeting.</p> <p><u>Time:</u> 20 minutes</p> <p><u>Format:</u> Individual exercise or small groups</p> <p><u>Materials Needed:</u> Flip charts and markers, completed ICS 220.</p> <p><u>Instructions:</u></p> <ol style="list-style-type: none">1. This exercise is to be completed individually or in small groups.2. Complete the blank ICS 220 for the next operational period on the Twitchell Canyon Incident.3. Incorporate the decisions made in the pre-planning meeting. If students were not able to come to a decision, select one for them and base the exercise on your selection.4. Add the resources found on the completed resource order.5. Allow students approximately 15 minutes to develop their response.6. Review final products as a class. <p><u>End of exercise.</u></p>	<p>Slide 3-8</p> <p>IR/SR 3-2</p> <p>IR/SR 3-3</p>

OUTLINE	AIDS & CUES
III. BRIEFINGS AND AFTER ACTION REVIEWS	Slide 3-9
<div style="border: 2px solid black; padding: 10px;"> <p>At this point, all students should have both given and received multiple briefings throughout their career.</p> <p>The focal point of this section is to discuss the briefings AOBs are responsible for and what may vary from previous positions.</p> </div>	
<p>A. Briefing Subordinate Staff</p> <p>Brief air support staff on the following:</p> <ul style="list-style-type: none"> • Operational plan • Risk management • Situation awareness 	
<p>B. Debriefing Personnel and Pilots</p> <ul style="list-style-type: none"> • Pilot information may be provided by ASGS. • Attain situation awareness for both your personnel and pilots. • Standardized topics and questions. <ul style="list-style-type: none"> – Days off and availability – Concerns – Welfare of personnel – How is communication going? (Deck, air-to-air, air-to-ground) 	Slide 3-10

OUTLINE	AIDS & CUES
<p>C. Role in the Morning Briefing</p> <p>Consider you are speaking to a large audience. Select topics that will be of value to that audience. Try to limit speaking time to 3 minutes or less.</p> <ul style="list-style-type: none"> • Reference the ICS 220. • Identify location of available resources. • Provide a quick summation of operational missions. • Review ordering procedures. • Incorporate the Aviation Safety Message (proper A/G frequency use, water drop directing, etc.). 	<p>Slide 3-11</p>
<p>EXERCISE: Morning Briefing</p> <p><u>Purpose:</u> Students will demonstrate their ability to provide appropriate information at a morning briefing.</p> <p><u>Time:</u> 20 minutes</p> <p><u>Format:</u> Group or individual exercise</p> <p><u>Instructions:</u></p> <ol style="list-style-type: none"> 1. Develop a briefing outline from the information found on the Twitchell Canyon ICS 220 prepared in the ICS 220 exercise. <p>Briefings should be 2-3 minutes and contain information that is relevant to the audience at a typical morning briefing.</p>	<p>Slide 3-12</p>

OUTLINE	AIDS & CUES
<p>2. Select 2–3 students to present briefings to the class (<i>Select students that did not give a NTSB accident briefing in Unit 0.</i>)</p> <p>3. Evaluate the briefings based on time and appropriateness of content.</p> <p><u>End of exercise.</u></p> <p>D. Aviation Conference Call</p> <ul style="list-style-type: none"> • Call attendees include AOBDs, dispatch, local aviation managers, Multiagency Coordinating Group (MAC)/Area Command (AC) coordinators. • Typically organized when multiple incidents with teams/large numbers of aviation assets assigned are in an area/GACC at planning level (PL) 4 and 5. • Provides opportunity to discuss needs, wants, and excess resources with other incidents. • Helps facilitate the lend/lease process for aircraft and personnel. • Helps to provide awareness of what is happening on other incidents. • Attendees address safety concerns. 	<p>Slide 3-13</p>

OUTLINE	AIDS & CUES
<p>E. After Action Reviews (AARs)</p> <ul style="list-style-type: none"> • Conduct AARs as needed (useful tool). • Be prepared to participate in the team AAR. • Be prepared to participate in the AA closeout. 	
<p>IV. DOCUMENTATION</p> <p>A. ICS 214, Unit Log</p> <ul style="list-style-type: none"> • Document significant events. <p>B. Documentation Package</p> <ul style="list-style-type: none"> • The AOBD compiles aviation package. • May include: pertinent general messages, land use agreements, airspace issues, SAFECOMs, external documentation, claims documents, daily copies of ICS 220, cost sheets, and print outs of A-numbers. • The DOCL is responsible for the entire incident documentation package. 	<p>Slide 3-14</p>

OUTLINE	AIDS & CUES
<p data-bbox="298 281 548 317">C. ICS 215A</p> <p data-bbox="391 367 1027 573">Required risk management documentation is a necessary part of the AOBD position. Coordination with Operations and Safety during the development of the ICS 215A makes it a relevant tool.</p> <p data-bbox="220 632 607 674">Review Unit Objectives.</p>	<p data-bbox="1081 625 1235 661">Slide 3-15</p>

Air Operations Summary		Prepared by Chris Gamble & Bill Hayes		Date Prepared 09/21/10	Time Prepared 2000									
1. Incident Name TWITCHELL CANYON		2. Operational Period 09/22/10 Wednesday Day Shift 0600 - 2000		Sunrise 0715	Sunset 1927									
3. REMARKS (Safety Notes, Hazards, Air Operations Special Equipment, etc.):														
<p>-Pilots on at 0800. Helibase briefing at 0800. -Use discretion for flying weather. Mixed winds at various altitudes. -Ensure fire traffic area limits are followed. -Order helicopters to support tactical line function through air attack, or contact helibase. -Foam approved for DIV A & H. Keep drops 300 ft. from streams. - KEEP CLEAR OF ALL WATER DROPS</p>														
6. PERSONNEL		Phone #	7. FREQUENCY	AM RX/TX	FM RX/TX	8. FIXED-WING	# Avail/Type/Make-Model/FAA#/Base(s)							
AOBD	Bill Hayes	435-790-7084	TFR/Fixed Wing	133.975		Air Attack	N999GB - Cedar City Airport N9QY - Cedar City Airport							
AOBD (T)	Chris Gamble	435-790-7095	Robr Wing	127.375										
ASGS	Larry Mabbutt	208-308-3983	Air to Ground 1, Fixed Wing		170.000	Lead Plane Air Tankers	Not assigned - request through Central Utah Dispatch							
HEB1	Mike Beyers	435-896-1652	Air to Ground 2, Rotor		168.6375									
ATGS	Ted Mason	208-850-8138	Deck		163.100									
ATGS	Isaac Shinkle		IA	124.575	154.310									
9. HELICOPTERS (Use additional Sheets As Necessary)														
FAA #	TY	MAKE/MODEL	BASE	AVAIL	START	REMARKS	FAA #	TY	MAKE/MODEL	BASE	AVAIL	START	REMARKS	
HT-718	1	S-54B	Richfield	0800	0830									
HT-719	1	S-54B	Richfield	0800	0830									
HT-737	1	S-64	Richfield	0800	0830									
HT-733	1	S-64	Richfield	0800	0830									
N132BH	3	A-Star B3	Richfield	0800	0830									

Air Operations Summary		Prepared by Chris Gamble & Bill Hayes				Date Prepared 09/21/10	Time Prepared 2000							
1. Incident Name TWITCHELL CANYON		2. Operational Period 09/22/10 Wednesday Day Shift 0600 - 2000				Sunrise 0715	Sunset 1927							
9. HELICOPTERS (Continued)														
FAA #	TY	MAKE/MODEL	BASE	AVAIL	START	REMARKS	TY	FAA #	MAKE/MODEL	BASE	AVAIL	START	REMARKS	
10. TASK/MISSION/ASSIGNMENT (Type/Function Includes: Air Tactical, Relandant, Recon, Personnel Transport, Water Dropping, S&R, etc.)														
TYPE/FUNCTION		NAME OF PERSONNEL OR CARGO (if applicable) OR INSTRUCTIONS FOR TACTICAL AIRCRAFT										MISSION START	FLY FROM	FLY TO
Water Delivery		As needed										TBA	Richfield	Fire
Cargo/Recon/Personel Shuttle		As needed										TBA	Richfield	Fire
Dip Sites:		Shingle Creek: 38 34.38 x 112 27.26, Cove Fort Dip: 38 36.28 x 112 33.17, Freemont Dip: 38 34.20 x 112 20.07, Indian Creek Dip: 38 25.33 x 112 35.47.												
Helispots		H1 38 25.45 x 112 31.17, 7,616ft. H2 38 25.58 x 112 28.87, 8,491ft. H3 38 28.20 x 112 25.36, H6 38 28.06 x 112 24.51, 10,000ft.												
Repeater		38 28.06 x 112 24.51, 10,623ft.												
Rattlesnake Spike		38 30.39 x 112 25.83, 8,100ft.												

Fire Weather Forecast

FORECAST NO: 16
PREDICTION FOR: Day SHIFT
SHIFT DATE: Thursday, Sep 23

NAME OF FIRE: Twitchell Canyon
UNIT: Fishlake National Forest
SIGNED: Ian Morrison
Incident Meteorologist

FORECAST ISSUED: Wednesday, Sep 22

WEATHER DISCUSSION:

...RED FLAG WARNING FROM 1000 TODAY THROUGH 2000 THIS EVENING ...

A trough axis approaching the area will maintain gusty SW winds through today. Ahead of the trough, increased moisture from the south will bring mostly cloudy skies and the possibility of showers and thunderstorms today. A Red Flag Warning is in effect for strong winds, low RH, and the possibility of lightning strikes. After the trough axis moves east of the area, a stable atmosphere will prevail through Sunday.

TODAY:

WEATHER: Mostly Cloudy (60-80% cloud cover). Scattered showers and thunderstorms.

TEMPERATURES: Maximum 65-70 (8000 ft) and 58-62 (9500 ft). **Trend: down 5**

MIN HUMIDITY: Minimum 15-25% (8000 ft) and 20-30% (9500 ft). **Trend: Up 7%**

20 FT WINDS:

RIDGES: Southwest at 20-30 mph with gusts to 45 mph.

SLOPES/VALLEYS: Downslope/downvalley 2-5 mph through 1000am...then Southwest 10-15 mph with gusts to 25 mph.

INVERSION: 500 ft deep or less in mountain valleys, breaking around 0900-1000.

HAINES INDEX 5 (Moderate)

LAL: 2 CWR: 20%

*****THUNDERSTORMS IMPLY STRONG GUSTY AND ERRATIC WINDS*****

TONIGHT: Mostly cloudy in the evening...becoming partly cloudy after midnight. Min temp: 38-44 at 8000 ft. Max RH...38-44% on ridges and slopes and 44-54% in bottom of drainages. Northwest winds at 5-15 mph with gusts to 25 mph on the ridges through the night. Mid slope and valleys becoming downslope at 3-7 mph with local gusts to 12 mph. **Mountain valley inversion: about 500 ft deep.**

OUTLOOK FOR Thursday: Sunny (0-15% cloud cover).

TEMPERATURES: Maximum 68-72 (8000 ft) and 61-65 (9500 ft). **Trend: up 2**

MIN HUMIDITY: Minimum 16-20% (8000 ft) and 20-25% (9500 ft). **Trend: down 7%**

20 FT WINDS:

RIDGES: West winds 5 to 15 mph.

SLOPES/VALLEYS: Downslope/downvalley 2-5 mph through 1000am then upslope 6-10 mph after 1000am.

INVERSION: 500 ft deep in mountain valleys, breaking between 1000-1100

HAINES INDEX 5 (Moderate)

LAL: 1 CWR: 0%

EXTENDED FORECAST: Thursday - Sunday:

Friday: Sunny. Max temp: 70-74 (8000 ft) and 60-65 (9500 ft). Min RH 10-16%. Light winds above the ridges with downslope/upslope flow along the slopes and valleys. **HAINES INDEX: 5**

Saturday: Sunny. Max temp: 71-75 (8000 ft) and 61-66 (9500 ft). Min RH 10-16%. Light winds above the ridges with downslope/upslope flow along the slopes and valleys. **HAINES INDEX: 5**

Sunday: Mostly sunny. Max temp: 71-75 (8000 ft) and 61-66 (9500 ft). Min RH 17-22%. Light winds above the ridges with downslope/upslope flow along the slopes and valleys. **HAINES INDEX: 5**

AIR OPERATIONS SUMMARY

PREPARED BY: _____ PREPARED DATE/TIME: _____

1. INCIDENT NAME			2. OPERATIONAL PERIOD DATE: _____			START TIME: _____			END TIME: _____			SUNRISE: _____			SUNSET: _____								
3. REMARKS (Safety Notes, Hazards, Air Operations Special Equipment, etc.):						4. MEDEVAC A/C:						5. TFR: Radius: _____ NM Altitude: _____ MSL Centerpoint: Lat: _____ Long: _____											
6. PERSONNEL						7. FREQUENCIES						8. FIXED-WING #Available/Type/Make-Model/ FAA N#/ Bases											
AOBD:			Phone			AM		FM				Airtankers											
ATGS:			AIR/AIR FW:																				
HLCO:			AIR/AIR RW:																				
ASGS:			AIR/GROUND:			COMMAND: (Simplex)						Leadplanes											
HEBM:			COMMAND RPT			Rx: _____		Tx: _____				Base FAX#											
ATB MGR:			DECK FREQ.:									ATGS Aircraft											
			TOLC FREQ.:									Other											
9. HELICOPTERS (Use Additional Sheets As Necessary)																							
FAA N#	TY	MAKE/MODEL	BASE	AVAIL	START	REMARKS	FAA N#	TY	MAKE/MODEL	BASE	AVAIL	START	REMARKS	FAA N#	TY	MAKE/MODEL	BASE	AVAIL	START	REMARKS			

AIR OPERATIONS SUMMARY

TYPE/FUNCTION	NAME OF PERSONNEL OR CARGO (if applicable) OR INSTRUCTIONS FOR TACTICAL AIRCRAFT	MISSION START	FLY FROM	FLY TO

220 ICS (2/99)

PAGE 2 OF 2

NFES 1351

RESOURCE ORDER		Initial Date/Time		3. Incident / Project Order Number		Financial Codes	
AIRCRAFT		09/21/10 0800		UT-CCC-050004		9. Jurisdiction / Agency Utah Dispatch	
5. Descriptive Location Twitchell Canyon		2. Incident / Project Name Twitchell Canyon				10. Ordering Office National Interagency Coordination Center	
		6. TWN		8. Incident Base / Phone Number			
		25S		ID-NIC (Dispatch) 208-387-5400			
		3.9,37.26 N		Dispatch 435-208-4444			
		LONG. - 112.13.23 W					
11. Aircraft Information		Contact Name		Assigned Frequency		Other Aircraft / Hazards	
Bearing	Distance	VOR					
52	40	MLF					
147	43	DTA					
350	56	BCE					
12. Request Number	Ordered Date/Time	From	To	City	Resource Requested	Needed Date/Time	Deliver To
A-1	01/10/13 1148 MST	Dispatch 435-208-4444	ID-NIC	1	Helicopter, Type 2 Standard	09/23/10 0800 MST	Twitchell Canyon
Travel Mode flying from TWF to RIF		Financial Code		Special Needs Need T2S and module			
13. User Documentation				Reporting Instructions			
Req. No.				Documentation			
A-1				Request A-1 - Helicopter, Type 2 Standard - [UT-CCC-050004] Twitchell Canyon [EXT] has been filled with N56789 (ID-NIC) by Joshua Haney@ID-NIC ROSS.			
				Entered By			
				Joshua Haney (ID-NIC)			
				01/10/2013 11:51 MST			

RESOURCE ORDER		Initial Date/Time		2. Incident / Project Name		3. Incident / Project Order Number		Financial Codes	
OVERHEAD		09/21/10 0800		Twitchell Canyon		UT-CCC-050004		9. Jurisdiction / Agency Utah Dispatch	
5. Descriptive Location Twitchell Canyon		Base MDM		8. Incident Base / Phone Number		10. Ordering Office		National Interagency Coordination Center	
		25S		ID-NIC (Dispatch) 208-387-5400					
		LAT: 38.37 26 N		Dispatch 435-208-4444					
		LONG: 112 13 23 W							
11. Aircraft Information									
Bearing	Distance	VOR	Contact Name	Frequency Type	Assigned Frequency	Reload Base	Other Aircraft / Hazards		
52	40	MLF							
147	43	DTA							
350	56	BCE							
12. Request Number									
O-1	01/10/13 1158 MST	Dispatch 435-208-4444	HELICOPTER MANAGER, SINGLE RESOURCE (HMGB)	ID-NIC	09/23/10 0800 MST	Twitchell Canyon	ID-NIC	01/10/13 1202 MST	John Smith (ID-NIC)
Travel Mode helicopter N56789									
O-2	01/10/13 1158 MST	Dispatch 435-208-4444	HELICOPTER CREWMEMBER (HECM)	ID-NIC	09/23/10 0800 MST	Twitchell Canyon	ID-NIC	01/10/13 1205 MST	Mike Johnson (ID-NIC)
Travel Mode flying with N56789									
O-3	01/10/13 1158 MST	Dispatch 435-208-4444	HELICOPTER CREWMEMBER (HECM)	ID-NIC	09/23/10 0800 MST	Twitchell Canyon	ID-NIC	01/10/13 1207 MST	Bryant, Robbie (ID-NIC)
Travel Mode flying with N56789									
O-4	01/10/13 1158 MST	Dispatch 435-208-4444	HELICOPTER CREWMEMBER (HECM)	ID-NIC	09/23/10 0800 MST	Twitchell Canyon	ID-NIC	01/10/13 1209 MST	Wilson, Kobe (ID-NIC)
Travel Mode flying with N56789									
13. User Documentation									
Req. No.	Documentation								
O-1	Request O-1 - HELICOPTER MANAGER, SINGLE RESOURCE (HMGB) - [UT-CCC-050004] Twitchell Canyon [EXT] has been filled with John Smith (ID-NIC) by Joshua Haney@ID-NIC ROSS.								
O-2	Request O-2 - HELICOPTER CREWMEMBER (HECM) - [UT-CCC-050004] Twitchell Canyon [EXT] has been filled with Mike Johnson (ID-NIC) by Joshua Haney@ID-NIC ROSS.								
O-3	Request O-3 - HELICOPTER CREWMEMBER (HECM) - [UT-CCC-050004] Twitchell Canyon [EXT] has been filled with Bryant, Robbie (ID-NIC) by Joshua Haney@ID-NIC ROSS.								
O-4	Request O-4 - HELICOPTER CREWMEMBER (HECM) - [UT-CCC-050004] Twitchell Canyon [EXT] has been filled with Wilson, Kobe (ID-NIC) by Joshua Haney@ID-NIC ROSS.								

Run Date: 1/10/2013
 13:11 CST

Twitchell Canyon

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UT-CCC-050004

Run Date: 1/10/2013
 13:11 CST

UNIT OVERVIEW

Course	Air Operations Branch Director, S-470
Unit	4 – Coordination and Leading Assigned Personnel
Time	4 hours

Objectives

1. Identify sources both internal and external to the incident that the AOBD must coordinate with.
2. Identify interdependent activities that must be coordinated.
3. Establish work assignments and performance expectations for assigned personnel.
4. Describe how to monitor assigned personnel performance and provide feedback.

Special Instructions

This unit contains a panel exercise. There is a list of suggested panel members listed on page 4.17. The instructor or course coordinator will need to make copies of the exercise to give to the panel members well in advance of their participation in the exercise.

Strategy

This unit builds upon the concepts presented in Unit 1 by assuming that the student has assumed AOBD responsibilities. As an established AOBD, the student will coordinate with many internal and external incident sources and lead the personnel assigned to them. The lesson will progress from initial information gathering to assigning resources and coordinating activities with appropriate contacts. Leadership principles will be applied where appropriate in instruction and exercises.

Instructional Method(s)

- Instructor led discussion
- Panel Discussion

Instructional Aids

- Personal computer with LCD projector and presentation software

Exercise(s)

- Meeting With Dispatch
- Coordination With External Resources
- Leadership Challenges
- Panel Discussion

Outline

- I. Coordination with Local Dispatch
- II. Coordination With Vendors and Contractors
- III. Coordination With Other Incidents and Coordinating Groups
- IV. Coordination With External Resources
- V. Leading Assigned Personnel

Aids and Cues Codes

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

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HO – Handout	Slide – PowerPoint

UNIT PRESENTATION

COURSE: Air Operations Brach Director, S-470

UNIT: 4 – Coordination and Leading Assigned Personnel

OUTLINE	AIDS & CUES
<p>Before beginning this unit, panel members should have copies of the panel discussion introduction and the exercise instructions.</p> <p>Present unit title slide.</p> <p>Present unit objectives.</p>	<p>IR 4-1 IR 4-2</p>
<p>I. COORDINATION WITH LOCAL DISPATCH</p> <p>Coordination with local dispatch office is critical to the success of the AOBD. It is important to build a strong rapport and act professionally.</p> <p>Be aware of existing workload of dispatchers and local personnel. Try to minimize your impact on their operations.</p> <p>Maximize the efficiency of interactions by being prepared and gathering as much information/situation awareness as possible.</p> <p>When coordinating with local dispatch the AOBD will normally be working with the aircraft desk.</p>	<p>Slide 4-1 Slide 4-2 Slide 4-3</p>
<p>A. Airspace Coordination</p> <p>Is there an airspace coordinator available or assigned? Does the complexity of the incident require one?</p>	<p>Slide 4-4</p>

OUTLINE	AIDS & CUES
<p>Temporary Flight Restrictions (TFR)</p> <ul style="list-style-type: none"> • Review and validate • Special Use Airspace (SUA) • Military Training Routes (MTR) • Cooperator activities (e.g., local law enforcement activities) • Coordinate information exchange with unit's normal initial attack activities. • Flight routes • Need to establish corridors • Frequencies <p>B. Resources</p> <p>Check aviation resource orders:</p> <ul style="list-style-type: none"> • Ordered and assigned. • Unable to Fill (UTF) list. • Modify or change resource orders (e.g., mission change, effected resources on order). <p>Coordinate and validate exchange of information regarding resource orders.</p> <p>Provide glide path information to dispatch, as available.</p>	

OUTLINE	AIDS & CUES
<p>C. Communications</p> <ul style="list-style-type: none"> • Verify assigned frequencies. • Order additional frequencies as necessary. • Phone lists <p>D. Ordering</p> <ul style="list-style-type: none"> • Ordering process <ul style="list-style-type: none"> – Special attention orders (e.g., portable retardant base, portable towers). – Personnel • Anticipated timeframes • Expanded dispatch • Aircraft ordering protocols <ul style="list-style-type: none"> – Rotor-wing resources – Fixed-wing resources • Procedures and protocols for ordering airtankers. <ul style="list-style-type: none"> – Determining start/stop times for airtankers. <p>E. Hazard Map</p> <p>Obtain copies for each incident aviation base.</p>	<p>Slide 4-5</p>

OUTLINE	AIDS & CUES
<p>F. Flight Following</p> <ul style="list-style-type: none"> • Within the incident, local dispatch may be used to supplement. • To/from incident – once aircraft leaves TFR, local/national protocols are in effect. • Responsibilities between helibase and local unit dispatch (ensuring positive hand-off). • Automated Flight Following (AFF) (local protocol) • VIP flights protocol 	<p>Slide 4-6</p>
<p>G. Aircraft Emergency Response/Medevac Plan</p> <ul style="list-style-type: none"> • Ensure all required information is gathered for the development of your crash rescue plan and medevac plan. • Coordinate with all participants that will be involved in a medevac and review the process. • Refer to the most recent version of the Interagency Aviation Mishap Response Guide and Checklist (PMS 503). http://www.nwcg.gov/pms/pubs/pubs.htm 	<p>Slide 4-7</p>

OUTLINE	AIDS & CUES
<p>H. Aviation Facilities</p> <p>Aviation sites in proximity to the incident:</p> <ul style="list-style-type: none"> • Airports • Heliports • Military bases • Status of other incidents in the area with aviation activity and location of these incident bases. • Alternate aviation sites if necessary for expansion. <p>I. Initial Attack (IA)</p> <ul style="list-style-type: none"> • IA area • Communication procedures • Airspace coordination • Sharing of assets • Authorities 	<p>Slide 4-8</p>

OUTLINE	AIDS & CUES
<p>EXERCISE: Meeting with Dispatch</p> <p><u>Purpose</u>: Students will demonstrate their knowledge of information that must be coordinated with, and obtained from, the hosting agency dispatch on an incident.</p> <p><u>Time</u>: 20 minutes</p> <p><u>Format</u>: Class discussion</p> <p><u>Supplies</u>: None</p> <p><u>Instructions</u>:</p> <ol style="list-style-type: none"> 1. This exercise will be completed as a class. 2. Read the scenario to students. 3. Allow students approximately 5 minutes to individually develop their response. 4. Have students give their suggested answers. 5. Review and discuss the answers and provide feedback to the students. Example of analysis include: <ul style="list-style-type: none"> • Are the responses prioritized in a manner that makes sense? • Is the information that is being requested available from other sources? • Are the expectations realistic given the workload of the dispatch center? 	<p>Slide 4-9</p>

OUTLINE	AIDS & CUES
<p><u>Scenario:</u> When you arrive at the local agency dispatch center you see that they are extremely busy. There has just been another flurry of activity and they are managing several small fires within their area of responsibility. When you introduce yourself to the person at the aircraft desk, she seems busy but courteous and asks how she can help.</p> <p>Prepare a prioritized list of information and documents you would like to receive from the local dispatch office.</p> <p><u>End of exercise.</u></p> <p>II. COORDINATION WITH VENDORS AND CONTRACTORS</p> <p>The AOBD is indirectly responsible for assuring that contracts are administered properly.</p> <p>If a contract issue cannot be handled on-site then the issue should be elevated to the appropriate contracting official.</p> <p>As equipment, personnel, services, etc. are added to the incident the AOBD must ensure that span of control is maintained.</p> <p>Vendors and contractors may be interlaced throughout the aviation operation including but not limited to:</p> <p>A. Equipment</p> <ul style="list-style-type: none"> • Helibase trailers • Portable toilets and services 	<p>Slide 4-10</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Water tenders • Dust abatement • Portable retardant <p>B. Personnel</p> <ul style="list-style-type: none"> • Aircraft support personnel services • Infrared detection (IR) <p>III. COORDINATION WITH OTHER INCIDENTS AND COORDINATING GROUPS</p> <p>You may be required to coordinate with other incidents in the area as well as other coordinating groups and incident management teams, e.g., MAC Group, Area Command, and National Incident Management Organization (NIMO).</p> <p>When working with other incidents and coordinating groups, maintain professionalism and follow protocols.</p> <ul style="list-style-type: none"> • Airspace Issues <ul style="list-style-type: none"> – TFRs – Entry points, flight routes, and flight corridors • Lend/lease: Sharing aircraft with other incidents. • Excesses or needs: When you have more than what you need/what you need. 	<p>Slide 4-11</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none">• Participation in daily conference calls• Shared frequencies <div style="border: 2px solid black; padding: 5px; margin: 10px 0;">Discuss the importance of following protocols when working with other incidents and coordinating groups.</div> <p>IV. COORDINATION WITH EXTERNAL RESOURCES</p> <p>There are resources external to the team that you may coordinate with throughout the incident.</p> <p>These may include the following:</p> <ul style="list-style-type: none">A. Local Airport AuthorityB. MediaC. Land OwnersD. Adjacent Incident Personnel and/or Area CommandE. Aviation Support Groups, e.g., safety, maintenance, contractual, operations.F. Nonincident Fixed-Wing Air Bases	<p>Slide 4-12</p>

OUTLINE	AIDS & CUES
<p>EXERCISE: Coordination with External Resources</p> <p><u>Purpose:</u> Students will demonstrate their knowledge of the information and interactions with resources external to the IMT and hosting agency.</p> <p><u>Time:</u> 30 minutes</p> <p><u>Format:</u> Group or individual exercise</p> <p><u>Materials Needed:</u> None</p> <p><u>Instructions:</u></p> <ol style="list-style-type: none"> 1. Assign topics A – F to individual students or groups. 2. Groups complete the following information regarding interactions with their assigned resource. <ul style="list-style-type: none"> • Why might this interaction need to occur? • What is the nature of the relationship? <ul style="list-style-type: none"> – What does the resource need from the AOBD? – What does the AOBD need from the resource? • What type of information needs to be coordinated? 3. Allow students approximately 10 minutes to develop their response. 4. Have students present their answers. 5. Analyze each group’s responses prior to moving on the next group. 6. Instructor will conclude exercise by covering the Military Resources (Item G). <p><u>End of exercise.</u></p>	<p>Slide 4-13</p>

OUTLINE	AIDS & CUES
<p data-bbox="300 283 682 325">G. Military Resources</p> <p data-bbox="393 367 990 493">Reference the Military Use Handbook, (Chapter 70, Aviation) for utilization of military aviation assets.</p> <p data-bbox="393 535 933 619">When utilizing military support, use national or state expertise.</p> <p data-bbox="393 661 1015 745">What approvals are needed for use (FS or DOI)?</p> <p data-bbox="393 787 998 913">Who is the point of contact or liaison for information regarding activation of National Guard and/or active military?</p> <ol style="list-style-type: none"> <li data-bbox="393 955 722 997">1. National Guard <ul style="list-style-type: none"> <li data-bbox="490 1039 1039 1123">• Usually under agreement with the state. <li data-bbox="490 1165 1047 1249">• Usually trained in and familiar with firefighting operations. <li data-bbox="490 1291 950 1375">• May have frequent crew rotations. <li data-bbox="393 1417 722 1459">2. Active military <ul style="list-style-type: none"> <li data-bbox="490 1501 1047 1669">• May or may not have extensive knowledge of firefighting operations and fire air operations in particular. <li data-bbox="490 1711 1039 1837">• According to the Military Use Handbook, they will have received initial training. 	<p data-bbox="1079 283 1234 325">Slide 4-14</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Should only be used for the mission for which they are designated (e.g., passenger transport, water dropping). <p>V. LEADING ASSIGNED PERSONNEL</p> <p>The AOBD is responsible for providing quality leadership. Apply the leadership principles of duty, respect, and integrity to your position.</p> <p>You will be held accountable for decisions made by your staff.</p> <p>A. Establishing Work Assignments</p> <ul style="list-style-type: none"> • Determine hours of operation. • Determine need to stagger resources. • Plan for scheduled maintenance issues. • Assignment extensions. • Nonfederal duty-day policy may be more or less restrictive. • Provide adequate lead time to allow your staff to successfully perform assigned tasks. <p>How might various agency policies effect your operation or planning?</p> <p>If you have conflicting policies, how do you determine which to follow?</p>	<p>Slide 4-15</p>

OUTLINE	AIDS & CUES
<p>B. Performance Expectations</p> <ul style="list-style-type: none"> • Clearly state expectations. • Convey leader's intent. <ul style="list-style-type: none"> – Task – Purpose – End State • Ensure subordinates understand assignments. <p>C. Monitoring Assigned Personnel</p> <ul style="list-style-type: none"> • Provide for the safety and welfare of assigned resources. • Maintain situation awareness in order to anticipate needed actions. • Ensure the aviation staff is accountable for all personnel and resources. <p>D. Feedback</p> <ul style="list-style-type: none"> • Continually evaluate performance. • Conduct debriefings with staff whenever possible. • Provide fair and accurate evaluations. • If there is a significant concern, follow-up with the issues. • Credit staff for good performance. 	

OUTLINE	AIDS & CUES
<p>E. Personnel Issues</p> <ul style="list-style-type: none"> • Document • Elevate the issue as appropriate to involve the Human Resource Officer and the Incident Commander. <p>ADMINISTER EXERCISE: Leadership Challenges</p> <p><u>Purpose:</u> Discuss leadership challenges a new AOBD will encounter.</p> <p><u>Time:</u> 15 minutes</p> <p><u>Instructions:</u> Discuss the following leadership questions as a class:</p> <ul style="list-style-type: none"> • How do you manage and lead an aviation staff that is located in several geographic locations? • How do you establish cohesiveness among staff or assigned resources? • How can you successfully establish yourself as the leader in an existing operation? • What leadership challenges do you expect to face as an AOBD? <p><u>End of exercise.</u></p>	

OUTLINE	AIDS & CUES
<p>The panel will:</p> <ul style="list-style-type: none"> • Discuss intersectional relationships. • Identify topics and coordination needed by the AOBD to accomplish the job. • Serve as expert advisors to the scenarios created during the exercise. 	<p>Slide 4-18</p>
<p>Have each panel member give an overview of their position or section.</p> <p>Before beginning the exercise, review the instructions with students and answer any questions.</p>	<p>IR/SR 4-1 IR/SR 4-2</p>
<p>Review Unit Objectives.</p>	<p>Slide 4-19</p>

INTERACTION SCENARIOS/PANEL EXERCISE

INFORMATION FOR PANEL MEMBERS

As a panel member, use the following outline to give an overview of your section or position and how it interacts with the Air Operations Branch Director.

You should then facilitate an interactive discussion with the students to draw out and reinforce the main points where interaction is important, how problems can arise, and how they can be solved.

Make sure that you cover each position listed in the outline that is appropriate for your presentation.

Examples of common responsibilities and interactions:

Incident Commander:

- The Incident Commander is responsible for all incident activities.
- Brief Command and General Staff.
- Determine information needs.
- Approve requests for additional resources and requests for release of resources.

Safety Officer:

- Evaluate operating procedures. Update or modify procedures to meet the safety needs on the fire.
- Review Incident Action Plans to ensure that safety issues have been identified and mitigated.
- Analyze observations from staff and other personnel.

Logistics Section Chief:

- Gather information necessary to assess incident assignment and determine immediate needs and actions.
- Conduct logistics section meeting and/or briefing.
- Ensure Communication Plan, Medical Plan, and Transportation Plan are updated and provided to Planning Section.

Finance Section Chief:

- Meet with assisting and cooperating agency representatives as required.
- Provide input on financial and cost analysis matters.
- Gather pertinent information from briefings with responsible agencies.

Planning Section Chief:

- Conduct planning meetings and operational briefings.
- Advise General Staff of any significant changes in incident status.
- Prepare and distribute Incident Commander's orders.

Operations Section Chief:

- Determine needs and request additional resources.
- Brief and assign operations personnel in accordance with the Incident Action Plan.
- Report information about special activities, events, and occurrences.

Aircraft Dispatcher/Initial Attack Dispatcher:

- Communicates directly with aircraft and/or other aviation personnel.
- Monitors radio traffic for aircraft status.

Other:

- Fill with other resources that may meet local or regional specific needs.
Examples could include:
 - Tribal liaisons
 - Military liaisons
 - Human Resource Specialist

EXERCISE: INTERACTION SCENARIOS AND PANEL DISCUSSION

Purpose: Students will prepare scenarios dealing with AOBD responsibilities requiring interaction with their staff, section chiefs, command and general staff positions, dispatch, and entities external to the incident. The scenarios will be presented to a panel for discussion.

The intent of this exercise is to encourage students to think about the interaction and information required in different situations. The ability to consider these requirements in advance can make the AOBD more efficient and effective in their incident management role.

Time: 2 hours

Format: Group exercise followed by a panel discussion.

Materials Needed: Flip charts, markers, scenario development worksheet.

Instructions:

1. Students should be divided into groups of 3 or 4.
2. Each group will select 2-3 scenario topics to present. Topics can be selected from the included list, created by the group, or a combination of both. Ensure that groups do not all choose the same scenarios. (EXAMPLE: Group 1 can choose from Scenarios 1-5. Group 2 can choose from Scenarios 6-10, etc.)
3. Each scenario will require:
 - Interaction by the AOBD with other ICS functional areas.
 - A primary and secondary contact as well as the type of information that will be given and received.
4. Panel members and cadre members should be present to help answer questions during the development phase of the exercise.
5. Students should be given at least 15 minutes to develop their scenarios.
6. Students should document their scenarios using the Scenario Development Form located on SR 4-2 pages 4.21 - 4.23.

7. Group presentation of scenarios:

Each group will present their scenarios to the panel (10-15 minutes per group). The panel will provide feedback concerning the flow of information and the content of what the students expect to receive from various positions. Other student groups are encouraged to ask questions and make comments concerning the scenarios.

The time allotted for each group's presentation will need to be monitored to ensure all groups have adequate time to present to the panel. Time should also be reserved at the end of the presentations for an open question and answer period with the panel.

Example scenarios:

1. On a wildland fire, there is a medical emergency that is going to require a medevac helicopter. The responding helicopter needs to enter your TFR.
2. You are notified that you have severe weather conditions approaching that could potentially damage the aircraft assigned to the incident. The ASGS is saying that several pilots want to reposition to another location.
3. During the evening planning meeting, you are approached by the Safety Officer who has been informed that there are unsafe aviation practices occurring at H11.
4. You have helicopter managers that continue to sleep in a nearby motel when the directions were given to sleep in camp.
5. Your ASGS comes back to camp midmorning and reports 3 of the helicopters at helibase have been broken into. The batteries were stolen and other items are missing.
6. The IC confronts you with a request to fly the local politicians in a helicopter.
7. Your helibase is located on the only suitable piece of ground or area in proximity to the ICP. The landowner would like a flight to see where his livestock is located.
8. Your fire is has now been branched and you are being asked to consider establishing a second helibase for the new branch to support operations.
9. You have an appropriate configuration of helicopter types on your helibase to support the 3-day/ 24–48–72 operations planning cycle. National activity increases and you are asked to give up some of the helicopters.
10. Operations decide to spike out the crews that were flown in the morning, and asks logistics to supply food for them. Logistics agrees, when the food arrives at helibase it is unmarked and too late to be transported to the crews.
11. Communication breakdown between the line and the ordering process.
12. Before the morning briefing, you find out the ICS 220 is wrong in the IAP.

Example scenarios (continued):

13. A situation unit leader orders a private aviation resource (IR flight) without involving the AOBD.
14. Due to bleed over from the adjacent fire, the communications unit leader asks you to change frequencies in the middle of the shift.
15. Air support brings a concern to you about a harassment issue involving agency personnel and contractors.
16. HR comes to you (AOBD) and has been informed by the employee's local unit that there is a medical emergency and must be demobed immediately. The employee is in an incident critical position.
17. Public information officer is requesting to bring a grade school class to helibase for a tour.
18. You need to shut down a county airport.
19. While inspecting the helibase, a Safety Officer notices several large cottonwood snags in the sleeping area and requests that you address this.
20. Safety Officer is unaware of the aviation risk mitigation process and is concerned about the safety of the operation.
21. Operations is suggesting an aerial ignition operation 2 days out. What do you need to support the mission?
22. Operations are changing the tactics going from indirect to direct line construction in the wilderness with 10 crews.
23. A helicopter module is turning in Crew Time Reports showing 16-hour days with no breaks.
24. An Emergency Shift Ticket is filled out for a water source at Smith ranch for last 10 days.
25. You were just notified that you have been dropping retardant on area that requires cost sharing.

INTERACTION SCENARIO DEVELOPMENT FORM

Document your scenarios using the following forms. Choose from the provided examples or create your own. The scenarios must require interaction between the AOB and at least two other functional areas.

Scenario 1:	
Primary contact:	Information given/received:
Secondary contact:	Information given/received:
Other contacts:	Information given/received:

Scenario 2:

Scenario 2:	
Primary contact:	Information given/received:
Secondary contact:	Information given/received:
Other contacts:	Information given/received:

Scenario 3:

Primary contact:	Information given/received:
Secondary contact:	Information given/received:
Other contacts:	Information given/received:

UNIT OVERVIEW

Course Air Operations Branch Director, S-470

Unit 5 – Daily Operations and Legal Requirements

Time 1 hour

Objectives

1. Analyze current situation to prepare for the next operational period.
2. Identify and discuss safety and legal requirements.

Strategy

Discuss moving from current situation towards long range planning for the upcoming operational periods, and the safety, and legal requirement of the AOBD position.

Instructional Method(s)

- Facilitate a discussion

Instructional Aids

- Personal computer with LCD projector and presentation software

Exercise(s)

- NTSB Accident Review Discussion

Evaluation Method(s)

- None

Outline

- I. Monitoring and Evaluating Daily Aviation Operations
- II. Safety and Legal Requirements

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: Air Operations Branch Director, S-470

UNIT: 5 – Daily Operations and Legal Requirements

OUTLINE	AIDS & CUES
Present unit title slide.	Slide 5-1
Present unit objectives.	Slide 5-2
<p>I. MONITORING AND EVALUATING DAILY AVIATION OPERATIONS</p> <p>Ensure that information is collected, completed, and available.</p> <p>A. Documentation and Information</p> <p>Collect and process incident reports and daily fiscal information as required by the incident.</p> <ul style="list-style-type: none"> • Flight hours flown. • Analyze aircraft cost summaries. • Document gallons of water, foam, and retardant dropped. • Document number of personnel transported. 	Slide 5-3
Review the Day in a Life of the AOB. Discuss other examples that may not be on the list.	IR/SR 5-1

OUTLINE	AIDS & CUES
<p>Fiscal information may be used in the following:</p> <ul style="list-style-type: none"> • Cost sharing among different agencies. • Recovery/suppression costs. • Planning purposes. • Monitoring efficiency. • Fire narrative and transition documents. <p>B. Gather Intelligence and Information for Future Operational Planning</p> <ul style="list-style-type: none"> • Obtain status and availability of aircraft and personnel. • Check with operations before releasing resources. • Consider alternate locations for expansion of air operation. • Conduct informal meetings with operations. • Attend planning and pre-planning meetings. • Participate in aviation conference calls. • Gather intelligence from local agency and private sources. 	

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Complete actions within established timeframes. <p>C. Incident Objectives and Tactics</p> <p>Evaluate incident objectives and/or tactics to ensure appropriate aviation management principles are applied.</p> <p>It may be necessary to provide alternatives to tactics being proposed in an effort to ensure appropriate use of aviation assets.</p> <ul style="list-style-type: none"> • Monitor operational climate. • Monitor and evaluate air operations program to ensure assets are being appropriately utilized. • Ensure daily interaction and feedback from air operations staff. • Confirm with operations whether or not objectives are being met. 	
<p>II. SAFETY AND LEGAL REQUIREMENTS</p> <p>A. General Considerations</p> <ol style="list-style-type: none"> 1. Determine which agency has jurisdictional authority for the incident. This should have been clarified at the AA's briefing. Consult that agency's national aviation policy. 	<p>Slide 5-4</p>

OUTLINE	AIDS & CUES
<p>2. Determine jurisdictional agency's policy regarding key operational issues where areas of difference among agencies may exist:</p> <ul style="list-style-type: none"> • Helicopter load calculations. • Personal Protective Equipment (PPE). • Pilot duty day/flight time limitations. • Adoption of interagency guides for helicopters and air tanker base operations as policy or as guidance only. <p>B. Incidents Where Federal Agency Has Jurisdictional Control</p> <ul style="list-style-type: none"> • Review policy manuals and guides. • Adoption of interagency guides has standardized operations. <p>C. Incidents on State or Local Jurisdiction Lands</p> <ul style="list-style-type: none"> • Policy may be more or less restrictive in certain areas. 	

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • If Federal resources are involved in a nonfederal incident under state/local jurisdiction, it is essential that the AOBD determine differences in policy and develop an operating procedure to accommodate all agencies' need to operate within each policy requirements. <p>Remember these key points:</p> <ul style="list-style-type: none"> • Participating agency resources cannot operate in a less restrictive manner than their agency's policy and procedures dictate, regardless of which agency has jurisdictional responsibility for the incident. • If jurisdictional agency's policy is more restrictive, then all resources must operate under those restrictions. <p>EXERCISE: NTSB Aviation Accident Review</p> <p><u>Purpose:</u> Building on the previous NTSB exercise, students will now apply what they know about the AOBD position to how it relates to their accident scenarios.</p> <p><u>Time:</u> 20 minutes</p> <p><u>Format:</u> Students work in small groups of 3 to 5</p> <p><u>Materials Needed:</u> Flip charts, markers</p>	<p>Slide 5-5</p>

OUTLINE	AIDS & CUES
<p><u>Instructions:</u></p> <ol style="list-style-type: none">1. Work in small groups and refer back to the NTSB Accidents the groups gave briefings on in Unit 0.2. Within each group, look at the aviation accidents and take into consideration safety and legal requirements and AOBD position duties and responsibilities.3. Keep in mind that some of the aviation accidents did not occur during firefighting operations. For the non-fire incidents, treat them like an all-risk assignment that <i>would have</i> a management team in place with an AOBD.4. Have students answer the following questions and discuss as a class:<ul style="list-style-type: none">• What safety and legal issues could the AOBD have addressed?• What steps could have been taken by the AOBD to prevent this accident?• Does this aircraft accident have any similarities with operations you've been a part of? <p><u>End of exercise.</u></p>	

OUTLINE	AIDS & CUES
<p data-bbox="298 281 1016 319">D. Public and Civil Resources (Pressler Bill)</p> <div data-bbox="207 369 1052 470" style="border: 2px solid black; padding: 5px;"> <p data-bbox="220 380 1023 459">Review the Briefing Paper on the Pressler Bill and discuss any questions students may have.</p> </div> <ul data-bbox="396 520 1032 1234" style="list-style-type: none"> <li data-bbox="396 520 1032 680">• An aircraft's status as public or civil depends upon its use in government service and the type of operation the aircraft is conducting. <li data-bbox="396 730 1032 1024">• The law gives government agencies the latitude to carry out necessary government functions, such as firefighting and law enforcement, without complying with regulations that could restrict or prohibit these missions. <li data-bbox="396 1075 1032 1234">• Be aware of local resources and procedures that may impact your operations (Air Guard, Reserve, private aircraft, etc.). 	<p data-bbox="1081 281 1218 319">Slide 5-6</p> <p data-bbox="1081 369 1230 407">IR/SR 5-2</p>
<p data-bbox="298 1285 539 1323">E. Contracts</p> <ul data-bbox="396 1373 993 1579" style="list-style-type: none"> <li data-bbox="396 1373 993 1453">• Bound by the Federal Acquisition Regulation (FAR). <li data-bbox="396 1503 993 1579">• No contractual authority (cannot modify; no ratification). 	<p data-bbox="1081 1264 1218 1302">Slide 5-7</p>

Contracting Scenarios:

1. Dip site tanks were ordered but they're not part of the contract. The AOBD tells the contractor to deliver and set up the tanks.

Question: Should the vendor be paid?

Answer: The vendor cannot be paid for using the flight payment systems. Another arrangement would need to be made. Prior to ordering additional equipment, determined if the equipment is on a contract.

2. The helibase ordered a tank in addition to a bucket for a helicopter. The bucket was on contract but the tank was not.

Question: Do you have the authority to order equipment that is not covered under the contract?

Answer: No, not without notification and approval from the appropriate contracting officer.

Ask students if they have questions about the legal requirements of an AOBD?

Review Unit Objectives.

Slide 5-8

Day in the Life of an AOBD

	0530	Check IAP for accuracy. Start new ICS 220. Prepare for briefings and check-in with Ops.
Brief	0600	Morning briefing
Monitor & Adjust	0800	Helibase briefing Monitor activity Ensure air operations are meeting needs of fire – adjust as necessary.
	0900	Telephone briefing with off-site contacts, e.g., dispatch, ATGS, ATB.
	1200	Meet with or check-in with Command and General Staff.
Preplan	1600	Preplanning: AOBD listens to Ops call to gain awareness of potential issues. Closely monitor information Operations gets prior to preplanning meeting.
Plan	1800	Planning meeting
	1900	Complete ICS 220 and turn into RESL (times may vary from 1900-2000). Monitor the timelines for your specific incident.
Debrief	2000	Debrief with aviation staff. Brief on next day's plan.

Monitor activities:

- Maintain a high level (managerial) view of the entire aviation operation, delegate as appropriate, and be aware of mission creep.
- Hit your milestones.
- Maintain situational awareness throughout the day.
- Maintain an awareness of local resources.
- Actively monitor fire activities and solicit intelligence from sources both external and internal to the incident.
- Ensure delegated tasks are being completed (time, cost being turned in, logistics, supplies, air operations meeting objectives). Go through all functional areas and address concerns that have been elevated to the AOBD.
- Adjust as necessary and always have a contingency plan.
- Take the opportunity to do spot visits or checks on all aviation activities.



US Forest Service Fire and Aviation Management Briefing Paper



Date: February 9, 2009

Topic: Public aircraft provisions contained in Public Law 106-181, codified in 49 U.S.C. Section 40102(a)(41)

Issue: Government aircraft (including Federal and contract) must meet certain requirements to qualify for public aircraft status.

Background: Public aircraft law exempts government aircraft from compliance with most Federal Aviation Administration (FAA) regulations when performing a governmental function. The law gives government agencies the latitude to carry out necessary government functions, such as firefighting and law enforcement, without complying with regulations that could restrict or prohibit these missions. Public aircraft operations also include search and rescue, aeronautical research, and biological and geological resource management. This list is not exhaustive and other governmental functions may qualify as well. Aircraft that do not qualify as public aircraft are civil aircraft, and must meet all FAA regulations and requirements.

Key Issues:

- Government aircraft used for commercial purposes, transporting passengers (except crewmembers, qualified non-crewmembers, or firefighters) or cargo for hire or compensation, do not qualify as public aircraft.
- An aircraft's status as public or civil depends upon its use in government service and the type of operation that the aircraft is conducting. For example, if an aircraft is used to transport government employees as administrative travel on a given morning, it is conducting civil aircraft operations. If firefighters used the same aircraft later that afternoon to fight a fire, the aircraft could qualify as a public aircraft.
- Public aircraft status is not granted by the FAA. There is no requirement to make a declaration in writing, nor is there any requirement to carry proof of this status. The burden of proof is on the operator to establish to the FAA's satisfaction that it is a public aircraft.
- A provision of the public aircraft law requires an aircraft operated by one government on behalf of another government under a cost reimbursement agreement, must certify to the Administrator of the Federal Aviation Administration that the operation is necessary to respond to a significant and imminent threat to life or property (including natural resources) and that no service by a private operator is reasonably available to meet the threat.
- Additional guidance on public aircraft is found in FAA Advisory Circular (AC) 00-1.1A.

Conclusion: An aircraft qualifies as a public aircraft if the aircraft is used exclusively for the government and is not used for commercial purposes. If these conditions are not met the aircraft is no longer public, rather it is a civil aircraft.

Contact: Larry Brosnan, Assistant Director, Aviation, 202-205-1505

UNIT OVERVIEW

Course Air Operations Branch Director, S-470

Unit 6 – Transition/Demobilization

Time 2 hours

Objectives

1. Discuss the responsibilities of the AOBD in the demobilization of aviation resources.
2. Evaluate the information necessary for an efficient transfer of position duties.

Strategy

Prepare the student for the transition/demobilization process. Discuss the responsibilities unique to the AOBD position when transitioning or demobilizing an incident.

Instructional Method(s)

- Informal lecture

Instructional Aids

- Personal computer with LCD projector and presentation software
- Example of special agreements (instructor provided).

Exercise(s)

- None

Evaluation Method(s)

- Unit information will be evaluated on the final exam.

Outline

- I. Demobilization of Aviation Resources
- II. Transfer of Position Duties

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: Air Operations Branch Director, S-470

UNIT: 6 – Transition/Demobilization

OUTLINE	AIDS & CUES
<p>Present unit title slide.</p> <p>Present Unit Objectives.</p> <p>After completion of this unit, administer the Final Exam which is located in Appendix C.</p>	<p>Slide 6-1</p> <p>Slide 6-2</p>
<p>I. DEMOBILIZATION OF AVIATION RESOURCES</p> <p>Demobilization is a dynamic process that occurs throughout an incident. It is critical to continually assess the aviation organization as it applies to incident objectives.</p> <p>Attention to detail during demobilization and transition will be the last impression you and your team members leave with the agency.</p>	<p>Slide 6-3</p>
<p>A. General Demobilization Consideration</p> <p>When releasing aviation resources there are several general considerations that should be weighed prior to release. These considerations include:</p> <ul style="list-style-type: none">• Length of assignment• Aircraft maintenance and availability	<p>Slide 6-4</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • National needs – Maintaining communication with the National Helicopter Coordinator can help with the effective distribution of aircraft. There might be an aircraft on your incident that isn't meeting your needs but it could prove to be effective in a different environment. • Other incident needs • Cost • Aircraft capabilities/limitations • Status of incident • Predicted weather conditions <p>Just as each mobilization is unique, each demobilization and management transition will differ from all the others.</p> <ul style="list-style-type: none"> • The type of transition occurring (e.g., to another team, to local unit). • Status of incident (active, mopup, out). • Complexity of the air operation that will remain in place. • Management level of the organization you are transitioning to. • Transfer of accountable property. 	<p>Slide 6-5</p>

OUTLINE	AIDS & CUES
<p>When demobilizing aviation resources, the AOBD may be responsible for providing a glide path to the operations section and the plans section to assist in planning.</p> <p>The AOBD may also be responsible for providing input into the demobilization plan created by the Demobilization Unit Leader (DMOB).</p> <p>B. Specific Considerations By Resource Type</p> <p>1. Aircraft</p> <ul style="list-style-type: none"> • Priority release list based on financial constraints implemented by the land management agency. • Other incident needs. • Always consider the cost of assigned aircraft. <ul style="list-style-type: none"> – Call when needed (CWN) vs. Exclusive-Use Contracts Aircraft • Maintenance and availability. • Job performance – capabilities and limitations of specific aircraft or personnel. • Release of military before commercial. 	<p>Slide 6-6</p>

OUTLINE	AIDS & CUES
<p>2. Airspace Coordination</p> <ul style="list-style-type: none"> • Portable towers and/or FAA controllers. • TFR – reduce in size or cancel. • Cancel, amend, or keep special procedures in place, i.e., flight corridors, entry points. 	Slide 6-7
<p>3. Communications</p> <ul style="list-style-type: none"> • Release frequencies when no longer needed. 	Slide 6-8
<p>4. Personnel</p> <ul style="list-style-type: none"> • Complete accurate performance evaluations. • Ensure trainees coordinate with the Training Specialist. • Coordinate with the RESL and DMOB in demobilization process. 	Slide 6-9
<p>5. Equipment and Facilities</p> <p>Coordinate with Ground Support and Logistics to determine inspections for release of:</p> <ul style="list-style-type: none"> • Mobile Retardant Plants. • Operations trailers. 	Slide 6-10

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • Crash-rescue services. • Helibase equipment. • Accountable property (radios). • Water trucks/portable tanks. <p>6. Administrative</p> <ul style="list-style-type: none"> • All shift tickets closed out. • Special agreements (land, water use, etc.) up-to-date or closed. 	<p>Slide 6-11</p>
<div style="border: 2px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p>Share examples of agreements that you have used or seen used on different incidents. Make copies or provide electronic versions for students.</p> </div>	
<ul style="list-style-type: none"> • Final cost summary for narrative. • Complete any compensation claims documentation. <p>C. Rehabilitation</p> <p>If rehabilitation begins during transition or close-out, use the following guidelines:</p> <ul style="list-style-type: none"> • Gather suppression rehabilitation guidelines from the local resource advisor. 	<p>Slide 6-12</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none"> • The BAER (Burned Area Emergency Response) team may start work using aviation resources while the aviation operation is still in a suppression mode. Ensure that coordination occurs. Define who is in charge and work cooperatively to meet their needs. • Be sure that all BAER costs are charged to the appropriate codes. 	
<p>II. TRANSFER OF POSITION DUTIES</p>	<p>Slide 6-13</p>
<p>A. The Transition Plan</p> <p>A written transition plan is a standard operating procedure when transferring responsibility for an incident between incident management teams or when transferring responsibility back to the local unit.</p>	
<p>The report should include:</p> <ul style="list-style-type: none"> • Aviation assets • Phone list and contact names • Equipment and Supply Unit issues • Personnel • Anticipated actions • History of historical significant events 	<p>Slide 6-14 IR/SR 6-1</p>

OUTLINE	AIDS & CUES
<ul style="list-style-type: none">• Emergency Equipment Rental Agreements (grants and agreements)• Land Use Agreements• Special agreements or considerations in place• Outstanding orders and status• Base locations and status• Dip sites and helispots (include latitude, longitude, and elevation) <p>You should also make it a priority to tour all aviation facilities with your counterpart and consult on projected needs.</p> <p>Ensure your incoming replacement knows where all the air operations records are located.</p> <p>Think back to when you were doing your initial information gathering when coming to the incident. What information did you expect to receive? Don't be afraid to ask if you feel that you didn't receive adequate information.</p> <div style="border: 2px solid black; padding: 5px;"><p>Provide examples of additional completed transition plans.</p></div>	

OUTLINE	AIDS & CUES
<p data-bbox="298 283 873 321">B. Agency Administrator Closeout</p> <p data-bbox="393 369 1003 445">At this meeting, the team closes out with the local unit.</p> <p data-bbox="393 497 1032 789">A written narrative summary of operations from each section is required. Identify successes, cost-savings and provide suggestions for efficiencies. At the beginning of your assignment, check with the team to see if they have a template or preferred format for the document.</p> <p data-bbox="393 840 1045 915">Suggested items to include in air operations summary:</p> <ul data-bbox="393 963 1024 1686" style="list-style-type: none"> <li data-bbox="393 963 675 1001">• Introduction <li data-bbox="393 1052 883 1089">• General operations review <li data-bbox="393 1140 899 1178">• Review of operations bases <li data-bbox="393 1228 586 1266">• Safety <li data-bbox="393 1316 1013 1354">• Incidents, accidents, and medevacs <li data-bbox="393 1404 1000 1480">• Aircraft use and cost summary for fire <li data-bbox="393 1530 1024 1686">• Recommendations (operations are discussed): What went right? What went wrong? What can be done to improve? 	<p data-bbox="1081 283 1235 321">Slide 6-15</p> <p data-bbox="1081 497 1235 535">IR/SR 6-2</p>

OUTLINE	AIDS & CUES
<p data-bbox="300 283 706 325">C. After Action Review</p> <p data-bbox="394 367 1015 535">The AOBD should be prepared to participate in an AAR with the operations section as well as with the entire incident management team.</p> <p data-bbox="394 577 1047 745">The AOBD should be prepared for the AAR by having copies of any documentation regarding significant events, such as unit logs, IAPs, SAFECOMS, etc.</p> <p data-bbox="394 787 1047 1039">The climate surrounding an AAR must be one in which the participants openly and honestly discuss what transpired, in sufficient detail and clarity, so everyone understands what did and did not occur and why.</p> <p data-bbox="394 1081 1047 1207">Most importantly, participants should leave with a strong desire to improve their proficiency.</p> <p data-bbox="394 1249 592 1291">AAR format:</p> <ul data-bbox="394 1333 901 1648" style="list-style-type: none"><li data-bbox="394 1333 787 1375">• What was planned?<li data-bbox="394 1417 868 1459">• What actually happened?<li data-bbox="394 1501 787 1543">• Why did it happen?<li data-bbox="394 1585 901 1627">• What can we do next time?	<p data-bbox="1079 283 1242 325">Slide 6-16</p>

OUTLINE	AIDS & CUES
<p>Discuss your experience with AARs and provide examples to the students of how you have improved your performance using the information gained.</p>	
<p>Review Unit Objectives.</p>	<p>Slide 6-17</p>
<p>Instructions to the students for the Final Exam are located in Appendix B_PowerPoints: S-470_Final Exam.pptx</p>	<p>S-470_Final Exam.pptx</p>

Aviation Transition Plan
Middle Fork Complex
August 10, 2007

Aviation Assets still assigned:

Helicopters:

N2LM Bell 206L4 A-12
N2773H Bell 205++ A-27
N206GH Bell 206L4 A-43

Fixed-Wing:

N57RS AC690 A-51

Phone List:

Middle Fork Helibase 208-555-2724
208-555-2726 (FAX)

Warm Springs Helibase 208-555-3416
208-555-3516 (FAX)

Kevin Smith (HEB1)	208-555-3251	O-62
Bob Perkins (HEB2)	907-555-1678	O-72
Jeff Olsen (ATGS)	520-555-1945	A-51.1
Boise Dispatch	208-555-3400	

Equipment & Supplies:

2 Helibase Communications trailers E-23 Middle Fork E32 Warm Springs
2 Water Tenders E-56 Middle Fork E68 Warm Springs
1 Heli-Well Borrowed from the Payette NF/ Call 208-555-7531 for pick-up.

Personnel:

10 personnel @ Warm Springs Helibase
20 personnel @ Middle Fork Helibase

Anticipated Actions:

Close Warm Springs Helibase in 2 days.
Tear down Heli-Well ASAP & return to Payette NF.

Significant Events:

2 SAFECOMS filed in last 18 days.

Equipment Rental Agreements:

None

Land Use Agreements:

1 land use agreement in place on private land where Heli-Well is located. Agreement is in Finance. This needs to be closed out.

Outstanding orders:

3 HECM orders placed. Not filled. This needs to be checked on.

Base locations and Status:

Close Warm Springs helibase and keep Middle Fork helibase running until no longer needed.

Dip sites and Helispots: Helibase has complete listing and location of all dip sites and helispots.

Aviation Narrative
Ola Complex August 12th to August 17th, 20XX
Lund Type II Great Basin Incident Management Team

Overview:

The Aviation Section of Lund's Type II IMT assumed control of the Ola Complex on August 12th, 2006. Aviation safety and cost efficiency is always the top priority for this section of the team. This was a transfer of command from an Initial Attack Type III fire. There were a total of five fires within the complex. The aviation unit placed orders for 1 Type I, 2 Type II, and 2 Type III helicopters. In addition 2 Air Tactical fixed-wing aircraft were ordered. Due to the numerous other incidents that were going on within the region aviation resources were limited.

The incident had assigned 1 Type II and 1 Type III helicopters. The incident was able to share 1 Type III, 1 Type II, and 1 Type I helicopter with the Boise District BLM, Boise National Forest, and the Idaho Department of Lands. In addition to the aircraft assigned to the incident, the helibase was serviced by 1 communications trailer, and 1 water tender.

During daily operational periods the aviation section was involved with aerial supervision above the incident, recons, bucket operations, and other missions as requested. Challenges to the aviation section were the limited available resources due to the high fire activity within the region, the number of fires within the complex, and the size of the Cherry Fire (54,000 acres). Transfer of command to a Type III Team was completed on August 17th, 2006. No helicopters were assigned.

Cost Savings

Type II and III helicopter and crew support from local district.

Land lease agreement for helibase operations.

The movement of the Type I helicopter to save on ferry flight time.

Conclusion:

Actual flight time on the Ola complex was heavy for the size and complexity for the fire. The aviation section worked closely with all sections of the Incident Management Team to make this a successful incident. The local community should be commended for the help and the acceptance of having the many people that impacted the area.

