

# STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS



DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
NATIONAL PARK SERVICE  
BUREAU OF INDIAN AFFAIRS

DEPARTMENT OF AGRICULTURE  
FOREST SERVICE



REVISED 2/14/2011

## STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS



NATIONAL INTERAGENCY FIRE CENTER  
3833 S. Development Avenue  
Boise, Idaho 83705-5354

February 14, 2011

To: Agency Personnel

From: Fire and Aviation Directors;  
Bureau of Land Management  
Forest Service  
National Park Service

Subject: *Standards for Interagency Hotshot Crew Operations*

In 2007 National Interagency Hotshot Crew Steering Committee was tasked with updating the *Interagency Hotshot Crew Operations Guide (2001)*. Attached are the rewritten *Standards for Interagency Hotshot Crew Operations* that resulted from this assignment. These updated standards reflect changes in crew usage and address changes in policy since the original document was written. Crews will meet the minimum standards and be in full compliance with the certification process found in this document to be considered an Interagency Hotshot Crew. It will remain in effect until revised or rescinded.

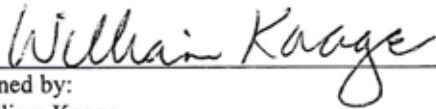
Please note that the nationally accepted process for certification of new Interagency Hotshot Crews is outlined in Chapter 5 with required supporting documentation and forms provided in Appendices B, C and E.

The annual requirement for existing Interagency Hotshot Crews is outlined in Chapter 5 with required supporting documentation and forms provided in Appendices B and C.

The contents of this book are not to be modified. Supplemental agency specific direction of a more restrictive nature may be issued separately

  
Signed by:  
Timothy M Murphy  
Deputy Assistant Director (NIFC), Fire & Aviation, Bureau of Land Management

  
Signed by:  
Lyle Carlile  
Director, Branch of Wildland Fire Management, Bureau of Indian Affairs



Signed by:  
William Kaage  
Chief, Branch of Wildland Fire, National Park Service



Signed by:  
Karyn Wood  
Assistant Director, Fire & Aviation Management, Forest Service



Signed by  
Matt Hoggard  
National IHC Steering Committee Chair

National Interagency Hotshot Crew Steering Committee members:

Matt Hoggard - Chair

Mike Noel

Johnny Clem

Eric Miller

Dennis Trentham

Bart Yeager

Juan Mendez

John Goss

Darin Fisher

# STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS

## TABLE OF CONTENTS



## CHAPTERS

1- DEFINITION, POLICY AND IHC MISSION STATEMENT .....	4
2- STANDARDS AND QUALIFICATIONS.....	6
3- TRAINING .....	8
4- SUPPORT REQUIREMENTS.....	11
5- CREW CERTIFICATION AND MOBILIZATION .....	13

## APPENDICES

A- CREW STANDARDS FOR NATIONAL MOBILIZATION
B- ANNUAL IHC PREPAREDNESS REVIEW
C- ANNUAL IHC MOBILIZATION CHECKLIST
D- NATIONAL IHC STEERING COMMITTEE CHARTER
E- PEER REVIEW FOR INTIAL CERTIFICATION OF IHCS
F- ERRATA SHEETS

## CHAPTER 1

### STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS DEFINITION, POLICY AND IHC MISSION STATEMENT

#### DEFINITION

A nationally available, twenty-person hand crew within the Incident Command System meeting the minimum standards and in compliance with the certification process found in this document. Interagency Hotshot Crews (IHC) are a national shared resource, statused and assigned through the National Interagency Coordination Center.

#### POLICY

Sponsor agencies shall provide direction, support, and review processes that ensure IHC operations are safe, effective, and meet the IHC operations standards as outlined in this document. The National IHC Steering Committee will facilitate any proposed revisions to these standards under the direction of the IHC Sponsor Agency Fire Directors.

#### OBJECTIVE

The *Standards for Interagency Hotshot Crew Operations* provides the standard for IHC operations. These standards are to be used by IHC leadership, agency administrators and first line supervisors, for planning, administering and conducting IHC operations. These standards are to be used as a measure of IHC qualifications.

#### IHC MISSION STATEMENT

The primary mission of the IHCs is to provide a safe, professional, mobile and highly skilled hand crew for all phases of fire management and incident operations.

#### PROGRAM EMPHASIS

IHCs can be used to meet management objectives other than their primary mission of wildland fire operations. Utilization of IHCs will be initiated with strict compliance to accepted interagency and agency specific safety standards. Responsibility for compliance with these standards and the safe operation of an IHC ultimately lies with the IHC superintendent. The priority for use of IHCs is as follows:

- **Wildland Fire Incident Operations**  
IHCs are staffed, conditioned, equipped and qualified to meet a variety of strategic and tactical wildland fire assignments. The organizational structure allows IHCs to form into small modules or squads and accomplish independent incident assignments. IHCs may be prepositioned for initial attack or perform ready reserve duties as required by national planning level requirements.
- **All Hazard Incident Operations**  
Within the limits of their experience and qualifications, IHCs are capable of providing a disciplined, self contained and adaptable workforce to meet the needs of incident managers in a variety of situations and during all hazard assignments.
- **Resource Management Objectives**  
When not committed to fire assignments, IHCs can provide a workforce to accomplish a variety of resource management objectives while maintaining availability for incident mobilization.
- **Training Cadres**  
IHCs can provide a high quality cadre for fire management training at local, geographic area and national levels.

## **PROFESSIONAL ETHICS**

IHCs acknowledge their responsibility to sponsor agencies and to the wildland fire community as a whole. IHCs subscribe to a Code of Ethics to guide them in their practice as wildland fire professionals. IHCs will:

- Perform only services they are qualified, trained, and equipped in which can be accomplished safely. Continue to educate themselves in order to improve their qualifications and performance. Give earnest effort and provide their best professional advice in the performance of their duties.
- Build their professional reputations based on the leadership values of duty, respect and integrity. Ensure the quality and cost effectiveness of our programs. Be accountable to host unit supervisors, incident management teams, other IHCs and to any hosting unit as a safe, productive and professional resource.
- Conduct themselves and their programs in accordance with the *Standards for Interagency Hotshot Crew Operations*, relevant Agency, State and Federal policies and all required operational and safety procedures.
- Ensure the civil rights of constituents and employees by treating every person with respect. Hazing, harassment of any kind, verbal abuse or physical abuse by any employee toward any other person will not be tolerated. Professional behavior will be exhibited at all times.
- Endeavor to enhance public knowledge and promote understanding of the functions and achievements of the wildland fire community.

## **GEOGRAPHIC AREA IHC STEERING COMMITTEES**

Geographic Area IHC Steering Committees will provide the IHC community, fire managers and agency administrators a means for proactive problem and issue resolution at the local level. Geographic Area IHC Steering Committees will promote safe, effective IHC operations and strive to ensure consistent adherence to area and national fire management policies.

Elected representatives will act as a guiding body and unified voice for all area IHCs. Each Geographic Area IHC Steering Committee will be chartered under the local Geographic Area Coordinating Group. Each agency will continue to provide specific program management and oversight for their respective crews.

## **NATIONAL IHC STEERING COMMITTEE**

The National IHC Steering Committee will provide the IHC community, fire managers and agency administrators a means for proactive problem and issue resolution at the national level. The National IHC Steering Committee will promote safe and effective IHC operations and strive to ensure consistent adherence to national fire management policies.

Elected representatives will act as a guiding body and unified voice for all IHCs on matters of national scope. The National IHC Steering Committee will be chartered under the IHC sponsor agency National Fire Directors.

## CHAPTER 2

### STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS STANDARDS AND QUALIFICATIONS

#### MINIMUM IHC MOBILIZATION STANDARDS

For mobilization to an incident Interagency Hotshot Crews, will at a minimum:

- Have 18 fireline-qualified personnel for assignment.
- Have 80% of the crew members with at least one previous season of fire experience.
- Have permanently assigned leadership.
- Have an assigned availability period with a minimum of 90 consecutive calendar days (including required days off).
- Work and train together a minimum of 40 hours per week during their availability period.
- Mobilize within 2 hours of receipt of orders during their availability period.
- Be available for incident assignments with no geographic restrictions.
- Have the ability to break down into a minimum of three squads for initial attack and/or other independent operations.
- Have assigned vehicles, hand tools, power saws and communications equipment configured for their needs.
- Be logistically self-sufficient utilizing credit card or agency purchasing authority.
- When flying to an incident and the crew is authorized to transport crew vehicles, not have the staffing of the crew at the incident drop below 18 fireline-qualified personnel without approval.
- When flying to an incident not have more than 20 personnel flying without approval.

#### MINIMUM LEADERSHIP STAFFING

IHCs shall be staffed to provide skilled personnel to accomplish IHC mission objectives. IHCs will maintain a minimum of seven permanent/career positions. This standard is based on the *1995 Interagency Management Review Team Hotshot Action Plan*. Apprentice Program positions that may be assigned to IHCs will be in addition to the minimum seven career positions.

Non-federal IHCs will meet the retention and qualification intent of this standard using equivalent employment authority within their sponsor agency human resource policy and the sponsor Geographic Area Coordinating Group. Minimum leadership staffing will include the following positions as part of an IHC organization:

One Superintendent	OR	One Superintendent
One Assistant Superintendent/Captain		Two Assistant Superintendents/Captains
Three Squad Leaders		Two Squad Leaders
Two Senior Firefighters		Two Senior Firefighters

#### POSITION DESCRIPTIONS

While specific job descriptions of leadership personnel may vary among IHCs, each crew will provide the personnel to perform the following functions:

##### Superintendent

- The superintendent is a permanent employee with administrative and supervisory skills to conduct training and sufficient fire experience to provide capable leadership to the crew. The superintendent is responsible for all hotshot crew program management activities including certification that the crew is available for incident assignment.
- Minimum Red Card Qualifications: Task Force Leader (TFLD), Incident Commander Type 4 (ICT4) and Firing Boss (FIRB).

**Assistant Superintendent/Captain**

- Assists the superintendent in all aspects of crew management and must be qualified to supervise and manage the crew in the absence of the crew superintendent. This is a career position.
- Minimum Red Card Qualifications: Strike Team Leader Crew (STLC) and Incident Commander Type 4 (ICT4).

**Squad Leader**

- Provides day-to-day leadership for squad members. It is their responsibility to keep the assistant superintendent/captain or superintendent informed on all aspects related to safe and effective crew operations. This is a career position.
- Minimum Red Card Qualification: Advanced Firefighter/Squad Boss (FFT1) and Incident Commander Type 5 (ICT5).

**Senior Firefighter**

- Within the crew there are a minimum of two senior firefighters that are career positions.
- Minimum Red Card Qualification: Advanced Firefighter/Squad Boss (FFT1).

**Crewmember**

- Minimum Red Card Qualification: Firefighter (FFT2).

## CHAPTER 3

### STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS TRAINING

#### TRAINING PLAN

Each Interagency Hotshot Crew will establish a training plan to meet their mission objectives and address operational standards. The superintendent has the discretion to select among the optional elements of the training program that best fit the needs of their crew.

#### IHC MINIMUM REQUIRED TRAINING AND QUALIFICATIONS

The following are the required National Wildfire Coordinating Group (NWCG) training courses and qualifications that apply to IHC personnel at the full performance level and in support of crew certification:

<b>IHC Position</b>	<b>IHC Position NWCG Training</b>	<b>NWCG Qualifications</b>
<b>Firefighter/Crewmember</b>	I-100 Introduction to ICS L-180 Human Factors in the Wildland Fire Service S-130 Firefighter Training S-190 Introduction to Wildland Fire Behavior	FFT2
<b>Senior Firefighter</b>	All the above plus: S-131 Firefighter Type 1 S-133 Look Up, Look Down, Look Around S-211 Portable Pumps and Water Use S-212 Wildland Fire Chain Saws S-270 Basic Air Operations S-290 Intermediate Wildland Fire Behavior	FFT1
<b>Squad Boss/Leader</b>	All the above plus: I-200 Basic ICS L-280 Followership to Leadership S-215 Fire Operations in the Wildland/Urban Interface S-230 Crew Boss (Single Resource) S-234 Ignition Operations S-260 Interagency Incident Business Management	ICT5
<b>Assistant Superintendent or Captain</b>	All the above plus: I-300 Intermediate ICS L-380 Fireline Leadership M-410 Facilitative Instructor or equivalent S-200 Initial Attack Incident Commander S-330 Task Force/Strike Team Leader S-390 Introduction to Fire Behavior Calculations	STCR ICT4
<b>Superintendent</b>	All the above.	TFLD ICT4 FIRB

#### ANNUAL TRAINING

This training and NWCG qualifications must be completed to meet position full performance levels and prior to becoming available for incident or prescribed fire assignments and/or crew certification. All IHC personnel must receive 40 hours of Operational Preparedness Training as defined below. The training is intended to meet the needs of crew positions and NWCG Qualifications which include classroom and field exercises. This training is not inclusive of agency specific administrative requirements. All training shall be documented.

This training provides skills and knowledge that allows an IHC to perform safely and effectively in the all-hazard incident environment. Training will include, agency specific fireline refresher (RT-130) and applicable OSHA required safety training. The remaining 40 hour minimum should include but not be limited to firefighter safety, first aid, fire behavior and crew operating procedures. Upon completion of this training, all crewmembers will understand their professional

responsibilities, as a member of a team, are capable of fulfilling their team roles working in a high-risk environment and be able to identify critical safety issues and demonstrate appropriate reactions to unsafe conditions.

## **OPERATIONAL PREPAREDNESS TRAINING**

The following are suggested training topics and in no way exclude other topics:

- **Fire Behavior and Safety**
  - Incident Response Pocket Guide
  - LCES, the Standard Firefighting Orders, Watch Out Situations, and Common Denominators
  - Entrapment Avoidance
  - Job Hazard Analysis System
  - Firefighter Health (heat stress, nutrition, fatigue, smoke)
  - Proper Gear and PPE
  - Look Up, Look Down, Look Around
  - Characteristics of Extreme Fire Behavior
  - Basic Firing Operations
  - Firefighter Safety in the Wildland/Urban Interface
  - Hazard Tree Safety
  - Predictive Services
- **Leadership Development and Human Factors**
  - 1995 Human Factors Workshop Findings
  - Tactical Decision Games Library
  - Staff Ride Library
  - Professional Reading Program: each crew should offer a variety of leadership publications
  - Crew Cohesion Assessment
- **Lessons Learned**
  - Fatality Fire Case Studies
  - Incident Reports and Lessons Learned Analyses
  - Wildland Firefighter Fatalities in the United States
  - High Reliability Organizations
- **Crew Organization**
  - Standard Operating Procedures
  - Chain of command
  - Configuration for smaller unit operation
- **Intra-Crew Communication**
  - Briefing
  - Debriefing with AARs
  - Identification of hazards
  - Sending messages and asking for clarification
  - Handheld radio protocol and operations
- **Transportation**
  - Fixed-wing transport
  - Helicopter transport
  - Ground transport

## **FIELD EXERCISES**

In addition to the classroom portion of the training program, crewmembers will be required to demonstrate their physical ability to perform arduous duties while in the field.

Field exercises give crew leadership an opportunity to observe, assess, instruct and evaluate individual crewmembers in the field environment. It also provides crew leaders the opportunity to develop intra-crew communication and stress the basics of tool use and field safety. It gives crewmembers an opportunity to familiarize themselves with crew operations, practice proper and safe tool use and develop crew cohesion. Field exercises are essential for team building.

The following are suggested field exercise scenarios and in no way exclude other drills:

- **Cut and scrape as a crew**
  - Tool orders
  - Saw operations
- **Small module operation/split configuration**
  - Hot spotting
  - Spot fires
  - Firing and holding
- **Withdrawal to escape routes and safety zones**
- **Medivac procedures**
- **Fire shelter use**
  - Individual and group deployment (planned and hasty)
  - Drop gear and go/ two in one shelter/ high wind
- **Interface operations**
  - Structure assessment and triage
  - Tactics for hand crews

#### **ADDITIONAL TRAINING**

Additional training may be added by the superintendent and will be based on crew and individual needs (i.e., Individual Development Plan). Specific training objectives can be met through NWCG courses, other classroom training, on-the-job-training or task book position assignments.

#### **FITNESS TRAINING**

As a part of fire line performance required of IHCs, the physical ability to perform arduous labor is critical to crew morale, personal health and safety standards. As part of the training program for IHCs, all crew personnel will be required to participate in a minimum of 1 hour of fitness training, 5 days a week, during unassigned periods.

The fitness training program will focus on stretching, aerobic fitness and strength building. All IHC personnel shall meet the sponsor agency's current Work Capacity Test (WCT) fitness standard for fire line personnel. *Fitness and Work Capacity, 3rd edition* by Dr. Brian Sharkey, 2008, identifies fitness measurements for IHC crewmembers:

- 1.5 mile run in a time of 10:35 or less
- 40 sit-ups in 60 seconds or less
- 25 pushups in 60 seconds or less
- Chin-ups, based on body weight
  - More than 170 lbs. = 4 chin-ups
  - 135-169 lbs. = 5 chin-ups
  - 110- 134 lbs. = 6 chin-ups
  - Less than 110 lbs. = 7 chin-ups

## **CHAPTER 4**

### **STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS SUPPORT REQUIREMENTS**

#### **HOST UNIT SUPPORT**

IHCs require management oversight, administrative support and facilities to accomplish their mission. IHCs are available to assist the host unit with other resource management objectives when not assigned to incidents or conducting training. Host units benefit from the skills, knowledge and abilities of crew personnel. IHCs are available to assist the sponsor agency in accomplishing its mission in addition to instructing a variety of local, geographic area and national fire management courses.

#### **MANAGEMENT RESPONSIBILITIES**

The local host unit first line supervisor and the agency administrator shall:

- Certify the crew as ready for incident assignment using the Annual IHC Mobilization Checklist (appendix C) prior to national availability.
- Ensure completion of an Annual IHC Preparedness Review (appendix B) on an annual basis.
- Assist in career development and training of crew personnel.
- Ensure that crew health, safety and welfare needs are addressed.

When establishing a new IHC program, the host unit is responsible for the requirements listed in the *Standards for Interagency Hotshot Crew Operations* and facilitating the IHC Certification Process, found in Chapter 5.

#### **ADMINISTRATIVE SUPPORT**

The local host unit first line supervisor and the agency administrator are responsible to provide administrative support such as personnel management, time and attendance, travel, purchasing and fleet management.

#### **FACILITIES**

The local host unit first line supervisor and agency administrator are responsible to provide adequate facilities for the crew including: office space, crew ready room, access to physical training facilities, equipment storage and fire cache.

#### **INCIDENT SUPPORT**

IHCs are self contained and self sufficient in most aspects. The ordering incident will be expected to supply the IHCs with needed supplies depending on method of transport. IHCs are required to arrive at the incident with a complete inventory of all non cache items approved for crew use by the local unit.

#### **GROUND TRANSPORTATION**

When ordering IHCs by ground transportation, they will come equipped to the following minimum standards:

- Assigned crew vehicles
- Assigned mobile/handheld communication equipment
- 4 chain saws with fuel
- Firing equipment
- Hand tools
- Water handling equipment
- All required overnight gear
- First aid and trauma kits
- Drinking water and food for 48 hours
- GPS/Cell Phone

**FIXED WING TRANSPORTATION**

When IHCs are delivered by aircraft the receiving unit will need to provide the following:

- Crew personnel transportation/separate vehicles for transportation of saws, fuel and hand tools
- Firing equipment (minimum 2 cases of fusees, 4 drip torches w/fuel)
- Hand tools
- Chainsaws (4 kits, 28" bar)
- 10 gallons unmixed gas
- 5 gallons of bar oil
- 2 cycle mix for 10 gallons of gas
- 50 gallons of drinking water and 10 cases of MREs

## CHAPTER 5

### STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS CREW CERTIFICATION AND MOBILIZATION

#### CREW CERTIFICATION PROCESS

Crew programs seeking to be recognized as an IHC will use the process listed below:

- 1) To initiate IHC certification a request is placed by the host unit or hosting agency to the dispatching GACC.
- 2) The Geographic Area IHC Steering Committee will be advised and involved in the process.
- 3) The crew has Peer Review for Initial Interagency Hotshot Crew Certification forms (appendix E) and incident performance appraisals completed during incident assignments.
- 4) Host unit first line supervisor and superintendent complete a draft of Annual IHC Mobilization Checklist (appendix C) and the Annual IHC Preparedness Review (appendix B) to insure the modules readiness for certification.
- 5) The requesting crew host unit or hosting agency contacts the GACC who contacts the Geographic Area IHC Steering Committee chair to request certification.
- 6) Certification team will be assembled and a team leader identified.
- 7) Date of certification will be negotiated and confirmed.
- 8) The host unit is responsible for arranging accommodations and providing logistical support for the team.
- 9) The certification team will in brief with requesting crew superintendent and host unit fire leadership/supervisors to discuss objectives and agenda for review.
- 10) Certification team will meet with requesting crew for introductions and provide a briefing of planned activities and expectations.
- 11) A thorough review will be conducted of records, plans, crew evaluations, vehicles, facilities, equipment, safety, training, fitness, qualifications, etc.
- 12) Short-term individual simulations (i.e., sand table exercises, readiness) will be conducted.
- 13) Crew field simulation (drills), possibly with other resources involved (i.e., fireline construction, initial attack organization) will be conducted.
- 14) Requesting crew will conduct an "After Action Review".
- 15) Certification team will make decision on certification.
- 16) Certification team closes out with requesting crew and host unit.
- 17) If certified, the Annual IHC Mobilization Checklist Mobilization (appendix C) is signed by the team leader and forwarded to the GACC.
- 18) This certification is forwarded by the GACC to National Multi-Agency Coordination Group and the National Interagency Coordination Center.
- 19) If not certified the documentation and a letter of items not meeting standards will be left with the host fire management unit.

#### CERTIFICATION TEAM MEMBERSHIP

The certification team will be comprised of at least three qualified individuals:

- A current IHC superintendent
- The host unit first line supervisor or agency administrator
- A unit or sub-unit fire management officer selected by the Geographic Area IHC Steering Committee

The team leader and at least one other member will be independent of the host unit. Certification will be based on compliance with the current *Standards for Interagency Hotshot Crew Operations*.

#### DECERTIFICATION

Integrity cannot be written into a document and it is impossible to address every conceivable scenario. It is the responsibility of the superintendent and first line supervisor to objectively assess their crew to see if they are meeting the intent of this document. They are duty bound to not misrepresent the IHC community. Leadership of the highest moral character is required during these decisions. Short-term failure to meet the minimum requirements

of the Annual IHC Mobilization Checklist (appendix C) may not necessarily require a re-certification; however these requirements must be met for Type 1 crew mobilization.

#### **ANNUAL CREW PRE-MOBILIZATION PROCESS**

The superintendent of crews holding IHC status the previous season are required to complete the Annual IHC Mobilization Checklist (appendix C) and send the completed document to the local GACC prior to making the crew available for national mobilization each season.

#### **ANNUAL CREW READINESS REVIEW**

On an annual basis the superintendent of crews holding IHC status the previous season are required to complete the Annual IHC Preparedness Review (appendix B). This process is designed to evaluate crew preparedness and compliance with the *Standards for Interagency Hotshot Crew Operations*.

The annual review will be conducted while the crew is fully staffed and operational. This review is not required prior to a crew being made available for incident assignment at the beginning of their availability period.

When a review is completed the document is kept on file at the local host unit fire management office.

# APPENDICES



## APPENDIX A

### STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS MINIMUM CREW STANDARDS FOR NATIONAL MOBILIZATION

Minimum Standards	Type 1	Type 2 with IA Capability	Type 2
<b>Fireline Capability</b>	Initial attack/can be broken up into squads, fire line construction, complex firing operations(backfire)	Initial attack/can be broken up into squads, fireline construction, firing to include burnout	Initial attack, fireline construction, firing as directed
<b>Crew Size</b>	18-20		
<b>Leadership Qualifications</b>	Permanent Supervision Supt: TFLD, ICT4,FIRB Asst Supt: STCR, ICT4 3 Squad Bosses: ICT5 2 Senior Firefighters: FFT1	Crew Boss: CRWB 3 Squad Bosses: ICT5	Crew Boss: CRWB 3 Squad Bosses: FFT1
<b>Language Requirement</b>	All senior leadership including Squad Bosses and higher must be able to read and interpret the language of the crew as well as English.		
<b>Experience</b>	80% 1 season	60% 1 season	20% 1 season
<b>Full Time Organized Crew</b>	Yes (work and train as a unit 40 hrs per week)	No	No
<b>Communications</b>	5 programmable radios	4 programmable radios	
<b>Sawyers</b>	3 agency qualified	3 agency qualified	None
<b>Training</b>	As required by the <i>Standards for Interagency Hotshot Crew Operations</i> or agency policy prior to assignment	Basic firefighter training and/or annual firefighter safety refresher prior to assignment	Basic firefighter training and/or annual firefighter safety refresher prior to assignment
<b>Logistics</b>	Crew level agency purchasing authority	No purchasing authority	No purchasing authority
<b>Maximum Weight</b>	5300 lbs		
<b>Dispatch Availability</b>	Available nationally	Available nationally	Variable
<b>Production Factor</b>	1.0	.8	.8
<b>Transportation</b>	Own transportation	Transportation needed	Transportation needed
<b>Tools &amp; Equipment</b>	Fully equipped	Not equipped	Not equipped
<b>Personal Gear</b>	Arrives with: Crew First Aid kit, personal first aid kit, headlamp, 1 qt canteen, web gear, sleeping bag		
<b>PPE</b>	All standard designated fireline PPE		
<b>Certification</b>	Must be annually certified by the local host unit agency administrator or designee prior to being made available for assignment.	N/A	N/A

## APPENDIX B

### STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS ANNUAL IHC PREPAREDNESS REVIEW

The following document is designed to evaluate crew preparedness and compliance with the *Standards for Interagency Hotshot Crew Operations (SIHCO)*. It will be used to review IHC programs annually while the crew is fully staffed and operational. This review is not required to verify that a crew is ready for incident assignment at the beginning of their availability period.

When a review is completed the document is to be kept on file at the local host unit fire management office.

Crew Name:	Host Unit/Address:
IHC Personnel Roster (Name/Working Title):	NWCG Qualifications
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

<b>Location:</b>		<b>Date:</b>	
<b>Respondent:</b>		<b>Reviewed By:</b>	
<b>Key Code: E = Exceeds Standard M = Meets Standard NI = Needs Improvement NR = Not Reviewed</b>			
Description		Code	Remarks
<b>1</b>	Crew meets Agency and National Standards for Organizational Requirements: a. Superintendent b. Assistant Superintendent/Captains c. Squad Boss d. Senior Firefighters e. Number of career positions (7 required)		
<b>2</b>	Crew meets Agency and National Standards for: a. Mobilization and dispatch time frames b. Government purchase authority c. Operational Preparedness Training d. SIHCO and Red Book		
<b>3</b>	Is the crew properly stasured with the appropriate Geographic Area Coordination Center?		
<b>4</b>	Has the local first line Supervisor, Agency Administrator and IHC Superintendent signed Appendix C? (SIHCO)		
<b>5</b>	IHC has been trained on accident/injury notification procedures: a. Vehicle Accident Reporting b. SAFENET c. SAFECOM d. CA-1/CA-16/APMC e. Safety Management Information System (SMIS) (SHIPS)		
<b>6</b>	IHC regularly participates in documented tailgate safety sessions.		
<b>7</b>	Unit Safety Plan is available and can be readily accessed.		
<b>8</b>	IHC has Job Hazard Analysis completed for each fire related task.		
<b>9</b>	IHC has Risk Assessment completed for each project task. (Agency requirement)		
<b>10</b>	Radio operations meet requirements: a. Minimum number of radios b. Knowledge of radio programming (Narrow/Wide Band/Digital Frequencies) c. Understand frequency authorization and use issues d. Facility radio and speaker system e. Approved local radio frequencies are posted		

11	IHC leadership is familiar with administrative issues and prepare and secure documents as per agency standards: a. Time & Attendance b. Crew time reports c. Fire time reports d. Per Diem forms e. Accident reports f. Credit card purchases and records g. Fleet purchasing cards		
12	IHC members meet the agency qualifications required of their positions.		
13	Status (filled/vacant) of leadership positions within the approved Organizational Chart.		
14	Leadership is familiar with air cargo transport limitations and requirements including: a. Purging of gas receptacles b. Air transport manifesting c. Weight limitations d. Safe packaging procedures for specialized equipment e. Local security requirements and procedures		
<b>INCIDENT QUALIFICATIONS AND CERTIFICATION CONSIDERATIONS</b>			
15	The Incident Qualifications and Certification System is used to produce Red Card qualifications.		
16	IHC members have current Red Cards.		
17	IHC members have a documentation file for current season training, certification, and experience (Hardcopy or Electronic).		
18	IHC members have a hard-copy file for past season fire training, fire experience, task books, performance evaluations and physical fitness.		
19	Each IHC member who drives a government vehicle is current with agency required driving documentation.		
20	IHC has access to training materials and equipment.		
21	IHC members are current in annual firefighter safety refresher training.		
22	IHC members have taskbooks initiated appropriate to their training needs. (NWCG 310-1)		
23	IHC members have documentation of currency with the agency medical standards.		
24	IHC members have completed the following training as per agency requirements: a. Defensive driving for drivers b. First aid c. CPR Certification d. Blood-borne pathogens e. Hazardous materials awareness/MSDS(OSHA 29CFR/1910.1200 & 29CFR 1910.120)		
25	IHC members have attended agency required employee orientation.		
26	Each IHC member has reviewed and signed an Employee Performance Appraisal Plan (EPAP) for the current season.		
27	Per agency standards IHC members participate in an established physical fitness program.		

28	IHC is aware of and meets agency mobilization standards, including: a. Mobilization and get-away time frames b. Driver duty limitations c. Work/rest requirements		
29	IHC members possess commercial drivers' license where appropriate.		
<b>FACILITIES</b>			
30	Annual Agency Safety Inspection is documented and complete.		
31	Computer/fax/telephone equipment meets the needs of the IHC(s).		
32	Facility has security for: a. Personnel records (privacy act notice OS-76 Item 43 schedule) b. Government equipment c. Personal equipment		
33	Safety Equipment and Signing includes: (OSHA 29CFR1910) a. Fire Extinguisher b. Smoke alarms c. First aid kits		
34	Storage of flammables/hazardous materials meets standards. (OSHA 29 CFR1910)		
35	Bulletin board includes appropriate postings: a. Unit and IHC organization charts. b. Emergency Notification Procedures c. 10 Standard Firefighting Orders d. 18 Watch Out Situations e. LCES f. Facility fire plan g. Fire danger information h. Fire weather information i. Smoking policy j. Sexual harassment policy/EEO counselors k. Department of Labor required information		
36	Employee right-to-know information/Material Safety Data Sheet (MSDS) is posted.		
<b>CACHE</b>			
37	Inventory and use records are available and current.		
38	Inventories are posted, dated, signed.		
39	Cache is secure.		
40	Tools meet maintenance standards. (Fire Equipment and Storage and Refurbishing Standards NFES 2249)		
41	Fire extinguisher service is current and location is identified in a highly visible manner.		

VEHICLES			
42	Preventive maintenance checks are documented and current.		
43	If required by the agency an Annual Gross Vehicle Weight (GVW) slip from a certified scale is documented in logbook and meets vehicle specifications.		
44	References/paperwork available include: a. Accident report forms b. Communications plan c. Posted frequencies d. Inventory (specific to compartment/location) e. Use record current f. Preventive maintenance records g. Personnel accident/injury forms h. Unit maps i. Current North American Emergency Response Guide Book j. Current credit card		
45	Jack (serviceable for GVW).		
46	Lug wrench (serviceable for vehicle).		
47	Non-skid surface per (OSHA 29CFR1910)		
48	Fire extinguisher service is current and location is identified in a highly visible manner.		
49	Hazard reflectors/flares.		
50	First aid/trauma kit is available and appropriate size; location is identified in a highly visible manner		
PROFICIENCY CHECKS			
This is a listing of skills that an IHC should have as a minimum. How the Proficiency Checks are conducted is up to the local unit. The intent is for the Superintendent and Reviewing Official to verify the crew being reviewed is proficient in these skill areas. This is a crew proficiency check, all items do not necessarily apply to all crewmembers			
51	Basic Handcrew Tactics: a. Handline construction b. Chainsaw operations c. Firing & holding organization d. Mop-up & spot grid organization e. Portable pump setup f. Simple and progressive hoselays		
52	Specialized Handcrew Operations: a. Lookouts and scouting b. Hot spotting c. Spot fire attack d. Felling teams e. Initial attack f. Structure protection g. Medivac h. Map/Compass/GPS navigation		
53	Air Operations: a. Fixed-wing transport of Crew b. Helicopter passenger safety c. Helicopter transport of flammables d. Directing helicopter drops by radio e. Helispot specifications f. Longline/Hover hook operations		

<b>54</b>	Demonstrated ability to make fire weather observations (using belt weather kit, accessing local daily forecast, using weather indicators to anticipate potential fire behavior).		
<b>55</b>	Demonstrated ability to use two-way radios (Dispatch contact protocol, local call sign system, programmable radio procedures).		
<b>56</b>	Demonstrated knowledge of basic individual communication responsibilities (briefings, debriefings, acknowledge messages, identify hazards, asking questions for clarification).		
<b>57</b>	Demonstrated knowledge of the key components of the Fire Orders (LCES) and established protocol for Crew disengagement.		
<b>58</b>	Demonstrated knowledge of the differences between a Safety Zone and a Deployment Zone.		
<b>59</b>	Demonstrated ability to deploy fire shelters in various situations (individual, group, two people in one shelter, drop gear and run, with wind).		

## PREPAREDNESS REVIEW SUMMARY

Comments:

General preparedness of the crew:

Items which are deficient:

Corrective action to be taken:

I have reviewed the \_\_\_\_\_ IHC program and certify the crew meets the requirements of the *Standards for Interagency Hotshot Crew Operations*.

Crew Superintendent: \_\_\_\_\_

Reviewing Official: \_\_\_\_\_

Sig \_\_\_\_\_ nature and Title

Date: \_\_\_\_\_

## APPENDIX C

### STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS ANNUAL IHC MOBILIZATION CHECKLIST

The Annual IHC Mobilization Checklist will be completed by the IHC superintendent and approved by the first line supervisor and agency administrator. The signed document must be forwarded to the responsible GACC notifying them of crew availability. This checklist must be provided prior to national mobilization.

If at any time an IHC fails to meet the required red card qualifications or the superintendent feels their crew is not meeting the intent of the *Standards for Interagency Hotshot Crew Operations* it is incumbent upon the crew superintendent to re-status the crew.

The IHC will be re-statused per crew typing in the Minimum Crew Standards for National Mobilization (appendix A). The superintendent is responsible for informing the first line supervisor, agency administrator and the local GACC of any required changes in the crews typing.

#### REQUIRED IHC STAFFING

This table designates employees in leadership positions on the IHC being certified for mobilization. A minimum of seven (7) career positions or fully qualified personnel are required for certification as defined in Chapter 2:

Position	Fully Qualified Career Employee (Name)	Fully Qualified Detailed Employee (Name)	Current NWCG Qualifications
Superintendent			
Asst Supt or Captain			
Captain or Squad Boss			
Squad Boss			
Squad Boss			
Senior Firefighter			
Senior Firefighter			

#### TRAINING AND CERTIFICATION

Have all crewmembers completed Operational Preparedness Training? Yes \_\_\_\_\_ No \_\_\_\_\_  
Do all crewmembers have a current Incident Qualifications Card? Yes \_\_\_\_\_ No \_\_\_\_\_

#### PREPAREDNESS

Does the IHC meet mobilization standards defined in Chapter 2? Yes \_\_\_\_\_ No \_\_\_\_\_  
Does the crew have dedicated transportation and the required fire equipment? Yes \_\_\_\_\_ No \_\_\_\_\_  
Has the crew undergone a preparedness review (appendix B) in the last 12 months? Yes \_\_\_\_\_ No \_\_\_\_\_

The \_\_\_\_\_ IHC program is available for national assignment.

IHC Superintendent \_\_\_\_\_ Date \_\_\_\_\_

IHC first line Supervisor and Title \_\_\_\_\_ Date \_\_\_\_\_

IHC Agency Administrator and Title \_\_\_\_\_ Date \_\_\_\_\_

## **APPENDIX D**

### **STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS NATIONAL INTERAGENCY HOTSHOT CREW STEERING COMMITTEE CHARTER**

#### **CHARTER AUTHORITY**

The National Interagency Hotshot Crew (IHC) Steering Committee will function under the authority of the IHC Sponsor Agency Fire Directors.

#### **MISSION**

The National IHC Steering Committee will provide the IHC community, fire managers, and agency administrators a means for proactive problem and issue resolution; will promote safe and effective IHC operations and will strive to ensure consistent adherence to national fire management policies. Interagency Hotshot Crews are those crews identified as National Shared Resources.

#### **OBJECTIVE**

The National IHC Steering Committee will assist fire managers, agency administrators, and IHCs in the management of the hotshot program through solicitation, review and validation of input and concerns relating to fire operations that are national in scope. The Steering Committee will facilitate the exchange of information between the above groups.

#### **STEERING COMMITTEE COMPOSITION**

The Steering Committee will consist of 13 standing members to include the following:

- One regional or state level fire operations staff member from an IHC sponsor agency, selected by the IHC Sponsor Agency Fire Directors to serve as their representative to the Steering Committee.
- One Agency Administrator representative from an IHC host unit, selected by the above IHC Sponsor Agency Fire Directors representative.
- One National Interagency Fire Center (NIFC) representative, selected by the national fire operations office of the U.S. Forest Service (USFS).
- One National Interagency Fire Center (NIFC) representative, selected jointly by the national fire operations offices of the Bureau of Land Management (BLM), the Bureau of Indian Affairs (BIA), and the National Park Service (NPS).
- Three IHC Superintendents representing Department of Interior agencies.
  - One representing BLM
  - One representing BIA
  - One representing NPS
- Six USFS IHC Superintendents selected by the IHC Superintendents in these Geographic Areas:
  - One representing the Northern Rockies Geographic Area
  - One representing the Pacific Northwest Geographic Area
  - One representing the Great Basin and Rocky Mountain Geographic Areas
  - One representing the California Geographic Area
  - One representing the Southwest Geographic Area
  - One representing the Eastern and Southern Geographic Areas

**CHAIRPERSON** - A Chairperson and Co-Chair will be elected for a 2-year term from the superintendents listed above.

**ELECTION PROCESS** - Election will be held at the beginning of the steering committee meeting. Committee members will nominate the new chair and co-chair, outgoing chair will facilitate the election process.

**MEMBERSHIP TENURE** - IHC Superintendents serve a 4-year term that can be extended with the support of their agency sponsors. Agency committee members serve at the pleasure of their selecting sponsor.

**MEETING FREQUENCY** - The Steering Committee will meet annually, at a minimum. Meetings will be conducted in the various geographic areas; technical specialists may be invited to participate.

**STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS** - The Steering Committee will facilitate the process for any national IHC operations standards revisions under the direction of the IHC Sponsor Agency Fire Directors.

**NATIONAL IHC WORKSHOP** - The Steering Committee will recommend the need for and timing of National IHC workshops.

## APPENDIX E

### STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS PEER REVIEW FOR INITIAL CERTIFICATION OF INTERAGENCY HOTSHOT CREWS

ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>CORPORATE KNOWLEDGE</b> <b>Communications - Sharing information</b>	<b>Comments</b>	
<p>Crew clearly understands and demonstrates the knowledge expected of Type 1 crews. Crew shares critical information in a timely manner utilizing the appropriate vernacular for the situation.</p> <ul style="list-style-type: none"> <li>Face to face and radio communications are accurate, concise and respectful.</li> <li>Intra and intercrew communications are maintained and appropriate for the situation.</li> <li>Crew clearly understands and utilizes "Trigger Points" and "Trip Wires" and makes them know to all affected resources.</li> </ul>	Contact Phone #	
ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>CORPORATE KNOWLEDGE</b> <b>Strategy and Tactics</b>	<b>Comments</b>	
<p>Crew clearly understands the overall incident strategy and control objectives. Crew selects the correct tactics to meet the control objectives and is able to adjust their tactics as the situation warrants.</p> <ul style="list-style-type: none"> <li>Crew demonstrates knowledge of line placement and standards.</li> <li>Crew demonstrates knowledge of water use and hoselays.</li> <li>Crew demonstrates extensive knowledge in the use of portable pumps.</li> </ul>	Contact Phone #	

<b>ASSIGNMENT</b>	<b>Reviewer's Name:</b>	<b>Reviewer's Crew:</b>
<b>CORPORATE KNOWLEDGE</b> <b>Mobilization - Travel: Ground/Air</b>	<b>Comments</b>	
<p>Crew has been mobilized inside/outside of region and they clearly demonstrate an understanding of travel policies and guidelines.</p> <ul style="list-style-type: none"> <li>• Crew has driven to incidents and demonstrates a clear understanding of policies and procedures associated with this type of mobilization</li> <li>• Crew has flown in contract aircraft demonstrating a clear understanding of policies and procedures associated with this type of mobilization</li> <li>• Crew has flown commercially and prepared and secured equipment and personnel in accordance with airport security policies</li> </ul> <p>Crew has “chased” the buggies and still maintains minimum expectations/standards of receiving units</p>		
Contact Phone #		
<b>ASSIGNMENT</b>	<b>Reviewer's Name:</b>	<b>Reviewer's Crew:</b>
<b>Line Construction - Hotline</b>	<b>Comments</b>	
<p>Crew was engaged in a “Hotline” assignment of significant duration, (# of hours/shifts) crew performed efficiently and effectively adhering to all applicable rules of engagement. The quality, quantity and location of their line were commensurate to the conditions.</p> <ul style="list-style-type: none"> <li>• Crew briefing was conducted and included assignment objectives and LCES</li> <li>• Personnel, tools and equipment were adequate for the conditions</li> <li>• Escape Routes and Safety Zones were adequate for the conditions and known by all crewmembers</li> <li>• Crew overhead and crewmembers appeared to have good Situational Awareness</li> <li>• Crew conducted effective and well organized After Action Review</li> </ul>		
Contact Phone #		

<b>ASSIGNMENT</b>	<b>Reviewer's Name:</b>	<b>Reviewer's Crew:</b>
<b>Line Construction - Cold Trail</b>	<b>Comments</b>	
Crew clearly demonstrated an understanding of the concept, utilizing the appropriate techniques of securing, mopping up and lining hot spots adjacent to the fires edge.		
Contact Phone #		
<b>ASSIGNMENT</b>	<b>Reviewer's Name:</b>	<b>Reviewer's Crew:</b>
<b>Working with Engines</b>	<b>Comments</b>	
<ul style="list-style-type: none"> <li>• Crew worked with water handling equipment coordinating with and supporting fire engine crews.</li> <li>• Crew briefing was conducted which included assignment objectives, hazards, communications, lookouts, escape routes, and safety zones.</li> <li>• Crewmembers assisted engine companies in setting up engine operations.</li> <li>• Crewmembers looked for water sources (ponds, pools, stand pipes, etc.) set up portable pumps and hose lays.</li> <li>• Crew utilized working lines in combination with hand tools to suppress and/or mop up fire activity.</li> <li>• Crew personnel maintained good communications and were accounted for at all times.</li> <li>• Crew maintained good situational awareness dealing with fire activity and hazards. LCES was maintained.</li> </ul>		
Contact Phone #		

ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Line Construction - Downhill</b>	<b>Comments</b>	
<p>Crew participated in a downhill line construction operation. LCES was in place and maintained for the duration of the operation.</p> <ul style="list-style-type: none"> <li>• Crew supervisor(s) and fireline overhead will discuss assignments prior to committing crew(s). Responsible overhead individual will stay with job until completed. (Minimum TFLD or ICT4)</li> <li>• Decision will be made after proposed fireline has been scouted by supervisor(s) of involved crew(s).</li> <li>• LCES will be coordinated for all personnel involved. <ul style="list-style-type: none"> <li>• Crew supervisor(s) is in direct contact with lookout who can see the fire.</li> <li>• Communication is established between all crews.</li> <li>• Rapid access to safety zones in case fire crosses below crew(s).</li> </ul> </li> <li>• Direct attack will be used whenever possible.</li> <li>• Fireline will not lie in or adjacent to chute or chimney.</li> <li>• Starting point will be anchored for crew(s) building fireline down from the top.</li> <li>• Bottom of the fire will be monitored; if the potential exists for the fire to spread, action will be taken to secure the fire edge.</li> </ul>		
Contact Phone #		
ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Line Construction - MIST</b>	<b>Comments</b>	
<p>Crew engages to suppress a wildfire with the least impact to the land. Fire conditions and good judgment dictate actions taken.</p> <ul style="list-style-type: none"> <li>• Safety is of the utmost importance. Line standards and specifications are commensurate to the conditions.</li> <li>• Proper procedures, tools and equipment are selected that least impact the environment.</li> </ul>		
Contact Phone #		

ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Spot Fire Procedures</b>	<b>Comments</b>	
<p>Crew has pre-identified spot fire protocols and procedures.</p> <ul style="list-style-type: none"> <li>• Notification procedures: To overhead, firing boss, holding boss, burners, crew members, adjoining forces.</li> <li>• Appropriate size-up procedure.</li> <li>• Safety - LCES implementation.</li> <li>• Engagement method(s).</li> <li>• Ability to request additional resources if needed.</li> <li>• Contain, control, patrol, mark and notify procedure or system.</li> </ul>		
	Contact Phone #	
ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Firing Operations - Burnout/Division Level</b>	<b>Comments</b>	
<p>Crew initiated and conducted a successful burnout to accomplish crew level control objectives. The crew was able to able to maintain control of fire intensity and keep the main fire and burnout operation within the control lines.</p> <ul style="list-style-type: none"> <li>• Incident, division and crew level briefings were in agreement and crew fully understood the assignment.</li> <li>• Coordination with adjoining resources and neighboring divisions was apparent and maintained for the duration of the shift.</li> <li>• Crew utilized firing techniques appropriate for the fuels, weather and topography.</li> <li>• Crew showed proficiency in the use of various types of firing equipment.</li> <li>• Crew demonstrated the ability to control the intensity and rates of spread of the burnout necessary to meet incident objectives.</li> </ul>		
	Contact Phone #	

ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Firing Operations - Burnout/Crew Level</b>	<b>Comments</b>	
<p>Crew initiated and conducted a successful burnout to accomplish crew level control objectives. The crew was able to able to maintain control of fire intensity and keep the main fire and burnout operation within the control lines.</p> <ul style="list-style-type: none"> <li>• Superintendent or the crew overhead maintained communications with division supervisor and adjoining resources</li> <li>• Crew had sufficient personnel, equipment and expertise to conduct the burnout without assistance.</li> </ul>		
Contact Phone #		
ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Firing Operations - Holding</b>	<b>Comments</b>	
<ul style="list-style-type: none"> <li>• Crew was involved in holding operations in support of a burnout or backfiring operation.</li> <li>• Superintendent and or crew overhead briefs and develops an organizational holding plan and assigns equipment and crews.</li> <li>• Holding Boss should assure safety of personnel.</li> <li>• Overhead and crew maintains communication with adjoining</li> <li>• Resources to ensure plan is followed accordingly.</li> <li>• Holding Boss advises Division Supervisor of the progress and holding conditions.</li> <li>• Selected Individuals should be at a vantage point where both the firing and holders can be seen.</li> <li>• Objective hazards and crew members and adjoining forces can be observed.</li> <li>• Holding Boss should insure that crews and equipment are progressing with the firing operations when possible.</li> </ul>		
Contact Phone #		

ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Interface Operations - General</b>	<b>Comments</b>	
<ul style="list-style-type: none"> <li>• Crew operations stayed fluid in their performance of the overall plan. Crew's strategy and tactics were able to adjust to changing conditions and situations.</li> <li>• Priorities for the protection of life, property, and environmental resources were kept in focus, maintaining safety first.</li> <li>• Crew conducted an organized and meaningful After Action Review following the assignment.</li> </ul>		
Contact Phone #		
ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Interface Operations - Firing Around Structures/Improvements</b>	<b>Comments</b>	
<p>Crew was actively engaged in firing operations adjacent to structures/improvements threatened by an approaching wildland fire.</p> <ul style="list-style-type: none"> <li>• Crew overhead obtained a briefing from division or operations concerning the firing operation.</li> <li>• Superintendent participated in the tactical planning of the firing procedures and crew responsibilities.</li> <li>• Crew briefing was conducted addressing the objectives, safety concerns, LCES, firing procedures, and the crew's part in the tactical implementation.</li> <li>• Crew safely and effectively fired out from roads, lanes, pathways, handline, etc. in an effort to protect structures/improvements.</li> <li>• Burners showed a firm knowledge of firing techniques and firing equipment used.</li> <li>• Crew maintained a vigilant stance during the holding period of the firing operation, actively searching for spot fires, and problems associated with doglegs, widow makers, snags, etc.</li> </ul>		
Contact Phone #		

ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Interface Operations - Structure/Improvement Triage</b>	<b>Comments</b>	
<p>Crew performed or assisted in the structure/improvement triage process, sizing up the threat to individual structures/improvements, prioritizing, and determining how best to minimize property damage and loss.</p> <ul style="list-style-type: none"> <li>• Crew briefing was conducted addressing assignment objectives, predicted fire and weather activity, special hazards, communications, escape routes and safety zones.</li> <li>• Crew showed a firm grasp of the defensible space concept.</li> <li>• Crew was aware of occupancy coordinating efforts between property owners and fire fighters maintaining a professional attitude when dealing with the public.</li> <li>• Crewmembers performed hazard reduction by cutting brush, limbing trees and shrubs, constructing handline, and removing debris from around structures/improvements.</li> <li>• Crew maintained good situational awareness with urban interface conditions such as vehicle traffic, best ingress and egress, domestic animals, electrical hazards and propane lines.</li> <li>• Crew maintained a mobile capability, and maintained LCES.</li> </ul>		
	Contact Phone #	
<b>ASSIGNMENT</b>	<b>Reviewer's Name:</b>	<b>Reviewer's Crew:</b>
<b>Line Construction – Indirect</b>	<b>Comments</b>	
<p>Crew participated in an indirect line construction operation. LCES was in place and maintained for the duration of the shift.</p> <ul style="list-style-type: none"> <li>• Assignment was to construct an indirect control line some distance from the main fire.</li> <li>• Assignment was to widen a road and eliminate all hazard in anticipation of a firing operation.</li> </ul>		

ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Working with Dozers</b>	<b>Comments</b>	
<ul style="list-style-type: none"> <li>• Crew works in conjunction with dozer to meet control objectives on the fireline.</li> <li>• Crew briefing was conducted which included assignment objectives, hazards, communications, lookouts, escape routes, and safety zones.</li> <li>• Communication was maintained between crew and dozer boss.</li> <li>• Crew was never placed directly below dozer operations.</li> <li>• If firing behind, crew supervisor(s) coordinates to not allow dozer to get too far ahead of firing crew.</li> <li>• Crew maintained good situational awareness dealing with fire activity and hazards. LCES was maintained.</li> </ul>		
	Contact Phone #	
ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Construct/Prepare Helispot</b>	<b>Comments</b>	
<ul style="list-style-type: none"> <li>• Locate appropriate site</li> <li>• Determine prevailing wind directions and clear approach and departure paths appropriate to size class of helicopter</li> <li>• Level touchdown area appropriate to size class of helicopter</li> <li>• Install windsock or wind indicator</li> <li>• Remove or secure loose items</li> <li>• Clear area of stumps, brush, posts, large rocks or anything over 18 inches high</li> <li>• Relay any hazards to pilot</li> </ul>		
	Contact Phone #	

ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Working with aircraft - Fixed wing: Air Attack/ASM's</b>	<b>Comments</b>	
<ul style="list-style-type: none"> <li>• Crew supervisor(s) do an adequate job of describing crew location and crew needs.</li> <li>• Radio communications are accurate, concise and respectful.</li> </ul>		
Contact Phone #		
ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Working with aircraft - Directing Retardant and Bucket Drops</b>	<b>Comments</b>	
<ul style="list-style-type: none"> <li>• All affected fireline personnel are notified of the aircraft's intentions and are located in a safe area prior to the drop.</li> <li>• Crew supervisor(s) describes general location on the incident.</li> <li>• Crew supervisor(s) finalizes location by using appropriate and accepted communication methods: <ul style="list-style-type: none"> <li>• Signal mirrors</li> <li>• Clock direction</li> <li>• Flagging/Panels</li> <li>• Position/Aspect on slope</li> <li>• Describe prominent landmarks, etc.</li> </ul> </li> <li>• Crew supervisor(s) gives proper target description and mission.</li> <li>• Crew supervisor(s) confirm the drop area is clear both with pilot and ground personnel.</li> <li>• Crew supervisor(s) gives honest and constructive feedback on drop accuracy and effectiveness.</li> </ul>		
Contact Phone #		

ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Working with aircraft - Rotor Wing Crew Transport</b>	<b>Comments</b>	
<ul style="list-style-type: none"> <li>• Crew arrives at helibase/helisport organized with gear and equipment prepared to fly.</li> <li>• Crew has current manifest ready for helitack personnel.</li> <li>• Generally crew superintendent requests being placed on the first load.</li> <li>• Crew listens and adheres to helitack personnel's instructions.</li> </ul>		
	Contact Phone #	
ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
<b>Chainsaw Operations</b>	<b>Comments</b>	
<p>Crew has demonstrated the safe and effective use of chainsaws and utilized appropriate saw team deployment techniques while engaged in line construction (hotline, downhill, indirect, etc.), mop-up, and felling operations.</p> <ul style="list-style-type: none"> <li>• Crew was able to deploy multiple saw teams based on fireline assignment.</li> <li>• Crew maintains personnel qualified at the B (intermediate) and/or C (advanced) Faller level and demonstrated the ability to perform complex falling and bucking operations.</li> <li>• Sawyers showed a firm knowledge of chainsaw use and technique and adhered to agency policy and guidelines.</li> <li>• Crew was proficient at conducting field maintenance of chainsaws and carried appropriate tools and parts to make basic repairs.</li> </ul>		
	Contact Phone #	

ASSIGNMENT	Reviewer's Name:	Reviewer's Crew:
Working with Other Crews, Adjoining Forces and Cooperators	Comments	
<p>Leading Up:</p> <ul style="list-style-type: none"> <li>• Ability to provide resources from the crew to meet incident objectives. (IE: DIVS, DOZB, ENGB and other)</li> <li>• Ability to provide intelligence gathering for operations, division, the situation unit to help develop objectives or strategy.</li> <li>• Crew demonstrated leadership skills and collaboration when working with adjoining forces and or cooperators.</li> <li>• Crew communicated tactical objectives and goals for the completion of assignments.</li> <li>• Crew understands the capabilities and limitations of non Type I IHC when conducting fire assignments.</li> <li>• Crew maintained professionalism when working with Type 2 crews, contract crews, military crews and inmate crews during fire assignments.</li> <li>• Crew maintained prompt and dependable communication with adjoining forces and or cooperators.</li> <li>• Crew executed assignment while understanding cultural differences and abilities of other crews.</li> <li>• Crew shared awareness of critical situations and hazards with other crews while performing assignments.</li> <li>• Crew demonstrated ability to assist and or work with adjoining forces or cooperators while conducting engine company operations.</li> <li>• Hoselays</li> <li>• Fold-a-tank</li> <li>• Portable pumps</li> <li>• Mop-up</li> <li>• Hose recovery</li> </ul>		

# **STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS**

## **APPENDIX F ERRATA SHEETS**

# STANDARDS FOR INTERAGENCY HOTSHOT CREW OPERATIONS ERRATA SHEET #1

Effective Date: January 21, 2011

Changes:

The Standards for Interagency Hotshot Crew Operations (SIHCO) has had minor edits added or changed. Specific items to note include:

- Signature page has been updated with current Agency Fire Directors, along with current National Interagency Hotshot Crew Steering Committee members.
- Chapter 3: added S-290 as required training for the Senior Firefighter position. Deleted S-290 for the Squad Leader position.
- Chapter 5: Added Sub-Unit to the Certification Team Membership.
- Appendix A: Revised maximum crew flight weight of 5300lbs.