

Great Basin

FAST Final Report

August 29, 2015



FAST Team Members

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Participating Agencies

Bureau of Land Management
Bureau of Indian Affairs
National Park Service
US Fish and Wildlife Service
US Forest Service
Idaho Department of Lands
Nevada Division of Forestry
Utah Division of Forestry
Southern Idaho Timber Protective Association

Executive Summary

Purpose:

The Fire, Aviation and Safety Team (FAST) was instructed to conduct an independent assessment and evaluation of operational and managerial activities on incidents throughout the Great Basin. These assessments could also include support organizations, dispatch centers, and coordination centers if necessary. The team was tasked through a Letter of Delegation to specifically review the following elements:

- a. Fatigue management and compliance with national guidance on work/rest.
- b. Effectiveness of incident support, readiness, dispatch, communications, and coordination center support.
- c. Incident Management Team staffing and specific safety mitigations.
- d. Smoothness and effectiveness of IMT transitions, especially from extended attack or Type 3 IMT's to Type 1 or Type 2 IMT's.

- e. Safety issues arising from the use, or lack thereof, of contracted or local resources such as volunteer fire departments.
- f. Recognition by managers and incident staff of the unusual fire conditions faced throughout the geographic area and any positive or negative safety implications of response actions for initial attack, extended attack, and aviation operations.
- g. Any issues the IMT, local unit line officer, or FMO ask the team to address.

Schedule:

- August 22 – FAST met at NIFC in Boise, ID for in-brief
Met with USFS Boise National Forest Fire Staff and Boise Interagency Dispatch Center
Traveled to Salmon, Idaho
- August 23 – Met with Salmon-Challis National Forest Fire Staff and Interagency Dispatch
Visited Bobcat Fire Type 2 Team (Whalen)
Met with Middle Fork Complex Type 3 Team (Galyardt)
- August 24 – Reviewed Boise Air Tanker Base
Traveled to McCall, Idaho
- August 25 – Visited Cougar Fire Type 2 Team (Rosenthal)
Met with Payette National Forest Fire Staff, Forest Aviation Officer, Center Manager, and Forest Supervisor
- August 26 – Visited Teepee Springs Fire Type 2 (DeMasters)
Met with Southern Idaho Timber Protection Association Fire Warden and IDL Area Manager
- August 27 – Visited West Scriver and Rapid Fires Type 2 team (Dunford)
Traveled to Boise, Idaho
- August 28 – Traveled to Salt Lake City, Utah to finalize report
- August 29 – Close out with Great Basin MAC and Great Basin Coordination Group

Summary:

The 2015 FAST conducted extensive field visits and interactions at all levels in the Great Basin and many observations and recommendations in alignment with the guidance in the Letter of Delegation. However, challenges in holistically implementing the Dutch Creek Protocol as defined in the 2010 NWGC Memorandum remain as the **single greatest safety challenge** for fire and aviation in the Great Basin. All fire management leadership the FAST interacted with during the review wholly believes in the value and benefit of Dutch Creek Protocol compliance. The issue is lack of uniform training, equipment, personnel, medical authority, and agency direction. Research from the FAST, comparing 2015 to past reviews (2012 and 2013) reveals that Dutch Creek Protocol implementations challenges were detailed in multiple reports.

In the absence of definitive guidance, people on all levels are trying to implement Dutch Creek with a great deal of overlap in some areas (buying non-standard ALS medical kits), gaps in other areas (medical authority), confusion in communication (without single terminology), authority (differing Agency policy and medical direction, and no cost-benefit analysis for solutions.

Critical and Immediate Follow-up Actions:

The FAST recommends that Great Basin Coordinating Group develop a sub-group specifically tasked to address Dutch Creek Protocol recommendations from FASTs over the last several years, in collaboration with NIFC, each Agency, and the States with a timeline to integrate a comprehensive suite of information for 2016 pre-season training.

Introduction:

On August 18, 2015 the Great Basin Multi-Agency Coordination Group (GBMAC) ordered a Fire and Aviation Safety Team (FAST) to visit several large fires in Idaho. The mission of the FAST was to gather information, provide assistance when needed, and promote safe fire operations during high fire activity. The Delegation of Authority was issued to the team on August 20, 2015 and the team visited the field from August 22 through August 27. The FAST visited four Type 2 teams, one Type 3 team, two interagency dispatch centers, and multiple agency administrators and fire personnel.

Methods and Procedures:

Incident Commanders, local dispatch, and Agency Administrators were contacted prior to each visit. It was emphasized during the initial contact that the FAST mission was to gather information for trend analysis and to promote safe fire operations. With approval, the FAST scheduled and facilitated an in-brief with the ICs and other command and general staff. Hosting units were notified and invited to attend. Agendas and interviews with appropriate staff at the ICP followed the objectives identified in the DOA. Fireline visits were conducted at the discretion of the Incident Commander.

Findings and Recommendations:**Dutch Creek Protocols Continued Implementation Issues**

Findings: There are multiple different strategies and ongoing confusion about what IMTs, and local Agencies need to have in place to meet the Dutch Creek Protocol. All Fire Management leadership the FAST interacted with during the review wholly believes in the value and benefit of Dutch Creek Protocol compliance. The issue is lack of uniform training, equipment, personnel, medical authority, and agency direction.

Extracted below are comments from three previous FAST Reviews, going back to 2012, that are just as relevant for this 2015 FAST based on team interaction with field personnel.

Aug 15-20 2012 FAST Report Extract--**"Dutch Creek Protocol**

This issue was a major concern on all incidents. Teams are diligently pursuing procedures and resources necessary to ensure rapid patient care and transportation with a goal of meeting the "golden hour" and striving to meet the new direction.

Issues

- *Dutch Creek Protocol guidelines and expectations are not clear and need to be clarified as it relates to dedicated resources for treatment and transportation.*
- *Inability to acquire and maintain Type 3 High Performance helicopters to meet medical evacuation needs throughout the life of the incident.*
- *Teams are trying to provide a higher level of patient care with line qualified paramedics (EMTP) in situations where transportation is a challenge (night, smoke, high winds, etc.).*
- *Teams experienced difficulty acquiring line qualified paramedics (EMTP) and ALS resources.*
- *Finance sometimes rejected or delayed requests for resources that provide treatment and transportation.*

Recommendations

- *Implementation of the Dutch Creek Protocol can be complicated on an incident. Further discussion on development of a clear, simple process to allow for alternative means to meet requirements needs to be developed i.e. use of line paramedics, ALS, ambulance, risk avoidance, altered strategy and tactics, etc.*

- *Teams should utilize all available aviation resources to meet medivac requirements, including local unit aviation, Life Flights, military, and private. Consider the need for litter kits on government contracted aircraft.*
- *Local units should begin fact finding, negotiations and establish agreements with emergency medical resources before fire season so teams don't have to attempt this on an incident.*
- *Expanded dispatch, finance, IBAs and others who approve requests for medical resources (paramedics, medical supplies, ALS, ambulances) should be educated on the Dutch Creek protocols.*
- *Need to have a distinction in ROSS for line qualified paramedics (EMTP) like there is for EMTs (EMTB).*
- *Share the increased use of line EMTPs as a strategy for other IMTs.*
- *If the Idaho Air National Guard Medivac Helicopter agreement is implemented, the teams need to understand the mobilization process so they can access it.*
- *Exploration of hoist capabilities on agency Type 2 exclusive use helicopters should be encouraged, including purchase of hoist equipment and development of a training program.*
- *An IMT conducted a successful emergency medical incident exercise that simulated two simultaneous injuries. Local emergency management agencies were included in the exercise. This effort should be encouraged elsewhere as this practice is part of the Dutch Creek Protocol."*

Jun 30-Jul 4, 2013 FAST Report Extract—

"Dutch Creek Protocols--The FAST reviewed each IMT's emergency medical evacuation plans and found that the Dutch Creek protocols are being promoted and adhered to. In most cases, the teams have printed the standard communication process in the IAP and the pink IRPG insert is being widely used by most fireline supervisors. The time/distance to medical assistance (the "golden hour") is being discussed frequently and is being used in the risk management process when determining personnel assignments."

Aug 17-19, 2013 FAST Report Extract—

"Safety:

- *There is ongoing confusion about what teams need to have in place to meet Dutch Creek Protocol. Some IMTs neglected to address the protocol at all in their IAP.*
 - *Consider including Dutch Creek Protocols in the 2014 refresher courses.*
 - *Some teams were implementing sand table exercises to simulate emergency medical protocol.*
- *Some teams are aware of the Idaho EMS program and haven't had any problems working with the state.*
 - *Overview of the program should be included in the in-brief to ensure IMT understanding."*

2015 FAST Findings: Dutch Creek Protocol and Aviation Extraction capability compliance **continues** to be a concern. Most of the recommendations of 2012 and 2013 have **not been implemented** in a consistent manner.

Specific 2015 Findings:

- Recent Agency letters are contributing to confusion on the ground:
 - BLM released a Memorandum July 28, 2015 on Helicopter Emergency Long-line Last Option (HELLO). It states that, *"Departure from policy/procedures to respond to an emergency of a person's training is supported by the IHOG and the BLM National Aviation Plan...The HELLO is a Last Option to be considered after all other extraction methods have been evaluated and determined to not be feasible."*
 - The BLM Memo provides a Decision Criteria Checklist for HELLO to be signed by DIVS/OPSC/FMO/IC/Duty Officer to determine if HELLO is to be used.
 - The BLM Memo further provides a Go/NoGo Checklist for HELLO to be signed by pilot and spotter.
 - The USFS Fire and Aviation Management letter dated, Aug 14, 2015 states that, *"It is important that Forest Service aviation and operations personnel understand that HELLO missions are not approved*

operations. Such missions are last resort options and should only be considered when other approved methods are unavailable. The Forest Service Fire and Aviation Management staff believes that departure from existing policy and procedures, and performing missions that personnel are not trained to perform, increases risk.”

- While the NWCG letter states, “Each IMT should train to understand and practice the medical emergency procedures.” Yet, the USFS letter states that HELLO isn’t approved.
- The Great Basin geographic area has lost capability with the elimination of the Zion helicopter and reassignment of the other short haul capable aircraft out of the area.
- The lack of interagency standards for equipment, clear procedures, and standard training the Many of the aircraft on the source list were not available, and the ability to respond within one hour was lacking.
- The Forest request for short haul program development was not approved and only 2 aircraft in the nation will be allowed to start the program for the next two years.
- The FAST sees a great advance, is the Forest Service development and maintains the Emergency Helicopter Extractions Source List (http://www.fs.fed.us/fire/aviation/av_library/ehe_source_list.pdf) that provides information on helicopter extraction sources for each geographic area. .
- IMT1/IMT2 have their MEDL get approval for out of state EMTs, this does not happen on type 3 fires.

Recommendations:

- Develop a Great Basin sub-group specifically tasked to address Dutch Creek Protocol recommendations from FASTs over the last several years, in collaboration with NIFC, each Agency, and the States with a timeline to integrate a comprehensive suite of information for 2016 pre-season training.
- The task group should address: standard extraction and medical equipment, standard terminology, standard training across agencies, and integration of transport options.
- The task group should represent all key functions (safety, operations, medical unit leader, finance, and aviation) as well as each participating agency cross-sections to integrate Agency policy/procedures(one USFS, one DOI, one State, one local government for example).

Medical Direction for Medical Responders, Agency Administrators, and IMTs

Findings:

- Medical Direction (authority to work on patients in scope) is confusing on the ground and needs to be addressed in conjunction with the Dutch Creek Protocol implementation. Specifically, the BLM, Payette NF, and Bridger-Teton NF all have different medical directors designated. This is unclear to AAs, IMTs and responding medical resources. Dutch Creek Protocol directs Agency Administrators provide this information to the IMTs.
- Firefighters have made it clear to the FAST that they need additional clear, specific, and uniform guidance on medical direction.

Recommendation: Develop a separate Great Basin sub-group to address medical direction from each State, Federal Agency, and local cooperators before the 2016 Fire Season Refresher and IMT meeting to ensure changes are included and conveyed in both venues to provide a more efficient response. Without the GBCG taking a leadership role, there is not another integrating group in the Great Basin.

Fatigue management and compliance with national guidance on work/rest

Findings: A trend and common finding is that Type 1 hand crews are showing the greatest level of fatigue. Type 2 crews, engine crews, and aviation assets report no issues with fatigue. Crews are implementing good mitigation measures to manage fatigue. Multiple IMTs are utilizing spike camps to reduce hiking and travel time, mitigate smoke, and colder temperatures in the valley bottoms where ICPs were easier to support logistically. Additionally, home unit personnel were taking appropriate days off and emphasizing the application of work/rest guidelines.

Finding: FAST agrees with crew supervisors who strongly suggested IMTs use spike camps whenever feasible to mitigate fatigue due to proximity to the fire.

Findings: FAST reviewed all 2:1 ratio exceedance reports and the majority of the exceedance were the result of travel or establishing camp. All issues were mitigated within 3 operational periods.

Recommendation: The FAST supports direction giving wildland fire personnel the option of taking an additional day off is appropriate for the level of fatigue observed. Additionally, local line and fire leadership should fully appreciate cumulative fatigue after multiple back to back high stress/high tempo assignments may require more mitigation.

Effectiveness of incident support, readiness, dispatch, communications, and coordination center support

Finding: All IMTs reported that they received high-quality support and coordination with the cache, local dispatch centers, expanded dispatch center, and the coordination center. The GMAC group has been responsive to urgent needs. Everyone understands the shortage of resources, overhead, and aircraft due to national activity.

Commendation: Multiple teams and local units reported service from the GBCC Overhead desk has been exceptional given the current situation.

Finding: While it is positive that local MACs have been formed and are functioning, coordination between local MACs and GMAC needs to be better defined and operational procedures need to be developed. Concerns were with crew or aircraft movement without coordination of local priorities resulted in inefficiencies and conflict. In some cases, the resources that arrived on the incident did not meet the needs of the IMT. IMTs and local units reported a need to better coordinate the placement and movement of IA resources throughout the GACC.

Recommendations: Also, when a local MAC is formed, a scheduled daily conference call with the GMAC needs to occur to ensure priorities and resource assignments align. A preseason exercise would build better SOPs between local MACs and GMAC.

Finding: There is reluctance by local units to release suppression and support resources due to agency performance elements that are tied to targets and funding, until a Regional Forester or Chief writes a letter providing them target relief, also known as the Moses Letter (let my people go).

Recommendations: When everyone is below drawdown, acceptance needs to be better aligned to position resources where fire danger and potential for fire danger is greatest. Additionally, line officers at the District and State/Forest level should be provided specific guidance on the use of engines, overhead, and Type 2 crews funded by preparedness for general use and response by the Regional Forester/State Director/Area Director.

Incident Management Team staffing and specific safety mitigations

Findings: The IMTs are well staffed and functioning. Unfilled positions on the current rosters prior to mobilization were not critical to the performance of the IMT. Shortages were ordered and, although late, were filled.

Finding: Those positions not identified as IMT positions, such as LTAN, HRSP, an additional ASGS, and SOFR, are often unable to be filled.

Recommendations: Use UTF reports to help establish the training courses and establish the priority trainee program. Supervisors need to identify skill sets and characteristics in their employees that are necessary to support these priorities.

Findings: Liaison Officers with the knowledge of FEMA, FMAG, and cost-share agreements provided a good interface with local governments and emergency organizations. Some local units did not have the ability to perform this function.

Recommendations: A Liaison Officer or Technical Specialist with these skills should be considered for all incidents with WUI. Liaison Officer or Technical Specialist training should include Homeland Security and Emergency Management System and state specific items. Consider Liaison Officer or Technical Specialist role as a topic for IMT preseason meeting.

Findings: The Priority Trainee Program is limited by trainee availability. GB trainees are possibly not getting called out because they are being ordered and filled in their fully qualified positions. Demand for all positions results in low availability of trainees. ROSS has the ability to only show those positions in which the individual or management desires a resource to mobilize.

Recommendation: Consider having Trainees only identify those positions for which they are trainees in ROSS to avoid being mobilized in other positions.

Findings: Reluctance of agency personnel to step up in fire management and a reduction in militia has resulted in a heavy reliance on ADs. The AD program is important to the IMTs to fill positions and train trainees. Many ADs feel they are not welcome in the management organization by those that oversee the hiring of ADs and upper level management but are highly respected and appreciated by the IMTs. The AD program has the corporate knowledge base necessary to move incident management through successional planning.

Recommendation: Request management and line to change the negative perception and embrace the value of the AD program.

Finding: The number of team assignments and the team rotation process has pulled key fire management overhead from the entire Great Basin Geographic Area. This is especially impacting those units with high fire activity and large fires, more so than in the past.

Recommendations: Consider limiting the number of IMTs that are activated at the same time. Revisit the decision to eliminate an IMT that provided the opportunity to have 4 on and 4 off.

Smoothness and effectiveness of IMT transitions, especially from extended attack or Type 3 IMTs to Type 1 or Type 2 IMTs

Findings: Transitions from extended attack to Type 2 IMTs were found to have been smooth and efficient with clear leader's intent and delegations of authority. A key component highlighted by multiple IMTs to this success was the use of IMT members to fill critical shortages on the Type 3 IMTs and gain critical information prior to takeover. There was never confusion over who was in charge. There was a large variation in takeover times but all were appropriate for the specific incident.

Findings: Type 3 IMTs were available, utilized, and functioned well. New PMS 310-1 standard and direction additions are now available to establish the Command and General Staff of Type 3 IMTs.

Finding: The national shortage and unavailability of Type 1 and 2 IMTs created a sense of urgency to turn back fires prior to meeting adequate turn back standards.

Recommendation: Encourage proper risk assessment and ensure the type 3 IMT's capabilities are not exceeded.

Safety issues arising from the use, or lack thereof, of contracted or local resources such as volunteer fire departments

Findings: Relationships and engagement with local, county, and state entities varied greatly between IMTs. Most were positive for emergency response operations. The lack of wildland fire management knowledge by EMS Coordinators to address FMAG issues was reported as an obstacle. Knowledge of cost share agreements standards and procedures by agency personnel and local governments varied greatly. A common issue with establishing strategies and preparing cost share agreements is when does the responsibility to prevent fires from threatening structures become structure protection.

Recommendation: Utilize Liaison Officers or THSP with knowledge and expertise in this area. Emphasis should be placed in preseason coordination meetings with local governments.

Finding: Impacts to communities, including long term effects on infrastructure, were not included in the decision process. Current models used to make projections did not match actual fire size and progressions that impacted these values.

Recommendation: This should be a discussion with cooperators in a preseason meeting.

Recommendation: Review the method and accuracy of projections used in the initial WFDSS process.

Findings: There were no safety issues identified with the use of Idaho RFPAs; there were several safety issues with out of state RFPAs.

Recommendation: Briefing packages in Idaho should include information on state certification of RFPA resources.

Findings: There is an unrealistic expectation that IMTs can perform adequate contract inspections on contracted resources.

Recommendation: Rely on the preseason inspection for contract compliance. Minimize on-incident inspections to critical safety requirements.

Recognition by managers and incident staff of the unusual fire conditions faced throughout the geographic area and any positive or negative safety implications of response actions for initial attack, extended attack, and aviation operations

Findings: Managers and IMTs recognize the unusual fire conditions but had few options to boost capability. Adjacent Geographic Areas required the reassignment of local IA resources to support the large fires in those areas. Due to these shortages, appropriate strategies were implemented to mitigate potential safety implications and response. Crews were complimentary that they were able to provide input into strategies and tactics.

Findings: All of the reviewed units reported that they were below drawdown levels. Forests are left to their own devices to try and provide backup capability without success.

Recommendations: Consider identifying actions to take in fire management plans when adequate resources are not available to implement the planned response.

Any issues the IMT, local unit line officer, or FMO ask the team to address

Finding: Length of Assignment Reports generated by e-Isuite reported inaccurate and changing length of assignment dates.

Recommendation: GBCC Manager contact project manager for I-suite to identify problem.

Finding: IHC would like a standard for UTVs on incidents and to have the UTV included on the resource order. IMTs are utilizing and support IHCs' use of UTVs on incidents.

Recommendation: Modify mobilization plans to authorize IHCs to bring UTVs, similar to lap tops, as a standard.

Finding: Assistance was requested to elevate the need for adequate facilities at the Boise Air Tanker Base. This is one of the highest utilized tanker bases in the nation. Current facilities are temporary in nature, do not meet the standards of the Air Tanker Base Guide, and do not have a flush toilet. The pilots' lounge is limited and shared with NIFC Ramp operations. Shade is limited. In addition, because of the proximity to NIFC, many foreign visitors and cooperators visiting NIFC are given tours of the facility and operations. The facility is a poor representation of the professionalism of our National Interagency Fire Management Program.

Recommendation: USFS and BLM aviation managers should jointly develop a proposal that addresses a cost-share agreement for the operation and development of the Boise Air Tanker Base.

Finding: The WFDSS risk assessment and the standard IMT Risk Assessment worksheet are not consistent.

Recommendation: Consider a consistent format between Incident Risk Assessment worksheet and WFDSS.

Finding: Incident personnel are unable to maintain contact with family through cell phones and social media when assigned to a remote fire.

Recommendation: Consider the use of cell service and internet boosters in spike camps to further this capability.