

# Eastern Montana Incident Support

July 25-August 6, 2017



**Tom Kurth**  
**Incident Commander**

**Tony Doty**  
**Deputy Incident Commander**





## Incident Data

### Buffalo Fire:

- Started July, 24, Contained July 30.
- 3,020 Acres
- 2,301 Acres on Montana Private Lands (MT-PRI)  
526 Acres on Wyoming Private Lands (WY-PRI)  
17 Acres on Eastern Land Office (MT-EAS)  
176 Acres on Miles City Field Office (MT-MCD)

### Stallions Fire:

- Started July 24, Contained July 28.
- 1,051 Acres
- 969 Acres on Wyoming Private Lands (WY-PRI)  
82 Acres on Casper Field Office (WY-CAD)

### Bruner Mountain Fire:

- Started July 27, Contained July 31.
- 418 Acres 418 ACRES on Montana Private Lands (MT-PRI)

### Mile Marker 417 Fire :

- Started July 30, contained August 1.
- 144 Acres on Montana Private Lands (MT-PRI)

### No Name Gulch Fire:

- Started August 1, contained August 1.
- 10 acres on Montana private lands (MT-PRI)

## **Northern Rockies Staging - Billings, MT 7/22-7/24**

On July 22, 2017, the Alaska Type 1 IMT (Kurth) was ordered to pre-position in Billings, Montana. Fuels throughout eastern Montana had cured to record dry levels due to persistent and pervasive drought conditions, and frequent initial attack over the previous three weeks had challenged the capabilities of local resources leading to fatigue and readiness issues. Predicted lightning with high temperatures and low RH indicated a high potential for new starts and the Northern Rockies Coordinating Group felt it was prudent to have an incident management team in place and available for rapid deployment. The Team attended a general in-briefing at the Bureau of Land Management Montana State Office on the morning of July 24, 2017, and was assigned to the emerging Buffalo Fire in Powder River County about 30 miles southwest of Broadus, Montana that same evening.

## **Buffalo & Stallions Fires - Broadus, MT 7/24– 7/31**

The Buffalo Fire was started by lightning on July 24, and was reported to be 3,000 acres and growing rapidly. Initial attack efforts being hampered by gusty winds and low RHs. Approximately two to three miles south in Wyoming, the Stallions fire was ignited by lightning at roughly the same time and was reported



to be 1,000 acres and growing. The Alaska Type 1 IMT was assigned based on the area's shortage of initial attack resources, and complexity associated with fires burning in two states and geographic areas that were highly likely to merge. The team attended an incident in-briefing at the Community Center in Broadus, Montana on July 25, and assumed command of both the Buffalo and Stallions fires on July 26 at 0600.

Fire activity had diminished due to light precipitation and cloud cover on the evening of the 25th. Crews were able to build containment lines around most of the perimeter on both fires. ICP was established at the Broadus Community Center and a base camp was established at the Moorhead campground near the fire. Containment was quickly achieved on both fires. Initial Attack responsibilities were delegated to the team and several resources were dedicated to initial attack response if needed.

When it became clear that both fires had been caught and there was little chance that they would merge, a decision was made to transfer the Stallions fire back to the local unit on July 27 after being under the command of the Alaska IMT for only one day. This decision was largely driven by a desire to simplify the financial packages.

The Alaska IMT managed the Buffalo fire for five operational periods before transferring the incident to a Type 3 organization on July 30 to complete suppression repair operations. On July 31 the fire was transferred back to the local unit.



## **Bruner Mountain Fire - Roundup, MT 7/28-8/6**

The Bruner Mountain fire, 12 miles southeast of Roundup, MT, was ignited by lightning on July 27. Local volunteer fire departments, Montana DNRC and federal BLM resources responded; but with steep, rugged terrain and dry fuel beds, the fire grew to over 400 acres during the first burning period. Due to numerous threatened structures and high potential for growth, the Alaska IMT was assigned to assume command and relieve local resources. Designated Initial Attack resources from the Buffalo fire responded on the evening of July 28, with a forward group of IMT support personnel following the next day. Team members attended an in-briefing at the Emergency Operations Center in Roundup on July 29 at 1800. The Team officially took command of the fire at 0600 on July 30. The fire was approximately 65% contained at the time of the transfer. Remaining IMT resources relocated to the Bruner Mountain fire over the next several days as Buffalo fire objectives were met.

Crews continued to work securing the Bruner Mountain perimeter and suppression repair began shortly thereafter. The fire was officially declared 100% contained on July 31. Transfer of command from the Alaska IMT to an ICT4 (Scholl) occurred at 0700 on August 3 to complete suppression and repair objectives. Transfer of command from ICT4 to the local unit occurred on August 6.



## **Eastern Montana Incident Support - Roundup, MT 8/3—8/6**

As Bruner Mountain fire objectives neared completion, the Northern Rockies Geographical Area Coordination Center requested the Alaska IMT to form task forces to supplement and assist eastern Montana fire resources with initial attack capability. The area of responsibility covered the three Zones dispatched out of Billings, Lewistown and Miles City. Task forces responded to Sweet Grass County for the Mile Marker 417 Fire and the No Name Gulch Fire. Cooler, wetter weather moved into eastern Montana on August 5, moderating fire behavior across the region. Resources were demobilized to be made available for large fires still burning in western Montana and to be ready for the fire season developing in other western states.



# Fire Behavior - Buffalo and Stallions

## Topography

The Buffalo and Stallions fires were located in the Powder River Basin of southeastern Montana and north-eastern Wyoming. The area is composed of large areas of ranchland interspersed with steep and broken rocky plateaus (breaks). The valley bottoms started at 3600 feet elevation and the higher elevation maximums are around 4000 feet. The drainages in the area are generally aligned northwest to southeast. These drainages funnel diurnal winds in the fires' area.

## Fuels

Primary fuels carrying the fire were grass and sage. Another mechanism for fire spread was spotting from stands and individual ponderosa pine and juniper trees. The majority of the fire area could be characterized as Low Load, Dry Climate Grass (GR2), Short Sparse Dry Climate Grass (GR1), interspersed with Moderate Load, Dry Climate Grass-Shrub (GS2). Timbered areas were mainly Long-Needle Litter (TL8) and Moderate Load Conifer Litter (TL3) in drainage bottoms.



Fuels adjacent to the fire were similar fuel types to the interior of the fire. On 7/24/2017 a Fuels and Fire Behavior Advisory was issued for Central and Eastern Montana where the fire was located. The advisory stated the area had been experiencing a combination of drought, low fuel moistures and record high indices: 1000-hour fuels as low as 5%, live fuel moistures in juniper and ponderosa pine in the low to mid 80% range, and sagebrush live fuel moistures as low as 90%.

## Fire Weather Indices and Spread

The incident started on July 24 from lightning and burned almost all of the acreage during the first burn period. The initial attack forces reported burning off indirect lines until approximately 2:00 AM. Subsequent fire behavior was moderated greatly by the weather (cloudy most of the day and a light rain on July 25). Fire behavior after the first burn period was mostly creeping and smoldering in heavy fuels and occasional tree torching if the heat was located near a juniper tree. The fire did not grow in acreage for the rest of the time the Alaska team was in command of the fire. Some reported acreage decreases occurred due to more precise mapping.

During the incident, the area experienced high (but normal for the area) winds of 8 to 10 MPH with gusts to 20 MPH, which aided fire spread.

Burning Index was the main index used in the area to monitor fire danger. On July 24 the Bradshaw RAWS (located west of the fire at a similar elevation) calculated a BI of 35. Based on climatology, the 85 percentile for the RAWS is 38.



## Fire Behavior - Bruner Mountain

### Topography

The Bruner Mountain fire was located in the Bull Mountains 12 miles southeast of Roundup, Montana. The surrounding area was composed of large areas of ranch and rangeland interspersed with steep isolated mountain ranges, including the Bull Mountains south of Roundup and the Judith Mountains south and east of Lewistown. The elevation in the fire area ranged from 4000' to 4500' with slopes up to 20%.



### Fuels

The Fuels and Fire Behavior Advisory dated 7/24/2017 issued for Central and Eastern Montana encompassed the fire. The advisory stated the area had been experiencing a combination of drought, low fuel moistures and record high indices: 1000-hour fuels as low as 5%, live fuel moistures in juniper and ponderosa pine in the low to mid 80% range, and sagebrush live fuel moistures as low as 90%.

Primary fuels were grass, sage, and ponderosa pine. The ponderosa pine was particularly thick with needles from smaller trees creating a continuous ladder of fuel into the canopy of larger trees. Fuels adjacent to the fire were similar fuel types to the interior of the fire.

### Weather

The fire started on July 27 with temperatures in the 90s, mid teen RHs and strong gusty winds. Resulting fire behavior was very high to extreme on July 27 and 28. Rapid rates of spread and short-range spotting occurred during the first two burn periods. Thick patches of ponderosa pine had the entire canopy burned. The fire was stopped largely due to aggressive initial attack, including large amounts of retardant and dozer line, as well as water trucked in by engines and water tenders. On August 1, the weather moderated to cooler and dryer conditions. The fire experienced a wetting rain the night of August 4.





# Objectives

## General Management Objectives

- Provide for firefighter and public safety through risk management and implementation of appropriate mitigations.
- Fully suppress fire to minimize impacts to communities, ranches, infrastructure and range lands.
- Repair damage to public and private lands caused by fire suppression efforts.
- Provide initial attack assistance at the request of the local Dispatch Center.
- Ensure cost containment and apportionment measures are identified, applied and documented.
- Enhance community relationships through respect, engagement and communication.



## Buffalo Control Objectives (7/28)

- Continue to secure fire perimeter to the extent necessary to prevent further fire spread.
- Mop up according to MT-DNRC Mop-up Guidelines.
- Conduct suppression repair as necessary according to the MT-DNRC Fire Suppression Repair Plan. Ensure private landowners are involved in decisions affecting their property. Consult the BLM Resource Adviser regarding repair on BLM lands.

## Bruner Mountain Control Objectives (7/31)

- Secure fire perimeter to the extent necessary to prevent further fire spread.
- Wherever possible use direct tactics in order to limit impacts to rangelands.
- Mop up to a minimum of 200 feet from the fire's edge.
- Initiate suppression repair according to DNRC guidelines.

## Eastern Montana Incident Support Operational Objectives (8/4)

- Respond to requests for initial attack support. Provide relief for initial responders and additional support as requested.
- On Bruner Mountain conduct additional mop-up if needed to ensure containment; complete fence line and fire line repair, and chipping of slash around structures.



# Incident Commander

## Key Decisions

- The Northern Rockies Geographic Area recognized a need to preposition and IMT in Eastern Montana and the Alaska Team was ordered and staged in Billings. Eastern Montana fire staff and managers provided a general area briefing that emphasized mitigating firefighter fatigue, improving stakeholder and public relations, and recognizing and communicating heavy fuel loading, drought-like conditions and record-high fire-indices.
- Prior to the team's departure from Alaska a "second wave" of resources was put on hold with the intent of ordering once the team was assigned to an incident. These positions typically fill out units that are needed on emerging, large scale incidents. Because of the nature of the assignment (pre-position order followed by relatively low complexity incidents), the opportunity to order these resources never came to fruition. The size and scope of the incidents the Team managed did not warrant ordering of the additional positions. Second wave resources were unfortunately not utilized and were unavailable for other assignments for almost a week.
- The decision to accept the both the Buffalo fire and the Bruner Mountain fire without a transition day added pressure on the Planning Section, but it did fulfill one of our primary objectives of relieving fatigued County resources for rest and IA readiness.
- Several functions rely on internet, power and phone to provide services. The lack of connectivity at the Moorhead drove the decision to split the team with a one-hour drive-time from ICP to the base camp. Challenges related to the distance added additional exposure and fatigue to IMT members that was mitigated by rotation of personnel for tasks including IAP delivery and providing briefings. Minimal communication between ICP and the base camp was of concern regarding IMT cohesion and information flow from medevacs, to current conditions of the incident, to simple logistics issues.
- An unanticipated withdrawal from the delegation was cause for a quick adjustment. Maintaining relationships with the Wyoming BLM became the focus through the transition. This was done primarily to keep the accounting packages separate and "clean."
- Realizing the Buffalo fire was quickly winding down, the decision was made to pre-plan several scenarios and identify what was needed to complete the Buffalo fire demobilization and what would be needed to move the Alaska Team to an emerging incident. Several options were brought forward which helped prepare for a request to respond to a new fire.
- Prior to the demobilization and close out of the Buffalo Fire, the team was asked to respond to the Bruner Mountain Fire. Similar conditions to the Buffalo fire were brought up: fire fighter fatigue, shortage of resources, and potential for loss of homes. After a brief discussion, the team accepted the assignment.



# Safety

- Initial attack forces were fatigued and the extra forces provided by the Alaska IMT helped to mitigate that issue.
- Light flashy fuels were a concern.
- Driving was a major concern on both fires. On Bruner Mountain narrow, steep, winding roads with lack of maintenance and poor sight distances provided a challenge. Use of a Safety Officer for pilot car with water tenders proved valuable.
- Used a robust risk analysis for daily tasks. The incident experienced one injury and one vehicle accident.
- Weather was a challenge from a safety standpoint; the high heat and low humidity could result in dehydration and/or heat exhaustion.



## Human Resources

- No HR contacts were made for the entirety of the assignment.
- The Alaska IMT supported a respectful and safe work environment at incident. There was no dedicated HR specialist for most of the assignment, however the last 3 operational periods there was a qualified HR specialist assigned.



## Liaison

- Held Cooperator Meetings in Broadus and Roundup to discuss issues and concerns.
- Interacted with local cooperators including: Montana DNRC Southern and Eastern Land Offices, Bureau of Land Management, Musselshell County Sheriff and Powder River County Sheriff.



## Information

- The County Department of Emergency Services (DES) in Roundup maintained a Facebook that remained the focus of general public inquiry as the IMT took command. This worked smoothly since non-local inquiries were few and it allowed the Info staff to concentrate on community affairs at Roundup. The Powder River County Sheriff's Facebook page played the same role for the Buffalo fire.
- The IMT held community meetings for both the Buffalo and Bruner Mountain fires. Approximately 15 people attended the meeting in Broadus for the Buffalo, and 45 people attended the Bruner Mountain meeting. Members of the public were more curious than concerned and many expressed their appreciation for the Team's efforts. Montana's single Congressman, Greg Gianforte, attended the Bruner Mountain meeting and spent time in camp visiting with firefighters. A staff member from Senator Tester's office also attended, along with a Musselshell County Commissioner.





## Operations

- In eastern Montana, implementing a direct strategy wherever possible is extremely important in order to minimize acres burned and grazing land lost. Indirect control lines were sometimes necessary due to active fire behavior, but as conditions moderated, control lines were placed in direct locations in order to avoid the need for large burnouts.
- Unmanned Aircraft Systems (UAS) commonly known as drones were successfully used for reconnaissance and IR flights, which saved on overall incident costs.
- The IMT successfully accomplished the goal of relieving exhausted local resources on the Buffalo, Bruner Mountain, Mile Marker 417, and No Name Gulch fires.
- During their tenure, the IMT made initial attack support available for most of eastern Montana including the Lewistown, Billings, and Miles City Dispatch Zones.

## Air Operations

- A type 1 Helicopter was assigned to the Buffalo and Bruner Mountain fire and was utilized for initial attack on two separate occasions.
- One air attack cycle was flown over the Buffalo fire, and two reconnaissance flights were flown for the local area.
- A UAS (Drone) was utilized on 29 separate reconnaissance flights for 4 ½ hours of flight time to gather intelligence, scout fireline, and generate infrared information. This was a significant cost savings vs. using a type 3 helicopter to perform the same mission.

## Logistics



- The logistics section successfully set up, maintained and demobilized several different base camps and ICP's throughout the duration of the assignment.
- The communications unit put up the NIRSC repeaters and communications was moved from the local frequencies/dispatch to the team communications. In addition, the Communications unit established a bank of groups/frequencies to be cloned in radios to cover the large response area. The unit established a 24-hour operation with staggered shifts including night shift.
- The DNRC kitchen unit was on site with the initial attack resources and was feeding approximately 200 personnel with sack lunches included. It was determined, due to anticipated size and the mobile resource concept of our operation that the National caterer would not be required. The use of female inmates was crucial to the success.

## Plans

- The Broadus courthouse provided printing and copying support for the IMT until the Team was able to contract services from local sources.
- Geographic Information Specialists were provided space in local offices including the Broadus Volunteer Fire Department and the Musselshell County Emergency Operations Center in Roundup. This local cooperation was key to the success of the Situation Unit.





# Finance

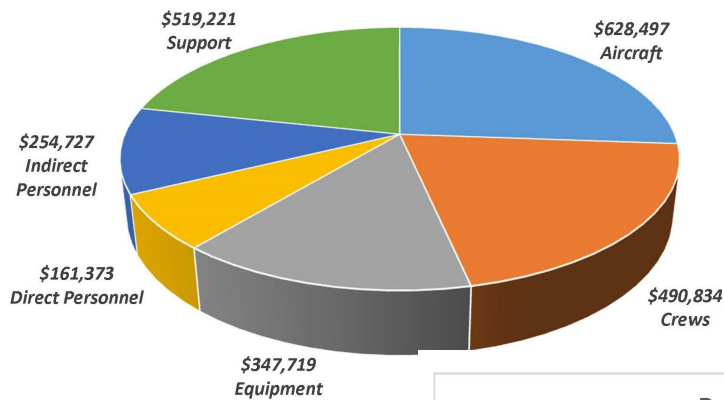
- Interaction with the local unit was facilitated by the presence of the Incident Business Advisors for the affected jurisdictions. Coordination was critical to set the Finance Section up for success related to all business matters.
- During the transition from Buffalo to Bruner Mountain, the Finance Chief was the only member of the Finance Section to travel to Bruner Mountain with the Alaska IMT advance team. The remainder of the Section followed over the next few days as the work was completed at Buffalo.
- The Alaska team used both the Site and Enterprise versions of e-ISuite to help facilitate tracking of resources to various responses. Although each response would have provided separate invoices, Finance



## Buffalo Cost Summary

MT-MCD-000274

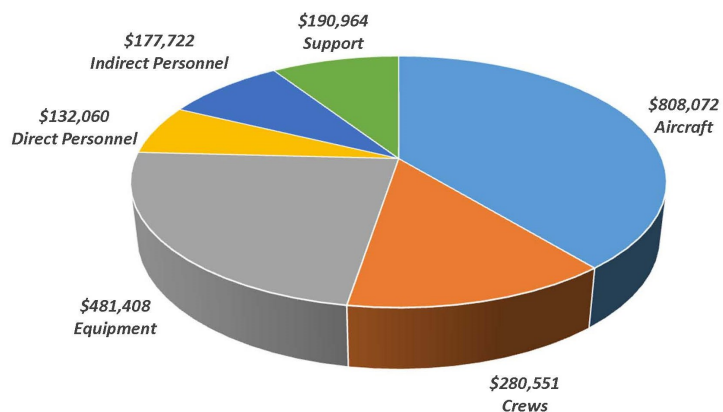
Estimated Cost \$2,402,380



## Bruner Mountain Cost Summary

August 6, 2017

Estimated Cost \$2,070,800



## Significant Events

The AK IMT places a traditional emphasis on fire fighter safety. Focus on recent incidents has been timely extrication and transport of injured fire fighters to a higher level of care. Facilitation comes in the form of emphasis on the “9 Line Medical Plan” and air evacuation capabilities within incident. This proved, again, to be effective in evaluation and transport of an injured Lewis and Clark IHC crewmember after a fall off a cliff resulting in approximately 5 minutes of unconsciousness. Timely response was directed by the team air attack. During the medevac, he served as a communications link, serving as a repeater for communications, helicopter traffic, and the point of contact on the ground who was responsible for patient care. The result was less than one hour of ground time, transport to a level 2 trauma center, and the crewmember leaving the hospital that evening after an evaluation revealed concussion like symptoms.

The AK IMT adapted to the pace of Eastern Montana’s quick spool-up and spool-down fire response cadence and *flexibility* became the mantra. On July 28<sup>th</sup>, the Team received a request from Northern Rockies Coordination Center to respond to the Bruner Mountain Fire. After a brief discussion with the C&G and Billings FMO, the decision was made to accept the new assignment. Understanding the potential for an expedited demobilization, the plan to use a pre-identified “clean up” team was implemented with a contingent of logistical support and all but one of the finance section to wrap-up the Buffalo fire and provide a clean fire package. The remainder of the team departed for Bruner Mountain with strong operations and planning sections.

This dual-response ensured that loose-ends were tied on Buffalo while local IA resources were quickly relieved at Bruner Mountain.





# Notable Successes

## Use of Unmanned Aircraft Systems

Prior to departure for assignment the team made the decision to travel with two Unmanned Aerial System (UAS) as part of a DOI approved program. The team traveled with three DOI carded pilots who also filled other team positions. The UAS were used to provide reconnaissance, IR, and monitoring. Using a helicopter for the same mission would have increased risk and cost. Although still in trial stage, the program has proved successful for real-time reconnaissance and “hot spotting.”

## Ability to Adapt to and Manage Multiple Fires

Breaking the team into two management originations was challenging but also showed the flexibility of the Alaska Team to meet the needs of DNRC and Northern Rockies GACC. One of the safety concerns brought up in every briefing was fatigue management and focusing on replacing local and county resources who were taxed with initial attack. By being able to quickly respond and take command of an incident without a lengthy “shadow” period, local resources were able to return to their regular duties of IA and provide for rest.

## Development and Management of an IA Support Response

In both Team delegations, one primary objective was to provide for and assist with IA. This response area began within the TFR or relatively small box. As containment was reached on the Bruner Mountain Fire, the response area was expanded to include Eastern Montana (Billings, Lewistown, Miles City). This mission is atypical for a Type 1 Team but within the realm of today’s expectations. The team organized accordingly and responded to the challenge. The Operations Section organized into five task forces that had significant fire suppression capabilities. Potential issues were quickly identified and addressed such as response times, overhead capabilities, and overall makeup. Communication plans were adapted to meet the mission, and relationships were established with cooperators and stake holders within the geographic area of response.

## Maintaining and Improving Relationships

Working with cooperators continues to be an important request from the agency administrators. Eastern Montana fire resources are tiered with the local county fire departments supplying the initial response and then backed with state and federal response. Interfacing with the local fire chiefs, emergency operations personnel, and county commissioner’s is critical to working cooperatively with first responders. The communities of Broadus and Roundup provided good, centralized locations to work together with locals for political, operational, and information needs.





## Significant Challenges and Resolutions

- Cache radios are not intended to be transferred from incident to incident, their purpose is for large fire support only. As a result, contract equipment lacking their own radios that were part of the IA group were required per policy to turn in radios issued on one incident and check out radios on their next incident. As a result the IA response was delayed while this issue was resolved. The communications section did send a forward group with a box of radios to be issued at the new incident and ensured a starter system with adequate radios was ordered for the incident. In addition, the COML contacted the NIFC radio cache regarding our unique assignment and an agreement was made to allow the team to transfer radios for this assignment.
- A potential way to address this issue in the future would be to establish a separate resource order based on delegated initial attack responsibility to allow the ordering of communications equipment separate from the incident the team is primarily assigned to.
- Following wrap-up of Bruner Mountain Fire, the IMT had good verbal communication with the NRCC and Eastern Montana MAC regarding the mission and expectations to support initial attack in Eastern Montana. The AK IMT drafted a letter for review and processing by the GACC.
- Overall, the Alaska IMT received timely input, questions, and critique from Agency Administrators. Administrators were primarily from Montana DNRC, however, we also had input from Miles City expanded dispatch, Northern Rockies Coordination Center, Eastern Montana MAC Group, Billings Dispatch, county administrators, and local fire chiefs. All agency oversight was helpful as we learned to navigate around the eastern Montana idiosyncrasies. We are appreciative of this time dedicated to us.







# 2017 Alaska IMT Eastern Montana Incident Support

August 6, 2017

