Monument Fire
North Zone
Shasta-Trinity National Forest
August 18-31, 2021
Incident Summary

Alaska Incident Management Team
Incident Commander Norm McDonald
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Monument Fire At A Glance

**Location:** Del Loma, CA near Monument Peak

**Size:** 170,945 acres (as of 8/31)

**Containment:** 29%

**Miles of perimeter:** 208

**Miles of uncontained line:** 156

**Miles of dozer line:** 63

**Miles of completed hand line:** 5.6

**Cost to date:** $70 million
2021 Monument Fire

A widespread lightning event following months of record-breaking temperatures and extreme drought ignited the Monument fire on July 30, 2021. The fire was detected near Monument Peak in the Shasta-Trinity National Forest, 1 mile south of Del Loma, CA. Under the effect of strong and erratic winds, the fire became established in rugged, inaccessible mountainous terrain. With numerous initial attack and large fires developing across the Northwest, firefighting resources were in short supply. California Interagency Incident Management Team 5 (CAIIMT) were ordered and assumed command of the fire on 8/4.

The Alaska Type 1 Incident Management Team (AKIMT) received an order to replace CAIIMT on 8/10, and traveled to Redding, CA on the NICC jet on the evening of August 15th. An inbriefing with Agency Administrators from Shasta-Trinity National Forest was held concurrently with a transition meeting facilitated by the outgoing California Team 5 on August 16th. Representatives from the Six Rivers National Forest and CAL FIRE were also in attendance.

As the AKIMT prepared to assume command from California Team 5 during the shadow day of August 17th, the decision was made to break the fire into two Zones, and have CAL FIRE 5 IMT manage the South, and the AKIMT manage the North Zone. Last minute preparations were made by all sections to facilitate the zoning of the fire. As noted in many of the sectional comments below, cooperation and communication between CAL FIRE 5 and the AKIMT were excellent. At the time of transition, the fire was 119,364 acres, 10% contained with a cost of $20.1 million.

The AKIMT utilized direct tactics to achieve strategic objectives where possible, but due to inaccessible terrain and a lack of fire suppression resources, indirect lines were prepped on the northern and southern flanks of the fire. Lighter winds and capping due to smoke from Monument and surrounding fires kept fire behavior relatively subdued throughout the AKIMT’s tour, with the majority of fire growth occurring in CAL FIRE’s South Zone and on the northern flank of the fire in the Trinity Alps Wilderness. During AKIMT’s tenure, highway 299 corridor was opened to residents, and work was able to begin on restoring damaged powerline infrastructure and some previously evacuated areas were able to be opened to residents.

CAIIMT was again ordered to come back to the Monument Fire to replace the AKIMT, with the transfer of command to take place on 8/31. At the time of the transition, the fire was 170,945 acres, 29% contained with a cost of $70 million.
Command

Mobilization

The Alaska Type 1 Team was mobilized to Redding for the Monument Fire on August 15th. Travel using the National Interagency Coordination Center (NICC) jet was determined by NICC and the Alaska Interagency Coordination Center (AICC) ensured vehicles were available for an expedited response and to reduce the risk of COVID spread. After a brief negotiation with the agency administrator, an expanded roster was approved.

Incident Objectives

Incident objectives remained consistent over the course of the Alaska IMT’s assignment. The agency direction was full containment, keeping the fire to the smallest footprint possible. Shortage of resources and extreme terrain made this difficult. Primary lines were selected by highest probability of success, even though this was not in alignment with smallest footprint in most instances. Incident course of action was directed towards minimizing fire spread using aggressive and appropriate suppression actions. This was due to the large number of values at risk and private property, communities, and homes.

The IMT and AA had several difficult discussions regarding operating dozers in the wilderness. Conversation led to acceptable specifications of line application and the use of smaller equipment with on-site READ involvement.

Operational emphasis remained focused and vigilant as the incident faced numerous days of critical fire weather and long-term drought conditions. Throughout the incident, briefings consisted of COVID messaging and main-

Key Decisions

- Operating from a remote ICP in Redding with two forward operating bases and a spike camp.
- The decision to Zone the fire and operate in a unified command with CAL FIRE.
- Maintaining a remote ICP, two forward operating bases and a spike camp to reduce COVID transition.
- Having pre-established COVID testing in Redding and in our Weaverville forward operating base.
- Facilitating reentry of residents within the fire perimeter along the 299 corridor.
- Embedding a CAL FIRE Team 5 IC into the Alaska Teams ICP.

- READ Coordinator and the development of relationships with local AREPS and READS.
- COVID mitigations implemented and reinforced at check-in points, during briefings and public meetings.
- Virtual Briefings and meetings to reduce COVID exposure.
- Using beta version of the Strategic Risk Assessment tools with AA’s. The product has areas that will need improvement but provided an opportunity for conversation with AAs and AREPs.
- Using strategic planning process to develop long term plan for all three Branches of the incident.
Management Objectives

- Provide for firefighter and public safety by developing and implementing sound strategies and tactics that take into account values, risk, resource availability, and probability of success.

- Protect businesses, homes, and property in and around the communities of Del Loma, Big Bar, Big Flat, Burnt Ranch, Cedar Flat, Helena, Junction City, Douglas City, Weaverville, Hayfork, and Hyampom, and elsewhere within the planning area. Where possible, take actions to reduce the amount of time that residents must remain evacuated from their homes.

- Protect Highway 299 and Highway 3 corridor infrastructure, PG&E and TPUD electrical infrastructure, communications sites, and other public and private infrastructure within the planning area.

- Protect Trinity Wild and Scenic River values including anadromous fish habitat.

- Protect private and public timber values including a progeny-plantation site south of the fire.

- Protect cultural and historic values near Hayden Flat Campground, Ironside Lookout, and elsewhere in the planning area.

- Provide initial attack air support for new starts within the incident TFR. Coordinate response with the local unit.

- Maintain and enhance relationships with agency partners, cooperators, stakeholders, and the public through timely and accurate information exchange. Ensure long-term strategies are communicated.

- Coordinate with CalFire Team 5 to provide a unified strategy and consistent public messaging for the North and South Zones.

- Follow CDC, local, state, and federal COVID-19 mitigation guidance and protocols to reduce exposure and protect firefighters and the public from virus spread.
Weather and Fire Behavior

- Since April 2020, over 80% of the area near and within the Monument fire perimeter experienced Severe Drought (D2 on the Drought Monitor) and increased to Exceptional Drought status (D4 on the Drought Monitor) in July of 2021, with most of the area seeing less than one half the normal amount of rainfall.

- When the fire originated from a dry lightning strike, high temperatures at the Big Bar RAWS reached 105° with 14% humidity. Very hot temperatures in the upper 90s to low 100s combined with critically low humidity in the 10-15% range continued through the first week of August, with diurnally driven upcanyon winds into the late evening, that transitioned to down-canyon after midnight each night.

- Record low fuel moistures brought on by extended exceptional drought and above average temps and low RH have dictated fire intensity and spread. ERCs and 1000-hour fuel moistures have been trending between the 90th and 97th percentile during the Alaska IMT tenure and will continue to remain elevated until significant precipitation is received.

- Fuels in the fire area were primarily composed of mixed conifer (TU5/TL8), dry climate brush (SB2/GS2) and seasonal grass (GR2). The fuel models most represented were timber understory and timber litter. Recent fire footprint including 2017 Helena and were represented with SB2. Pockets of timber litter, grass/shrub, and shrub fuel models were also present in the fire area, but to a lesser degree.

- Fire behavior was influenced by smoke cover from neighboring fires and strong overnight inversions which moderated fire behavior from August 17-27. Midafternoon clearing increased ventilation to promote fire activity and maintained moderate fire behavior each afternoon starting on August 22 within areas of the fire that cleared.

- Solar radiation, drainage and wind alignment increased fire behavior at the drainage scale and caused isolated group torching and spotting. With the exceptional drought and extremely dry fuels, where fire behavior became active resistance to control was high.

Significant Challenges and Resolutions

Challenge: Coordination with the Monument South Zone and River Complex was critical in long term fire planning. Resolution: Operational PACE planning integrated long term and strategic planning including fire behavior analysis to adapt to changing conditions and resource availability.

Challenge: No dedicated qualified FBAN was available. Resolution: One Operations Section Chief was also qualified as FBAN and provided oversight to the FBAN trainee. A remote LTAN and qualified FBAN in Alaska provided modeling and other products to support fire behavior analysis.

Challenge: Two Strategic Planning Meetings were conducted between the Alaska IMT and the Shasta-Trinity National Forest leadership. Resolution: Long Term Strategic Analyses were completed and shared as part of the meeting.
Operations

Key Decisions

- A heavy initial roster helped to keep Operations from being spread too thin and provided the ability to help fill in the gaps. This also helped to cover lack of middle management and minimal resources.

- Zoning the incident helped to break up the ground and enabled Ops to initiate construction of PACE model rather than focusing solely on point protection, as was necessary for the previous team.

- Obtaining approval from the USFS WO to open up an old dozer line and trail system on Backbone Ridge in the Trinity Alps Wilderness provided a viable option to increase chances of boxing fire out of the Weaverville community and surrounding site values.

Notable Successes

- AKIMT incorporated lessons learned from the 2020 August Complex, which was in a similar location and situation:
  - Communications
  - Local Factors
  - Local Resources
  - Obtaining local knowledge
  - Availability of Mobile Retardant Base

- Resource Sharing with South Zone enabled CAL FIRE 5 to be more aggressive protecting values at risk.

- Emphasis in the objectives on building and maintaining positive relationships with locals helped make the Operations personnel more conscious and mindful in planning meetings, interactions with the public, and daily tasks. This also helped to establish solid communication and working relationship with local agency officials.

Significant Challenges and Resolutions

- **Challenge:** The night briefing at 1900 on the command frequency occurs during a typically busy period with fire operations. **Resolution:** If possible establish a forest-net, separate from fire frequencies or use internet-based virtual platforms.

- **Challenge:** Shortages of Type 1 Crews hindered the ability to achieve containment in remote, rugged terrain. **Resolution:** Use of indirect lines as a primary alternative were incorporated in these areas.

- **Challenge:** A quicker turnaround on information about known Hazmat locations would have improved response to threatened values in the area.

- **Challenge:** Integrating Alaska IMT operations around CAL FIRE Team 5’s 24-hour shifts was difficult due to continuity issues.
Air Operations

Key Decisions

- Due to a national shortage, a dedicated ATGS and platform was ordered from Alaska and arrived with the Team.

- The IMT assembled and arrived with a fully staffed Air Ops section (AOBD, ASGS, ASGS(t), HEBM) due to national shortages.

- The decision was made to utilize a single TFR for Monument when SE corner was zoned with CAL FIRE 5 for the entire fire, which streamlined aviation considerations.

- The IMT loaned an ASGS/HEBM to McFarland Fire during a time of critical need, offering goodwill and assisting to bolster forces in a potential problem fire to the south.

Notable Successes

- Integration of an Alaska IMT ASGS into CAL FIRE 5 air ops group during early transition days.

- Utilizing the R5 NOPS regional air attack pool for relief of AKIMT air attack as needed worked well.

- The flexibility and adaptability of aviation personnel to fill critical needs positions (EU crews) was key in maintaining aviation operations.

- Lend/Lease of aircraft and personnel to other units and for Initial Attack was appreciated by adjoining units and the MAC.

Significant Challenges and Resoultions

Challenge: Multiple days of extremely heavy smoke and low visibility rendered aviation assets unavailable to support operational activities. Resolution: Use of unmanned aircraft systems.

Challenge: Extremely difficult to fill critical needs positions. Resolution: Name requests were often the only way to get fills.

Challenge: Incorporation of the varied aviation operation standards of CAL FIRE 5 and Federal air resources under one umbrella was a challenge. Resolution: An adherence to the stricter standard was found to be the best solution.

Aviation Statistics

**Rotor Water Delivered:** 729,170 gallons

**Rotor Flight Hours:** 223 hours

**Rotor Retardant Delivered:** 112,000 gallons

**Fixed Wing Flight Hours:** 64 hours

**UAS Missions:** 65

**UAS Hours Flown:** 27.1 hours
Safety

Key Decisions
- Concerns about a critical lack of ability to remove injured fire personnel from the field were considered and operational and logistical mitigation measures were put in place before moving forward with planned operational shift.
- Safety took the lead in providing information and mitigations for the Unexploded Ordinance (UXO) concerns in Division Echo.
- Safety provided info to liaison for the private insurance company (Wildfire Defense Systems), tied in with the task force and provided info to operations.

Significant Events
- A significant Hazmat was discovered in Division A, but information concerning the effects of the substance was difficult to obtain. Safety facilitated distribution of CA-2 forms for employees to take home in case of possible exposure to carbofuran.

Notable Successes
- The Strategic Risk Assessment (SRA) process went well with input from both Agency Administrators and Team members.
- Worked with Logistics to develop Evacuation Plans for each remote Forward Operating Base (FOB) and all other remote facilities including supply, and ground support.
- All North Zone forces worked approximately 250,000 hours worked with four minor lost time/reportable injuries.

Challenges and resolutions
- Focused and detailed dialog initiated by safety to discuss and work through the concern related to shortage of ground transport ambulances. This discussion resulted in team section leads coming together to identify viable options for mitigating the hazards.
Planning

Key Decisions

- Planning representatives were placed in spike camps to support virtual and local briefings, facilitate functional camp planning cycles and map/IAP distribution, and answer questions on virtual check-in and demob processes.

- Virtual check-in and demob processes worked well and continue to prove that these can be facilitated virtually. Using virtual processes minimizes face to face interactions to mitigate COVID concerns, eliminates SCKN and DMOB travel cost and exposure to and from the incident, and allows resources to check-in and demob in field environments, also decreasing extra driving exposure.

- Strategy planning meetings attended by Agency Administrators, CAL FIRE 5 command and neighboring fires were incorporated to validate existing values and strategy, and to ensure adjacent fires strategies were in alignment as the fires began to grow closer.

Notable Successes

- Coordination and daily communication with the South Zone IMT was instrumental in fostering a “two teams, one fire” relationship. Resource sharing and daily product completion was coordinated between the teams on daily section and unit virtual meetings at scheduled times each day.

- Audio Visual production crew at ICP produced high quality briefings that were streamed to camps and personnel via Zoom and displayed on large screen TV’s with PA supported audio at camps.

- The Alaska IMT developed positive relationships with local resource advisors and archaeologists on previous incidents in the Shasta-Trinity National Forest, which created an immediate atmosphere of cooperation.

- Resource advisors were heavily involved with operational staff on the ground regarding work around the Trinity Wild and Scenic River, Trinity Alps Wilderness, and the Proposed Pattison Wilderness.

Significant Challenges and Resolutions

- Zoning of the fire into two zones created challenges for resource advisors and archaeologists working across the zone break and collecting data throughout the fire. Specialized experience and limited personnel dictated that resource advisors work in both zones, an agreement reached by the two teams managing the incident and the Shasta Trinity National Forest.

- Resource advisors and archaeologists are reporting to incidents without active NIFC accounts to use Collector. Home units should ensure Collector accounts and familiarity with data collection for all staff qualified as READs, REAFs, ARCHs and trainees.

Members of the Alaska Incident Management Team, CAL FIRE IMT 5 and Shasta-Trinity National Forest at a strategy planning meeting on Saturday, August 28. Photo by Cathie Harms/Alaska Incident Management
Logistics

Key Decisions

- Robust mobilization roster enabled the logistics section to provide team leadership at camps.

- Pre-identified mobilization team both in Alaska and at the incident destination made mobilization for the team seamless and coordinated.

- A dedicated COVID coordinator was integrated as part of the medical unit, enabling a single point of contact for issues surrounding COVID procedures as they relate to the incident, the forest, and the counties.

Notable Successes

- The Planning Section established a check in procedure at camp that assisted logistics in managing the allotment of designated camping areas and accountability of all resources staying in camp.

- Ordering “Air Scrubbers” made a huge difference for personnel in the Weaverville camp when heavy smoke impacted the camp.

- Having procurement located with finance allows the LUA’s and other agreements to be processed quickly.

- The assigned Buying Team processed orders efficiently and quickly.

- AKIMT Ordering Managers input orders into IROC during a period in which expand dispatch was understaffed.

Significant Challenges and Resolutions

- Obtaining medical transport capabilities remained a significant challenge as resources are limited nationwide. Requests for ambulances were hard to fill and remain as a critical need on the 209. With limited air support, the need for ground transport ambulances is critical. In the event of a serious injury, we will have to rely on the local 911 system which could potentially delay transport and place an undue burden on the local system.
Key Decisions

- Continuing the contract with JA media as established by the previous IMT. Their equipment and staffing resulted in complete support for all sections needing virtual meeting support. They produced the 7am Operational Briefing, the 8am Operations video, the 10 am Zoom Operators briefing, the Strat meetings, 5pm Planning meeting and the twice weekly virtual community streams to numerous platforms.

- Holding pop-up community gatherings in Hyampom to respond to concerns and build trust in that community regarding construction of dozer lines and possible burnout operations in the Pattison Ridge proposed wilderness area.

- Establishing a YouTube Channel to meet the requests of impacted citizens who desired an alternate platform other than Facebook. YouTube also serves as a repository for video products and allows the media agencies to easily utilize these videos for news reports.

Significant Events

- The Shasta-Trinity National Forest’s decision to split the fire into North and South zones and bring CAL Fire IMT 5 into the fold to manage the South Zone. This made the information dissemination process more complicated, challenging and confusing for impacted audiences.

- The Shasta-Trinity National Forest’s direction to limit the use of social media to three Facebook postings a day. This handcuffed an information shop that relies heavily on the use of social media to disseminate information to the public and build trust with and educate people about wildland fire management.

Information Statistics

Facebook posts – 39
Facebook reach - 658,104
Facebook engagements - 92,736

Video views
11 videos for 86,600 views on FB
22 videos for 3,091 views on YouTube

Media contacts – 15
Community meetings – 7
Phone calls received - 397
Trapline stops - 45
Total miles driven on trapline – 2,956
Trapline contacts - 772
Information

Significant Events

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Notable Successes

- Adapting to the direction given by the Forest PAO regarding the use of social media to focus on low-tech messaging by utilizing community traplines to share information with impacted communities as a primary method of outreach during the COVID pandemic.

- Placing two public information officers at the Bar 717 Ranch to connect with residents in Hyampom, many of whom didn’t have Internet, to help keep them informed and provide a personal touch.

- Recruiting local PIOs to work in the field office in Weaverville and at the Red Cross shelter in Fortuna. These local PIOs provided a wealth of information about the forest and community to the PIO shop that proved invaluable. They also helped maintain adequate staffing levels when ordering additional PIOs was problematic.

- Maintaining a robust virtual office and utilizing that office to shoulder a heavy workload given a lack of PIOs in the central ICP office. The virtual PIO, located in Virginia, posted early morning updates to FB, handled most Inciweb posting, helped manage email and helped organize the Teams files.

Significant Challenges and Resolutions

Challenge: Social media constraints placed on the AK IMT information office by the Shasta-Trinity National Forest limiting the use of Facebook to only three posts a day.

Resolution: The AK IMT info office, which typically boasts an extremely strong social media presence, quickly shifted gears and focused on maintaining a robust trapline and remote community outreach in the safest manner possible in what was a difficult environment (i.e. COVID and smoke concerns) to say the least.

Challenge: Running a trapline in the midst of a resurgent pandemic and unhealthy conditions due to smoke created safety concerns for field PIOs.

Resolution: Field PIOs wore KN95 face masks and tried to maintain social distancing on the trapline. They also switched from camping out to indoor sleeping arrangements. PIOs also used air filtration tents at camps, took short breaks indoors or stayed in air-conditioned vehicles when possible.

Challenge: An Inciweb outage prohibited image uploading beginning August 22 at 10 a.m. The Inciweb Helpdesk restored access and notified the AK IMT virtual office on August 23, at 11 a.m.

Resolution: Provided live links for IR Map, Daily PIO Map, Daily Update, Vicinity Map, YouTube, Twitter, Smoke Outlook, Airnow.gov, CAL FIRE Information, and Facebook links (Shasta-Trinity National Forest, CAL FIRE SHU, and Trinity County Sheriff) on the top of the Incident Overview on the Inciweb page to provide quick access for mobile users and all others.
Liaison

Size and scope of the incident deemed a three person liaisons staff appropriate for the routine challenges of attending cooperators and repopulation meetings. Spontaneous requests were exemplified by such issues as school closures/re-openings, searching for property owners and access to utility properties. A staff of three allowed efficient work and good communications with the Cal Fire IMT 5 assigned to the South Zone. A considerable number of law enforcement issues would justify ordering a Law Enforcement Liaison from the local unit. Liaisons continue to address issues with all sections but specifically with Command, Information and Operations.

Key Decisions

- Using FSPro Near Term predictions using current fire weather data to assist cooperators understand the most likely fire spread in a one- to three-day outlook. Cooperators were able to apply the projections to evacuations, resource movement and repopulation.
- Maintaining a presence of Liaisons in the field allowed staff to communicate efficiently with cooperators and field staff.

Notable Successes

- Working with utilities to reestablish power and propane gas through the fire area to allow residents to resume their lives on and off the grid. Initiation as soon as possible was well received.
- Connecting schools, communities and individuals to our PIO staff to give them the best information possible to allow them to make decisions about schedules, business and other subjects.
- Continuing best practices and learning from preceding team to maintain and enhance relationships with cooperators.

Significant Challenges and Resolutions

- **Challenge:** Geographic size of large fires required extended driving times to field camps.
- **Challenge:** Zoom is impersonal and presents difficulties to get a read on the comfort levels of cooperators we have not met. **Resolution:** Extra efforts via phone calls and personal chats were implemented.
- **Challenge:** Evacuations require two decisions: when to leave and when to allow people back home. “Yo-yo effects” of calling a second or third evacuation is preferred by County authorities as opposed to extending evacuations.
- **Challenge:** Repopulation: a sense of urgency to get people back home after evacuations is generated by long term-fires to establish a “sense of normalcy” as soon as possible.
- **Challenge:** Roads are the lifeblood of the economics of California affecting contractors, logistical support, resupply, travel and tourism. Long-term closures are detrimental to public opinion and economic viability. Re-openings are a priority.

Shasta College Red Cross shelter manager Tanya Garrity orients new volunteers about the Monument Fire on August 24, 2001. Photo by Catherine Cilfone/Alaska Incident Management Team.
Key Decisions

- The decision to staff Finance units at Willow Creek and Weaverville was beneficial to the incident resources.

- Finance transferred documents from paper copies to electronic files.

Notable Successes

- Finance team members staffed locations at both Weaverville and Willow Creek. Their presence was well received and appreciated.

- A relationship was established with the Finance section on CAL Fire 5 Team. They were easy to work with, and we accepted that each agency has their own policies and practices. They appreciated our support when we elected to do the financial work for the federal, VIPR and cooperative resources that filled resource orders.

Significant Challenges and Resolutions

- **Challenge:** Finance was unable to obtain additional personnel, because of the lack of qualified resources. **Resolution:** Finance staff did accomplish the duties as required to accomplish the task of maintaining electronic files.

- **Challenge:** CAL FIRE does not have the computer systems to prepare the pay documents for Federal contracted resources. **Resolution:** A process was developed to handled these resources separately together with the North Zone resources. CAL Fire’s federal, VIPR, cooperative resources were checked in and entered into E-ISuite with their 10,000 resource order number from the South Zone’s block of numbers.

- **Challenge:** The computer program developed for the electronic filing and maintenance of records is time-consuming and cumbersome. All documents have to be touched by a person to go into the system. Renaming and filing are manual and not intuitive and require due diligence to complete in the developed method. **Resolution:** Teams are customizing these filing directions to accomplish this filing and maintenance in a more timely manner. This is the first year of these instructions, so it is anticipated that there will be another version developed in the coming “off-season.”

The Fairbanks #1 Type 2 crews hikes along Forest Road 60 on August 19, 2021. Photo by Andy Lyon/Alaska Incident Management Team.