Executive Summary

August, 2013

Alaska Type 1 IMT

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AK IMT Executive Summary for the Mississippi Fire

Incident Overview
May 30 – August 10

The Mississippi Fire was discovered during an aerial reconnaissance flight on May 30, 2013 at 9:10 am. The fire was one acre in size and smoldering in black spruce. It was located within the Limited Fire Management Option. The fire was determined to be human-caused, but due to its location within a military restricted area, no investigation took place and it was placed in monitor status.

By July 13, the fire had grown to 1,208 acres, but remained well within the Military restricted zone and the Limited Fire Management Option. It was not until a Chinook wind event on August 8 and 9 pushed the fire to the north out of the military restricted area and onto State Full Fire Management Option lands that values became threatened. With the fire at 33,833 acres, a Type 3 organization was put in place on August 8 to protect structures at Rainbow Lake and to begin assessing additional values at risk. The Alaska Type 1 Incident Management Team was placed on order. By the time the IMT was in-briefed in Fairbanks at 1800 on August 10, a burn-out at Rainbow Lake had been completed and dozers had begun to build line around the community of Whitestone.

August 11

At the time the Alaska Type 1 IMT assumed command of the fire on August 11th at 0800, the fire had grown to 40,841 acres. The Team set up an Incident Command Post at the Deltana Fairgrounds as fire personnel continued the process of identifying values at risk and prepping structures. Interagency Hot Shot Crews, Type 2 Initial Attack Crews, and Smokejumpers were engaged in triage and structure protection at the Richardson Clearwater, Southbank, and Rainbow Lake areas. Dozerline construction around the community of Whitestone was completed. Air resources including Military rotor-wing aircraft and CL-215s were used to slow fire spread to the north. Active fire behavior, lack of access to Military Restricted Areas (impact zones), and hot, dry, windy weather hindered operations. Strong morning inversions limited aviation activities. Numerous structures along the Tanana River and Clear Creek, Military assets in the 100 Mile Creek area, the Alaska Pipeline, Big Delta, Delta Junction, and Fort Greely were all at risk. Dense smoke threatened public safety on the Richardson Highway. Active wind driven fire spread was observed with running, spotting, and active backing and flanking.
August 12

On August 12, a Structure Protection Group was formed to assess and protect communities along the Richardson Highway including private cabins, Tenderfoot, Spengler Road, and Shaw Creek in case the fire spotted across the Tanana or Delta Rivers. Dozers remained staged at Whitestone farms in order to support a potential burnout operation. Properties on the west and south side of the Tanana River (including Whitestone farms, homes of the Southbank, Richardson Clearwater, and Rainbow Lake) required access by boat or helicopter, further complicating operations and logistics. The US Air Force initiated a “Red Flag” Exercise within the R2202B Restricted Area along the southwest fire flank. Despite this, air attack was still able to estimate the fire’s proximity to military observation points in this area. The fire was largely burning in the 1998 Carla Lake fire scar and had grown to 52,539 moving the fire more northeasterly and east.

August 13-15

Between August 13 and August 15, the fire progressed north, east, and west influenced by primarily northwest winds, high temperatures, low relative humidity, and dry fuels. Heavy morning inversions slowed fire progression and hindered morning aviation activities. The IMT continued to develop structure protection, and ordered additional firefighting resources and equipment to support protection of values at risk. Type 1 and Type 2 hand crews, CL-215s, CL-415s, Military Chinook and Blackhawk helicopters, Type 2 and Type 3 helicopters, boats, burnouts, and hoselays were used to accomplish this. On August 13, Operations recognized an opportunity to improve an existing road between the Delta River and the fire’s northeast corner. A plan was developed to conduct an aerial burnout in advance of a predicted Chinook that, in conjunction with handline around the fire’s northern edge, would secure the communities of Whitestone and Southbank. On August 14, dozers advanced to the fire’s edge and crews plumbed the road in preparation for burning. On August 15, burnout of the dozer line from Whitestone farms westward towards the fire’s edge was initiated. Additional crews were added to support the burnout and mop-up operation, while Type 1 crews secured the northern edge of the fire using direct tactics, in anticipation of the Chinook predicted for the next day. Evacuation contingency planning for Delta, Ft. Greely, and Big Delta was initiated by a specialist from Division of Homeland Security who arrived on August 14.
August 16 -18

By August 16, the fire had grown to 64,601 acres pushed by warm, dry, and windy weather and CFFDRS indices in the high to extreme values. The predicted south wind event did not develop, so crews were able to continue to secure the northern most section of the fire using direct tactics and burnout operations. A public meeting was held at the Delta Community center at 1900 and community members expressed support for the burnout operation. Management constraints associated with anadramous fish resources in Clearwater Creek and the Delta River were identified and integrated into tactical operations. The IMT loaned Tok Area a strike team of engines, a Type 2 helicopter, and several overhead after they experienced extreme fire behavior on the Tetlin Junction Ridge fire that posed a threat to values at risk in the Alaska Highway corridor. These resources returned by end of shift on August 17th. Another public meeting was held in Delta at the community center at 1900.

By August 18, the fire had grown to 67,711 acres as it continued to smolder in areas of hardwoods, and creep in tundra and spruce. Over 500 people from multiple federal, state and local agencies, Tribes, and the local community were engaged in the effort to manage the fire. Rain moderated fire behavior and provided opportunities for ground forces to secure the northern fire edge, limiting the spread of fire towards values at risk at the fire’s head. An existing road running west from the fire’s edge to Delta Creek was improved as a contingency measure. If necessary, aerial burning could be conducted from the road in order to restrict northerly movement of the fire towards identified values while allowing continued spread to the west, south, and southwest on military lands. There remained a long-range low probability of threat to the values along the Tanana and Delta until a true season ending event occurred. However, the threat to values along the highway corridor was greatly reduced and the task force of engines patrolling the Richardson Highway areas was released.

August 19-21

From August 19th - 21st, over .73 inches of rain fell in the fire area, significantly moderating the potential for fire spread. Mop-up remained difficult however, due to the extreme drought code values and deep burning. Multiple crews remained in place to secure direct line and mop up along the dozer line, while crews from the Lower 48 were released. The direct fireline on the north edge of the fire was tied-in to the completed west dozer line on August 21st, providing
19% containment of the fire perimeter. The 8-mile dozer walk-down along the edge of the winter road extending from the fire’s west flank to Delta Creek was completed. The two IHC crews were released. A suppression repair plan was developed and distributed to Agency Administrators for review.

August 22-26

With additional cool and rainy weather in the forecast, and with little additional opportunities available for direct action due to restrictions on military lands, demobilization of resources began in earnest on August 22. Structure protection equipment was removed from all values. Mop up was completed and the suppression repair plan was finalized. Crews completed some preliminary repair work designed to deter spruce beetles and were demobilized. Preparations were made to transition command of the fire back to the Military Zone. Several personnel were identified to remain in place after the departure of the IMT. They will coordinate repair efforts by receiving and storing seed and fertilizer, and by facilitating mobilization of an excavator after the Delta River drops to a safe level. With equipment in place, a short crew from the local area will be hired to complete repair operations. The IMT transferred command back to the local unit on August 26th.

Incident Objectives

- Provide for the safety of the public and firefighters by implementing sound risk management and hazard mitigation practices.
- Provide protection for values at risk to include:
  - Inhabited structures and businesses
  - Recreational cabins, and seasonal structures
  - Military assets in the 100 Mile Creek area
- Keep fire south of the Tanana River and west of the Delta River.
- Evaluate protection of timber resources on the east side of the fire along the Delta River.
- Protect anadromous fish habitat in the Richardson-Clearwater and Delta River drainages from the effects of fire as well as from the effects of fire suppression efforts.
- Prepare and disseminate public information for media, community, and stakeholders.
- Manage cost containment strategies while meeting outlined objectives.
Fire Weather Summary

Strong south flow aloft, between high-pressure ridging over the Yukon, and a low over the Eastern Bering Sea, the so-called “Chinook” pattern, dominated the fire area the week previous to the Team’s arrival. This caused the majority of the fire’s acreage gains. South winds of 25-40 mph occurred on the 8th and 9th, with temperatures in the 70s F, and minimum RH’s 20-25%.

High pressure ridging to the east weakened the next several days; under lighter south flow aloft, the diurnal up/down valley circulation dominated the fire area. Light south-southwest winds therefore occurred in the mornings, and west-northwest winds in the afternoons. Smoke loading increased as a result over the fire, from it, and the upstream Caribou Creek fire, which shaded the area, keeping temperatures slightly cooler, and RH’s 5-10 % higher than would otherwise be expected. Maximum temperatures at this time were generally in the upper 60s-mid 70s F, with minimum RHs in the 40-50% range.

This pattern held until Saturday the 17th, at which time an upper-low moved into the Gulf of Alaska. In the easterly circulation around this, a disturbance moved into the eastern Interior from the Yukon.

Clearing and instability ahead of this feature (temps. warmed into the mid-70s F) allowed thunderstorms to develop the evening of the 17th, which moved over the
fire after 1900 hours. No strong winds were observed with these over the fire, and no ground strikes, but it is estimated that about .18 rain fell in the next three hours, as the weakening thunderstorms slowly moved over and dissipated in place.

Sunday the 18th was a transition day between weather systems, with the remains of the “easterly wave” over the fire area providing cool, cloudy conditions. Temperatures in the mid-60s F and minimum RHs near 50 percent occurred. On Monday the 19th, a strong low pressure trough began moving into Interior Alaska from the northwest. A band of showers ahead of this brought about .10 of rainfall to the fire in the late morning hours, but clearing afterward allowed temperatures to warm into the lower 60s F, and RH’s to drop to 45-50%. On Tuesday the 20th, the cold front associated with the incoming low pressure trough hung up just to the west, near Fairbanks (which received over .60 rain), until late afternoon, at which time rainfall increased, and an estimated .40 fell over the fire area. The fire continued to receive a pattern of partly cloudy days with intermittent rain, lowered day and night temperatures, and relatively high humidity with good night time recovery.

**Fire Behavior**

**Topography**

The fire is located on alluvial deposits from the Delta River, starting at 1700’ to the final fire terminus to the north at 650’ elevation, with little topographic uniqueness. Several large drainages to the south exist, with upper elevations surpassing 11,000’. Frequent Chinook events occur in the fire area reflecting funneling due to these features.

**Fuels**

Primary fuels carrying the fire were Boreal Spruce (C2), Standing Grass (O1b), and Mixed Hardwoods (M2, 25% conifer, 75% mixed wood). Fuel bed’s orientation on this river plain are in a South-North alignment, reflecting the same orientation of glacial and river deposits.
Fire indices and spread

The fire started on May 30, 2013 with the duff moisture code as moderate and drought code as low. The fine fuel moisture code at this time was extreme; however initial spread was limited to about 280 acres. Over the next several weeks the fire showed minimal fire behavior and growth.

With weeks of high temperatures and low relative humidity’s, fuels conditions in the fire area were ripe for a spread event. The alignment of high to extreme Fire Weather Indices (record setting drought code) and a Chinook wind event resulted in 16 miles of northward progression over a 2 day period. After the winds shifted to a normal flow, fire spread decreased significantly.

After the Alaska IMT assumed responsibility for the fire, growth was limited to westward movement in grasses and Black Spruce. The eastern edge of the fire had a large finger push from west to east during a small wind event. Further acreage gains were from firing operations securing the north and northeast perimeter. By August 19th, moderating weather with light precipitation reduced fire spread to smoldering and creeping in deeper duff layers.

Fire spread for this event is typical for the Delta area, where Chinook winds increase in probability from August 1st into November. Future fires will almost certainly be defined by similar alignment of fuel conditions, Fire Weather Indices, and Chinook winds.

Incident Commander

Mobilization

On August 8, the Alaska Type 2 (Black) Team was notified of an assignment to the Birch Creek Fire in the Upper Yukon Zone. The short team was in-briefed on Friday, August 9, 2013 and departed mid-morning for Central, Alaska. While en route on the 2½-hour drive from Central to Fairbanks, the Mississippi fire, administered by the Military Zone, was prioritized by AK MAC over Birch Creek, and the Team was reassigned to it in a Type 1 configuration. The initial challenge for the IC was to notify team members of the change in both complexity and venue, and to select additional roster members while en route from Central back to Fairbanks with limited communications options.

The AICC Overhead Desk was instrumental in facilitating “pool” selection and coordination of the Type 1 roster, however the communications issues resulted in some notification delays. The Nixle emergency notification system provided a
quick and effective instant messaging for mobilization. However, the Nixle message was pushed to all members of the IMT pool and initially caused confusion regarding who exactly was on the roster. This was remedied with a follow-up email, and calls by Section Chiefs.

Several Team members were already embedded in the suppression activity as part of the initial attack response, and in order to accelerate the mobilization, members of the Logistics Section and Operations Section were asked to report directly to the incident. The remaining team members on the original Type 2 order attended the Fairbanks in-briefing, allowing additional team members, some of whom were arriving from the L48, time to travel without delaying the transfer of command.

**Delegation, WFDSS, and Incident Objectives**

Overall, the Delegation provided the IMT with clear direction. Daily meetings with Administrators and stakeholders helped to keep the IMT focused on objectives. The main objective for the IMT was to protect values at risk to the north of the fire. This included the Richardson-Clearwater, South Bank, and Whitestone communities including an estimated 126 structures. A strong south Chinook wind during the initial phase of the mobilization posed the potential for spotting across the Tanana River that would threaten the communities of Delta, Big Delta, Fort Greely and the Tenderfoot subdivision as well. By keeping the fire south of the Delta and Tanana Rivers, the IMT indirectly provided protection for these communities. Several military sites west of the fire were slated for protection, and some consideration was given to protection of the timber to the east of the fire, though neither the timber nor the military sites were ever directly threatened, and contingencies developed to protect them were not implemented.

On August 13, a decision was made to take advantage of a window of opportunity in advance of another predicted Chinook event and to move from a defensive posture and begin taking direct action on the fire. Selection of a suitable anchor point and limited available resources complicated this decision to ‘seal’ the northern edge of the fire with direct and indirect attack. An existing road between the Delta River and the fire was improved with dozers and vegetation along its edge was walked down in preparation for an aerial burnout. The Division of Lands was made aware of the change in tactics as the operation was commencing, and heavy equipment was used according to DNR policy, a copy of which was made available to the Branch Director.
On August 16, a facilitated meeting was scheduled to revisit the Wildland Fire Decision Support System (WFDSS) decision and determine whether it remained valid. The IMT presented Agency Administrators with a draft strategic plan that outlined three strategic options for moving forward. A verbal agreement was reached to move forward with a strategy that combined direct and indirect line construction and aerial firing as needed to complete operations on the northern edge and develop a contingency line to the west.

During the meeting, the IMT was made aware of water bodies in the fire area that have been identified by the Alaska Department of Fish and Game (ADF&G) as important for the spawning, rearing, or migration of anadromous fishes, known as “cataloged” waters. Cataloged waters in the Mississippi Fire area include the lower two miles of the Delta River as well as the Tanana River including its side channels and clear-water tributaries. In general, any flowing waters north of the northwest-southeast trending scarp, approximated by the 1000-foot contour line, were to be considered high value fish habitat. The IMT agreed to take no additional actions that might threaten the fishery, and to mitigate any damage that may have occurred before they were aware of the area’s value. A resource advisor from the local area was assigned to evaluate existing work, assist with planning ongoing work, and to develop a suppression repair plan to address any issues. The facilitated format of this meeting provided an excellent venue for bringing Agency Administrators together with the IMT and developing incident strategies that meet each of their needs.

Despite a delay in publishing of the WFDSS decision that resulted from this meeting, the IMT immediately implemented changes to its strategy and tactics based on the new information it presented. A week after the meeting the decision was still unsigned, and some Agency Administrators expressed concern that the document no longer represented the current status of the fire and that much of the work it outlined had already been completed. They requested amendments to the decision to reflect these changes. It is difficult to obtain all the signatures required to publish multi-jurisdictional WFDSS decisions and delays are common. The disjointed format of WFDSS decision documents makes them difficult to review, especially by inexperienced users. It is the position of the IMT however; that the published decision should reflect conditions as they were at the time the decisions were actually made during the facilitated review; not at the moment all electronic approvals are obtained. This topic should be discussed
further at the incident closeout, and may be deserving of discussion at the Fall Fire Review.

Safety

Staffing

The SOF2 from the Birch Creek Type 2 IMT order attended the Fairbanks inbriefing on 8/10 and managed the Safety function until the arrival of the IMT SOF1(t) on 8/12. A fully qualified SOF1 was not available from within the pool and was ordered through ROSS, arriving at the incident on the 8/14. Line safety officers (SOFR) were needed and ordered on 8/12, but these orders were UTF’d and never filled. We were able to find individuals assigned elsewhere on the fire with SOFR and SOF2 qualifications and reassigned them as Safety Officers in Divisions with less experienced crews.

Risk Management Analysis

A new Risk Management Analysis (RMA) process was implemented on this incident. The process has been used by other IMTs, and was introduced to the Alaska IMT on the 2012 Trinity Ridge Fire. The new format integrates the traditional 215a with a hazard and mitigation matrix, and is designed to encourage all IMT members to participate in the safety process. The Planning Section assisted with the production of daily large display forms for the tactics and planning meetings. Although challenging initially, buy-in from the ICs and IMT C&G members helped the Safety Team adapt quickly to the format. A risk management segment was incorporated into 1300 C&G meetings in order to allow participation from all Sections. The majority of feedback from the Team was very positive. Input was solicited from Division Supervisors as well. Tabloid sized copies of the completed RMA were distributed, and one Division did provide good suggestions.

First on Scene Protocols

An error in the Team’s “First on Scene Protocols”, published in the IAP, was discovered several days into the incident. Safety staff worked with the Medical and Communications Units, and outdated language was replaced with the IRPG insert for pg. 49 (the “nine step” Dutch Creek recommendations).
In addition to LCES and hazards associated with extreme fire behavior, which were addressed throughout the duration of the incident, the following specific safety concerns were addressed by the IMT:

**Boat Operation**

The Safety Team quickly recognized the potential hazards/risks that the heavy reliance on boat operations presented. After working with Logistics/Ground support, a system for manifesting passengers was implemented. Boats were placarded with easily visible weight and occupancy limits. E numbers were also displayed.

**Driving Safety**

Busy highway traffic including Military Convoys also became an immediate concern. Ground Support provided signage on the Richardson Highway to warn citizens of fire traffic. Electronic message boards were put in place in the school zone due to community concern over increased fire traffic.

**ATV Operation**

Numerous ATVs were operated on this incident. The Safety Team recommended mitigation measures for their use, and obtained IC approval. The following mitigations were implemented:

- All ATV operators must have approval from their Division Supervisor.
- All Operators must have a current Agency ATVO certification.
- All operators must adhere to PPE requirements outlined in the Red Book.

Team SOP’s will be revised to further address ATV safety.

**Medical**

As of end of shift on 08/21/13, there were six reportable injury/illnesses. Two resulted in lost time. The other four included two hand cuts from improper use of Pulaskis, and one insect bite infection.

Total personnel hours worked to date are 80,895 hours.
Liaison

The Liaison Officer [LOFR] arrived at the incident on August 11 and was briefed by the Type 3 organization’s Public Information Officer. After assuming incident duties, the LOFR began making contact with various cooperating and assisting agency representatives in the Delta, Big Delta and Fort Greely area.

Cooperators Meetings

Beginning on Monday August 12, daily 1100 cooperators meetings were held in the LOFR office at ICP. A teleconference number was established so interested agency representatives from Fairbanks and Anchorage could also attend. In addition to the daily meetings, an email list of local cooperators was used to provide real time updates on changing conditions such as burnout operations and community meeting schedules. IMT Command and General staff members regularly contacted the LOFR to assist in resolving issues related to use or coordination with assisting agency resources [i.e. Army helicopters, facilities, etc.]. When necessary, the LOFR made contact with the appropriate cooperator point of contact via email or direct phone call to resolve or address agency specific issues.

Evacuation Contingency Planning

The lack of formal government structure [i.e. no borough government] in the majority of the area threatened by the fire presented challenges for coordinating the development of contingency plans for evacuation. The initial mention of an evacuation plan in the incident planning process caused some confusion for the local public and military, who misinterpreted evacuation contingency planning as preparation for an imminent evacuation. The distinction was clarified at a Public Meeting and the Alaska Division of Homeland Security and Emergency Management provided a Technical Specialist to assist in coordinating various local agencies with evacuation contingency planning. After clarifying the scope of the evacuation plan objective [fire 117 specific and not generic for future use] local agencies were successful in developing a written plan that they believed met the IMT objective and the needs of the community.

Department of Defense Coordination

Another challenge was clarifying the different chains of command between various Department of Defense military branches either impacted or interested in
the fire. Inquiries regarding fire operations and impacts were received from military officials from Ft. Greely in Delta Junction, Ft. Wainwright and Eielson Air Force Base in Fairbanks, and Joint Base Elmendorf-Richardson (JBER) in Anchorage. Within the Army, Ft. Greely operations and personnel are in a separate chain of command than Ft. Wainwright lands and operations. Once these chains of command and responsibilities were clarified, the LOFR was better able to direct questions to appropriate Army points of contact and resolve issues in a timelier manner. Assisting and cooperating agency representatives expressed their appreciation that the Alaska IMT had a designated point of contact that provided 24/7 access to the Team during the incident.

Information

Significant Events

The Section’s immediate mission as part of the IMT mobilization on August 10 was to reinforce the single PIO1 who had been temporarily stationed at Delta Area Forestry to deal with a deluge of requests for information from the public. Wind driven fire was running north toward the Richardson Highway, with significant numbers of structures in its path. There were huge smoke impacts on traffic on the Richardson Highway. A PIO2 from the Stuart Creek incident drove down to help out while the IMT got in place.

The IMT arrived with a Lead PIO1 and one additional PIO2. Two additional PIO2s were on order, but those orders ultimately were filled out of the Eastern GACC and they did not check in at the incident until August 13. On August 14, the Section also obtained a “loaner” PIO2 from the Joint Information Center (JIC) in Fairbanks; this individual remained attached to the incident until August 20. The PIO2 from Stuart Creek was ultimately reassigned as a PIO1 on Mississippi.

Once the fire slowed in intensity, additional public awareness developed as burnout operations west of Whitestone took place. The incident remained high on the local public’s radar for several days running.

Challenges

The Information Section did not have computers/Internet access for nearly 48 hours after arrival at the ICP at Delta Fairgrounds. The Lead PIO is EFF, not a regular government employee, and thus carries no government computer upon mobilization.
Delta has a local weekly newspaper. The only voice media available in Delta Junction is a small, low-power FM radio station operated by the students at the Delta High School. There was little other media interest in the incident and thus no one to tell the story to a statewide public audience.

The LOFR, the IC, and 3 SOFs were initially collocated with Information. This was crowded and distracting for all. Safety and the IC decided early on to move to another location shared with Operations/Air Ops.

Upon mobilization, the Lead PIO1 stood up the Alaska Virtual Operations Support Team (VOST). Efforts to maintain contact with the VOST leader got lost in the shuffle. A better way to stay in touch with the VOST needs to be developed, but the Lead PIO also needs to supervise this function more closely.

Two vocal members of public became upset with the amount of water that was being scooped from Quartz Lake by the CL-215s for use in the initial stages of the fire. The Lead PIO1 conferred with ADFG (Regional Supervisor, Sport Fish Division) and had someone calculate the effects of suppression related water use. Assuming the lake was not being recharged at all by rain or springs, the operation could have reduced the water level by as much as 0.7 millimeters over the course of the incident.

**Successes**

Orders for PIO personnel ultimately ended up being filled from the Eastern GACC. While this often can be a problem in terms of “Western” experience, the personnel who filled these orders were not just qualified, they were experienced and a tremendous asset.

Most of the Section’s focus was on community relations. The actions taken proved effective. Community acceptance of the IMT and the firefighting operations took place early on. For example, extensive burnout operations on August 16 did not cause significant alarm despise the sudden appearance of a very large convection column clearly visible from Ft. Greely north to Salcha on the Richardson Highway.

Information shared an office with the LOFR. This allowed for close coordination and communication.
Information staff arranged for both public meetings to be broadcast live over the local station, FM 95.5 KDHS-LP. This allowed residents who lived out away from town or who did not want to travel in the smoke, to listen to the meetings on their radio.

An external bulletin board was established at the local grocery store (IGA.) During periods of fire activity or significant fire operations such as burnouts, this location was staffed as an Information “kiosk.” When it became extremely busy and popular, as many as three PIOs staffed the kiosk at one time.

**Lessons Learned**

Incident updates probably should be electronically transmitted in PDF format, as opposed to a Word document. This precludes (or at least, complicates) other recipients from making changes and then distributing an altered document.

When distributing updates via email, the “group” of recipients should be in the Bcc section, not the To section to avoid forcing recipients to scroll through a long list of names prior to reading the email content.

On future assignments, look for a local radio station willing to broadcast public meetings live. It’s a great way to get the word out to even more people.

**Operations**

**Initial Strategy: Point Protection**

The initial strategy implemented by the IMT was to provide point protection for the structures along Clearwater Richardson Creek area, South Bank, Whitestone Farm community, and the surrounding area. Crews were mobilized to these areas, and structure protection equipment was deployed.

The Tenderfoot subdivision, Shaw Creek, Quartz Lake, Big Delta, Delta Junction, and Fort Greeley were identified and assessed for structure protection needs. This work was accomplished by a task force of engines and overhead. No equipment was ever deployed.

The Observation Points west of the fire were monitored by air assets. An evaluation point was identified between the fire and the values. If the fire reached this point, the Army would be notified that values that can be moved should be relocated. Aviation resources from the IMT and the US Army would be deployed to relocate and protect structures as appropriate.
The timber stands east of the fire were not immediately threatened. If the fire began to move in the direction of the timber stands, aviation assets would be deployed to limit its spread.

Initially this strategy had a high probability of success and allocated suppression effort commensurate with the values at risk, given the fire behavior, weather, and resource availability at the time. However, uncertainty about the timing of a fire-ending event, and the likelihood that another Chinook event could push the fire across the Tanana River and threaten the above-mentioned communities and the Richardson Highway led the IMT to consider alternate strategies.

**Secondary Strategy: Combination of Direct and Indirect**

With point protection in place to protect the values at risk south of the Tanana River closest to the perimeter, the IMT began looking for opportunities to secure the fire and reduce the time spent on the incident. A favorable weather forecast with reduced fire behavior, as well as availability of additional resources allowed consideration of a strategy that included a combination of direct and indirect line supported by burn-out.

**North Flank**

Indirect line on an existing road was constructed from the dozer line at Whitestone Farms west to the fire’s edge. Crews then went direct on the northern-most edge of the fire, working from the end of the dozer line to the west. An additional indirect contingency dozer line was constructed from the northwest edge of the fire west along an existing winter road/dozer line to the Little Delta River. Burnout of the eastern dozer line was conducted. Burnout of the western contingency line was not needed, and did not occur. This strategy halted the fire’s progression northward and secured the values at risk to the north of the fire, including the Richardson-Clearwater Creek, South Bank, and the Whitestone Farms.

**West Flank**

Tactics for the Military Observation Points remained the same.

**East Flank**

An optional component of this strategy included active protection of timber values to the south of the Whitestone Farm. This option would have required improvement of an existing logging road running south from the farm as well as some additional new dozer line to tie in to the Delta River at the southern end of...
the stand. This would have required additional heavy equipment and crews to implement. Given the current weather pattern and fire behavior this operation was never initiated.

**Successes**

Having a full Operations staff allowed the section to protect the values at risk, go direct on the fire when given the opportunity, and develop a Strategic Risk Assessment. This assessment was helpful during the WFDSS evaluation process and gave fire managers several options to meet the objectives of the incident. At the same time, the Operations section developed Management Decision Points and a map that identified time frames required for the updating of evacuation watches and warnings, as well as time frames required to initiate structure protection.

During the incident the Tetlin Jct. Ridge fire made a run towards the Alaska Highway. Given the success of the direct line and burnout option, the IMT was able to make their Engine task force available to Tok Area on Saturday, August 17 in order to assist with the Tetlin Jct. Ridge fire for 48 hours.

**Air Operations**

Helibase positions were filled through resource orders and from the AFS overhead pool. The helibase was established on military land south of Delta. Two Division of Forestry exclusive use Type 2 helicopters and one CWN helicopter were assigned to the fire; other AFS helicopters were loaned to the incident as needed. Heavy air tankers, CL-215s, and military Chinooks and Blackhawk helicopters were also used. Air Attack platforms were borrowed from the overhead pool until a dedicated platform was assigned. A TFR was established and adjusted once to cover the helibase, and to include Quartz Lake, which was being used as a water source for the CL-215s. It was adjusted again to accommodate military operations on restricted areas and to eliminate the lake area so pipeline patrols could resume. Two Safecoms were generated: one for a slingload released too high, and the other for a chip light. Air operations personnel participated in statewide conference calls discussing locations and needs for aviation resources.

A high level of coordination with the U.S. Air Force was required to de-conflict airspace with “Red Flag” exercises August 13 – 23. To manage TFRs, AICC already had an Air Space Coordinator (Gary Rose) in place. With his input, Team Air Operations Branch, and USAF input (Maj. David Miller), were able to determine
air space corridors, frequencies, operational parameters, and time frames. This close coordination permitted simultaneous operations. Military rotor aircraft were available from Ft. Wainwright in order to supplement incident aircraft, and were designated for the protection of military assets including observation posts, targets, and electronic emitters to the southwest of the fire. This allowed agency aviation resources to be focused on identified values to the north of the fire.

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**Planning**

**Mobilization and Staffing**

The Planning Section mobilization for the Mississippi fire was relatively smooth despite a couple of issues associated with the IMT Pool System, and with the mid-mobilization change-up from a Short Type 2 IMT for Birch Creek to a Long Type 1 IMT for Mississippi.

Two rostered GISS positions went unfilled in Alaska and were sent to the Lower-48 while the Alaskans that the Plans Chief intended to fill those slots ended up filling two additional orders not placed by the Team. This resulted in the unintentional filling of three GISS orders. The fourth order was caught and cancelled before a fill, and incident complexity ended up warranting a three GISS shop.

All Planning Section Units were fully staffed. The Section carried eight trainees, six of whom were Alaskans. The incident provided an excellent training environment.

**Resource Advisors**

Suppression Repair was primarily coordinated by Mike Reggear from Delta Area Forestry. Mike participated in the strategic meeting on August 16 where repair needs were initially identified and thereafter served as the IMT’s point of contact for repair concerns. Mike spent several days in the field collecting repair data and
coordinated with Agency Administrators and subject matter experts to develop a suppression repair plan for the incident.

A resource advisor from the Military Zone was also available for questions related to military managed land.

**Situation Unit**

The Situation Unit was comprised of a SITL, FBAN, and IMET. A GISS, and a GISS (t) arrived the following day, as well as a SITL(t) that moved over from Resources. A second fully qualified GISS arrived on August 13. A PSC2 ordered for the incident prior to the team mobilization arrived on August 13. He was initially used as a field observer and eventually took over the Situation Unit.

The rapid development and ongoing improvement of Situation Unit products can be attributed to assistance from the Upper Yukon/Tanana Zone (provided initial remote GIS support), the Operations Section, the Unit’s Field Observer, and Resource Advisors from the military and Delta Area Forestry. Some of these had local knowledge and access to local documents and spatial data used for resource management and previous fires (especially Carla Lake). AICC Predictive Services staff and the NWS provided products after the FBAN and IMET demobilized on August 21. The AICC ArcIMS and Predictive Services website provided one-stop shopping for links to weather forecasts, RAWS data, fire indices, and spatial data that proved invaluable to Situation Unit personnel.

The original fire perimeter (8/11) was acquired from the UYT GIS shop. Fire perimeters were updated throughout the incident using aerial GPS missions and NIROPS IR data. Helibase personnel assisted in perimeter mapping missions.

**Unit Successes**

The GIS shop was staffed with three GIS Specialists. A lead GISS was designated as the editor/data manager, while the other two mainly produced maps, and managed structure and known sites data. The GIS shop was able to assist Tok Area with map production for the Tetlin Jct. Ridge upon request.

It was also beneficial to have an IMET and FBAN in place, especially during the critical incident timeframes.

A Quick Response Code (QR) was attached to maps and IAPs to provide a link to geo-referenced PDF maps to personnel with mobile devices. The technology was very useful for making digital products available to a wider audience.
There were limited Known Sites Data for the areas of concern when the IMT arrived. Structure protection data was collected by operations personnel and the Field Observer and provided to the Situation Unit; including GPS locations, hand drawn maps and some additional site data. An index and 42 inset maps were created and provided to Military Zone and Delta Area. Spatial data was provided to the Northern Region GIS shop for inclusion in the statewide Known Sites Database.

Infrared data was provided to the incident through a DoD satellite and processed through NIROPS. Although the satellite IR was sometimes limited by cloud cover and some occasions unavailable due to AK MAC prioritization, it proved to be a valuable asset when available.

**Demobilization Unit**

The Demobilization Plan for the Alaska IMT was prepared on August 11 and signed by the team on August 15, 2013. All releases of resources and equipment were processed through UYT Expanded Dispatch at Alaska Fire Service. All “Actual Demob” forms, created in I-Suite were emailed regularly to expanded dispatch in batches, and copies of the 221s (plus all air travel) were kept for the documentation box. Flight requests were emailed to Expanded Dispatch and flight itineraries were then emailed back to the Demob Unit Leader at the ICP.

**Successes**

Expanded Dispatch was very helpful and cooperative in making this an easily handled incident. There was excellent communication between the two groups.

**Challenges**

The travel agency’s after hours desk would only process emergency demobs on the weekend, leading to some delays in demobing excess personnel. This problem was not resolved. All flight requests were processed on weekdays.
Training Specialist

Ten trainees were rostered with the IMT. Additional trainees were ordered or reassigned at the fire.

Number of Trainees by section and agency:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Command</th>
<th>Ops</th>
<th>Aviation</th>
<th>Plans</th>
<th>Logistics</th>
<th>Finance</th>
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<td>8</td>
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NUMBER OF TRAINEES WITH THE FOLLOWING RATINGS:

__26__ 1. The individual has successfully performed all tasks for the position and should be considered for certification.

__33__ 2. Opportunities were not available for all tasks (or all uncompleted tasks) to be performed and evaluated on this assignment. An additional assignment is needed to complete the evaluation.

__0__ 3. The trainee did not complete certain tasks for this position in a satisfactory manner and additional training, guidance, or experience is recommended.

__0__ 4. The individual is severely deficient in the performance of tasks for the position and additional training, guidance, or experience is recommended prior to another training assignment.

__3__ 5. Other: ___Unknown______________________________________________________________

Remarks:__________________________________________________________________________
Logistics

ICP was established at the Deltana fairgrounds in Delta Junction. The fairgrounds were an excellent location for ICP. There were several buildings and a large area of land available for use as well as electricity on site. This facility would make an excellent location for future ICPs.

The main supply unit was established on the Arkansas Range at Fort Greely Army Base. There was adequate covered storage with potential for expansion and telephone and electricity onsite. Range control personnel made daily contact with the supply unit to ensure their needs were being met.

Successes

ICP was fully operational by the end of the first shift due to the fact that electricity, tables and chairs were available in many of the fairgrounds buildings.

Supply’s proximity to the helibase made deliveries for sling loads easy to manage.

Ordering had a great working relationship with the Buying Team and Expanded Dispatch. Everyone had a very positive attitude. Open lines of communication between Ordering, Expanded, and the Buying Team made the Supply Unit effective in accomplishing their goals.

Using an EMT from a crew as a line EMT under the Medical Unit met immediate staffing needs and increased medical coverage for crews that were spiked out.

Acquisition of UTVs for line EMTs gave them the mobility that they needed to interact with the crews on the line and address any medical issues in a timely fashion. This reduced the need for lengthy transports to camp for minor issues that could be effectively addressed on the line, and increased productivity of crews based in spike camps.

A local catering service, the Chocolate Gypsy, was used to feed overhead and crews at ICP. Whitestone Farm’s fed crews and overhead at the large Whitestone Spike camp. Both caterers did an outstanding job providing healthy, nourishing meals to overhead and crews. Their use is recommended on future assignments.

The mobile shower service, Cameron Equipment, was located at ICP and enabled the IMT to provide showers for crews prior to their demob.
The use of a mobile dual-fuel truck (diesel and unleaded) allowed for the efficient delivery of fuel for boats, dozers, and other vehicles. Refilling of fuel drums on-site eliminated the need for transporting drums from Fairbanks.

The IMT used the State’s RapidComm mobile communications unit. This allowed for instant Internet connectivity, telephone lines, and radio patching. It allowed the Communications Unit to deploy two NIFC repeaters and patch them together with the normally non-compatible federal repeater. It was setup instantly and provided connectivity and phones for the IMT by the morning following travel.

**Challenges:**

Coordinating the logistics functions among several large spike camps, staging areas and ICP was a difficult task, made successful by assigning RCDMs, BCMGs and EQPMs to these established areas. These personnel were instrumental in coordinating the movement of supplies and personnel, and provided for field equipment accountability and repair.

Supply deliveries early in the incident were delayed due to lack of a vehicle and driver from AFS Transportation. Mechanical problems with several of the rental trucks also caused delivery delays. The turnaround time for delivering supplies and equipment was improved thanks to extra drivers and vehicles provided by the warehouse, Buying Team, and those assigned to the incident. Once the buying team was in place and an ordering cycle for supplies and local purchase items was established, all items were delivered in a timely manner.

Delayed communication from the MAC Group and/or AICC on crew movement and assignments caused some confusion between Expanded and Ordering when the incident was trying to cancel and/or fill crew orders. All was resolved.

Due to the high water levels in the Delta River, the transport of the D9 dozers from the fireline back to Delta has been delayed. The dozers have been released from the incident and will be moved at the contractor’s expense after the river waters drop and a crossing permit is obtained.

**Finance**

The Finance Section managed the Mississippi Fire and all of its resources within one functional database. All known resources were accurately tracked and their cost information reported daily to the Incident Agency.
Interaction with the local unit was facilitated by the presence of the Incident Business Advisor who arrived within a couple days of the Alaska IMT being assigned to the fire. The initial interaction was between the Finance Chief and Deputy, and the Agency Administrator, Aleshia Purcell.

The Agency sent out a local resource to work with the EQTR Judy Gau to sign up as much equipment as possible prior to the IMT arrival; however, much of the Initial Attack equipment was already out on the line, so it was not possible to gather the information initially. The Finance and Logistics sections worked continually throughout the assignment to collect the resource information and get agreements in place prior to their demobilization.

The Southwest Buying Team, with BYUT Leader Mark Hosteller, took the lead of managing the Land Use Agreements used by the Incident. The LUAs included:

- Deltana Fair Grounds – Used as ICP
- Whitestone Farms – Used as the main base camp, and included a variety of items which the Whitestone Farms personnel provided to support the incident objectives.
- Bill Allen and Cheryl Schikora – Spike camp, supply staging, and landing strip for H-10 Helispot. CLOSED: 8/21/13
- Richard Gardner – Used for a spike camp and supply depot. CLOSED: 8/21/13

There was a request by local resident, Tracy Morphis to be paid for the use of her property along the Tanana River. This was used as a “coyote” spike camp initially by the Chena IHC and then the White Mountain T2IA for 2 nights each. This was during the time that they were doing structure protection on her cabin and property. Upon further consideration, Ms. Morphis decided that she and her husband did not want to claim compensation for the protection of their property. An envelope was created and placed with the other LUAs for documentation purposes.

The IMT understood, after speaking to the BUYT Leader on 8/14 that the LUA for the Whitestone Farms property, used as a Base/Spike Camp, was being worked on and finalized by the BUYT. However, on 8/22 the IMT received a call asking for a copy of the LUA (this was five days before the IMT was scheduled to demobilize). An initial start to the agreement was done and presented to the BUYT Lead Hostetler to perform the “pre-inspection” when he went to Whitestone Farms to work on facility agreements (connex box, mobile building, generators, etc.).
However, the Whitestone LUA must have been misplaced in the processing of other documents.

The BUYT processed the majority of the Service and Supply orders for the IMT. All documentation for these types of payments should be available within the Buying Team’s documentation package for the Mississippi Fire.

Two boats used during initial attack were released prior to the IMT taking over the fire. These were owned by Ted Morphis and John Nusbaumer. Both boat operators were paid directly from Aleshia Purcell at the Alaska Fire Service. No invoices were captured or maintained within the Finance Final Fire Package.

During initial attack, there were three dozers hired and driven across the river to Whitestone Farms. They were all demobed on 8/22; however the equipment was stuck on the Whitestone Farms side of the river due to high water levels. As a result, it was not possible to get them across the river at the time the IMT demobilized. A couple options were discussed with the Logistics and Operations sections (i.e., Army Corp of Engineers building a temporary bridge, Chinook Helicopter to lift them each over the river, waiting out the higher water, etc.). After speaking to the representatives from Green and Sons and also Whitestone Farms, they do not intend to charge the fire for the time that the dozer is located across the river. They will “wait” until the river goes down and then drive the equipment across.

There were only six injury claims for the incident; two involving lost time; with a total of 80,895 total man-hours (as of 8/25/13). To date there have been 9 claims for loss or damage turned in. Additional claims may be submitted after the team demobilizes.

The total cost of the incident as of 8/25/2013 is $5,508,000.