

The Learning Curve

TEN LESSONS LEARNED and BEST PRACTICES AFTER INCIDENT REPORTS THIRD EDITION - 2002

INCIDENT COMMUNICATIONS:

Liaison with Local Law Enforcement

The continuity of communications with multiple law enforcement agencies proved critical on an incident last summer that involved the evacuation of a town and the closure of a nearby major highway. Due to local preplanning activities a success was achieved and rapport established among the involved multi-agency group of land management and law enforcement agencies. The wildfire preplan contained the key to this initial success because the local overhead team had the foresight to establish and then implemented the use of the current agency contact list as contained in their fire management preplan. This fire preplan list enabled local cooperators to be readily contacted and provide their input at briefings. The incoming regional Incident Management Team (IMT) also then had use of this pre-established list of direct contacts at these agencies, which provided them a simplified means to maintain this established continuity of emergent or daily communications throughout the incident.

FIRE INFORMATION:

Enhancing Incident Information

As the public requests more information during wildland fires, information officers are utilizing a variety of tools. In addition to traditional press releases and media updates, information posted on Incident Web sites can provide near real time updates to the general public. These Web sites have been known to receive thousands of hits per day on large incidents.

Other useful communication tools include regular community meetings as well as identifying community-gathering places such as post offices and grocery stores, and then setting up information trap lines with bulletin boards and handouts at these locations. In addition, scheduled open houses at the incident command post (ICP), media tours of the ICP, and updates provided through the local community television channels and other local media outlets are all avenues that can foster incident related communications with the local general public.

During community meetings, past feedback indicates that interactive Power Point presentations can be effective when they include video footage of the fire and various area and incident maps to help explain the suppression objectives and

containment progress. These types of visual aids are also helpful in explaining to the lay public both the magnitude of the incident and physical limits of the committed resources in their ability to obtain these containment objectives.

OPERATIONS:

Use of Mark-3 Pumps

Crews and line overhead should be made aware that the Great Basin Cache at NIFC states all Mark-3 Pumps can use the same gas/oil mixtures. The pumps built before the early 1970's were originally specified to use a 16:1 gas/oil mixture while all pumps made since then require a 24:1 ratio. The Cache at NIFC related that pumps manufactured before the early 1970's can be run on the 24:1 ratio. On a Type 3 incident during the 2002 fire season, both generations of pumps were utilized. This resulted in confusion among crewmembers over which was the proper gas/oil mixture to use. Using the wrong gas/oil mixture ratios can impede operations and potentially damage a pump. According to the Cache, all Mark-3 Pumps should now have the 24:1 ratio boldly stenciled on the pump. As a point of information, premixed gas/oil supplied to Alaskan incidents is mixed to a 40:1 ratio. The Alaska Cache has found this mix to be very effective based on 10 years of use and it simplifies logistics for all 2-cycle machinery (chainsaws and pumps) to use the same ratio. For more specifics on operating Mark-3 pumps click on: <http://www.wildfire-equipment.com/Mark-3.html>.

Specialized Firefighting Vehicle

After the 2000 fire season in Montana, a rough terrain firefighting vehicle was developed that has been particularly effective in steep and rugged terrain. This vehicle has a 60% down hill capacity and 45% uphill capacity. The Proteus has been used during the last two fire seasons both to construct line as well as mop up in areas that lack engine access. Some Incident Management Teams (IMT) report they find this type of vehicle is most effective as part of a task force with a handcrew during the mop up phase of an incident. It is an 8 wheel drive vehicle with a 3000-gallon tank and a 100 gpm @ 100 psi pump combined with live hose reel with 250 feet of 1-inch hose. The water tank can accept refilling by conventional means as well as helicopter aerial delivery.

PLANNING:

Population Protection Plans Effective

A population urban interface plan developed by Missoula County, Montana is now in use by 56 counties in this state. The "Population Protection Plan" is a planning document whose use can be implemented by Incident Management Teams (IMT) and affected local communities during urban interface wildfires. The plan consists of four primary elements: Fire Suppression, Evacuation Process, Access Management, and Structural Protection Plan.

The **Fire Suppression** component keeps primary resources focused on suppression and is combined with the use of independent advance reconnaissance parties to locate defensible spaces. A portion of the suppression resources are held in staging and then dispatched to these newly identified defensible interface positions.

The **Evacuation Process** portion of the plan includes the emergency implementation procedure guidelines, non-compliance response guidelines, and is combined with pre-planned evacuation routes that identify roadblocks and other traffic control points. Resource locations for those being dislocated such as evacuation centers are included as part of this portion of the plan.

In the **Access Management** component, access criteria are developed and then bulletin boards, public service announcements, and other signage are utilized to explain access restrictions. Restricted access may also include the use of pilot cars and limits on general access hours to the affected areas.

The **Structural Protection Plan** considers the use of both traditional and progressive tactics such as engine task forces, large volume sprinkler systems, house wraps, foam and gel applications, and night operations to suppress ember blizzards that can potentially ignite wildland urban interface structures.

For a copy of the plan format and additional information click on:
<http://www.wildfirelessons.net/Library.htm#WUI>

Safety Objective Becomes Paramount

On a 2002 Type 3 incident, the first and paramount objective of the initial attack incident commander upon arrival became safely removing the already on scene local personnel who were suppressing the fire without proper wildfire training and personal protective equipment (PPE). When the wildland fire trained resources arrived, 30 Marines from a local base and the local volunteer fire department were already on scene. Neither the Marines, nor the local fire department, were properly trained or equipped to handle this type of incident. After the incident the IC contacted the local Marine Corps commander and arranged for wildland fire and ICS training as well as technical support in securing PPE for the local Marines. The County Emergency Services office was also contacted to arrange for training and proper wildland fire PPE for the local volunteer fire department. As a result, a situation that at one time presented a serious safety liability became a means of establishing additional initial attack resources in this locale at minimal cost.

Briefing Operational Resources at Check in

Crews and other operational resources checking in after the regularly scheduled day and night shift briefings can miss critical information prior to assignment to the fireline. To solve this communication lapse, one Incident Management Team

(IMT) has altered their check in procedures for operational resources. As part of this team's check in procedure, new resources are automatically routed through key personnel in a manner similar to the one currently established for the demobilization process. This check in routing entails line personnel receiving an Incident Action Plan from the Plans Section, gear and radios from Logistics, and an operations briefing from either the Staging Area Manager or a Safety Officer. This revised procedure was found to be so effective in preventing check in lapses that this IMT decided to utilize it for the remainder of their 2002 season assignments.

LOGISTICS:

Incident Medical Team

Incident Management Teams (IMT) from the Pacific Northwest utilize incident medical teams that are ordered when one of their teams is first mobilized for an in region or national assignment. Paramedics and emergency medical technicians make up this five-member team working for the Medical Unit Leader. The medical team's primary focus is on preventative medicine rather than treatment after the fact. For example, they work with crews to help prevent dehydration rather than have to treat numerous heat illness cases. Feedback from firefighters and other incident personnel indicates that this type of consistent medical team staffing has led to high quality care on these incidents.

Dealing with a Public Closure

A Pacific Northwest wildfire in 2002 required a means to permit vehicle access to a large number of residents. There was also a need to provide normal support services to these residences, all of which were within the perimeter of an uncontrolled fire. This proved to be a difficult challenge while trying to enforce a more general public closure of the area. This problem was largely resolved on this incident by issuing permits to the affected residents for travel beyond a series of established check- points. A supplemental list of authorized support service providers such as contractors, trash collectors, and utility companies was also prepared for use at these control points to facilitate their entry into the restricted zone. This allowed personnel at the checkpoints to easily ascertain whether a party seeking entry had authorization. If the party seeking entry did not have a permit or did not meet the established criteria, they were advised by checkpoint personnel whom to contact regarding obtaining authorization for entry.

Mobile Sleeping Units

Originally developed for U.S. Military ground troops, an Incident Management Team (IMT) in Southern California tested out climate-controlled mobile sleeping units. The units were used by night shift crews whose critical sleep hours fell during periods of extremely hot daytime temperatures. The mobile units tested look similar to a semi-trailer from the exterior but the inside contains one person

sleeping cubicles that can accommodate 42 firefighters per trailer. The units are also sound resistant blocking out disruptive noises such as generators and loudspeaker announcements. Comments from firefighters who slept in the units on the McNally and Williams Fires were very positive.

***Remember – A lesson learned has to be shared for it to be a true lesson.
Please pass this on to others.***

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