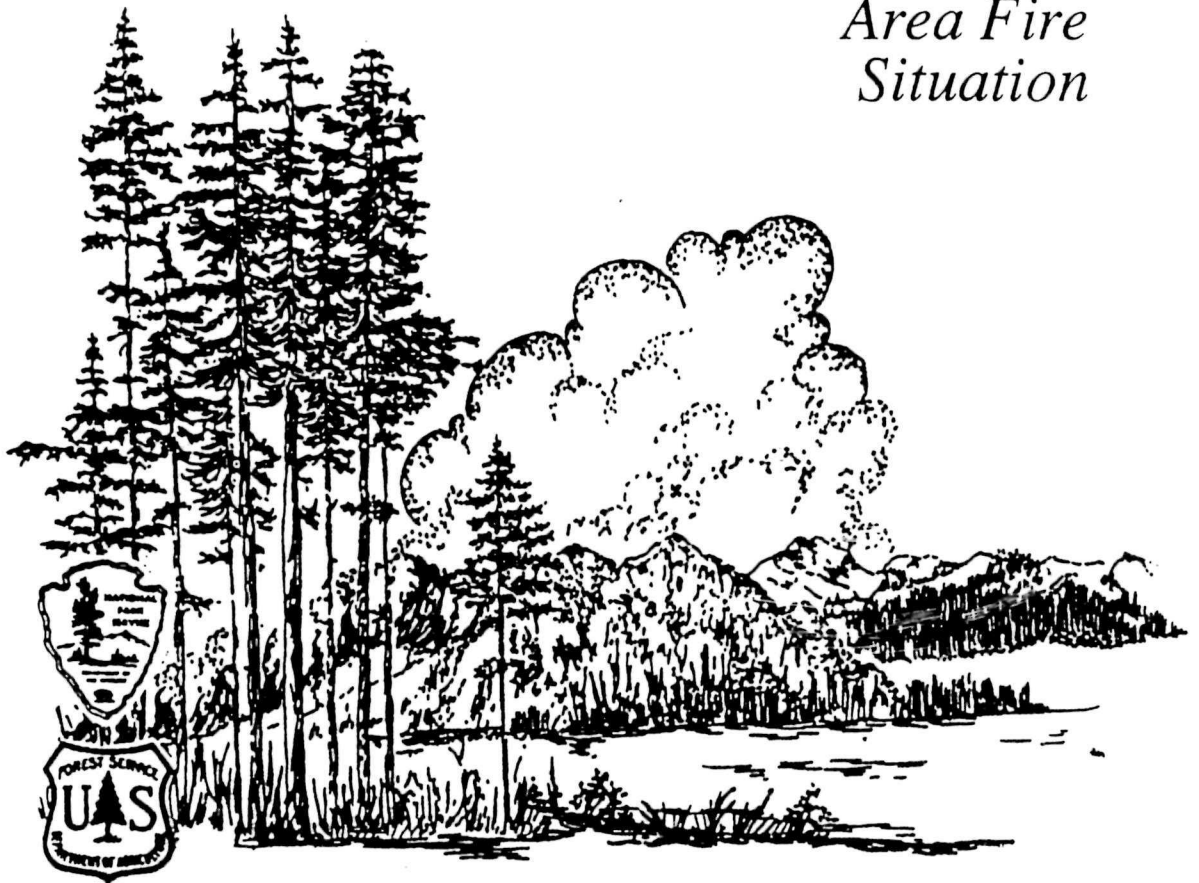


# COORDINATION AND MANAGEMENT REVIEW

*1988 Greater  
Yellowstone  
Area Fire  
Situation*



*January 1989*

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United States Department of Agriculture • Forest Service  
United States Department of the Interior • National Park Service

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# COORDINATION AND MANAGEMENT REVIEW 1988 GREATER YELLOWSTONE AREA FIRE SITUATION

*January 25, 1989*

Submitted by:

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Team Leader



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# COORDINATION AND MANAGEMENT REVIEW 1988 GREATER YELLOWSTONE AREA FIRE SITUATION

## I. INTRODUCTION

The Greater Yellowstone Coordinating Committee (GYCC) requested a review of the coordination and management of the 1988 fire activity in the Greater Yellowstone Area (GYA). A review team was formed to assess the effectiveness of the coordinating organizations and procedures in supporting the needs of the incident management teams.

The review team consisted of:

### **Team Leaders:**

*Bill Briggie*, USDI National Park Service, PNW Region

*Jerry L. Monesmith*, USDA Forest Service, Washington Office

### **Members:**

*Ron Ketchum*, USDA Forest Service, Rogue River National Forest

*Jim Olson*, USDI National Park Service, Rocky Mountain Region

*Bill Wade*, USDI National Park Service, Shenandoah National Park

### **Objectives for the review are....**

A. To evaluate the effectiveness of the Greater Yellowstone Coordinating Committee in this situation with emphasis on implementation, decision making, and support to the Greater Yellowstone Area Command.

B. To assess the implementation and effectiveness of the area command.

C. To assess the effectiveness of logistics support with emphasis on the supply of personnel, supplies, and equipment.

D. To evaluate whether management oversight and direction from the NPS/FS region and forest/park levels were coordinated, communicated, and applied effectively.

The intent of this review was to evaluate the coordination and management aspects of the fire situation and not the technical fire suppression decisions and/or actions. Corrective actions were identified when national in scope as well as for the GYA.

We obtained input from principal GYA line officers (NPS and USFS), key personnel from the Boise Interagency Fire Center, most of the involved incident commanders, all of the area commanders and a number of other involved persons. Personal interviews were conducted with many of these individuals. The entire review team was present during the debriefings conducted for the GYCC by the four (Clover-Mist, Huck-Mink, North Fork-Wolf Lake and Hellroaring-Storm Creek) individual fire review teams. In addition, relevant documents, evaluations and reports were reviewed. All sources of input are listed in the appendix.

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## II. SITUATION

The Greater Yellowstone Area is made up primarily of parts of six national forests from three Forest Service regions, two national parks, and one memorial parkway. Also included in the 11.7 million acres are some state lands, National Wildlife Refuges, unreserved public domain (Bureau of Land Management), and other lands. The GYA lies within 3 States—Montana, Idaho, and Wyoming—and includes all or parts of 12 counties.

A series of dry lightning storms ignited numerous fires in late May and June. Additional lightning and human-caused fires occurred in July and August. A total of 249 fires occurred in the GYA during 1988. Eighty-one percent (201) of these were suppressed at less than 10 acres. Thirty-one fires were initially classified as prescribed natural fires: 28 in Yellowstone National Park, one in the Custer National Forest, one in the Bridger-Teton National Forest, and one in Grand Teton National Park. Of the 28 prescribed natural fires in Yellowstone National Park, 12 burned out at less than 1 acre and the remaining 16 were later declared wildfires and grew to large size despite suppression efforts. Both prescribed fires on the national forests were later declared wildfires, grew to large size, and burned into Yellowstone National Park. The total area within the fire perimeters is an estimated 1.6 million acres, of which an estimated 900,000 acres lie within Yellowstone National Park.

The fire situation in the GYA became so complex that priorities for limited numbers of

firefighters and equipment had to be set. A Greater Yellowstone Area Command (GYAC) was established in West Yellowstone on July 23 to coordinate suppression action. The GYAC was staffed concurrently by command officers from both the National Park Service and Forest Service.

Thirteen incident management teams functioned within the GYA and were assigned to the GYAC organization. The GYAC organization was very large, at times consisting of up to 275 personnel.

Air support consisted of 32 large helicopters, 2 infrared surveillance airplanes, air tankers for dropping fire retardant in support of line-building efforts, and a large transport aircraft. A total of 117 aircraft were used.

Due to depletion of organized fire crews, the Boise Interagency Fire Center requested and obtained assistance from the Department of Defense. Military assistance peaked with 4,146 soldiers, marines, sailors, and airmen. The Wyoming National Guard also provided significant air and ground support.

Fires in the GYA attracted tremendous public, media and political interest. Providing accurate and timely information for the media, the public, and the agencies became a priority. Special efforts were made to keep nearby communities informed and to provide briefings to numerous VIP's.



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### *III. SUCCESSES*

Park Superintendents and Forest Supervisors set safety as a priority objective of the GYAC. Concern for personnel safety became an integral part of all strategy decisions. As a result, there were no fireline fatalities or serious injuries on the GYA fires prior to October. Considering that suppression activities continued for more than 3 months with a peak of over 9,500 firefighters and 117 aircraft, this was a remarkable safety record. No injuries were sustained to the public when fires involved campgrounds, private homes, or park facilities.

Many believe the tracking of aircraft conducted by the GYAC among incidents contributed greatly to safe air operations.

The decision to implement an area command organization proved to be very important in the coordination of information and aircraft, dealing with VIP's, and particularly in assuring overall coordination of fire suppression activities for the entire GYA.

Important information about the fires was collected and distributed to the media and public by up to 67 information specialists assigned to the GYAC. These specialists conducted valuable community relations programs to reduce public anxiety and provided important daily updates of fire activity for participating agencies, incident management teams, and VIP's.

The GYA Interagency Team Leader served as a valuable liaison between the GYCC and other involved groups, especially the GYAC.

Effective electronic communications was accomplished through the use of the Data General computer system.

Involvement of local responsible agencies and key political figures in decision making provided coordinated and effective support for planned actions.

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## IV. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

### OBJECTIVE A

*Evaluate the effectiveness of the Greater Yellowstone Coordinating Committee in this situation with emphasis on implementation decision making, and support to the Greater Yellowstone Area Command.*

**Finding No. 1:** Communication channels opened by ongoing issue resolution in resource areas being handled by the GYCC provided a basis for the early establishment of an unified area command at West Yellowstone.

The members of the GYCC are accustomed to working with each other at frequent intervals. Because of this, there are few barriers to proposals of joint actions among agencies or regions. This comfort level provided the framework for the early establishment of the GYAC.

This was an excellent decision in the view of this review team. Without the GYAC organization to oversee the resulting joint public information, it would have been impossible for the public to get a relatively accurate picture of the entire situation. Moreover, the GYAC performed admirably by setting priorities and providing a forum for overall strategy setting.

**Finding No. 2:** The GYA Interagency Team Leader position, filled by Jack Troyer, provided a logical and effective liaison between the GYCC and the GYAC.

Mr. Troyer provided a focal point for the dispersal and gathering of information to and from members of the GYCC, particularly the

unit line officers, who were heavily involved in formulating local suppression objectives and strategy. He also was able to assess proposals in light of known philosophy and previous decisions. This kind of information was invaluable in this extremely complex emergency situation.

**Finding No. 3:** Once problems were identified and brought to their attention, the regional level of the GYCC effectively dealt with them in a positive and appropriate manner.

The meeting of the entire GYCC, GYAC leadership and incident commanders in Bozeman on September 3, 1988, is an illustration of this finding. Concerns between the GYAC and some line officers had developed over delegation of authority questions and other issues. The situation was taking its toll in personal stress, which required an outlet and sharing with the entire group.

All individuals in attendance who were interviewed felt that this meeting was candid, decisive and helpful in getting over a particularly difficult time. One of the reasons for success is rooted in the successfully established relationships in the GYCC based on past problem solving actions.

**Finding No. 4:** The delegations of authority to the GYAC did not involve all members of the GYCC. The delegations were not explicit enough and were not effectively communicated to all affected persons and organizations.

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The GYCC agreed on July 19 to establish an area command which became active on July 23. The first delegation of authority to the GYAC was on July 23. This document was signed by the Yellowstone Park Superintendent. Area Commanders believed there was "assumed" delegation from the Forest Supervisors. Some line officers had differing perceptions regarding their relationships with the GYAC and frustration resulted regarding the roles and responsibilities of the GYAC.

Because the GYCC had established the GYAC they believed that the organization was working for them and that the GYAC had full authority to carry out decisions. However, some key officials still misunderstood or disagreed with the scope of the delegation of authority. This was evident by the GYAC's inability to "force" action on the west flank of the North Fork Fire, to integrate a Type II incident management team with a Type I team, and to move some resources without major discussion or confrontation. As a result, a new delegation of authority was issued to the GYAC on August 27, signed by the four members (National Park Service Regional Director, Lorraine Mintzmyer, and Regional Foresters, Gary E. Cargill, John W. Mumma, and J. S. Tixier) of the upper level of the GYCC. There is no indication on the document that it was an amendment to or superseded the July 23 delegation. Further, because of its content and the lack of formal involvement by all line officers during its preparation, and lack of follow-up, this delegation did not resolve all problems.

Neither delegation of authority was explicit enough in terms of accountability, priorities, constraints, fire and land management concerns or external considerations to clearly establish

understanding and implementation among area commanders, line officers, and incident commanders.

The GYAC was assigned by the GYCC but the Committee had difficulty in ensuring accountability for the actions and decisions of the group. Because of their workload and geographic distance, the Committee had difficulty in meeting with the GYAC on a frequent basis. GYAC decisions on turning a fire back to the Yellowstone National Park and replacing a Type I incident management team with a Type II team were not shared with the Committee.

The GYCC depended on their individual agency organizations and on the GYCC Inter-agency Team Leader to communicate their collective decisions. The Committee formally met in person or by conference call six times between July 28 and September 9. However, formal documentation and distribution of their key decisions regarding agreements on strategies, the activation of GYAC, etc., are not evident with the exception of the issuance of the delegation of authorities to the GYAC on July 23 and August 27. Communication breakdowns, reported by one of the National Forests, included a lack of notification that the GYAC was established, and copies of the delegation of authorities, notification of GYAC personnel and organization changes were not received.

When used, the Data General computer system served as a very positive and effective tool for electronic communication between the GYCC, GYAC, incident management teams, and the Forest Supervisors and Park Superintendents. Also, the GYCC Interagency Team Leader provided valuable liaison between the GYCC and affected parties.

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## CONCLUSION

The GYCC was formed to solve resource and political problems in an atmosphere of deliberate and reasoned negotiation. The existing, relationship within the GYCC was instrumental in fielding a cohesive unified area command. However, fast-moving emergency situations created complications in:

- Communication and coordination
- Delegation of authority and accountability

5. Ensure that when Area Command is established, clearly defined delegations of authority are provided to Area Command and then re-delegated to individual incidents.

## RECOMMENDATIONS

1. Ensure full membership of GYCC in decision making processes, particularly when and where understanding and commitment to overall interagency actions and decisions are paramount.

2. Strengthen communications through formal documentation and distribution of decisions and actions.

3. For future fire emergency situations involving the GYA, establish a formal process that will assure adequate and timely multi-agency, multi-regional response, advice and information through which decisions can be made and implemented.

4. Define roles and responsibilities of the GYCC during multi-agency involved emergencies.

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## OBJECTIVE B

*To assess the implementation and effectiveness of the Area Command.*

**Finding No. 1:** Confusion in the delegations of authority to the GYAC made it difficult for the GYAC to effectively coordinate strategies and critical resources among incident management teams. This was complicated further by delegations of authority and/or directions given from unit line officers to incident commanders, but not coordinated with the GYAC. This caused misunderstandings and, at times, conflicting directions given to incident commanders.

**Finding No. 2:** Span of control and the physical area of responsibility hampered the effectiveness of the GYAC.

The Incident Command System (ICS) was designed based on a recommended 5 to 1 span of control. The Greater Yellowstone Area Command managed 13 incident management teams, and served 6 Forest Supervisors, 2 Park Superintendents, and 4 Regional Managers. It also had responsibility for expanded dispatch, consolidated public and agency information, and other functions.

The geographic area of responsibility covered over 11 million acres, 180 miles by 90 miles. Because of separation, fires south of Jackson, Wyoming, received little coordination from the GYAC. The situation became so difficult that the establishment of "zones", a term not used in the ICS, were considered in an effort to improve communications and GYAC effectiveness. Eventually a zone was established covering the southern portion. A "Zone Coordinator," a position also not used in the

ICS, was assigned for liaison with the GYAC.

**Finding No. 3:** The roles and responsibilities of the GYAC were unclear to many of the involved participants.

Roles and responsibilities were constantly in question as evidenced by the number of GYAC meetings where the subject was brought up.

Some National Park and Forest Service unit line officers were not knowledgeable of Area Command functions and this lack of understanding hindered a smooth transition to this type of organizational structure.

Examples of confusion of roles and responsibilities of GYAC included the involvement of line officers; the authority of GYAC to prioritize fires, make decisions on strategies and move resources; processes for park and forest units to acquire resources from incidents; and the responsibility for handling the media.

**Finding No. 4:** GYAC effectiveness was reduced because of the volume of work and assigned responsibilities.

The organization had responsibility for public affairs and media service with 67 information officers and staff to carry out this task, dealing with more than 3000 different media people.

Area commanders reported that up to 7 hours per day were spent dealing with VIP's. This included cabinet secretaries, Governor Dukakis and entourage, agency chiefs and directors, agency headquarters staff, regional

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personnel and cooperating agency heads such as the State Forester of Mississippi and the Chief of the Los Angeles County Fire Department.

Additional workload included unusual air traffic problems requiring an additional air traffic controller group to manage 117 aircraft, at the West Yellowstone tower and for the tracking of aircraft. In addition, GYAC air operations certified civilian and military aircraft and pilots to meet agency requirements.

Expanded dispatch and demobilization also were assigned to the GYAC which further impacted on their time.

Coordination with the military including an on-site task force commander (Brigadier General), as well as with military VIP's, including the Chief of Staff of the U.S. Army, required much time on the part of the area commanders.

GYAC also managed a logistics support center at the West Yellowstone airport which included transportation, shower and feeding operations to facilitate both mobilization and demobilization.

All of these responsibilities were a tremendous impact on the GYAC organization that intruded on their ability to deal with fire operations. However, all of these high impact operations received plaudits for their effectiveness, especially from incident commanders.

**Finding No. 5:** The GYAC was perceived to have grown to excessive size.

At peak, on September 3, the GYAC had 275 people. Included in this organization were 72 people assigned to the West Yellowstone Logistics Support Center including security,

ground support and base personnel; 40 people in expanded dispatch including demobilization and fixed wing base operations; 20 people in air operations including air traffic controllers, safety inspectors and training specialists; 67 people in information including the West Yellowstone Information Center, photographers and satellite information operations; 6 people in finance including contracting officers; 10 people in documentation; 4 people in military liaison; 16 people in planning including meteorologists, infrared interpreters and training specialists; and 7 people on the area command staff including GYCC liaison.

**Finding No. 6:** Lack of fiscal coordination hampered the effectiveness of area command.

Because the GYAC involved two federal agencies and four regions, differences in agreements for hires, procurement procedures, billing and payment processes, property accountability and use of suppression funds for rehabilitation existed. Responsibilities for financial coordination at the area command level was not clear in this multi-agency, multi-regional situation.

**Finding No. 7:** Differences in rest, relaxation, and rotation policies among agencies and regions generated the potential for unequal treatment of personnel.

Moreover, the tenure (almost 50 days) of one Area Commander was extended beyond what is reasonably expected for these positions given the enormous complexity of the task even though a degree of continuity was provided.



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*Finding No. 8:* Even though the GYAC had a multitude of responsibilities in both area command and multi-agency coordination, a number of examples of unique, positive and innovative decision making occurred.

In the area of command, their strategy decisions on Hell Roaring/Storm Creek fires smoothed out a situation where two incident commanders had opposite strategies regarding a key portion of adjoining line. The GYAC stepped in and made the decision based upon their broader view.

Additionally, the organization of an area command liaison in the south zone (Bridger-Teton/Grand Teton area) provided improved communication and coordination in that portion of the GYA.

The coordination work done by the GYAC became essential to handling a number of interagency and external influences that are found on most multi-fire situations, but not to the scope that occurred in this event. The national media attention developed beyond that ever experienced, resulting in an influx of VIP visits that required a level of involvement by high ranking fire managers beyond that normally expected. All incident commanders and line officers involved point to this accomplishment as an outstanding contribution by the area commanders.

In both the command and coordination portions of the GYAC, the individuals occupying the Area Command positions were outstanding. Without this positive and cooperative leadership the situation had the potential of becoming an organizational disaster. It did not.

## CONCLUSION

The Greater Yellowstone Area Command provided an important and necessary focal point for the consolidation and dissemination of information, assuring the proper coordination of incident management strategies, and the coordination of scarce resources among incidents. Greater effectiveness, however, was hampered by:

- Confusion about the delegations of authority
- Span of control and area of responsibility
- Unclear understanding of GYAC role by all participants
- Volume of work and responsibility
- Type I Incident Commanders being more comfortable and experienced in working with Line Officer authority rather than through Area Command.

In accordance with documents approved by the NWCG in December 1987, it is apparent that the GYAC was carrying out both Area Command and MAC group responsibilities. This is not a new problem nor a problem unique to the GYA situation. This same concern was expressed in the National Activity Review of the 1987 California/Oregon Fire Situation. The National Wildfire Coordinating Group recognized this as a national problem and approved a "NIIMS Terminology Clarification" in December 1987. Even though the NWCG has approved descriptions of Area Command and MAC groups, very limited use and experience have been made of these organizational concepts in large fire situations. The concepts are relatively new and agencies have not completed technology transfer, and training.



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The NIIMS Terminology Clarification states: "Area command is an expansion of the incident command function primarily to manage a very large incident that has multiple incident management teams assigned. The organization is normally small and is responsible for coordinating the determination of incident management team objectives, suppression strategies, and suppression actions." The GYAC operated far beyond this scope.

In a NIIMS Terminology Clarification document, NWCG described a MAC group in part: "A MAC group is activated when requests exceed or may exceed the number of available resources. Normally this will occur when a number of jurisdictions are involved. The MAC group is made up of agency representatives who are fully authorized to commit agency resources and funds. They, as a group, prioritize incidents and allocate scarce resources based on resource requests and availability, policies and agreements, situation status, etc. In order to make knowledgeable decisions, the group is supported by situation and resource status coordinators who collect and assemble data through normal channels. MAC group direction is carried out by expanded dispatch organizations and incident commanders." NWCG further described MAC group functions in a "Multiagency, Multi-incident Coordination and Management" document as:

- (1) Overall situation status information;
- (2) incident priority determination;
- (3) resource acquisition or allocation;
- (4) state and/or federal disaster coordination;
- (5) political interfaces;
- (6) overall coordinated information provided to the media and agencies involved.

Since a MAC group was not activated for the GYA, the GYAC assumed these responsibilities. A MAC group was activated in Forest Service R-1; however, its primary responsibility was to serve the agencies in that region.

Overall, the establishment of the GYAC organization was a very good decision. The group was effective in carrying out a multitude of responsibilities that relieved the incident management teams of extensive external impacts allowing the teams to concentrate on incident management. Future operations and effectiveness could be improved by separating off-incident coordination and support from on-site incident management. This can be accomplished by establishing a MAC group organization with responsibilities for coordination and support, and area command organization(s) to ensure proper on-site incident management.

## RECOMMENDATIONS

1. Conduct orientation and training in the activation and use of the Incident Command System, area command and multi-agency coordination groups to line officers and fire management personnel at field and central office levels..
2. Request that the National Wildfire Coordinating Group develop course materials for interagency training on the use and functions of multi-agency coordination groups.
3. Consider span of control, size of the geographical area involved, and organizational responsibilities when determining the need for area command organizations.
4. Activate multiagency coordination groups and support personnel when there is a need to provide MAC group functions.

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5. Request that the National Wildfire Coordinating Group establish national, pre-determined area command teams.

6. Request that the National Wildfire Coordinating Group develop national guidelines for R & R and crew rotation procedures.

7. Request that the National Wildfire Coordinating Group review fiscal coordination needs for multi-agency, multi-regional incidents and determine the necessary organizational structure and processes to meet these needs.

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## OBJECTIVE C

*Assess the effectiveness of logistics support, with emphasis on the supply of personnel, supplies and equipment.*

**Finding No. 1:** Multiple dispatching processes and the numbers of requests sometime caused work overloads and delays in the servicing of the requests for resources and support to ongoing fires.

Multiple dispatch organizations exist in the Greater Yellowstone Area. Forest Service units routinely place their fire orders to the national level at BIFC through Forest Service regional dispatch centers located in Regions 1, 2, and 4. Yellowstone National Park requests are placed through Forest Service Region 1 and Grand Teton National Park fire orders are handled by Forest Service Region 2.

To consolidate orders, manage requests, and reduce the confusion of multiple supply channels, an expanded dispatch was set up at West Yellowstone as a part of the GYAC. All fires working in the GYAC program were then expected to place their requests through the expanded dispatch. All orders were then consolidated and placed to the Region 1 dispatch center in Missoula. However, delays occurred in this system because of the large number of orders that were being processed by the West Yellowstone dispatch. Delays also occurred at the regional dispatch center in Missoula because of a computer overload that resulted from the center having to serve both the GYA fires and other project fires taking place in Region 1 at the same time.

Early on, representatives from BIFC and latter a GYA supply review team recommended that the West Yellowstone dispatch center be given regional status and be allowed to place their orders to the national dispatch center at BIFC. These recommendations were discussed but never implemented.

**Finding No 2:** Some barriers to communication exist among the regional fire management organizations in the area of dispatch and support responsibilities. This lack of coordination lead to some delays and confusion.

The NPS regional fire staff organization is far too small and lacks the training and experience to be of much assistance either to their Regional Director or to their parks when situations become as complex as they did during the summer of 1988.

The three Forest Service regional fire staffs are considerably larger and have the skills needed to support their Regional Foresters and the forests in their regions. These staffs are not as effective in coordinating activities when they extend across regional boundary lines. This lack of interchange caused some delays and confusion.

**Finding No. 3:** The performance and availability of infrared imagery did not meet expectations. The lack of reliable infrared imagery reduced the effectiveness of the fire management activities in the GYA.

BIFC representatives have been directed by the National Fire Offices to review the infrared imagery problem that occurred during the GYA fires. Therefore, this review will not provide

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recommendations on this subject. A problem did exist and some positive recommendations are expected.

## CONCLUSION

As the fire situation in the Greater Yellowstone Area continued to escalate, the normal dispatch channels were not expanded and adjusted sufficiently to meet the constantly growing demands for logistical support.

Although we found problems in the logistical support for the GYA fire complex, the existing system provided the supplies and equipment needed to support the almost 10,000 fire personnel that they mobilized. The magnitude of the service that was promptly and effectively provided was impressive.

## RECOMMENDATIONS

1. Develop alternatives for the processing of fire order requests to when established routing methods become overloaded.
2. Review NPS regional fire management staffing needs. (They may want to consider some joint agency solutions.)
3. Develop processes and procedures that will facilitate and activate coordination among regional fire staffs during multi-regional emergency situations.
4. Review and determine if the current dispatching processes in the GYA are effective and efficient and can expand as situations involve more than one agency and become complex as they did during 1988.

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## OBJECTIVE D

*Evaluate whether management oversight and direction from the NPS/FS region and forest levels were coordinated, communicated, and applied effectively.*

**Finding No. 1:** The difficulty with effective coordination in this multi emergency situation hindered the formulation and communication of timely, coordinated direction to the GYAC and to incident commanders.

Procedures did not exist that would have facilitated collective decision making and communication from the line officer level. Issues such as the restricted entrance of fire-fighters, and the use of dozers often were resolved through telephone conversations between incident management personnel and individual line officers, rather than through organizational understanding to prevent these occurrences.

**Finding No. 2:** Differences between agencies in the methods used to implement their fire management programs created problems when fires threatened to cross from one agency's jurisdiction to another's.

In the case of the Clover-Mist fire, the predetermined prescriptions for managing natural fire on the Shoshone National Forest had reached the level that the forest would not take on any more natural fires. At the same time, Yellowstone National Park was still within their predetermined prescriptions and was managing the Clover-Mist fire adjacent to the Forest boundary as a prescribed natural fire.

This case reflects a difference in management programs that resulted in direct conflict of suppression resource allocations and management strategies.

**Finding No. 3:** The direct involvement of some line officers in fire operations compromised their ability to provide management oversight and direction.

Lack of experience and knowledge of large fire management organizations such as area command and multi-agency coordination groups hindered some line officers from performing immediate and effective roles in oversight and direction. Some line officers' involvement in direct suppression operations sometimes restricted their availability and involvement in the GYAC.

**Finding No. 4:** The establishment of the GYAC and the resultant area information and media staff provided an excellent focal point for information dispersal.

Prior to the establishment of the area command, poor communication and the lack of coordination of information staffs in the individual parks and forests gave the media opportunities to "whipsaw" the agencies. Failure to separate incident information from normal public information functions sometimes caused duplication of effort and differences in released information. With the formation of an area public information office, these problems abated; however, we believe that the upper level of the GYCC (regional managers) should have been more proactive in dealing with the media and other outside interest groups.

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## Conclusion

Effective oversight and direction from the regional level to the incident management teams were complicated throughout the system by the number of regions, agency administrative units, and levels of fire organization and the lack of procedures to effect collective decisions during the multi emergency situations. This problem was largely overcome by the existence of the GYCC and the establishment of the GYAC.

## RECOMMENDATIONS

1. Ensure that all forest supervisors attend the Fire Management for Line Officers course at the National Advanced Resource Technology Center (NARTC).
2. Ensure a high level of large fire organization training and/or experience for NPS fire management specialists.
3. Ensure proper coordination and management between fire information and normal public information functions during large fire activity.
4. Ensure availability and involvement of line officers and key staff to provide oversight and direction to MAC groups and ICS command organizations.
5. Ensure that the NPS completes the proposed eight hour Introduction to Fire Management for Superintendents and present this course at all regional superintendents' conferences.
6. Ensure that the NPS develops a Comprehensive Fire Management for Managers course patterned after the Forest Service Fire Management for Line Officers 40-hour course.
7. Ensure that GYCC works out fire coordination procedures based on ICS. Build upon the current GYCC Coordinator role.
8. Add to the coordination opportunities on page 3-90 of the Greater Yellowstone Area "Aggregation" Report the roles and responsibilities for managing future large fire situations.

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# APPENDIX

## I. INPUT SOURCES

### A. Personnel

- GYCC Interagency Team Leader
- Park Superintendents of Yellowstone and Grand Teton National Parks
- BIFC Fire Directors Butts, Baden, Tandy, Percival and Cole - BIFC staff Scott and Rios
- IC's Bates, Gallegos, Gollaher, Bungarz, Poncin, Liebersbach, Caplinger, Boggs, Bryant, Long and Raddatz
- Area Commanders Kurth, Pierce, Cox, Edrington, Gale and Dittmer
- Forest Supervisors for Beaverhead, Gallatin, Shoshone, Bridger-Teton and Targhee National Forests
- State Forester for Montana
- Regional Foresters for Regions 1, 2 and 4
- Regional Director, NPS, Rocky Mountain Region.

### B. Reviews, Evaluations and Reports

- Aviation Safety Evaluation of the Yellowstone Fire Complex, August 15, 1988.
- Greater Yellowstone Area Supply Review, August 1988 - Greater Yellowstone Unified Area Command, August 8, 1988 - Greater Yellowstone Strategy Meetings, August 26, September 4 and September 11.
- GYUAC Training Narrative Summary, October 13, 1988 - Greater Yellowstone Area
- Command Visit, August 23-26, 1988 - Greater Yellowstone Unified Area Command
- The Greater Yellowstone Fires of 1988: Phase I and II reports.

### C. Documents

- Multiagency Multi-incident Coordination and Management, December 1, 1987
- NIIMS Terminology Clarification, December 21, 1987
- GYAC Delegations of Authority, July 23 and August 27
- GYCC Aggregation Report
- GYAC Report on Area Command Information Role and Accomplishments by Frank E. Mosbacher



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## II. A BRIEF CHRONOLOGY OF THE FIRE SITUATION AND RELATED GYCC AND GYAC ACTIONS

- *FIRE SITUATION JULY 15-23: THE GROWTH OF EXISTING FIRES AND DETERIORATING FIRE DANGER CONDITIONS INCREASE FIRE SUPPRESSION AND COORDINATION DIFFICULTIES AMONG GYA FORESTS AND PARKS. THE NORTH FORK FIRE STARTS AND GRANT VILLAGE IS FIRST THREATENED ON JULY 22.*

The Regional GYCC Managers agree to establish an Area Command (by conference call) to coordinate fire suppression activities in the GYA. The GYAC is established in West Yellowstone on July 23. Its authority is delegated from the Superintendent of Yellowstone National Park with "assumed" delegation from Forest Supervisors. Kurth and Pierce are Area Commanders.

- *FIRE SITUATION JULY 24-28: FIRE BEHAVIOR WORSENS. OLD FAITHFUL IS THREATENED AND FIRES BECOME AN INTERNATIONAL STORY. SECRETARY HODEL INSPECTS THE PARK.*

Area Command becomes operational. The decision is made to form an expanded dispatch and IC's begin to work with the area commanders to discuss strategies. The special "MAC" group of Mann, Butz, Quinn, and Bird visit the Area Command and discuss its scope. An effective Area Command fire information center is created. On July 28, the first Area Command meeting with all GYCC Supervisors, Superintendents, and all IC's occurs. It is also attended by Regional Director Mintzmyer. Area Command operations and overall strategies are approved by the line officers.

- *FIRE SITUATION JULY 29-AUGUST 3: FIRE SUPPRESSION COMPLEXITIES INCREASE. THE FAN FIRE THREATENS CHURCH OF THE UNIVERSAL TRIUMPHANT LANDS. THE SCOPE OF THE EVENT INCREASES. THE MINK FIRE REACHES YELLOWSTONE NATIONAL PARK.*

Area Command reaches the decision to form a nationally recognized group of fire behaviorists to predict alternative scenarios for use in strategic planning. The second AC-IC meeting with GYCC line officers (Superintendents and Supervisors only) to hear the fire behavior report and reapprove strategies occurs on August 3. The Clover Mist team is demobed and the fire is turned back to Yellowstone National Park. The fire behaviorist team returns home.

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• *FIRE SITUATION AUGUST 4-12: THE WEATHER AND SUPPRESSION SUCCESS IMPROVES.*

The size and role of Area Command decreases. Much of the AC public information staff is demobed. The special MAC group visits Area Command. Kurth replaced by Edrington as F.S. Area Commander.

• *FIRE SITUATION AUGUST 13-19: THE WEATHER AGAIN WORSENS AND OVERALL THREATS INCREASE. THE NORTH FORK FIRE CROSSES THE MADISON ALLOWING ACCESS TO UNLIMITED LODGEPOLE FUELS. COOKE CITY RESIDENTS CRITICIZE FIRE SUPPRESSION EFFORTS AS THE CLOVER MIST FIRE MOVES NORTH.*

Area Command responsibilities increase. Public information activities become difficult to handle. Recognition increases that traditional suppression strategies are becoming more unsuccessful. Gale and Cox assume command on August 14. The shortage of National "fire" resources begins. An effective public information team is re-established at West Yellowstone on August 19.

• *FIRE SITUATION AUGUST 20: THE TREMENDOUS WIND EVENT CAUSES 165,000 ACRES TO BURN AND COMPLETELY CHANGES THE SITUATION. HUNDREDS OF MILES OF OPEN LINE NOW EXIST LEAVING A SITUATION WHERE ONLY A WEATHER CHANGE CAN LEAD TO CONTROL.*

The special regional (MAC) group meets with several GYCC line officers and Area Command to clarify roles and reaffirm Area Command responsibilities throughout the GYA.

• *FIRE SITUATION AUGUST 20-27: THE FIRES MOVE RAPIDLY AND BURN 30,000 - 90,000 ACRES EACH DAY. NATIONAL ATTENTION INTENSIFIES.*

The area commanders formulate a broad strategy of basically protecting life and property, holding onto what is now secure, and setting exterior containment lines. Area Command is visited by VIP's, supply review teams, Assistant Director John Chambers, and others. Again a GYCC Superintendent/Supervisor meeting (plus RF John Mumma) is held to approve these overall strategies on a coordinated GYA basis (August 26). Area commanders set priorities to reduce the large number of aircraft and increase their safety and effectiveness. A new delegation of authority from Regional Managers to GYAC is signed on August 27. Area Command moves to the expanded downtown location from the airport.

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- *FIRE SITUATION AUGUST 28-SEPTEMBER 4: DAILY ACREAGES SLIGHTLY DECREASE AS WINDS DECREASE. A PREDICTED WIND EVENT SEPTEMBER 6-9 PROVOKES FEARS OF MASSIVE ADDITIONAL ACREAGES AND SERIOUS THREATS TO MANY COMMUNITIES.*

The last area commander change occurs as Dittmer replaces Cox on August 28. The exterior containment and structural protection strategies are set in place. The continued lack of dependable IR photography hinders planning. Military resources increase. A full membership GYCC meeting occurs on September 4 to affirm and coordinate overall strategy and preparations, to clarify questions on delegations of authority, and to arrange for further support that might be needed for Area Command. The south zone coordinator functions well for all fires south of Yellowstone National Park.

- *FIRE SITUATION SEPTEMBER 5-10: AN IMMENSE ACREAGE IS BURNED WITH PREVIOUSLY UNKNOWN FIRE BEHAVIOR OCCURRENCES RECORDED. EIGHT COMMUNITIES ARE THREATENED SIMULTANEOUSLY.*

VIP briefings occur each day. Cabinet Officers and Governors visit. The GYCC meets again on September 9 (attended by the Chief of the Forest Service) to affirm strategies and set post fire interagency operations in motion. A September 10 agreement occurs between area commanders and GYCC Regional Managers to move to a total perimeter control strategy. Much of the daily Area Command priority setting revolves around community defense.

- *FIRE SITUATION SEPTEMBER 11-29: THE SEPTEMBER 11 SNOW ALLOWS THE NEEDED WEATHER BREAK TO MAKE PROGRESS IN CRITICAL AREAS.*

A high level briefing for Presidential Candidate Dukakas and several western governors occurs. The Congressional oversight team headed by Jack Neckels works at Area Command. Ken Dittmer is demobilized on September 24, and GYAC is deactivated on September 29 under Gale's supervision.

- *AREA COMMAND CLOSES OUT WITH THE GYCC ON OCTOBER 19.*
- *SUMMARY OF GYCC MEETINGS AS A FULL OR PARTIAL GROUP:*

July 22  
July 28  
August 3

August 20  
August 26  
September 4

September 9  
September 20  
October 1

### III. NIIMS TERMINOLOGY CLARIFICATION

MULTIAGENCY COORDINATION SYSTEM (MACS)	INCIDENT COMMAND SYSTEM (ICS)
A. MACS is part of the NIIMS supporting technologies subsystem.	A. The ICS is an individual subsystem of NIIMS
B. <b>Initial Action Dispatch:</b> This includes normal dispatching operations on initial actions utilizing existing available resources.	B. <b>Incident Commander:</b> A single individual responsible to the land manager for all incident command level functions and incident activities.
C. <b>Expanded dispatch:</b> As complex incidents develop and/or numbers of wildfires increase it is necessary to expand day to day coordination organizations. Coordinators are added to handle requests for personnel, equipment and supplies, aircraft, etc. This allows Initial Action dispatchers to concentrate on new starts.	C. <b>Unified command:</b> A representative from each of the involved jurisdictions share in carrying out the command function, collectively directing incident management.
D. <b>MAC Group:</b> A MAC Group is activated when requests exceed or may exceed the number of available resources. Normally this will occur when a number of jurisdictions are involved; are heavily supporting an effort; and/or are significantly impacted by the commitment of local resources. A MAC Group support organization can be activated to provide staff support to the land manager when only one agency has an incident(s). The MAC Group is made up of agency representatives who are fully authorized to commit agency resources and funds. They, as a group, prioritize incidents and allocate scarce resources based on resource requests and availability, policies and agreements, situation status, etc. In order to make knowledgeable decisions, the group is supported by situation and resource status coordinators who collect and assemble data through normal coordination channels. MAC Group direction is carried out by expanded dispatch organizations and Incident Commanders.	D. <b>Area Command (AC):</b> AC is an expansion of the Incident Command function primarily designed to manage a very large incident that has multiple Incident Management Teams assigned. The organization is normally small and is responsible for coordinating the determination of Incident Management Team objectives, suppression strategies, and suppression action.  Personnel assigned to AC should be the best available
MAC Groups may be activated at one or several levels (BLM/State Forestry District, National Forest; State/Region; National).	

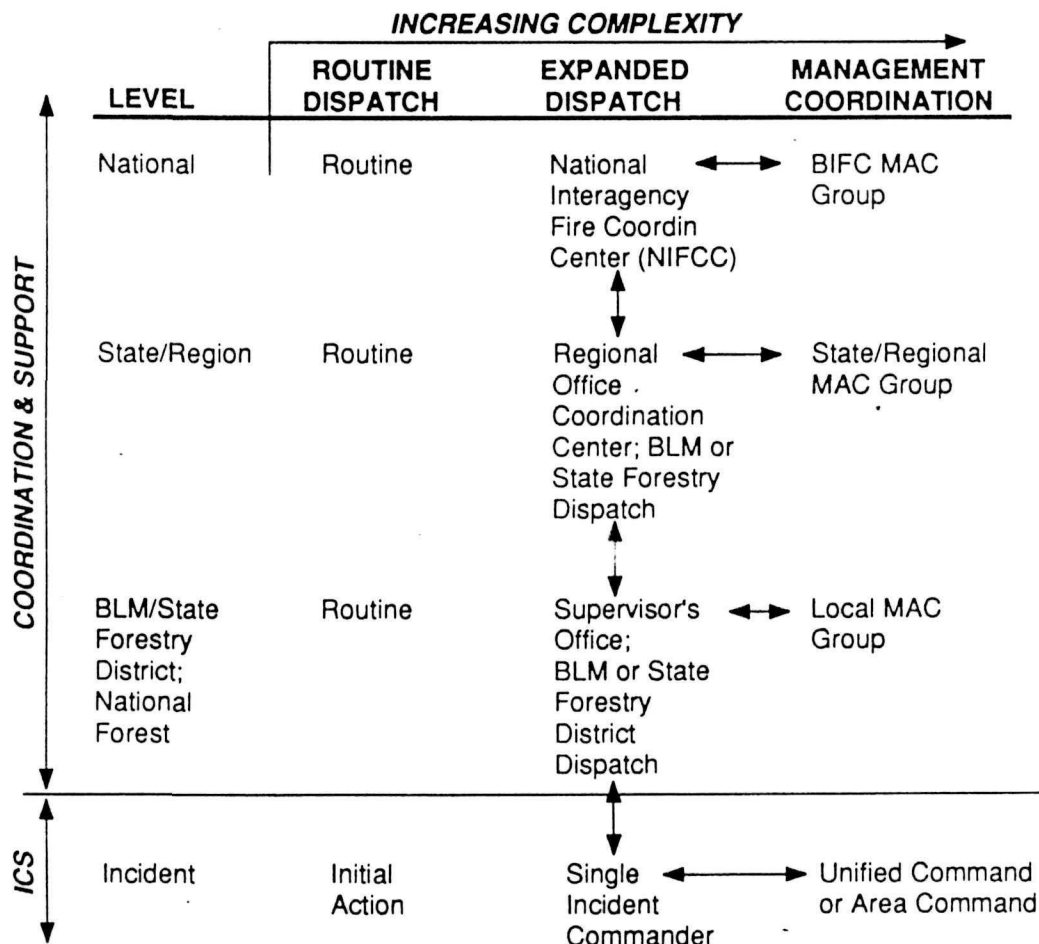
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## IV. MULTIAGENCY MULTI-INCIDENT COORDINATION AND MANAGEMENT

### INTRODUCTION

As numbers of wildfires, complex incidents and the involvement or impact on other agencies increases it is necessary to expand day to day coordination and management organizations to ensure efficient and effective use of critical personnel and equipment. This is not an expansion of the Incident Command System (ICS) but rather an expansion of the coordination and management system that support on-the-ground incident management organization(s).

The following table illustrates the expansion of the coordination and management system from routine dispatch to the most complex situation when a Multi Agency Coordination (MAC) Group is activated.



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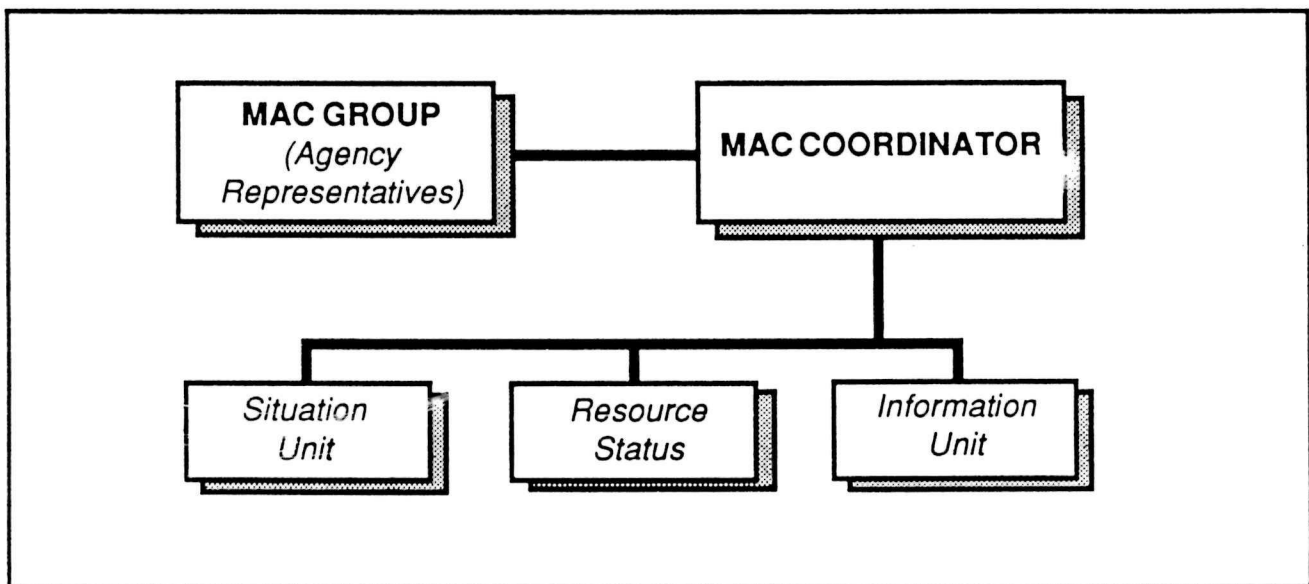
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## WHEN SHOULD A MAC GROUP BE ACTIVATED?

A MAC Group and supporting organization would normally be activated when the character and intensity of the emergency situation significantly impacts or involves other agencies. At this point agency representatives are brought together and briefed so that they can relieve the expanded dispatch organization of the responsibility for making key decisions regarding the sharing and use of critical resources.

## MULTIAGENCY COORDINATION (MAC) GROUP AND SUPPORT ORGANIZATION

Positions, Units and Support personnel are activated depending on the complexity of the involvement. The following organization provides the basic framework.



## MAC ORGANIZATION RELATIONSHIPS

A MAC organization represents the agencies from which it is composed. The flow of information is from MAC through the expanded or normal dispatch channels.

The Organization does not operate directly with the Incident Command or Area Command Authority (ACA) who have responsibility for the management of the on-the-ground incident organizations.

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## MAC FUNCTIONS

Activation of MAC Group improves interagency coordination at top management levels and provides for allocation and timely commitment of multiagency emergency resources on any incident. Participation by multiple agencies in the MAC effort will improve:

1. Overall situation status information.
2. Incident priority determination.
3. Resource acquisition or allocation.
4. State, Federal disaster coordination.
5. Political interfaces.
6. Overall coordinated information provided to the media and agencies involved.



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## MAC GROUP (AGENCY REPRESENTATIVES)

The MAC Group is made up of top management level personnel from those agencies who have jurisdictional responsibility and those who are heavily supporting the effort or may be significantly impacted by the lack of local resources.

These agency representatives should be fully authorized to represent their agency.

### FUNCTIONS

1. Ensure that the collective situation status is provided and current, by agency.
2. Prioritize incidents.
3. Ensure that the collective resource situation status is provided and current, by agency.
4. Determine specific resource requirements, by agency.
5. Determine resources availability by agency (available for out-of-jurisdiction assignments) and the need for providing resources in a mobilization center.
6. Determine need and designate mobilization and demobilization centers.
7. Allocate scarce/limited resources to incidents based on priorities.
8. Anticipate future resource needs.
9. Review policies/agreements for resource allocations.
10. Review need for other agencies involvement.
11. Provide necessary liaison with out-of-area facilities and agencies as appropriate.
12. Critique and recommend improvements.

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## MAC GROUP COORDINATOR

The MAC Group Coordinator serves as a facilitator in organizing and accomplishing the mission, goals, and direction of the MAC group. The position provides expertise on the functions of a MAC organization and the proper relationships with dispatch centers and incidents.

### FUNCTIONS

1. Fill and supervise necessary Unit and support positions, as needed, in accordance with coordination complexity.
2. Arrange for and manage facilities and equipment necessary to carry out the MAC Group functions.
3. Facilitate the MAC Group decision process by ensuring the development and display of information that will assist agency representatives in keeping abreast of the total situation. Provide the data necessary for astute priority setting and allocation of resources.
4. Implement decisions made by the MAC Group.

*NOTE: Collection of data should be through established reporting systems.*

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## SITUATION UNIT

The situation unit is responsible for the collection and organization of incident status and situation information and the evaluation, analysis and display of that information for use by the MAC Group.

## FUNCTIONS

1. Maintain incident situation status including fire/incident name, location, acres, fuel type, significant losses, values threatened, control problems, and any other significant information.
2. Maintain information on current and predicted weather conditions in fire activity locations and for areas with the potential for fire activity.
3. Request and collect resource status information from resources unit.
4. Summarize data describing total number of fires, acreage burned, total losses, structures or improvements threatened, resources committed, etc.
5. Obtain highlights on aircraft accidents, personal injuries, etc.
6. Provide photographic services and maps.
7. Develop projections on fire behavior and potential activity.
8. Post information on displays for use by MAC Group and the Information Unit.
9. Participate, as needed, in MAC Group meetings.

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## RESOURCES UNIT

The resources unit maintains and provides current information regarding the status of equipment and personnel committed and available within the MAC area of responsibility. Status is kept on the numbers of resources rather than individual increments.

## FUNCTIONS

1. Maintain current information on the status of personnel and equipment committed to incidents and/or available for assignment.
2. Identify both critical and excess resources.
3. Provide resource summary information to situation unit as requested.
4. Participate, as needed, in MAC Group meetings.

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## INFORMATION UNIT

This Unit is designed to satisfy the needs for a regional information function as part of the MAC. The activity involves establishing and operating an information center to service the public, media and other governmental agencies. It will provide summary information from agency/incident public information officers and be able to identify to the media and other government agencies, local agency sources for additional information.

### FUNCTIONS

1. Prepare and release summary information to the news media and participating agencies.

Examples of the type of information would be:

- a. Total number of major incidents.
- b. Total number of personnel and suppression resources assigned.
- c. General geographic location of major incidents and the names of the incidents and Incident Commanders.
- d. Responsible agencies for each incident and names of assisting agencies.
- e. Total acreage involved.
- f. Costs of suppression and damage.
- g. Total number of serious injuries/resource and property losses. etc. reported to the MAC Center.
- h. Summary of regional weather picture as provided through fire weather and anticipated fire behavior/suppression difficulty.
- i. Individual incident Information Officers and phone numbers or phone numbers of the appropriate agency contact.

The above are only examples and the information officer in charge should take the initiative to provide other special interest items.

Tactical or specific operational information will not be released or any other information that might be sensitive from an agency standpoint.

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2. Assist news media who visit the MAC Center and provide information on its function. Make sure that joint agency involvement is stressed in dealings with the media.
  3. Assist in arranging news conferences, briefings, preparing informational materials, etc., when requested by MAC Group or MAC Coordinator.
  4. Coordinate all matters related to public affairs (VIP tours, etc.). Act as the escort for agency tours and contacts when appropriate.