

2018

MONTANA ARMY AVIATION  
ARNG OPERATIONS PLAN



COOPERATING AGENCIES:

MONTANA DEPARTMENT OF NATURAL RESOURCES  
AND CONSERVATION  
MONTANA NATIONAL GUARD

MONTANA INTERAGENCY NATIONAL GUARD  
HELICOPTER FIREFIGHTING PROGRAM

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# **MONTANA INTERAGENCY MILITARY HELICOPTER FIRE FIGHTING PROGRAM**

## **OPERATING PLAN**

### **I. INTRODUCTION**

This operating plan (OPLAN) implements the agreements documented in the "Cooperative Agreement" (Appendix A), among the Montana Department of Emergency Services (DES); the Montana Department of Natural Resources and Conservation (DNRC); and the Montana National Guard (MTNG). Nothing in this OPLAN conflicts with the cooperative agreement, the Department of Defense policy, or National Guard service related regulations, directives or instructions.

### **II. OBJECTIVES**

The DNRC, USFS routinely employ helicopters for fire suppression when fighting wild fires. MTNG helicopters are tasked to support these agencies in fire suppression operations during emergency support conditions as authorized per National Guard Regulation, 500-Afl 10-8101, Military Support to Civil Authorities.

This OPLAN is a single source document that identifies the mutual duties, responsibilities, and expectations of the various firefighting agencies, and the units of MTNG, when tasked to support wild fire operations. This OPLAN standardizes MTNG helicopter firefighting equipment and aircrew training, evaluations, and currency requirements. It specifies the process to activate MTNG units and provides firefighting managers with detailed information about aircraft, and staffing capabilities. It also outlines the responsibilities and training requirements of the firefighting agency personnel.

### **III. POLICY**

MTNG aircraft and resources will normally be activated after all state agency, federal and contract call when needed (CWN) helicopters, by type, have been employed. The MTNG helicopter firefighting capability is a supplemental emergency resource employed when suitable civilian contract helicopters are not available

## IV. SAFETY

Historically during critical emergency activity, agencies within the state of Montana look to the MTNG. This military organization has vital rotor wing aircraft that provide a wide range of services. During activation of the MTNG, safety shall be the utmost priority. All agencies have their own standard operating plans integrating safety and risk management. Caution will be exercised to ensure that the most restrictive policies are adhered to. Activation team members have the responsibility to identify the agency specific policies to be followed. If conflicts are evident, flight activity will cease until a clear resolution is attained. The intent of all agencies involved shall be to provide safe and effective resource utilization during activation of MTNG assets. The final authority for the safe operation of the aircraft is always the responsibility of the pilot in command (PIC).

### A. Incident and Accident Reporting

Should an aviation incident or accident occur, the MTNG and the Agency controlling the incident must follow their respective reporting procedures. All aviation incidents and accidents will be reported immediately to the state and or federal officials as applicable.

Upon arriving at a fire incident it shall be the responsibility of the Agency Aviation Military Liaison (AAML) or the Military Helicopter Manager (MHEM) to ensure that the crash /rescue plan, medivac procedures and notification procedures are in place prior to allowing any MTNG aircraft to operate on the incident. In the case of dispatch to an initial attack (IA) incident the AAAML/MHEM must be aware and plan for safety, advising MTNG crews when unsafe situations or activities are occurring. The AAML/MHEM may, at any time, cease MTNG operations when they feel that it is unsafe. It is the responsibility of the AAML/MHEM to initiate all firefighting agency incident reports and to ensure that all incident and accident reports are accurate.

### B. Safety Equipment

1. MTNG crews shall adhere to applicable military regulations governing the wearing, use, and maintenance of aviation life support equipment (ALSE).
2. AAML/MHEM shall wear the following clothing and equipment during flight.
  - a. Authorized flight helmets.
  - b. Authorized Nomex flight suit or wild land firefighting Nomex.
  - c. Leather or Nomex gloves.
  - d. Leather boots.
  - e. Crew tether harness when appropriate.
  - f. ID Tags.
  - g. Cotton underwear.

3. In addition to the above equipment, all crewmembers shall be required to wear approved personal flotation devices (PFD) during over water operations.

## **V. RESPONSIBILITIES**

### **A. Command and Control**

All assigned MTNG crewmembers and attached firefighting agency personnel will comply with all operating procedures established in this OPLAN.

All MTNG aircraft flying on an Agency wildland incident shall have a copy of the most recent authorization letters (Appendix I).

Only trained and qualified firefighting personnel will fly on MTNG military aircraft to, from, and on operational flights. The IC can authorize Aerial Observation missions for the Adjutant General and his staff to ensure interagency cooperation and information sharing.

All agencies that are part of the Cooperative agreement will maintain aircrews and equipment capable of responding to an emergency activation during the fire season in accordance with this OPLAN.

### **B. MTNG Support Facility**

The MTNG will supply helicopters from the following facility:

Helena; Army Aviation Support Facility (AASF) -  
UH-60A+/L HH-60M CH-47F UH-72 C-12

### **C. Support Facility Working Group**

The DNRC will maintain a Support Facility Working Group in conjunction with the MTNG flight facility.

Prior to the start of the season, this working group will be responsible to insure that:

1. The firefighting equipment at the facility is inventoried, tagged, inspected and ready for deployment.
2. MTNG aircrew and agency personnel are trained to OPLAN standards and that it is properly validated and documented.
3. Coordination between the MTNG facility personnel, aircrews and agency personnel is maintained.

## **D. MTNG Maintenance and Support**

Additional MTNG maintenance and support elements can be expected to be deployed in conjunction with aircraft and crews. The exact number of personnel is dependent on agreements separate of this OPLAN but generally the types of support are as follows:

### **1. Each Incident Site**

Maintenance personnel can be expected to vary depending on the number of aircraft and type assigned. Maintenance requirements for MTNG aircraft in the field are generally parallel to the civilian equivalent with 1-3 additional mechanics needed to conduct daily and periodic maintenance. Aircrews should not be expected to perform maintenance on aircraft in violation of crew rest requirements. The ordering agency should plan for the support of additional maintenance support personnel.

When more than one aircraft is deployed to an incident the MTNG will normally activate a Military Liaison Officer (LNO) and when necessary additional administrative support staff. This staff will work with the agency AAML on the incident.

### **2. Support Facility**

When the MTNG activates aircraft, the Aviation Battalion will also activate additional operations staff to provide a communications link and coordinator for aircraft and flight crew records. These MTNG personnel may remain at the facility and may or may not deploy to the incident.

## **E. Rules and Regulations**

MTNG aircraft operate under procedures contained in Department of Defense Flight Information Publications and flight rules contained in Army and Air National Guard and State regulations. Specific paragraphs in Federal Aviation Regulations Part 91, that do not exempt military aircraft or flight crewmembers, apply to flights in the National Airspace System. Other applicable regulations or procedures may be more restrictive but under no circumstances may they be less restrictive.

This OPLAN establishes operating procedures that MTNG aircrews, and DNRC personnel will operate under when activated to support this plan. Nothing in this plan, or communicated by other means, authorizes MTNG aircrews to violate existing Army or Air Force rules, regulations, instructions, or guidance.

## **F. Crew Endurance**

1. National Guard flight crews will operate shifts of 14 hours on duty and 10 hours off duty. Flight crews are limited to eight hours of flight time in one duty day.
2. Pilots and crewmembers accumulating 36 hours in any six consecutive days shall be off duty the following day, with a 42-hour maximum in any 6-day period.
3. Pilots or crewmembers shall not work more than 12 consecutive days without 2 days off. (Note: these two days off are with pay.)
4. Duty time includes flight time, ground time of any kind, and standby or alert status at any location.
5. A day off must not be less than 24 hours and the pilot or crewmember shall not be subjected to call-up for duty during this period.

## **G. Military Staffing**

The Officer in Charge (OIC) is the individual designated by the MTNG as the overall commander of the aviation assets regardless of the number of aircraft. The OIC will normally be an aviator with flying duties but will have at a minimum the following responsibilities while assigned to an incident:

Has overall responsibility for all operations of MTNG aviation assets on an incident.

1. Supervises aircraft and aircrew scheduling.
2. Supervises maintenance operations/logistical support.
3. Enforces crew endurance policies Coordinates with the agency AAML.
4. Manages Personnel Assignments.
5. Coordinates with MTNG higher headquarters.

An Air Mission Commander (AMC) is designated when two or more aircraft are tasked to perform a single mission on an incident. The AMC has overall responsibility for planning and completion of the assigned mission from the initial air mission brief to the back brief or debrief upon mission completion. The AMC makes the determination whether or not the mission can be completed as briefed and briefs the aircrews on the assigned mission. There may be times when the AMC and OIC may be the same individual.

A MTNG Military Liaison Officer (LNO) will be dispatched when two or more aircraft are sent to the same incident. The LNO will be responsible for the coordination between MTNG and agencies on all issues. The LNO answers to the OIC.

**H. Aircrew Staffing**

AVIATION MISSION SUPPORT PACKAGE		AVIATION MISSION SUPPORT PACKAGE		AVIATION SUPPORT MISSION SUPPORT PACKAGE*	
Airframe	Personnel	Airframe	Personnel		
UH-60	Pilot in Command (PC)	UH-60M	Pilot in Command (PC)	OIC	
	Pilot (PI)		Pilot (PI)	NCOIC	
	Crew (CE) (15T) X 2		Crew (CE) (15T)	Aviation Operations (15P)	
	Aviation Mechanic (15T)		Crew (CE/MO) (15T/68W1F)	Supply NCO (92Y)	
	Technical Inspector (TI)		Aviation Mechanic (15T)	HEMMT Fueler (92F) X2	
	HEMMT Fueler (92F) X2		Technical Inspector (TI)	ADMIN (42A)	
Aviation Operations (15P)	HEMMT Fueler (92F) X2	TOTAL PERSONNEL: 7			
<b>TOTAL PERSONNEL: 9</b>		Aviation Operations (15P)	* One package supports up to 3 AFP's		
CH-47	Pilot in Command (PC)	<b>TOTAL PERSONNEL: 9</b>			
	Pilot (PI)	LUH-72	Pilot in Command (PC)		
	Flight Engineer (FE)		Pilot (PI)		
	Crew (CE)		Crew Chief (CE) (15T)		
	Aviation Mechanic (15U)		Aviation Mechanic (15T)		
	Technical Inspector (TI)		HEMMT Fueler (92F) X2		
	HEMMT Fueler (92F) X2		Aviation Operations (15P)		
	Aviation Operations (15P)		<b>TOTAL PERSONNEL: 9</b>		
<b>TOTAL PERSONNEL: 9</b>					



MEDEVAC Mission Support Packages. The manning for the MEDEVAC package is based upon operation and support of one aircraft to conduct medical evacuations in conjunction with the MT DNRC aviation resources. Under the DoDI 6000.11, May 4, 2012, the Montana National Guard is able to assist in movement of patients, medicine, or medical equipment to alleviate the effects of a life-threatening disaster in the United States. Under National Guard Pamphlet 95-5, Use of Army National Guard Aircraft, Section II, Operational Mission Support, 7-5 National Guard domestic Operations: *b. National Guard Civil Support (NGCS)* – for which the NG normally serves in a supporting role to other primary State or Federal agencies by providing assistance to U.S. civil authorities at the federal, state, tribal, and local levels. NG Soldiers conduct NGCS missions in their State role supporting local, State, and Federal civil authorities. Almost all NGCS is provided in Title 32 duty status, or in State Active Duty (**SAD**) status under the command and control of the Governor. The focus of these missions is usually on providing humanitarian support where no threat or hostility is normally anticipated.

<b>AVIATION MEDEVAC MISSION SUPPORT PACKAGE</b>	
<b>Airframe</b>	<b>Personnel</b>
<b>UH-60M</b>	Pilot in Command (PC) Pilot (PI) Crew Chief (CE) (15T) Flight Medic (CE/MO) (15T/68W1F) Aviation Mechanic (15T) Technical Inspector (TI) HEMMT Fueller (92F) X2 Aviation Operations (15P)
<b>TOTAL PERSONNEL: 9</b>	

## **I. Time schedule for Deployment**

To complete all the necessary preparations to configure the aircraft and notify the flight crews, 48 hours notice will normally be required prior to deploying for wildfire fighting operations. Deployment prior to 48 hours will depend on pre-warning time. The AAML or MHEM will, in conjunction with the OIC, use the Incident Mobilization Checklist (Appendix D). The following is the normal sequence of events that occur prior to MTNG unit deployment to an incident.

### **1. Army National Guard**

- a. Flight crews identified, called in briefed and flight planning completed.
- b. Fire fighting agency AAML/MHEM identified and linkup established.
- c. Radios installed, frequencies assigned and checks completed.
- d. Water buckets checked and loaded.
- e. Maintenance support kit loaded.
- f. Identification number painted on aircraft.
- g. Hoist installed (if required).
- h. Aircraft preflight by flight crew.

## **VI. ORDERING**

- A.** Montana Department of Natural Resources (DNRC) request for Montana National Guard (MTNG) assistance are placed through the Department of Emergency Services (DES) per the provisions specified in the cooperative agreement.
- B.** The USFS, Northern Region (USFS/Region 1) and the United States Department of Interior, Shall make all requests for MTNG assistance through the DNRC, who then places the request with DES and then DES assigns.

### **C. Payment**

MTNG aircraft are paid on an hourly basis. The most current rates are published in the Interagency Incident Management Handbook in Chapter 50, Cooperative Relations, NRCG Supplement. Payment will be recorded on the USDA Forest Service, Flight Use Report, FS-6500-122. The white copy will go to DNRC FMB via the AAML, pink copy will stay with the fire and the yellow copy will go to the AAML. The 6500-122's will be turned into the Finance Unit, who in turn will forward the copies to the Department of Military Affairs. Military Affairs will bill to DNRC. The Department of Natural Resources and Conservation will then bill the Federal partners for applicable charges.

## **VII. AIRCRAFT**

### **A. MTNG Aircraft numbering and Painting**

All MTNG aircraft will be painted in accordance with the numbering sequence and high visibility schemes (Appendix E) as depicted in this operations plan prior to deployment to an incident. If for some reason an aircraft is deployed without being painted it will not be allowed to engage in flight operations on the incident until it is properly marked. The number painted on the aircraft will be the aircraft tail number with the type aircraft prior. (UH-72 will use U, UH-60 will use B, and CH-47 will use C.) (Example, UH-60 Aircraft 26136 will be B136)

Aircraft will retain the same number until released from all fire activity. When an aircraft is released from an incident and is no longer available for assignment, the paint shall be removed as quickly as possible. It will be the joint responsibility of the requesting agency and MTNG facility to ensure the aircraft are cleaned. If necessary this may entail hiring of contractor services to remove the painted markings. Cleaning of aircraft is chargeable to the incident.

### **B. UH-60A Blackhawk**

#### **1. General Description**

The Army National Guard UH-60A+/L Blackhawk is a twin turbine engine, single rotor helicopter. The primary mission for fire suppression activities are the transport of firefighters, supplies and equipment, and water bucket operations. The aircraft has an external hook for sling load operations. The aircraft has a maximum seating capacity for 17 personnel but normally come configured with three seats for the crew, one for the helicopter manager and

11 seats for passengers. The aircraft may be configured for search and rescue operations with a rescue and /or medical transport kit capable of carrying six litters with the passenger seats removed. During personnel transport one crewmember may remain on the ground, providing one additional passenger seat. Aircraft is deployed with a 660-gallon collapsible Bambi bucket.

**2. Performance Data**

The following data is based on a fuel load of 1300 pounds, Aircraft Torque Factor (ATF) of 1.0 The power available and was computed using the UH-60/A+/L Operators manual.

The Aircraft will be configured and performance calculated with the following:

- 3 crewmembers (600 lb.)
- Fuel burn rate (950 lb./hr)
- 1300 lbs. of fuel on board = 1 hr of flight time + 20 minutes of reserve
- Average take off gross weight of 13,650 pounds
- OGE hover
- 10 seats available
- A firefighter is calculated at 200 lb., with equipment

Pressure altitude/temp	Cargo load	Passengers
5000/25C	4793	10
5000/30C	4593	10
5000/35C	3801	10
6000/25C	4168	10
6000/30C	3893	10
6000/35C	3191	10
7000/25C	3523	10
7000/30C	3054	10
7000/35C	2555	10

**C. CH-47F Chinook**

The Chinook is a twin turbine engine, tandem rotor helicopter. The primary mission is the transport of firefighters, supplies, equipment and bucket operations. The aircraft has three external hooks for sling load operations. The aircraft has a maximum seating capacity for 36 personnel. Normal configuration is four seats for the crew, one for the helicopter manager, two seats removed for equipment storage, leaving 29 seats for the passengers. The aircraft is deployed with either 2000 or 1300 gallon collapsible buckets.

4 crewmembers (800 lb.)  
 Fuel burn rate (2000 lb./hr)  
 6500 lbs. of fuel on board = 2.5 hrs + 20 minutes of reserve  
 Average take off gross weight of 31,000 pounds  
 OGE hover  
 34 seats available  
 A firefighter is calculated at 200 lb., with equipment

**1. Performance data**

The following planning data is based on a full load of fuel (6600 lbs ), a maximum passenger capacity of 32 seats available and Out of ground Effect (OGE) hover power. A firefighter is calculated at 200 lbs.

Pressure Altitude/Temp	Cargo load	Passengers
5000 ft/25C	18,000 OGE / 18,000 IGE	32
5000 ft/30C	17,000 OGE / 18,000 IGE	32
5000 ft/35C	15,800 OGE / 18,000 IGE	32
6000 ft/25C	16,200 OGE / 18,000 IGE	32
6000 ft/30C	15,000 OGE / 18,000 IGE	32
6000 ft/35C	13,800 OGE / 18,000 IGE	32
7000 ft/25C	14,200 OGE / 18,000 IGE	32
7000 ft/30C	13,000 OGE / 17,800 IGE	32
7000 ft/35C	11,800 OGE / 16,400 IGE	32

**D. UH-72 Lakota**

The a twin engine, single rotor system helicopter. The maximum gross weight is 7900 pounds The primary mission for fire suppression activities are the transport of fire fighters, supplies and equipment, IR mapping. The aircraft has an external hook for sling load operations. The aircraft has a maximum seating capacity for 7 personnel but normally configured with 5 seats for the passengers. During personnel transport one crewmember may remain on the ground, providing one additional passenger seat. Aircraft is deployed with a 180-gallon collapsible Bambi bucket.

**1. Performance Data**

The following data is based on a fuel load of 800 pounds. The power available and was computed using the Operators manual.

The Aircraft will be configured and performance calculated with the following:

- 2 crewmembers (400 lb.).
- Fuel burn rate (600 lb./hr).
- 800 lbs of fuel on board = 1 hr of flight time + 20 minutes of reserve
- 6000 LBS empty weight
- Average take off gross weight of 7200 pounds
- OGE hover
- 5 seats available
- A firefighter is calculated at 200 lb., with equipment

Pressure Altitude/Temp	Cargo Load	Passengers
4000/25C	1000	5
4000/30C	600	3
5000/25C	600	3
5000/30C	300	1
6000/25C	400	2

## VIII. AGENCY STAFFING

The cooperating fire fighting agencies have established two positions for the purposes of this program: the Agency Aviation Military Liaison (AAML) and the Military Helicopter Manager (MHEM). These positions are based on agency management personnel recommended in the National Interagency Fire Center's, Military use Handbook dated April 1996.

The AAML/MHEM will use the Montana Department of Natural Resources and Conservation 1500 Aviation manual, or the Interagency Helicopter Operations Guide (IHOG) as a directive and be knowledgeable of this OPLAN pertinent to the assigned mission. They will also ensure that the MTNG helicopters, personnel, and equipment assigned will be utilized in the safest, most effective and suitable manner. The AAML/MHEM shall be assigned as appropriate by the MAC group in order to manage the mission. A CWN qualified Helicopter Manager or Helicopter Boss (type IV, IC or arduous physical fitness level not required) can be assigned to perform the AAML/MHEM duties and responsibilities when directed to do so.

### A. Agency Aviation Military Liaison (AAML) role and responsibilities:

1. The AAML is directly responsible for supervising the agency aviation personnel assigned to the military aircraft.

2. Lead person to make contact with the assigned Guard facility to obtain the aircraft tail numbers and ensure that the aircraft, paint scheme, and crews are equipped and ready to respond to the incident.
3. Insures that MHEMs are assigned to helicopters prior to arriving at an incident.
4. Obtains and provides fire order information relative to the incident to the assigned MHEM, National guard crews and support personnel.
5. Insures that the necessary fuel, transportation, communication, lodging, and all other logistical support required to perform the mission is ordered using the proper incident logistical support chain of command.
6. Establishes the communications link between the Helibase Manager, and MTNG aircrews.
7. Facilitates and coordinates with the MTNG liaison, and monitors any support requirements necessary to maintain MTNG personnel and/or aircraft mission readiness.
8. Facilitates the scheduling, of maintenance personnel requirements with MTNG Liaison, and Helibase Manager for the maintenance of the MTNG helicopters as necessary.
9. Attends all meetings and briefings regarding the operation of the MTNG helicopters as necessary.
10. Coordinates with appropriate agency safety officer to investigate and complete the paper work regarding an accident or incident on helicopters, equipment, and personnel.
11. When necessary, conducts briefings, debriefings relative to operations and activity of the MTNG helicopters, personnel, and required equipment.
12. Upon release of the MTNG assets, completes evaluations of assigned MTNG Military Helicopter(s), MTNG crew(s), and assigned agency staff. Maintains a suitable file of all documentation associated to assignment to include the ICS 214 form.
13. Insure that the initial inventory checklist is completed and all equipment is brought up to initial attack standards prior to responding to the incident.
14. Insures the Daily Operation Debriefing (Appendix documents are completed by the AAML and submits to the appropriate agency.
15. In the absence of the MHEM, performs the MHEM duties.

16. The AAML will remain at the AASF and act as a direct liaison with the Military. The Chief Pilot DNRC and or the Region 1 Aviation Officer can assign the AAML to an alternate location if it will benefit the incident.
17. The AAML will assist the MTNG and make arrangements for transportation at the fire I.E. rental vehicles etc. The vehicles will be charged to the incident. The MTNG will provide the driver. The guard will attempt to obtain GSA vehicles first.

**B. Military Helicopter Manager (MHEM) role and responsibilities:**

1. The MHEM reports to the AAML and is an active member of the MTNG flight crew.
2. The MHEM will insure that the MTNG personnel, aircraft, and equipment assigned are configured in accordance with this OPLAN and suitable for the assigned mission.
3. Obtains and provides information pertaining to the incident to their assigned MTNG personnel.
4. Insure that the assigned AAML is informed of any issues or changes in MTNG personnel, aircraft or equipment.
5. Maintains records of daily flight hours, crew duty hours, and accumulated totals and route copies to the Helibase Manager and AAML.
6. Coordinates with the AAML on support requirements for MTNG flight crews and aircraft.
7. When the AAML assigned to the incident is unavailable, the MHEM will insure MTNG personnel, aircraft and equipment needs are addressed through the Helibase Manager.
8. Insures that an inventory checklist is completed and damaged equipment is repaired or replaced prior to leaving the incident and charged to the incident.
9. Flies as part of the helicopter crew for the purposes of coordination and wild land fire expertise.
10. Completes the daily Operations Debriefing document and submits to AAML.



## IX. MISSION SUPPORT REQUIREMENTS

### A. Personnel

MTNG aircraft assigned to an initial attack incident will be accompanied by either an AAML or MHEM prior to conducting any operation in support of an incident. Typically, agency personnel deployed with multiple aircraft will be deployed as a team headed by a Agency Aviation Military Liaison (AAML), who may, but more will likely not, fly as a member of an aircrew.

MTNG helicopters will be allowed to operate on wildland fire incidents without an assigned civilian Helicopter Manager, using the Military Crew Chief as the Pilot in command's representative as the Chief of Party, for the following mission profiles:

1. Montana National Guard helicopters transporting personnel.
2. Montana National Guard helicopters moving supplies in support of personnel.(excluding longline remote hook use)
3. If pre-designated and trained, Montana National Guard helicopters dropping retardant or water using buckets or fixed tanks. \*

\* TRAINING WILL BE DETERMINED BY THE MONTANA INTERAGENCY NATIONAL GUARD HELICOPTER FIREFIGHTING PROGRAM OPERATIONS PLAN.

The following conditions must be met:

1. The helicopter must be moving troops from one established/ managed Helibase/ helispot, to another established/managed Helibase/helispot.
2. The helicopter must be assigned to an incident, managed by a Type I or II Incident Management Team with aerial supervision on scene, i.e. an assigned Air Tactical Group Supervisor.
3. A Helibase Manager must be assigned.
4. Necessary communication equipment (radios) must be installed in all helicopters to allow for adequate communication with all other resources on the assigned incident.
5. Montana National Guard helicopters and pilots will carry a letter of approval issued by the Region One Helicopter Inspector Pilot and the Mt. Department of Natural Resources, Check Airman.

6. Assign a Military Liaison to accompany the assigned Montana National Guard Unit for the duration of the assignment. (See section V paragraph G responsibilities).
7. Compliance with all aspects of the Montana Interagency National Guard Helicopter Firefighting Program.

When MTNG helicopters are working directly with a DNRC agency helicopter that has a qualified helicopter manager the above criteria will have been met. The HEMG will provide management and oversight over both the Guard and Military helicopters.

#### **1. Helicopter Firefighting Program Operations Plan.**

The following overview and condensed fire-training curriculum will be provided by a compliment of Regional/State Helicopter Inspector Pilots, Aviation Technical Specialists, Helicopter Operations Specialists, Incident Air Operations personnel, and experienced fire suppression specialists from the Natural Resource Agencies involved (approximate training time 1-2 days).

- a. Firefighter Training (condensed)
- b. Intro Fire Behavior (condensed)
- c. ICS
- d. Agency Aviation Policy/Chief of Party Training
- e. Incident Air Operations Organization and Requirements
- f. Communications within the Fire Environment
- g. Airspace Integrity and Coordination
- h. Mountain Flying Techniques.

#### **B. Aircraft Utilization**

Safe, efficient and economical utilization of MTNG aircraft will establish the priorities for deciding aircraft missions. Once MTNG aviation assets have been assigned to the incident, and the mission designation identified, there will be no delineation in the use of military or civilian aircraft. The most suitable aircraft shall be used for each mission.

MTNG helicopters assigned to an incident should be used to their fullest potential. Heli-mopping is not approved as it exposes ground and aircrews to unnecessary risks without corresponding benefit.

MTNG helicopters are considered standard category aircraft and can be used for the transportation of passengers and external loads including water bucket operations. UH-60 and CH-47 helicopters are classified as type I; UH-72 are type II.

## C. Communications

### 1. Receiving Incident Orders

Prior to departure from the flight facility the AAML/MHEM shall contact the Helena fire desk (449 5475) and obtain or relay the following information:

- a. Incident Order Number
- b. DES Mission Number
- c. Incident Name
- d. Incident Location (Legal, Lat, Long., Geographic)
- e. Reporting location and contact.
- f. Estimated time of departure
- g. Estimated time of arrival
- h. Assigned helicopter call sign/identification
- i. Names of flight crew ; AAML/MHEM and MTNG personnel.

### 2. Flight Following

Flight following in route to the incident shall be done with the Forest or State Dispatch center in that geographic location, in compliance with agency flight following procedures. The MTNG shall also open and close flight plans with the appropriate MTNG or FAA facility as per their unit standard operating procedures until such time as the aircraft is on an incident. Aircraft call signs shall be used for FAA flight following.

### 3. Communications Equipment

MTNG helicopters come with an array of avionics that provide for communications on VHF, UHF and FM frequencies.

Army National Guard

Technosonic VHF-FM	138.000-174.000 Mhz
UHF-AM	225.000-399.975 Mhz
VHF-FM	030.000-087.975 Mhz
VHF-AM	116.000-151.975 Mhz

As a means of improving MTNG communications with fire fighting ground and air assets, each helicopter must have an operational Technosonic VHF - FM radio in each operational aircraft assigned to an incident. The flight crews and agency personnel must also be proficient in its use. Interagency frequencies are normally pre-loaded in each radio. Appendix (7).

**Use of the Technosonic with State and Federal frequencies is only authorized for fire fighting, search and rescue or other emergency operations missions.**

## **D. Fueling**

### **1. Credit card or Identiplate**

Each MTNG helicopter has a commercial fuel credit card that can be used at general aviation airports that carry jet fuel. Because of the higher cost per gallon than contract fuel, this method of payment for fuel should only be used when deploying or when contract fuel is not available.

The Identiplate is a military type credit card that can be used at a military base or DOD contractor for fuel.

Both of these options can be used and are coded the same as if it was a state card to the incident. It is forwarded along with the billing package from the MTNG to the DNRC. The MTNG will bill the state and/or the USFS a wet rate including the cost for fuel when computing the hourly cost of the aircraft.

### **2. Fueling from MTNG fuel trucks.**

MTNG fueling trucks (HEMTTS) should be ordered as soon as possible. If the need is mobile in nature i.e., various incidents, then a HEMTT must be ordered. This unit will come with 2000 gallons of fuel and two operators who will conduct and manage the fueling. The HEMMTT will be refilled with at the most cost effective fuel vendor available. The state can assist in finding the most economical, local vendor, it will be topped off with fuel and billed to the incident. This HEMMTT will normally come with a fire-extinguishing unit that will be placed at the fueling site. Personnel assigned to this unit will be treated as any other personnel assigned to the incident.

### **3. Commercial Vender Fuel**

It is the responsibility of the MTNG to supply fuel, fueling utilities and fueling personnel in support of its operation.

### **4. Fuel Requirements**

- a. UH-60/A burn rate is approximately 140 gallons (950 lb.) per hour. Burn rate will vary depending on power requirements.

Fuel Types: Jet A-1 (JP-8); Jet A (JP-5) (with Prist)

Total Capacity-360 gallons

- b. UH-72 BURN RATE IS APPROXIMATEELY 88 gallons (600 lbs per hour. Burn rate will vary depending on power requirements.

Fuel Types: Jet A (JP-5)

- c. CH-47F BURN RATE IS APPROXIMATELY 384 gallons (2500 lbs. per hour)

Burn rate will vary depending on power requirements.

Fuel Types: Jet A-1 (JP-8); Jet A (JP-5) (JP-4)(with Prist)

Total Capacity: 1028 gallons

#### **E. Water Bucket Operations**

MTNG Type 1 helicopter, CH-47F, UH-60A+/L/M Type 1 helicopters; come equipped with variable fill buckets and rigging with a capacity commensurate with the maximum lifting capabilities of the aircraft. Prior to deployment the bucket and aircraft need to have functional checks completed and maintenance conducted if necessary. (See Appendix D for Bambi Bucket maintenance and operational checklist).

### **X. RELEASE AND DEACTIVIZATION**

- A. MTNG aircraft will be released from an incident as soon as sufficient commercial CWN or other aircraft become available and are assigned to the incident.
- B. Aircraft released from an incident shall not be re-deployed to another incident unless a DES mission number has been assigned and the supporting military facility has assigned that specific aircraft and crew.
- C. AAML/MHEM are not authorized to release or deactivate any MTNG aircraft. Prior to being released from any incident MTNG aircraft and personnel must obtain approval from the incident commander.

### **XI. TRAINING AND QUALIFICATIONS (See Also Appendix C)**

#### **A. Military Flight Crews**

- 1. Montana National Guard personnel are trained with the joint DNRC/USFS approved training program. The training program is comprised of classroom training, practical exercises, and applicable flight training. National Guard PIC flight time requirements will be 1500 hours total time in helicopters for fire operations.

- a. Classroom training address the following subject matter:

- Fire behavior
- Tactics and bucket operations
- Preparation and pre-flight of bucket
- Incident Command System (ICS)
- Communications within the fire theater area of operations.
- Aircraft performance considerations and planning.
- Aircraft preparation and high visibility identification paint scheme application.
- Aircrew communications and coordination.
- Aircrew training and currency requirements.
- Fire shelter deployment.
- Standards for Survival
- Fire Traffic Area

- b. Practical exercises include preparation, helicopter connection, operational checks and preflight of bucket.
- c. Flight training and evaluation will focus on water drops in mountainous terrain; up/down slope and cross slope conditions as well as water bucket pickup maneuvers over running streams, irrigation canals, ponds and lakes when ever possible.

## **B. Fire fighting Personnel**

Listings of qualified fire agency personnel will be maintained by the MTNG and DNRC. AAMLs will provide appropriate agency training staff with verification of attendance of MHEMs at annual MHEM training.

1. Minimum Qualifications for Agency Aviation Military Liaison (AAML)
  - a. All Qualifications for MHEM.
  - b. Two years as a MHEM.
2. Minimum Qualifications for Military Helicopter Manager (MHEM)
  - a. One year as Helitack Foreman, Helicopter Coordinator, or Fire Helicopter Manager as defined by IHOG or Helicopter boss as defined in the 1500 manual or 310-1.
  - b. Strong knowledge of helicopter operations, tactics, basic, maintenance concepts, record keeping, and air program.
  - c. Previous verifiable experience as a CWN Helicopter Manager

or Helicopter Boss.

- d. Has a working knowledge of 1500 Aviation manual and IHOG
- e. Helispot manager qualified.
- f. Currently listed in agency resource Directory or current Red card Certified or any qualifying position.