

## **Military Use Handbook**

### **Appendix E. Rotary Wing Operations Guide**

#### **General.**

- A. The goal of this guide is to facilitate the use of federally activated Department of Defense (DoD) military aviation and state activated Air/Army National Guard aviation for wildland firefighting activities.
- B. When civilian aviation resources are depleted, NMAC/GACCs and individual states may request federal activation of Department of Defense (DoD) and National Guard military to assist the wildland firefighting effort and provide military aircraft to support large incidents
- C. Military aviation is used when civilian aviation resources have been depleted to the degree that military support is necessary to respond adequately to firefighting demands. This may result from a lack of civilian resources on a national scale or during high demand needs.
- D. Military policies and regulations conflict with agency policies. There are operational, procurement, payment, deployment, logistical and administrative differences between military and wildland firefighting agencies

#### **U.S.C. Title 10, Federally Activated Military**

- A. Activation under Title 10 United States Code (U.S.C) is associated with federal military activation of DoD military and federally activated state National Guard. Federal activation is coordinated between NMAC and the DoD by request from NMAC. Federal activation of state National Guard units is mechanized through the state's Emergency Management Assistance Compact (EMAC). Types of units that may be activated are DoD military and National Guard.
- B. Advanced notification and pre-assignment of federally activated units prior to each fire season is generally not possible. However, Regional (Forest Service) and State (BLM) aviation units, in coordination with the GACC and local units, should make every effort to work with active military installations to provide fire aviation training and briefings in advance of fire season. Where pre-season trainings and briefings have not occurred, NMAC, in coordination with the GACCs and the receiving agencies are responsible to ensure military units receive safety, operational, and logistical training.
- C. The DoD Liaison to NMAC informs DoD of the possible request for assistance. This allows DoD the ability to identify and notify the military unit that will be assigned. Where NMAC anticipates a reasonable potential to activate federalized military, pre-emptive coordination should be coordinated with the assigned military unit. This should be coordinated with the receiving GACC and incident commanders. The purpose being a smooth transition integrating the military within the incident command system and finalize operational, logistic, equipping, staffing, support, training, and deployment plans.
- D. GACCs and incident commanders should plan for necessary logistics growth and increased logistical footprint necessary to onboard ground and flight crew, support personnel, aircraft, ground support equipment, fuel trucks, vehicles, hygiene and portable toilet/shower facilities, etc. Pre-emptive coordination with the military commander should be made to coordinate and identify any additional equipment or logistics requirements.
- E. Because of the basic differences in military operations and agency procedures, additional civilian positions beyond the scope of the Incident Command System (ICS) are required to help manage military aviation operations. Standard ICS terminology is used to simplify the organizational concept whenever possible.

## **U.S.C. Title 32, State Activated Air/Army National Guard**

- A. Under Title 32, National Guard units are activated by the state. This is not federal activation and is different from that of federal activation. The use of National Guard units for federal firefighting is mechanized through national, regional, state, and local agreements. These agreements must be in place in order to exercise use of the National Guard for federal services.
- B. The regional Letter of Agreement (LoA), (cooperative agreement) is the primary method by which federal agencies exercise use of National Guard. The cooperative agreement is an agreement between specific National Guard units and the governing federal region. This is the mechanism by which National Guard Units are able to serve federal agencies and are specific to a designated region. Where inter-regional agreements exist, or where federal policy authorizes, National Guard units serving under a regional cooperative agreement may serve a different region without an agreement in place for that other region.
- C. Regional cooperative agreements establish the standards that National Guard units must satisfy prior to operating on behalf of federal agencies.
- D. Where National Guard units are requested by federal agencies, federal agencies are responsible for additional logistics support and incident staffing.
- E. Where National Guard has not been requested by federal agencies, state agencies are responsible for additional logistical and incident staffing.

## **Concept of Operations**

- A. The number, type, and mission sets associated with aviation units may vary, depending on the needs associated with the size and scope of fire activity and the operational theatre. A single unit, or multiple units, may be assigned to multiple incidents, single incidents, or an area command. Aircraft may operate out their home base on a daily basis or deploy during the term of the activation. Aircraft groups may operate from a single location or split unit aircraft to operate from multiple site locations.
- B. Military aviation units may be activated and assigned as for fire operations as task forces, companies, platoons, sections or equivalent size units. Units may send a company or battalion size aviation unit outside its local area along with the maintenance and logistical support units required to operate for an extended period. Units can also operate with less than a company size unit (satellite operations) if logistical support from their base of operations can be provided.
- C. Military units may be able to support operations within its local operating area without having to deploy maintenance and support personnel from their military base. However, if a unit provides aircraft outside its local operating area, they also have the authorization to send the necessary maintenance and logistical support needed to conduct operations. The DoD Liaison to NMAC and the Defense Coordinating Officer (DCO) coordinates the request for aircraft, maintenance, and logistical support through U.S. Northern Command (USNORTHCOM).
- D. When federally activated military are assigned to incidents, military aircraft will operate under the operational and tactical direction of the incident Air Operations Branch. When assigned a regional area of operations, the GACC may retain TACON or control may be assigned to an area command, or specific incident, whether to support initial attack or extended attack. Military aircraft will be assigned and dispatched per federal dispatching procedures and protocols.
- E. Both federal and state activated military units assigned to other than state-only incidents, will be governed by federal agency policies and procedures unless otherwise indicated within this handbook. Where state activated units are assigned to state-only incidents, then military units will be governed by state policies and procedures.

## **FS/DOI, Federal Activation, Title 10**

- A. Activation of federal resources will be coordinated through NMAC/NICC.
- B. DoD assistance should be requested by the LFA (Lead Federal Agency) only when other local, state and federal capabilities have been depleted or unique capability is required.
- C. Requests will be in accordance with the Interagency Agreement for “Provision of Temporary Support During Wildland Firefighting Operations”. Initial requests will be submitted thru the Department of Defense (DOD) Executive Secretariat.
- D. Federal activation of state National Guard units is mechanized through the state’s Emergency Management Assistance Compact (EMAC).
- E. USFS/DOI is responsible for training, equipment, supplies, and reimbursement of actual cost of services for federally activated military and state military units.

## **Cooperative Agreement, State Activation, Title 32**

- A. Resources used on federal lands must be federally approved (FS/DOI) approved via cooperative agreement.
- B. Military aircraft must not exceed the 72-hour mutual aid period and government contracted aircraft must be on order.
- C. Annual Operating Plans (AOP) and/or Cost Share Agreements (CSA) must identify who covers the cost on federal land and/or state/county lands.

## **Immediate Response Authority / Mutual Aid**

- A. In response to a request for assistance from a civil authority and under imminently serious conditions, DoD and National Guard can provide an immediate response.
- B. Under imminently threatening conditions DoD can provide immediate response to save lives, prevent human suffering, or mitigate property damage within the United States. Immediate response does not imply free response when other resources are available and capable.
- C. Immediate response authority is generally associated within the normalized area of operations from the location of the military facility or deployment site.
- D. Cost will be reciprocated by the requesting agency.

## **Special-Use Mission Approvals**

- A. Military units perform military operations where those missions are directly relatable to aviation firefighting missions, such as troop transport or night vision goggle operations. These are termed as Designated Military Missions.
- B. Then there are agency missions that are implied by the types of operations that military units conduct, such as low-level operations or mountainous terrain flight. In these cases, the military routinely trains, qualifies flightcrew, and performs operations but may not identify an associated flightcrew designation nor specific mission type.
- C. Then there are also missions where military units do not perform, or perform on an infrequent basis, such as long-line/bucket or short-line/bucket. Both these types of mission types are termed Non-Designated Military Missions.
- D. To facilitate a common understanding of what type of military can be performed in support of wildland aviation firefighting activities, a letter of authorization shall accompany each helicopter. The letter will indicate, using standard agency mission terminology, the types of missions that are authorized to be performed.

- E. The development of mission approvals and authorizations is a collaborative effort between the military unit commander and the agency to determine what mission will be authorized. Military commanders may prohibit some types of operations to be performed and vice versa. Additionally, for some mission authorizations, the agency requires verification and validation in accordance with this handbook.
- F. FS/DOI helicopter standardization and inspector pilots shall provide recommended authorization of approved missions to the agency signatory authority responsible for signing the letter of authorization.
- G. Copies of the letter of authorization indicating agency mission approvals shall be carried aboard each helicopter.

## **Military Mission Types**

### **Designated Military Missions**

A flight mission that a particular military unit has officially indicated as trained, equipped, and qualified to perform as part of the unit's overall military mission. Military units pre-identify their Designated Military Missions. Military helicopters may only be used for operations for which they are trained and equipped, designated by the unit commander, and that coincide with established interagency aviation standards.

Designated Military Mission Types	Agency Equivalent Special-Use Mission
Command and Control <sup>2,3</sup>	Aerial Supervision, Helicopter Coordination
MEDEVAC <sup>1,2,3</sup>	
Troop Transport <sup>2,3</sup>	Helitack/Passenger Transport
Cargo Transport, Internal <sup>2,3</sup>	Cargo Transport, Internal
Cargo Transport, External <sup>2</sup>	External Load, Long-Line and/or Short-Line (Belly Hook)
Bucket Operations <sup>2</sup>	Bucket Operations
Hoist <sup>2,3</sup>	Hoist Operations
NVG Operations <sup>2,3</sup>	NVG Operations
Search and Rescue <sup>2,3</sup>	Low Level Operations, Reconnaissance, Hoist
Sensor Operations/Reconnaissance <sup>2,3</sup>	Low Level Operations, Reconnaissance
Instrument Flight	IFR
Notes:	
1. Requires aircraft and flightcrew to be medically configured, equipped, and qualified.	
2. Implied agency missions are comprised of low-level operations, mountainous terrain flight.	
3. Implied agency missions are comprised of helitack/passenger transport.	

### **Designated Military Mission: Bucket/Long-Line Operations**

- A. The Army and National Guard do have an Army Aircrew Training Program specific to water bucket delivery/long-line. Although the unit may indicate this mission as a designated mission, because of frequent pilot turnover and infrequent use of this capability, pilots and crews are required to undergo a verification and validation of long-line/water bucket delivery operations by federal agency inspector pilots prior to operational use. A review of their Aircrew Training Program (ATP), verification of satisfying ATP requirements and recommendation for use by the inspector are necessary to endorse this mission for use by federal agencies. Inspector on-board flight observations are required.
- B. Significant training and proficiency flights are necessary to satisfy federal agency firefighting suppression activities. Qualifying a military unit for this mission is a major undertaking and requires extensive planning on the part of both the military and the wildland fire organizations. Military aviation units must be pre-identified, qualified, and approved. Short-term response to emergent fire operations is generally not feasible.

- C. It is recommended that only those units (normally Reserve and National Guard) establish a cooperative agreement, receive pre-season training, and undergo verification and validation by Federal agency inspectors ahead of time so as to expedite the ability to perform this mission on behalf of federal agencies.
- D. The establishment of a cooperator approval between the military unit and the federal agency indicates approval to exercise this mission. Where a cooperative agreement has not been established, federal inspectors will conduct verification and validation, inclusive of program review and observation flights, and document the recommendation to both the federal regional and national office as well as the military unit, itself.

### **Designated Military Mission: Night/NVD Operations**

- A. Although military units operate at night as part of their normalized military mission sets, federal agencies shall only exercise night operations for use in emergency casualty evacuations where life is at risk. The primary resource will be those aircraft and aircrew medically qualified and configured. Where medevac aircraft are absent, non-medically equipped aircraft may be used to extract the casualty. Emergency medical extraction or emergency extraction is allowed under the following constraints:
  - 1. Unit commanders' approval for emergency night missions. This may be identified via the cooperative approval agreement or other documentation (for federally activated) or the military commander may delegate approval to a subordinate.
  - 2. Aircrew are approved and designated by the military commander for night vision device operations and for the type of extraction technique (hoist or landing) that will be employed. Generally, day designations carry over to night when the crew is night vision goggle or device (NVG or NVD) qualified.
  - 3. Aircraft and crew are properly equipped, qualified, and current for the conduct of night vision operations.
  - 4. Crew shall operate using night vision devices.
  - 5. The mission can be conducted in accordance with the military unit's regulation and policy standards.
  - 6. All other civilian options are not available within the timeliness that the situation dictates.

### **Non-Designated Military Missions**

- A. Non-Designated Military Missions are missions that a military unit is not trained and equipped to perform as part of the unit's overall military mission. Bucket operations are examples of Non-Designated Military Missions for most military units, the exception being Army and National Guard.
- B. Prior to deployment of military units that will be performing Non-Designated Missions, verification and validation of currency and proficiency of military pilots is required by federal agency inspectors prior to exercising those missions. Depending on the type of mission to be performed, aircrew training and qualification records may be reviewed, the pilot training program may be reviewed, and observation flights may be necessary.
- C. It is recommended that a cooperator agreement is established or that the unit undergoes verification and validation by federal agency pilot inspectors, pre-season, so as to expedite the response to federal agency fire operational needs.

## **Ordering and Mobilization**

- D. Orders for military aircraft must specifically identify the intended missions such as medevac, personnel transport, internal and external cargo transport, hoist, command and control, NVD etc., and be accompanied by estimations of flight hours per day, pounds of cargo per day, number of passengers to transport per day, etc. Requirements for Non-Designated Military Missions must be noted on the request and will generate appropriate attention and actions.
- E. Orders for Title 10, federally activated military aircraft is accomplished by the NMAC through submission of a Request for Activation (RFA) for the capabilities required to complete the scope of assignments.
- F. Orders for Title 32, state activated military aircraft is accomplished by the GACC through the use of national, regional, state, and local agreements and that have been approved through the use of regional cooperative agreements for the capabilities to satisfy CAGG scope of assignments.

## **Advance Party Briefings**

- A. For title 10, federally activated military, the federal agency will provide an advance party that travels to the military units' home station to brief the unit on the Incident Command System (ICS), organizational structure, chain-of-command and how military units are integrated into the suppression organization as well as other necessary information to prepare for operations.
  - 1. An aviation specialist, assigned by the NICC, is assigned to deliver the aviation portion of the advance party briefing. Additional agency personnel may be required to brief areas specific to their subject matter expertise. Where bucket/long-line or non-designated missions are to be performed, a federal agency inspector will be part of the advance party in order to validate and verify program and pilot training and qualification.
  - 2. In addition, a small cadre of military personnel from the assigned unit should try to visit the incident prior to deployment of the entire unit. They are briefed by the local Aviation Officer, incident Air Operations Director and possibly the assigned Air Support Group Supervisor/Helibase Manager. Information about objectives, procedures, organization, operating bases, logistical concerns, etc., is shared at this meeting. This briefing is most valuable and should always occur.
- B. For title 32, state activated military, these briefings have generally been performed pre-season, as a requirement to satisfy the cooperative approval agreement.
  - 1. Where state activated military have been activated and cooperative approval has not been established, a GACC/regional assigned aviation specialist and regional subject matter experts may be required to on-board the units. Where bucket/long-line or non-designated missions are to be performed, a federal agency inspector will be part of the advance party in order to validate and verify program and pilot training and qualification.
  - 2. The National Guard unit may provide an advance party to facilitate deployment of their unit.

## **Allocation of Military Helicopters**

Military aviation units are assigned to Incident Management Teams or Area Command. If assigned to Area Command, priorities and assignments of military aircraft to appropriate incidents shall be established. The organizational, logistical, and planning requirements must be commensurate with the complexity of military aviation activity.

## **Military Aircraft Utilization**

- A. Utilization of Military Aircraft. Once military aviation assets are assigned to the incident and the approved mission designation has been identified, there is no delineation in the use of military or civilian aircraft. The most suitable aircraft for a mission shall be used, regardless of ownership. Military assets shall be assigned to the incident to integrate military personnel into the incident and helibase organizations.
- B. Military aircraft assigned to an incident shall be used to their fullest potential. The military is trained to move large amounts of cargo and passengers rapidly and efficiently. Every effort shall be made to take advantage of this military expertise. Using the military for those missions while civilian contractors perform tactical missions is an efficient use of resources. Optimizing contractor flight time should be a consideration but not the overriding issue.

## **Integration of Interagency and Military Policies and Regulations**

- A. The Incident Management or Area Command Team has directional and tactical control of military aircraft and will coordinate missions with the military aviation commander. The military aviation organization is integrated within the incident Air Operations Branch to enhance planning, briefings, operational efficiency, and safety.
- B. Interagency aviation policy is to be followed for all operations unless the military standard is more restrictive. Military operations are to follow the operational procedures found within the interagency and agency policies and guides such as the NWCG Standards for Helicopter Operations and NWCG Standards for Aerial Supervision, except where deviations have been indicated within this handbook.
- C. Formation flying of military aircraft during arrival on an incident or during incident operations is prohibited unless prior coordination is made with the Helibase and the base is prepared for multi-aircraft flights.
- D. Both Title 10, federally activated, and Title 32, state activated, military aircraft and pilots will satisfy the requirements indicated within this guide. Federal approval shall be indicated by hosting a letter of approval onboard each helicopter.
  - 1. Aircraft approval may be generalized by make/model or specifically by the N#. This is due to military aircraft replacement or being reconfigured for the type of mission to be performed. Approval of the helicopter by mission type need not be indicated.
  - 2. Flightcrew approval may be generalized through a summary listing of flightcrew names or by the designation standards associated with a military commander designation that satisfy the types of agency missions to be conducted.
  - 3. Mission approval will be indicated by listing interagency mission types that have been approved.
- E. Federal flightcrew and helicopter approval will satisfy the requirements of this guide. Aircraft and pilot approval letters shall be Approvals will be indicated
- F. Administrative Control. When assigned to an agency/incident, the military maintains administrative control of their aircraft and operates in accordance with their own internal policies.
- G. Operational Control. Military units maintain and do not surrender operational control of their personnel, aircraft and other resources. Military respond to operational direction or TACON provided by the agency.
- H. Operational Direction. Operational direction is defined as the authority to designate objectives, assign tasks, and provide the direction necessary to accomplish the mission. Agencies are responsible for dispatching and directing firefighting services. Agencies are responsible to collaboratively work with military commanders to address any operational conflicts that may exist



as well as develop a concept of operations in the utilization, capabilities, and constraints associated with the use of military aviation.

- I. Tactical Control (TACON). Refers to the Incident or Area Commander to whom the military aircraft is assigned has the authority to direct and control the movement of these assigned aircraft to accomplish missions or tasks assigned by the Area or Incident Commander.
- J. Federal Aviation Regulations. The military strictly adheres to federal aviation regulations, 14 CFR Part 91, as well as their own aviation policies and regulations. Military do not operate in accordance with 14 CFR Part 137 nor Part 133. These types of operations are governed by military regulations. Training and certification of pilots are governed by military regulations and are not subject to 14 CFR Part 61 nor that of 14 CFR Part 67.
- K. Public Aircraft. Military aircraft are public aircraft as defined by Title 49 § 40102 and §40125. Military operations are governed by military rules and regulations which are inclusive of 14 CFR Part 91. It must be understood that where firefighting services are needed where 14 CFR Part 91 regulations cannot be complied with, either all or in part, that the military commander must be made aware prior to exercising this operation. Where 14 CFR Part 133 class B external loads are conducted, military commanders should be made aware of rules and regulations governing such and as well as necessary deviations pursuant to firefighting operations. Military commanders should be made aware of *NWCG Standards for Helicopter Operations* (NSHO) governance standards associated with class B operations. 14 CFR Part 91 deviations, Part 133 regulations, and NSHO and should be discussed pre-emptively with military commanders prior to military operations.

## **Incident/Operational Management Protocols**

- A. Aviation operations shall comply with the operational requirements in the applicable military governance and interagency guides and standards as listed below.
  - 1. *NWCG Standards for Helicopter Operations, PMS 510*
  - 2. *NWCG Aquatic Invasive Species Guide, PMS 444*
  - 3. *NWCG Standards for Aerial Supervision, PMS 505, NFES 002544*
  - 4. *NWCG Standards for Airspace Coordination, PMS 520*
  - 5. *Interagency Standards for Fire and Fire Aviation Operations (Red Book) NFES 2724*
  - 6. *National Interagency Mobilization Guide*
- B. A qualified Helicopter Manager (HMGB), Helicopter Coordinator (HLCO) or Agency Aviation Military Liaison (AAML) will be assigned to assist the helicopter flight crew(s) to work with the incident. This shall occur after the initial attack period when moving into extended operations.
- C. FS/ DOI helicopter managers for National Guard helicopters shall be ordered and mobilized through ROSS/Interagency Resource Ordering Capability (IROC).
- D. FS/DOI helicopter managers shall not be assigned to manage non-FS/DOI approved helicopters.
- E. Aircraft shall be ordered and mobilized in ROSS/IROC.
- F. Federal firefighters may be transported on military helicopters.
- G. Regional Aviation staff may perform Quality Assurance oversight reviews of training and operations when on federal lands.
- H. An Aviation Safety Communique (SAFECOM) shall be submitted to report any hazard, incident, observation, maintenance problem, or other circumstance with personnel or aircraft that has the potential to cause an aviation related mishap.
- I. Missions are limited to day/VFR unless otherwise authorized for night operations.
- J. Agency approval of missions shall be indicated by letter of authorization to be carried aboard the helicopter. Determination of mission approval shall be assessed by a federal helicopter pilot



inspector or National Helicopter Standardization Pilot in coordination with the military commander.

- K. Aviation resources shall be provided initial information (other aviation resources on scene, frequencies, flight hazards, etc.) prior to actual operations. ICs/AOBs should also provide mission objective and expectations. After the first initial attack period an operational briefing shall be provided to all aviation resources.
- L. If a state has activated (Title 32) military resources on federal jurisdiction, the IC should determine if resources are federally approved. A letter of approval identifying military aircraft and pilot approved for FS/DOI operations shall be on board the aircraft. If approved, the IC can retain these resources during the mutual aid period until government owned, contracted or leased resources are filled. Once filled, military resources must be released. Where a desire is to retain these military resources, the incident must submit a resource request with NICC. If the order is not approved, the IC must release the military resources.
- M. Communications (Air to Air and Air to Ground) are required and must satisfy the requirements of this handbook. Communication shall be tested prior to flight into a dispatch zone or the fire traffic area. If communication has not been satisfactorily assessed, the resource shall participate within the dispatch zone or engage in incident activities. Contact with appropriate dispatch office should be made when entering the dispatch zone or incident.
- N. If military aviation resources are FS/DOI approved, government employees may be approved to fly on the aircraft regardless of jurisdiction, providing the employee is required for the mission and has the appropriate level of aviation training.
- O. Administrative use of military helicopters to stage personnel and equipment to/from airports, administrative logistical sites, base camps is authorized where expediency is required and within the local incident operating area.
- P. Aerial supervision (ASM or ATGS) is required when military helicopter resources are on an incident. A Helicopter Coordinator is highly recommended.
- Q. Military aviation units shall be part of an existing agency Air Operations Branch and be directed by the incident helibase organization.
- R. Emergency extraction – this may be performed consistent with agency standards associated with non-medically equipped helicopters and should serve as a last resort where civil respondents and the military MEDIVAC helicopter are not available immediate response is required.
- S. The military commander shall remain informed of the types of missions to be performed. Where emergency extraction using a non-medivac helicopter is proposed, the military commander's approval shall be received prior to that operation.

## **Helicopter Management**

- A. Every military helicopter assigned to support suppression activities shall have a military crew chief assigned. The crew chief performs many of the duties assigned to agency helicopter managers.
- B. At a minimum, one qualified helicopter manager (HMGB) shall be assigned at a ratio of one HMGB for each four military helicopters. The HMGB assures proper integration of military assets and functions as a liaison with military crew chiefs and pilots. Allowing one HMGB to manage four helicopters is approved only when all helicopters are working at the same helibase.
- C. Military aviation units shall be part of an existing incident Air Operations Branch and be directed by the incident helibase organization. Reference the NWCG Standards for Helicopter Operations for any additional operational, qualification and training requirements.

## **Aircrew and Flight Duty Limitations**

- A. Night Operations. As per interagency policy, aviation operations are conducted during daylight hours under VFR conditions (exception outlined below).
- B. Military medevac aircraft and pilots should expect to be used for emergency night operations if approved for the mission. The military will use their standard medevac mission protocols. Utilization of night vision goggles depends on the assigned units SOP to include consideration of illumination, obscuration, and meteorological conditions.
- C. Military night vision goggle proficiency flights may be performed as required to maintain proficiency requirements for assigned medevac responsibilities. Coordinate and schedule these flights with the Area Command/Incident Management Team and local administrative unit.
- D. Federal agencies only pay for proficiency flights that support missions directly related to fire suppression activities. The cost of all other proficiency flights necessary for the military to remain proficient with other mission profiles is borne by the military.

## **Mission Brief and Debrief**

- A. Military Operations Officer(s) and flightcrew are included in daily agency pre- and post-operational aviation briefings and planning meetings. The exception being flightcrew who are not collocated with agency flightcrew. Where this occurs, the military or agency personnel via the helicopter manager shall provide necessary briefing elements to flightcrew. Pilots shall participate in all Helibase morning prelaunch briefings for assignments, weather, and hazard updates.
- B. Following military aircraft missions, military flightcrew should provide debrief items to the agency and their military chain of command. Debrief items should then be provided to the incident Air Operations Branch.

## **Load Calculations**

- A. Interagency load calculation forms are not used by military flightcrew. The military method of performance planning is acceptable for interagency aviation operations. The Pilot-in-Command is required to use their unit's performance planning tools and are unique to the make/model variant of helicopter. Out-of-ground effect allowable payloads will be calculated.
- B. The helicopter manager is responsible for transference of information to an interagency load calculation form for use by incident management.
- C. Throughout the term of the incident, military pilots and military operations duty officer should remain informed of any associated change in operating altitudes and temperatures so as to update military performance planning calculations.

## **Manifesting**

- A. Incident management personnel are responsible for manifesting agency personnel. The military is responsible for manifesting military flightcrew and military equipment. Military flightcrew will provide payload capabilities to the helicopter manager so as to ensure an accurate accounting of payload capability.
- B. The helicopter manager is responsible for providing military flightcrew with an accurate manifest of passengers and cargo.

## **Helitack/Personnel Transport**

- A. This is applicable to helitack and administrative transport. Incident and cooperator personnel are authorized to be transported by military aircraft that satisfy the requirements of this handbook. All

personnel must receive a flight safety brief, be agency manifested, and satisfy agency PPE requirements.

- B. A flight safety brief is required to be provided by military flightcrew. The military may delegate this authority to qualified incident personnel who have been briefed by the military flightcrew.
- C. Agency approval shall be indicted by letter of authorization to be carried aboard the helicopter.

### **Internal Cargo Transport**

- A. Internal cargo shall be secured in the aircraft in accordance with military standards.
- B. Passengers may not be carried on cargo missions unless cargo is secured in such a manner that the cargo does not pose a hazard.
- C. Movement of hazardous cargo shall satisfy agency operational standards as specified with the *NWCG Standards for Aviation Transport of Hazardous Materials, PMS 513*.
- D. Cargo shall be weighed and manifested. A copy of the manifest will be provided to the pilots, crew chief and HMGB in accordance with the *NWCG Standards for Helicopter Operations*.
- E. Agency approval shall be indicted by letter of authorization to be carried aboard the helicopter.

### **External long-line and short-line (Belly-Hook) Cargo Transport**

- A. External cargo shall be rigged and secured in accordance with military standards.
- B. Movement of hazardous cargo shall satisfy agency operational standards as specified with the *NWCG Standards for Aviation Transport of Hazardous Materials, PMS 513*.
- C. Notification of the weight and type of cargo shall be provided to the flightcrew in accordance with the *NWCG Standards for Helicopter Operations* and the *NWCG Standards for Aviation Transport of Hazardous Materials*.
- D. Agency approval shall be indicted by letter of authorization to be carried aboard the helicopter.

### **Bucket Operations, Long-Line and Short-Line**

- A. Military helicopters may be approved for long-line/bucket and/or short-line/bucket operations. Mission approval shall satisfy the approval standards indicated within this handbook.
- B. Federally carded aerial supervision, preferably a federally carded Helicopter Coordinator (HLCO), shall be utilized whenever military aircraft are engaged in bucket operations.
- C. Agency approval shall be indicted by letter of authorization to be carried aboard the helicopter.

### **Non-Qualified Crewmember During External Load Operations**

- A. If the military unit has been approved for external loads, a HMGB may be aboard the aircraft during the mission only when authorized by both the incident, military commander, and agency policy authorizes. Flight during external load operations should only occur when the safety of the mission can be substantially enhanced. A Risk Assessment shall have been performed prior to operation in accordance with the *NWCG Standards for Helicopter Operations* and agency policy standards. This practice shall not be a routine occurrence and shall be held to an absolute minimum.
- B. Agency personnel shall satisfy agency PPE requirements and satisfy associated agency standards for passenger security, inclusive of secondary harnessing systems.
- C. Agency approval shall be indicted by letter of authorization to be carried aboard the helicopter.

### **Aerial Supervision/Helicopter Coordination**

- A. Aerial supervision and helicopter coordination may be performed aboard military helicopters for those aircraft properly equipped and configured. Personnel shall be trained and qualified.

- B. The helitack/passenger transport approval authorizes this mission. Personnel shall comply with agency manifesting, PPE, and passenger security requirements in accordance with this handbook and the *NWCG Standards for Helicopter Operations*.
- C. Agency approval shall be indicated by letter of authorization to be carried aboard the helicopter.

### **Hoist Operations**

- A. The military flightcrew, if trained and the aircraft is properly equipped, may be approved for hoist operations. Hoist operations shall be conducted in accordance with military policies and procedures.
- B. Where assessed as critical, a HMGB or spotter may fly aboard as a non-qualified crewmember to enhance situational awareness, improve safety, and increase the likelihood of mission success.
- C. Where the helicopter is not approved for helitack/passenger transport, cargo let-down may still be performed and the provisions identified in this handbook for non-qualified crewmembers shall be complied with.
- D. Agency approval shall be indicated by letter of authorization to be carried aboard the helicopter.

### **Cargo Letdown**

- A. Military flightcrew do not normally perform cargo letdown operations. However, military flightcrew are well qualified to provide an adequately stable platform for conducting agency cargo letdown. If the aircraft is properly equipped, it may be approved for agency cargo letdown operations.
- B. Cargo letdown operations shall be pre-briefed with flightcrew. Aircraft configuration shall support the ability to perform cargo letdown. Cargo letdown shall be conducted in accordance with agency policy and procedures.
- C. Where the helicopter is not approved for helitack/passenger transport, cargo let-down may still be performed and the provisions identified in this handbook for non-qualified crewmembers shall be complied with.
- D. Agency approval shall be indicated by letter of authorization to be carried aboard the helicopter.

### **Night Operations**

- A. Night Operations. As per interagency policy, aviation operations are conducted during daylight hours under VFR conditions (exception outlined below).
- B. Military medevac aircraft and pilots should expect to be used for emergency night operations if approved for the mission. The military will use their standard medevac mission protocols. Utilization of night vision goggles depends on the assigned units SOP to include consideration of illumination, obscuration, and meteorological conditions.
- C. Military night vision goggle proficiency flights may be performed as required to maintain proficiency requirements for assigned medevac responsibilities. Coordinate and schedule these flights with the Area Command/Incident Management Team and local administrative unit.
- D. Federal agencies only pay for proficiency flights that support missions directly related to fire suppression activities. The cost of all other proficiency flights necessary for the military to remain proficient with other mission profiles is borne by the military.

### **Accident Emergency Response**

- A. Agencies are responsible to exercise accident/mishap emergency response plans in accordance with agency policies and procedures, inclusive of agency reporting protocols, medical assistance, and site preservation until otherwise directed by the military commander. Agencies shall provide

notification to the military commander as soon as possible. Accident/mishap response plans should be discussed pre-emptively with military commanders prior to military operations.

- B. The military utilizes their own reporting system as well. Sharing information on incidents and mishaps between land management agencies and the military is essential to maintaining the safety of flight.

### **Accident and Incident Investigations**

- A. The military is responsible for military accident and incident investigations involving their own aircraft. Interagency employees assist in securing the accident site and facilitate the military accident team investigations. A land management agency may request participation in any accident involving military helicopters on agency incidents.
- B. Where agency aircraft and/or ground personnel are involved (combined accident/incident), investigations should be done collaboratively. Agencies are responsible to publish their own investigative reports for combined accidents/incidents. If an agency aircraft is involved two separate investigations may occur. Joint investigations are possible. Accident and investigation plans and protocols should be briefed to military commanders prior to military operations.

### **Safety Communications**

The military is subject to the interagency safety reporting system. SAFECOMs are completed and submitted through normal interagency channels. The military utilizes their own reporting system as well. Sharing SAFECOM information with the military is essential and should be performed on a continuing basis in order to optimize safety of aviation activities.

### **Flightcrew Training, Qualification, and Operational Requirements**

- A. Flightcrew shall be mission qualified for the types of mission operations that are to occur in accordance with military training and qualification programs as well as the training, qualification, and operational requirements associated with this handbook.
- B. The operations officer will ensure that all training requirements have been accomplished and that flightcrew are qualified and current in the types of mission activities to be performed.
- C. Training may be conducted at the military's home base, the location where they are to be deployed, or any other location. Training may occur pre-season or when the military unit is initially activated. For cooperative approval, training and qualification requirements shall be satisfied pre-season.
- D. The operations officer should be prepared to summarize flightcrew qualifications, experience, and provide documentation that indicates satisfactory completion of training pursuant to conducting agency firefighting operations. Interagency Pilot Inspectors will work with the operations officer to ensure pilot experience levels are appropriate and develop crew pairing plans.
- E. Where applicable, the operations officer should assign pilots who have demonstrated mountain flying skills or that have received training in mountain flying techniques.

### **Pilot-in-Command Requirements**

- A. Pilot-in-Commands (PICs) shall have completed all training specified as "Designated and Non-Designated Military Missions. Pilot-in-Commands (PICs) assigned to fire incidents shall have been trained to the Aircrew Training Program Standard (Army) (other DoD military will satisfy their applicable training and readiness policies). PICs shall satisfy RL1 and satisfy those requirements associated with full-mission capability for the types of mission activities that are to occur. PICs shall satisfy additional agency requirements specified by this handbook.

- B. An approved PIC must be on the controls when transporting agency personnel. Co-pilots may fly cargo or empty backhauls.

### **Copilot Requirements**

- A. Army. Copilots shall satisfy RL1 progression training status. Co-Pilots that are designated RL2 can be utilized but shall have a designated Instructor Pilot or Unit Trainer as the PIC.
- B. Other DoD. Copilots shall satisfy unit military command requirements. Where the co-pilot is unqualified to perform the mission as a PIC, then an instructor pilot is required. The instructor shall satisfy the requirements of this handbook.

### **Additional Agency Required Pilot Training Requirements**

- A. All military flight crews shall receive the following minimum training prior to being deployed in support of fire suppression activities. Training may be conducted at the deployment site or another designated location. The training session may occur pre-season or when the military unit is activated.
- B. Instruction is provided by interagency Standardization/Pilot Inspectors, Aviation Management Specialists and Wildland Fire Specialists, as necessary.
  - 1. Interagency aviation policy and SAFETY
  - 2. Incident Command System/organization/terminology
  - 3. Missions and roles
  - 4. Basic fire tactics and fire behavior/fire shelter
  - 5. Ground school, mountain flying techniques, or demonstrated ability in a mountain environment.
  - 6. Communications/fire traffic area
  - 7. Medevac/emergency evacuation
  - 8. Cargo (internal/external)
  - 9. Reconnaissance
  - 10. Passenger haul
  - 11. Mobilization and demobilization (including return of interagency equipment)
  - 12. Logistics/finance
  - 13. Fire Shelter Training

### **Military Pilot Training for Non-Designated Military Missions**

- A. Military aviation units pre-identified to perform Non-Designated Missions must complete the following training syllabus in addition to the minimum training requirements listed above. This specialized training may be conducted at the military unit's home station or another predetermined site before the beginning of fire season. Non-Designated Missions will not be performed if the unit has not been pre identified by the military and has not completed the training and approval process for those missions prior to mobilization.
- B. Upon verification and validation of completing training requirements, a letter of approval from the agency will be issued for the PIC and aircraft. A copy of this letter will be required in each of the approved aircraft.
- C. Types of Non-Designated Missions include:
  - 1. Mountain flying training
  - 2. External loads (longline)
  - 3. Bucket operations (suppressant and retardant application)

## **Required Agency Positions to Manage Military Aircraft**

- A. The firefighting agencies will provide adequate aviation and logistical staffing to support military aviation units on fire assignments. The size and complexity of military aviation operations dictate the type and number of interagency positions required.
- B. Because Federal Regions and GACCs have established an active relationship with their state and National Guard counterparts, and due to exercising pre-season training in order to develop cooperative agreements, not all positions described within this handbook are necessary to be exercised. Regional, GACC, and state management will determine and coordinate any additional personnel staffing needs when exercising cooperative agreements in response to federal requests.
- C. Title 10, federally activated military,
  - 1. NICC orders, assigns, and dispatches interagency personnel to manage military helicopter operations. Some interagency personnel may be dispatched directly to the military base to conduct training and briefings prior to actual deployment. Military aviation contingents with interagency personnel already assigned shall be deployed to individual incidents or Area Command.
  - 2. Although NMAC is responsible for interagency staffing of military aviation operations, coordination with the hosting incident must occur so they know exactly what is being provided and what they have to provide. One incident hosts the military unit logistically, even if the aircraft are serving other incidents.
- D. Title 32, state activated National Guard,
  - 1. Where the state activated the National Guard, the state is responsible for integrating the units within existing incident command structure and has directional control until federally dispatched and assigned. The state is responsible for coordinating orders, assignments, and dispatching of additional incident personnel staffing necessary to support the military units.
  - 2. Where federal agencies have requested the use of National Guard, the federal agency is responsible for integrating the units within the existing incident command structure and has directional control. The federal agency is responsible for coordinating orders, assignments, and dispatching of additional incident personnel staffing necessary to support the military units.

## **Interagency Aviation Military Liaison (AAML)**

- A. The AAML position might be necessary upon activation of military aviation assets and reports to the Military Liaison Officer. The AAML is a liaison between the military and NMAC for military aircraft mobilization. The AAML position is located at NIFC, with limited field duties.
- B. Qualifications: The person assigned to the AAML position should be a national, regional, or state-level Aviation Management Specialist; Technical Specialist; or government pilot with extensive experience in fire aviation and military helicopter use.
- C. AAML duties and responsibilities:
  - 1. Have a working knowledge of the Memorandum of Understanding between DoD, Army National Guard and USDA-USDI and the Military Use Handbook.
  - 2. Obtain assignment and direction from the Military Liaison Officer.
  - 3. Serve as a member of the Advanced Party, if necessary.
  - 4. Order civilian interagency personnel to manage the military aviation operations at the incident.
  - 5. Coordinate with the Area/Incident Commander, the Regional/State Aviation Officer, and Air Operations Branch Director (AOBD) to establish military operational site, expected



utilization, and to brief incident staff on military operational procedures and logistical needs.

6. Serve as (or assign) an Aviation Specialist to perform aviation briefings at the military unit as a member of the Advance Party to travel to the military installation to brief Military Commanders.
7. Coordinate the Military Advance Party mobilization to the incident.
8. Arrange for all interagency provided military pilot training, briefings, inspections, approvals, etc., prior to use on the incident.
9. Arrange for all interagency required aircraft inspections, equipment and avionics installations, paint schemes, etc., prior to deployment.
10. Prior to deployment arrange through the Finance/Logistics Section Chiefs for housing, meals, fuel, securing, transportation, dust abatement, crash rescue, and other supplies necessary to support military and civilian interagency personnel.
11. Coordinate with Area/Incident Commander and the ASGS/Helibase Manager assigned to the military unit to establish mission ordering procedures and acquire Incident Action Plans.
12. Report all incident/accidents through appropriate channels.
13. Coordinate media activities with the military and incident Information Officers.
14. Keep region/state and NICC aviation managers advised of current operations. Forward daily summary reports to Area/Incident Commander and to the Military Liaison Officer.
15. Inform Military Liaison Officer when release is contemplated.
16. Complete performance evaluations of all staff members and submit an after-action report to the Military Liaison Officer.

### **Interagency Federal Inspector/Standardization Pilots (HIP)**

- A. HIPs are federal standardization pilots that serve to verify pilot qualification requirements have been satisfied and issue pilot approvals. These personnel are necessary to ensure that military pilots satisfy interagency requirements prior to fire assignment utilization and provide follow-up checks during field operations. HIPs are ordered as technical specialists and report to the AAML. Roles and responsibilities are:
  1. Conduct verification/validation assessments and issue mission approvals for the types of missions that military pilots may perform.
  2. Provide required interagency training and briefings to military aircrews at the military units' home station or other designated location. This occurs pre-season or upon military activation and includes interagency training requirements for Designated and Non-Designated Missions.
  3. Ensure military pilot experience and training meet interagency standards.
  4. Ensure required interagency equipment, avionics and markings have been installed or applied. Ensure aircraft configuration meets interagency needs.

### **Interagency Federal Aviation Maintenance Inspectors (AMI)**

- A. AMIs serve to assess the airworthiness of helicopters and that required equipment, avionics and markings have been installed or applied. These personnel are necessary to ensure that military aircraft satisfy interagency requirements prior to fire assignment utilization. They provide follow-up checks during field operations. AMIs are ordered as technical specialists and report to the AAML.
- B. Federal agencies do not issue specific aircraft approvals for military helicopters.

### **Air Support Group Supervisor (ASGS) or Helibase Manager 1 (HEB1)**

- A. The role for the ASGS/HEB1 is to coordinate the use of military aircraft between the Military Operations Officer and the incident AOBD. The ASGS and HEB1 are supervised by the incident (AOBD) but must work closely with the AAML or Area Command Aviation Coordinator.
- B. Qualifications: Must be a qualified ASGS or HEB1.
- C. An additional ASGS/HEB1 is recommended when more than one military aircraft is assigned at one location, to work specifically with the military aircraft.
- D. The ASGS/HEB1 shall:
  - 1. Obtain assignment and direction from the AOBD.
  - 2. Meet with the Military Operations Officer and establish a joint operations facility at the military staging area or assigned helibase.
  - 3. Obtain a list of all military aircraft, flight personnel, and aviation assets to be used on the incident.
  - 4. Coordinate with the Military Operations Officer on daily assignments of aircraft and flight crews. Direction and assignments to military personnel must be made through the Military Operations Officer.
  - 5. Provide organizational oversight of all agency aviation personnel assigned to military aviation operations.
  - 6. Maintain records for all requests and use of military aircraft.
  - 7. Keep the AAML and the Area Command/ AOBD informed on the number of aircraft available and the types of missions the military unit can provide on a daily basis. Notify the AOBD and AAML immediately if any problem arises which will prevent an assigned mission to an incident from being performed.
  - 8. Request all logistical support, supplies and fuel through the Logistics Section Chief.
  - 9. Conduct pre- and post-daily operational briefings for the flight crews.
  - 10. Ensure that all military flight crews have incident maps, frequencies, flight following procedures, and other information necessary to complete assigned missions.
  - 11. Do not allow formation flying of military aircraft to or on incidents unless the helibase is informed and prepared for multi-aircraft flights.
  - 12. Coordinate media and proficiency flights with incident Air Operations.
  - 13. Report all incidents/accidents through appropriate channels.

### **Helicopter Manager (HMGB)**

- A. All military helicopters require a HMGB collocated with the helicopter(s). Military helicopters assigned MEDEVAC do not require a HMGB.
- B. A qualified HMGB will be assigned at a ratio of one HMGB to each four military helicopters deployed in support of fire suppression. The HMGB is the direct liaison between the military flight crews and the incident Air Operations organization. The HMGB reports to the ASGS/HEB1 responsible for military aircraft. The HMGB must work within the assigned helibase organization. The HMGB will supervise agency crew members when assigned to military helicopters.
- C. As a member of the joint military/agency flight crew, the HMGB will obtain instructions and information on passengers and cargo to be moved, assist the Military Crew Chief in loading and unloading of cargo and passengers, keep aircraft use records, and will act as the liaison for the military crew chiefs to ensure compliance with all joint military/agency aviation policies and safety procedures.
- D. The HMGB is authorized and will fly aboard the helicopter in the performance of helitack, internal cargo movement, troop transport, and other missions where presence is required. Where

consideration is being given to long-line or short-line operations, inclusive of bucket operations, specific authorization is required from the agency in accordance with non-qualified crew member requirements specified within this handbook.

- E. Qualifications: Meet interagency fire Helicopter Manager standards, PMS 310-1.
- F. The HMGB shall:
  - 1. Arrive prepared for the incident assignment, including flight helmet with a microphone that is compatible with the military, flight suit, flight gloves and leather boots.
  - 2. Report to the ASGS/HEB1 and receive an assignment and briefing on military operational procedures and policies.
  - 3. Develop a working relationship with the military flight crews and other agency and military personnel. As an active member of the flight crews, assist the Pilots-in-Command by advising them of incident/aviation procedures and by serving as a liaison with incident personnel.
  - 4. Receive mission assignments from the ASGS/HEB1 and relay assignments to the flight crews and Pilots-in-Command (PIC).
  - 5. Ensure the military flight crew receives all pertinent information necessary for the safe completion of the assigned missions.
  - 6. Ensure all flight operations are conducted according to the joint military/agency policies established for military aircraft operations.
  - 7. Keep accurate aircraft use records and immediately report all incidents or safety concerns to the Helibase Manager or ASGS/HEB1.
  - 8. Attend all pilot briefings to ensure mission integrity.

### **Helicopter Crew Member (HECM)**

- A. The HECM is not a required position since HECMs are not normally needed to staff military helicopters. The HECM can be assigned if additional personnel are needed. The helicopter crew member position is supervised by the HMGB assigned to the aircraft. The HECM is authorized to fly aboard the helicopter when additional assistance is necessary to satisfy mission needs.
- B. Qualifications: Meet interagency fire Helicopter Crew Member standards.
- C. The HECM shall:
  - 1. Arrive prepared for a fire assignment, including flight helmet with a microphone that is compatible with the military, flight suit, flight gloves and leather boots.
  - 2. Report to the HMGB and receive an assignment and briefing on military operations procedures and policies.
  - 3. Develop a working relationship with military flight crew and HMGB.
  - 4. Assist the HMGB and the Flight Engineer/Crew Chief in the loading/unloading of all passengers and cargo, ensuring passengers comply with safety requirements, and safely securing all cargo.
  - 5. Attend briefings and debriefings as appropriate.

### **Air Tactical Group Supervisor (ATGS) / Helicopter Coordinator (HLCO)**

- A. Aerial supervision is the act of airborne management of aircraft operating within an incident. They serve to coordinate airspace and aircraft and are responsible for aircraft deconfliction and assignments. When a Temporary Flight Restriction (TFR) or Fire Traffic Area (FTT) is active, the aerial supervisor is the controlling authority. They essentially serve as a “command and control” airborne platform for aviation and ground incident activities. Refer to the *NWCG Standards for Aerial Supervision* for a complete description of roles and responsibilities.

- B. The ATGS serves as the primary airborne management position. The ATGS normally occupies a position aboard an airplane but may operate from a helicopter. Where an ATGS is performing duties from an “Air Attack” platform, the aircraft will occupy a consistent position at the top of the aircraft “stack.” Where an ATGS is occupying an Aerial Supervision Module (ASM), aerial supervision performed from a Lead Plane, altitude position will vary depending on Lead Plane mission requirements.
- C. The HLCO is a helicopter-borne position provided by the incident and reports to the incident Air Tactical Group Supervisor (ATGS). The HLCO serves as an extension of the ATGS and is responsible for management of helicopter operations.
- D. Aerial supervision, preferably a HLCO, is required whenever military helicopters are performing retardant/foam/water operations in incident airspace.
- E. The HLCO or ATGS mission may be performed from military helicopters where aircraft equipment requirements are satisfactory for aerial supervision mission needs. Aerial supervisors shall comply with agency PPE requirements including flight helmet with a microphone that is compatible with the military, flight suit, flight gloves and leather boots. The HLCO/ATGS shall coordinate with the HMGB and incident command prior to any flight aboard a military helicopter.

## **Logistics Section Chief (LSC2)**

- A. LSC2 is only required when military aviation support needs exceed the capabilities of the incident Logistics Section Chief or when the military aviation contingent is staged at a non-incident location (area command military staging area). This person is responsible to coordinate the procurement and accountability of all supplies, equipment, services, transportation, fuel, and facilities needed to support the military and civilian management group.
- B. Qualifications: Meet interagency fire Type 2 Logistics Section Chief standards.
- C. The LSC2 shall:
  - 1. Coordinate with the Military Advance Party to determine needs.
  - 2. Immediately upon arrive, identify the Finance Section and Logistic Section Chiefs on the IMT and work closely with those individuals. If the military aviation unit is not collocated with an incident supported by the IMT, the LSC2 will contact the appropriate agency national Financial Manager/Administrative Officer for assistance with finance questions and purchasing contracts.
  - 3. Contact NICC for the fiscal code for all costs incurred with the battalion’s use on the incident(s). The support costs will be prorated based upon the hours flown on each incident, using the agency/unit assigned fiscal code assigned to a specific incident.
  - 4. Refer to the appropriate chapter for cost reimbursement direction contained within this handbook for direction on cost reimbursable items to the military. For questions on items not specifically covered under this chapter, contact the incident Finance Section Chief. If there is no Finance Section Chief, contact the agency national Financial Manager/Administrative Officer for direction.
  - 5. Provide oversight and approval procedures for all support costs associated with the battalion activation.
  - 6. Order, receive, store, and distribute supplies and equipment. Maintain inventory and accountability of supplies and equipment. Coordination with the incident Logistics Section Chief will be required to develop procedures for ordering supplies and equipment.
  - 7. Order, receive, and account for the aviation fuel furnished to the military. After demobilization of the military aviation unit, the Logistics Section Chief will facilitate the transfer or removal of excess fuel.

8. Coordinates the procurement of lodging, feeding arrangements, transportation, facilities, and other services needed by the military and civilian aviation groups.
9. Provide costs to the incident Finance Section Chief, and the appropriate agency national Financial Manager/Administrative Officer.
10. At the end of the assignment, account for all property issued to the military and civilian management groups. Send records of all costs incurred to the appropriate agency national Financial Manager/Administrative Officer.
11. Coordinate with the military regarding security for aircraft and equipment.

### **Communications Specialist**

- A. The Communications Specialist position is located at NIFC, reports to the National Military Coordinator, and normally performs duties during the mobilization phase of military aircraft. A Communications Specialist may be assigned to incidents with large or complex military activity and would be assigned to the incident Logistics Section Chief to coordinate communication for the Military Aviation Unit.
- B. Qualifications: Must meet the agency requirements for Avionics and Communications Specialists positions.
- C. The Communications Specialist shall:
  1. Have responsibility for coordinated installation and maintenance of NIRSC equipment that was assigned to the incident.
  2. If necessary, provide the HMGB with necessary interface/equipment for civilian flight helmet utilization with military avionics.
  3. Serve as a member of NIFC Advance Party to brief military commanders on communications issues.
  4. Coordinate with the Military Communications Officer, Operations Officer, and Avionics Technician on the use of all frequencies and communications equipment.
  5. Coordinate with the Communications Unit Leader, Logistics Section Chief, and Air Support Group Supervisor.
  6. Attend agency planning meetings and briefings as appropriate.
  7. Implement military support requirements such as the need for cross link radio system and telephones and communication requirements.
  8. Ensure that communication problems or issues concerning the communication support to military are resolved.
  9. Recommend procurement of communication and navigation equipment.

### **Military Aviation Organization**

- A. Every military commanding officer has the authority to give lawful orders to those under his or her command. Orders are passed from the unit's Commander to the Military Operations Officer, and then to the Platoon Leader or to the Air Mission Commander, for multi-ship operations, or the Pilot-in-Command for single-ship operations, and finally to the flight crew members.
- B. While the following provides the Army's general organizational structure and position descriptions, other DoD military organizations follow and adhere to a strict chain of command and include specialty functions similarly to what is described below.

## **Commanding Officer**

- A. A commanding officer is in charge and ultimately responsible for the unit. If a commanding officer does not deploy with a unit, then a designee will be assigned. The commanding officer's designee is the senior officer assigned to a deployment and may be referred to as the officer-in-charge (OIC).
- B. Within the context of federal incident management and preparedness, the commanding officer or his delegated representative will:
  - 1. Retain absolute authority as to whether not to except an agency mission assignment.
    - a. These are predetermined and indicated via the letter of authorization that is maintained with each aircraft.
    - b. MEDEVAC does not require a letter of authorization for MEDEVAC missions.
  - 2. Coordinate with the Interagency Aviation Military Liaison (AAML) and/or incident command staff for integration of the unit into the incident's infrastructure, operations, support, and logistics.
  - 3. Ensure and coordinate that the additional training necessary for incident flight operations has been completed.
  - 4. Maintain responsibility and control of unit personnel while on deployment or assignments.
  - 5. Maintain responsibility and resolve disciplinary or legal issues of deployed personnel.
  - 6. Assign flightcrew and aircraft to missions.
  - 7. Provide flightcrew and aircraft availability scheduling to the incident management team AOB.
  - 8. Coordinate unit aircraft maintenance and logistics requirements and scheduling.
  - 9. Ensure flightcrew comply with military crew day/crew rest requirements.
    - a. Agency duty day and flight hour standards may be adopted so long these do not conflict with unit standards.
  - 10. Ensure compliance with military ground and air safety protocols.
  - 11. Coordinate billeting and facilities support requirements.
  - 12. Assign a liaison to coordinate with the incident command team, ASGS.

## **S-3, Operations Officer**

- A. The unit's operations officer is subordinate to the unit's commanding officer and is responsible for flight operations, unit plans, and flightcrew training and qualifications. The operations officer reports directly to the commanding officer. The operations officer will:
  - 1. Coordinate aircraft, flightcrew, and mission schedules with the ASGS and incident command system.
  - 2. Promulgate schedules to both military subordinates and superiors.
  - 3. Ensure that flightcrew satisfy military mission briefing standards.
  - 4. When deployed as the OIC, ensure that those duties directed by the commanding officer are satisfied.

## **Operations Liaison Officer to the Incident Commander**

- A. The liaison officer serves as the direct link between the military unit's leadership command and the incident's leadership command. The liaison officer will be collocated with incident management command staff to facilitate real time integration of military aviation resources within that of the incident management system. The role of the liaison officer is to:
  - 1. Coordinate military aircraft, flightcrew, and mission support with incident and/or area command leadership staff.

2. Promulgate mission and aircraft assignments with military flightcrew.
3. Keep incident management abreast of aircraft, flightcrew, and mission availability.
4. Coordinate military needs with incident management.
5. Advise the AAML on capabilities and limitations of military aircraft.
6. Provide reports to and coordinate with appropriate military headquarters and Defense Coordinating Element.
7. When deployed as the OIC, ensure that those duties related to the commanding officer are satisfied.

### **Officer-in-Charge**

Officer-in-Charge (OIC) is a general term that the military uses to identify the supervisory officer leading a unit. The OIC is responsible to carry out the orders and direction assigned by the commanding officer and reports through the chain of command back to the commanding officer.

### **Operations Specialist**

The operations specialist reports to the unit's liaison officer and generally fills the dispatcher role regarding flight planning, flight following procedures, airspace restrictions, weather information, aircraft availability and management of individual aircrew flight records.

### **Communications Officer or Specialist**

- A. The communications officer or specialist coordinates all communications requirements for the unit. The roles and responsibilities are to:
  1. Advise military superiors on all communications matters, including placement of required communications and navigation equipment.
  2. Coordinate with maintenance personnel to ensure that all aircraft assigned to a mission have adequate communications and navigation equipment installed and operational.
  3. Ensure avionics equipment installed in the aircraft meets military regulatory requirements for either temporary or permanent aircraft modifications.
  4. Ensure any technical requirements for avionics support are adequately staffed at field sites.
  5. Advise superiors on the technical communications aspects of electronic systems and devices as required.
  6. Note that aircraft specific communications problems are addressed by an avionics maintenance specialist located within the unit's maintenance section.

### **Standardization Instructor Pilot**

- A. The military standardization instructor pilot (SP) ensures all training conducted by unit personnel is standardized using appropriate military regulations, the Aircrew Training Program (ATP), and standing operating procedures (SOPs). Roles and responsibilities are to:
  1. Ensure all Instructor Pilots (IPs) are standardized in the task performance standards being taught.
  2. Act as a subject matter expert on issues relating to aircraft capabilities, crew performance standards, or mission support capabilities.
  3. Ensure compliance with military regulations and SOPs regarding the proper documentation of training being accomplished.
  4. Ensure all crew members are qualified to perform the assigned mission.
  5. Coordinate with the operations officer and OIC to ensure scheduling results in safe and efficient flight crews.



6. Reports directly to the commanding officer.

### **Instructor Pilot**

Unit instructor pilots (IPs) are responsible for conducting all flight training of aviator tasks. The IP also evaluates aviator and flight crew performance to ensure tasks are being performed in accordance with military regulations, Aircrew Training Program (ATP) and SOPs. The IP may also develop and teach aviation subjects in a classroom environment, act as a subject matter expert on aircraft capabilities, limitations, or questions relating to mission performance.

### **Aircraft Flightcrew Composition**

Assignment of flightcrew depends on aircraft type, mission type, and a unit's SOP. The flightcrew of a UH-60 and CH-47 aircraft require a pilot-in-command, co-pilot, and flight engineer. A CH-47 that is performing sling load or terrain flight operations requires an additional flightcrew member. All missions to be performed shall satisfy military flightcrew compliment requirements.

### **Air Mission Commander**

When two or more aircraft are tasked to perform a single mission, an Air Mission Commander (AMC) is assigned and designated. The AMC has overall responsibility for planning and completion of the assigned mission to include air mission briefings and debriefings. The AMC serves as the final authority as to determine whether or not a mission can be successfully completed.

### **Pilot-in-Command**

- A. The pilot-in-command (PIC) is assigned, designated, and approved for the type of helicopter to be operated, for the type of missions to be performed, and serves as the final authority in the conduct of the mission activity. Roles and responsibilities include:
  1. Have final authority as to whether or not a mission can be performed.
  2. Have final authority as to whether or not cargo and personnel can be transported.
  3. Ensure the carriage of flightcrew and persons comply with military regulations and protocols.
  4. Comply with military performance planning requirements.
  5. Comply with military regulations in the administration and operation of the aircraft.
  6. Ensure all tasks performed are done in accordance with the mission briefing and that all flightcrew have been properly briefed.
  7. Coordinate with the agency's helicopter manager (HMGB).

### **Flight Engineer and Crew Chief**

- A. The flight engineer is responsible for daily maintenance of the aircraft and the load configuration of the CH-47. A crew chief assists the flight engineer on the CH-47. On the UH-60 and other rotary military aircraft, the crew chief performs these duties. Roles and responsibilities include:
  1. Inspect load configurations, supervise loading of cargo in accordance with military regulations and SOPs, and ensures cargo is secured prior to and during flight.
  2. Comply with flightcrew duty requirements and procedures.
  3. Controls release of the load on the CH-47 and on the H-60 as directed by the pilot-in-command.
  4. Ensures passengers are given an aircraft safety brief, loaded safely, and that passengers and crew are properly secured prior to flight.

5. Ensure aircraft systems and maintenance are performed in accordance with military maintenance practices.
6. Coordinate with the HMGB for mission activities to be performed.

### **Aviation Safety Officer**

- A. The Aviation Safety Officer (ASO) serves as an integral part of the military's aviation safety management system. Roles and responsibilities include:
  1. Assist the CO in implementing the unit's safety program.
  2. Advise the CO on safety related issues including air and ground safety.
  3. Monitor compliance with the unit's crew rest policy and procedures.
  4. Prepare military safety reports.
  5. Secure an accident site prior to arrival of the Accident Investigation Team. Ensure compliance with initial accident investigation procedures.

## **Aircraft Security, Maintenance and Fueling**

### **Security**

The military is responsible for the security of all military aircraft and military support equipment provided.

### **Maintenance**

When military aircraft are activated, it is necessary to accommodate their maintenance group. The civilian agencies' involvement would be to assist in selecting and obtaining a suitable area and facilities for maintenance. A request through military command may be necessary for additional military aircraft maintenance support. To meet military logistical needs, it may be easiest to station military aircraft at or near an airport where aircraft parts and equipment can be readily delivered.

### **Fueling**

- A. Military aircraft use JP-8 or Jet A fuel. The military can purchase fuel by credit card from any commercial source or obtain fuel from local military sources. Military helicopters require the fuel additive PRIST. Ensure fuel sources contain PRIST. PRIST is generally available commercially.
- B. The Military Operations Liaison Officer to the Incident Commander needs the location of available sources so contracts can be made with a fuel supplier to furnish fuel to staging areas. The military has two systems for providing fuel to aircraft:
  1. Military fuel trucks with a fuel servicing hoses and equipment, and
  2. A Forward Area Refueling System (FARS) comprised of bladder fuel tanks, filters, hoses, equipment and connectors.

## **Basic Aircraft Equipping Requirements**

- A. All military aircraft deployed to fire assignments shall be configured with the following equipment:
  1. High visibility markings on main rotor blades and fuselage.
  2. A complete and current set of aeronautical charts covering area of operations. Electronic display of charts satisfies this requirement.
  3. At least (1) 760-channel VHF-AM aeronautical radio system operating in the 118 to 137-MHz bands, with 25 kHz channel increments, and a minimum transmitter carrier power output of five watts.
    - a. Agencies may furnish the military aircraft with a VHF-FM radio system compatible with interagency frequencies capable of operating over the frequency band of 150 to

174 MHz with 12.5 MHz channel increments with 32 sub audible (ctcss) tones. Radio must be furnished with separate Guard receiver operating on 168.625 MHz Frequency.

- b. Adapters are provided by the civilian agencies to allow for an interface between the Helicopter Manager and the flight crew.
- c. Until the civilian agency furnished radio systems can be installed, the following interim procedures may be utilized:
  - i. Helicopters may be allowed to operate helibase to helispot if both locations have VHF AM communications with the helicopters and Aerial Supervision is present.
  - ii. Single- or multi-ship operations can include helicopters without VHF FM communications so long as Aerial Supervision is present, and a plan is established.
- 4. Equipped with a Global Position System (GPS), or its equivalent, to be used for always locating the position of the aircraft by referencing latitude and longitude coordinates.
- 5. Tie-down straps, nets, or other devices for securing cargo in the cabin or cargo compartment. These devices shall be simple in function and have the capability of being installed quickly.
- 6. Cargo restraint systems for carriage of internal cargo (if approved for internal cargo) that complies with military standards.

#### **External Operations Aircraft Equipping Requirements**

- A. One Mil-Spec cargo hook employing both electric or hydraulic and manual release systems and rated at the maximum lifting capacity of the aircraft.
  - 1. All external load operations and equipment must satisfy the *NWCG Standards for Helicopter Operations* or military specifications.
  - 2. The agency may provide long line and or remote cargo hooks with release system and brush guard or cage rated at no less than the primary hook capacity. The military provides the appropriate rigging to interface with the civilian agency provided long lines.
- B. For bucket operations:
  - 1. A commercially available bucket with a fill capability proportionate to the payload capacity of the helicopter. Each helicopter will have available on board the helicopter the bucket operator's manual.
  - 2. The agency may provide to the military a variable capacity bucket. Buckets provided by the civilian agency are to be returned to the designated fire cache for refurbishment. The military provides the appropriate rigging to interface with civilian agency provided buckets.

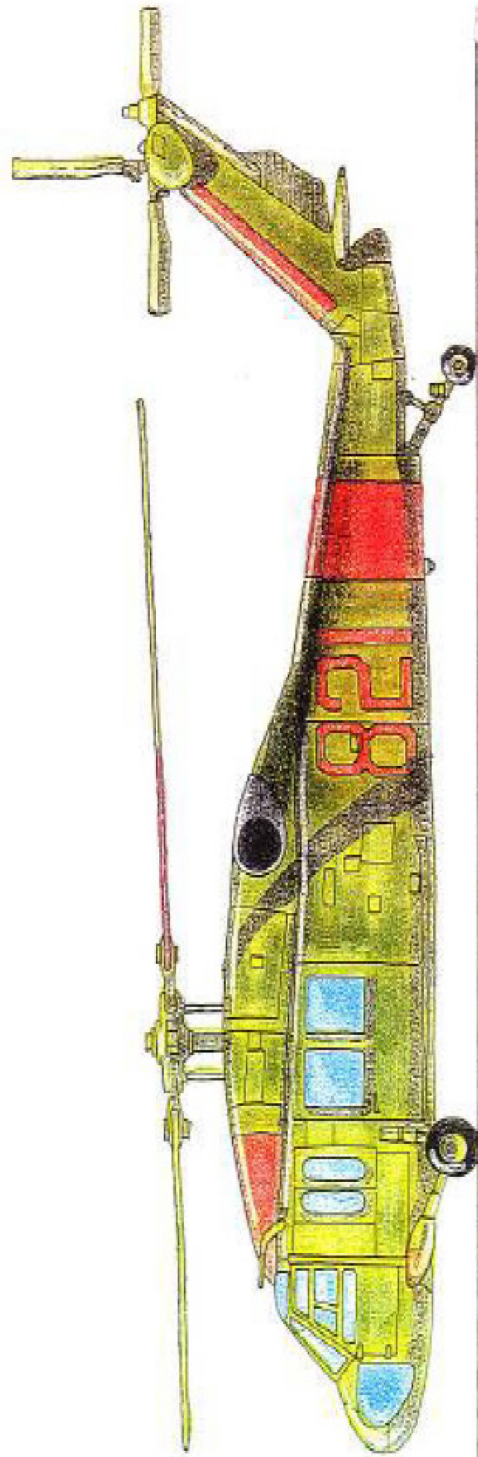
#### **Agency Mobilization Checklist for Military Helicopters**

- A. The following checklist can be used as a guide when developing mobilization plans for military helicopter units:
  - 1. Order for military helicopters has been properly initiated through the appropriate dispatch unit. Military is informed of incident number and fiscal code for the incident.
  - 2. Number of helicopters ordered is sufficient considering maintenance and crew changes.
  - 3. Identify unit's designated military mission.
  - 4. Fuel is ordered by proper type for the aircraft. Who is supplying the fuel?
  - 5. Notify regional or area aviation group/management involved with the mobilization.
  - 6. Identify a purchasing unit.

7. Copy of the Memorandum of Understanding is available as well as flight hour costs and crew pay rates available.
8. A copy of the letter of agreement or cooperator letters indicating approved missions hosted on board each helicopter.
9. A copy of the *NWCG Standards for Helicopter Operations* on board each helicopter.
10. Adequate agency aviation positions ordered is proportionate to the military aviation assets.
11. Identify staging area for helicopters to join up with interagency personnel.
12. Helicopters are equipped with proper radio packages, or it must be installed. Frequency cards are included.
13. Incident radio frequencies and contacts are given to military prior to entering the incident.
14. Helibase parking has been selected to accommodate all helicopters ordered. Dust abatement ordered.
15. Arrange ground transportation prior to arrival.
16. Arrange Eating/sleeping facilities.
17. Establish military and agency chain of command/staffs.
18. Develop an organizational chart with positions for military/agency chain of command, to include spaces for names of individuals as applicable.
19. Brief military flight crews.
20. Establish medical evacuation procedures, including crash rescue capabilities.
21. Maps and hazard maps made available to pilots.
22. Incident Action Plans are made available.
23. If available, dedicated telephones and radios for use by the military.
24. Address crew flight time and duty day limitations.
25. Status of aircraft availability (maintenance posture) is current and available.
26. Keep daily logs, incident reports and completed aircraft pay documents.
27. Performance planning and manifesting to be completed for all flights.
28. High visibility water soluble paint (temporary) made available for marking helicopters.
29. Security established.
30. Water bucket mechanics available or provisions for bucket repairs addressed.
31. DoD OLR/AMCOM team activated if requested for added maintenance capability.

**PROFILE**

- PAINTED NUMBERS ARE APPROXIMATELY 3 FEET HIGH.
- NUMBERS ARE STILL VISIBLE WHEN AIRCRAFT CABIN DOOR IS OPEN.
- COLOR SWASHES ON FORE AND AFT PORTIONS OF AIRFRAME.
- AIRCRAFT CAN BE PAINTED IN DIFFERENT HI-VIS COLOR TO DIFFERENTIATE AIRCRAFT OR TO CONTRAST WITH VARIOUS TOPOGRAPHIC AREAS

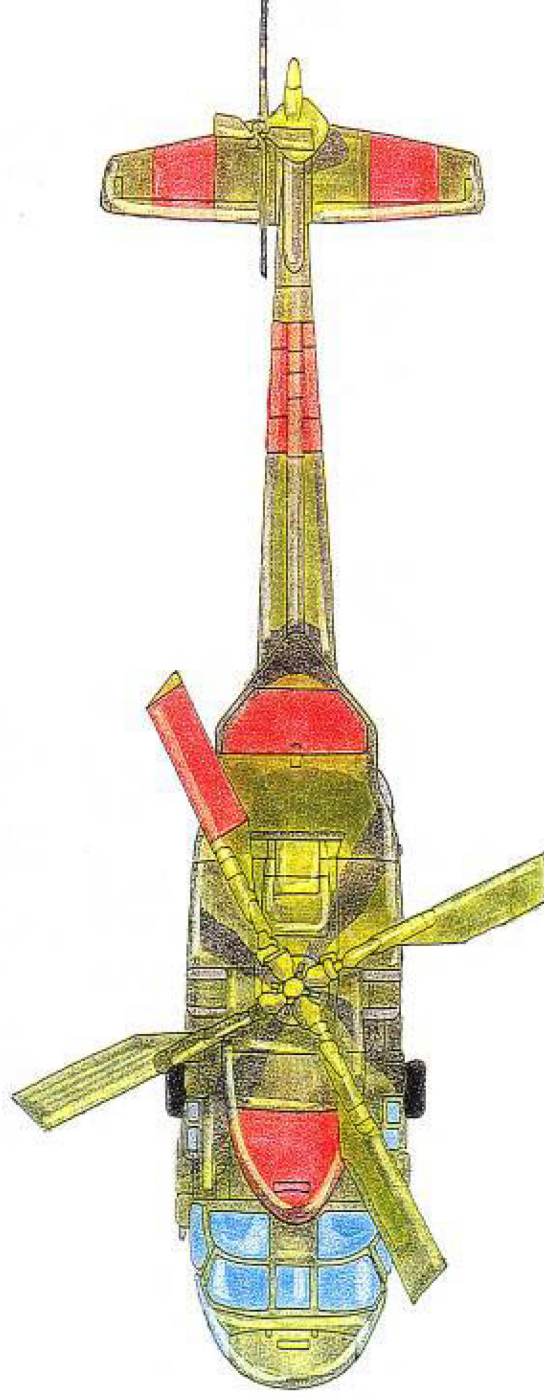


PAINT SCHEME DESIGNS  
NATIONAL GUARD BLACKHAWK HELICOPTERS

DESIGNS BY BRIAN ESTES  
BASELINE HELITACK

## OVERHEAD

- COLOR SWASHES ON HORIZONTAL STABILIZER.
- AIRCRAFT CAN BE PAINTED IN DIFFERENT HI-VIS COLOR TO DIFFERENTIATE AIRCRAFT OR TO CONTRAST WITH VARIOUS TOPOGRAPHIC AREAS.
- AIRCRAFT PAINTED USING HI-VISIBILITY WASHABLE TEMPERA.



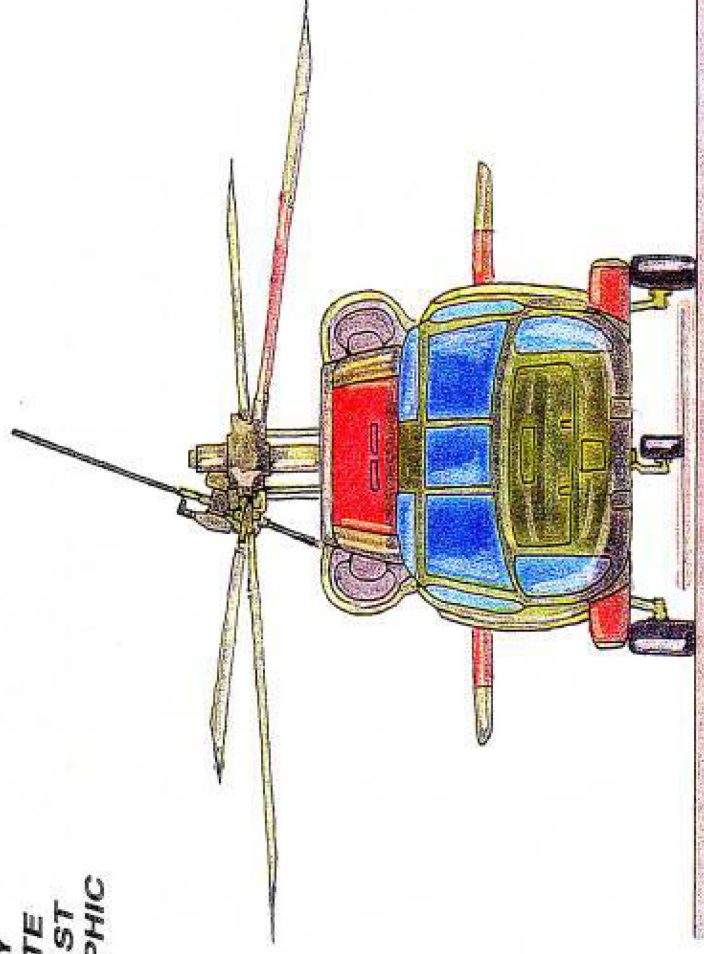
PAINT SCHEME DESIGNS  
NATIONAL GUARD BLACKHAWK HELICOPTERS

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## HEAD-ON

- APPLICATION OF PAINT TO COWLINGS IS ACCOMPLISHED BY USING AIR LADDERS.
- AIRCRAFT CAN BE PAINTED IN DIFFERENT HI-VISIBILITY COLORS TO DIFFERENTIATE AIRCRAFT OR TO CONTRAST WITH VARIOUS TOPOGRAPHIC AREAS.



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