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In Reply Refer To:
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Memorandum

To: State Fire Management Officers

From: Ron Dunton 
Assistant Director, Fire and Aviation

Subject: Helicopter Emergency Long-line Last Option (HELLO)

The Bureau of Land Management (BLM) Fire Leadership Team (FLT) and ground firefighting personnel have requested the capability for helicopter emergency extraction of critically injured firefighters. Several sources of these capabilities exist elsewhere with the National Park Service (NPS) short haul program, the recently created United States Forest Service (USFS) emergency extraction short haul program and potential military extraction aircraft. However, these resources are not always available or capable of the timely extraction of seriously injured firefighters.

Consistent with the BLM priorities of firefighter and public safety the National Aviation Office (NAO) in concert with Fire Operations and the FLT have created several HELLO decision support tools. The HELLO mission is defined as transporting a critically injured person from an otherwise inaccessible location using a helicopter long-line. The ultimate goal is to get a critically injured patient to definitive care by the quickest means available.

Departure from existing policy/procedures to respond to an emergency outside of a person's training is supported by the Interagency Helicopter Operations Guide (IHOG) (Chapter 17, V.A) and the BLM National Aviation Plan (NAP) (5.6). The HELLO is intended to assist BLM personnel when faced with the decision of how and if to conduct an emergency extraction. These decision support tools are not regulatory in nature but, are designed as optional tools to help incident personnel make good risk-based decisions on whether HELLO is the safest most efficient option. It is important to understand that HELLO is a Last Option to be considered after all other extraction methods have been evaluated and determined to not be feasible. Under no circumstances will any BLM helitack program promote HELLO as a capability of their program.

Aviation policy deviations are allowed in certain life threatening situations identified below. The IHOG Ch-17, V. A:

In certain life threatening emergencies it may be necessary for personnel to deviate from policy. This may include Personal Protective Equipment (PPE) deviations, seating configurations and riding in unapproved aircraft and/or with unapproved pilots. These situations usually involve search and rescue or medevac operations being conducted by local authorities using public agency, military, commercial or private aircraft.

The BLM NAP 5.6 - Emergency Exception to Policy:

Federal employees who are involved in an event in which there clearly exists an imminent threat to human life, and there is insufficient time to utilize approved methods, may deviate from policy to the extent necessary to preserve life (reference 350 DM 1.3.B). The following provisions and follow-up actions apply:

- *Personnel involved are expected to use good judgment.*
- *Personnel involved in the decision making associated with deviating from policy must weigh the risks verses benefit.*
- *Any deviations must be documented on a SAFECOM.*

Attachment

Bureau of Land Management Fire and Aviation

Helicopter Emergency Longline Last Option (HELLO)

Mission Definition:

The HELLO mission is defined as transporting a critically injured person from an otherwise inaccessible location, using a helicopter longline. HELLO is considered **a last resort option, when other methods are unavailable or cannot respond in the necessary time frame for life preservation.** HELLO can be considered, utilizing available resources in the field, to perform such a rescue. When faced with this type of life-threatening situation HELLO should be performed by exclusive use helicopter programs if possible. The ultimate goal is to get a critically injured patient to definitive care (hospital) by the quickest means available.

Issue:

Until now the BLM has not had any guidelines in place for HELLO. HELLO has been performed to extract injured personnel when other methods were not available or did not meet necessary time frames. Fire and Aviation employees work in remote areas and when they are injured the agency should expend all reasonable options to get them to the appropriate medical care. Fire managers and firefighters have requested agency capabilities to extract injured firefighters when no other asset is available to accomplish the mission. The BLM has invested time and resources in developing multiple ways to deliver firefighters to incidents but has not committed the resources, time and money to develop strategies to extract an injured firefighter when no other options exist.

The term Emergency Helicopter Extraction (EHE) has numerous definitions depending on the individual, has been around for many years and can be confusing. The missions that could be labeled EHE are STEP, Short Haul, Hoist and long line extractions. A new label needs to be developed for emergency extraction utilizing a long line that is the last option to extract an injured individual. This is not a developed operational program. It is the **absolute last option** that may save a life.

Decision support tools or job aids have been created to assist a pilot, helicopter manager, incident commander, line manager, fire management officer etc., to make good risk based decisions when requested to perform an emergency longline extraction. The utilization of these job aids and the acceptance of a mission request are not mandatory. These Job Aids were developed by helicopter managers to assist in determining if HELLO is the best option for a given situation and in making HELLO decisions. These job aids can be utilized to facilitate the discussions between pilots, managers, and line officers if they choose to utilize this extraction method.

Key Points:

- HELLO is considered a last resort option, to be used only for life threatening situations.
- Pre-planning between the HMGB and pilot may be completed before the incident occurs, not during a high stress and time critical situation.
- Both the pilot and manager need to agree on activation of a HELLO mission only after careful analysis of the risks involved.
- Used only to evacuate the patient to the nearest suitable landing area or appropriate ground unit.
- 14 CFR Federal Aviation Regulations Part 133.31 Emergency operations:
 - (a) *In an emergency involving the safety of persons or property, the certificate holder may deviate from the rules of this part to the extent required to meet that emergency.*
 - (b) *Each person who, under the authority of this section, deviates from a rule of this part shall notify the Administrator within 10 days after the deviation. Upon the request of the Administrator, that person shall provide the certificate-holding FAA Flight Standards District Office a complete report of the aircraft operation involved, including a description of the deviation and reasons for it.*

Bureau of Land Management Fire and Aviation

Summary

Job aids have been developed to assist helicopter personnel and pilots in making good risk based decisions on accepting or declining HELLO missions. It is important that aviation and operations personnel understand that HELLO missions are not mandatory and that no helitack program is required to utilize these job aids or accept HELLO missions. The BLM Fire Operations Group (FOG) and Fire Leadership Team (FLT) fully supported the development of these job aids.

The following Job Aids are attached:

- HELLO Decision Criteria
- HELLO Go/No Go Checklist

Helicopter Emergency Longline Last Option (HELLO)

DIVS/OPSC/FMO/IC/DUTY OFFICER Decision Criteria Checklist

Decision Element	Yes	No
<p>1. Is there a confirmed life threatening injury?</p> <ul style="list-style-type: none"> • Example of situations that may require Emergency Helicopter Extrication (EHE) <ul style="list-style-type: none"> a. Serious trauma - Examples include: <ul style="list-style-type: none"> ○ Patients with head and spinal injuries ○ Chest injuries ○ Blunt or penetrating abdominal injuries ○ Fractures of large bones ○ Full or partial amputations ○ Patients in shock b. Cardiac/Respiratory Conditions - Patients with cardiac/respiratory conditions may exhibit some or all of the following signs and symptoms: <ul style="list-style-type: none"> ○ Respiratory difficulty ○ Chest pain in jaw, down arm, back, etc. ○ Nausea ○ Cold, clammy skin (sweating) ○ Sudden collapse ○ Weak, rapid pulse c. Unconscious Patient d. Miscellaneous Conditions - Other conditions that may necessitate Emergency Helicopter Extrication via Longline: <ul style="list-style-type: none"> ○ Anaphylactic shock ○ Seizures ○ Cerebrovascular accidents (CVA's) or strokes ○ Drug overdose ○ Poison ingestion, inhalation, or skin absorption ○ Serious burns 		
<p>2. Has on-site emergency responder requested rapid evacuation of patient?</p>		
<p>3. Have all other options of extraction been considered?</p> <ul style="list-style-type: none"> • Cutting a helispot • Walking/carrying patient to an existing helispot • Walking/carrying patient to a road • Do these options significantly increase risk to responders or injured person 		
<p>4. Have alternate air rescue (Military, Park Service, etc.) methods been pursued?</p>		
<p>5. Environmental hazards are manageable (fire, wind, sunset etc..)</p>		

The Decision Criteria Checklist is a process to assess whether or not the situation warrants Emergency Helicopter Extraction via Longline. A "No" response to any element on the checklist indicates that further evaluation and/or consultation may be needed.

Decision to Proceed Approved By:

Signature may need to be completed after the fact; Verbal approval will be obtained before EHE is initiated. Verbal approval should be documented and attached to this form.

Signature _____

Name/Title _____

Date/Time: ____/____/____

Helicopter Emergency Longline Last Option (HELLO)

GO/NO-GO Checklist

Incident Name: _____

Location: _____

Go, No-Go Checklist needs to be filled out jointly by Pilot and Helicopter Manager.

GO	NO GO	
		Patient is in critical need of Advanced Life Support (ALS) attention and immediate extraction, due to life threatening condition
		Other evacuation options evaluated and rejected
		Communications checked and made known to all involved
		HELLO mission plan briefed, understood, and agreed upon by all
		Environmental hazards are manageable (fire, wind, sunset)
		Manifest completed
		Load calculation completed for the mission and current conditions (HOGE)
		Complete inspection of required equipment
		All items in the aircraft have been secured
		Spotter harness and tether ready in accordance with IHRG requirements
		Required length of longline is verified and is available
		If belly band is not available then Pilot/Mechanic should pull the helicopter circuit breaker that controls the electronic release for the belly/remote hooks. The mechanical release remains available in emergency situation.
		Longline electrical connections are unplugged and secure
		Risk Assessment reviewed
		ATGS briefed and ready to support HELLO mission (if applicable)
		All involved personnel have been briefed on operation
		HELLO/Medevac is in coordination (location, time, status) with incoming EMS/ALS
		Personnel at pick-up and drop off sites identified
		Incident Commander has approved the mission

A "NO GO" response to any element on the checklist indicates a deficiency which must be addressed prior to the start of the mission.

Pilot	Signature	Date
Spotter	Signature	Date