UNITED STATES MARINE CORPS
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I MEFO 3501.1
G-3
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I MARINE EXPEDITIONARY FORCE ORDER 3501.1

From: Commanding General
To: Distribution List

Subj: I MEF STANDARD OPERATING PROCEDURE (SOP) FOR MARINE EXPEDITIONARY UNIT (SPECIAL OPERATIONS CAPABLE) TRAINING OF SPECIAL MISSIONS USING HELICOPTER ROPE SUSPENSION (HRS)

Ref: (a) JAG Manual Investigation of CH-46 Mishap on 9 Dec 99
(b) MARFORPACO P3501.2A

1. Situation

a. On 9 December 1999, seven lives were lost in a CH-46 helicopter mishap. Reference (a) provides valid recommendations to avoid repeating the circumstances that resulted in the lost lives and the CH-46 helicopter.

b. Reference (b), SOP for Helicopter Rope Suspension Training (HRST), is the primary reference in matters concerning Helicopter Rope Suspension (HRS). However, it does not address specific issues when conducting Visit, Board, Search, and Seizure (VBSS), Gas/Oil Platform (GOPLAT) seizure, Military Operations in Urban Terrain (MOUT), or the safety parameters when operating on/in these unique environments.

c. Reference (b) is the ruling authority for HRS training in I MEF. The items in this SOP addressing HRS shall be used as a supplement to standing procedures outlined in reference (b) until changes are submitted, approved, and disseminated to Marine Forces Pacific (MARFORPAC) units.

2. Cancellation. I MEFO 3600.

3. Mission. To provide guidance to operational units in the conduct of specialized training missions based on the recommendations and lessons learned from reference (a).

4. Execution

a. Commanders shall ensure that the provisions of this order are incorporated in all appropriate unit Standing Operating Procedures (SOP) and Letters of Instruction (LOI) addressing the conduct of training that includes or may include HRS.

b. All cognizant Commanders shall ensure, where appropriate, Helicopter Emergency Egress Lighting System (HEELS) or Emergency Exit Lighting systems in general are installed and operational prior to shipboard or extended overwater flight operations.

c. Commanders shall ensure, where appropriate, installation of and compliance with AFC 442, Amendment 1 (Helicopter Emergency Flotation System and water activated switch) for shipboard or extended overwater operations.

d. Personnel conducting over water operations will be briefed on aircraft ditching procedures prior to entering aircraft. Furthermore, specific egress items such as emergency exit location, emergency exit lighting, and the use of HEEDS/HABD shall be briefed and discussed to frequent flyers when conducting extended operations overwater emphasizing operational discipline, risk management, and appropriate SOPs.

NOTE

Frequent flyers are those individuals designated by the commander who are frequent passengers onboard helicopters conducting overwater flights. Examples are the heliborne infantry company, the Maritime Special Purpose Force (MSPF), the Tactical Recovery of Aircraft and Personnel (TRAP) Force, and selected staff. This list is not inclusive.

e. Commanders shall conduct risk analysis with special emphasis on "load versus survivability" tests with mission essential equipment lists and the currently employed flotation vests. Mission essential equipment lists shall be tailored to the results of these tests and will provide personnel the ability to remain afloat without physical exertion. The Helicopter Emergency Egress Device (HEED)/Helicopter Aircrew Breathing Device (HABD) will be added to the mission essential equipment list for frequent flyer Sailors and Marines. Continue to ensure frequent flyer Sailors and Marines attend and are current and proficient in water survival, helicopter egress, HEED/HABD, and, if applicable, the 9D5A device (dunker) training.

f. Personnel not fitted with the Full Spectrum Battle Equipment (FSBE) shall wear an appropriate flotation device throughout the entire evolution. Flotation shall be worn underneath battle gear; however, battle gear must remain open and flotation activation device accessible. Additionally, HABD/HABD must be placed in a manner that is easily accessible.

g. The tactical commander shall conduct equipment checks prior to entering aircraft to ensure equipment configuration is in compliance with this order.

h. No personnel shall be unbuckled prior to the aircraft stabilizing in a hover over the insertion point and clearance from the Aircraft Commander to deploy the rope has been given.

i. All extraneous equipment or gear such as packs, breaching equipment, or radios shall be placed on the deck under the seats to ensure security. This equipment/gear will not be donned until personnel are cleared to unbuckle under the provisions of paragraph 4.g.

j. Commanders whose personnel utilize the CMU33P survival vest shall conduct annual familiarization training in order to facilitate the utilization of proper immediate action steps by personnel in emergency water survival situations. Additionally, Commanders will take appropriate actions to ensure operability of the CMU33P in an emergency water survival situation.

k. CH-46 and CH-53 aircraft shall not install the XM-218 0.50 caliber Aircraft Machinegun during the overwater portion of any training flight when passengers are embarked. However, the guns may be installed (airborne or on the ground) once overland ("feet dry"), employed, then uninstalled prior to returning to overwater ("feet wet") flight.

l. During mission analysis of VBSS, GOPLAT, or MOUT HRS operations, aircraft commanders shall identify and discuss insert point reference points and altitudes, minimum safe approach altitude, and obstacle clearance. Holding and ingress altitude will be not less than 200 feet AGL. A descending/decelerating approach will be flown to the insert point that will provide the aircraft maximum tactical advantage based on thorough objective area and LZ analysis. Each HAC will plan an approach to arrive over the insert point no lower than **25** feet. Once the aircraft is in the hover regime, the aircraft will hover at an appropriate altitude based on pilot visual cues and desired length of the slide determined by HRS Marines. However, this hover altitude will be no lower than **10** feet. Additionally, emphasis shall be placed on aircrew coordination and crew responsibilities during all phases of the operation.

m. When using Special Insertion/Extraction (SPIE) as a means to extract the assault force, procedures set forth in reference (b) will be adhered to. The aircraft will begin a slow ascent straight up until the last roper is clear of all obstacles prior to transitioning to forward flight.

n. Hover heights will provide clearance at least **10** feet vertically and horizontally from any physical or notional obstacle.

o. If the aircraft develops a drift that takes the exit point within five feet of a deck edge, the HRST Master will stop FASTROPE operations until the aircraft is repositioned over the insert point. If a rope drops off of a platform or deck, the HRS Master will stop FASTROPE operations, retrieve the rope, and allow the aircraft to reposition over the insert point before continuing slide.

p. If a roper becomes entangled, remain in a hover until the roper is free or is pulled into the aircraft. If near the ground, the belay man will assist the hung roper in freeing himself. At no time shall the hung roper take his hands off of the rope to attempt to free himself or jettison gear.

q. When conducting FASTROPE operations, the rope will be dropped to the deck or retrieved completely into the aircraft prior to transitioning to forward flight.

r. When HRS operations are conducted during VBSS and GOPLAT training, there shall be an Aircraft Commander (AC) familiar with HRS and shipboard procedures or GOPLAT operations acting as the site controller. A Marine shall be present at the insert point and will act as rope belay for the first HRS Marine. The Safety Insert Officer (SIO) will be present as outlined in reference (b). The SIO shall have the ability to communicate with the controlling agency/site controller and each aircraft (the SIO and AC/site controller may be the same individual).

NOTE

The aircraft commander/site controller/SIO is usually the I MEF G-7 SOTG Air Officer for all currently conducted CONUS VBSS and GOPLAT training. Training occurring while deployed or not under I MEF G-7 supervision shall adhere to the procedures listed above.

s. When conducting HRS to the intended landing area of an air capable ship, the ship shall be at flight quarters and procedures set forth in NWP-42 (Shipboard Helicopter Operating Procedures) shall be adhered to. The controlling agency shall be the Air Boss or Helicopter Control Officer appointed by the ship's Commanding Officer and will be assisted by the site controller. A Marine shall be present at the insert point and

will act as rope belay for the first HRS Marine. When operating to a non-standard insert point (e.g. bridge wing or bow), the provisions outlined in paragraph 4.q shall be adhered to.

t. When conducting HRS operations in a MOUT environment, the site controller shall be an Aircraft Commander familiar with HRS operations. A Marine will be present at the insert point and will act as rope belay for the first HRS Marine. The SIO will be present as outlined in reference (b). The SIO shall have direct communication with the site controller (the SIO may be the same individual as the AC/site controller).

u. Aircraft control procedures and position of deck safety personnel shall be a mandatory preflight briefing items for all VBSS and GOPLAT operations.

5. Administration and Logistics

a. There shall be safety vessels in the water when conducting VBSS or GOPLAT exercises. These boats shall have a free board that will support surface extract of personnel, shall have boat space available to support the number of personnel in the aircraft conducting HRS, and shall be able to quickly maneuver into position to extract personnel if required. Additionally, appropriately trained and equipped swimmers shall be located in these vessels. Under exceptional circumstances, when surface safety vessels are unavailable, a Search and Rescue helicopter equipped to conduct SAR, shall be available on scene with appropriately trained and equipped swimmers and rafts to assist in extraction of personnel if required. The Deputy Commanding General, I MEF, when operating in CONUS or the MEU Commanding Officer, when deployed, shall be the only individuals with authority to approve the conduct of such exercises when surface safety vessels are unavailable.

b. Each aircraft shall be in radio contact with and cleared by the controlling agency prior to approaching the insert point during all VBSS training and by the site controller for GOPLAT and MOUT HRS training.

c. The verbal calls from the controlling agency/site controller of "waveoff (or go around)," "hold," and "abort" shall be treated as mandatory by aircraft conducting HRS operations. All other calls, per NWP-42 and other applicable directives shall be advisory in nature but treated with all due regard.

d. Commanders and Officers Conducting Exercises shall conduct periodic medical emergency and triage drills in order to rehearse implementation of standing medical plans.

6. Command and Signal

a. Command. The Assistant Chief of Staff G-3, I MEF shall maintain staff cognizance of all HRS training and ensure this SOP is properly disseminated to operational units prior to conducting training.

b. Signal. This Order is effective the date signed.

M. W. HAGEE

Distribution: LIST I A, D, H/LIST II