From: Chief of Naval Operations

Subj: NAVY HELICOPTER ROPE SUSPENSION TECHNIQUES AND HELICOPTER CAST AND RECOVERY POLICY AND ADMINISTRATION

Ref: (a) MCO 3500.42B
(b) OPNAVINST 3130.6E
(c) OPNAVINST 5430.48E
(d) USSOCOM M350-6 (NOTAL)
(e) COMNAVSPECWARCOMINST 3000.3B
(f) COMEODGRUONE/COMEODGRUTWOINST 3000.1D (NOTAL)
(g) NAVSEAINST 13482.1
(h) NAVAIR 13-45-2 (NOTAL)
(i) NAVSEA ULSS 13482SER089 (NOTAL)
(j) OPNAVINST 5700.7H
(k) OPNAVINST 5102.1D
(l) OPNAVINST 5100.23G
(m) NWP 1-03.1
(n) JAGINST 5800.7F
(o) SECNAVINST 5000.2E
(p) OPNAVINST 4441.12D
(q) OPNAVINST 1500.75C
(r) OPNAVINST 5450.180E

Encl: (1) Glossary of Terms

1. Purpose. To establish policy and assign responsibilities for Navy helicopter rope suspension techniques (HRST) and helicopter cast recovery operations.

2. Scope. This instruction applies to all Navy activities engaged in HRST and cast recovery operations as a part of their mission except: United States Marine Corps (USMC) personnel, their assigned U.S. Navy personnel, and personnel conducting search and rescue (SAR) operations. USMC personnel and U.S. Navy personnel assigned to Marine Corps units are governed by reference (a). U.S. Navy personnel performing cast and recovery and or rappel operations in support of official Navy SAR duties are governed by reference (b).
3. Definitions

a. For the purpose of this instruction, the term HRST and cast recovery operations is used to encompass rappel; fast rope; Fast Rope Insertion and Extraction System (FRIES); special patrol insertion and extraction (SPIE); cast and recovery; and hoist operations. Throughout this instruction, HRST and helicopter cast recovery operations refers collectively to the elements and functions associated with the performance and execution of these operations.

b. Terms defined as they relate to Navy HRST and helicopter cast recovery operations policy and or operations can be found in enclosure (1).

4. Policy. Mission accomplishment while maintaining safety of personnel is the primary consideration in all HRST and helicopter cast recovery operations training and operations. As a result, the following policies and procedures are established:

a. Policy Authority. Chief of Naval Operations (CNO) is the overall authority for all policy governing U.S. Navy HRST and helicopter cast recovery operations. Per reference (c), Director, Expeditionary Warfare (OPNAV N95), acting for CNO, shall coordinate all related matters, as applicable. Departure from established operating and safety procedures outside of those mentioned within this instruction requires a waiver forwarded via the chain of command to OPNAV N95.

b. Department of Defense (DoD) Proponent. Per reference (d), the United States Special Operations Command is the advocate for rotary-wing infiltration and exfiltration techniques for all special operations forces. This includes rappel, fast rope, FRIES, ladder operations, hoist operations, special vehicle loads, cast, SPIE, and combat rubber raiding craft deployment.

c. Training Agent

(1) Naval Special Warfare Command (NAVSPECWARCOM) is designated the training agent for HRST and helicopter recovery related training for NAVSPECWARCOM personnel. NAVSPECWARCOM
provides guidance for training and is the approval authority for associated NAVSPECWARCOM HRST and helicopter cast recovery operations courses of instruction.

(2) Commander, Navy Expeditionary Combat Command (COMNAVEXPDCMBTCOM) is designated as the training agent for all COMNAVEXPDCMBTCOM personnel involved in HRST and helicopter cast recovery operations training. COMNAVEXPDCMBTCOM shall provide guidance for training specific to the explosive ordnance disposal (EOD) community and shall be the approval authority for the EOD HRST and cast recovery operations.

d. Technical Authority. Commander, Naval Sea Systems Command (COMNAVSEASYSCOM), Program Manager, Ships Naval Special Warfare Program Office (PMS-340) is the technical authority for authorized for Navy use designation of all equipment and systems used for HRST and cast recovery operations. The use of HRST and helicopter cast recovery equipment, which is not approved for military service use or unauthorized modification of approved equipment is strictly prohibited. Any request to modify equipment shall be forwarded via the chain of command to OPNAV N95 for approval with information copy to PMS-340. Equipment that will be permanently or semi-permanently attached to the aircraft must be approved by Naval Air Systems Command.

e. Authorized HRST and Helicopter Cast Recovery Commands

(1) Only Navy commands with an HRST and cast recovery operations mission established in the command’s required operational capability and projected operational environment instruction are authorized to conduct HRST and cast recovery operations and or training, and to procure, store, and maintain authorized for Navy use HRST and helicopter cast recovery equipment.

(2) Authorized HRST and helicopter cast recovery commands may allow personnel from other commands and Services to participate in their HRST and helicopter cast recovery operations. The commanding officer (CO) of an authorized HRST and helicopter cast recovery command shall require those outside personnel participating in HRST and helicopter cast recovery operations complete the requisite job qualification requirements. The CO shall also request permissive temporary additional duty orders from outside participants. The CO
authorizing the temporary additional duty shall ensure that the following documentation is in place (when applicable):

(a) Command letter of designation as an HRST and helicopter cast recovery basic roper, master, or instructor.

(b) Proof of currency within the previous 12 months or receipt of refresher training.

f. Personnel Qualifications

(1) HRST and helicopter cast recovery operations shall be conducted only by qualified and current military personnel, DoD employed civilian personnel, and specifically authorized DoD contracted personnel.

(2) Qualification requirements for HRST and helicopter cast recovery operations basic roper, HRST and helicopter cast recovery operations master, and HRST and helicopter cast recovery operations instructor are contained in reference (e) for NAVSPECWARCOM personnel and reference (f) for COMNAVEXPDCMBTCOM personnel.

(3) Initial and refresher HRST and helicopter cast recovery operations training shall be conducted at the unit level by command designated HRST and helicopter cast recovery operations instructors using approved training curriculum and approved joint qualification requirements’ lesson guides.

g. Use of HRST and Helicopter Cast Recovery Operations Equipment. Only DoD-owned and authorized for Navy use HRST and helicopter cast recovery equipment is authorized for use during HRST and helicopter cast recovery operations and training. The use of personally owned HRST and helicopter cast recovery equipment during military operations and training is prohibited.

h. HRST and Helicopter Cast Recovery Operations Inspection, Maintenance, and Storage Requirements. Due to the life support nature of HRST and helicopter cast recovery equipment listed in reference (g), the following shall be adhered to:

(1) HRST and helicopter cast recovery equipment shall be inspected and maintained by command designated HRST and helicopter cast recovery operations masters.
(2) HRST and helicopter cast recovery equipment, maintenance, tools, modification requirements, equipment limitations, personnel qualification requirements, personnel training requirements, and the applicable technical and field manuals are stipulated in references (h) and (i).

(3) Access to HRST and helicopter cast recovery operations maintenance and storage facilities is to be controlled by the CO. Only command designated personnel shall be allowed access to HRST and helicopter cast recovery operations maintenance and storage facilities. If required, other essential personnel shall be allowed access to HRST and helicopter cast recovery operations maintenance and storage facilities under the supervision of a command designated HRST and helicopter cast recovery master. Additionally, HRST and helicopter cast recovery equipment shall be stored and maintained separately from cargo airdrop equipment.

i. HRST and Helicopter Cast Recovery Aircraft

(1) HRST and helicopter cast recovery operations aircraft shall be rigged per references (d) through (f) and reference (h), and applicable other aircraft manuals. When using aircraft from another U.S. Military Service or Government agency, the proper manuals of that Service or agency shall be used to rig the aircraft.

(2) Qualified military, DoD employed civilian personnel, and specifically authorized DoD contracted personnel are authorized to participate in HRST and helicopter cast recovery operations utilizing the aircraft of U.S. Federal, State and local government agencies.

j. Landing Zones and Drop Zones. All landing zones and drop zones used for HRST and helicopter cast recovery training and operations shall be evaluated, selected, and operated by a qualified and designated HRST and helicopter cast recovery operations master and per references (d) through (f).

k. Deliberate Water Operations. Navy HRST and helicopter cast recovery operations commands are authorized to conduct HRST and helicopter cast recovery operations into, out of, and over open bodies of water. Requirements and procedures for deliberate water operations are detailed in references (d)
through (f) and reference (h). Personnel involved in HRST and helicopter cast recovery operations into and out of the water shall be a minimum of a second class swimmer or must be a qualified sea-air-land (SEAL), special warfare combatant-craft crewmember, EOD technician, or Navy diver. Safety swimmers must be first class swimmers or qualified as a SEAL, EOD technician, Navy diver or special warfare combatant-craft crewmember. The number of required safety swimmers shall be per the local standard operating procedures (SOP). Other Service personnel must hold their respective Service’s equivalent level of swimmer qualification.

1. Joint and Combined Training and Foreign Duty Assignment

   (1) Joint Training. Qualified U.S. Navy personnel are authorized to participate in Army, Air Force, USMC and other DoD agencies’ HRST and helicopter cast recovery operations and to use the HRST and helicopter cast recovery equipment approved by that service or agency. U.S. Navy personnel must be qualified on the other Service’s HRST and helicopter cast recovery equipment per the directives of that Service.

   (2) Combined Training

   (a) Qualified U.S. Navy personnel engaged in combined HRST and helicopter cast recovery training operations are authorized to utilize foreign military aircraft and HRST and helicopter cast recovery operations procedures provided the safety requirements are determined to be equal to or more stringent than U.S. Navy regulations by the senior U.S. Navy HRST and helicopter cast recovery operations master present. Prior to any such operation, the first flag officer in the operational chain of command of the forces involved must be notified of all planned HRST and helicopter cast recovery activities. The use of non-authorized for Navy use foreign HRST and helicopter cast recovery equipment and systems by U.S. Navy personnel during peacetime allied training requires a written authorization from the first O-6 in that person’s chain of command. Per reference (e), all foreign equipment must meet safety standards of U.S. equipment and must be inspected by a U.S. HRST and helicopter cast recovery operations master.

   (b) Qualified foreign personnel may participate in HRST and helicopter cast recovery operations from U.S. aircraft
when conducting combined training. The use of U.S. Navy-owned HRST and helicopter cast recovery equipment, systems, and facilities by foreign personnel is authorized provided such personnel are currently qualified per their particular military’s service requirements and U.S. Navy approved procedures are used.

(3) Foreign Duty Assignment. Per reference (j), qualified U.S. Navy personnel permanently assigned to billets with the armed forces of allied nations are permitted to use those nations’ HRST and helicopter cast recovery equipment, provided a waiver from OPNAV N95 has been granted. The senior U.S. Navy HRST and helicopter cast recovery operations master or roper assigned to that unit shall review the operational standards and procedures of the allied force’s HRST and helicopter cast recovery operations to ensure that no undue safety hazards exist before allowing the participation of U.S. Navy personnel.

(4) Other Overseas Assignments. All HRST and helicopter cast recovery operations qualified U.S. Navy personnel permanently assigned to overseas duty where there are no local U.S. military units conducting HRST and helicopter cast recovery operations may participate in HRST and helicopter cast recovery operations with an appropriate allied force. U.S. Navy personnel that fall into this category may use foreign HRST and helicopter cast recovery equipment, provided a waiver from OPNAV N95 has been granted. The senior U.S. Navy HRST and helicopter cast recovery operations master or roper assigned shall review the operational standards and procedures of the allied force’s HRST and helicopter cast recovery operations to ensure that no undue safety hazards exist before allowing the participation of U.S. Navy personnel.

m. Waiver Requests

(1) All waiver requests shall be submitted to OPNAV N95. An information copy shall be forwarded to PMS-340 when concerning equipment or a deviation from the authorized for Navy use list.

(2) Waiver requests shall include a description of the circumstances dictating the need for a waiver, urgency of need,
equipment or system being used, potential impact on personnel safety, required duration of the waiver, and impact if not granted.

n. Research, Development, Test and Evaluation

(1) PMS-340 is the technical authority for authorized Navy use designation of all equipment and systems used for HRST and helicopter cast recovery operations. Per reference (g), PMS-340 shall task Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), China Lake, and other qualified government test activities to test and evaluate HRST and helicopter cast recovery operations equipment systems. All test and evaluation (T&E) plans shall be approved by PMS-340. Funding shall be required from within the requesting organization’s chain of command depending on the extent of T&E required.

(2) Commander, NAVAIRWARCENWPNDIV, China Lake, is authorized to purchase and use equipment which has not been certified or authorized for Navy use for the purpose of T&E equipment and or developing procedures per specific written authorization as directed by PMS-340.

(3) Commander, Naval Special Warfare Development Group (COMNAVSPECWARDEVGRU), with specific written authorization from the cognizant type commander, operational commander, or PMS-340, is authorized to purchase, develop, train with, and use equipment which has not been certified or authorized for Navy use in conjunction with performance-related T&E procedures. COMNAVSPECWARDEVGRU shall obtain engineering and test plan guidance from NAVAIRWARCENWPNDIV, China Lake, U.S. Army Research, Development and Engineering Command, Natick Soldier Center, Natick, MA, or other qualified government agencies for HRST and helicopter cast recovery equipment or systems. All operational test data obtained shall be used for the final authorized for Navy use authorization process.

(4) EOD Training and Evaluation Unit (TEU) One and Two, with written authorization from PMS-340, are authorized to provide T&E support and services on authorized for Navy use recommended items for inclusion in reference (g). These authorized for Navy use recommended items must be DoD component safety released equipment in the operational test phase of development or commercial items that are underwriters laboratory
certified to the National Fire Protection Association 1983 standard (for category I equipment) and commercial and non-
developmental HRST and helicopter cast recovery operations equipment (categories II and III). The definition of each of
these categories can be found in reference (g). Each item requires specific written authorization from PMS-340 with
endorsement and oversight by Commander, NAVAIRWARCENWPNDIV, China Lake, Warfighter Systems and Support Division (Code
466200D).

(5) U.S. Navy HRST and helicopter cast recovery personnel, DoD civilians, and specifically authorized DoD contracted personnel who do not meet the stipulations of
subparagraphs 4f(1) through 4f(2) shall not participate in any service’s HRST and helicopter cast recovery operations T&E
without written, by-name authorization from PMS-340 for that specific event.

o. Training

(1) HRST and helicopter cast recovery operations master training shall be conducted through one of the following service approved training programs:

(a) Naval Special Warfare Center Advanced Training Command (NAVSPECWARADVTRACOM) HRST and helicopter cast recovery operations master course.

(b) NAVSPECWARADVTRACOM Detachment Little Creek HRST and helicopter cast recovery operations master course.

(c) EOD TEU One HRST and helicopter cast recovery operations master course.

(d) EOD TEU Two HRST and helicopter cast recovery operations master course.

(2) Individuals that were designated as HRST and helicopter cast recovery operations masters prior to 1 February 2003 are not required to attend one of these HRST and helicopter cast recovery operations master courses. Additional qualification and currency requirements are listed in references (d) through (f).
(3) The following HRST and helicopter cast recovery operations training conducted at the unit level shall be conducted by fully qualified HRST and helicopter cast recovery operations instructors using current lesson training guides as listed in references (e) and (f).

(a) HRST and helicopter cast recovery operations basic roper.

(b) HRST and helicopter cast recovery operations instructor.

(4) With the exception of COMNAVSPECWARDEVGRU, OPNAV N95 waiver approval shall be obtained prior to the use of non-traditional (non-service) training as a substitute for and or augmentation to traditional training programs.

5. Action. All commands exercising operational and or administrative control for HRST and helicopter cast recovery operations shall implement the policies and procedures contained in references (d) through (i), and this instruction, as applicable. SOPs shall be developed and directives shall be issued as required to ensure activities are conducted using approved equipment, systems, and procedures. SOPs should address unit specific issues that are not addressed in current publications.

a. OPNAV N95 shall:

(1) Provide Navy HRST and helicopter cast recovery operations policy guidance.

(2) Coordinate fleet requests and establish requirements for specific HRST and helicopter cast recovery equipment.

(3) Provide guidance to the Naval Safety Center (NAVSAFECEN) regarding the collection and maintenance of HRST and helicopter cast recovery operations statistics.

(4) Collect and coordinate all Navy inputs to joint service HRST and helicopter cast recovery operations instructions and publications.
(5) Coordinate associated HRST and helicopter cast recovery operations aircraft requirements with OPNAV Director of Air Warfare Division (OPNAV N98).

b. Fleet commanders, systems command commanders, type commanders, squadron and group commanders, COs, and officers in charge shall:

(1) Ensure Navy personnel use only approved HRST and helicopter cast recovery operations systems and equipment per specific authorized for Navy use requirements and parameters, unless addressed elsewhere within this instruction and or authorized by waiver from OPNAV N95.

(2) Ensure all HRST and helicopter cast recovery operations maintenance, storage, training, and administrative spaces and facilities are identified as “restricted access” life support equipment spaces and limit access to essential personnel only.

(3) Ensure HRST and helicopter cast recovery operations are conducted using approved procedures and only by personnel qualified per this instruction and per references (d) through (f), as applicable. Periodic personnel re-qualification shall also be performed per applicable directives.

(4) Develop and implement command training plans to ensure adequate training of personnel in all HRST and helicopter cast recovery operations mission areas. Evaluate the effectiveness of such training and ensure compliance with references (d) through (f) as applicable. Training plans must address equipment, systems, and ship classes approved as HRST and helicopter cast recovery operations training platforms, and provide for the development of individual skills.

(5) Maintain records of all command HRST and helicopter cast recovery activities to include official logs of HRST and helicopter cast recovery operations and copies of malfunction and incident reports, permissive orders, duty assignment letters, and certification letters. This policy is required, regardless of an individual's permanent command assignment. These documents are official records and are to be retained for 3 years; except for malfunction and incident reports which
should be maintained per reference (k) for 5 years following the end of the fiscal year in which the malfunction or incident occurred.

(6) Ensure all HRST and helicopter cast recovery operations malfunctions, mishaps, and incidents are reported per reference (k) to the NAVSAFECEN and as required per references (k) through (n). OPNAV report control symbols (RCS) contained within references (k) through (n) apply.

(7) Report all HRST and helicopter cast recovery operations equipment product quality deficiencies, design, and manufacturing defects to PMS-340 for resolution; units shall not contact the equipment manufacturers to resolve problems.

(8) Establish procedures per reference (k) to ensure that all HRST and helicopter cast recovery operations equipment and or systems involved in an incident remain untouched and secure until completion of any inquiry or investigation required by references (k) through (n). These procedures will specify that items shall not be dismantled, cleaned, or altered in any way except to remove injured personnel or reduce risk of further injury.

(9) Verify the safety and effectiveness of all HRST and helicopter cast recovery operations by performing periodic operational, administrative, and materiel inspections. Any safety related trend data will be reported to NAVSAFECEN.

c. PMS-340 shall:

(1) Designate a technical manager for U.S. Navy HRST and helicopter cast recovery activities whose responsibilities shall include the acquisition, evaluation, logistics, operation, and maintenance of HRST and helicopter cast recovery operations equipment and systems.

(2) Provide technical support to CNO as required in the development of HRST and helicopter cast recovery operations policy and advise the CNO on matters which affect it.

(3) Establish and administer procedures for the safety assessment of commercially available and other DoD Service’s type classified equipment leading to an authorized for Navy use
designation. Maintain a listing of all systems and equipment authorized for use by Navy commands involved in HRST and helicopter cast recovery activities. Revise the list as required and retain documentation supporting all approvals.

(4) Develop and provide HRST and helicopter cast recovery operations equipment, procedures, and systems with tailored logistics support in response to OPNAV N95 approved requirements and per references (o) and (p).

(5) Provide recommendations to OPNAV N95 regarding requests for waiver of HRST and helicopter cast recovery operations equipment, equipment maintenance, equipment service-life and any other HRST and helicopter cast recovery operations technical information as required.

(6) Assist in the correction of safety deficiencies discovered during inspections, administrative site surveys and mishap investigations. Provide technical guidance or recommend policy changes for approval by higher authority to preclude recurrence of deficiencies.

(7) Provide technical support for the design and development of changes required to upgrade or correct system design deficiencies identified through surveys, mishap investigations, and technical reviews.

(8) Implement a configuration management program for all authorized for Navy use listed items and related equipment.

(9) Develop and maintain a user logistics support summary and maintenance plan on all authorized for Navy use listed items. Provide technical requirements for the use, maintenance, repair, storage, service life, operational limitations and or procedures not found in other applicable policy or publications.

d. Commander, Naval Facilities Engineering Command shall:

(1) Provide recurring safety-of-use inspections and certifications of Navy HRST and helicopter cast recovery operations training apparatus per the DoD and industry standards, and immediately report any deficiencies to the parent command.
(2) Provide engineering guidance for all naval facilities requiring HRST and helicopter cast recovery training apparatus repairs, modifications, improvements and new construction.

(3) Commands should coordinate with their installation public works officer (PWO) to accomplish a facility certification at the frequency determined by the PWO.

e. NAVSPECWARCOM shall:

(1) Provide training safety policy and procedures for NAVSPECWARCOM HRST and helicopter cast recovery operations curriculum per reference (q).

(2) Exercise approval authority for HRST and helicopter cast recovery operations related curriculum taught at NAVSPECWARCOM training activities.

(3) Review reference (e) annually to identify any conflicts with this and any applicable joint service instruction and or publication. Safety related conflicts shall be reported via Navy message.

f. COMNAVEXPDCMBTCOM shall:

(1) Provide training safety policy and procedures for EOD HRST and helicopter cast recovery operations curriculum per reference (q).

(2) Exercise approval authority for HRST and helicopter cast recovery operations related curriculum taught at Navy EOD training activities.

(3) Review reference (f) annually to identify any conflicts with this and any other applicable joint service instruction and or publication. Safety related conflicts shall be reported via Navy message.

g. Commander, Naval Supply Systems Command shall:

(1) Provide material support to meet fleet requirements for HRST and helicopter cast recovery equipment and systems designated as authorized for Navy use per reference (p).
(2) Provide supply management guidance for Navy HRST and helicopter cast recovery equipment and systems. Maintain liaison with PMS-340 following existing program support agreements.

h. NAVSAFECEN shall:

(1) Carry out the provisions of references (k), (m), (q), and (r) as they relate to Navy HRST and helicopter cast recovery training and operations.

(2) Evaluate all HRST and helicopter cast recovery equipment malfunctions, incidents and mishaps. As directed by PMS-340, participate in safety mishap review boards. Act as a board member and technical adviser and provide technical and procedural expertise for class A, class B, and selected class C and class D mishaps.

(3) Maintain a data repository for all HRST and helicopter cast recovery operations malfunction and incident reports. Analyze compiled data for trends in personnel injuries, equipment performance, and procedural adequacy. Annually distribute safety trend analysis results and statistics to all commands that conduct HRST operations.

(4) Provide safety assistance to PMS-340 and commands conducting HRST and helicopter cast recovery operations as an essential part of their assigned mission. Review safety assessments on new equipment leading to an authorized for Navy use designation.

(5) Advise CNO on the status of the Navy safety and occupational safety and health program as it relates to HRST and helicopter cast recovery activities.

(6) Maintain an HRST and helicopter cast recovery operations safety checklist and triennially conduct safety surveys in conjunction with premeditated personnel parachuting program safety surveys on Navy commands per reference (r) or as directed by OPNAV N95. Checklists shall be made available prior to the safety survey.
(7) Conduct high risk training safety surveys on all Navy units authorized to conduct HRST and helicopter cast recovery master training at least once every 3 years.

6. Records Management. Records created as a result of this instruction, regardless of media and format, shall be managed per Secretary of the Navy Manual 5210.1 of January 2012.

7. Reports Control

   a. OPNAV RCS’ contained within references (k) through (n) apply to reporting requirements contained within subparagraph 5b(6).

   b. OPNAV RCS 3501-14 has been assigned to Safety Trend Data Report contained within subparagraph 5b(9).

   c. OPNAV RCS 3501-15 has been assigned to Annual Safety Trend Analysis Results and Statics Report contained within subparagraph 5h(3).

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GLOSSARY OF TERMS

1. Authorized for Navy Use. The designation applied to select HRST and helicopter cast recovery equipment, tools, systems, accessories, and components that have undergone design safety reviews, T&E, or both to ensure proper function, personnel safety, and suitability for military operations. Items can be designated authorized for Navy use only by the HRST and helicopter cast recovery operations technical authority, PMS-340. Reference (g) provides a list of authorized for Navy use HRST and cast recovery equipment and or systems including associated restrictions and amplifying notes. For the most current list or to check for any updates to the authorized for Navy use list, go to the PMS-340 Web site: https://www.pmsnsw.org. The PMS-340 Web site requires a common access card for access.

2. Cast and Recovery Operations. The premeditated act of exiting from a helicopter in flight into an open body of water. Recovery of the swimmer is typically accomplished by use of a specially designed ladder, a SPIE rope, or by raising the swimmer with the helicopter’s rescue hoist. Refer to applicable aircraft Naval Air Training Operating Procedures Standardization or Navy tactics, techniques, and procedures documents for height and speed limitations of specific aircraft while conducting these operations.

3. Fast Rope. A specially designed rope that is suspended from a helicopter and allows personnel to quickly descend from the helicopter to the ground. In most cases, personnel use only their hands and feet to attach themselves to the rope. In some instances, a mechanical descender can be used to help accommodate a heavy load of combat equipment.

4. Fast Rope, Insertion and Extraction System (FRIES). A specially designed rope suspended from a helicopter that allows for quick insertion or extraction of personnel. The FRIES rope may be used to insert or extract personnel into and or from areas which the helicopter cannot land such as forests, crowded urban areas, open bodies of water or a ship. When used for extraction purposes, up to six personnel can be connected to the bottom portion of the rope by means of a SPIE harness and carabineer.
5. **Hoist Operations.** Hoisting is an effective means of extracting personnel, injured personnel, and equipment from the water or a confined area. Additionally, the hoist can be used to infiltrate personnel and equipment.

6. **Quality Assurance.** The independent technical review, test, and approval of procedures, equipment, or systems to ensure safe, reliable performance that is within specified operational limits.

7. **Quality Assurance Authority.** The delegated authority within PMS-340 responsible for carrying out quality assurance functions and procedures as they pertain to HRST and helicopter cast recovery operations equipment and systems; this term also refers to the specific code so designated within COMNAVSEASYSCOM (i.e., PMS-340).

8. **Rappelling.** An intentional descent of a person from a helicopter by the use of a specially designed rope. Typically the rope is routed through a descending device which is attached to a harness worn around the waist. Rappelling allows a very controllable rate of descent even when personnel are carrying a reasonably sized equipment load.

9. **Special Patrol Insertion and Extraction (SPIE).** A specially designed rope (typically 120 feet in length) that is suspended from a helicopter and is used to insert or extract personnel to and or from areas which the helicopter cannot land such as forests, crowded urban areas, open bodies of water or a ship. Up to 14 personnel are connected to the bottom third of the rope by means of a specially designed harness.

10. **Waiver.** A temporary authorization to depart from established operating and safety procedures, to use items not currently authorized for Navy use, or to exceed specified operational limits. Only OPNAV N95 can approve a request for a waiver.