



DEPARTMENT OF THE NAVY
UNITED STATES NAVAL ACADEMY
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USNAINST 1500.1
Ser 28/Safety
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USNA INSTRUCTION 1500.1

From: Superintendent, U.S. Naval Academy

Subj: USNA HIGH RISK TRAINING SAFETY PROGRAM

Ref: (a) OPNAVINST 1500.75 series
(b) OPNAVINST 5450.336 series
(c) OPNAVINST 5102.1 series
(d) NFPA 1403
(e) OPNAVINST 3500.39 series
(f) OPNAVINST 5100.23 series
(g) OPNAVINST 1500.25 series

Encl: (1) High Risk Training Safety Organization Chart
(2) High Risk Training and Courses Listing

1. Purpose. This instruction amplifies Office of the Chief of Naval Operations (OPNAV) policy and procedures to abate or minimize mishaps during High Risk Training (HRT).

2. Discussion. The U.S. Naval Academy (USNA) is a unique training environment involving multitudes of HRT and activities, including formal coursework and non-traditional training. Aggressive training programs prepare personnel to perform mission essential high risk tasks. References (a) through (c) recognize USNA as a Training Agency to ensure training is conducted in a realistic manner while maintaining a safe learning environment. To comply with references (a) through (g), USNA developed policy outlining roles and responsibilities to implement this instruction, and the associated addendums for High Risk Training Safety (HR-TS), to ensure safety and protection of USNA personnel and equipment.

3. Scope and Applicability. This instruction defines and assigns those responsibilities and applies to all USNA personnel (military, midshipmen, midshipmen candidates, civilian, and contractors) whose duties include evolutions or tasks involving HRT and HR-TS. As a Training Agency, USNA will exercise Echelon II control and oversight of management, support programs, and functional areas of subordinate organizations per reference (a). Extracurricular activities (ECA) are not governed by this instruction but shall be evaluated via risk assessments to determine the risk of serious injury. ECAs deemed high risk using the criteria of reference (a) shall be identified annually in writing, evaluated by the High Risk Training Safety Administrator (HR-TSA), and at minimum comply with reference (g).

4. Policy. All levels of command are responsible for implementing and maintaining an aggressive HR-TS program per reference (a).

5. Roles and Responsibilities. Implementing the HR-TS program at all USNA high risk (traditional and non-traditional) sites ensures a safe training and working environment for staff and midshipmen. The organization and personnel identified in this instruction provide knowledgeable professionals to implement, evaluate, and oversee programs associated with USNA safety policies, both internal and external to the HR-TS program. The roles and responsibilities outlined below include all matters pertaining to HR-TS execution, HR-TS oversight evaluations, and mishap investigations within the USNA domain. Enclosure (1) provides direction for developing the USNA HRT safety organizational structure.

a. Superintendent

(1) Issue amplifying policies and provide technical guidance for managing and implementing a viable Training Safety Program that includes a process to evaluate the effectiveness and execution of HR-TS programs and associated requirements per reference (a).

(2) Pursue a HR-TS program that minimizes the probability of mishaps and related injuries to midshipmen, staff, and Technical Training Equipment (TTE) during formal training.

(3) Schedule and oversee on-site HR-TS Evaluations of all high risk courses and ECAs at least once every 24 months by developing and promulgating an annual evaluation schedule by 1 October.

(a) Conduct HR-TS Evaluations immediately after modifications to previously identified HRT courses or activities or when they have been changed and introduce additional risk. This will be on a case-by-case basis as determined by the Safety Officer.

(b) Conduct HR-TS Evaluations of newly developed high risk courses, training, and activities.

(4) Analyze mishap statistical data and ensure activities with statistical irregularities or adverse trends are evaluated for possible improvements to abate or minimize mishap occurrences.

(5) Interpret standards, regulations, policies, and procedures, and provide guidance when regulations are lacking clarity or conflicting standards.

(6) Initiate a Safety Investigation Board (SIB) upon notification of a Class A or Class B on-duty mishap per reference (c), and ensure all reportable mishaps are entered into the Enterprise Safety Application Management System (ESAMS), validated, and closed. All Class A and B mishaps shall be entered into ESAMS and the Web Enabled Safety System (WESS) to ensure data availability.

(7) Approve course unique Instructor Training Plans for all high risk courses.

(8) Designate, in writing, a HR-TSA. The following are prerequisites:

(a) HR-TSA must have skills in hazard recognition, HR-TS, and knowledge of the referenced instructions.

(b) HR-TSA must have successfully completed: NAVOSH Assessment Tools and Strategies, A-493-0889; and Mishap Investigation (Ashore), A-493-0078.

(9) Determine a Course of Action (COA) for a training event when the HR-TSA or department, Brigade, or Naval Academy Preparatory School (NAPS) Training Safety Officer (TSO) identifies ineffective controls. The COA may include, but is not limited to:

(a) Cancelling the event pending HRT safety evaluation.

(b) Implementing additional mitigating controls to continue training.

(10) Make the final determination on recommendations to change the list of high risk courses.

b. USNA HRT Safety Administrator (HR-TSA)

(1) Serve as the central point of contact for USNA's HR-TS policy and related matters.

(2) Ensure HRT activities correctly apply HR-TS standards and that hazard mitigation efforts are effective.

(3) Assist department, Brigade, and NAPS TSOs to develop HR-TS policy and procedures, as requested.

(4) Assist or lead mishap investigation teams, as requested.

(5) Ensure the chain of command is promptly notified when issues arise affecting safe employment of HRT.

(6) Assist or lead evaluations of all HRT sites.

(7) Assist HRT activities to identify and define mission unique HR-TS requirements.

(8) Assist department, Brigade, and NAPS TSOs to analyze training related mishaps, if requested.

(9) Upon notification of a Class A or Class B training related mishap at USNA, contact the affected department, Brigade, or NAPS safety officer and HR-TSO and render assistance in developing a 72-hour profile, and immediately begin a mishap investigation per reference (c).

(10) Conduct a TSO Safety Committee meeting, either in person or via conference call. These committee meetings shall occur biannually and be documented in ESAMS.

(11) Assist in evaluating and reviewing risk assessments for high risk courses, training, and ECAs.

(12) Observe HRT evolutions at frequency intervals as required by the hazards associated with the training being conducted.

(13) Provide an annual schedule of HRT evaluations to Commander, Naval Safety Center NAVSAFECEN by 1 October for the forthcoming fiscal year.

(14) Annually update and maintain the list of all USNA HRT and courses.

(15) The USNA Safety Officer will serve as the HR-TSA.

c. Brigade, NAPS, and Departments with HRT or courses shall:

(1) Ensure all training and courses that are considered high risk are in compliance with this instruction. Although not an all-inclusive list, enclosure (2) provides USNA's HRT and courses.

(2) Request HR-TSA review risk assessments with an appropriate subject matter expert (SME) whenever new courses, training, or events are developed, or existing courses are modified.

(3) Ensure the five-step risk assessment process is employed when new courses, training, or ECAs are initiated or modified. For the purposes of this instruction, a residual Risk Assessment Code (RAC) 1 or 2, as well as an assignment of RAC 3 in Severity Level I or II, must be considered high-risk.

(a) A residual RAC 3 in Severity Level III or IV (although not high risk by definition) shall be reviewed by the HR-TSA prior to the activity's commencement.

(b) It is widely accepted that administrative training (classroom only) does not pose a reasonable element of risk to the staff or midshipmen; thus, a risk assessment may not be necessary. However, if the classroom environment introduces high risk equipment or items that will be handled, then a risk assessment must be conducted for this portion of the training.

(c) Ensure each step of the operation has been thoroughly evaluated in the risk assessment. Include appropriate student-to-instructor ratios as a control for mitigating risks.

(d) Department Heads (or equivalent) must approve (sign and date) all risk assessments for newly developed or modified high risk courses that require revised risk assessments. The annual reviews must be conducted by the department, Brigade, or NAPS TSO.

- (4) Ensure all curricula and standard operating procedures (SOPs) for each HRT event are clearly annotated with identified risks.
- (5) Ensure safety requirements, control measures, and lessons learned are incorporated into the HRT curricula, and any unnecessary risk elements are removed from training if they are not essential to completing.
- (6) Identify HRT prerequisites that reflect physical, academic, and performance standards required for completion.
- (7) Include Drop on Request (DOR) procedures in the curricula of all voluntary courses.
- (8) Include Training Time Out (TTO) procedures during all HRT. TTO procedures should be developed to protect midshipmen and staff without jeopardizing the training objectives. Any modifications to the procedures must be reviewed and approved by the Superintendent, Commandant, Cost Center Head, Director, or Department Head.
- (9) Develop a Core Unique Instructor Training (CUIT) plan for each high risk course, including familiarization with all safety controls, HRT Emergency Action Plan (EAP), training equipment, and Personal Protective Equipment (PPE), as well as definitions of, and procedures for, reporting mishaps, near-misses, and unsafe or unhealthful working conditions. Additionally, the CUIT must include guidance on TTO and DOR policies and procedures, as applicable. All CUITs for high risk courses must be reviewed by the USNA HR-TSA.
- (10) Ensure all approved CUIT processes place emphasis on instructors' full understanding of the training platform operation, identified risks, and control measures necessary to identify and prevent HRT mishaps.
- (11) Approve HRT course schedule variations and evolution sequencing for all HR-TS curricula.
- (12) Provide an annual schedule of HRT inspections and evaluations to the HR-TSA by 15 September for the forthcoming fiscal year.
- (13) Submit recommended changes to the list of high risk courses to the HR-TSA.
- (14) Ensure all instructors receive thorough HR-TS indoctrination applicable to site specific hazardous operations and training platforms.
- (15) Conduct training with approved HRT curricula, ensuring safety precautions are in place and that instructors adhere to established safety procedures and protocol.
- (16) Ensure all HR course risk assessments are reviewed annually by the department, Brigade, or NAPS TSO. This review must be documented in writing.

(17) Ensure all required instructors, safety observers, and other support personnel are present whenever HRT is conducted. Assign additional instructors or safety observers to mitigate any additional risks. Ensure personnel have been properly trained to perform their duties in instances where non-instructors are required to fulfill a role in training.

(18) Designate a sufficient number of TSOs to properly oversee HRT (e.g., Plebe Summer).

(19) Appoint the TSO(s) in writing. The appointment letter shall list all high-risk courses under the TSO's responsibility, as well as the course observation periodicity (no less than once per year).

(a) TSO(s) shall be E-7 or senior or the civilian equivalent, and required to complete a specific HR-TSO Job Qualification Requirement (JQR) developed by the SME and reviewed by the HR-TSA.

(b) TSO JQRs shall include, at a minimum, familiarization with HR-TS instructions, TSO responsibilities, all appropriate curricula, and pertinent CUIT plans. Additionally, JQRs shall include familiarization with all high risk evolutions, associated training platforms, and devices to the extent necessary to properly evaluate the assigned training. JQRs shall also include general familiarization with ESAMS and other appropriate reporting and recording methods.

(c) Ensure TSO(s) conduct evaluations of all HRT technical training equipment, devices, training areas, and platforms to ensure proper operation, maintenance, and compliance with applicable directives.

(d) Ensure the TSO(s) attend HR-TSA safety committee meetings.

(20) Training must also be specific and include safety policies, directives, precautions, appropriate technical manuals associated with the training platform and subject matter, lessons learned from fleet training mishaps, hazard recognition, training safety protocol, and other material deemed appropriate.

(21) Upon receiving a prospective instructor's orders, determine if the nominee will fill a HRT instructor position and coordinate with the detaching command to initiate instructor screening. For courses that have both high-risk and non-high risk training segments, an instructor does not need to be screened to teach a high risk course if they will only be teaching non-high risk portions of the course.

(22) Ensure every HRT instructor is properly screened prior to teaching students per reference (a). The military instructor screening process must include:

(a) Service record reviews and personal interviews. This may be delegated by the interviewing authority, in writing, to a qualified subordinate. This requirement may be waived if documentation proves that the prospective instructor was screened by the detaching command.

(b) Medical screening conducted by competent medical authority (i.e., medical officer or credentialed Physician Assistant (PA), Nurse Practitioner (NP) (family practice), or Independent Duty Corpsman (IDC)).

(c) Documenting completion via a Page 13 service record entry indicating the member was screened and found suitable for high risk instructor duty.

(23) Ensure high risk instructors are certified for the courses they are instructing.

(24) Ensure all HRT instructors complete Cardiopulmonary Resuscitation (CPR) training and remain current.

(25) Ensure all HRT instructors receive initial blood borne pathogen awareness training and annual refresher training.

(26) Ensure all instructors assigned to HRT duties complete basic first aid training.

(a) HRT requiring a Hospital Corpsman (HM) or Emergency Medical Technician (EMT) onsite (within a two minute response) is exempt from the basic first aid training requirement. The Corpsman or EMT must be physically present during HRT events.

(b) Basic first-aid training can be sought through various recognized training mediums such as the American Heart Association, American Red Cross, National Safety Council, American Safety and Health Institute, or other local vendors.

(27) When a HM, EMT, or other medical support person is required, they must be present throughout the entire HRT evolution.

(28) Ensure a HM, EMT, or other qualified person, as well as emergency oxygen, is available on scene during all aquatic training. Establish a clear set of written procedures when using USNA aquatic facilities. This shall include a risk assessment and mandatory use of a pool deck safety observer. Although a full EAP is not required, activities shall have a list of emergency phone numbers on the pool deck in the event of a mishap.

(29) Medical personnel assigned must have a fully inventoried and appropriate medical response bag on-hand and ready for use during all HRT evolutions.

(30) Develop an instructor training jacket for compiling all required instructor qualification documentation as set forth by this instruction.

(31) Ensure all students are medically screened prior to participating in HRT. USNA personnel will use the Naval Education and Training Command, (NETC) 1500/5 High Risk Student Medical Screening Form to document medical screening. This form is available on Naval Forms On-Line, <http://navalforms.daps.dla.mil> (select the "forms" tab and "NETC" as the command).

(a) Part 1 shall be signed by a medical provider (supplying command physician or authorized command health care professional to include MD, PA, NP, or IDC).

(b) Part 2 can be signed by a HM, MD, PA, NP, or IDC at the discretion of the medical provider.

(c) Part 3. Any "yes" answers or issues may be cleared at the discretion of the Training Site Authority. The Training Site Authority is any individual appointed in writing to make the final determination if an individual is approved to attend training.

(32) Establish a process to ensure students meet course prerequisites that reflect physical requirements and assess the student's medical status and fitness for training prior to participating in HRT. Procedures must include a system to ensure instructors are informed of students who were previously "set back" due to medical conditions that might cause future problems. These procedures must not rely solely on students informing instructors of changes in their medical status. Students evaluated as unfit for duty or not suitable for training shall be removed from training immediately and may not continue until medically cleared.

(33) Ensure a risk assessment is performed and that controls are in place to mitigate hazards for all physical fitness training that is part of a course, preconditioning efforts, or is a requirement for graduation. Physical fitness training must be conducted in a safe environment. Consideration must be given to the local environmental factors, i.e., pests, insects, heat, cold, and lighting. Complete the Navy Physical readiness protocols and use further guidance located at: http://www.public.navy.mil/bupersnpc/support/21st_Century_Sailor/physical/Pages/default2.aspx.

(34) Training conducted in an environment that subjects students or staff to extreme temperatures must include controls to mitigate the hazard. Heat or cold injury prevention programs, when properly implemented and adhered to, are highly effective and shall be included as part of mitigation efforts. NAVMED P-5010-3 provides the basic requirements of heat or cold injury prevention.

(35) Ensure all students are briefed on DOR policy and procedures. A DOR briefing shall be given prior to commencing any HRT.

(36) Ensure students are thoroughly briefed on TTO policy and procedures prior to starting a training event. For all-day or multi-day evolutions, a statement prior to training such as "TTO policy and procedures still in effect" will suffice. Evolution specific TTO procedures shall also be added where needed. These procedures shall be standardized to conform with established fleet distress indicators where appropriate (e.g., standard small arms range procedures, diving distress signals, etc.).

(37) Develop an HRT-EAP for response to mishaps. All HRT-EAP data (e.g., dates of walk-through, exercises, and remarks) must be documented in ESAMS.

(a) The HRT-EAP shall cover initial emergency actions for instructors and students to follow in the event of a medical emergency, inadvertent weapon firing or explosive mishap, equipment failure, fire, earthquake, etc., as applicable. Anticipate all reasonable scenarios and plan to cope with associated hazards. The EAP should be a checklist of actions to be taken by personnel to mitigate the mishap and provide medical care to any victims. The EAP shall include the following, at a minimum:

1. Primary and alternate communications.
2. Telephone numbers of the chain of command and emergency response activities.
3. Applicable radio channels and call signs.
4. Locations of emergency response personnel.
5. Locations of emergency equipment.
6. Equipment emergency shutdown procedures.
7. Muster location(s).
8. Methods to maintain control of the scene and any non-affected personnel.
9. All immediate emergency procedures.

(b) The HRT-EAP shall include a monthly review, quarterly walk-through, and an annual exercise.

(c) The HRT-EAP shall be reviewed with students prior to HRT. The review shall consist of a safety brief advising students what to do in the event of a mishap.

(d) HRT-EAPs must be at the training site and readily available to the instructors for use in the event of an emergency.

(e) If multiple courses use the same trainer, such as a pool, one HRT-EAP may suffice for that device or location. However, there must be sufficient personnel available to implement the EAP.

(38) Ensure all HRT related mishaps, whether first aid, medical treatment, or lost time injuries, are investigated, entered into ESAMS, validated, and closed. All Class A and B mishaps shall be entered into ESAMS and WESS.

(39) Ensure a preventative maintenance system is established, and includes spot-checks for all HRT equipment, devices, and personal protective equipment. If preventative maintenance is

performed by contractors, then the TSO shall communicate with the Contracting Officer Representative to ensure that it is being performed properly.

(40) In the event of a Class A or Class B mishap, immediately notify the chain of command and Safety Officer.

(41) Ensure the Safety Officer is promptly notified of issues affecting the safety of staff (military, civilian, and contractors), midshipmen, or HRT platforms.

d. Department, Brigade, and NAPS Training Safety Officers (TSO) Shall:

(1) Be appointed in writing and familiar with HRT curricula objectives, including approved training procedures, safety precautions, applicable instructions, and emergency procedures for training facilities and equipment.

(2) Complete a qualification process that includes completing the HR-TSO JQR specific to the HRT assigned.

(3) Observe HRT evolutions at frequency intervals as required by the hazards associated with the training being conducted. Confer with the Department Head (or equivalent) to establish the minimum frequency intervals required to ensure a safe HRT program.

(4) Ensure all training mishaps, near misses, and injuries are investigated and reported per reference (c).

(5) Keep the chain of command advised of all training mishap or injury investigation results and recommended corrective actions.

(6) Ensure Assistant Training Safety Officers (ATSO) are properly trained and completely familiar with their responsibilities for training safety. ATSOs must meet the same qualification requirements as the Training Safety Officer.

(7) If applicable, ensure contracted and civilian instructors comply with all HRT directives. Requirements shall be clearly defined through a Position Description, Memorandum of Agreement, Memorandum of Understanding, or Statement of Work, as appropriate. Review employment criteria annually to validate contractor and civilian employment requirements.

(8) Assist HR-TSA to develop HR-TS policy and procedures, as requested.

(9) In conjunction with the USNA Safety Officer, ensure all reportable HRT mishaps are entered into ESAMS, validated, and closed within thirty days. All HRT Class A and B mishaps shall be entered into ESAMS and WESS.

(10) Monitor HRT mishap report emails from ESAMS to ensure mishaps are opened, reviewed, and closed within thirty days.

- (11) Assist or lead mishap investigation teams as required.
- (12) Assist, as requested by the HR-TSA, on-site evaluations of HRT courses within the assigned cost center.
- (13) Monitor HRT within the assigned cost center. This monitoring shall consist of ensuring EAP quarterly walkthroughs and annual drills are conducted, reviewing instructor qualifications, and assessing HRT and courses.
- (14) Review all risk assessments provided within the assigned cost center.
- (15) Help develop TSO and HRT JQRs.
- (16) Conduct an annual review of all high risk courses and training assigned, including observing HRT evolutions and assessing compliance with approved training procedures, safety precautions, risk mitigation, emergency procedures, and the safety posturer. The HRT review shall be documented.
 - (a) Verify student to instructor or safety observers and other promulgated ratios are accurate and reflected on the risk assessment as a mitigation factor.
 - (b) Review all course risk assessments to ensure accuracy.
 - (c) Verify TTO (and DOR, as applicable) processes are in place and that students are thoroughly briefed on TTO (and DOR, as applicable) policies prior to commencing training.
 - (d) Verify the conditions of the training platform, training devices, equipment, and PPE.
 - (e) Verify compliance with approved training procedures, safety precautions, risk mitigation efforts, and EAP procedures.
 - (f) Highlight observed safety issues noted during training.
 - (g) Ensure SOPs are current and reflect any process changes, if applicable.
- (17) Ensure all training-related first aid, medical treatment, and lost-time injury incidents are investigated and recorded in ESAMS. Ensure all mishaps entered into ESAMS are opened, reviewed, and closed within thirty days.
- (18) Compile and maintain a department, Brigade, or NAPS TSO binder that includes copies of fleet messages, training-related lessons learned, SOPs, copies of completed JQR and certificates of related training, high risk instructions, and any other relevant data that would facilitate a smooth transition upon transferring duties.

(19) Ensure the following is retained in a HR training file:

(a) TSO letter of designation. If multiple HRT courses, training programs, or ECAs are assigned to the same TSO, the letter of designation shall include the names and course numbers (if applicable).

(b) The documentation of the HRT-EAP quarterly walk-through and annual drill or exercise.

(c) The risk assessment sheets for corresponding high risk course(s) and training.

(d) The documentation of HR-TSO observations, including comments and any associated recommendations.

(20) Ensure the seven-step risk assessment process is employed when examining risk elements.

(21) Ensure the required number of instructors and safety observers are present during training and that they have received first aid training.

(22) Ensure a HM, EMT, or other qualified medical representative is on site during any HRT either on or off a military site if the training is located more than ten minutes away from emergency response services.

(23) Ensure a HM, EMT, or other qualified medical representative, and emergency oxygen is available on scene during all aquatic training.

(24) Ensure all HRT instructor training records are maintained and that they contain qualifications and certifications as set forth by this instruction.

(25) Ensure the Chain of Command and HR-TSA are promptly notified when HRT safety issues arise.

(26) Review all HR-TS student critiques for student identified safety issues and assist in developing corrective actions.

(27) Attend supporting HR-TSA safety committee meetings.

6. Records Management. Records created as a result of this instruction, regardless of media and format, must be managed per SECNAV Manual 5210.1 of January 2012.

7. Review and Effective Date. The Safety Officer will review this instruction annually on the anniversary of the effective date to ensure applicability, currency, and consistency with Federal, DoD, SECNAV, and Navy policy and statutory authority using OPNAV 5215/40 Review of

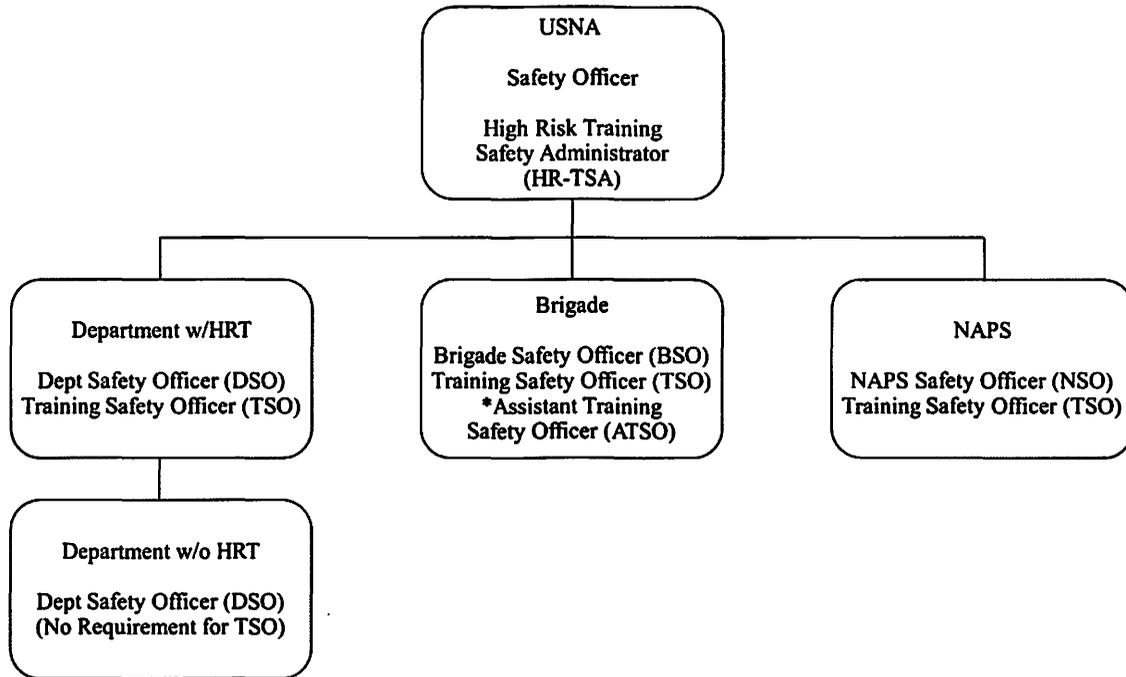
Instruction. This instruction will automatically expire five years after the effective date unless reissued or otherwise canceled prior to the five year anniversary date, or an extension has been granted.

8. Forms. The following form is available on Naval Forms On-Line,
<http://navalforms.daps.dla.mil>: NETC 1500/5 High Risk Student Medical Screening Form.



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High Risk Training Safety Organization Chart



* More than one Assistant Training Safety Officer (ATSO) can be assigned. The number of ATSO's should be based on the volume and risk associated with the HRT courses and activities and the required expertise for oversight.

High Risk Training and Courses Listing

| USNA High Risk Training * | |
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| | |
| <u>High Risk Training Courses</u> | |
| | |
| Boxing PE 101, 418 (Plebe Summer) | Swimming PE 102, 201, 301, 434 (Plebe Summer) |
| Intro to Rock Climbing PE 450 | Triathlon PE 434 |
| Kayaking PE 402 | Wrestling PE 101/111 |
| Martial Arts PE 202, 302, 462 (Plebe Summer) | |
| | |
| <u>High Risk Training</u> | |
| | |
| Endurance Course | Plebe Summer Weapons |
| High Ropes Confidence Course | Sea Trials |
| MARSOT Screener - Quantico | Plebe Summer Sailing |
| Obstacle Course | EOD Screener |
| SEAL Screener | |
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* This list of HRT and courses conducted at USNA is not all inclusive and is provided as a guide. The list of high risk training and courses will be dynamic and change based on updated risk assessments or new training requirements. The Training Safety Administrator will maintain the official list of USNA high risk training and courses.