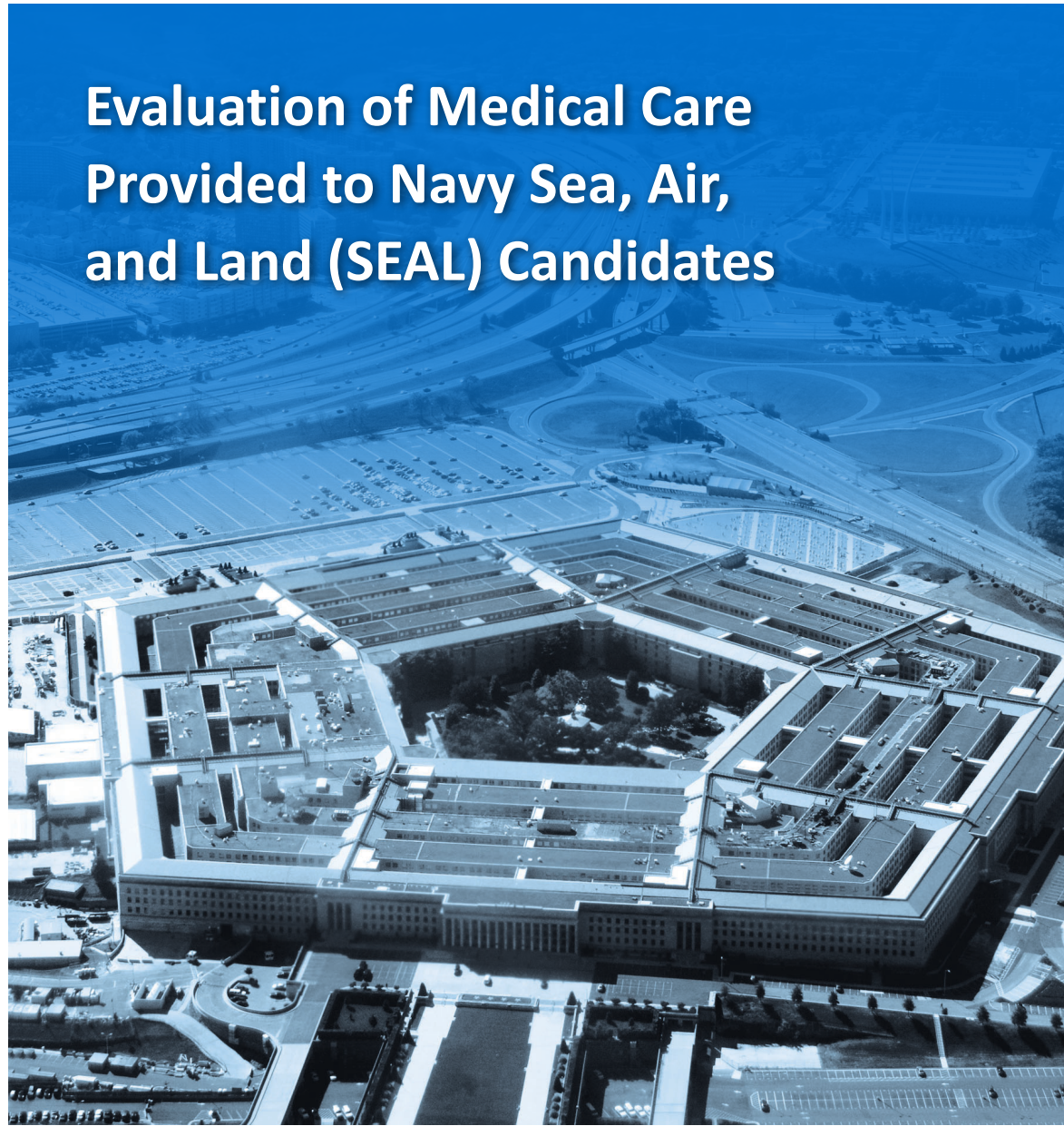




# INSPECTOR GENERAL

*U.S. Department of Defense*

OCTOBER 22, 2024



## Evaluation of Medical Care Provided to Navy Sea, Air, and Land (SEAL) Candidates

INDEPENDENCE ★ INTEGRITY ★ EXCELLENCE ★ TRANSPARENCY







# Results in Brief

## *Evaluation of Medical Care Provided to Navy Sea, Air, and Land (SEAL) Candidates*

**October 22, 2024**

### Objective

Consistent with the FY 2023 National Defense Authorization Act, the objective of this evaluation was to conduct a comprehensive review of the health care provided to individuals undergoing Navy Sea, Air, and Land (SEAL) training to determine whether professionals providing health care to SEAL candidates are properly trained, quality assurance mechanisms with respect to this care are sufficient, and appropriate efforts to mitigate the health stress to individuals undergoing this training are in place.

### Background

Established in January 1962, Navy SEALs are considered by the Navy to be an elite maritime military force suited for all aspects of unconventional warfare. Navy SEAL training consists of Basic Underwater Demolition/SEAL (BUD/S) and SEAL Qualification Training. One of the defining events during BUD/S is known as “Hell Week.” Hell Week occurs during the fourth week of BUD/S and is meant to test candidates’ grit and resilience. It consists of 108.5 consecutive hours of training spanning 6 calendar days.

### Finding

From February 2022 through January 2024, the Navy and U.S. Special Operations Command made policy and procedure changes that improved the medical care

### Finding (cont’d)

and safety for Navy SEAL candidates. We observed the implementation of the changes to policies and procedures during Hell Week of Class 362 in September 2023.

However, the DoD and Navy could improve their policies and ensure that the Naval Special Warfare Center (NSWCEN) has sufficient resources. For example, DoD Instruction (DoDI) 1010.16, “Technical Procedures for the Military Personnel Drug Abuse Testing Program,” regarding performance-enhancing drug (PED) policy, does not define PEDs to align with language in a January 2023 Under Secretary of Defense for Personnel and Readiness (USD[P&R]) memorandum.

Additionally, to alleviate burnout, NSWCEN Medical uses staff from other phases of training to support Hell Week. An assessment of NSWCEN’s medical capabilities may provide opportunities to address NSWCEN’s medical manpower requirements to ensure that staffing meets clinical demand and possibly reduce the potential for staff burnout. Naval Special Warfare Command (NAVSPECWARCOM) should reassess NSWCEN’s medical and communication equipment and medical manpower.

Furthermore, although safety procedures are in place to mitigate risk to candidates, NAVSPECWARCOM lacks a policy on the intentional use of sleep deprivation practices. The practice of sleep deprivation during Hell Week is operationally relevant, and NSWCEN has safety procedures in place to mitigate the risk to candidates. However, Navy officials were unable to provide specific rationale for the timing, length, or number of sleep periods, and we were unable to identify DoD policies providing purpose, applicability, and guidance for intentionally depriving candidates of sleep.



# Results in Brief

## *Evaluation of Medical Care Provided to Navy Sea, Air, and Land (SEAL) Candidates*

### Recommendations (cont'd)

### Recommendations

We recommend that the USD(P&R), in coordination with the Assistant Secretary of Defense (Health Affairs), Defense Health Agency Director, Surgeon General of the U.S. Navy, and Command Surgeon of the U.S. Special Operations Command, review, update, and implement drug testing policies related to PEDs, including DoDI 1010.16.

We recommend that the NAVSPECWARCOM Commander:

- a. Reassess NSWCCEN's medical capabilities.  
At a minimum, the review assessment should determine if:
  1. NSWCCEN's medical and communication equipment provide the appropriate standard of care to candidates and
  2. NSWCCEN's medical manpower requirements meet clinical demand.
- b. Develop and implement a plan and policy to ensure NSWCCEN has sufficient resources based on the results of review above.

We recommend that the NAVSPECWARCOM Commander develop and implement a sleep deprivation policy establishing written guidance that uses results from ongoing medical studies to provide functional guidance to ensure operationally relevant training while minimizing safety concerns for SEAL and Special Warfare Combat Crewmen candidates during training.

### Management Comments and Our Response

The Deputy USD(P&R), performing the duties of the USD(P&R), neither agreed nor disagreed with the recommendation to update DoDI 1010.16. However,

the Deputy USD(P&R) stated that in April 2024 they issued a memorandum that detailed over 170 PEDs prohibited by the DoD and standardized the language for PEDs to reflect current policy that steroids and PEDs are collectively referred to as PEDs. The Deputy USD(P&R) also described the actions the Office of Drug Demand Reduction plans to take to address the recommendation. The April 2024 memorandum and planned actions addressed the recommendation; therefore, the recommendation is resolved but will remain open until management officials provide the revised DoDI 1010.16 that includes the PED testing panel and standardized language.

The Acting NAVSPECWARCOM Force Inspector General (Acting NAVSPECWARCOM Force IG), responding for the NAVSPECWARCOM Commander, neither agreed nor disagreed with the recommendation to assess whether medical and communication equipment supported the appropriate standard of care for candidates, and agreed with the recommendation to assess whether the medical manpower study meets clinical demand. Additionally, they neither agreed nor disagreed with the recommendation to develop and implement a plan and policy for ensuring NSWCCEN has sufficient resources. The Acting NAVSPECWARCOM Force IG stated that:

- NAVSPECWARCOM plans to acquire additional medical and communication equipment,
- the U.S. Special Operations Command commissioned a manpower study in February 2024, and
- NSWCCEN Instruction 6000.4A was updated and signed in August 2024, and it addresses all medical capabilities policy, plans, and implementation.





# Results in Brief

## *Evaluation of Medical Care Provided to Navy Sea, Air, and Land (SEAL) Candidates*

### **Comments (cont'd)**

The planned actions address the recommendations; therefore, the recommendations are resolved but will remain open until management officials provide the reassessment of NSWCEN's medical capabilities, including the medical and communication equipment, medical manpower requirements, and plan and policy that ensures NSWCEN has sufficient resources.

The Acting NAVSPECWARCOM Force IG, responding for the NAVSPECWARCOM Commander, agreed with the recommendation to develop and implement a sleep deprivation policy. The Acting NAVSPECWARCOM Force IG stated that a NAVSPECWARCOM sleep deprivation policy for training should be produced pending the results and recommendations from the Navy Health Research Center's fatigue study. According to NAVSPECWARCOM, the fatigue study was ongoing as of February 2024.

The comments addressed the intent of the recommendation; therefore, the recommendation is resolved but will remain open until management officials provide the implemented sleep deprivation policy.

Please see the Recommendations Table on the next page for the status of recommendations.

## Recommendations Table

Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed
Under Secretary of Defense for Personnel and Readiness	None	1	None
Commander, Naval Special Warfare Command	None	2.a.1, 2.a.2, 2.b, and 3	None

Please provide Management Comments by January 22, 2025.

**Note:** The following categories are used to describe agency management's comments to individual recommendations.

- **Unresolved** – Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- **Resolved** – Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **Closed** – The DoD OIG verified that the agreed upon corrective actions were implemented.





**OFFICE OF INSPECTOR GENERAL**  
**DEPARTMENT OF DEFENSE**  
4800 MARK CENTER DRIVE  
ALEXANDRIA, VIRGINIA 22350-1500

October 22, 2024

**MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR PERSONNEL  
AND READINESS  
COMMANDER, NAVAL SPECIAL WARFARE COMMAND**

**SUBJECT: Evaluation of Medical Care Provided to Navy Sea, Air, and Land (SEAL) Candidates  
(Report No. DODIG-2025-008)**

This final report provides the results of the DoD Office of Inspector General's evaluation. We previously provided copies of the draft report and requested written comments on the recommendations. We considered management's comments on the draft report when preparing the final report. These comments are included in the report.

This report contains five recommendations that are considered resolved and open. The Deputy USD(P&R) and Acting NAVSPECWARCOM Force IG provided planned actions which address these recommendations. We will close the recommendations when you provide us documentation showing that all agreed-upon actions to implement the recommendations are completed. Therefore, please provide us within 90 days your response concerning specific actions in process or completed on the recommendations. Send your response to either [REDACTED] if unclassified or [REDACTED] if classified SECRET.

If you have any questions, please contact [REDACTED]

FOR THE INSPECTOR GENERAL:

*Bryan Clark*

Bryan T. Clark  
Assistant Inspector General for Evaluations  
Programs, Combatant Commands, and Operations

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# Introduction

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## Objective

Consistent with the FY 2023 National Defense Authorization Act (NDAA), the objective of this evaluation was to conduct a comprehensive review of the health care provided to individuals undergoing Navy Sea, Air, and Land (SEAL) training to determine whether:

- professionals providing health care to SEAL candidates are properly trained,
- quality assurance mechanisms of this care are sufficient, and
- the DoD has appropriate efforts to mitigate the health stress to individuals undergoing this training.<sup>1</sup>

To address the objective, we reviewed the seven elements that Congress established in the NDAA to identify changes the DoD made since February 2022. The following are the congressionally required elements, as directly stated in the NDAA.

- A review of policies for improved medical care to individuals undergoing Navy SEAL training and quality assurance with respect to such care
- A review of sleep deprivation practices implemented with respect to Navy SEAL training, including an identification of when such practices were initially implemented and how frequently such practices are updated An assessment of policies and rules related to the use of performance-enhancing drugs by individuals undergoing Navy SEAL training
- An assessment of the oversight of health care professionals, including enlisted and officer medical personnel, civilian employees of the Department of Defense, and contractors of the Department, with respect to the provision by such professionals of health care services to individuals undergoing Navy SEAL training
- A review and assessment of deaths occurring during the twenty-year period preceding the date of the review of individuals who were undergoing Navy SEAL training at the time of death
- A review of ongoing efforts and initiatives to ensure the safety of individuals undergoing Navy SEAL training and to prevent the occurrence of long-term injury, illness, and death among such individuals
- An assessment of the role of nutrition in Navy SEAL training

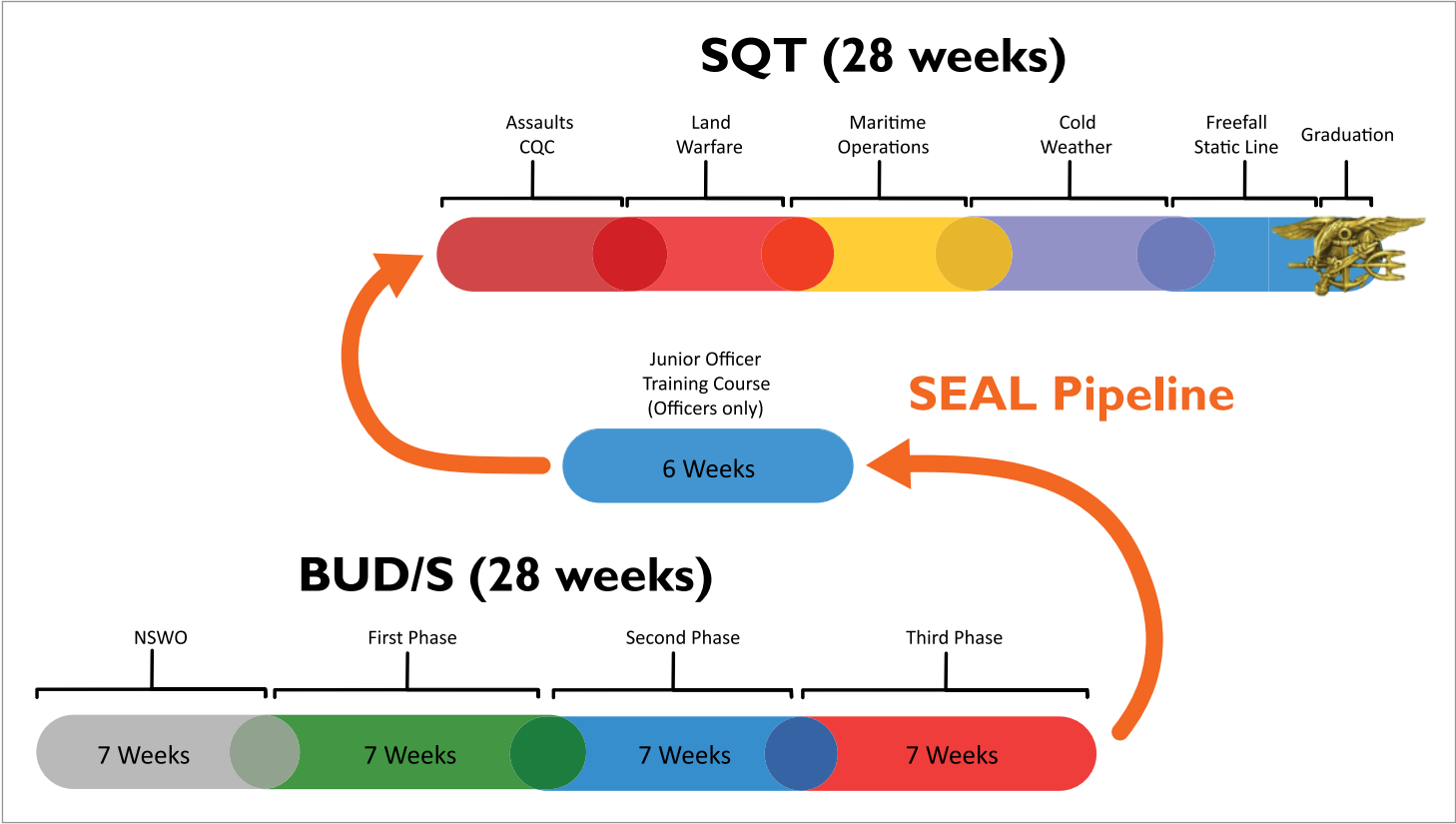
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<sup>1</sup> James M. Inhofe National Defense Authorization Act for Fiscal Year 2023, Pub. L. No. 117-263 § 745 (2022).

Background

The Navy considers Navy SEALs, established in 1962, to be an elite maritime military force trained for unconventional warfare. Under the authority of the Naval Special Warfare Command (NAVSPECWARCOM), SEAL candidates undergo intense mental and physical training to become SEALs. Figure 1 illustrates the SEAL training pipeline, or development process, which consists of Basic Underwater Demolition/SEAL (BUD/S) and SEAL Qualification Training. Historically, 25 percent of SEAL candidates complete the entire training pipeline, earning their trident and designation as a Navy SEAL.<sup>2</sup>

Figure 1. SEAL Training Pipeline



**LEGEND**  
**CQC** Close Quarters Combat  
**NSWO** Naval Special Warfare Orientation  
**SQT** SEAL Qualification Training  
Source: The Naval Special Warfare Basic Training Command.

<sup>2</sup> The Navy SEAL trident is a gold pin that identifies the wearer as part of a select group that has endured SEAL training, earning the title of Certified Special Warfare Operator.



According to the Navy SEAL website, one of the defining events of the SEAL pipeline takes place during BUD/S and is known as “Hell Week.” Hell Week occurs during the first phase of BUD/S. It tests candidates’ grit and resilience and consists of 108.5 consecutive hours of training spanning 6 calendar days. Candidates undergo intense physical conditioning, receive fewer than 4 hours of sleep during the 108.5 consecutive hours of training, and are continuously monitored by medical personnel.

## ***Navy Commands and Offices***

Several Navy organizations are responsible for the safety of Navy SEAL candidates and the health care provided to them. In addition, these Navy organizations play key roles in the oversight and implementation of policies and procedures regarding Navy SEAL training.

### ***Naval Special Warfare Command***

NAVSPECWARCOM is located on Naval Amphibious Base (NAB), Coronado in San Diego, California, and leads the Navy’s maritime special operations forces (SOF). NAVSPECWARCOM is the Navy component to the U.S. Special Operations Command (USSOCOM), headquartered in Tampa, Florida.

A full-spectrum special operations force, NAVSPECWARCOM defends U.S. national interests in the maritime domain. NAVSPECWARCOM is responsible for providing vision, leadership, doctrinal guidance, resources, and oversight for all Naval Special Warfare (NSW) forces and maintains a continuous overseas NSW presence. NAVSPECWARCOM includes the Naval Special Warfare Center (NSWCEN) as a component command.

### ***Naval Special Warfare Center***

NSWCEN, also known as NAVSPECWARCEN, is located on NAB, Coronado. NSWCEN is the professional training center for NSW and is responsible for individual SEAL and Special Warfare Combat Crewmen (SWCC) selection and their basic and advanced training. NSWCEN oversees the NSW Assessment Command, which assesses and selects candidates to serve in NSW; NSW Advanced Training Command, which provides standardized and individual training; NSWCEN Medical; and Naval Special Warfare Basic Training Command (NSWBTC).

### ***Naval Special Warfare Center Medical***

NSWCEN Medical is subordinate to NSWCEN and is also located on NAB, Coronado. It is responsible for managing and administering the medical care of the staff, candidates, and subordinate commands. Additionally, NSWCEN Medical provides operational medical support for high-risk training evolutions and initiates, reviews, and approves all directives concerning the administration and execution of medical programs and training.

### ***Naval Special Warfare Basic Training Command***

The NSWBTC is a subordinate command to NSWCEN and is located on NAB, Coronado. Its mission is to conduct special operations training in basic NSW tactics, techniques, and procedures and equipment and award the SEAL and SWCC enlisted classification to qualified U.S. forces. SWCC are specially selected and trained SOF who operate NSW combatant craft in maritime and coastal environments. The NSWBTC also provides support to and conducts a 3-day indoctrination course for new instructors.

### ***Human Performance Program***

Both NAVSPECWARCOM and NSWCEN have Human Performance Programs (HPP) designed to meet the unique physical needs of SOF. This program is a physical training program developed and led by certified civilian professionals. It involves focused strength and conditioning training, performance nutrition, and physical therapy.

### ***Navy Casualty Assistance Office***

The Navy Casualty Assistance Office (NCAO) provides timely casualty assistance to Navy families when a Sailor is seriously ill or injured, placed in a duty status of whereabouts unknown, declared missing or a prisoner of war, or dies while on active duty.

### ***DoD and Navy Policies Related to Health, Nutrition, Safety, and Casualty Assistance for Navy SEAL Candidates***

Several DoD and Navy policies provide guidance related to health, nutrition, and safety for Navy SEAL candidates, including health support, commercial off-the-shelf nutrition, and performance-enhancing drug (PED) testing.



### ***DoD Instruction 1010.10, “Health Promotion and Disease Prevention”***

The Office of the Under Secretary of Defense for Personnel and Readiness (OUSD[P&R]) authored DoD Instruction (DoDI) 1010.10, which establishes and updates policies, assigns responsibilities, and prescribes procedures to enhance mission readiness, unit performance, and health and fitness of members of the Military Services.<sup>3</sup> This instruction identifies sleep patterns as a key indicator of readiness, promotes healthy wake cycles in operational and nonoperational environments, and develops sleep strategies to maximize performance and alertness based on scientific evidence.

### ***DoD Instruction 1010.16, “Technical Procedures for the Military Personnel Drug Abuse Testing Program”***

The OUSD(P&R) authored DoDI 1010.16, which establishes and updates policies, assigns responsibilities, and prescribes procedures for the Military Personnel Drug Abuse Testing Program and is applicable to all entities within the DoD.<sup>4</sup> Additionally, the instruction promotes standardization and joint Service operations among all Service forensic toxicology drug testing laboratories. DoDI 1010.16 states that PED testing is considered when command directed or probable cause or a medical reason exists. In addition, the instruction requires that PED testing be conducted at a DoD-approved laboratory and provides processes for requesting and submitting PED testing urinalysis.

### ***DoD Instruction 1300.18, “DoD Personnel Casualty Matters, Policies, and Procedures”***

This instruction states that the Defense Casualty Information Processing System (DCIPS) is the DoD’s functional information system for the business information processes of casualty and mortuary affairs and the system of record for DD Form 1300, “Report of Casualty,” and other documents and reports.<sup>5</sup>

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<sup>3</sup> DoD Instruction 1010.10, “Health Promotion and Disease Prevention,” April 28, 2014 (Incorporating Change 3, May 16, 2022).

<sup>4</sup> DoD Instruction 1010.16, “Technical Procedures for the Military Personnel Drug Abuse Testing Program,” June 15, 2020.

<sup>5</sup> DoDI 1300.18, “DoD Personnel Casualty Matters, Policies, and Procedures,” January 8, 2008 (Incorporating Change 2, March 29, 2023).

### ***USSOCOM Policy Memorandum 19-16, “Policy for Commercial Off-the-Shelf Nutrition Products”***

USSOCOM Policy Memorandum 19-6 provides guidance, defines commercial off-the-shelf nutrition products, and establishes command policy to recommend products for distribution to all SOF candidates during periods of high physiological demand.<sup>6</sup> The policy applies to all USSOCOM components, field training exercises, and qualification courses.

### ***Commander NAVSPECWARCOM Instruction 6000.1C, “Naval Special Warfare Medical Department Manual”***

Commander NAVSPECWARCOM Instruction 6000.1C replaced NAVSPECWARCOM Instruction 6000.1B, which was published in August 2018. The 6000.1C instruction establishes guidelines, policies, and standards for administering health service support to NAVSPECWARCOM and subordinate commands.<sup>7</sup> Additionally, the instruction states that medical departments are responsible for training command personnel in first aid, self-aid, and cardiopulmonary resuscitation, including basic life-support training.

### ***Commander NSWCEN Instruction 1500.12, “Hell Week and Tour Candidate Recovery Observation Center”***

Commander NSWCEN Instruction 1500.12 details procedures for establishing the Hell Week Recovery Observation Center (ROC).<sup>8</sup> The ROC maintains accountability for and ensures observations and oversight of all candidates for 24 hours after they are removed from or complete Hell Week. The ROC helps to facilitate mandatory medical checks of every candidate removed from training before that candidate returns to normal duties.

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<sup>6</sup> USSOCOM Policy Memorandum 19-16, “Policy for Commercial off-the-Shelf Nutrition Products,” December 17, 2019.

<sup>7</sup> Commander NAVSPECWARCOM Instruction 6000.1C, “Naval Special Warfare Medical Department Manual,” August 11, 2023.

<sup>8</sup> Commander NSWCEN Instruction 1500.12, “Hell Week and Tour Candidate Recovery Observation Center,” August 31, 2023.

### ***Commander NSWCEN Instruction 5355.1, “Steroid, Anabolic Steroids, and Performance-Enhancing Drug Testing”***

Commander NSWCEN Instruction 5355.1 establishes procedures to test for and detect steroids, anabolic steroids, and other PEDs at NSWCEN and subordinate commands.<sup>9</sup> The instruction does not reference any prior NSWCEN policy relating to steroids, anabolic steroids, and PEDs. All Navy SEAL candidates are subject to random urinalysis testing for PEDs. This instruction describes the procedures for random urinalysis testing, including specimen collection, chain of custody, records management, and how to proceed in the case of positive urine samples. This instruction also describes the roles and responsibilities of the urinalysis program coordinator, who oversees the collection of all urinalysis samples, to ensure that personnel follow proper processes and procedures related to urinalysis testing.

### ***Commander NSWCEN Instruction 6000.4A, “Naval Special Warfare Center Medical Department Instruction”***

Commander NSWCEN Instruction 6000.4A replaced Commander NSWCEN Instruction 6000.4. NSWCEN Instruction 6000.4A establishes guidelines, policies, and standards for administering health service support to NSWCEN and subordinate commands.<sup>10</sup> This instruction addresses medical care, rehabilitation, force health protection, operational planning, medical training, administrative and standard operating procedures (SOPs), and human performance issues encountered by the medical officer or other medical department representative assigned to NSWCEN.

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<sup>9</sup> Commander NSWCEN Instruction 5355.1, “Steroid, Anabolic Steroids, and Performance-Enhancing Drug Testing,” March 7, 2023.

<sup>10</sup> Commander NSWCEN Instruction 6000.4A, “Naval Special Warfare Center Medical Department Instruction,” August 31, 2023.

## Finding

### **The Navy and USSOCOM Improved SEAL Candidate Medical Care and Safety but Further Improvements Are Needed**

Consistent with the FY 2023 NDAA, we conducted a comprehensive review of the health care provided to individuals undergoing Navy SEAL training to determine whether professionals providing health care to SEAL candidates are properly trained, quality assurance mechanisms for this care are in place, and the DoD has in place appropriate efforts to mitigate health stress to individuals undergoing this training. To address the objective, we reviewed the seven elements that Congress established in the NDAA to identify changes the DoD made since February 2022.

From February 2022 through January 2024, the Navy and USSOCOM made policy and procedural changes that improved the medical care and safety for Navy SEAL candidates. These changes included adding additional training for health care professionals, putting quality assurance mechanisms in place, and developing procedures to mitigate the health stress of individuals undergoing training. In September 2023, we met with NSW leadership and observed the implementation of several policy and procedural changes during Hell Week. For example, NSWCCEN can now conduct random PED testing to deter the use of PEDs because of an exemption to DoDI 1010.16, which prohibits random and unit sweep urinalysis testing of NAVSPECWARCOM and NSWCCEN personnel for PEDs. In addition, NSWCCEN implemented infectious disease prevention procedures to reduce cases of bacterial infections related to swimming-induced pulmonary edema (SIPE), hypothermia, and pneumonia. To answer the NDAA provisions, we also provide details on actions the DoD and Navy took regarding nutrition, uniforms, and NSWCCEN Medical research on SIPE.

However, the DoD and Navy can improve their policies and better resource the NSW community. For example, DoD policies related to PEDs neither define PEDs nor state whether steroids are considered PEDs. Also, according to an NSWCCEN Medical senior official, NSWCCEN Medical needs additional corpsmen to mitigate the staff's potential for burnout, as well as specialized medical equipment to improve the health and safety of Navy SEAL candidates. In addition, the DoD and Navy do not have a sleep deprivation policy that provides standards for and consistency across training environments throughout the DoD and Navy.

Ensuring that the DoD and Navy have policies and procedures in place to mitigate the risks in Navy SEAL training will increase the health and safety of candidates, as well as the overall readiness of the NSW community. Additionally, without a comprehensive review of the equipment and manpower available to NSWCEN Medical, the Navy may not be able to provide the most efficient and effective patient care to satisfy clinical demand. The Navy's ability to deter the use of PEDs, a set of dangerous and sometimes deadly drugs, is also impacted because DoD policy does not define PEDs or state whether steroids are considered PEDs.

## **The DoD and Navy Made Improvements to the Medical Care and Safety of SEAL Candidates but Additional Efforts Are Needed**

Section 745 of the FY 2023 NDAA listed seven elements to include in our review of medical care for individuals undergoing Navy SEAL training. From February 2022 through January 2024, the Navy and USSOCOM made policy and procedural changes that improved the medical care and safety of Navy SEAL candidates. However, during our review of policies, procedures, and documentation, we found that additional efforts are needed in some of these areas. We discuss each of the seven elements that Section 745 identified for review below.

### ***Element One: Policies for Improved Medical Care of Individuals Undergoing Navy SEAL Training and Quality Assurance with Respect to This Care***

During the course of the evaluation, we found that the DoD and Navy implemented four policy changes that improved the medical care and safety of Navy SEAL candidates. Specifically, the DoD and Navy implemented policies related to health promotion and disease prevention; steroids, anabolic steroids, and PED testing; the Hell Week ROC; and the procedures for treating candidates with SIPE, hypothermia, and pneumonia. A more detailed summary of all recent policy and procedural changes can be found in Appendix B.

### ***The DoD Updated Policy for Health Promotion and Disease Prevention***

The DoD updated DoDI 1010.10, "Health Promotion and Disease Prevention," incorporating guidance to prevent and mitigate the effects of sleep deprivation and encourage time for at least 7 hours of uninterrupted sleep. Although the NSWBTC Commander updated Navy SEAL sleep practices outside of Hell Week



in 2024, neither the DoD nor the Navy have sleep deprivation policies even though sleep deprivation was incorporated into the Hell Week training curriculum at the inception of Hell Week. NDAA Element Two further discusses sleep deprivation.

### ***The Navy Updated Policies Related to Health and Safety***

The Navy updated the following three policies related to the health and safety of individuals undergoing Navy SEAL training.

- Commander NSWCEN Instruction 5355.1, “Steroid, Anabolic Steroids, and Performance-Enhancing Drug Testing,” establishes that all SEAL candidates are subject to random and unit sweep PED urinalysis testing. Although NSWCEN implemented the instruction for random PEDs testing for SEAL candidates, no DoD policy requires random PED testing. NDAA Element Three further discusses PED testing.
- Commander NSWCEN Instruction 1500.12, “Hell Week and Tour Candidate Recovery Observation Center,” established the ROC, implemented mandatory medical checks of every candidate removed from training before returning the candidate to normal duty, and implemented the use of wearable medical devices for monitoring. The ROC provides closer medical oversight of candidates during Hell Week and when Hell Week is complete, NDAA Element Six further discusses mandatory medical checks.
- Commander NSWCEN Instruction 6000.4A, “Naval Special Warfare Center Medical Department Instruction,” reflects updated procedures for treating candidates with SIPE, hypothermia, and pneumonia. Additionally, this instruction requires one or two medical personnel to be on-site for all Hell Week evolutions. NDAA Element Six further discusses these improvements to SEAL candidate medical care.

### ***Element Two: Sleep Deprivation Practices Implemented with Respect to Navy SEAL Training, Including When These Practices Were Initially Implemented and How Frequently These Practices Are Updated***

Although the NSWBTC Commander updated Navy SEAL sleep practices outside of Hell Week in 2024, the DoD and Navy still do not have policies that address intentional use of sleep deprivation practices during training. This is true even though sleep deprivation practices were incorporated into the Hell Week training curriculum at the inception of Hell Week to determine how SEAL candidates perform individually and as a team while cognitively impaired. To better understand DoD sleep policies, we reviewed DoD and Navy sleep policies

and NSWBTC Hell Week training schedules and conducted 19 interviews with senior personnel from the Office of the Deputy Assistant Secretary of Defense (Health Readiness Policy and Oversight), Department of the Navy Bureau of Medicine and Surgery, USSOCOM Surgeon's Office, NAVSPECWARCOM, and subordinate units at NSWCEN.

### ***DoD and Navy Policies Outline Sleep Practices but Do Not Address Intentional Use of Sleep Deprivation Practices During Training***

Although the DoD does not have an overarching policy governing the intentional use of sleep deprivation practices during training, DoDI 1010.10, "Health Promotion and Disease Prevention," provides guidance to prevent and mitigate the effects of sleep deprivation and encourages Service members to commit at least 7 hours to uninterrupted sleep per every 24-hour period. A 2015 DoD-funded RAND Corporation sleep study indicated that other tasks, such as written assignments, uniform preparation, or studying for exams, may compete with sleep during elite training.<sup>11</sup>

According to the USSOCOM Command Surgeon, the USSOCOM Surgeon's Office has oversight of preventive medical care, including sleep deficiency. However, the USSOCOM Surgeon's Office is not specifically involved in creating or influencing sleep deprivation policy for SEAL candidates.

### ***Hell Week Included Sleep Deprivation Since Inception, and Total Sleep Hours Reduced over Time***

NSW officials stated that sleep deprivation has been part of Hell Week training curriculum since its inception, but officials were unable to provide specific rationale for the timing, length, or number of sleep periods candidates receive in Hell Week. In addition, the number of sleep periods changed over the years. However, NAVSPECWARCOM was unable to provide a historical explanation for these changes. The primary objective of Hell Week is to expose candidates to extreme stress in a controlled environment to identify individuals who can withstand physical and psychological stressors similar to what they will likely experience during combat operations. The secondary objective is to expose candidates to controlled sleep deprivation to determine how they perform individually and as a team while cognitively impaired.<sup>12</sup>

<sup>11</sup> RAND Corporation, "Sleep in the Military: Promoting Healthy Sleep Among U.S. Servicemembers," accessed April 3, 2024.

<sup>12</sup> Karen Kelly and Jason Jameson, "Navy Sea, Air and Land (SEAL) and Special Warfare Combatant-Craft Crewman (SWCC) Physical Standards Validation Report," June 2015.

According to the NSWCCN command historian, “Hell Week sleep management parameters were stabilized in the late 1980s with an emphasis on safety and performance expectations.” Balboa Hospital Sleep Research Lab was the primary source that developed this sleep management strategy.<sup>13</sup> According to the command historian, the sleep strategy provided information on total and partial sleep deprivation, along with various nap strategies and the effectiveness of using larger blocks of sleeping time to gain better cognitive recovery, which were used to enhance safety awareness. NAVSPECWARCOM, NSWCCN, and the NSWBTC were unable to provide the sleep management strategy from the 1980s or any other sleep guidance or policies dated before 2022.

We asked NAVSPECWARCOM to provide four random Hell Week training class schedules from 2002 to 2023, and we reviewed these documents to identify if candidates’ sleep cycles were consistent across the 21-year time frame. We analyzed Hell Week class schedules for the following classes.

- Class 239, conducted January 27, 2002, through February 1, 2002
- Class 266, conducted July 15, 2007, through July 20, 2007
- Class 330, conducted April 8, 2018, through April 13, 2018
- Class 362, conducted September 3, 2023, through September 8, 2023

Before Class 266 in 2007, a change was made to the sleep periods. Class 239 had three sleep cycles for a total of 5 hours of sleep during Hell Week.<sup>14</sup> However, Classes 266, 330, and 362 had two sleep cycles for a total of 4 hours of sleep during Hell Week.<sup>15</sup>

Currently, candidates have two 2-hour sleep cycles during the 6 calendar days of Hell Week. The first 2-hour sleep event is at hour 70, and the second is at hour 88. The evolution brief sheet for the sleep events states the following.<sup>16</sup>

- Objective—Conduct a 2-hour period of rest on a cot in a tent during daylight or at night while wet and sandy. Wake up when instructed and continue training.
- Safety Procedures and Policies—Corpsmen will conduct periodic walk-throughs of tents to monitor candidates’ condition.

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<sup>13</sup> Balboa Hospital is currently known as Naval Medical Center San Diego.

<sup>14</sup> The first rest was 2 hours, and the second and third rests were 1.5 hours each for a total of 5 hours of rest.

<sup>15</sup> This included two 2-hour rest cycles for a total of 4 hours.

<sup>16</sup> An evolution is a physical or mental training event. Evolution briefings and evolution brief sheets include information on safety precautions, procedures, and details about the evolution.

### ***The NSWBTC Updated Navy SEAL Sleep Practices, But No DoD Policies Govern Intentional Sleep Deprivation During Training***

The NSWBTC updated Navy SEAL sleep practices in January 2024; however, neither the NSWBTC nor the DoD updated practices or developed policies that govern intentional sleep deprivation used in training. For this evaluation, sleep practice refers to the number of recommended hours of sleep per night, whereas sleep deprivation refers to the intentional limiting of sleep so that candidates do not receive the recommended hours of sleep. During our September 2023 site visit, we discussed sleep deprivation policy in every interview we conducted with NAVSPECWARCOM personnel and subordinate command leadership. In 2022, the NSWBTC Commanding Officer issued sleep guidance regarding candidate rest, recovery, and performance to the NSWBTC.<sup>17</sup> However, the NSWBTC Commander's guidance does not specifically address intentional sleep deprivation in Hell Week. Further, the NSWBTC Commander did not sign the guidance into policy until January 2024. We did not identify any other DoD policies discussing intentional sleep deprivation.

In April 2004, NSWCCEN initiated a curriculum review and recommended establishing written guidance for sleep during Hell Week. At the time, the NSWCCEN command staff were reluctant to establish a written policy because the NSWCCEN Commander's written response to the curriculum review stated, "Guidance comes from a Commanding Officer only." However, the NSWCCEN Commander supported establishing guidance if the guidance was flexible and had a minimum-maximum time but did not prescribe when to sleep. The current Commander NSWCCEN Instruction 1500.3K, "High-Risk Training Safety Program, Policies, and Procedures," does not contain language regarding Hell Week sleep policy.<sup>18</sup> However, at the request of NAVSPECWARCOM, the Naval Health Research Center is in the process of researching the impact of fatigue and stress on candidates' judgment and will examine whether further guidance is needed to protect candidates.

<sup>17</sup> Commander NSWBTC, "Commander's Guidance for Candidate, Rest, Recovery, and Performance," January 31, 2024.

<sup>18</sup> Commander NSWCCEN Instruction 1500.3K, "Naval Special Warfare Center High-Risk Training Safety Program, Policies, and Procedures," October 24, 2022.

### ***Medical Care and Safety Processes for Candidates of Class 362 During Hell Week***

To understand the extent of candidate medical care and safety processes in place, we divided into three teams to observe all aspects of Hell Week. Each team covered an 8-hour shift, providing 24-hour coverage for Hell Week. Before Hell Week began, we observed the operations order brief provided to the NSWCCN Commodore, which explained the details for all events scheduled during Class 362 Hell Week. During Hell Week, we observed multiple evolution safety briefings, shift change safety briefings, and NSWCCN Medical intake briefings. These briefings provided structured event details, controls, and conditions to the NSWBTC instructor cadre, NSWCCN Medical staff, and any observers. We witnessed all physical evolutions, meals, hydration breaks, sleep periods, and candidate medical checks, as well as the class completion ceremony.

#### ***We Observed Instructors and Medical Personnel Monitoring Fatigued Candidates***

During Hell Week, we witnessed numerous instances of medical staff and instructors monitoring the cognitive skills of candidates who exhibited drowsiness to mitigate the risk of candidate sleep deprivation. According to the operations order for NSWBTC Class 362 Hell Week, all major physical evolutions are complete at the 48-hour mark, and the training methodology shifts focus to teamwork and leadership from boat crew leaders. Instructors keep candidates motivated and performing as a team. The priority is to show candidates what they are capable of enduring.<sup>19</sup> A senior NSWBTC leader stated that after 48 hours, training intensity is reduced, and the NSWBTC instructor cadre is prepared to identify any waning cognitive skills. We observed medical personnel checking candidates for degrading cognitive abilities to mitigate the risk of injury, as well as the following interactions between medical staff, instructors, and candidates.

- Day 2—September 4, 2023
  - Midnight to 4:00 a.m.: A hospital corpsman (HM) asked candidates simple math questions to test their cognitive abilities during water evolutions.
  - 4:00 p.m. to midnight: Medical personnel asked candidates questions to assess their mental aptitude.

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<sup>19</sup> Major physical evolutions include log physical training (conducted three distinct times), the Long Mile beach run, the Base Tour run, the Rock Portage, surf immersion (conducted three distinct times), and the Around the World small boat paddle.



- Day 3—September 5, 2023 (first mandatory candidate medical check at the clinic)

8:00 a.m.: Human Performance Program personnel asked each candidate to stand on the weight scale. The personnel then told the candidate their weight to the exact numerical pound and ounce; for example, 195 pounds and 6 ounces was 195.6. Then, the candidate proceeded to the HM, who captured the candidate's vital signs, including their complete weight. The candidate had to remember their weight, both the pounds and ounces, and repeat it to the HM. This simple exercise checked the cognitive state of the candidate. As the week went on, some of the candidates struggled to remember the ounces of their weight; for example, a candidate only repeated 195 pounds as opposed to the complete 195.6 pounds. If the candidate did not provide their ounces, the HM asked follow-up questions to trigger the candidate's memory.

4:00 p.m. to midnight: Medical personnel asked candidates questions to check their cognitive skills.

- Day 4—September 6, 2023

8:00 a.m. to 4:00 p.m.: A fatigued and disoriented candidate presented to the instructors and indicated that he intended to quit. An instructor encouraged the candidate to see medical personnel instead of quitting.

4:00 p.m.: Candidates were sleep deprived and displayed signs of exhaustion, such as falling asleep while standing in the dining facility listening to a brief from the person in charge. A second candidate was ready to quit, but the NSWBTC instructor cadre encouraged the candidate to continue.

6:30 p.m. to 8:30 p.m.: Candidates were allowed to sleep for 2 hours on cots in a tent, as seen in Figure 2.

- Day 5—September 7, 2023

4:00 p.m. to midnight: Most candidates were alert and encouraged others on the team. However, two candidates exhibited exhaustion, so the instructors continued asking questions to determine level of consciousness.



Figure 2. Cots Inside a Sleep Tent

Source: The NAVSPECWARCOM Public Affairs Office took this photo at our request during our visit to Hell Week.

The practice of sleep deprivation during Hell Week is operationally relevant, and the DoD has safety procedures in place to mitigate the risk to candidates. However, Navy officials were unable to provide specific rationale for the timing, length, or number of sleep periods, and we were unable to identify DoD policies providing purpose, applicability, and guidance for intentionally depriving candidates of sleep. Therefore, we recommend that the NAVSPECWARCOM Commander develop and implement a sleep deprivation policy to establish written guidance using results from ongoing medical studies to provide functional guidance that will ensure operationally relevant training while minimizing safety concerns for SEAL and Special Warfare Combat Crewmen (SWCC) candidates during training.

### ***Hell Week Evolution Briefing Books Had Inconsistencies***

Our September 2023 site visit revealed inconsistencies between Hell Week evolution briefing books. Evolution briefing books consist of briefing sheets that include information on safety precautions, procedures, and details about each evolution. We reviewed two evolution briefing books for consistency and found that only one of the books included a briefing sheet on sleep deprivation, specifically how to conduct the 2-hour rest period in a tent. Additionally, we

observed that one book had briefing sheets dated 2023, while the briefing sheets in the other book were dated 2022, suggesting that one of the briefing books was updated and the other not. As a result, the information across the two books may be inconsistent, potentially resulting in inconsistent guidance for the evolutions.

### ***Element Three: Policies and Rules Related to the Use of Performance-Enhancing Drugs by Individuals Undergoing Navy SEAL Training***

According to senior leaders from the Office of the Under Secretary of Defense for Personnel and Readiness (OUSD[P&R]), DoDI 1010.16, “Technical Procedures for the Military Personnel Drug Abuse Testing Program,” as published in June 2020, contains outdated language. For example, the instruction states that steroid testing can be conducted when probable cause exists; however, the instruction does not allow for random PED testing. Furthermore, the instruction states that random testing or unit sweeps for steroid use are not authorized. Additionally, the instruction does not define PEDs, nor does it clearly state whether steroids are considered PEDs. However, a January 2023 memorandum from the Under Secretary of Defense for Personnel and Readiness (USD[P&R]) states that steroids and PEDs are collectively referred to as PEDs.<sup>20</sup> Therefore, DoDI 1010.16 should be reviewed and updated to reflect current policies and language.

### ***The Assistant Secretary of the Navy (Manpower and Reserve Affairs) Endorsed Policy Exemption to Deter PED Use***

The Assistant Secretary of the Navy (Manpower and Reserve Affairs) endorsed a request for a policy exemption to test NSW personnel for PEDs. Using PEDs during training can lead to injury, long-term health issues, or death. NSWCEC recognized the potential for SEAL candidates to use PEDs during training. NSWBTC officials stated that candidates sign an administrative document during the first phase acknowledging that they will not take any unapproved dietary supplements, including PEDs.

On September 19, 2022, the Assistant Secretary of the Navy (Manpower and Reserve Affairs) endorsed a request to OUSD(P&R) to expand the authority to test NSW personnel for PEDs to help NSWCEC understand the scope of PEDs use within the force and deter unauthorized use. On January 18, 2023, the USD(P&R) authorized a 1-year exemption to policy (ETP) to DoDI 1010.16, which prohibits random and unit sweep urinalysis testing of NAVSPECWARCOM and NSWCEC personnel for PEDs. However, before the ETP expired, the USD(P&R) issued a memorandum in September 2023 that authorized the Department

<sup>20</sup> USD(P&R) Memorandum for Assistant Secretary of the Navy (Manpower and Reserve Affairs), “Exemption to Policy Request for Performance Enhancing Drug Testing,” January 18, 2023.

of the Navy to indefinitely continue conducting PED testing for NAVSPECWARCOM and NSWCEN personnel and candidates of those programs.<sup>21</sup> As a result of this memorandum, the Navy is no longer required to seek an ETP to continue random PED testing. The September 2023 USD(P&R) ETP memorandum is in effect until canceled or until DoDI 1010.16 is reissued. Additionally, OUSD(P&R) officials stated that both Army and Air Force special operations forces (SOF) requested and received approved ETPs to allow random PEDs testing. Marine SOF are preparing to submit an ETP request to the OUSD(P&R) as well.

### ***NAVSPECWARCOM and NSWCEN Implemented PED Testing***

NAVSPECWARCOM issued a PED standard operating procedure (SOP) in October 2023 that requires unit sweep urinalysis testing for PEDs on SEAL candidates at various phases of the training pipeline and implemented PED testing for all candidates.<sup>22</sup> In addition, the SOP states that all other NSW commands will conduct random PED testing as directed by NAVSPECWARCOM. The PED SOP also describes collection and urinalysis testing processes.

NSWCEN issued Commander NSWCEN Instruction 5355.1, “Steroid, Anabolic Steroids, and Performance-Enhancing Drug Testing,” which establishes procedures to test for and detect PEDs for all NSW candidates participating in the SEAL and SWCC selection process. Additionally, the instruction established the collection and testing procedures for random and unit sweep PED testing.

Since NSWCEN implemented NSWCEN Instruction 5355.1, they tested all candidates for PEDs at least once every training phase. If a candidate is confirmed positive for PEDs, the candidate may be subject to disciplinary action or processed for administrative separation. Under these policies, according to NSWCEN personnel, they tested 1,817 SEAL and SWCC candidates for PEDs from March 2023 to January 2024. Of the 1,817 candidates NSWCEN tested for PEDs, three SEAL and three SWCC candidates had confirmed positive urinalysis tests.

### ***The DoD PED Testing Policy Needs Revision***

The DoD drug testing policy related to PEDs needs review and revision. DoDI 1010.16 applies to all entities within the DoD, while the ETPs are specific to the Military Services with approved ETPs. Specifically, DoDI 1010.16 does not explicitly list which types of PEDs or steroids are included in testing. Instead, the instruction states that, “in addition to anabolic steroids, PEDs explicitly listed in Classes S1, S2, and S4 of the World Anti-Doping Code

<sup>21</sup> USD(P&R) Memorandum for Assistant Secretary of the Navy (Manpower and Reserve Affairs), “Exemption to Policy for Performance-Enhancing Drug Testing,” September 29, 2023.

<sup>22</sup> NAVSPECWARCOM SOP, “Urinalysis Collection to Test for Performance Enhancing Drugs (PEDs) at NSW Commands,” October 24, 2023.

Prohibited List, including all updates and amendments by the World Anti-Doping Agency” are included in testing. Additionally, the instruction distinguishes between steroids, anabolic steroids, and PEDs, whereas the January 2023 USD(P&R) ETP for NSW refers to both anabolic steroids and PEDs as PEDs. According to OUSD(P&R) officials, DoDI 1010.16 is outdated and does not define PEDs in alignment with language in the ETPs, which states that anabolic steroids and PEDs are collectively referred to as PEDs. Therefore, the USD(P&R), in coordination with the Assistant Secretary of Defense (Health Affairs), Defense Health Agency Director, Surgeon General of the U.S. Navy, and USSOCOM Command Surgeon should review, update, and implement drug testing policies related to PEDs, including DoDI 1010.16.

***Element Four: Oversight of Health Care Professionals (Including Enlisted and Officer Medical Personnel, Civilian Employees of the DoD, and Contractors of the DoD) with Respect to the Provision by These Professionals of Health Care Services to Individuals Undergoing Navy SEAL Training***

We assessed NSWCEN oversight of health care professionals and determined that NSWCEN personnel followed Navy and NAVSPECWARCOM policies during Hell Week. We also determined that NSWCEN Medical should reassess and submit to NAVSPECWARCOM their medical manpower requirements to ensure that staffing meets clinical demand.

***Credentialing and Privileging Records for Health Care Professionals Providing Health Care Services to Navy SEAL Candidates Did Not Have Deficiencies***

On May 13, 2024, we reviewed a nonstatistical sample of credentialing and privileging records for NSWCEN health care providers who we observed providing care to Navy SEAL candidates in Coronado. The sample we reviewed did not identify any deficiencies. Commander NAVSPECWARCOM Instruction 6000.1B, “Naval Special Warfare Medical Department Manual,” and Commander NSWCEN Instruction 6000.4A, “Naval Special Warfare Center Medical Department Instruction,” provide the requirements for how an NSW health care provider is credentialed and a process for quality management of the credentialing process. All individuals providing independent patient care services in the Military Health System must go through the credentialing and privileging process, including all military and civilian providers and staff.



During our September 2023 site visit, we confirmed that the NAVSPECWARCOM force medical officer (FMO) provides privileging and credentialing to NSWCEN's health care providers. Additionally, the FMO conducts quality assurance of the credentials, which are maintained in the DoD Centralized Credentials Quality Assurance System. Finally, the NAVSPECWARCOM Inspector General conducts command inspections to determine organization risk and issues relevant to policy, management, and direction. We reviewed the results of the September 2023 NAVSPECWARCOM Inspector General's "Command Inspection Report of Commander, NSWCEN," and concluded that the findings did not significantly impact the health care provided to Navy SEAL candidates.<sup>23</sup>

Furthermore, we nonstatistically selected clinical activity files for three physicians and one physical therapist from NSWCEN Medical who we observed providing care to Navy SEAL candidates and concluded that all were current on their certifications and privileged by the FMO to provide health care to Navy SEAL candidates. Additionally, we nonstatistically selected NSWCEN Medical training folders for four independent duty corpsmen (IDCs) and three HMs and concluded that the IDCs and HMs were in compliance with their required training and certification to provide health care to Navy SEAL candidates.

### ***NSWCEN Medical Supervised Health Care Professionals in Accordance with Navy and NAVSPECWARCOM Guidance***

NSWCEN Medical provides oversight of medical professionals providing care to Navy SEAL candidates in accordance with Navy and NAVSPECWARCOM guidance. NSWCEN Medical also provides medical support and care to the NSWBTC and Naval Special Warfare Assessment Command for evolutions that require medical support in a training environment. NSWCEN Medical is staffed with physicians, IDCs, HMs, and DoD civilians. Military physicians, IDCs, and HMs provide direct care to Navy SEAL candidates, both in the clinic and in a training environment. DoD civilians only provide direct medical care to Navy SEAL candidates in the clinic.

Although the FMO is the staff advisor to the NAVSPECWARCOM Commander and overall supervisor for all medical departments in NSW, the senior medical officer (SMO) at NSWCEN Medical is responsible for providing supervision to its staff.

The SMO is appointed by the FMO and has primary responsibility for continuously monitoring the professional clinical performance, conduct, and health status of medical staff in their area of responsibility. The SMO also ensures that health care services are consistent with the clinical privileges and responsibilities for

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<sup>23</sup> NAVSPECWARCOM Inspector General, "Command Inspection Report of Commander Naval Special Warfare Center, 18-22 September 2023," November 30, 2023.

that specialty or provider. Additionally, the SMO serves as the department head and performs duties consistent with that title. Serving as the department head, the SMO monitors quality management and medical staff activities for practitioners assigned to their department and completes performance appraisal reports for their practitioners and clinical appraisal reports for the clinical support staff. During the NSWCEN Medical site visit, we witnessed the SMO provide oversight of and engage with the physicians, IDCs, and HMs throughout the entire Hell Week.

Office of the Chief of Naval Operations Instruction 6400.1D states that the IDC supervision program must be directed and managed by a program director who is a licensed, credentialed, and privileged physician.<sup>24</sup> The instruction also states that all Navy IDCs must be supervised by an assigned clinical supervisor. We witnessed physicians and IDCs working together while providing medical care to Navy SEAL candidates. We also witnessed the SMO, deputy SMO, and senior medical department representative provide supervision and oversight of all NSWCEN IDCs providing care to candidates both inside and outside of the clinic.

HMs perform duties as assistants in the prevention and treatment of disease and injury and are supervised by the IDC physician supervisor. During the NSWCEN site visit, we witnessed the SMO, deputy SMO, and senior medical department representative provide oversight of all HMs providing care to candidates both inside and outside of the clinic. Additionally, we witnessed IDCs working with and providing guidance to HMs, both inside and outside of the clinic.

According to a senior NSWCEN official, before March 2022, four contractors were employed at NSWCEN Medical to provide direct care to candidates both inside the medical clinic and in the training environment. Since March 2023, these billets were converted to military positions. During the site visit in September 2023, we did not witness any DoD civilians or contractors providing care in the training environment. Instead, DoD civilians and contractors only provided patient care inside the clinic. Specifically, DoD civilians provided mental health care, and contractors provided mental health and physical therapy care.

Based on observations during the September 2023 NSWCEN site visit, we concluded that NSWCEN Medical followed DoD, Navy, and other relevant guidance in the supervision of health care professionals providing health care to Navy SEAL candidates.

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<sup>24</sup> Office of the Chief of Naval Operations Instruction 6400.1D, "Training, Certification, Supervision, and Employment of Independent Duty Corpsman," January 24, 2019.

### ***NSWCEN Leadership Expressed the Need for Additional Corpsmen to Mitigate the Potential for NSWCEN Medical Staff Burnout***

We interviewed an NSWCEN senior leader and NSWCEN Medical staff and reviewed the NSWCEN Medical's program planning, budget, and execution documents. Based on these interviews and reviews, we concurred with NSWCEN that having additional corpsmen could mitigate the potential for NSWCEN Medical staff burnout. According to a senior NSW representative, because Hell Week is 108.5 consecutive hours of training spanning 6 calendar days, manpower hours are a major concern. Another senior NSW representative stated that Hell Week takes a toll on the medical staff and can lead to burnout. To alleviate burnout, NSWCEN Medical uses staff from other phases of training to support Hell Week. In November 2022, through the program planning, budget, and execution process, NSWCEN received approval for nine additional NSWCEN Medical billets in 2025. However, it is unclear whether those billets will be filled. Therefore, NAVSPECWARCOM should reassess and submit NSWCEN's medical manpower requirements to the Department of the Navy to ensure current staffing meets NSWCEN Medical's clinical demand and develop and implement a plan and policy to resource NSWCEN based on the results of the assessment.

### ***Element Five: Assessment of Deaths Occurring During the Twenty-Year Period Preceding the Date of the Review of Individuals Who Were Undergoing Navy SEAL Training at the Time of Death***

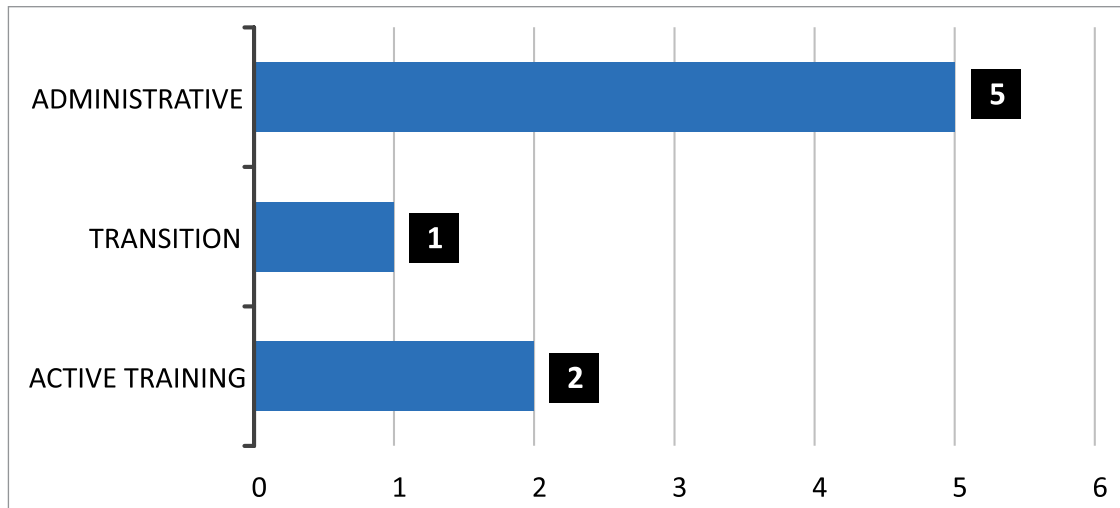
We determined that, from January 1, 2002, through November 30, 2023, eight Navy SEAL candidates died while assigned to NSWCEN. DoDI 1300.18, "DoD Personnel Casualty Matters, Policies, and Procedures," established personnel policies and procedures for reporting and recording DoD casualties and implemented the use of a central DoD repository for casualty information.<sup>25</sup> The DoD uses DD Form 1300, "Report of Casualty," to electronically record casualty information in the Defense Casualty Information Processing System (DCIPS). DCIPS is the DoD's functional system for casualty and mortuary business information processes and the system of record for DD Form 1300.

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<sup>25</sup> DoDI 1300.18, "DoD Personnel Casualty Matters, Policies, and Procedures," January 8, 2008 (Incorporating Change 2, March 29, 2023).

The regional Navy Casualty Assistance Office (NCAO) in Millington, Tennessee, provided DCIPS data for the past 20 years. From this data, we established that Navy personnel who died during Navy SEAL candidate training were in one of three BUD/S statuses at the time of their death, as shown in Figure 3.<sup>26</sup>

*Figure 3. Status of BUD/S Candidates at Time of Death*



Source: The DoD OIG.

According to the DCIPS data, eight candidates died while assigned to NSWCCN. Of these eight deaths:

- two deaths occurred while the candidates were in an active training status (causes of death categorized as illness from cardiac arrest [2004] and homicide from drowning [2016]),
- one death occurred while the candidate was in a transition status (cause of death categorized as illness from acute pneumonia [2022]), and
- five deaths occurred while the candidates were in an administrative status (causes of death categorized as self-inflicted from suicide [2016], homicide from a gunshot wound [2006], accident from drug overdose [2007], and two accidents from ground vehicle accidents [2004 and 2015]).

In DCIPS, Navy SEAL training was not listed as the cause of death for any of the eight deaths, but the training may have contributed to the documented deaths. For example, one candidate died from illness identified as cardiac arrest after a training run.

<sup>26</sup> For this evaluation, we defined active training status as the time when the candidate is actively participating in a training evolution, such as a training run. Transition status is the period between completion of a training evolution and start of the next training evolution, such as the weekend between training evolutions. Finally, administrative status is when candidates are assigned to NSWCCN but are not in either active training or transition status. In this status, candidates may be recovering from an injury, participating in non-judicial punishment, or arriving to or out-processing from NSWCCN.

Four of the deaths discussed in Figure 3 occurred before 2009. An NCAO official stated that “data before 2009 may be incomplete because we migrated paper copies of DD Forms 1300 into DCIPS, and it may not be all inclusive.” After analyzing the DCIPS data the NCAO provided, we identified that the data contained multiple blank data fields, as well as data that we were unable to validate for accuracy. However, even with the blank data fields, we could validate using other fields that the unit of assignment was NSWCCN.

### ***Element Six: Ongoing Efforts and Initiatives to Ensure the Safety of Individuals Undergoing Navy SEAL Training and to Prevent the Occurrence of Long-Term Injury, Illness, and Death Among These Individuals***

During the March 2023 through January 2024 review, we found that NSWCCN had existing safety measures in place and implemented six new initiatives to promote the safety of individuals undergoing Navy SEAL training. Additionally, we observed and discussed with NSWCCN Medical leadership their need for specialized medical equipment to improve candidate safety.

- Existing Safety Measures—Advanced cardiology screening, probable cause vehicle searches, investment in NSWBTC instructor cadre, and curriculum review and optimization
- New Safety Measures—Proactive pneumonia and cellulitis prevention, ongoing research with updated swimming-induced pulmonary edema (SIPE) diagnosis and treatment, increased medical support and safety screenings, the Recovery Observation Center (ROC), the Training and Survey Assessment Team (TSAT), and the study of reduced chafing with new uniforms
- Specialized Equipment Needs—Cold-water immersion equipment, portable ultrasound, and communication equipment

### ***NSWCCN Medical Provided Advanced Cardiology Screening to Navy SEAL Candidates***

NSWCCN health care providers follow Navy medical department policies by administering initial electrocardiograms (EKGs) to candidates during NSW Orientation. In accordance with Naval Military Personnel Manual 1220-410, “Physical Screening Testing Standards and Procedures,” SEAL candidates must meet all medical requirements and physical standards for U.S. Navy diving duty.<sup>27</sup>

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<sup>27</sup> Naval Military Personnel Manual 1220-410, “Sea-Air-Land (SEAL)/Explosive Ordnance Disposal (EOD)/Special Warfare Combatant-Craft Crewman (SWCC)/Diver/Aviation Rescue Swimmer (AIRR) Physical Screening Testing Standards and Procedures” (Incorporating Change 77, December 3, 2021).



In accordance with Navy Medical Publication P-117, “Manual of the Medical Department U.S. Navy,” one of the medical requirements for diving duty is an EKG.<sup>28</sup> Of the known causes of nontraumatic sudden death, sudden cardiac death is the leading cause of death for enlisted recruits in training. A 2020 Military Medicine study advocating for the use of EKGs stated that, of 126 DoD recruit autopsies they reviewed, 108 (86 percent) of the nontraumatic sudden deaths were related to exercise, and over half of those cases demonstrated a clearly identifiable cardiac abnormality at autopsy.<sup>29</sup> According to a January 2024 Uniformed Services University Initiative report, EKGs can detect 80 to 86 percent of conditions associated with sudden cardiac death.<sup>30</sup> Without conducting EKGs, sudden cardiac death-related cardiac conditions are a risk to the individual, unit, and mission, making early identification crucial. NSWCEN Medical instructions follow Navy medical department policies for administering initial EKGs to candidates during NSW Orientation. According to an NSWCEN SMO, medical staff administer EKGs, used to identify heart conditions in athletes, when screening Navy SEAL candidates.

### ***NAVSPECWARCOM Conducted Two Probable Cause Vehicle Searches***

According to a NAVSPECWARCOM legal official, during BUD/S, candidates’ personal belongings and barracks can be searched at any time to ensure they do not have contraband, such as unapproved dietary supplements, controlled substances, or drug paraphernalia. However, according to a senior NAVSPECWARCOM legal official, candidates hide contraband in their vehicles. The Military Rules of Evidence state that personal vehicles can only be searched if probable cause exists.<sup>31</sup> NAVSPECWARCOM officials stated that they conducted two probable cause vehicle searches since June 2022. In the first vehicle search, conducted in March 2023, NAVSPECWARCOM officials found one empty box for an at-home drug test, which is contraband.<sup>32</sup> In the second vehicle search, conducted in June 2023, officials did not find any contraband.

<sup>28</sup> Navy Medical Publication P-117, “Manual of the Medical Department U.S. Navy” (Incorporating Change 168, February 2, 2023).

<sup>29</sup> Charles Magee and Mark Haigney, “Cardiovascular Screening in the U.S. Military: Time to Reconsider the Electrocardiogram,” *Military Medicine*, August 14, 2020.

<sup>30</sup> EKGs are used to identify heart conditions. Changes in an EKG can be a sign of many heart-related conditions. Hadiyah Brendel, “USU Initiative Reexamines ECG Screening to Reduce Sudden Cardiac Death of Service Members,” *USU News*, accessed April 3, 2024, <https://news.usuhs.edu/2024/01/usu-initiative-reexamines-ecg-screening.html>.

<sup>31</sup> Military Rules of Evidence, “Section III: Exclusionary Rules and Related Matters Concerning Self-Incriminating, Search and Seizure, and Eyewitness Identification,” Rule 315, “Probable Cause Searches,” June 2015.

<sup>32</sup> Specific to restrictions for NSWBTC candidates, contraband is any item that is not authorized by Navy regulation, such as drugs, drug paraphernalia, weapons, and unlawful images or NSWBTC policy, such as tobacco or nicotine products, alcohol, and unauthorized medications/supplements.

### ***NSWCEN and the NSWBTC Have Mentorship Programs to Develop Instructor Cadre and Navy SEAL Candidates***

We were informed by NSWBTC leaders that NSWCEN and the NSWBTC have structured mentorship programs.<sup>33</sup> These programs develop instructor cadre and candidates, facilitate the building of long-term trust, and establish a sense of safety between the candidates and NSW community. An NSWBTC senior official stated that professionalism is a top priority and is expected from the staff and instructor cadre. According to an NSWCEN senior official, NSWCEN and NSWBTC senior leadership use various mentorship programs for the NSWBTC instructor cadre and candidates. The NSWBTC instructor cadre is expected to show empathy and humility towards candidates and provide counseling to the candidates when appropriate. NSWCEN and the NSWBTC provide several programs to educate and provide support to the NSWBTC instructor cadre.

- The Command Leadership Development Program uses feedback meetings to develop phase officers-in-charge and instructor cadre. The program uses a 360-feedback appraisal system designed to record, monitor, assess, develop, and facilitate improvement of individual performance and character. The program accomplishes this through peer-to-peer and candidate course feedback for constant improvements. Leadership development continues throughout the 24- to 36-month cadre tour. An NSWBTC senior official informed us that NSWBTC senior leadership routinely meet to discuss the 360 feedback with the NSWBTC instructor cadre, demonstrating senior leadership involvement.
- The Human Factors Council is a candidate mentorship program. An NSWBTC senior officer told us that the Human Factors Council provides mentorship, safety, and psychological counseling to candidates. The NSWBTC officer confirmed during our interview that the NSWBTC observed group members talking with candidates, asking how they were doing. According to an NSWBTC senior officer, “candidates will remember their instructors, building future relationships.”
- The Cadre Onboarding Course is a robust, 3-day, cadre indoctrination course provided by the NSWBTC. A senior NSWBTC officer informed us that the cadre indoctrination is focused on leadership development. Onboarding new team members is one of the NSWBTC’s more important and difficult tasks, which is why a framework supported by leadership, mission, and culture is helpful. Onboarding new talent helps to introduce NSWBTC culture, people, processes, and complexities of the command.

<sup>33</sup> The team performed a document review of the mentorship program, but we did not independently evaluate the programs for their effectiveness.

- The candidate's mentorship program, established in NSWBTC Instruction 1500.5A, "Student Leadership and Character Development," focuses on character development for candidate leadership based on the SEAL Ethos.<sup>34</sup> An NSWBTC senior official stated that this program helps instructors get to know their candidates and future teammates. The NSWBTC is currently evaluating ways to codify program success.

### *The NSWBTC Conducted Continual Curriculum Review and Optimization*

According to Commander NSWCEN Instruction 1550.2, NSWCEN is required to conduct a formal course review and formal course evaluation of all training courses to ensure curriculum and course records are properly maintained and assessed. Additionally, NSWCEN Instruction 1550.2 states that these periodic evaluations review the "various elements contained in the course and is designed to maintain a method for internal and external evaluation of course material for technical accuracy and support of training requirements."<sup>35</sup> Furthermore, the NSWBTC Commander conducts an informal, internal review that allows for an in-depth review of each phase of training to identify any issues or concerns, as well as provide an assessment of readiness. Additionally, each phase officer-in-charge analyzes their training objectives to ensure the phase aligns to operational mission requirements. According to an NSWCEN senior official, curriculum reviews are ongoing through all phases of training. Additionally, an NSWBTC senior official stated that the NSWBTC instructor cadre aims to answer the following higher-level questions as they complete the NSWBTC Commander's review.

- Is there a policy or doctrine from the Navy through NAVSPECWARCOM to NSWCEN?
- Are we delivering in a manner that elicits the behavior we want?
- Does the training deliver the expected results?
- Is this a relevant operational training requirement?

According to an NSWBTC senior official, one recent change made as a result of a curriculum review is that tear gas, once used during training, is now suspended from BUD/S training. Since tear gas training is completed in boot camp, the curriculum review determined that it is no longer relevant during BUD/S training. Instead, the NSWBTC senior official stated that Navy SEALs may attend the more relevant Army-sponsored chemical, biological, radiological, and nuclear explosives training courses.

<sup>34</sup> NSWBTC Instruction 1500.5A, "Student Leadership and Character Development," March 6, 2018.

<sup>35</sup> Commander NSWCEN Instruction 1550.2, "Naval Special Warfare Center Formal Course Review and Formal Course Evaluation Program," March 18, 2021.

### ***NSWCEN Implemented Infectious Disease Prevention Measures***

In February 2022, NSWCEN Medical implemented infectious disease prevention measures for Navy SEAL candidates. Commander NSWCEN Instruction 6000.4A, “Naval Special Warfare Center Medical Department Instruction,” states that pneumonia is a known risk of Hell Week because the candidates are constantly wet. Other risks include infections, small cuts, skin abrasions, and blisters generated from the physical evolutions. During the pre-Hell Week medical check, candidates receive a prophylactic antibiotic administration of Bicillin.<sup>36</sup> This proactive antibiotic helps prevent common bacterial infections, including pneumonia, from various environmental exposures candidates may encounter during Hell Week. NSWCEN Medical administers a single-dose, slow-release, antibiotic injection that lasts for 14 days. According to an NSW SMO, NSWCEN Medical implemented the new procedure to provide the antibiotic to Navy SEAL candidates in February 2022. Additionally, during Hell Week, candidates receive a daily, single-dose pill of the antibiotic doxycycline for cellulitis prevention.<sup>37</sup>

NSWCEN follows the San Diego County Beach and Bay Water Quality Program to mitigate candidates’ exposure to bacteria during water-based training. This program uses bacterial indicators to test for the presence of possible pathogens. Several times a week, the county tests ocean water at the beaches north and south of Naval Amphibious Base, Coronado for total coliform, fecal coliform, and enterococcus bacteria—all indicators of possible disease-producing pathogens. According to the December 2022 Hell Week Sleep Evolution Brief, the NSWCEN safety officer is responsible for checking the Beach and Bay Water Quality Program website to verify the water quality before beginning any water training events.<sup>38</sup> Training may be canceled or relocated if beaches are closed because of contaminated water from the cross-border pollution in the Tijuana River Valley and the Pacific Ocean. For example, from January 2022, through December 2023, NSWCEN relocated 309 of 975 in-water events because of closures related to water contamination.

### ***NSWCEN Medical Is Conducting Location-Specific Research to Improve SIPE Diagnosis and Treatment***

NSWCEN Medical is conducting location-specific research to improve the diagnosis and treatment of SIPE, a dangerous breathing condition that is often underrecognized or misdiagnosed.<sup>39</sup> Common symptoms of SIPE include coughing

<sup>36</sup> Bicillin L-A is the Pfizer trade name for penicillin G benzathine injectable suspension.

<sup>37</sup> Cellulitis is a common, potentially serious bacterial skin infection.

<sup>38</sup> The County of San Diego Department of Environmental Health and Quality operates the Beach and Bay Water Quality Program website located at <http://sdbeachinfo.com>.

<sup>39</sup> Lili Barouch, “Swimming-Induced Pulmonary Edema: An Underrecognized Cause of Triathlon-Associated Medical Emergencies,” National Library of Medicine, accessed April 3, 2024.

up blood-tinged or frothy phlegm, shortness of breath, or rapid, heavy, or uneven breathing. Additionally, SIPE is clinically characterized by bubbling or rattling sounds in the lungs. It occurs during cold-water activity in young, otherwise healthy athletes. SIPE is a rare but serious condition first reported in SCUBA divers in 1981 and has since been reported in military trainees and open water swimmers. It can be fatal, but if caught early, the vast majority of those diagnosed experience near resolution of symptoms within 48 hours of initial onset.

According to an August 2018 article from the American College of Cardiology, SIPE is an understudied condition with an unknown true prevalence.<sup>40</sup> The acute treatment of SIPE begins with immediate removal from water and constrictive gear and placement in a warm environment. In the most severe cases, those with significant respiratory distress or a prolonged need for supplemental oxygen, Emergency Medical Services is activated, and the patient is transported to the hospital for a higher level of care.

A SMO stated that the goal of the ongoing research is to find ways to prevent the condition. However, a research challenge is finding someone with a security clearance at the appropriate level to work with the research data. As a result of this ongoing research, NSWCEN Medical implemented a SIPE standard operating procedure (SOP) in August 2023.<sup>41</sup> This SOP outlines the requirement for a candidate diagnosed with SIPE to pass the Functional Exercise Challenge Test before receiving medical clearance to return to training. The Functional Exercise Challenge Test was created by an undersea medical officer who specialized in pulmonary critical care and is administered using a stationary exercise bike.

### ***NSWCEN Increased Medical Support and Safety Screenings for Candidates During Hell Week***

From 2007 through 2022, NSWCEN made changes that increased health care provided to Navy SEAL candidates. Since Class 266 in July 2007, medical support evolved from medical personnel only present during Hell Week water evolutions to Class 353 in March 2022 having medical personnel present for all Hell Week evolutions.

A SMO stated that, since Class 353 in March 2022, every evolution of Hell Week includes two corpsmen. In line with Commander NSWCEN Instruction 6000.4A, “Naval Special Warfare Center Medical Department Instruction,” we witnessed at least two corpsmen on scene for each evolution during our observation of Hell Week. During high-risk events, the medical officer is also required to be on-site, which we also observed during our site visit.

<sup>40</sup> Ankit B. Shah and Aaron L. Baggish, “Swimming-Induced Pulmonary Edema,” American College of Cardiology, accessed April 3, 2024.

<sup>41</sup> NSWCEN Medical SOP, “Standard Operating Procedure: Swimming-Induced Pulmonary Edema,” August 2023.



Clinical medical checks occur at CAPT Calvin L. Polland, MC USN, NSWCEN Medical Clinic, and since 2018, NSWCEN Medical made procedural changes to candidate medical checks after Hell Week graduation. NSWCEN Medical personnel complete five clinical medical checks of candidates during Hell Week. The first four medical checks are conducted on Tuesday, Wednesday, Thursday, and Friday of Hell Week, with additional medical checks conducted at the discretion of the shift officer-in-charge and the senior medical provider on duty. The fifth check is conducted on Saturday, 24 hours after the candidates complete Hell Week. According to the training schedules we reviewed, the Saturday check has been part of the training schedule since at least Class 330 in April 2018. However, according to a SMO, the Saturday medical check was optional before January 2023. After January 2023, the Saturday medical check was made mandatory for all candidates. Additionally, according to a NAVSPECWARCOM official, the Saturday medical checks help to ensure candidates are in good health for the following 24 hours of recovery and before receiving time off. In September 2023, we observed the Class 362 Saturday medical check, which focused on the overall health of the candidate and resulted in additional care as needed. In total, we observed five Hell Week hygiene and medical checks, and the medical personnel and staff showed empathy and humility towards candidates.

In addition to the clinical medical checks, NSWCEN Medical implemented three boot station and skin inspection evolutions. During these evolutions, candidates remove their boots and socks and immerse their feet in a solution of water, antiseptic, and antimicrobial skin cleanser, as shown in Figure 4. During the boot and skin inspections, medics inspect candidates' feet for deformities, injuries, and infections and provide new socks and dry boots.



Figure 4. Candidates Immersing Their Feet in a Solution to Minimize Risk of Infection  
Source: The NAVSPECWARCOM Public Affairs Office took this photo at our request during our visit to Hell Week.



### ***NSWCEN Established the Recovery Observation Center for Hell Week Training***

In August 2023, NSWCEN established the ROC to provide closer medical oversight of candidates during Hell Week and when Hell Week is complete. Establishing the ROC maintains accountability of all candidates removed from Hell Week and after the completion of Hell Week. In accordance with Commander NSWCEN Instruction 1500.12, "Hell Week and Tour Candidate Recovery Observation Center," mandatory medical checks of every candidate removed from training are conducted before that candidate returns to normal duties.

A senior official from the NSWCEN High-Risk Safety Training Office stated that one of the biggest improvements for SEAL candidates is the ROC, providing more safety oversight when Hell Week is complete. We observed the ROC in operation and discussed ROC operations during interviews with senior leadership from NSWCEN, NSWCEN Medical, and the NSWBTC. Additionally, we observed the ROC configured differently during and after Hell Week, as shown in Figure 5. On the left, during Hell Week, cots and mats are set up according to candidate preference; on the right, to mitigate candidate fall risk after Hell Week, the ROC is configured with mats only.



Figure 5. Recovery Observation Center Configuration During and After Hell Week

Source: The NAVSPECWARCOM Public Affairs Office took these photos at our request during our visit to Hell Week.

A hospital corpsman (HM) is on duty in the ROC during the duration of Hell Week while candidates are present in the ROC. The HMs ensure accurate turn over between NSWCCN Medical staff and coordinate 24-hour medical checks as needed. A ROC HM assesses and monitors candidates during this observation period. The HM is responsible for having the required, properly functioning medical equipment on-site. In accordance with Commander NSWCCN Instruction 1500.12, the minimally required items include a trauma kit, oxygen kit, automated external defibrillator, stretcher, vital sign monitor, and multiple finger pulse oximeters. Some items are shown in Figure 6.



Figure 6. Examples of Recovery Observation Center Medical Equipment

Source: The NAVSPECWARCOM Public Affairs Office took this photo at our request during our visit to Hell Week.

Wearable devices continuously monitor candidates over the first 4-hour period of recovery, assessing blood pressure, heart rate, and pulse oxygen saturation. The purpose of the wearable device is the early detection of clinical deterioration of any candidate during the recovery phase of Hell Week. We observed the ROC medical personnel prepare and outfit several candidates with the wearable devices.

An NSWCCN psychologist informed us that, when a candidate requests to be removed or is medically removed from the Hell Week program, a 15-minute face-to-face session is required. In accordance with Commander NSWCCN Instruction 1500.12, an NSWCCN psychologist conducts a mental status check with each candidate before

the candidate is released from observation at the ROC. An NSW senior officer informed us that, during psychologist checks, the candidates are provided counsel, and available resources and services are highlighted.

### ***NSWCEN Employs the Training and Survey Assessment Team***

In October 2022, NSWCEN formalized the NSWCEN Training Safety and Assessment Program. The program chartered the functions and activities of the Training and Survey Assessment Team (TSAT), which is composed of Naval personnel and DoD civilians and reports to the NSWCEN Commander. Some personnel fill dedicated TSAT positions, while others perform these responsibilities as an additional duty to their primary position. As the training curriculum control authority, the TSAT was established to provide a standardized process for evaluation, inspection, and assessment of all training programs aligned to curriculum, high-risk training safety, and instructor development. During our site visit, a senior NSWBTC officer stated that the TSAT is tasked with conducting quarterly quality assurance reviews of policy and procedural compliance, which are independent reviews outside the NSWBTC chain of command. Additionally, the TSAT conducts walk-throughs and monthly spot-checks on evolutions and provides situation reports on their observations. Although the TSAT does not spot-check the curriculum review, they do cover all aspects of each evolution. If the TSAT spot-check situation report generates recommendations, that report goes directly to the NAVSPECWARCOM Commander. Furthermore, the senior NSWBTC officer stated that TSAT situation report recommendations are passed down to the lowest group that has the authority and ability to act on the recommendation. This ensures that actions are at the appropriate level and corrections are made in a timely manner. TSAT reports also include recommendations documented in other external safety and mishap reports, and the TSAT tracks those report recommendations until completion.

After our site visit, we requested a random TSAT assessment of BUD/S training. NAVSPECWARCOM sent us the TSAT assessment from August 1 through August 5, 2022, which focused on NSW Orientation and the first phase of BUD/S. The assessment noted that the NSWBTC cadre and staff followed all safety procedures and approved curriculum. The TSAT had no concerns at the conclusion of the August 2022 assessment.

### ***NSWCEN Is Testing a New Uniform to Reduce Candidate Chafing***

During our September 2023 Hell Week site visit, we noticed some Navy SEAL candidates wore different uniforms from the standard uniform worn by most candidates. Additionally, we observed that approximately 99 percent of candidates had some degree of chafing, which was sometimes severe. Chafing is a skin irritation that occurs when skin rubs against skin, clothing, or other material, increasing the risk of skin infection. An NSWCEN senior official told us that NSWCEN is “testing experimental uniforms in the hopes to reduce the number of issues related to chafing.” In Figure 4, the candidate to the far left is wearing one of the test uniforms. Furthermore, an NSWBTC official stated that “Uniform chafing has no operational place in the training curriculum. It is only a detractor from training and is one reason why new uniforms are being tested.”

During the post-Hell Week medical check, an NSWCEN Medical officer indicated that the medical staff saw less chafing in the candidates wearing the test uniform. Additionally, we observed that candidates with test uniforms appeared to have less chafing of their skin. Furthermore, to assess the severity of chafing, we observed NSWCEN Medical distributing questionnaires about the test uniforms for the candidates and medical personnel to answer. However, an NSWCEN senior officer stated that the Navy has not decided whether to transition to the new uniform for BUD/S training.

### ***NSWCEN Medical Leadership Expressed a Need for Additional Specialized Medical Equipment***

NSWCEN Medical leadership expressed the need for additional specialized medical equipment. For example, heat injuries such as hyperthermia are commonly seen during training. Hyperthermia is a heat illness that can occur during excessive physical activity when the body absorbs or generates more heat than it can release. This can cause core body temperatures to rise with eventual organ damage. If the candidate’s core body temperature is not immediately reduced, the results can be deadly. Hyperthermia medical treatment in the field is ice packs on the neck, armpits, and groin. Once transported back to the NSWCEN Medical clinic, cold-water immersion is recommended. NSWCEN Medical has one small inflatable boat filled with ice water for this purpose, as seen in Figure 7. According to the NSWCEN SMO, NSWCEN Medical would benefit from additional cold-water immersion equipment, which would allow more than one candidate to be cooled at any time.





Figure 7. Small Inflatable Boat Filled with Ice Water to Treat Heat Injury and Illness

Source: The NAVSPECWARCOM Public Affairs Office took this photo at our request during our visit to Hell Week.

Additionally, the NSWCCN SMO informed us that “the medical center could use a portable ultrasound machine that’s usable at the patient’s bed.” The advantages of this machine include portability, accessibility, high resolution, and relative lower cost. Additionally, direct imaging correlating with patient symptoms provides the medical officer with vital information. Therefore, NAVSPECWARCOM should assess NSWCCN’s medical equipment and determine if it supports the appropriate standard of care and develop and implement a plan and policy to ensure that NSWCCN has sufficient resources based on the results of the assessment.

The NSWBTC also expressed a need for communication equipment to improve medical capabilities provided to Navy SEAL candidates. During Hell Week evolutions, we observed corpsmen using cell phones to communicate with the medical clinic. According to an NSWBTC senior leader:

the command has been trying to get away from cell phones by using radios instead....radios would make it easier for everyone to know what is going on during training since all parties would be able to listen to what is being discussed on the radio, unlike the phone, where only the caller and receiver can communicate.

Therefore, NAVSPECWARCOM should assess NSWCEN's communication equipment and determine if it supports the appropriate standard of care and develop and implement a plan and policy to ensure that NSWCEN has sufficient resources based on the results of the assessment.

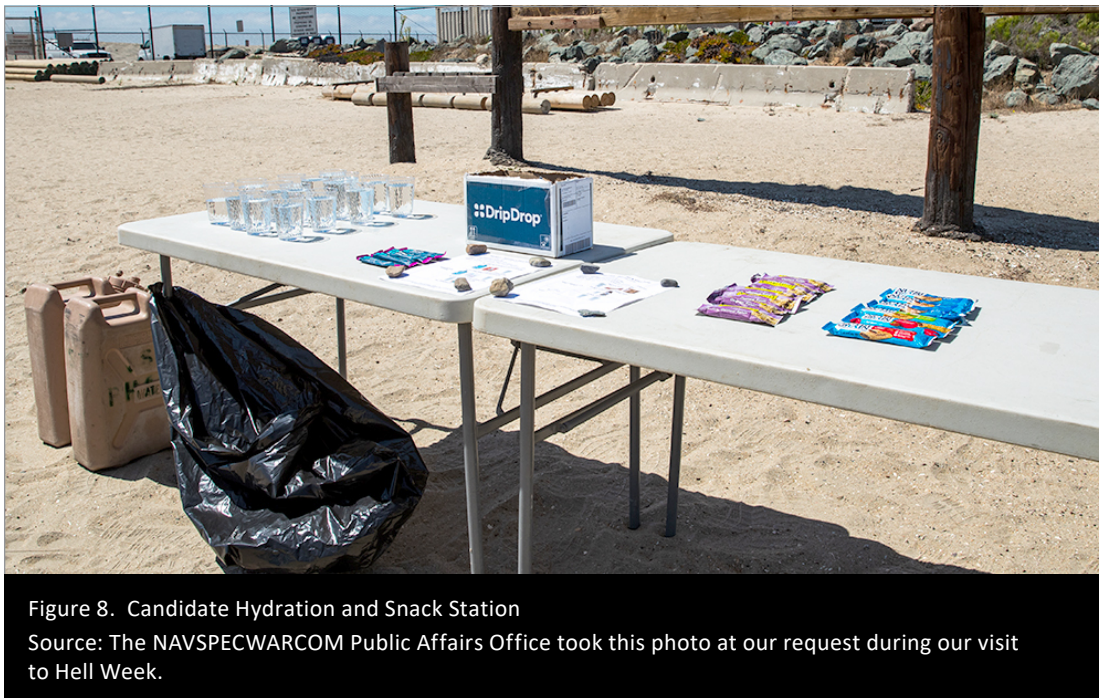
### ***Element Seven: The Role of Nutrition in Navy SEAL Training***

We found that NSWCEN established and implemented standard operating procedures (SOPs) related to hydration, as well as meals and snacks. Special operations forces (SOF) personnel, such as Navy SEAL candidates, endure extremely demanding operations and strenuous training loads designed to tax their physical and cognitive limits. Nutrition and performance studies validated that SOF require a substantial caloric intake to maintain pace with their physiologic and cognitive demands. Furthermore, training or working with insufficient energy intake decreases physical performance and increases risk of injury and illness. SOF personnel must be adequately fueled to optimize human performance, enhance readiness, and ensure mission success.

As a result of a dehydration case in Class 361 in July 2023, NSWCEN Human Performance Program officials stated that they revised the oral rehydration solution policy and published the August 2023 NSWCEN Medical Hell Week Hydration Protocol SOP and Hell Week Hydration and Snack Guide SOP. Specifically, the NSWCEN Medical hydration SOP requires instructors to encourage candidates to drink slightly beyond thirst throughout the day and during training events. The SOP also outlines protein shake, carbohydrate, and oral rehydration solutions to provide at each hydration and snack break to mitigate hypoglycemia and heat illness. During our site visit, we observed instructors encouraging the candidates to hydrate before continuing to the next training event. In addition, we observed instructors providing candidates with protein shakes and snacks.



Oral rehydration solution is a powder mixed with water that supports hydration and reduces the incidence of heat stress-related illness, such as heat stroke, heat exhaustion, and heat rash. Human Performance Program officials stated that in September 2023, the NSWCCN cadre began providing oral rehydration solutions to candidates. Before September 2023, candidates were only offered protein shakes, sports drinks, or ready-to-eat meals during hydration or snack breaks. During the Hell Week Class 362 September 2023 site visit, we observed 30 hydration breaks in addition to breaks provided when candidates were in the dining facility. During these breaks, instructors and support staff provided candidates with oral rehydration solutions containing electrolytes and water, as seen in Figure 8.



During our site visit, we observed candidates participate in 19 meals at the dining facility or consume ready-to-eat meals. Instructors did not limit the candidates' food. Further, we observed instructors encouraging the candidates to eat, even if they did not feel hungry at the time. In addition to meals at the dining facility, we observed instructors provide candidates with midnight rations, which are ready-to-eat meals. NSWBTC officials stated that they ensure candidates follow the meal schedule and that instructors, knowing the Hell Week schedule, provide hydration, snacks, and meals.

## **NSWCEN Medical Capabilities May Be Impeded Without Further Improvements**

Without a review, update, and implementation of drug testing policies related to PEDs, including DoD Instruction (DoDI) 1010.16, “Technical Procedures for the Military Personnel Drug Testing Program,” Navy SEAL candidates may be at risk for long-term, PEDs-related illnesses, injuries, and even death. DoDI 1010.16 does not define PEDs, nor does it clearly state whether steroids are considered PEDs. However, a January 18, 2023, memorandum from the Under Secretary of Defense for Personnel and Readiness (USD[P&R]) states that steroids and PEDs are collectively referred to as PEDs.

According to USD(P&R) officials, the DoDI is outdated and does not define PEDs to align with language in the exemption to policy that anabolic steroids and PEDs are collectively referred to as PEDs. Additionally, without an assessment of NSWCEN’s medical capabilities, missed opportunities may exist to address NSWCEN’s medical manpower requirements to ensure that staffing meets clinical demand and possibly reduce the potential for staff burnout. According to a senior NSW representative, manpower hours are a major concern because it takes a toll on the medical staff and can lead to burnout. To alleviate burnout, NSWCEN Medical uses staff from other phases of training to support Hell Week. Furthermore, without developing and implementing sleep deprivation policy, Navy SEAL candidates may incur health and safety risks that can lead to illness, injury, or death. The practice of sleep deprivation during Hell Week is operationally relevant, and safety procedures are in place to mitigate the risk to candidates. However, Navy officials were unable to provide specific rationale for the timing, length, or number of sleep periods, and we were unable to identify DoD policies providing purpose, applicability, and guidance for intentionally depriving candidates of sleep. In summary, without these improvements, the health care provided to Navy SEAL candidates may be impeded and may affect the health, safety, and readiness of SOF.

## Management Comments on the Finding

The Acting NAVSPECWARCOM Force Inspector General (Acting NAVSPECWARCOM Force IG), responding on behalf of the NAVSEPCWARCOM Commander, provided the following comments on the Finding. For the full text of the Acting NAVSPECWARCOM Force IG's comments, see the Management Comments section of the report.

### *NAVSPECWARCOM Comments*

The Acting NAVSPECWARCOM Force IG stated that NSWCEN Medical does not have records supporting this report's statement that Saturday morning post-Hell Week medical checks were optional before January 2023. NSWCEN Medical recommended that the DoD OIG change the report to indicate that the NSWBTC's Commanding Officer at that time stated that the Saturday morning medical checks were required from June 2022 to June 2024.

In addition, the NAVSPECWARCOM FMO stated that two forms of SIPE exist—swimming-induced pulmonary edema and SCUBA-induced pulmonary edema, which is different than SIPE as described in the report. The NAVSPECWARCOM FMO also stated that no documented fatalities from either form of SIPE exist, and although SIPE is on the list of possibilities for some SCUBA divers, it is not proven to be a cause of death. The NAVSPECWARCOM FMO added that most cases of SIPE resolve without treatment, which is why the incidence or prevalence is unknown.

Lastly, the NAVSPECWARCOM FMO stated that they believe the ROC has existed since 2015, not 2023; and the ROC instruction was updated in 2023. The NAVSPECWARCOM FMO added that the ROC was extended in February 2022 to observe the candidates for 24 hours after Hell Week instead of ceasing operations at the end of Hell Week.

### *Our Response*

We reviewed NAVSPECWARCOM's comments and recommended revisions, but did not revise the report because NAVSPECWARCOM did not provide any evidence to support their recommended revisions. The evidence obtained during our fieldwork does support the statements, as written, in the report.

## Recommendations, Management Comments, and Our Response

### ***Recommendation 1***

**We recommend that the Under Secretary of Defense for Personnel and Readiness, in coordination with the Assistant Secretary of Defense (Health Affairs), Defense Health Agency Director, Surgeon General of the U.S. Navy, and Command Surgeon of the U.S. Special Operations Command, review, update, and implement as needed drug testing policies related to performance-enhancing drugs, including DoD Instruction 1010.16, “Technical Procedures for the Military Personnel Drug Abuse Testing Program.”**

### ***USD(P&R) Comments***

The Deputy Under Secretary of Defense for Personnel and Readiness, performing the duties of the Under Secretary of Defense for Personnel and Readiness, neither agreed nor disagreed with the recommendation. The Deputy Under Secretary stated that they signed a memo on April 24, 2024, which included a detailed panel of over 170 PEDs prohibited by the DoD and standardized the language for PEDs to reflect current policy that steroids and PEDs are collectively referred to as PEDs. The Deputy Under Secretary also stated that the Office of Drug Demand Reduction is currently working to revise DoDI 1010.16 to include the performance-enhancing drug testing panel and standardized language.

### ***Our Response***

Although the Deputy Under Secretary neither agreed nor disagreed with the recommendation, the comments from the Deputy Under Secretary addressed all specifics of the recommendation. Therefore, the recommendation is resolved but will remain open. We will close this recommendation after we receive and review the revised DoDI 1010.16 that includes the performance-enhancing drug testing panel and standardized language.

### ***Unsolicited NAVSPECWARCOM Comments***

Although not required to comment, the Acting NAVSPECWARCOM Force IG, responding for the NAVSPECWARCOM Commander, agreed with the recommendation. The Acting NAVSPECWARCOM Force IG suggested updates to the language in DoDI 1010.16 and stated that any updates to the DoDI should be captured and mirrored in appropriate USSOCOM, Navy, and NSWCEN PED policies.

## ***Our Response***

We acknowledge receipt of the Acting NAVSPECWARCOM Force comments. For the full text of the Acting NAVSPECWARCOM Force IG comments, see the Management Comments section of the report.

## ***Recommendation 2***

We recommend that the Commander of the Naval Special Warfare Command,

- a. **Reassess the Naval Special Warfare Center's medical capabilities.**  
At a minimum, the assessment should determine if the:
  1. **Naval Special Warfare Center's medical and communication equipment supports the appropriate standard of care for candidates.**
  2. **Naval Special Warfare Center's medical manpower requirements meet clinical demand.**
- b. **Develop and implement a plan and policy to ensure that the Naval Special Warfare Center has sufficient resources based on the results of the assessment completed in Recommendation 2.a.**

## ***NAVSPECWARCOM Comments***

The Acting NAVSPECWARCOM Force IG, responding for the NAVSPECWARCOM Commander, neither agreed nor disagreed with Recommendation 2.a.1. The Acting NAVSPECWARCOM Force IG stated that NSWCEN Medical has the equipment to support appropriate standard of care for candidates, that NSWCEN has procured additional medical equipment to support candidates during Hell Week, that they instituted the use of communication equipment, and that they plan to acquire additional medical and communication equipment.

The Acting NAVSPECWARCOM Force IG agreed with Recommendation 2.a.2, which aligns with the USSOCOM manpower study commissioned in February 2024. However, the manpower study is ongoing and has not been validated.

The Acting NAVSPECWARCOM Force IG neither agreed nor disagreed with Recommendation 2.b. The Acting NAVSPECWARCOM Force IG stated that Commander NSWCEN Instruction 6000.4A, "Naval Special Warfare Center Medical Department Instruction," was updated and signed in August 2023, and it addresses all medical capabilities, policy, plans, and implementation.

### ***Our Response***

The Acting NAVSPECWARCOM Force IG, responding for the NAVSPECWARCOM Commander, neither agreed nor disagreed with Recommendations 2.a.1 or 2.b, but agreed with Recommendation 2.a.2. However, comments from the Acting NAVSPECWARCOM met the intent of the recommendations. Therefore, the recommendations are resolved but will remain open. We will close the recommendations after we receive and review the reassessment of the Naval Special Warfare Center's medical capabilities, to include the medical and communication equipment, the medical manpower requirements, and the plan and policy that ensures NSWCEN has sufficient resources.

### ***Recommendation 3***

**We recommend that the Commander of the Naval Special Warfare Command develop and implement a sleep deprivation policy to establish written guidance using results from ongoing medical studies to provide functional guidance that will ensure operationally relevant training while minimizing safety concerns for Sea, Air, and Land and Special Warfare Combat Crewmen candidates during training.**

### ***NAVSPECWARCOM Comments***

The Acting NAVSPECWARCOM Force IG, responding for the NAVSPECWARCOM Commander, agreed with the recommendation and stated that a NAVSPECWARCOM sleep deprivation policy for training should be produced pending the results and recommendations from the Navy Health Research Center's fatigue study. According to NAVSPECWARCOM, the fatigue study was ongoing as of February 2024.

### ***Our Response***

The Acting NAVSPECWARCOM Force IG, responding for the NAVSPECWARCOM Commander, agreed with the recommendation. Therefore, the recommendation is resolved but will remain open. We will close this recommendation after we receive and review the implemented sleep deprivation policy.



## Appendix A

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### Scope and Methodology

We conducted this evaluation from March 2023 through March 2024 in accordance with the “Quality Standards for Inspection and Evaluation,” published in December 2020 by the Council of the Inspectors General on Integrity and Efficiency. Those standards require that we adequately plan the evaluation to ensure that objectives are met and that we perform the evaluation to obtain sufficient, competent, and relevant evidence to support the findings, conclusions, and recommendations. We believe that the evidence obtained would lead a reasonable person to sustain the findings, conclusions, and recommendations.

We focused this evaluation on data, processes, and policies related to the medical care provided to candidates undergoing BUD/S training. This evaluation’s scope included the following.

- DoD offices, activities, officials, and verbal guidance related to the medical care provided to Navy SEAL candidates
- Directives, instructions, manuals, plans, and any documents related to the medical care provided to Navy SEAL candidates

To determine whether professionals providing health care to SEAL candidates are properly trained, quality assurance mechanisms of this care are sufficient, and the DoD has appropriate efforts to mitigate health stress to individuals undergoing this training, we completed the following actions.

- reviewed the policies for improved medical care of individuals undergoing Navy SEAL training and quality assurance with respect to this care
- reviewed sleep deprivation practices implemented with respect to Navy SEAL training, including an identification of when these practices were initially implemented and how frequently these practices are updated
- assessed the policies and rules related to the use of PEDs by individuals undergoing Navy SEAL training
- assessed the oversight of health care professionals regarding the health care services these professionals provide to individuals undergoing Navy SEAL training
- reviewed ongoing efforts and initiatives to ensure the safety of individuals undergoing Navy SEAL training to prevent the occurrence of long-term injury, illness, and death among these individuals

- reviewed and assessed candidate deaths that occurred during the 20-year period preceding the date of the review of individuals who were undergoing Navy SEAL training at the time of death
- assessed the role of nutrition in Navy SEAL training
- identified deviations from prescribed criteria and the impact of those deviations

We interviewed officials from the following organizations to gain insight on the medical care provided to Navy SEAL candidates.

- Office of the Under Secretary of Defense for Personnel and Readiness
- Office of the Assistant Secretary of Defense (Health Affairs)
- Defense Health Agency
- Office of the Naval Inspector General
- Navy Bureau of Medicine and Surgery
- U.S. Special Operations Command (USSOCOM) Surgeon's Office
- NAVSPECWARCOM
- NSWCEN
- NSWBTC
- Navy Southwest Regional Casualty Office

We also interviewed the parent of a deceased Navy SEAL candidate who indicated that they had information on Navy SEAL candidates' medical care.

Because Hell Week is a defining event of BUD/S, we conducted a site visit to NSWCEN to observe BUD/S training, specifically Hell Week, on Naval Amphibious Base, Coronado in San Diego, California. We split into three teams, each covering an 8-hour shift. This provided 24-hour evaluator coverage and allowed us to observe all aspects of medical care provided to Hell Week candidates.

## Use of Computer-Processed Data

This evaluation used computer-processed data. We requested that the Navy provide us with a list of Navy SEAL candidates that died while assigned to NSWCEN during the period of January 1, 2002, through November 30, 2023. In response, the Navy Casualty Assistance Office (NCAO) used the Defense Casualty Information Processing System (DCIPS) to provide us with an Excel spreadsheet of Service members who died during that period.

We determined that the data provided a reasonable basis for our analysis based on the following factors.

- DCIPS is the DoD's functional system for casualty and mortuary business information processes and the system of record for DD Form 1300, "Report of Casualty." It contains the DoD's records pertaining to casualty and mortuary affairs.
- We interviewed officials from the NCAO and NAVSPECWARCOM, and each office provided documentation identifying SEAL candidates who died while assigned to NSWEN during the period of January 1, 2002, through November 30, 2023.
- We compared NCAO's DCIPS data against NAVSPECWARCOM's internal documentation and determined that the data matched, which suggests that NAVSPECWARCOM tracked deaths and entered data into DCIPS for SEAL candidates who died during the reporting period.

## Prior Coverage

During the last 5 years, the Government Accountability Office (GAO) issued one report discussing USSOCOM structure and organization.<sup>42</sup>

Unrestricted GAO reports can be accessed at <http://www.gao.gov>.

## GAO

GAO Report No. GAO-23-105163, "Special Operations Forces: Better Data Necessary to Improve Oversight and Address Command and Control Challenges," October 5, 2022.

House Report 116-442, accompanying a bill for the FY 2021 National Defense Authorization Act, included a provision for the GAO to conduct a review of USSOCOM's structure and organization. This report: (1) described the type and number of SOF command and control (C2) structures the DoD used from 2018 through 2021 and evaluated the data used to oversee them and (2) described any challenges USSOCOM identified with its oversight of SOF C2 structures and any actions taken to address them. The GAO analyzed data on SOF C2 structures for 2018 through 2021. The GAO also reviewed studies and interviewed DoD officials on challenges overseeing SOF C2 structures.

<sup>42</sup> We reviewed four Navy reports in preparation for this project; however, they are not considered to be prior coverage.

"Naval Special Warfare Command's Safety Investigation of Event 661797," September 9, 2022.

"Line of Duty Investigation into the Death of SN Kyle Mullen on or About 4 February 2022," September 12, 2022.

"Quality Assurance Investigation into the Care and Treatment of Kyle F. Mullen, SN, USN," October 27, 2022.

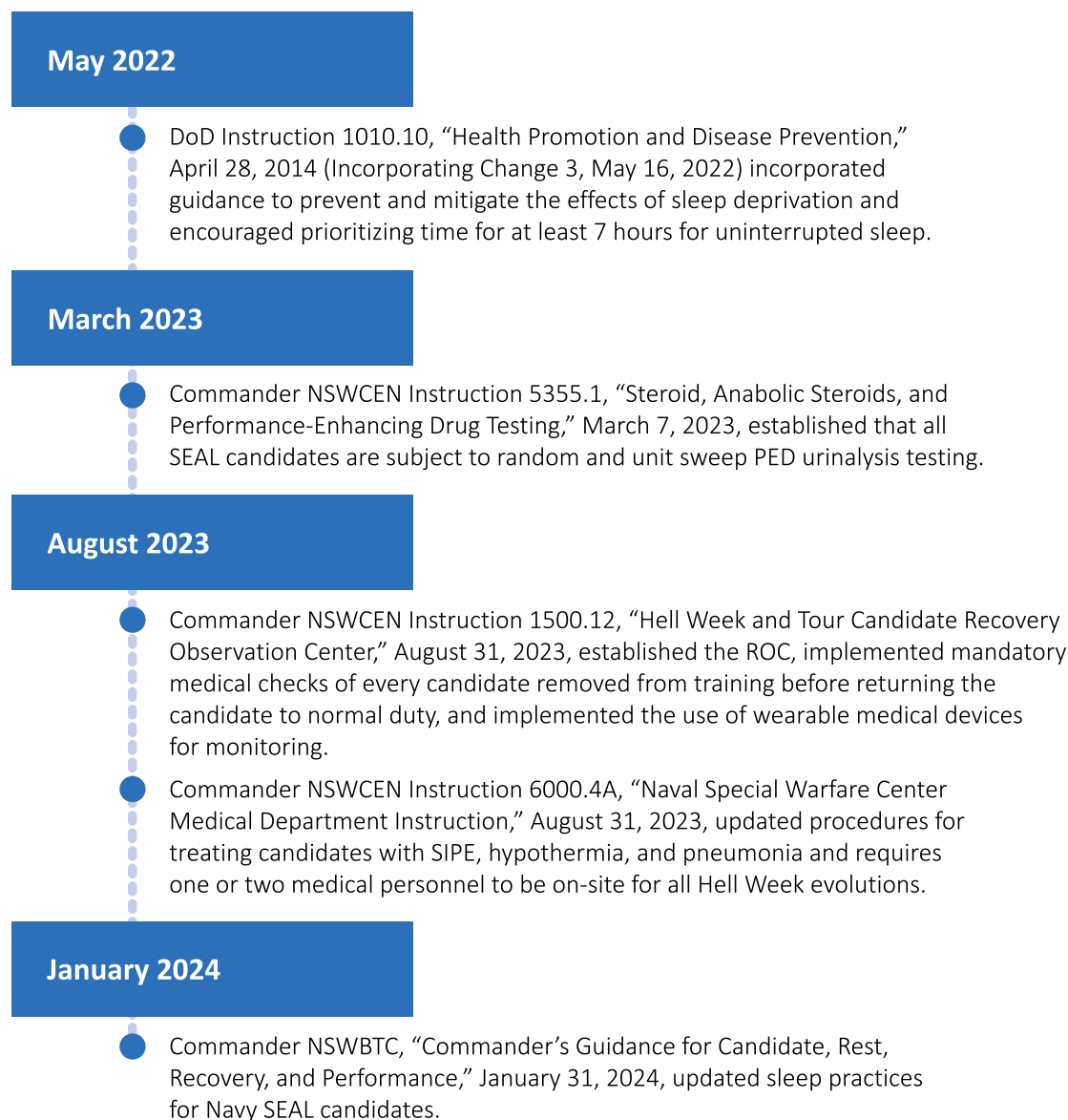
"Command Investigation into the Facts and Circumstances Regarding Safety and Medical Oversight of Basic Underwater Demolition/Sea, Air, and Land (BUD/S) Class 352," November 18, 2022.

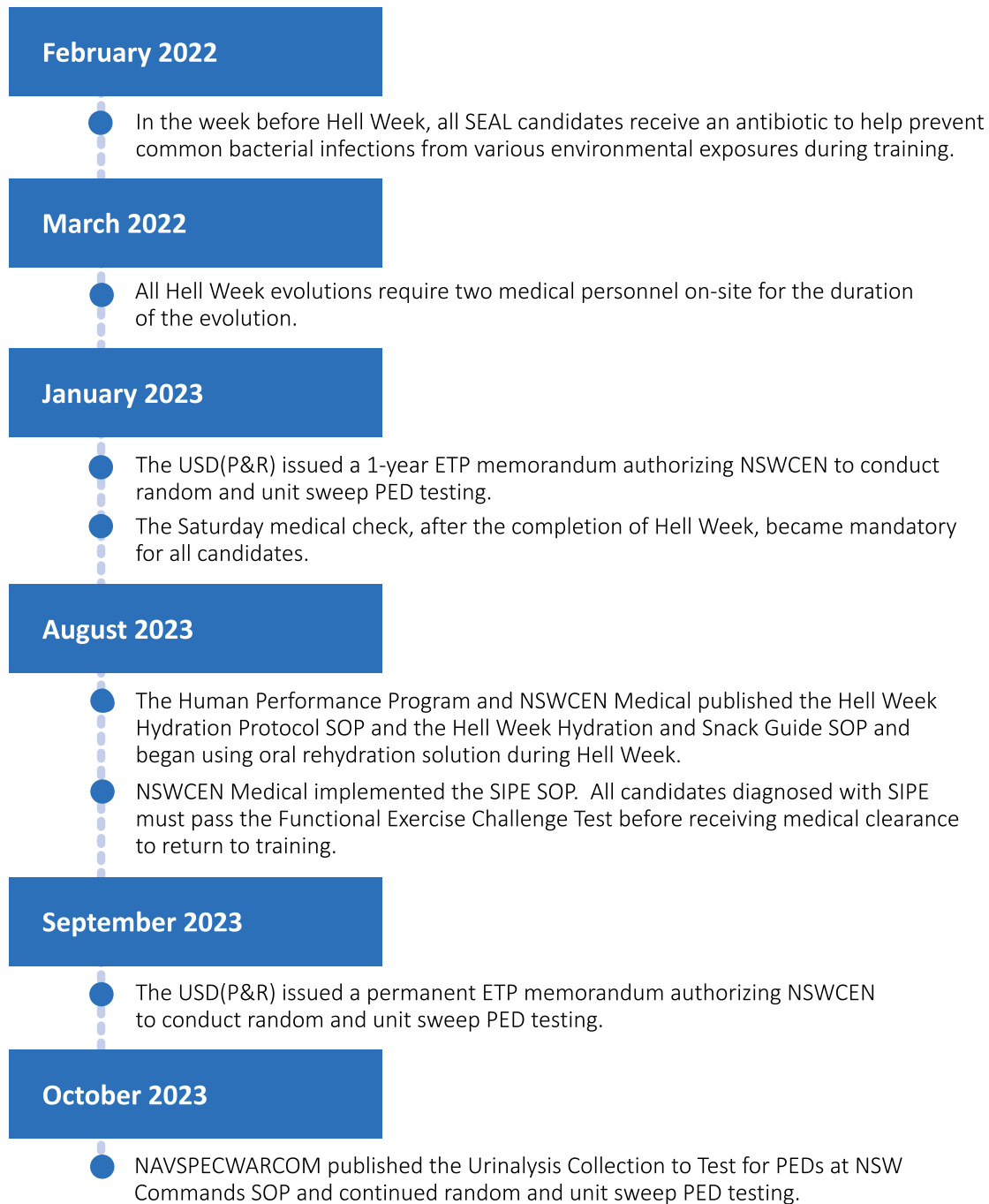
USSOCOM identified three challenges with its oversight of SOF C2 structures, including appropriately sizing or terminating SOF C2 structures, maintaining SOF training and preparedness, and staffing. USSOCOM addressed these challenges through mission and organizational changes, reviews of SOF requirements, and improving deployment management. The GAO stated that it cannot yet determine whether these changes and USSOCOM's commitment to further improvements are sufficient to address the challenges it faces with oversight of SOF C2 structures. The GAO made two recommendations: (1) require the use of standard terminology and (2) establish a centralized data collection mechanism to retain data on, for example, personnel assigned to SOF C2 structures. The DoD concurred with the recommendations.

## Appendix B

### Policy and Procedural Changes

*Figure 9. Policy Changes Applicable to Navy SEAL Training*



*Figure 10. Procedural Changes Applicable to Navy SEAL Training*



# Management Comments

## Under Secretary of Defense for Personnel and Readiness



PERSONNEL AND  
READINESS

OFFICE OF THE UNDER SECRETARY OF DEFENSE  
4000 DEFENSE PENTAGON  
WASHINGTON, D.C. 20301-4000

SEP - 4 2024

MEMORANDUM FOR INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE

SUBJECT: Response to Department of Defense Inspector General Draft Report, "Evaluation of Medical Care Provided to Navy Sea, Air, and Land (SEAL) Candidates" (Project No. D2023-DEV0PB-0099.000)

DoD Inspector General Draft Report, "Evaluation of Medical Care Provided to Navy Sea, Air, and Land (SEAL) Candidates" (Project No. D2023-DEV0PB-0099.000), recommended the review, update, and implementation of drug testing policies related to performance-enhancing drugs (PEDs), including Department of Defense Instruction (DoDI) 1010.16, "Technical Procedures for the Military Personnel Drug Abuse Testing Program," June 15, 2020.

The draft report recommended review and revision of two areas of DoDI 1010.16. The report indicated the DoDI does not explicitly list the types of PEDs included in testing and instead references a list published by the World Anti-Doping Agency (WADA), and the instruction distinguishes between steroids, anabolic steroids, and PEDs, whereas the January 2023 exception to policy (ETP) for Navy Special Warfare (NSW) refers to both anabolic steroids and PEDs as PEDs.

On April 24, 2024, I signed the attached memorandum, which included a detailed panel of more than 170 PEDs prohibited by the Department. This list amended Section 7 of DoDI 1010.16, which referenced the WADA prohibited list but did not explicitly list each PED. The PED testing panel ensures transparency, especially as NSW and other special operations forces have begun random and unit sweep PED urine testing. The memorandum also standardized the language for PEDs. The Office of Drug Demand Reduction is currently working to revise DoDI 1010.16 to include the PED testing panel and standardized language.

Thank you for your thorough review of our instruction and associated processes. We have worked closely with NSW and the other special operations forces over the past 2 years to improve detection and deterrence of these dangerous drugs.

My point of contact for this action is [REDACTED]

Ashish S. Vazirani  
Performing the Duties of the Under Secretary of  
Defense for Personnel and Readiness

Attachment:  
As stated

**Under Secretary of Defense for Personnel  
and Readiness (cont'd)**

**Attachment**

## Under Secretary of Defense for Personnel and Readiness (cont'd)



PERSONNEL AND  
READINESS

OFFICE OF THE UNDER SECRETARY OF DEFENSE  
4000 DEFENSE PENTAGON  
WASHINGTON, D.C. 20301-4000

APR 24 2024

MEMORANDUM FOR CHIEF OF THE NATIONAL GUARD BUREAU  
ASSISTANT SECRETARY OF THE ARMY FOR MANPOWER  
AND RESERVE AFFAIRS  
ASSISTANT SECRETARY OF THE NAVY FOR MANPOWER  
AND RESERVE AFFAIRS  
ASSISTANT SECRETARY OF THE AIR FORCE FOR MANPOWER  
AND RESERVE AFFAIRS

SUBJECT: Department of Defense Special Drug Testing Panel

The Military Personnel Drug Abuse Testing Program (MPDATP) has special testing provisions for substances not covered by standard drug abuse testing. These provisions are detailed in Section 7 of Department of Defense Instruction (DoDI) 1010.16, "Technical Procedures for the Military Personnel Drug Abuse Testing Program," June 15, 2020, and include anabolic steroids and performance-enhancing drugs, herein termed PED, when authorized.

Testing for these prohibited substances requires approval and is only considered when substantial indications exist to suspect wrongful use. Random testing and unit sweeps for PED misuse is only authorized by an exception to policy approved by the Under Secretary of Defense for Personnel and Readiness. Urine PED testing is performed at a World Anti-Doping Agency (WADA) accredited laboratory for agents explicitly listed in Classes S1, S2, and S4 of the World Anti-Doping Code Prohibited List.

The purpose of this update is to provide a detailed panel of PEDs tested under the abovementioned provisions. Attached is a list of WADA Classes S1, S2 and S4 drugs identified by name and will be incorporated in the next reissuance of DoDI 1010.16. A positive PED test is reported to the submitting unit based on established WADA analytical testing standards. Testing cutoffs are only established for PEDs that can result from food or other known contamination sources.

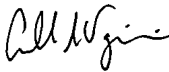
This memorandum hereby amends Section 7 of DoDI 1010.16 accordingly. This memorandum does not invalidate previously approved authorizations to conduct random testing and unit sweeps for PEDs.

The Department remains committed to deterring the misuse of all illegal, illicit, and prescription drugs, including PEDs, which degrade security, military fitness, readiness, and good order and discipline.

Under Secretary of Defense for Personnel  
and Readiness (cont'd)

My point of contact for this action is

[Redacted]



Ashish S. Vazirani  
Performing the Duties of the Under Secretary of  
Defense for Personnel and Readiness

Attachment:  
As stated

## Under Secretary of Defense for Personnel and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
1-Androstenediol (5 $\alpha$ -Androst-1-ene-3 $\beta$ ,17 $\beta$ -diol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
1-Androstenedione (5 $\alpha$ -Androst-1-ene-3,17-dione)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
1-Androsterone (3 $\alpha$ -Hydroxy-5 $\alpha$ -androst-1-en-17-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
1-Epiandrosterone (3 $\beta$ -Hydroxy-5 $\alpha$ -androst-1-en-17-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
1-Testosterone (17 $\beta$ -Hydroxy-5 $\alpha$ -androst-1-en-3-one) (Dihydroboldenone)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
4-Androstenediol (Androst-4-ene-3 $\beta$ ,17 $\beta$ -diol) (Androst-4-ene-3 $\alpha$ ,17 $\beta$ -diol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
4-Hydroxytestosterone (4,17 $\beta$ -Dihydroxyandrost-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
5-Androstenedione (Androst-5-ene-3,17-dione)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
6 $\alpha$ -Methyl-androst-4-en-3,17-dione (6-Methylandrostenedione)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
7 $\alpha$ -Methylnandrolone (17 $\beta$ -Hydroxy-7 $\alpha$ -methyl-estr-4-en-3-one) (MENT) (Trestolone)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
7-Keto-DHEA (3 $\beta$ -Hydroxy-androst-5-ene-7,17-dione, 7-oxo-DHEA)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
11-Keto-Testosterone (17 $\beta$ -Hydroxy-androst-4-en-3,11-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
11 $\beta$ -Methyl-19-nortestosterone (11 $\beta$ -methyl-17 $\beta$ -hydroxy-estr-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
17 $\alpha$ -Methylepithiostanol (2 $\alpha$ ,3 $\alpha$ -Epithio-5 $\alpha$ -androstan-17 $\alpha$ -methyl-17 $\beta$ -ol) (Epistane)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
19-Norandrostenediol (Estr-4-ene-3,17 $\beta$ -diol) (Bolandioli)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
19-Norandrostenedione (Estr-4-ene-3 $\beta$ ,17-dione) (Bolandione)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
19-Nortestosterone (17 $\beta$ -Hydroxy-estr-4-en-3-one) (Nandrolone) (Deca-durabolin)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)

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## Under Secretary of Defense for Personnel and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
Androst-4-ene-3,11,17-trione (Adrenosterone) (11-oxo)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Androstanolone (17 $\beta$ -hydroxy-5 $\alpha$ -androstan-3-one) (5 $\alpha$ -Dihydrotestosterone) (5 $\alpha$ -DHT)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Androstenediol (Androst-5-ene-3 $\beta$ ,17 $\beta$ -diol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Androstenedione (Androst-4-ene-3,17-dione)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Androsterone (3 $\alpha$ -Hydroxy-5 $\alpha$ -androstan-17-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Bolasterone (7 $\alpha$ ,17 $\alpha$ -Dimethyl-17 $\beta$ -hydroxy-androst-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Boldenone (17 $\beta$ -Hydroxy-androsta-1,4-dien-3-one) (Equipoise)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Boldione (Androsta-1,4-diene-3,17-dione)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Calusterone (7 $\beta$ ,17 $\alpha$ -Dimethyl-17 $\beta$ -hydroxy-androst-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Clostebol (4-Chloro-17 $\beta$ -hydroxy-androst-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Danazol ([1,2]Oxazolo[4',5':2,3]pregna-4-en-20-yn-17 $\alpha$ -ol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Dehydrochloromethyltestosterone (4-Chloro-17 $\beta$ -hydroxy-17 $\alpha$ -methyl-androsta-1,4-dien-3-one) (DHCMT) (Oral turinabol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Delta-2 (5 $\alpha$ -Androst-2-en-17-one) (5 $\alpha$ -Androst-3-en-17-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Desoxymethyltestosterone (17 $\alpha$ -Methyl-5 $\alpha$ -androst-2-en-17 $\beta$ -ol) (17 $\alpha$ -methyl-5 $\alpha$ -androst-3-en-17 $\beta$ -ol) (Madol) (DMT) (Pheraplex)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Desoxytestosterone (5 $\alpha$ -Androst-2-en-17 $\beta$ -ol) (5 $\alpha$ -Androst-3-en-17 $\beta$ -ol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)

2



## Under Secretary of Defense for Personnel and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
DHEA (Dehydroepiandrosterone) (3 $\beta$ -hydroxy-androst-5-en-17-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Dienedione (Estra-4,9-dien-3,17-dione)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Dienolone (17 $\beta$ -Hydroxy-estra-4,9-dien-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Dimethandrolone (7 $\alpha$ ,11 $\beta$ -Dimethyl-19-nortestosterone)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Dimethazine (17 $\beta$ -Hydroxy-2 $\alpha$ ,17 $\alpha$ -dimethyl-5 $\alpha$ -androstan-3-one azine)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Dimethyltrienolone (17 $\beta$ -Hydroxy-7 $\alpha$ ,17 $\alpha$ -dimethyl-estra-4,9,11-trien-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Drostanolone (17 $\beta$ -Hydroxy-2 $\alpha$ -methyl-5 $\alpha$ -androstan-3-one) (Masteron)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Epiandrosterone (3 $\beta$ -Hydroxy-5 $\alpha$ -androstan-17-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Epitestosterone (17 $\alpha$ -Hydroxyandrost-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Epthiostane (17 $\beta$ -Hydroxy-2 $\alpha$ ,3 $\alpha$ -epithio-5 $\alpha$ -androstan-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Ethylestrenol (19-Norpregn-4-en-17 $\alpha$ -ol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Etiocholanolone (3 $\alpha$ -Hydroxy-5 $\beta$ -androstan-17-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Fluoxymesterone (9 $\alpha$ -Fluoro-11 $\beta$ ,17 $\beta$ -dihydroxy-17 $\alpha$ -methylandrosta-4-en-3-one) (Halotestin)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Formebolone (2-Formyl-17 $\alpha$ -methyl-1,4-androsta-1,4-dien-11 $\alpha$ ,17 $\beta$ -diol-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Furazabol (17 $\alpha$ -Methyl [1,2,5]oxadiazolo[3',4':2,3]-5 $\alpha$ -androstan-17 $\beta$ -ol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Gestrinone (13 $\beta$ -Ethyl-17 $\beta$ -hydroxy-18,19-dinor-17 $\alpha$ -pregna-4,9,11-trien-20-yn-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Halodrol (4-Chloro-17 $\alpha$ -methyl-androsta-1,4-dien-3 $\beta$ ,17 $\beta$ -diol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Mestanolone (17 $\alpha$ -Methyl-17 $\beta$ -hydroxy-5 $\alpha$ -androstan-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)

3

Under Secretary of Defense for Personnel  
and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
Mesterolone (17β-Hydroxy-1α-methyl-5α-androstan-3-one) (Proviron)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Methandienone (17β-Hydroxy-17α-methylandro-1,4-dien-3-one) (Dianabol) (Methandrostenolone)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Methenolone (17β-Hydroxy-1-methyl-5α-androst-1-en-3-one) (Primobolan)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Methandriol (17α-Methylandro-5-ene-3β,17β-diol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Methasterone (17β-Hydroxy-2α,17α-dimethyl-5α-androstan-3-one) (Superdrol) (Methyldrostanolone)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Methylclostebol (4-Chloro-17β-hydroxy-17α-methylandro-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Methyldienolone (17β-Hydroxy-17α-methylestra-4,9-dien-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Methyl-1-testosterone (17β-Hydroxy-17α-methyl-5α-androst-1-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Methylnortestosterone (17β-Hydroxy-17α-methylestr-4-en-3-one) (Normethandrolone)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Methylstenbolone (2,17α-Dimethyl-17β-hydroxy-5α-androst-1-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Methyltestosterone (17β-Hydroxy-17α-methylandro-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Methyltrienolone (17β-hydroxy-17α-methylestra-4,9,11-trien-3-one) (Metribolone)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Mibolerone (17β-Hydroxy-7α,17α-dimethylestr-4-en-3-one) (Cheque drops)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Norbolethone (17α-Ethyl-17β-hydroxy-18-methylestr-4-en-3-one) (Genabol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)

## Under Secretary of Defense for Personnel and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
Norclostebol (4-Chloro-17 $\beta$ -hydroxyestr-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Norethandrolone (17 $\alpha$ -Ethyl-17 $\beta$ -hydroxyestr-4-en-3-one) (Nilevar)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Oxabolone (4,17 $\beta$ -Dihydroxyestr-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Oxandrolone (17 $\beta$ -Hydroxy-17 $\alpha$ -methyl-2-oxa-5 $\alpha$ -androstan-3-one) (Anavar)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Oxymesterone (4,17 $\beta$ -Dihydroxy-17 $\alpha$ -methylandrost-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Oxymetholone (17 $\beta$ -Hydroxy-2-hydroxymethylene-17 $\alpha$ -methyl-5 $\alpha$ -androstan-3-one) (Anadrol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Promagnon (4-Chloro-17 $\alpha$ -methyl-androst-4-en-3 $\beta$ ,17 $\beta$ -diol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Prostanozol (17 $\beta$ -[(Tetrahydro-2H-pyran-2-yl)oxy]-5 $\alpha$ -androst-2-eno[3,2-c]pyrazole)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Protobol (17 $\alpha$ -methyl-5 $\alpha$ -androstan-17 $\beta$ -ol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Quinbolone (17 $\beta$ -(1-Cyclopenten-1-yloxy)androsta-1,4-dien-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Stanozolol (17 $\alpha$ -Methylpyrazolo[4',3':2,3]-5 $\alpha$ -androstan-17 $\beta$ -ol) (Winstrol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Stenbolone (17 $\beta$ -Hydroxy-2-methyl-5 $\alpha$ -androst-1-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Testosterone (17 $\beta$ -Hydroxyandrost-4-en-3-one)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Tetrahydrogestrinone (17 $\beta$ -Hydroxy-18 $\alpha$ -homo-19-nor-17 $\alpha$ -pregna-4,9,11-trien-3-one) (THG)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Thiomesterone (1,7-bis(acetylthio)-17 $\beta$ -hydroxy-17 $\alpha$ -methyl-androst-4-en-3-one) (Emdabol)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)

5

Under Secretary of Defense for Personnel  
and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
Trenbolone (17β-Hydroxyestr-4,9,11-trien-3-one) (Tren) (Finajet) (Parabolan)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Trendione (Estra-4,9,11-triene-3,17-dione) (Trenavar)	S1. Anabolic Agents: Anabolic Androgenic Steroids (AAS)
Clenbuterol	S1. Anabolic Agents: Other Anabolic Agents
Osilodrostat	S1. Anabolic Agents: Other Anabolic Agents
Ostarine (Enobosarm) (SARM S22) (MK-2866)	S1. Anabolic Agents: Other Anabolic Agents
Ractopamine	S1. Anabolic Agents: Other Anabolic Agents
SARM AC-262,536	S1. Anabolic Agents: Other Anabolic Agents
SARM ACP-105	S1. Anabolic Agents: Other Anabolic Agents
SARM BMS-564,929	S1. Anabolic Agents: Other Anabolic Agents
SARM GSK2881078	S1. Anabolic Agents: Other Anabolic Agents
SARM LGD-2226	S1. Anabolic Agents: Other Anabolic Agents
SARM LGD-3303	S1. Anabolic Agents: Other Anabolic Agents
SARM LGD-4033 (Ligandrol)	S1. Anabolic Agents: Other Anabolic Agents
SARM S1	S1. Anabolic Agents: Other Anabolic Agents
SARM S4 (Andarine)	S1. Anabolic Agents: Other Anabolic Agents
SARM S9	S1. Anabolic Agents: Other Anabolic Agents
SARM S23	S1. Anabolic Agents: Other Anabolic Agents

## Under Secretary of Defense for Personnel and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
SARM RAD140 (Testolone)	S1. Anabolic Agents: Other Anabolic Agents
SARM YK-11	S1. Anabolic Agents: Other Anabolic Agents
Tibolone (17-Hydroxy-7alpha-methyl-19-nor-17 $\alpha$ -pregn-5(10)-en-20-yn-3-one)	S1. Anabolic Agents: Other Anabolic Agents
Zeranol	S1. Anabolic Agents: Other Anabolic Agents
Zilpaterol	S1. Anabolic Agents: Other Anabolic Agents
Darbepoietin (dEPO) (NESP) (Aranesp)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
Erythropoietin (rEPO) (Epogen)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
EPO-Fc	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
Methoxy polyethylene glycol-epoetin beta (CERA)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
Daprodustat (GSK1278863)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
Desidustat (ZYAN1)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
Enarodustat (JTZ-951)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis

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Under Secretary of Defense for Personnel  
and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
FG-2216	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
IOX2	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
IOX4	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
JNJ-42041935	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
Molidustat (BAY 85-3934)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
Roxadustat (FG-4592)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
Vadadustat (AKB-6548)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Erythropoietins (EPO) and Agents Affecting Erythropoiesis
Human Chorionic Gonadotrophin (hCG)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Testosterone-stimulating Peptides
Luteinizing Hormone (LH)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Testosterone-stimulating Peptides
Buserelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Testosterone-stimulating Peptides
Deslorelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Testosterone-stimulating Peptides



## Under Secretary of Defense for Personnel and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
Gonadorelin (LHRH)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Testosterone-stimulating Peptides
Goserelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Testosterone-stimulating Peptides
Histrelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Testosterone-stimulating Peptides
Kisspeptin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Testosterone-stimulating Peptides
Leuprorelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Testosterone-stimulating Peptides
Nafarelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Testosterone-stimulating Peptides
Triptorelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Testosterone-stimulating Peptides
Human Growth Hormone (hGH) (Somatotropin)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Human Growth Hormone (hGH), its Analogues and Fragments
Insulin-like Growth Factor-I (IGF-I) (Mecasermin)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Human Growth Hormone (hGH), its Analogues and Fragments
IGF-1 Analogues: R3-IGF-1, Long R3-IGF-1, des(1-3)IGF-1	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Human Growth Hormone (hGH), its Analogues and Fragments
AOD-9604	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Human Growth Hormone (hGH), its Analogues and Fragments
hGH fragment 176-191	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Human Growth Hormone (hGH), its Analogues and Fragments

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Under Secretary of Defense for Personnel  
and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
CJC-1293	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
CJC-1295	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
CJC-1295 DAC	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
Rismorelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
Sermorelin [GHRH (1-29)]	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
Somatorelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
Tesamorelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
Anamorelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
Capromorelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
Ibutamoren (MK-677)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
Ipamorelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
Lenomorelin (Ghrelin)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
Tabimorelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors

## Under Secretary of Defense for Personnel and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
Alexamorelin	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
GHRP-1	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
GHRP-2 (Prlmorelin)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
GHRP-3	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
GHRP-4	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
GHRP-5	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
GHRP-6	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
Examorelin (Hexarelin)	S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics: Growth Hormone Releasing Factors
6-Bromo-androstan-3,17-dione (6-Bromo)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
6-Bromo-Androstan-1,4-diene-3,17-dione	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
6-oxo-androstenedione (4-Androstene-3,6,17-trione) (6-Oxo)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Aminoglutethimide (3-(4-Aminophenyl)-3-ethylpiperidine-2,6-dione) (Cytadren)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Anastrozole (2-[3-(2-Vyanopropan-2-yl)-5-(1,2,4-triazol-1-ylmethyl)phenyl]-2-methylpropanenitrile) (Arimidex)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances

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## Under Secretary of Defense for Personnel and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
Androstatrienedione (Androst-1,4,6-triene-3,17-dione) (ATD)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Arimistane (Androst-3,5-diene-7,17-dione)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Exemestane (6-Methylenandrosta-1,4-diene-3,17-dione) (Aromasin)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Formestane (4-Hydroxy-androst-4-ene-3,17-dione)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Letrozole (4-[(4-Cyanophenyl)-(1,2,4-triazol-1-yl)methyl]benzonitrile) (Femara)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Testolactone (D-Homo-17 $\alpha$ -oxandrosta-1,4-diene-3,17-dione) (Teslac)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Bazedoxifene	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Clomiphene (Clomid)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Cyclofenil (Fertodur)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Enclomiphene	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Fulvestrant (Faslodex)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Ospemifene	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Raloxifene (Evista)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances

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## Under Secretary of Defense for Personnel and Readiness (cont'd)

Attachment

Performance Enhancing Drug	WADA Prohibited Class
Tamoxifen (Nolvadex)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
Toremifene (Fareston)	S4. Hormone and Metabolic Modulators: Aromatase Inhibitors and Anti-Estrogenic Substances
AICAR	S4. Hormone and Metabolic Modulators: Metabolic Modulators
GW0742	S4. Hormone and Metabolic Modulators: Metabolic Modulators
GW1516 (GW501516)	S4. Hormone and Metabolic Modulators: Metabolic Modulators
SR9009 (Stenabolic)	S4. Hormone and Metabolic Modulators: Metabolic Modulators
SR9011	S4. Hormone and Metabolic Modulators: Metabolic Modulators
Meldonium	S4. Hormone and Metabolic Modulators: Metabolic Modulators
Trimetazidine	S4. Hormone and Metabolic Modulators: Metabolic Modulators

Under Secretary of Defense for Personnel  
and Readiness (cont'd)

Attachment

Performance Enhancing Drug	Cutoff ng/mL *
Clenbuterol	1.0
Clomiphene	0.1
DHCMT M3	0.1
GW1516	0.1
Ractopamine	5
Selective Androgen Receptor Modulators (SARMs)	0.1
Trenbolone	0.2
Zeranol	5
Zilpaterol	5

*\* PEDs with a concentration equal to or greater than the cutoff concentration are reported positive. All other PEDs are reported positive if any PED(s) is present in accordance with WADA testing guidelines.*



## NAVSPECWARCOM

From: Office of the Inspector General, Naval Special Warfare Command  
To: DoD Inspector General

Subj: Evaluation of Medical Care Provided to Navy Sea, Air, and Land (SEAL) Candidates

Ref: (a) Draft Evaluation Report of 13 Aug 2024 – Project No. D2023-DEVOPB-0099.000

1. The Naval Special Warfare Command (NSWC) Force Medical Officer, together with NSW Center (NSWCEN) and NSW Center Medical (CENMED) have completed their review of reference (a) and provide the following comments for consideration.

a. NSWCEN / CENMED feedback below.

1) **IG recommendation #1 (page 48)** - “We recommend that the Under Secretary of Defense for Personnel and Readiness, in coordination with the Assistant Secretary of Defense (Health Affairs), Defense Health Agency Director, Navy Surgeon General, and Command Surgeon of the U.S. Special Operations Command, review, update, and implement as needed drug testing policies related to performance-enhancing drugs, including DoD Instruction 1010.16, “Technical Procedures for the Military Personnel Drug Abuse Testing Program.”

**Discussion:** Specified guidance for candidate PEDs testing in SOF selection and training programs should be updated, simplified, and aligned in appropriate NSWC, SOCOM and DOD policies. BTC currently conducts candidate PEDs testing IAW OMNAVSPECWARCENTINST 5355.1 (07MAR2023) – Steroid, Anabolic Steroids, and Performance Enhancing Drug Testing. This Instruction References all below OPNAV and DOD overarching testing policy.

(a) DoDI 1010.01

(b) DoDI 1010.16

(c) USD(P&R) memo of 18 Jan 23

(d) ASN(M&RA) memo of 10 Feb 23

(e) SECNAVINST 5300.28F

(f) OPNAVINST 5350.4E

(g) DON Navy Drug Screening Laboratory memo of 14 Feb 23, Random Collection and Unit Sweet Steroid Specimen Collection Processes

**Recommendation:** Concur. Recommend updated language in DODI 1010.16, which should be captured and mirrored in appropriate SOCOM, Navy and NSWC PEDs Policies:

1. Excerpt, Section 7.1 (b): “In addition to anabolic steroids, performance-enhancing

## NAVSPECWARCOM (cont'd)

drugs explicitly listed in Classes S1, S2, and S4 of the World Anti-Doping Code Prohibited List, including all updates and amendments by the World Anti-Doping Agency, will be reported to submitting units because these substances are often used:

- (1) In conjunction with anabolic steroids as part of on-off use cycles; or (2) To suppress unwanted side effects.”
  - a. This excerpt of the DoDI is part of what is defined as wrongful use for steroids, which focuses heavily on the Designer Anabolic Steroid Control Act of 2014. That act covers controlled substances but does not address the “prohibited” substances that are not controlled (generally fall into the S4 category) and are not anabolic steroids. Many of these substances are used for performance enhancement on their own without use tied to (1) & (2) above.
  - b. The highlighted language does not portray the wrongfulness of use of these prohibited substances in the same light that they are considered by higher authorities (NSWC/OPNAV).
  - c. Recommend the language be socialized to reflect how a positive sample for these substances is classified as wrongful use and the consequences that are mandatory for that finding.
- 2. Excerpt, Section 7.2 (b): “Steroid testing is considered when substantial indications exist to suspect wrongful steroid use pursuant to a probable cause, command-directed, or medical basis. Random testing or unit sweeps for steroid misuse is not authorized.”
  - a. This section requires an update to reflect the ETP and align with the language in January 2023 ETP.
  - b. Recommend a subsection reflecting the following:
    - (1): Naval Special Warfare commands are permitted by exception to conduct random and unit sweep urinalysis testing of personnel assigned to Navy Special Warfare commands, to include candidates in training, for PEDs using premise codes for Random Collection (IR) and Unit Sweep (IU). Such collection shall be collected and submitted in line with the procedures herein to ensure observed collection and chain of custody.
    - (2): Random and unit sweep collection will require submission of two separate specimen bottles from each service member tested, one for a standard drug panel and the second for a PEDs panel.

2) **IG recommendation #2 (page 48):** “We recommend that the Commander of the Naval Special Warfare Command a.(U) Reassess the Naval Special Warfare Center’s medical capabilities. At a minimum, the assessment should determine if:

1.(U) Naval Special Warfare Center’s medical and communication equipment supports the appropriate standard of care for candidates.

**Discussion:** Currently, N10 has the medical equipment to support the appropriate standard of care for candidates. We have procured one cold plunge for heat injuries and have the inflatable rubber boat as back up. Goal is to purchase a second cold plunge. An ultrasound

## NAVSPECWARCOM (cont'd)

machine was purchased and is used extensively for diagnosing musculoskeletal injuries. A nationwide shortage of data thermometers for heat and cold injuries is a factor we have mitigated against with the temporary usage of other temperature measuring devices. Currently, N10 has instituted radio usage for Hell Week and Tour as the primary means of communication with CENMED. With N6's assistance, future plans are to use radios across all phases of training as the primary communication platform.

*2.(U) Naval Special Warfare Center's medical manpower requirements meet clinical demand.*

**Discussion:** Medical concurs with manning shortfall as does SOCOM J8 Manpower Study commissioned FEB '24 but still not complete and validated.

*b.(U) Develop and implement a plan and policy to ensure that the Naval Special Warfare Center has sufficient resources based on the results of the assessment completed in Recommendation 2.a."*

**Discussion:** COMNAVSPECWARCENINST 6000.4A Naval Special Warfare Center Medical Instruction. This was updated and signed by NSWCEN CDRE and addresses all medical capabilities, policy/plans and implementation. Based off NETC Investigation.

3) **IG recommendation 3 (page 49):** *"We recommend that the Commander of the Naval Special Warfare Command develop and implement a sleep deprivation policy to establish written guidance using results from ongoing medical studies to provide functional guidance that will ensure operationally relevant training while minimizing safety concerns for Sea, Air, and Land and Special Warfare Combat Crewmen candidates during training."*

**Recommendation:** Concur that a NSWC/ NSWCEN Sleep deprivation policy for training should be produced based on the pending results and recommendation of the NHRC Fatigue Study.

4) **IG statement (page 37, para 2):** "According to the training schedules we reviewed, the Saturday check has been part of the training schedule since at least Class 330 in April 2018. However, according to a SMO, the Saturday medical check was optional before January 2023. After January 2023, the Saturday medical check was made mandatory for all candidates."

**Discussion:** NSW Center Medical does not have records of Saturday morning post-Hell Week medical checks being optional prior to JAN '23. There is no evidence to suggest that Saturday morning post-Hell Week medical checks were ever optional.

**Recommendation:** Change report to indicate, "A SMO stated that post-Hell Week medical checks were optional prior to 2023. This, however, is inconsistent with BTC's Commanding Officer during that time who stated the Saturday morning medical checks were not optional – June 2022-June 2024"

b. NSWC Force Medical Officer feedback below:

## NAVSPECWARCOM (cont'd)

1) **IG statement (page 38, para 1):** SIPE is a rare but serious condition first reported in SCUBA divers in 1981 and has since been reported in military trainees and open water swimmers. It can be fatal, but if caught early,

**Discussion:** SCUBA Induced Pulmonary Edema is different than Swimming Induced Pulmonary Edema. There are no documented fatalities from either form of SIPE. SIPE is on the list of possibilities for some SCUBA divers, but it is not proven to be the cause of death.

2) **IG evaluation report (page 38, para 2):** According to an August 2018 article from the American College of Cardiology, SIPE is an understudied condition with an unknown true prevalence.

**Discussion:** Most cases of SIPE resolve without treatment. That is why the incidence/prevalence is unknown.

3) **IG statement (page 40, para 1):** In August 2023, NSWCEC established the ROC to provide closer medical oversight of candidates during Hell Week and when Hell Week is complete.

**Discussion:** The ROC has existed since 2015 (I think). In FEB 2022, instead of ceasing operations at the end of Hell Week, the ROC was extended to observe the candidates for 24 hours after securing from Hell Week. The ROC instruction was updated August 2023.

2. NSWCEC Deputy N2 reviewed reference (a) and provided the following input:

a. Page 17, Para 1, Line 10. As reads: "...review in Section 745 below." **Comment:** There is no Section 745 in this report. Believe this to be an error that should be addressed.

b. Page 36, Para 3, Line 2. As reads: "...However the research challenge is finding someone with a security clearance at the appropriate level to work with the research data." **Comment:** Believe this to be an inaccurate statement. This data should be no higher than SECRET and should be processed on SIPRnet. A SECRET clearance is relatively easy to obtain in the DoD research community. This does not require a TS/SCI clearance.

c. Page 46, Recommendation 1. Although the header is appropriately classified, the explanation paragraph also requires a classification marking. **Comment:** I recommend this paragraph be classified as UNCLASSIFIED (U).

d. Overall, I did not note any specific paragraph that I would classify as CUI. As such, I didn't see any effect of compilation of information that would move this from UNCLASS to CUI. I believe the report is releasable to interested members of Congress.

## NAVSPECWARCOM (cont'd)

3. Should you have any questions with regard to the foregoing, please reach out to me at [REDACTED]

CONLON.LORI.A  
NN. [REDACTED]  
L. CONLON  
NSW Force Inspector General (Acting)

Digitally signed by  
CONLON.LORI.ANN [REDACTED]  
Date: 2024.08.29 15:54:23 -07'00'

## Acronyms and Abbreviations

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<b>BUD/S</b>	Basic Underwater Demolition/Sea, Air, and Land
<b>C2</b>	Command and Control
<b>DCIPS</b>	Defense Casualty Information Processing System
<b>DoDI</b>	DoD Instruction
<b>EKG</b>	Electrocardiogram
<b>ETP</b>	Exemption to Policy
<b>FMO</b>	Force Medical Officer
<b>HM</b>	Hospital Corpsman
<b>IDC</b>	Independent Duty Corpsman
<b>NAB</b>	Naval Amphibious Base
<b>NAVSPECWARCOM</b>	Naval Special Warfare Command
<b>NCAO</b>	Navy Casualty Assistance Office
<b>NDAA</b>	National Defense Authorization Act
<b>NSW</b>	Naval Special Warfare
<b>NSWBTC</b>	Naval Special Warfare Basic Training Command
<b>NSWCEN</b>	Naval Special Warfare Center
<b>OSD(P&amp;R)</b>	Office of the Under Secretary of Defense for Personnel and Readiness
<b>PED</b>	Performance-Enhancing Drug
<b>ROC</b>	Recovery Observation Center
<b>SEAL</b>	Sea, Air, and Land
<b>SIPE</b>	Swimming-Induced Pulmonary Edema
<b>SMO</b>	Senior Medical Officer
<b>SOF</b>	Special Operations Forces
<b>SOP</b>	Standard Operating Procedure
<b>SWCC</b>	Special Warfare Combat Crewmen
<b>TSAT</b>	Training and Survey Assessment Team
<b>USD(P&amp;R)</b>	Under Secretary of Defense for Personnel and Readiness
<b>USSOCOM</b>	U.S. Special Operations Command



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