DEPARTMENT OF THE NAVY
COMMANDER
NAVAL EDUCATION AND TRAINING COMMAND
250 DALLAS STREET
PENSACOLA, FLORIDA 32508-5220

[redacted]

5830
Ser N00J/085
24 Mar 23

From: Commander, Naval Education and Training Command
To: File

Subj: COMMAND INVESTIGATION INTO THE FACTS AND CIRCUMSTANCES REGARDING SAFETY AND MEDICAL OVERSIGHT OF BASIC UNDERWATER DEMOLITION/SEA AIR AND LAND CLASS 352

Ref: (a) Vice Chief of Naval Operations ltr N09/22U100578 of 31 Aug 22
(b) RDML Benjamin Reynolds, USN, ltr of 18 Nov 22
(c) RDML Benjamin Reynolds, USN, ltr of 16 Dec 22

Encl: (1) NAVSPECWARCOM ltr 5830 Ser N00/L010 of 24 Feb 23 with encl
(2) BUMED ltr 5830 Ser N00J/13 of 7 Mar 23
(3) Modifications to the Command Investigation
(4) Commander, Naval Safety Command ltr 4730 of 19 Oct 22
(5) USSOCOM High Risk Training Inspection of 28 Oct 20
(6) Interview of (b) (6) [redacted]
(7) Interview of (b) (6) [redacted]
(8) Interview of (b) (6) [redacted]
(9) 1st Phase Data
(10) Naval Health Research Center Hell Week Report of 2005
(11) BTC Training Mishaps
(12) Naval Health Research Center Hell Week Report of 2015
(13) Attrition Data
(14) Thomas Stedman (2005), *Stedman's Medical Dictionary* 28th Ed. Stedman's
(15) Resume of (b) (6) [redacted]
(16) (b) (6) [redacted] email of 5 Nov 22
(17) Mission Critical Team Institute Research Inquiry of 8 10 Feb 22
(18) Memorandum for the Record (b) (6) [redacted] of 16 Mar 23
(19) Commander, Navy Special Warfare Center ltr 1200 Ser 00 of 6 Sep 19 (b) (6) [redacted] (b) (6) [redacted] High Risk Training Safety Officer Letter of Designation
(20) (b) (6) [redacted] HRTSO Job Qualification Requirements of 16 May 2019
(21) (b) (6) [redacted] Manager's Internal Control Assessment 2021
(22) (b) (6) [redacted] anager's Internal Control Assessment 2022
(23) Annual Safety Reviews from 2018-2022
(24) BTC DEOCS of April 2021
(25) Clinical Procedures for Safer Patient Care, Section 5.6 Management of Hypoxia
(26) Hafen BB, Sharma S (2022), "Oxygen Saturation," StratPearls Publishing LLC.
(27) Class 352 Pneumonia Medical Records of 4 February 2022

[redacted]

[redacted]

Subj: COMMAND INVESTIGATION INTO THE FACTS AND CIRCUMSTANCES REGARDING SAFETY AND MEDICAL OVERSIGHT OF BASIC UNDERWATER DEMOLITION/SEA AIR AND LAND CLASS 352

1. Per reference (a), I was directed to convene a command investigation into Naval Special Warfare Command's (NSWC) Basic Training Command (BTC) oversight of Basic Underwater Demolition/Sea Air and Land (BUD/S) Class 352 as it related to SN Kyle Mullen's death to include relevant circumstances associated with the incident. I concur with the findings, opinions, and recommendations of the investigating officer as set forth in references (b) and (c), but as modified herein.

2. I commend RDML Ben Reynolds and his investigation team for their diligent work. With collective decades of experience and diversity of relevant expertise, they took an in-depth look into a premier Navy high risk training program and provided insightful, actionable, and practical recommendations.

3. A copy of this investigation shall be forwarded to the Vice Chief of Naval Operations (VCNO) for action as deemed appropriate.

4. Independent of this investigation, Naval Safety Command (NAVSAFECOM) and Bureau of Medicine and Surgery (BUMED) are conducting a safety investigation and a quality of care review, respectively. However, to ensure as thorough a review as possible, I solicited, and incorporated as appropriate, input from NSWC (enclosure (1)), BUMED (enclosure (2)) and NAVSAFECOM. NAVSAFECOM did not identify any gaps or seams with the facts, opinions, and recommendations contained within reference (b). Finally, enclosure (3) directs modifications to the final report of investigation.

5. Naval Education and Training Command's (NETC) mission is to recruit, train, and deliver those who serve our Nation, fostering them from street-to-fleet by forging civilians into highly skilled, operational, and combat ready warfighters. We oversee much of the training within the Navy, including numerous high risk training programs, and lead in the delivery of effective, leading-edge training for naval forces. NSWC BTC is not aligned under NETC therefore we do not provide oversight. It is with this context of experience and expertise that I was tasked with convening this investigation into a high risk training program outside the NETC domain.

6. Overview

a. The high risk training program conducted at BUD/S is necessary to achieve the required outcome: fully combat capable special operators. Efforts to mitigate the inherent risk must not be allowed to dull training effectiveness and thereby create risk to commands and Sailors operating in combat environments. Candidates must be pushed close to operational limits to ensure they are adequately prepared for combat. However, effective risk management and training support systems can and should significantly mitigate injuries and illnesses associated with high risk training.

[redacted]

b. This investigation revealed what is correctly described as an individual and community tragedy and found failures across multiple systems that led to a number of candidates being at a high risk of serious injury. As stated by CNSWC in enclosure (1), it is a top priority for NSWC and the Navy to ensure we learn from this tragedy and take action to prevent it from happening again during assessment, selection and training. For the Navy and the Naval Special Warfare community to improve training and avert preventable injuries, this tragedy must be addressed through a holistic, systemic, and command responsibility lens, not as if this was an individual or unique event.

c. At its core, the investigation finds that relentless and continuous self-assessment and self-correction within all departments of BTC is required. It reveals a near perfect storm of converging factors, factors that accumulated unidentified and unmitigated risk. Without rigorous oversight and accountability, this high risk training mission cannot be accomplished effectively and safely. This report found that the Navy and NSWC must improve medical processes, procedures and policies. Enclosures (1) and (2) demonstrate that NSWC and BUMED are taking actions to address the issues discovered. The report also found that NSWC must strengthen its high risk training safety program. Finally, NSWC and the Navy must develop an enduring system to educate/acculturate candidates against the use of Performance Enhancing Drugs (PEDs), and a testing and enforcement mechanism to detect illicit use.

7. I concur with the report's four primary findings, which drive the associated recommendations contained in the report and this endorsement. Due to the expansiveness of this investigation, in this endorsement I have organized specific comments in sections by subject matter, specifically Instructors and Curriculum, Medical, Safety, and Performance Enhancing Drugs (PEDs).

a. **Executive Summary and Introduction.** I modify as set forth in enclosure (3).

b. **Instructors and Curriculum**

(1) I modify Findings of Fact, Opinions and Recommendations relating to instructors and curriculum as set forth in enclosure (3). I highlight several of the findings and recommendations as follows. The investigation considered curriculum execution to ascertain the potential impact on Class 352. While it found the curriculum was sound, it found the increased intensity of execution exacerbated the risk to candidates, through increased fatigue, increased environmental exposure, and reduced interstitial recovery time. I highlight though that the evidence did not indicate these issues were causal in SN Mullen's death.

(2) As noted in enclosure (1), there is a balance and art to curriculum execution, such that risk is properly mitigated while meeting the purpose of the training, and less experienced instructors may not fully understand and/or be able to strike this balance. It is incumbent upon leadership to ensure instructors understand this balance and execute appropriately. As the report

highlights, continuous oversight, self assessment, and self-correction is required in overseeing and managing training to prevent drift and potentially disastrous consequences. NSWC already has addressed these issues and made improvements since Class 352 in the areas of instructor training, qualifications, experience and curriculum management and execution. In enclosure (3), I recommend these changes be assessed to ascertain effectiveness.

c. **Medical**

(1) I modify Findings of Fact, Opinions and Recommendations relating to Medical as set forth in enclosure (3). I highlight several of the findings and recommendations as follows. This investigation revealed an inadequate medical structure to provide necessary medical command and control to a high risk training program. It found medical was poorly organized, poorly integrated, and poorly led, and put candidates at significant risk. While there was an accumulation of unidentified risk in multiple areas at the time of Class 352, the flaws in the medical program likely had the most direct impact on the health and well being of the members of Class 352, and specifically, to SN Mullen. The medical program that was in place at the time of Class 352 did not afford adequate and/or coordinated oversight. Instead, the flawed structure and inadequate leadership created a disconnected and inconsistent flow of information to proper authorities positioned to make informed risk determinations.

(2) Pneumonia is a serious, but known, identifiable, treatable, and preventable hazard in BUD/S training. Inattentiveness to pneumonia is a major error in oversight creating serious risks to health for our candidates going through BUD/S. A field guide and/or specific training for NSWC medical personnel on how to disambiguate pneumonia from SIPE is necessary as are more thorough evaluations. In enclosure (3), I directed a minor change to Recommendation 11 to specifically address this issue.

(3) Post-Class 352 Changes. While changes have been made since completion of Class 352, the investigation provides additional recommendations necessary to provide adequate oversight, communication and training for medical personnel. In accordance with enclosures (1) and (2), I incorporate additional recommendations to be included as Recommendations 29 through 34, as detailed in enclosure (3).

(4) The investigation found BUD/S candidates to be reluctant to seek medical care, worried that doing so would put their continuation in training at risk, and are driven by a desire to remain in training, often at all costs. As this report and the follow-on endorsements highlight, a holistic approach is required, not only by building a culture of trust with the candidates and instructors as well as trust with medical, but in revising the curriculum and evaluating how NSWC trains its instructors, medical personnel, and contractors regarding student attitudes and self-report decision making. I also recommend, and incorporate into the report at enclosure (3), a review of Navy and DoD policy to evaluate what responsibility medical personnel currently have, or should have, to assess patient capability for self-assessment, reporting and decision-making regarding their care when in a physically or mentally degraded state.

d. **Safety**

(1) I modify Findings of Fact, Opinions and Recommendations relating to Safety as set forth in enclosure (3). I highlight several of the findings and recommendations as follows. While the safety program met minimum administrative requirements, it was not suitably robust for the degree of risk inherent to the BUD/S training program. The safety program as implemented at the time of Class 352 was not managed and executed consistently and did not properly assess accumulating risk, hazards, and available mitigations. The investigation revealed a degree of complacency and insufficient attentiveness to a wide range of important inputs meant to keep the students safe. NSWC must build a successful program that balances the need to provide effective high risk training with appropriate safeguards. In this area, as set forth in Recommendation 9 of reference (b), recommend outside assistance to conduct a thorough, third party look at their program to ensure it meets the warranted rigor, and that the program adequately and thoroughly informs leadership about the circumstances where the command accrues risk.

(2) At the time reference (b) was submitted, it did not have the final NAVSAFECOM report for an inspection of the High Risk Training program at the NSW Center in Kodiak, Alaska. Enclosure (4) contains that final report; detailed changes are provided in enclosure (3). Further, at enclosure (5), the USSOCOM Inspector General conducted a "rapid" high risk training inspection in October 2020, detailed changes are provided in enclosure (3).

e. **Performance Enhancing Drugs (PEDs)**

(1) The report also examined PEDs use within BUD/S. I modify Findings of Fact, Opinions and Recommendations relating to PEDs as set forth in enclosure (3). BUD/S requires exceptional human physical performance, which generates a powerful incentive to use PEDs, but as this report highlights, this use creates a significant and unquantifiable risk to the safety of both the PEDs user and fellow candidates pushing themselves to compete with an unnaturally enhanced peer. While SN Mullen's death was not caused by PEDs use, PEDs use must be eliminated from NSWC and other high risk training.

(2) The investigation revealed strong indicators of PEDs use by some BUD/S candidates. Illicit PEDs use represents a significant hazard to candidate health, and is also contrary to the SEAL ethos and the Navy's core values. Thus, as the investigation recommends, both a robust testing program to mitigate the injury risk and an education program to build a culture of integrity and moral character must be implemented and sustained, as soon as scientifically and medically feasible, to eliminate PEDs use at BUD/S. As a Commander who oversees and manages high-risk training schools within the Navy, I note that while the SEALs are the leading indicator of this problem, they are not alone.

Subj: COMMAND INVESTIGATION INTO THE FACTS AND CIRCUMSTANCES REGARDING SAFETY AND MEDICAL OVERSIGHT OF BASIC UNDERWATER DEMOLITION/SEA AIR AND LAND CLASS 352

8. Conclusion. SN Mullen's death was tragic, and my heartfelt condolences go out to his family. This investigation provides NSWC and the Navy with actionable information to improve the safety and success of BUD/S training. This investigation identifies risks that aggregated as the result of inadequate oversight, insufficient risk assessment, poor medical command and control, and undetected performance enhancing drug use; and also offers actionable solutions to mitigate those risks going forward. The systemic deficiencies the investigation noted put all of Class 352 at unacceptable and underappreciated levels of risk. Overcoming these challenges requires relentless and continuous self-assessment and self-correction.

9. I also recommend referral of this report to the Navy's Learning to Action Board to oversee Navy-wide learning and to track and assess recommendations from this report, and including the actions NSWC has set forth in enclosure (1).

10. Accountability actions are also necessary. In enclosure (1), NSWC provides intent to take appropriate accountability actions. (b) (5) [redacted]

(b) (5) [redacted]

Enclosures (4) through (27) will be added to reference (b) as directed in enclosure (3).

11. My point of contact is (b) (6) [redacted] USN, NETC Force Judge Advocate, who can be reached at (b) (6) [redacted] or by email at (b) (6) [redacted]

(b) (6) [redacted]

P. A. GARVIN

Copy to:
VCNO
OPNAV N17
NAVSAFECOM
NSWC
BUMED

5830
18 Nov 22

From: RDML Benjamin Reynolds, USN
To: Commander, Naval Education and Training Command

Subj: COMMAND INVESTIGATION INTO THE FACTS AND CIRCUMSTANCES REGARDING SAFETY AND MEDICAL OVERSIGHT OF BASIC UNDERWATER DEMOLITION/SEA AIR AND LAND (BUD/S) CLASS 352

Ref: (a) Commander, Naval Education and Training Command Ltr N00J/286 of 13 Sep 22
(b) Commander, Naval Education and Training Command email of 6 Oct 22
(c) Commander, Naval Education and Training Command email of 27 Oct 22

Encl: (1) Final Report

1. Reference (a), as modified by references (b) and (c), directed an investigation into the facts and circumstances surrounding Naval Special Warfare Basic Training Command (BTC) oversight of BUD/S Class 352 as it relates to SN Kyle Mullen's death, to include relevant circumstances associated with the incident. Enclosure (1) is the required report.

2. As directed, the investigation focused on training and medical oversight in place during BUD/S Class 352 1st Phase, specifically during the crucible event known as "Hell Week" and the 48 hours immediately following. Additionally, it addressed training and oversight of instructors, safety measures in place, continuity of medical care, and the policy regarding and prevalence of performance enhancing drugs and supplements. Finally, it addressed changes made regarding these areas since 4 February 2022. During the course of the investigation, the team received support and cooperation from all organizations.

(b) (6)

B. G. REYNOLDS

EXECUTIVE SUMMARY

Summary of Findings Overview

On the morning of 4 February 2022, SN Kyle Mullen successfully secured Hell Week as part of Basic Underwater Demolition/Sea Air and Land (BUD/S) Class 352. SN Mullen and his classmates had pushed themselves through exceptionally arduous training, including fatigue and injuries, to be here. After a ceremony, Class 352 walked to the Naval Special Warfare Medical Clinic for a final medical check, to assess whether care was needed before they could rest. SN Mullen and other candidates in Class 352 had respiratory issues throughout Hell Week and had received field care from a contractor paramedic. However, Clinic medical personnel lacked information on these prior symptoms and treatment given, and concluded that SN Mullen was not at risk. He and his classmates were sent to rest at the barracks, monitored by watchstanders with no medical training. Approximately eight hours later, a doctor at the local Coronado hospital pronounced SN Mullen dead from bacterial pneumonia. Two of his classmates were admitted to the hospital to be treated for potential pneumonia as well.

This investigation examined four key areas that contributed to the unrecognized accumulation of risk across multiple systems designed to provide safe, effective training to BUD/S candidates.

Instructors and Curriculum. The report examines instructor selection and training, intent of the commanders involved, oversight by leaders and staff, and the broader roles of operational support staff. The historic, rapid, and significant changes to attrition occurring during the time of Class 352 likely had multiple causes, but were accompanied by insufficient oversight by both Basic Training Command and Naval Special Warfare Center leadership of execution of the curriculum with limited rest and recovery periods. Changes to cadre composition, additional training, and robust oversight have corrected this deviation.

Safety Oversight and Risk Management. The report examines high risk training safety and operational risk management, including practical mitigations by cadre, mishap reporting and analysis, and emergency action planning. Incomplete risk assessment left instructors and medical personnel unprepared to identify and address some hazards as they arose. Incomplete mishap tracking also failed to identify available mitigations. Safety management personnel continue to lack the training, tools, information, and structure required for identification of all sources of accumulating risk, accurate hazard assessment, and application of available mitigations.

Medical Oversight and Command and Control. The report examines the command structure and oversight of medical care for BUD/S candidates, including care immediately following Hell Week. Candidates were placed at significant risk by a medical system not trained, organized, integrated, or drilled to ensure continuous effective medical monitoring or care. These failures were the result of absent or insufficient written guidance, ineffective oversight by both Basic Training Command and Naval Special Warfare Center medical and command leadership, and uninformed risk decisions made at the wrong level. Many seams in the medical system have been closed, but those remaining continue to expose candidates to unnecessary risk.

Performance Enhancing Drugs (PEDS). After examining the relevant law, policy, and practice regarding detection and deterrence of PEDS, undetected use of PEDS creates significant, unquantified, and unmitigable risk to candidates going through the high intensity training of the BUD/S pipeline. Without a rigorous testing program producing timely results, Naval Special Warfare Center and Basic Training Command were and will be unable to effectively reduce this risk to candidates.

Unrecognized Accumulation of Risk

Hell Week. On 30 January 2022, BUD/S Class 352 began Hell Week after a grueling three weeks of 1st Phase BUD/S training. Instructors during this time were executing the curriculum at a constant high intensity, deviating from past practice with little to no recovery time afforded, leaving candidates more fatigued and compromised. As the Class progressed through Hell Week, both SN Kyle Mullen and (b) (6) experienced increasing respiratory symptoms from what was later determined to be pneumonia infections. While pneumonia had been identified as the cause of prior candidate mishaps, the available mitigation of prophylactic Bicillin was not identified or administered to candidates. Both during Hell Week and afterwards, SN Mullen presented a challenge to the Naval Special Warfare Center and Basic Training Command medical systems that should have been expected, but that they were unprepared to meet. Determined not to be seen as weak and to complete training with his Class, SN Mullen never approached medical providers about his deteriorating condition and consistently asked to continue training. As he coughed and struggled to breathe, SN Mullen was noted by fellow candidates, instructors, and support staff for continuing to push himself through evolutions, increasing his fatigue.

Friday, 4 February. At 0653 on 4 February 2022, the final day of Hell Week, (b) (6) the Phase Officer-in-Charge, pulled SN Mullen from an evolution for medical assessment by (b) (6), the contracted paramedic assigned to support this training. SN Mullen could no longer keep pace with his boat crew, and was observed spitting out a bloody, brown-colored fluid. (b) (6) noted indications of respiratory issues and administered high-flow oxygen before allowing SN Mullen to return to training. At 0816, (b) (6) again pulled SN Mullen from an evolution for medical evaluation by (b) (6). Observing SN Mullen's shortness of breath, (b) (6) again administered oxygen. Both (b) (6) believed SN Mullen to be suffering from Swimming Induced Pulmonary Edema (SIPE), a condition they had normalized from experiences at BUD/S. While pneumonia was a known potential injury, instructors and medical staff were never trained on differential indicators to identify the more serious condition. Without written guidance to establish and maintain a common medical operating picture, the field assessments and treatments by (b) (6) were not passed to medical providers at the Naval Special Warfare Center Clinic. (b) (6) (b) (6) decided that SN Mullen would remain in the command ambulance for the next hour and be driven to the Hell Week completion ceremony. While in the ambulance, SN Mullen had available supplemental oxygen for the next 60 minutes.

After SN Mullen exited the ambulance, (b) (6) checked out with (b) (6) and returned to his home. There was no clear written guidance on turnover of candidate condition with the Clinic, and so he left without informing any other medical provider about SN Mullen's condition or treatment during the final evolutions.

Final Medical Check. With the help of two classmates, SN Mullen stood atop the sand berm and secured Hell Week with his Class at 0930. With the rest of his Class, SN Mullen walked up the ramp of the Naval Special Warfare Center Clinic and was evaluated by the medical providers. Those providers noted SN Mullen's chief complaint of pain in his right knee and identified diffuse crackles in his lungs. However with SN Mullen's normal vital signs, without his self-identifying respiratory concerns, and without the context of symptoms observed and treatment given in the field, the medical providers did not order further diagnostic testing and assessed that SN Mullen was safe to rest in the barracks and recover from Hell Week. (b) (6) was also cleared to rest in the barracks.

Barracks Watch. After medical checks, Class 352 candidates proceeded to a nearby classroom for a medical brief that discouraged seeking medical assistance outside Naval Special Warfare with the possible consequence of delaying continued training. After speaking briefly with his mother to celebrate securing Hell Week, SN Mullen was transported by wheelchair to his barracks room by another candidate. To recover from Hell Week, Class 352 candidates rested in barracks rooms in Building 602. After a last 'eyes only' medical check by Clinic providers at 1300, SN Mullen and (b) (6) were entrusted to junior watchstanders with no medical or emergency care training and no written command guidance on the duties of their watch. From 1300 to 1600, both SN Mullen and (b) (6) suffered worsening respiratory issues. About 1430, one of the watchstanders called the duty medical provider, (b) (6) . (b) (6) stated that SN Mullen could go to the hospital if he was "in bad shape" but added that all candidates would be evaluated the following morning. SN Mullen declined repeatedly to go to the hospital. When (b) (6) was called back at 1549, he said (b) (6) should go back to sleep for an hour and see how he felt. At 1603, watchstanders notified (b) (6) , a Class 352 officer, of SN Mullen's deteriorating condition. (b) (6) called 911.

Emergency Care. Responding Federal Fire Department paramedics performed CPR on SN Mullen throughout transport to Sharp Memorial, the nearest hospital. Lifesaving efforts continued for SN Mullen until 1725 when he was pronounced dead. (b) (6) was transported to Naval Hospital Balboa, found to be in acute respiratory failure, and intubated. The subsequent autopsy concluded that SN Mullen's death was caused by Acute Pneumonia due to Steptococcus pyogenes, with cardiomegaly considered as a contributing factor.

Conclusions and Recommendations

The systemic issues identified above affected SN Mullen as well as other Sailors in the BUD/S pipeline. At least 11 visits to medical occurred for pneumonia during Classes 347-357, 112 other visits to medical were monitored for SIPE or pneumonia, and four candidates in Class 352 ended up in the hospital after Class 352, two of them, including SN Mullen, ultimately diagnosed with pneumonia. (b) (6) were admitted to the hospital with pneumonia symptoms on the same night as SN Mullen, with (b) (6) requiring intubation. Neither of these candidates tested positive for PEDs. The same risks contributing to SN Mullen's condition impacted these other candidates. The investigation found these risks were the result of inadequate oversight, insufficient clear written guidance, incomplete risk assessment, and poor medical command and control. Two of SN Mullen's classmates subsequently tested positive for

PEDs, identifying another unquantified and unmitigable risk to candidates in the training pipeline.

While some of these deficiencies have been corrected, recommendations for further action focus on (b) (5)

Table of Contents

SUBJ: COMMAND INVESTIGATION INTO THE FACTS AND CIRCUMSTANCES REGARDING SAFETY AND MEDICAL OVERSIGHT OF BASIC UNDERWATER DEMOLITION/SEA AIR AND LAND (BUD/S) CLASS 352

INTRODUCTION

Scope of Investigation

1. In accordance with enclosure (1), as modified by enclosure (2), this investigation examined the facts and circumstances surrounding Naval Special Warfare Basic Training Command (BTC) oversight of BUD/S Class 352 as it relates to SN Kyle Mullen's death, to include relevant circumstances associated with the incident. This investigation was directed to focus on training and medical oversight in place during BUD/S Class 352 1st Phase, specifically during the crucible event known as "Hell Week" and the 48 hours immediately following. Additionally, the investigation was tasked with addressing:

a. The safety measures in place for BUD/S first phase, including Hell Week;

b. Oversight of instructors and safety personnel assigned to BUD/S Class 352 during first phase, including Hell Week;

c. Training, qualifications and experience of instructors and safety personnel of Hell Week and ratio of instructors and safety personnel to candidates;

d. Oversight, training, qualifications and experience of medical personnel assisting in Hell Week;

e. Description of continuity of medical care for a candidate during Hell Week and the following 48 hours;

f. Policy for performance enhancing drugs (PEDS) relative to candidates in BUD/S, prevalence of use within class 352, and enforcement of such a policy; and

g. Changes made to doctrine, policy, training or manning at Naval Special Warfare Center and/or BTC with respect to items (a)-(f) since 4 February 2022.

Investigation Team

2. Rear Admiral Peter A. Garvin, USN, Commander Naval Education and Training Command convened this investigation and assigned Rear Admiral Benjamin Reynolds, USN, as the investigating officer. Additionally, (b) (6), JAGC, USN, was assigned to assist as legal advisor, and (b) (6), USN, and (b) (6) were assigned to assist as subject matter experts. The investigation team was further augmented by (b) (6) (b) (6) (b) (6)

(b) (6)
(b) (6)
.

3. This investigation team brought active duty and civilian subject matter experts with over 67 combined years of experience in field medical assessment and care, including experience in combat medicine, emergency medicine, family medicine, undersea medicine, executive medicine, naval flight medicine, and as major command surgeons; 46 combined years of experience in effective medical command and control; 41 combined years of experience in trauma medicine, endocrinology, and undersea medicine; and 45 combined years of experience in operational risk management and high risk training safety.

Methodology and Prior Investigations

4. In the course of this investigation, the team conducted over 100 interviews and reviewed over 900 instructions, policies, procedures, command documents, and execution briefs from the Department of Defense, U.S. Special Operations Command, Department of the Navy, Naval Special Warfare Command, and subordinate naval special warfare commands. After reviewing existing information, the investigation team visited Coronado, interviewed a first tranche of witnesses, inspected documents, and observed evolutions. Candidates from BUD/S Class 352 who secured Hell Week were interviewed, as were Class 352 instructors and a large number of other Sailors who have gone through portions of the BUD/S pipeline. Investigation subject matter experts questioned and reviewed the training, evaluation, and inspection records of BTC and Naval Special Warfare Center medical support staff, safety personnel, and operations staff. After the initial site visit, interviews continued across the country of personnel who had transferred, and hundreds of exit interviews from prior BUD/S candidates were reviewed along with dozens of student training reviews. To ensure widest possible perspective, anonymous surveys were conducted of past BUD/S candidates, candidates still in the BUD/S pipeline, and BTC staff. The investigation team then returned to BTC to evaluate execution of Class 357 Hell Week from 31 October to 5 November 2022. With unrestricted access, the investigation team observed 81 Hell Week evolutions and medical checks, and the functioning of medical, safety, and operational support structures surrounding them.

5. The investigation team also reviewed previous investigations that were convened into the matters addressed in this report, references (cp), (cq), (cs), and (cr), as well as the report of the Armed Forces Medical Examiner at enclosure (288). Reference (cp) investigated allegations of use of performance enhancing drugs and supplements by candidates attached to BTC. References (cq) and (cr) investigated the facts and circumstances surrounding SN Mullen's death and determined that he died in the line of duty, and not due to his own misconduct. Enclosure (288) is the medical examiner's report, which concluded "[t]his 24 year old Sailor, Kyle F. Mullen, died of Acute Pneumonia due to Strepococcus pyogenes. The decedent's cardiomegaly was considered a contributing factor in his death." This investigation adopts the conclusions of enclosure (288) and reference (cq). Where relevant, specific interviews conducted during prior investigations are included as enclosures.

6. To answer the specific questions tasked, as well as to gain a full understanding of the circumstances surrounding SN Mullen's death, this investigation looked in depth at multiple systems involved in supporting the BUD/S process, including medical support, the high risk training safety program, instructor training and qualification, and potential use and deterrence of such use of performance enhancing drugs and supplements by BUD/S candidates. Each system is described in detail below to fully understand the regulatory structure, function, oversight, and practical implementation at BTC.

7. It was beyond the scope of this investigation to examine the standard of care provided by individual medical personnel. Allegations of individual misconduct outside the scope of this report have been forwarded for appropriate action.

Report Structure

8. This investigation found an accumulation of unrecognized risk across multiple systems designed to provide safe, effective training to BUD/S candidates, which if addressed may have been able to prevent SN Mullen's death. The report first provides background on the Naval Special Warfare training architecture, then moves methodically through each system and the personnel responsible for it to fully understand systematic and individual failures.

9. **Background.** To provide context for reviewers necessary to understanding the detailed sections that follow, the first section provides background on the Naval Special Warfare commands involved, on the naval special operator training pipeline, on the principles of safety management applied to the pipeline, on medical risk and care during the pipeline, and on the risks that use of performance enhancing drugs and supplements introduces to that pipeline.

a. The structure and purpose of Naval Special Warfare Command, the Naval Special Warfare Center, and Naval Special Warfare Basic Training Command provide the backdrop to the rest of the report. Naval Special Warfare is charged with providing the Department of Defense with highly trained naval special operators able to execute Combatant Commander warfare requirements. The rigorous selection and training of these operators involves inherent risk. At the center of this investigation are the efforts necessary to identify and mitigate this inherent risk, without dulling the effectiveness of the training and thus creating risk to commands operating in combat where the environment is less controlled.

b. The balance of risk and mission accomplishment is commander's business. The commander of a unit is responsible for making their intent on this balance known to subordinates, for ensuring they have the training, tools, and time to assess and mitigate risk appropriately, and for maintaining proper oversight to ensure their intent is being carried out. Risk is managed across the Navy through a system currently known as the Safety Management System, and known at the time of Class 352 as Operational Risk Management. Leaders at every level, individuals, and teams are responsible for assessing risk, making deliberate risk decisions,

and communicating risk up their chain of command. For certain types of training, the high risk training safety program also applies. High risk training safety originated in the late 1980s to mandate policies, processes, and procedures to balance providing realistic, challenging training with not subjecting personnel to unnecessary risk.

c. Rigorous training involves risk of injury, and the medical structure at NSWCEN and BTC is tasked with care of candidates in this environment. Common medical issues occurring during BUD/S, such as musculoskeletal overuse injuries, fractures, and swimming induced pulmonary edema (SIPE), are outlined along with the NSW medical structure in place during Class 352. This structure was the framework within which continuity of care failed during Class 352.

d. Performance enhancing drugs and supplements introduce significant risk into high intensity training. Understanding the most common performance enhancing drugs and supplements, their effects, and their known risks gives context to the serious health risks posed to candidates, which include enlarged heart, altering hormonal concentrations, liver failure, and suppressing the immune system.

10. **Selection, Training, Experience, and Oversight of Instructors, Safety, and Medical Systems during Class 352.** After discussing the background, the report turns to each of the specific systems in turn, focused on effective implementation, oversight, and the accumulation and management of risk.

a. After laying out the specific roles of officers and instructors during the 1st Phase of BUD/S, the report examines the process of instructor selection, training provided, intent and oversight of the commanders involved, oversight mechanisms, and the broader roles of operational support staff. Causes of heightened attrition during this period, candidate attitudes toward medical care, and allegations of candidate self-policing are addressed as well. The focus here is on the risk introduced by the curriculum as implemented, and on the oversight in place to identify and correct deviations.

b. The report then examines the safety and high risk training safety systems at BTC and NSW Center. After covering Navy operational risk management and NSW high risk training safety governance, the report identifies the personnel involved and addresses execution of program requirements, practical risk mitigation measures within the Phases, implementation of emergency action plans, mishap reporting and analysis, and safety inspections of the BTC safety program. The focus here is whether the safety program had the trained personnel with the tools, information, and structure required to identify accumulating risk, accurately assess hazards, and mitigate risk in execution of BUD/S evolutions.

c. The report then examines the command structure and oversight for providing continuity of medical care to BUD/S candidates in the training pipeline, including care

immediately following Hell Week. Beginning with the governing directives, it examines lines of authority and responsibility, oversight obligations, manning and tasking levels, training and orientation of medical personnel, capture and communication of medical information, morale and culture in the departments involved, candidate attitudes toward medical care, and medical portions of emergency action plans. The focus here is whether commanders and department leadership ensured that medical personnel and the structure they worked within were trained, organized, integrated, and drilled to ensure continuous medical support to candidates.

d. Finally, the report addresses the risks created by performance enhancing drugs and supplements (PEDS) in a high intensity training environment. Starting with the policies in place during BUD/S Class 352, the report reviews prior instances of detected PEDS use, testing, search, and deterrent efforts made, perceptions of staff and candidates of use, and prevalence of use during Class 352. The focus here is on the additional risk to candidates that performance enhancing drugs and supplements introduce into BUD/S, what efforts were made to deter and detect such use, and what mitigations are available to commanders to address this risk.

11. **Timeline of Class 352 Hell Week.** The report then works chronologically through the execution of BUD/S Class 352 Hell Week by the structure laid out above. Instructor execution and safety processes are addressed, with findings focused on medical touchpoints, data flow and retention, and care of Class 352 candidates. The timeline proceeds through the medical care SN Mullen received after securing Hell Week and the specific circumstances surrounding his death, before reviewing findings of the Armed Forces Medical Examiner. All details available about SN Mullen's condition during that week have been included.

12. **Changes after Class 352.** The report then turns to changes made to NSW policies and procedures following Class 352, covering changes to instructor training, manning, and curriculum execution, changes to the medical structure, training, and reporting requirements, changes to the safety program, and changes to performance enhancing drug deterrence and detection.

13. **Opinions and Recommendations.** Following all findings of fact, the report comes to opinions on the facts and circumstances surrounding oversight of BUD/S Class 352, particularly as it related to SN Mullen's death, as well as changes made since that time. Briefly, the investigation revealed unrecognized accumulation of risk across the BTC and NSWCEN commands, which if addressed may have been able to prevent SN Mullen's death. Commanders and the leaders below them provided insufficient oversight, allowing these risks to accumulate unidentified and unmitigated. This was particularly true in a medical system without a clear command and control structure and clear delineation of roles and responsibilities. Medical operated without standardized practices of orientation, integrated training and drills, or care, and without assured communication of patient information between its different components. The safety enterprise also failed to fully identify the hazards to candidates, and thus to implement available mitigations, reduce normalized deviation, or orient instructors and staff to sources of

risk. Additionally, risk was introduced by a curriculum management system that relied primarily on on-the-job training and evaluation for oversight of instructors. Finally, the report acknowledges risk that PEDs introduce into this training pipeline. Recommendations focus (b) (5)

FINDINGS OF FACT

BACKGROUND

I. *Naval Special Warfare Training Community*

I.A. Training Structure

1. As the naval special warfare (NSW) type commander (TYCOM), U.S. Naval Special Warfare Command (NAVSPECWARCOM or NSWC) is delegated authority by the Chief of Naval Operations to organize, train, man, equip, educate, and sustain active component NSW forces and shore activities to required levels of current and future readiness. [Ref e]

2. NSWC is located in Coronado, California and commanded by a 2-star Admiral. It is comprised of over 10,000 personnel including over 3,000 Sea Air Land (SEAL) operators; Over 780 Special Warfare Combatant-craft Crewmen (SWCC), commonly referred to as SWCCs; over 4,600 combat support and combat service support personnel; over 700 reservists and over 1,200 civilians. [Encl 3]

3. Commander, NSWC (CNSWC) is designated the Navy component commander of USSOCOM and under the combatant command (COCOM) of the Commander, United States Special Operations Command (CDRUSSOCOM). CNSWC shall coordinate as necessary with the Chief of Naval Operations (CNO) and other Navy echelon two commanders for service administrative and service common logistic matters. On service-specific issues such as personnel, administration, logistics, equipment, and individual training, CNSWC shall communicate with the CNO, keeping CDRUSSOCOM informed. [Ref b]

4. NSWC's primary core tasks are executing Direct Action, Special Reconnaissance, Foreign Internal Defense, and Counter Terrorism missions as assigned by CDRUSSOCOM. Additionally, they execute Unconventional Warfare and Information Operations missions as secondary core tasks assigned by CDRUSSOCOM. NSWC also provides support to Combatant Command/ Joint Task Force/Special Operations Force Headquarters executing Civil Affairs Operations, Psychological Operations, Counter Proliferation, and Information Operations. [Ref b]

5. Naval Special Warfare Center (NSWCEN) is an echelon III command under NSWC whose mission is to develop, plan, and conduct training of U.S. Navy special operations forces (NAVSOF) personnel. This includes the assessment, selection, and training of SEAL and SWCC. NSWCEN, located in Coronado, CA is led by a Navy Captain (O-6) Commodore who has a staff of 71 personnel. [Encl 4; Refs e, p]

6. NSWCEN accomplishes its mission through three subordinate echelon IV commands:

a. Naval Special Warfare Basic Training Command (BTC) is located in Coronado, California and commanded by a SEAL O-5 Commander. BTC conducts special operations training and education in basic Naval Special Warfare Tactics, Techniques, and Procedures. Upon completion of training at BTC, candidates are awarded the Navy Enlisted Classification (NEC) 026A or officer designator 1130 and entitled to wear the special warfare insignia. They welcome, on average, 888 SEAL candidates every year and look to graduate 175. [Encls 5, 6, 7; Refs v, bm, bn]

b. Naval Special Warfare Advanced Training Command (ATC) is commanded by a SEAL O-5 Commander and provides standardized and accredited advanced individual training and education for naval special operations forces (NAVSOF) personnel (SEAL and SWCC), NAVSOF support personnel, United States SOF, partner nation SOF and other personnel, in the art and science of Naval Special Warfare Operations. Headquarters is located in Coronado, California with detachments in Key West, Florida; Pearl Harbor, Hawaii; Hurlburt Field, Eglin, Florida; Coronado, California; Yuma, Arizona; and Joint Expeditionary Base Fort Story, Little Creek, Virginia. [Ref bg]

c. Naval Special Warfare Assessment Command (NSWAC), stood up in August 2022, conducts assessments leading to selection as a SEAL or SWCC candidate. Additionally, they administer the NSW Leadership Assessment Program (NLAP) and Navy Special Warfare Enlisted Assessment and Selection (NEAS) for active duty NSW leaders which is considered when awarding AQDs and determining eligibility for promotion before every career milestone position. [Encls 8, 9]

7. All SEAL Commanding Officers are administratively screened for command by board action and must have completed Naval Special Warfare Leadership Assessment Program (NLAP); successfully completed the Navy Leadership and Ethics Center (NLEC) prospective commanding officer leadership course; completed Joint Professional Military Education Phase I; and finally, within 180 days of assuming command, must attend the Naval Special Warfare Leadership, Education, and Development (NLEAD) courses. Examples of O-5 SEAL Command tours include SEAL Teams, Special Reconnaissance Teams, SEAL Deliver Vehicle Teams, Basic Training Command, and Advanced Training Command. [Ref s]

8. In addition to the requirements above, the BTC Commanding Officer is board screened and selected from officers who have successfully completed a prior NSW O-5 command tour such as at a SEAL Team, Special Boat Team or Special Reconnaissance Team. [Encls 10, 11, 12, 140]

9. The NSWCEN Commodore is board screened and selected from officers who have successfully completed a prior NSW command tour and have been promoted or selected to O-6. Additionally, the officer must be designated “qualified for major command” through the NLAP; have successfully completed the NLEC prospective Major Command Leadership Course, and

have completed an in-residence graduate education program before assuming major command. [Encl 573; Ref s]

I.B. Training, Assessment, & Selection of SEAL Candidates

10. The SEAL assessment, selection, and training pipeline is 60 weeks long. [Encl 15; Refs ca, bs, cc, bx, ch, cg, cb, bw]

11. The first course in the training pipeline is Navy Special Warfare Orientation (NSWO) and lasts seven weeks. The purpose of the course is to establish an adequate conditioning base and orientation for SEAL candidates to prepare them for the demanding physical training and water competency evolutions within the pipelines. [Encl 13; Ref ca]

12. On 07 January 2021, RADM Howard, Commander, NSWC, directed that NSW Preparatory School (NSWPS) move from Naval Station Great Lakes to San Diego under BTC with the aim of increasing mission effectiveness and efficiencies in resources. The first NSWPS BTC Class (352/120) in San Diego began in November 2021. [Encls 14, 106]

13. On completion of NSWO, candidates progress to Basic Underwater Demolition/SEAL (BUD/S), lasting 21 weeks and divided into three seven-week-long "Phases." [Encl 15; Ref bv]

14. The first seven week block is "1st Phase," and can be broken down into three distinct portions: [Ref bv]

a. The first three weeks of this block are characterized as "Pre-Hell Week" and involve progressively more intense physical evolutions to prepare candidates for Hell Week. [Ref bv]

b. Week four is known as Hell Week. Hell Week is a 'crucible' event designed to expose candidates to extreme stress in a controlled environment, simulating what they might experience in combat. This includes continuous physical effort, training in harsh environments, and sleep deprivation. Hell Week progresses through over 26 individual evolutions across 108.5 hours including: (b)(2),(b)(5),(i)(2),(k)(2) (b)(2),(b)(5),(j)(2),(k)(2) Encls 16, 17; Ref bv]

c. The final three weeks are characterized as "Post-Hell Week". These three weeks begin with a focus on recovery and rehabilitation after the rigors of Hell Week. They also include mentorship sessions, leadership and ethics discussions, and academic topics. As candidates recover, the physical nature of the training returns and testable events such as (b)(2),(b)(5),(j)(2),(k)(2) [Ref bv]

15. The second seven-week-block is known as '2nd Phase.' The purpose of 2nd Phase is to train selected candidates in (b)(2),(b)(5),(j)(2),(k)(2) in preparation for the SEAL Qualification Training (SQT) pipeline. [Ref bu]

16. The third seven-week-block is known as '3rd Phase.' The purpose of 3rd Phase is to train selected candidates in (b)(2),(b)(5),(j)(2),(k)(2) SEAL Qualification Training (SQT) pipeline. [Ref bt]

17. Upon completion of BUD/S, candidates proceed to SQT, which lasts 19 weeks and is followed by 12 weeks of Advanced Training Command (ATC) Courses including (b)(2),(b)(5),(j)(2),(k)(2) (b)(2),(b)(5),(j)(2),(k)(2) (b)(2),(b)(5),(j)(2),(k)(2) [Encl 15]

I.C BTC Manning and Instructor Structure

18. Within BTC, the Operations Department is task-organized into seven branches each named for the portion of training they oversee. This included NSW Orientation, 1st Phase, 2nd Phase, 3rd Phase, Junior Officer Training Course (JOTC), SEAL Qualification Training (SQT), and Special Warfare Combatant-craft Crewman (SWCC). [Encl 18]

19. Each Phase is led by an Officer-in-Charge (OIC), a civilian Deputy OIC, and a Senior Enlisted Advisor. [Encl 20]

20. Each Phase also has a cadre of SEAL enlisted instructors and some are supported by contractors that are subject matter experts; the number of instructors varies by Phase. [Encls 6, 20, 127]

21. In Feb of 2022 1st Phase was billeted with 19 authorized manpower billets, comprised of a SEAL Lieutenant / O-3 as the Phase OIC, a GS-13 as the Deputy OIC, E-9 SEAL as the SEA, E-8 SEAL as LCPO, and 15 enlisted SEAL instructors; and four contractors. [Encl 6]

22. In February 2022, BTC was manned at 87% (211 of 242 requirements filled), with 1st Phase manned at 85%. On 12 October 2022, BTC was manned at 92% (219 of 236 requirements filled), with 1st Phase manned at 85%. [Encl 52]

I.D. Instructor Screening and Training

23. BUD/S instructors are assigned to BTC within the normal officer and enlisted detailing process. They are screened for disqualifying conditions within Navy standards, but there is no additional selection process. [Encls 22, 23; Refs k, bm]

24. On reporting to BTC, all instructors complete the NSWCEN Instructor Qualification Course (IQC) and receive the 805A Instructor NEC before supporting a class. The NSWCEN Instructor Development Division (IDD) is responsible for instructor qualification. [Encl 24; Ref ag]

25. The IQC is currently a two-week course which teaches instructors to (b)(2),(b)(5),(j)(2),(k)(2) (b)(2),(b)(5),(j)(2),(k)(2) within NSW courses of instruction. IQC was previously 4 weeks long, but was changed in March 2022 to 2 weeks followed by additional training specific to the prospective instructor's assignment. [Encl 244; Refs k, by, bz, bp, bo]

26. IQC is taught by four GS-12/13s with prior SEAL or SWCC experience and specifically former experience as a NSWCEN instructor. [Encl 174]

27. IQC covers the following topics: [Ref by]

a. (b)(2),(b)(5),(j)(2),(k)(2)
b
c.
d
e.
f.
g
h
i.
j.
k

l.
m

n
o
p
q

28. BTC instructors are also required to be certified to conduct high-risk training and meet the following standards: [Encl 25; Refs k, an]

a. Psychological screening
b. Medical screening
c. A review of their service record
d. CPR/AED certification
e. Blood-borne pathogen training
f. Complete individual and supervisor Operational Risk Management (ORM) courses
g. Attend as a student any high risk training that they will teach or supervise

29. To maintain their qualification, all BTC instructors must: [Encl 25; Ref ag]

a. Receive an evaluation on every topic instructed or managed by the instructor.
b. Receive quarterly evaluations.
c. Receive quarterly in-service training.
d. Maintain an Instructor Training Record that will be reviewed quarterly by the training office and annually by NSWCEN N34.

I.E. BUD/S Curriculum, Grading, and Standardization

30. Each BUD/S evolution and the details of its execution are linked to skills or attributes important to anticipated SEAL warfighting requirements. Naval Health Research Center (NHRC) completed a report on Hell Week in 2005 determining that Hell Week was plausibly connected to operational demands. In 2015, a NHRC SEAL/SWCC Physical Standards Report was done finding that the selection and assessment physical tests plausibly reflect the actual intensity of occupational demands. [Encl 17 and 352]

31. Each phase of BUD/S is governed by a Training Course Control Document which specifies: [Ref bv]

a. Every evolution or instructional unit to be conducted during the phase,

b. The duration (number of days) of each instructional unit for that phase,

c. The terminal objectives for each of the instructional units,

d. The enabling objectives of each lesson topic within each instructional unit,

e. A list of required material resources for each phase including consumables, equipment, and publications.

f. A Course Master Schedule that addresses:

1) The instructor to student ratio required for each evolution
2) Required special personnel for the conduct of an evolution
3) The day and week each evolution is to be conducted

32. Every evolution of every Phase of BUD/S has a correlating Evolution Brief Sheet and Lesson Plan that cover the enabling objectives, required equipment for staff and students, pertinent references, required instructor preparations, required trainee preparations, required safety precautions, step-by-step instructions for the conduct of the evolution, required discussion points and related required instructor activities, grading criteria, remediation guidance. Evolution Brief

Sheets are sometimes referred to informally as "Job Sheets." [Encls 26, 27; Refs af, br]

33. The grading criteria for a BUD/S evolution can either be objective—with set times, repetitions, or other measurable criteria—or subjective, based on assessed factors of character, cognition, and teamwork. These subjective criteria are often elaborated as (b)(2),(b)(5),(j)(2),(k)(2) [Encls 29, 74, 90, 98, 106]

34. Candidates who fail to meet the physical, academic, or mental requirements of a training evolution are remediated. Remediation is the act or process of correcting a deficiency; remediation takes place under the guidance of an instructor with the goal of gaining the attention of the student and reinforcing desired positive performance. [Refs bc, bd]

a. Remediation must be earned, appropriate, proportionate, safe, and avoid negative training impacts to things such as sleep, nutrition, and timed/graded evolutions. Remediation must not incur a financial cost, be personal, punitive, or induce sickness. [Ref bd]

b. Remediation can be broken into two categories. Skill remediation consists of repeating evolutions, room inspections, sea bag inspections, and essays on relevant topics. Physical remediation consists of directed physical exercise tailored to each phase of BUD/S, designed not to contribute to stress injuries, and can vary in intensity between Level 1, Level 2, and Level 3 as outlined below. [Ref bd]

1) Level 1: The infraction warrants a stoppage of training to capture attention of the candidates and will not exceed five minutes. Any qualified high-risk instructor can employ a level 1 remediation.

2) Level 2: The infraction is severe enough to warrant a stoppage of training to ensure maximum understanding without exceeding 15 minutes. All level 2 remediation will be approved and supervised by the evolution Safety Observer.

3) Level 3: The infraction is severe enough to warrant a schedule change and will not exceed 30 minutes per evolution. Level 3 remediation is reserved for when other means of skill and physical remediation have been ineffective. The Phase Officer-in-Charge (OIC) or Phase Deputy OIC will approve the remediation and report to the CO immediately. The Phase Officer, Phase Deputy, or Phase SEA must be present to supervise any Level 3 remediation.

35. All SEAL/SWCC students who exit the BTC training pipelines before completion and qualification become part of the Phoenix Division, formerly known as Students Awaiting Transfer (SAT). Phoenix Division is managed by NSWCEN and its role is to provide leadership, mentorship, and administrative support to the Sailors' transfer to other ratings in the Fleet or out of Naval service. [Ref ad]

36. All curriculum for BUD/S is internally reviewed through the Formal Course Review (FCR) process, annually for high risk courses and biennially for non-high risk courses, by the Course Supervisor, Lead Instructor, and Testing Officer. An external review is conducted triennially by the Curriculum Control Authority at NSWCEN during the Formal Course Evaluation (FCE) process. These are systematic processes to review course conformance to existing standards and instruction, to include high risk training standards and policies. [Refs ae, bq, bo]

37. Development of new or modification of existing courses or curriculum may occur only through the Naval Special Warfare Center Curriculum Management Process. [Ref af]

38. The last FCR was conducted on 10 January 2022. There is currently an FCE scheduled for 9-13 January 2023. [Encls 30, 31]

I.F. Historical Candidate Population & Attrition Rates

39. An average of 148 SEAL candidates begin BUD/S training each class, with five or six classes each year. The typical causes of attrition or rolls and their associated averages since 14 November 1998 are below. [Encl 5] For purposes of this investigation the term attrition means candidates removed from the AST pipeline.

a. Average attrition and rolls during the three weeks prior to Hell Week: 45% of the beginning Class strength

1) Drop On Request: 29% (average of 44 candidates)
2) Administrative Roll/Drop: <1% (average of less than 1 candidate)
3) Medical Roll: 9% (average of 13 candidates)
4) Medical Drop: <1% (average of 1 candidate)
5) Performance Roll: 5% (average of 8 candidates)
6) Performance Drop: 2% (average of 3 candidates)

b. Average attrition and rolls during Hell Week: 21% of those candidates entering Hell Week

1) Drop On Request: 15% (average of 23 candidates)
2) Medical Roll: 5% (average of 7 candidates)
3) Performance Roll: 1% (average of 2 candidates)

c. Average attrition and rolls rate for 1st Phase (all 7 weeks): 66%

d. Average attrition and rolls rate for 2nd Phase (all 7 weeks): 5%

e. Average attrition and rolls rate for 3rd Phase (all 7 weeks): 3%

f. Average attrition and rolls rate for BUD/S (all phases): 68%

g. Average attrition and rolls rate for SQT: <1%

h. Overall NSW 5-year attrition and rolls average: [Encl 353]

1) BUD/S: Officer 39% Enlisted 79%
2) SWCC A&S: 30%

40. Attrition rates from other training enterprises within SOCOM: [Encl 353]

a. Air Force Special Operations Command, 5-year attrition average:

1) Air Liaison Officer (ALO): 59%
2) Combat Controller (CCT): 74%
3) Combat Rescue Officer (CRO): 72%
4) Special Tactics Officer (STO): 62%
5) Tactical Air Control Party (TACP) Operator: 62%

b. Marine Special Operations Command, 5 year attrition average:

1) Officer: 59%
2) Enlisted: 73%

c. U.S. Army Special Operations Command:

1) U.S. Army John F. Kennedy Special Warfare Center and School: Special Forces: 65%, Civil Affairs: 45%, Psychological Operations: 52%
2) 160th Special Operations Aviation Regiment (Airborne) Green Platoon (Officer): 7%, Green Platoon (Enlisted): 34%
3) 75th Ranger Regiment: Ranger Assessment and Selection Program (RASP) I: 47%, RASP II: 28%

II. *Management of High Risk Training*

41. In the Navy, safety and risk are generally managed using the Navy Safety Management System and operational risk management (ORM) process. When an activity is identified as high risk training, additional requirements apply. [Refs k, i, j]

a. High risk training conducted by the Navy is governed by references (k) and (i), implemented in Naval Special Warfare by references (r), (an), (ag), (be), and (ay).

b. The Navy ORM process is governed by OPNAVINST 3500.39D. [Ref j]

II.A. High Risk Training Safety

42. Under the governing Navy instructions, all NSW training is considered high-risk.

Recognizing that NSW operations require aggressive training programs to prepare personnel to perform mission essential high-risk tasks in a variety of environments, NSW commands are directed to maximize the benefits of ORM and apply the high risk training safety program to minimize mishaps in training while preserving training value. [Ref k, r]

43. High risk training safety (HRTS) was initially developed during the late 1980s and early 1990s, prompted by the death of a student at Aviation Rescue Swimmer School before broadening in scope to all schools under the Naval Education Training Command (NETC), including NSW at the time. The report outlined the following safety weaknesses including, relevantly: [Encl 32]

a. Lack of psychological screening of instructors and students;

b. Students without a current or adequate physical examination;

c. Weak administrative processing controls on students' medical status;

d. Instructor evaluations not being performed or not adequately addressing performance in non-classroom portions of the course; and

e. Inadequate student critique systems and forms.

44. The overarching Navy guidance for HRTS is reference (k), which applies to all NSW enterprises. It mandates policies, processes, and procedures to balance providing realistic, challenging training to best prepare Sailors and Marines for real-life combat assignments and not subjecting personnel to unnecessary risk:

a. **High risk instructors**. Must be medically and psychologically screened by competent medical authority, interviewed by their Commanding Officer or their designee, complete a certification program via a core unique instructor training (CUIT) plan or equivalent, and be subject to recurrent evaluation. [Ref k]

b. **Students.** Must be medically screened for administrative and physical prerequisites. Must receive safety briefs before each evolution, including training time out procedures, and must be briefed on drop on request procedures. [Ref k]

c. **HRT Safety Officers (HRTSOs).** Must complete formal job qualification requirements, and Assistant HRTSOs (AHRTSOs) must complete site-specific job qualification requirements (JQR). Must observe evolutions frequently to understand and assess hazards. Specifically must observe instructor-to-student interaction and compliance with all safety and emergency procedures. [Ref k]

d. **Programmatic planning.** Must have deliberate risk assessments for each high risk evolution, including at a minimum the emergency action plan (EAP) and training time out procedures. Must have additional guidance on cold and heat stress environmental mitigations. [Ref k]

e. **Emergency action plans (EAP).** Must be reviewed monthly, have quarterly walkthroughs, and have annual drills. EAPs will exist for each high risk evolution and include at a minimum: primary and alternate communications; call signs; locations of emergency response personnel; locations of emergency equipment; equipment shutdown procedures; muster site and control of the scene; and all immediate emergency procedures. [Ref k]

f. **Mishap reports and analysis**. Must examine near misses, mishap data, student critiques, and any practice that could injure personnel or damage or destroy equipment. Identify 'lessons learned' or 'best practices' to be incorporated. [Ref k]

g. **Oversight.** Must be assessed by superior command for each high-risk training course at least once every 3 years. The CO, OIC, or Director of Training must conduct at least an annual safety review. [Ref k]

II.B. Operational Risk Management

45. The overarching Navy guidance for ORM is OPNAVINST 3500.39D. Pertinent requirements of this instruction as they relate to this investigation are as follows:

a. **Risk Decisions**. Risk decisions must be made at the appropriate level by experienced personnel who have authority to eliminate or minimize the hazard, implement controls to reduce the risk, or accept the risk. [Ref j]

b. **Training requirements.** Training must be commensurate with rank, experience, or position. The following table outlines ORM training requirements for individuals: [Ref j]

Level	Periodicity	Training
Individual	Annually	Command Directed (see the following "Note")
	Triennially	"Managing Your Risk"
Supervisor	Upon initial assignment of supervisory responsibilities and every 36 months while assigned at command	"Managing Your Team's Risk"
Assistant	When selected as an ORM assistant	"Leading Risk Management Integration"
Manager	Every new tour of duty (Every 12 months for civil service mariner chief mates and first officers on Military Sealift Command vessels)	"Directing Your Command's Risk Management"

Table 3-1: ORM Training Requirements

c. **Supervisors**. Supervisors should be trained to conduct ORM at the deliberate level, to control risks at their level and recognize when to elevate risks that they cannot control to the appropriate level. [Ref j]

d. **ORM Managers and Assistants**. The executive officer (XO), deputy OIC, or civilian equivalent must be designated as the command ORM manager, with another officer and senior enlisted or civilian equivalent designated as ORM assistants. ORM assistants are the

subject matter experts (SMEs) and must demonstrate a solid comprehension of all ORM concepts and principles. [Ref j]

e. **Time Critical Risk Management**. Time critical decision-making uses previous experience, training, and resources from the in-depth or deliberate ORM process. [Ref j]

III. ***NSW Medical Structure for Trainee Care***

III.A. Military Medicine and Care of Trainees

46. The Department of Defense (DoD) policies concerning patient care and patients' rights and responsibilities are set forth in reference (ct). This establishes policy, assigns responsibilities, and provides procedures for implementation of the "Patient's Bill of Rights." The right of a patient to considerate, quality care and treatment, the right to effective community of care, as well as the responsibility to provide information about medical issues are relevant to the assessment of instructor and healthcare provider actions.

47. Pertinent patient rights include:

a. Patients have the right to quality care and treatment that is consistent with available resources and generally accepted standards, including access to specialty care and to pain assessment and management.

b. Patients have the right to considerate and respectful care, with recognition of personal dignity, psychosocial, spiritual, and cultural values and belief systems.

c. Patients have the right to an explanation concerning their diagnosis, treatment, procedures, and prognosis of illness in terms that are easily understood. The specific needs of vulnerable populations in the development of the patient's treatment plan shall be considered when applicable. Such vulnerable populations shall include anyone whose capacity for autonomous decision making may be affected. Capacity may be defined as the ability to understand information relevant to a decision and the ability to appreciate the reasonably foreseeable consequences of a decision (or lack of a decision). Disparities in rank, and mental and physical fatigue are factors that can reduce a patient's ability to exercise autonomy. [Encl. 35, Ref ct]

d. Patients have the right to any and all necessary information in nonclinical terms to make knowledgeable decisions on consent or refusal for treatments. Each medical treatment facility shall ensure patients have the right and opportunity to participate fully in all decisions related to their healthcare, subject to readiness requirements for active duty Service Members. This includes giving competent patients the opportunity to refuse treatment and to express preferences about future treatment. [Ref ct]

e. Patients have the right to care and treatment in a safe environment.

f. Transfer and Continuity of Care. When medically permissible, a patient may be transferred to another MTF/DTF only after he or she has received complete information and an explanation concerning the needs for and alternatives to such a transfer. One implementation of this responsibility is the Navy case management system, which requires hand off of patients to ensure continuity of care with seamless transfer of information when there is a transfer of care to other levels or places of care for additional treatment and follow-up. Another is in the MANMED, which requires that when additional services are required, transfer must be coordinated between the current aid station and the accepting health care provider to ensure optimal continuity of care including the sharing and receipt of pertinent patient information. [Ref cu and cv]

48. Pertinent patient responsibilities include: Patients are responsible for providing accurate and complete information about complaints, past illnesses, hospitalizations, medications, and other matters relating to their health to the best of their knowledge. Patients are responsible for letting their healthcare provider know whether they understand the diagnosis, treatment plan, and expectations. [Ref ct]

49. Deleted

III.B. Common Medical Issues during BUD/S and Causes

50. BUD/S training demands optimal health from candidates as it exposes and induces extreme cognitive, mental, and physical stresses in them to mimic the demands of expected combat deployments. [Encls 36, 37]

51. BUD/S candidates often suffer musculoskeletal overuse injuries, fractures, pulmonary conditions including swimming induced pulmonary edema (SIPE) or infections, and cold immersion and heat injuries. For example, during BUD/S Classes 347 through 357, there were approximately 200 total musculoskeletal injuries in the three weeks preceding Hell Week. [Encls 36, 37, 38]

52. Common respiratory conditions encountered during BUDS include: SIPE, pneumonia, localized sore throat (pharyngitis) and viral upper respiratory infections. For class 347 through 357, there were approximately 11 pneumonia visits, 26 SIPE visits, and 123 visits labeled as “SIPE or pneumonia” in the three weeks preceding Hell Week. (where “visits” represents the number of times medical providers saw candidates, but a single candidate could have multiple visits for the same potential illness, such as follow-up visits). [Encl 38]

53. SIPE is a medical condition that causes severe and sudden breathlessness in young, healthy individuals during strenuous swimming or diving. [Encl 39]

a. Formerly SIPE was mostly identified among military combat divers, however, with the rising popularity of triathlon competition, more and more cases are known in the triathlon sport communities. [Encl 39]

b. The onset of SIPE symptoms occur during or immediately after strenuous swimming. [Encl 39]

c. The signs and symptoms of SIPE include: shortness of breath that is out of proportion to the effort being exerted; whistling or crackling sound in the chest that can be heard using a stethoscope; unexplained, uncontrollable cough; coughing up fluid or sputum described as pink frothy, or blood tinged in nature; and feelings of tightness in the chest. [Encl 39]

d. The physiologic mechanism of SIPE is not firmly established, but is believed to be caused by a shift of blood fluid in the arms and legs into the central core of the chest and abdomen of the body while conducting a strenuous swim in cool or cold water. This shift in blood fluid increases the pressure in the small blood vessels lining the air sacs of the lung. As the pressure in these small vessels increases with continued swimming, the pressure causes fluid and blood to pass into the air sacks of the lung resulting in shortness of breath with a blood tinged sputum. [Encl 39]

e. Research on SIPE continues in an effort to firmly establish understanding of the cause, risk factors, effective treatments, and possible prevention measures. Currently the potential risk factors being considered are: high blood pressure; tight wetsuit; female gender; cold water; age over 40; and prior diagnosis with SIPE. [Encl 39]

f. SIPE is a potentially life threatening condition. However, if treated immediately with basic medical care of supplemental oxygen, rewarming, and rest, one hallmark of SIPE is the rapid resolution of signs and symptoms in most cases within 24 – 48 hours without evidence of permanent or prolonged lung injury. Individuals with atypical cases involving prolonged recovery for as many as 7 days have occurred either delayed initial medical treatment or had a more significant underlying medical conditions that were not under effective medical treatment such as hypertension or asthma. [Encl 39]

54. Pneumonia is a respiratory infection of the lung tissue and lower lung airways. The infection specifically causes irritation and damage to the tissue in the affected area and results in the production of fluid. This fluid is an infectious exudate (pus) that fills the airspaces of the lungs thereby reducing the exchange of oxygen and carbon dioxide. This results in shortness of breath. A fever can also develop. Additionally a cough develops in an effort to remove the fluid and evacuate it from the lungs. [Encl 40]

a. Pneumonia can be caused by either a virus, bacteria, fungi, or parasites. Viral Pneumonia is the most common cause of pneumonia in children, while Bacterial Pneumonia is the most common cause in adults. [Encl 40]

b. The treatment for Viral Pneumonia is typically supportive care of symptoms and rest. Severe cases of Viral Pneumonia require hospitalization and the use of antiviral medications. [Encl 40]

c. The treatment for Bacterial Pneumonia includes antibiotic medication. While many

bacteria can cause Bacterial Pneumonia the most common cause is Streptococcus Pneumonia. A specific form of this, Group A Streptococcus (GAS) Pneumonia, is the most common cause of pneumonia in military recruit, prison, and college campus populations. [Encl 40]

d. To support prevention of streptococcal infections at Navy Recruit Training Command, an instruction was issued to ensure effective surveillance and the prevention of the disease using the injectable antibiotic Bicillin. [Ref bh]

55. Rales and rhonchi are abnormal lung sounds heard during the performance of a chest and lung physical exam using a stethoscope pressed against the chest or back. [Encl 41]

a. Rhonchi are sounds that resemble snoring. They occur when air is blocked or air flow becomes rough through the large airways. [Encl 354, Ref cw]

b. Rales are small clicking, bubbling, or rattling sounds in the lungs. They are heard when a person breathes in (inhales). They are believed to occur when air opens closed air spaces. Rales can be further described as moist, dry, fine, or coarse. [Encl 354, Ref cw]

c. Causes of abnormal breath sounds may include: Pneumonia, Bronchitis, Chronic Obstructed Pulmonary Lung Disease, Pulmonary Edema, Interstitial Lung Disease, Heart Failure, and Bronchiectasis. [Ref cw]

56. By the conclusion of BUD/S Hell Week, all candidates demonstrate a significant degree of exhaustion and difficulty with physical mobility to the point that their physical appearance could be immediately concerning to anyone that does not have experience with BUD/S candidates and Hell Week evolutions. (b)(2),(b)(5),(j)(2),(k)(2) (b)(2),(b)(5),(j)(2),(k)(2) BUD/S medical and instructor personnel are familiar from experience with this presentation. [Encl 42, 43, 44, 270]

III.C. NSW Medical Structure at the time of Class 352

57. The mission of NSW medical departments is to maintain the health and readiness of assigned personnel by means of a comprehensive program of prevention, clinical evaluation, medical treatment, and rehabilitation, as well as the training of corpsmen and combat medics who can render care in forward deployed settings to avert preventable loss of life. Medical departments are led by senior officer or enlisted medical personnel accountable to the commander of their unit for performance of duties. [Ref o]

58. The specified tasks of medical departments in NSW are: [Ref o]

a. Provide clinical and operational medical services as ordered and required.

b. Maintain the health of the force in all aspects to assure maximum manpower availability.

c. Provide medical oversight, quality assurance, and policy guidance to assigned subordinate component department components.

d. Conduct training and sustainment to satisfy mission essential task.

e. Provide critical and timely counsel to commanders and staff on all medical issues.

59. At the time of Class 352, Echelon II Naval Special Warfare Command (NSWC), Echelon III NSWCEN, and Echelon IV BTC each maintained their own command medical departments. [Ref o]

60. All NSW medical departments are administered by one of the following: [Ref o]

a. An officer designated as the Senior Medical Officer (SMO).

b. An officer or senior enlisted member designated as the Medical Department Head (DH); or

c. A senior enlisted member designated as the Senior Enlisted Medical Advisor (SEMA) or Senior Medical Department Representative (SMDR).

61. At the time of Class 352, the Echelon II Naval Special Warfare Command (NSWC) Medical Department structure, leadership, and responsibilities were as follows:

a. NSWC was commanded at the time of Class 352 by RADM Hugh Howard. He turned over to RADM Keith Davids on 19 August 2022. [Encl 192]

b. The NSWC Medical Department is led by the Force Medical Officer (FMO). [Ref o]

c. At the time of Class 352, the FMO was (b) (6). [Encl 45]

d. (b) (6) turned over to (b) (6) as FMO in July 2022. [Encls 45, 177]

e. Both the current and former FMO are board-certified physician Naval Medical Officers who are licensed, credentialed, and privileged to practice medicine. [Encl 45]

f. The NSWC FMO is the overall supervisor for every medical department in NSW. [Ref o]

g. The NSWC Medical Department provides advice to the NSWC Commander and guidance and instruction to subordinate medical departments. [Encl 45]

h. The NSWC Medical Department is responsible for the credentialing and privileging of licensed medical providers in NSW and the certification of non-licensed medical personnel

throughout the NSW enterprise. [Encls 45, 177; Ref m]

i. The NSWC Medical Department does not execute or provide direct patient care in a designated medical clinic or in the field, as it is administrative in nature only. [Encl 45; Ref n]

62. At the time of Class 352, the NSWCEN Medical Department structure, leadership, and responsibilities were as follows:

a. NSWCEN was commanded at the time of Class 352 by CAPT Brian Drechsler, who remains in command as of the date of this report. [Encl 30]

b. The NSWCEN SMO serves as the Medical Department Head of NSWCEN Medical. [Encl 228; Ref o, ab]

c. The NSWCEN SMO currently and at the time of Class 352 is (b) (6) . [Encl 173]

d. (b) (6) is a board-certified physician Naval Medical Officer who is licensed, credentialed, and privileged to practice medicine. [Encl 173]

e. Under NSWC policy, the NSWCEN SMO is responsible for the medical departments of subordinate commands. [Encls 177, 228; Ref o, ab]

f. The NSWCEN Medical Clinic is located within the compound and campus of NSWCEN onboard NAB Coronado. [Encl 46]

g. Per the NSWCEN Standard Organization and Regulations Manual, the NSWCEN Medical Department and SMO are required to: [Ref ab]

1) Provided administrative guidance and assistance to the medical departments of NSWCEN detachments.

2) Supervise NSWCEN healthcare.

3) Provide high quality medical care to NSWCEN staff, students, and staff of subordinate commands.

4) Provide operational medical support for high-risk training evolutions.

h. Separately, (b) (6) , as the Independent Duty Corpsmen Program Supervisor, was responsible for administration and clinical supervision of independent duty corpsmen (IDC) at his command and subordinate commands. [Ref d, o]

i. The NSWCEN Medical Clinic staff is organized into three divisions: [Ref ab]

1) The Primary Care Division, led at the time of Class 352 by (b) (6), Physician's Assistant.

    a) The Primary Care Division was responsible for administering and executing the daily operations of the NSWCEN Medical Clinic to include sick call, medical screenings, and physical exams.

    b) The Primary Care Division is staffed with three Naval officers (two physicians, one physician's assistant) and seven enlisted staff members, one of whom is an IDC.

    c) The Clinic is equipped to the standard of an outpatient general medicine clinic and is augmented with onsite X-Ray capability.

2) The Sports Medicine/Physical Therapy Division, with a gapped leadership billet.

    a) The Sports Medicine/Physical Therapy Division is staffed with one enlisted member and two contracted physical therapists.

    b) This Division is responsible for the treatment and rehabilitation of staff and candidates with musculoskeletal injuries.

3) The Mental Health Division, led by (b) (6), a board-certified psychologist.

    a) The Mental Health Division is staffed with two additional active duty psychologists.

    b) Additionally, the staff includes a General Schedule (GS) civilian psychologist, a contracted psychologist, a contracted psychology tech, a contracted data analyst, and a civilian nurse case manager.

    c) The department addresses all behavioral health and psychological complaints or concerns from candidates and staff.

    d) Additionally, at the time of Class 352 they performed the psychological screening for High Risk Instructor Duty. This role is now filled by the Primary Care Division and IDCs at ATC/BTC.

63. At the time of Class 352, the BTC Medical Department structure, leadership, and responsibilities were as follows:

a. BTC was commanded at the time of Class 352 by CAPT Bradley Geary, who turned over to CAPT Timothy Sulick on 3 June 2022. [Encl 56]

b. By NSWCEN instruction, the BTC Medical Department was a detached health care medical department of the NSWCEN Medical Department, but was treated in practice as a separate entity. [Encls 154, 173; Ref ab]

c. BTC Medical was located inside the main BTC building, onboard NAB Coronado. [Encl 46]

d. The BTC Medical Department is manned solely by corpsmen, contracted EMT paramedics, and contracted athletic trainers. It is not billeted for nor does it have an assigned Medical Officer. [Ref ab, ar]

e. The BTC Medical Department Head at the time of Class 352 was Hospital Corpsman (b) (6) [Encl 47]

f. (b) (6), as the BTC Medical Department Head, reported directly to the BTC Commanding Officer and was responsible to the BTC CO for proper execution of medical support to BUD/S evolutions. [Ref ar]

g. (b) (6), as the NSWBTC Medical Department Head, was solely responsible for: [Ref ar]

1) Advising the command on all medical and administrative matters, particularly those involving procedure, methodology, and procurement.

2) Serving as an administrative advisor to the commanding officer for all aspects of the medical department.

3) Managing all BTC medical staff, both administratively and operationally.

4) Serving as a training observer, evaluator, and resource to ensure medical staff are able to conduct effective phase medical training as required.

5) Serving as a liaison with outside medical entities in regards to patient status and medical programs as directed by the BTC Commander.

6) Reviewing authority for all EAPs within BTC.

7) Ensuring BTC corpsmen maintain all proficiencies and requirements for Corpsman Certification.

IV. ***Performance Enhancing Drugs and Supplements***

64. Performance enhancing drugs and supplements (PEDS) are defined broadly as substances

used by healthy individuals, otherwise absent of disease, to enhance performance in physical, cognitive, or other desired areas. [Encl 48]

65. The risk from the use of PEDS range from the known effects of Food and Drug Administration (FDA) approved drugs to unpredictable and potentially life-threatening effects of non-FDA approved PEDS purchased directly from manufacturers or distributors and not validated for benefit, purity, or safety in independent studies. [Encl 48]

66. Due to the Dietary Supplement Health and Education Act of 1994, the FDA has limited oversight of many supplements. Under this Act: [Encl 48]

a. Manufacturers and distributors of dietary supplements and ingredients are prohibited from marketing products that are adulterated or misbranded. That means that these firms are responsible for evaluating the safety and labeling of their products before marketing to ensure that they meet all the requirements of the Federal Food, Drug, and Cosmetic Act as amended by DSHEA and FDA Regulations. [Encl 48]

b. FDA has the authority to take action against any adulterated or misbranded dietary supplement product after it reaches the market. [Encl 48]

67. The United States Anti Doping Agency (USADA) is a signatory to the World Anti Doping Agency (WADA) which produces a list of PEDS prohibited for use by athletes competing in certain events. The purposes of the World Anti Doping Code and the World Anti Doping Program which supports it are: [Encl 48]

a. To protect the athlete's fundamental right to participate in a doping free sport and thus promote health, fairness, and equality for athletes worldwide, and [Encl 48]

b. To ensure harmonized, coordinated and effective anti-doping programs at the international and national level with regard to the prevention of doping including education, deterrence, detection, enforcement, rule of law. [Encl 48]

IV.A. Common PEDS, Effects, and Known Risks

68. **Androgens**. Androgens include testosterone or its derivatives that have similar molecular structure and effects on the body. Androgens are available by prescription by a variety of different routes for administration and are used to treat testicular dysfunction (hypogonadism) and gender transition. [Encl 48]

a. **Effects of Androgens**: Androgens have an anabolic (building) effect on muscle, bone, and other organs, meaning they promote constructive metabolic effects. Androgens improve athletic performance and strength. [Encl 48]

b. **Adverse effects of androgens**: Adverse effects include but are not limited to

temporary or permanent suppression of native production of testosterone, erythrocytosis (dangerous elevations in red blood cell production), clots, severe acne, tendinitis/rupture, increased LDL ("bad cholesterol"), decreased HDL ("good cholesterol"), high blood pressure, aggressive behavior, rage or violence, psychiatric disorders, infections such as HIV or hepatitis if he individual is using unapproved or non-sterile sources, diminished sperm production, shrinkage of testicles, liver abnormalities, and tumors. [Encl 48]

69. **Human growth hormone**. Human growth hormone is a naturally occurring hormone produced in the pituitary gland. It is available by prescription and is administered by injection. Athletes use growth hormones to improve muscle mass and athletic performance and decrease fat mass. [Encl 48]

a. **Effects of human growth hormone:** Human growth hormone has an anabolic (building) effect on muscle, bone, and the internal organs. [Encl 48]

b. **Adverse effects of human growth hormone:** Adverse effects include but are not limited to Joint pain, muscle weakness, fluid retention, diabetes, vision problems, carpal tunnel syndrome, enlarged heart (cardiomegaly), and hypertension. [Encl 48]

70. **Erythropoietin:** Erythropoietin is produced in the kidneys and increases red blood cell mass. It is available by prescription for injection to treat patients with severe kidney disease and anemia. [Encl 48]

a. **Effects of erythropoietin**: Athletes take erythropoietin to improve the movement of oxygen to muscles. Erythropoietin is known to improve athletic performance in endurance events. [Encl 48]

b. **Adverse effects of erythropoietin**: Erythropoietin was used commonly by competitive cyclists in the 1990s and allegedly contributed to 18 deaths. Adverse effects include but are not limited to risk of stroke, heart attack, and the development of clots in the lung vasculature. [Encl 48]

71. **Creatine**. Creatine serves to increase the production of the main energy source in muscle (adenosine triphosphate or ATP). It is available as a supplement powder over the counter. Creatine use is not banned by either the USADA or WADA, but it is a non-FDA approved supplement purchased directly from the manufacturer or distributor subject to the same risks as any other supplement obtained in this manner. [Encl 48]

a. **Effects of creatine**. Creatine might improve athletic performance for very brief repetitive bouts of high intensity exercise. It does not seem to improve aerobic performance in endurance exercise. [Encl 48]

b. **Adverse effects of creatine**. Adverse effects include abdominal discomfort, heart rhythm abnormalities, dehydration, muscle cramping, kidney dysfunction, rhabdomyolysis (muscle breakdown), seizures, fluid retention, and weight gain. [Encl 48]

72. **Aromatase Inhibitors**. Aromatase inhibitors are used in medical therapy as adjuncts for the treatment and prevention of estrogen dependent cancers. Aromatase inhibitors are attractive to athletes seeking to build muscle or bone due to their secondary effects of elevating circulating testosterone levels by enhancing production of testosterone and inhibiting its degradation. An example of a commonly prescribed aromatase inhibitor is anastrozole. [Encl 48]

a. **Effects of aromatase inhibitors**: modest elevations in testosterone in men with resultant muscle building and some improvements in athletic performance. [Encl 48]

b. **Adverse effects of aromatase inhibitors**: Adverse effects include but are not limited to hot flashes, fatigue, mood disturbances, nausea and vomiting, weakness, arthralgias, depression, high blood pressure, osteoporosis, peripheral edema, and fractures. [Encl 48]

73. **Selective Androgen Receptor Modulators (SARMS)**: SARMS are drugs that act in varying degrees on androgen receptors. They have similar effects to androgens on the body. There are studies looking at potential clinical applications but as of today SARMS are not FDA approved for any medical condition. Despite this lack of FDA approval, SARMS are popular with athletes and available for purchase directly from manufacturers and distributors. The use of SARMS is prohibited by the WADA. [Encl 48]

a. **Effects of SARMS**. SARMS produce anabolic (building) effects primarily on muscle, bone, and other organs. [Encl 48]

b. **Adverse effects of SARMS**. Side effects of SARMS include effects on the gastrointestinal system, elevation of liver enzymes, adverse effects on HDL (“good”) cholesterol, and have also been associated with side effects including liver failure. However most SARMS sold from unauthorized distributors are impure, contain unapproved drugs or substances, and many are inaccurately labeled. Adulterated SARMS can have unpredictable negative effects on the body, depending on the combination of substances. [Encl 48]

74. **Phosphodiesterase Inhibitors**: Athletes using androgens or their analogues commonly use phosphodiesterase inhibitors such as sildenafil (“Viagra”) for improved blood flow to muscles during strength training or other times when the desire is to increase blood flow to muscles such as during altitude training and swimming. Users may also combine these with popular workout supplements. The risk of swimmer’s induced pulmonary edema has been shown to be reduced by the controlled use of phosphodiesterase inhibitors. [Encl 48]

a. **Effects of phosphodiesterase inhibitors**: Phosphodiesterase inhibitors improve blood flow to muscles and may improve performance in strength training. Phosphodiesterase inhibitors also may reduce pressures in blood vessels in the lungs without compromising exercise dynamics and reduce the risk of swimmer’s induced pulmonary edema (SIPE). [Encl 48]

b. **Adverse effects of phosphodiesterase inhibitors**: Misuse of phosphodiesterase inhibitors can include severe low blood pressure, cardiovascular collapse, and death. Combining phosphodiesterase inhibitors with nitrates is particularly dangerous given the potential for

significant decreases in blood pressure and perfusion of the heart. [Encl 48]

IV.B. Effects of PEDS Use during Training

75. PEDS use during high-intensity physical training poses serious health risks to candidates. General effects include: [Encl 50]

a. Negative side effects to the cardiovascular system by means of directly altering the heart muscle, blood vessels, and elevating blood pressure. [Encl 50]

b. Negative side effects to the endocrine system by means of directly altering hormonal concentrations or metabolism. [Encl 50]

c. Negative effects to the gastrointestinal system including liver damage and failure. [Encl 50]

d. Negative effects to the immune system including the possibility of suppressing immune system function and increasing susceptibility to infection. [Encl 50]

e. Indirect effects caused by enabling individuals to push beyond normal physiologic limits with the potential consequences of induced arrhythmias. [Encl 51]

f. Risks from other constituents in PEDS that are not Food and Drug Administration (FDA) approved. These PEDS are obtained directly from manufacturers and distributors with no independent validation of purity, effects, and safety. [Encl 48]

76. The effect of PEDS and the risk they present to the individual depend on factors including the production source, purity, and validity of the drug or product, the dose and duration of use, the underlying health of the service member, and the environmental factors of the person's lifestyle. [Encl 53]

IV.C. Department of Defense and Navy Policy on PEDS

77. The wrongful use, possession, distribution, or introduction onto an installation of anabolic steroids is prohibited for all service members by Article 112a, Uniform Code of Military Justice. [Encl 54]

78. Navy policy further controls the use of PEDS by service members in references (c) and (f).

79. The Secretary of the Navy has prohibited the wrongful use or possession of any hormonal substance related to testosterone that promotes muscle growth by DON personnel, or of any drug, selective androgen receptor modulator (SARM), growth hormone, or masking agent intended to enhance or conceal the use of anabolic steroids. This instruction was in force at the

time of Class 352 and has not been updated. [Ref c]

80. From 2009 to 2022, the Chief of Naval Operations also prohibited the illicit use of drugs or hormonal substances related to testosterone that promote muscle growth. This instruction was updated on 28 March 2022 as part of routine revision, and now prohibits the illicit use of any drug or hormonal substance related to testosterone that promotes muscle growth, including all those listed in the Designer Anabolic Steroid Control Act of 2014 or the Comprehensive Drug Abuse Prevention and Control Act of 1970. [Refs f, g]

SELECTION, TRAINING, EXPERIENCE, AND OVERSIGHT OF INSTRUCTOR, SAFETY, AND MEDICAL PERSONNEL DURING CLASS 352

This section examines in detail the command and control, personnel, systems, and oversight in place at the time of Class 352 in the areas of curriculum execution, safety management, medical support to training, and detection and deterrence of PEDS. The focus is on effective implementation, oversight, and the accumulation and management of risk.

I. *Instructor Cadre Selection, Training, and Curriculum Execution during Class 352*

This sub-section outlines the intent of commanders for the accession pipeline, the process of instructor selection, the experience, training, and roles of instructors, oversight of curriculum execution, and the broader roles of operational support staff. Causes of heightened attrition during this period, candidate attitudes toward medical care, and allegations of candidate self-policing are addressed as well. The focus is on the risk introduced by the curriculum as implemented, and on the oversight in place to identify and correct deviations.

I.A. NSWC Commander's Intent for SEAL Selection and Assessment Process at the time of Class 352

81. RADM Howard's articulated intent for NSW was to rebalance the NSW force from heavily focused on counter-terror and violent extremist organizations to one better able to also address the Navy's key operational problems and provide irregular deterrence options that increase national leverage in crisis. It was his belief that the community had "over rotated" towards counter-terror/violent extremist organizations. [Encls 3, 106]

82. RADM Howard's intent for NSW assessment and selection in support of this realignment was to increase precision and depth of assessment for the character, cognitive, and leadership attributes the community required. He also intended to increase the precision with which the community selected officer and enlisted leadership and provide them with more comprehensive leadership development opportunities. [Encls 3, 55, 192]

83. To achieve this RADM Howard directed the creation of an additional Echelon IV command, Navy Special Warfare Assessment Command (NSWAC), under NSWCEN. This task was a

focus area for CAPT Drechsler and his staff. RADM Howard's perception was that the Warrior Challenge program had emphasized physical attributes over character, cognitive, and leadership attributes. NSWAC was tasked with engaging candidates upstream of Navy Recruiting Command to emphasize those attributes and set expectations for what it means to serve within NSW. [Encls 30, 106, 192]

84. Additionally, RADM Howard saw the Warrior Challenge cohort within Navy boot camp as creating a risk of a sense of entitlement and separation from the greater Navy. To mitigate this risk, he directed integration of all SEAL and SWCC candidates with their fellow recruits. RADM Howard also directed relocation of the enlisted NSW preparatory course from Great Lakes to Coronado to better prepare enlisted candidates entering the pipeline. The model for the new enlisted pathway was similar to the one used for officers, with heightened scrutiny and better training. [Encls 55, 106, 192]

85. RADM Howard saw these efforts as dependent on leadership at NSWCEN and BTC. Both the NSWCEN Commodore and BTC Commanding Officer were Stockdale Award recipients with proven track records of leadership, and NSW established a west coast based UIC to enable some highly capable and qualified SEALs to participate in the assessment and selection process while retaining special pays. RADM Howard directed the Force Master Chief to explore increasing the selectivity and professionalism of the BTC instructor cadre, although no formal process has been established yet. [Encl 192]

I.B. 1st Phase Cadre and Responsibilities

86. 1st Phase is led by a Phase Officer-in-Charge (OIC), a civilian Deputy OIC, and E-9 SEA, and an E-7 LCPO. [Encl 343]

87. The Phase OIC billet is filled by a pre-Department Head Lieutenant. The First Phase OIC is responsible for ensuring the training in the 1st Phase of the BUD/S training pipeline is carried out per the policies, plans, and intentions of the Commanding Officer while directly reporting to the OPSO for direction and guidance as a component of the Operations Department under his charge. [Encls 56, 57, 343]

88. The 1st Phase Deputy OIC is the direct representative of the 1st Phase OIC and is primarily responsible for the organization, performance of duty, training, education, and curriculum. In the absence of the 1st Phase OIC or during change of uniformed personnel, the 1st Phase Deputy OIC's duties include all OIC duties. [Encl 343]

89. The 1st Phase SEA is the liaison between the 1st Phase OIC and the enlisted personnel of 1st Phase to address issues, concerns and recommendations. The 1st Phase SEA serves as the enlisted advisor to the 1st Phase OIC on the formulation and implementation of command policies pertinent to the morale, welfare, discipline, manning and training. [Encl 343]

90. The 1st Phase cadre are responsible for one Class of candidates at a time, proceeding through the seven weeks of training before beginning again with a new Class. [Encl 58]

91. During Class 352, 1st Phase was led by (b) (6) as the Phase Officer-in-Charge OIC) and (b) (6) as the Deputy OIC, and (b) (6) as the SEA. (b) (6) was the Leading Chief Petty Officer of the Phase. [Encl 60] (b) (6) started BUD/S in 2006 and graduated with Class 262. Initially an enlisted SEAL, he had numerous operational deployments, served as an enlisted BTC/SQT instructor, and converted to officer in 2017. [Encl 67]

92. (b) (6) previously served as a SEAL officer before joining BTC as a civilian in 2021. Class 352 was the third BUD/S Class that he had instructed. [Encl 59] He had over 21 years of NSW experience, including in leadership roles and responsibilities within NSW and at joint commands. He is a retired SEAL LCDR who was post-Executive Officer and had previously led the NSW Development Group Selection and Training course of instruction while on active duty. [Encl 355]

93. At the time of Class 352, there were nine instructors assigned to 1st Phase: (b) (6) , (b) (6) (b) (6) [Encl 60]

94. (b) (6) was the Proctor for Class 352. [Encl 60]

95. A BUD/S Class Proctor is the primary liaison between a Class and BTC staff for administrative matters, management, and coordination. Proctors are to act as role models, train the Class chain of command, and have daily time in the Class schedule to develop candidates and address individual deficiencies [Ref ba]

96. Most 1st Phase instructors are on their first shore duty and first instructor assignment. Some instructors are in their second tour in NSW, and others have served multiple deployable tours. Most of the 1st Phase instructors for Class 352 indicate that they desired to come to BTC to contribute to the NSW community and positively train new candidates. [Encls 61, 62, 63, 64, 65]

I.C. Assignment of BUD/S Instructors

97. Phase OICs were historically post-Department Head Lieutenants / O-3s but over the past 10 years, that has shifted due to low force inventory of Lieutenants with that experience. To mitigate the experience gap, prior-enlisted Lieutenants who are pre-department head have been detailed. [Encls 66, 67]

98. For advancement or statutory board selection, the Special Warfare community communicates that it values sustained superior performance for all field grad officers and specifically [Encl 68]:

a. Lieutenant Commander: Served/Serving Department Head or Operations Officer (Afloat or Ashore)

b. Commander: Served/Serving XO (Afloat, Ashore, or Acquisitions) or Troop Commander

c. Captain: Served/Serving CO (Afloat or Ashore) or Acquisitions 05 Milestone

99. Officers assigned to BTC as Phase OICs do not receive the Department Head (DH) AQD. The only positions within NSW that currently receive the DH AQD are Platoon Commanders, SEAL Delivery Vehicle Platoon Commanders, Special Boat Team Troop Commandeers, NSWDG Mobility Troop Commanders, and Special Reconnaissance Team Platoon Commanders. [Encl 69]

100. Some reluctance to come to BTC as an instructor arises from the operational mindset of Naval Special Warfare, with personnel motivated to remain in operational units or units that directly facilitate their readiness and return to operational employment. This is in part because the operational impact and professional incentive of coming to BTC are not as evident. [Encl 70]

101. Duty as an instructor at BUD/S also presents challenges in maintaining qualification such as military free fall and Joint Terminal Attack Controller, while more traditional shore tours such as Training Detachments and ATC afford personnel a clear and sometimes shorter route back to an operational command. Finally, specials pays available at operational commands may lapse while assigned to BTC. [Encls 56, 71]

I.D. BUD/S Instructor Training

102. As addressed above, before acting as instructor on a course, BUD/S instructors completed a two week IQC run by NSWCEN. [Encls 57, 76; Refs k, bo, bp, by, bz]

103. SEAL officer and enlisted personnel assigned to instructor billets support BUD/S evolutions ‘under instruction’ while completing training. [Encl 57, 72, 76]

104. While in an ‘under instruction’ status, these officers and enlisted personnel do not count toward the required ratio of instructors to students and do not fill any of the required roles. [Encl 72]

105. These officers and enlisted personnel must observe an evolution without participating before serving in an ‘under instruction’ status. Most training on curriculum executions is on-the-job training and guidance from other instructors. [Encls 72, 74]

106. While getting certified, instructors are evaluated once on technique and twice on technical knowledge during the IQC by the NSWCEN Instructor Development Directorate (IDD).

Instructors are formally evaluated following each evolution conducted for the first time, and are periodically evaluated once a quarter. These later evaluations are generally conducted by qualified instructor cadre in the same Phase. [Encls 25, 57, 171; Ref ag]

107. The amount of time spent 'under instruction' varies with the Phase or department an individual is assigned to. Contributing factors are time to complete high-risk instructor certification, completion of the CUIT, completing letters of designation pertinent to the position, and required observations of evolution. For those assigned to 1st Phase, this process typically takes 14 weeks. [Encl 72]

108. BUD/S instructors indicate that IQC was helpful to transition from operational to instructor duty. They indicated that the two week course was sufficient time to cover useful topics related to all BTC phases of training. [Encls 61, 62, 64, 65, 73, 74, 76, 139]

I.E. 1st Phase Curriculum Execution Roles

109. Every 1st Phase BUD/S evolution has a Person in Charge, a Safety Observer, and a number of instructors assigned depending on the evolution details. [Encls 77-102]

110. As discussed below, a corpsman is assigned to support 1st Phase evolutions throughout the first three weeks, with additional personnel assigned to support Hell Week. [Encls 47, 108, 184]

111. BUD/S evolutions are controlled by the position of 'Person In Charge' (PIC), who is the senior, on-scene instructor in charge of training execution. The PIC is often an E-7 or E-6 member of the instructor cadre. [Ref be]

112. The PIC only directly participates in the evolution if absolutely necessary, and fulfills several safety and medical responsibilities: [Ref be]

a. Ensures a complete pre-training brief and post training debrief are conducted.

b. Ensures all safety inspections are complete before commencement of training.

c. Ensures emergency medical assets are staged and Personal Protective Equipment (PPE) worn as necessary.

d. Ensures primary and backup communications systems are functional

e. Ensures emergency medical services are staged and ready.

f. Maintains communications with next higher level of command on commencement and completion of training evolutions.

g. Conducts ORM as required.

h. Has the authority to cancel or postpone training for safety concerns.

113. The Safety Observer (SO) position must be of a minimum rank for certain evolutions, identified in the Evolution Brief sheet, and is typically filled by the Phase OIC, Deputy OIC, or SEA and: [Encls 13, 62, 109; Ref be]

a. Shall not participate in the evolution.

b. Must be qualified in the evolution being observed.

c. Ensures safe training/operating practices are briefed to staff and candidates.

d. Observes training for unsafe practices or conditions.

e. Has primary and secondary communications with the PIC.

f. Conducts ORM as required.

g. Makes recommendations regarding safety to the PIC to continue, postpone, or cancel training.

114. BUD/s instructors understand their role in assessing candidate health and safety to continue training. [Encls 13, 61, 63, 67]

a. 1st Phase instructors coordinate directly with on-site corpsman for an assessment of a candidate's fitness for training. [Encls 13, 61, 63, 67]

b. Instructors direct candidates to field corpsman during morning sick call and pull candidates from training evolutions when health concerns are observed. [Encls 13, 61, 62, 63, 67]

c. If a candidate appears to be struggling or suffering an injury, instructors recount asking students for their self-assessment of their fitness to train and explain options to see the corpsman, continue training, or DOR. [Encls 13, 61, 62, 63, 67, 73]

d. Candidates are escorted to NSWCEN Medical when higher medical attention is needed. [Encls 13, 61, 63, 67, 181, 230]

I.F. Drop on Request, Performance Pull, and Medical Drop Processes

115. The drop on request, medical drop, medical roll, performance drop, and set back processes are explained to candidates both during NSWO and before evolutions. [Encls 61, 65; Ref aw]

116. Some candidates misunderstood the differences between these avenues, and their consequences. [Encls 112, 113, 114, 115]

117. A medical roll occurs when the Senior Medical Officer makes a determination that a candidate is no longer fit to train and gives an estimate of recovery time. The phase leadership then looks at how long the candidate has been on board, past performance, previous rolls, and character before making a recommendation to the BTC Commanding Officer on retention. The CO then makes the final decision to setback or drop the candidate. Medically rolled candidates are placed into the Candidates Awaiting Training Students (CATS) division or retained within their respective Phase if they've completed Hell Week while recovering, and remain there while waiting to class up again. [Encls 47, 57; Ref as]

118. A medical drop occurs when a student becomes injured or develops a medical condition that permanently disqualifies them from continuing with training. Medically dropped candidates are placed into the Phoenix division while awaiting transfer to the Fleet or out of the Navy. [Encls 47, 57; Ref as]

119. NSWCEN Medical makes a recommendation for a candidate to be medically dropped or rolled, but it is ultimately the decision of the Shift or Phase OIC. [Encls 42, 57]

120. A Drop on Request (DOR) is a request by a candidate to voluntarily terminate training. A DOR must always be expressed verbally and followed up in writing [Encl 57; Ref aw]

121. A performance drop is the removal from training of a candidate who is unable to meet standards, which requires Candidate Review Board and BTC CO approval. [Encl 57; Ref as]

122. A candidate is automatically dropped if, prior to Hell Week, they fail an evolution with set standards including swims, runs, and the obstacle courses. An automatic drop is approved by the BTC CO without the use of a Candidate Review Board. Medical issues during these evolutions are addressed in accordance with the medical processes above. [Ref as]

123. Throughout 1st Phase, candidates are given daily verbal and/or written feedback on their performance. When a candidate show a trend of below-average feedback, typically from multiple shifts, the Phase leadership will performance pull that candidate from training and recommend a performance drop to the Candidate Review Board. [Encls 13, 57, 67; Ref as]

124. Set back (also known as a roll) requires a candidate to repeat a portion of the pipeline, if they show promise but need more work before advancing in the training pipeline. [Ref as]

125. A Phase Board considers whether to set a candidate back in the training, to continue training, or recommend drop from training. If a drop is recommended, a Candidate Review Board is conducted by BTC Operations Department and recommendation is sent to the BTC CO for approval/disapproval. [Encls 13, 67; Ref as]

126. Since 2020, candidates who drop on request or are pulled from a Class during Hell Week must be seen by a psychologist and spend the next 24 hours in the Recovery Observation Center, where they are observed by an instructor and a medical professional. [Ref ax]

127. After leaving the Recovery Observation Center, these personnel join Phoenix Division. [Encl. 181; Ref ad, ay]

128. Phoenix division is controlled by NSWCEN, and was run at the time of Class 352 by a Chief Petty Officer and a Second Class Petty Officer. The division relied heavily on officer candidates awaiting transfer for leadership and oversight of the division. Personnel in Phoenix Division were underemployed, with most having only a daily muster and no daily tasking. [Encl 181; Ref ad]

129. Some personnel describe very lengthy or undesirable assignment processes while in Phoenix Division. [Encls 114, 116, 117, 118, 181]

I.G. Curriculum Oversight Roles at the Time of Class 352

130. As discussed above, NSWCEN conducts oversight of BUD/S curriculum in its role as the Curriculum Control Authority. Curriculum control is primarily an administrative activity ensuring completeness and accuracy of curriculum documentation. [Ref ae]

131. CAPT Brian Drechsler, Commodore, NSWCEN, serves as the Curriculum Control Authority (CCA) for WARCOM, BTC, and ATC courses. The CCA approves all instructional materials, supervises and ensures subordinate training activities adhere to policy and procedures for curriculum development, management, and maintenance. [Ref af]

132. Curriculum standardization at BTC is conducted through the initial instructor indoctrination process, routine touchpoints between the triad and the instructors, debriefs of lessons learned, and an open door leadership policy. [Encls 70, 119]

133. All high risk curriculum for BUD/S is also internally reviewed annually by BTC through the Formal Course Review (FCR) process. [Ref ae]

134. The Commanding Officer of BTC serves as the Course Curriculum Model Manager

(CCMM) and is responsible for developing, revising, and maintaining the course of instruction (COI) and maintains the course master training plan (MTP). They also maintain the course audit trail (CAT) binders ensuring curriculum is inspection ready at all times. These responsibilities are supported by the following positions: [Ref af]

a. The CCMM Instructional Systems Specialist serves as primary policy advisor to the CCMM, training directors and OICs on all training administration and training curriculum development for CCMM as assigned. Responsible for documenting and maintaining the master training plan and the course audit trail ensuring the curriculum is continuously inspection ready. Conducts formal course reviews and formal course evaluations annually for all high-risk courses and biannually for all non-high risk courses. [Ref af]

b. The Course Supervisor (CS) position provides oversight of instructor staff in support of curriculum development and maintenance. These positions are filled by the Deputy Phase OIC to maintain continuity. [Encl 57; Ref af]

135. The BTC Operations Department is responsible for the direction and oversight of all BTC training, including by facilitating curriculum execution, developing instructors, coordinating safety implementation management, and providing training modernization feedback. This responsibility was exercised primarily through the Deputy Phase OICs as the Phase curriculum managers, tasked to: [Encl 57, 343]

a. Serve as advisor for candidate selection with an important leadership role of providing continuity of experience during the phase of training that historically has the most potential physical risk to candidates and instructor staff.

b. Ensures training consistency through rotational leadership changes in phase and advise command leadership and ISIC, as appropriate.

c. Provide guidance and instruction on all portions of Phase curriculum, as well as recommendations for curriculum enhancements throughout pipeline courses.

136. During Class 352, (b) (6), 1st Phase Deputy OIC, was the 1st Phase curriculum manager. [Encls 60, 120, 343]

137. Exit interviews by the Phase OIC, Deputy OIC, or SEA are conducted of every candidate who drops on request (DOR) from training. These personnel are not asked for feedback on the course. [Encl 121]

138. Until 2022, there was a Director of Mentorship position at BTC, filled by (b) (6) (b) (6). The Director of Mentorship (DOM) serves as the professional mentor and course manager for all special warfare mentorship and core values curricula prescribed for the NSW training pipeline. [Encl 343]

139. In this position, (b) (6) conducted surveys of BUD/S candidates at various stages of the BUD/S pipeline, including post-Hell Week, to get feedback on what parts of the training had proved useful, which instructors had the most or least impact, and any changes that candidates suggested. [Encl 122]

140. Review of 161 student surveys for Classes 329, 341, 350, and 352 revealed no allegations of instructor mistreatment, of candidate self-policing, of standards not being followed or being changed, or difficulty getting medical care. [Encl 122]

141. Some candidates expressed that the earlier weeks of 1st Phase should move more quickly to a focus on teamwork, that Class leadership should be based on capability instead of rank, and that some degree of 'extra BUD/S' was occurring. [Encl 122]

142. Survey of candidates in the pipeline ended with the departure of the BTC Director of Mentorship in June 2022, and there is not another direct feedback mechanism from candidates to BTC Operations. [Encls 123, 127]

I.H. BTC Commander's Intent under CAPT Geary

143. CAPT Geary identified three primary lines of effort during his time in command. [Encl 56]

a. The first line of effort was the staff and instructor cadre. His objective was to develop and mentor world class instructors and staff. He felt it important for the staff and cadre to support each other, learn from their mistakes, and methodically embrace risk. He saw this as critical to their no-fail mission. He also saw it as critical in sustaining trust from the US Navy, USSOCOM, and Naval Special Warfare. [Encl 56]

b. The second line of effort was the candidates. Over time, CAPT Geary noticed a tendency for candidates to be viewed as the "customer." His narrative was to reflect the American people as the customer with the candidates being the product. It was the cadre's job to lead, coach, and mentor the candidates to meet the standard the American people deserve while protecting them against unnecessary risk from curriculum adjustments or overload and overuse injuries. As an example of his attention to risk/harm reduction, CAPT Geary oversaw curriculum adjustments designed to reduce overload and overuse injuries (with corresponding reduction in medical drops during his tour). Every evolution is designed for a purpose – to develop attributes in candidates or highlight what already exists. To reinforce this perspective, CAPT Geary had leadership discussions with the staff and bi-weekly meetings with instructors to reinforce his vision. [Encl 56]

c. The third line of effort was service member's families. BTC is a shore tour and he was concerned that the instructors and staff make the most out of their shore tour before going back to sea duty and deployments. [Encl 56]

144. CAPT Geary valued the commander to commander relationship, and communicated his intent to 1st Phase leadership and cadre through face-to-face discussions, explaining leadership expectations, curriculum changes, and instructional guidance. [Encl 56]

145. CAPT Geary expected Phase leadership to operate independently under his guidance, with the Phase OIC, civilian Deputy Phase OIC, and Senior Enlisted Advisor forming a "mini-Triad." [Encls 56, 67, 125]

146. CAPT Geary understood the risk of inexperienced Phase leadership drifting in their instructional practices. His vision for civilian deputies was to apply sanity checks and reinforce curriculum standards. [Encls 56, 125]

I.I. Role of Civilian Staff during Class 352

147. As discussed above, the civilian mentors at BTC were hired to provide continuity of experience, and support standardization in execution of the pipeline. The civilian mentors acted as guides to the active duty cadre, most of whom had no prior instructor experience, and as a first line of oversight able to spot correct deviations and raise continued issues to command leadership. [Encl 127, 343]

148. The civilians also provided perspective, maintaining a longer-term view of the BUD/S pipeline focused on production and building SEALs from candidates. [Encl 127]

149. Active duty instructors were concerned that civilians have too much influence and authority over curriculum delivery and standards. The relationship between the civilian mentor and instructor cadre in 1st Phase was particularly tense until Class 350, when the mentor changed to (b) (6) [redacted]. [Encls 125, 126]

150. This sense of civilian control was connected to a feeling among some active duty staff that candidate performance standards had decreased and the NSW community are getting poor quality operators. [Encl 126]

151. At the beginning of CAPT Geary's tour at BTC, there were tensions between active duty and civilians. [Encls 56, 125, 128].

152. CAPT Geary viewed this as natural tension between the enthusiasm of the more junior active duty instructors and the experience of the civilians involved with the operation and training. [Encl 56]

153. CAPT Geary felt that the previous CO had marginalized the active duty leadership and created an imbalance with respect to civilian influence within the organization. [Encl 56]

154. To address this tension, CAPT Geary directed civilian employees to step back in their roles and allow the active duty personnel to step-up into leadership roles. [Encls 56, 106, 109, 125, 127]

155. Deputies were to advise the Phase OIC, not run the Phase, but were also directed by CAPT Geary to spot correct any overzealous efforts if they were going wrong. [Encls 56, 109, 127]

156. Civilian employees felt that their knowledge and experience were being marginalized and increased unnecessary risk in training as a result. Trust was damaged between long tenured civilians and the CO. [Encls 106, 109, 126, 127]

I.J. 1st Phase Curriculum Execution at the time of Class 352

157. Many BUD/S instructors interviewed and surveyed indicated that they felt the quality of SEAL candidates making it through the pipeline had declined, and that their role includes keeping a high standard for candidates to meet the needs of operational SEAL Teams. [Encls 61, 65, 67, 76, 126]

158. "Extra BUD/S" is a slang term used to describe extra training, usually physical in nature. When the term is used by instructor staff, it typically denotes additional iterations of an evolutions to ensure competency and understanding. For example if a boat crew is able to demonstrate proficiency in rock portage in a single iteration, they will forego additional repetitions; a less capable boat crew may need "extra BUD/S" or additional iterations to demonstrate proficiency. When used by students it can be a pejorative term used to describe training not directly associated with evolution training objectives or approved remediation. This misunderstanding may have been born out of a lack of candidate insight into appropriate instructor curriculum execution. [Encls 30, 62, 115, 129, 130, 134, 150, 348]

159. Some candidates from Classes 350 to 355 believed their instructors had engaged in 'extra BUD/S' by changing standards during evolutions, while others stated they did not experience it during their Class. However, as addressed above, instructors intentionally have discretion to adjust evolution intensity or length to achieve evolution objectives. Candidates in the pipeline do not have insight into this discretion and may misperceive it as outside the curriculum. [Encls 30, 103, 107, 112, 113, 115, 129, 130, 134, 150, 184, 201, 232, 348]

160. Candidates from this period were divided on whether their instructors valued individual performance or teamwork more during 1st Phase. [Encls 113, 114, 115, 118, 124, 129, 130, 134, 135, 137, 150, 201, 260, 277, 184, 199, 348]

161. As early as classes 348 and 349, some civilian mentors expressed concern directly to CAPT Geary over elevated attrition, identifying potential increased intensity of curriculum and a lack of perspective on the intent of the evolutions. [Encl 356].

162. During late 2021 and 2022, both CAPT Geary and CAPT Drechsler identified that an increase in the intensity of training might be a contributing factor to increased attrition. The potential issue was not that 1st Phase instructors were changing the evolutions or executing 'extra BUD/S,' but they were giving very little 'slack,' meaning that within the guidelines of evolutions, they continued to physically push candidates instead of allowing periods of recovery and rest. [Encls 30, 56, 57, 125, 340]

163. CAPT Geary, the BTC Commanding officer, was concerned about increased attrition and commissioned a research inquiry into the topic in approximately February 2022. While he believed elevated attrition to be multi-factorial and hypothesized intensity creep was likely a potential contributing factor, he believed the primary reason for attrition issue was the current generation had less mental toughness. [Encl 56, 356, 357]

163A. Due to increased attrition, CAPT Drechsler directed BTC's civilian Deputy Operations Officer to audit the first week of Class 354 and report his results to CAPT Geary. The Deputy Operations Officer discovered the instructors had lost the intent and the why of the evolutions. He further indicated the instructor cadre stopped teaching the candidates and just spent the time with physical remediation, seemingly with an intent to weed out some candidates. [Encl 127 and 356]

164. The view of civilian mentors was the 1st Phase cadre began to view these evolutions as a means of attrition vice a means of training and team building. (b) (6) , for example, is recalled as having said, "[I was] surprised that so many quit in Hell Week. I was trying to weed them out in the earlier weeks." [Encl 356]

164A. Civilian mentors also recall the continuation of demanding physical training beyond the historic line of Wednesday of week three, resulting in less recovery time prior to Hell Week. This noted intensity creep resulted in heated exchanges between civilian leadership and the BTC Commanding Officer who believed the elevated attrition was due to a lack of mental toughness of the current generation, not cadre execution of the curriculum. [Encl 356]

I.K. Heightened Attrition during 2021/2022

165. Shortly after the BTC Change of Command in the fall of 2020, attrition during the first three weeks of 1st Phase began to noticeably increase beyond historical averages beginning with Class 346 in January/February 2021. [Encl 132]

166. Attrition due to candidates dropping on request during weeks 1-3 of 1st Phase rose during 2021/2022 to 48% and 49% respectively from the historic average of 30%. [Encl 5]

167. This heightened attrition began just before (b) (6) became 1st Phase OIC and continued through his tenure until returning to normal levels by Classes 354 and 355. [Encl 5, 132]

168. Attrition in class 350 was roughly 17 percentage points higher than class 356 and 23 percentage points higher than class 344 which were held at the same time of year providing a control for air and water temperatures. [Encl 133]

169. Review of over 400 DOR requests from Classes 351, 352, and 353, identified the following self-reported causes for DOR. [Encl 121]

a. Injury – 32 (8%)
b. Physical limitations – 199 (49%)
c. Other – 3 (1%)
d. Loss of motivation – 171 (42%)

170. Overall, exit interviews of those Classes showed 91% cited to physical limitations or a lack of motivation, often mixing the two, as the reason for their request. 8% cited specific injuries. [Encl 121]

171. Heightened attrition during Classes 350-355 was attributed by BTC leadership and 1st Phase cadre to a combination of: [Encls 56, 67, 132]

a. COVID-19, which started in 2020, decreasing candidate preparedness. The Department of Defense determined it to be one of the deadliest threats our Nation had ever faced. [Ref cx]

b. The removal of SEAL/SWCC candidates from separate “800 series” boot camp cohorts

c. The transition from BUD/S Prep to NSWO, including relocation and curriculum changes.

d. An increased intensity or reduced “slack” in how the curriculum was administered.

e. Intensity creep in the form of evolutions like, “ruck runs” being added to the curriculum in 2015.

f. Overly enthusiastic class leadership creating extra work at the expense of rest.

g. Generational differences, with candidates being physically better prepared and with higher emotional intelligence but less familiar with physical discomfort.

172. COVID was believed by BTC leadership at the time to have impacted attrition due to long-term post-COVID fatigue, reduced mental resilience following quarantine, a paper-only SEAL Officer Assessment and Selection (SOAS) panel replacing the normal two week in-person process, and some direct effects on some Classes. [Encl 56]

173. The view of NSWCEN leadership was that the key factor within their control was the way the cadre implemented the curriculum, and they engaged directly with BTC as attrition rose. Changes made to execution and oversight of the curriculum are addressed below. During this period, RADM Howard addressed BTC leadership and instructor cadre, saying words to the effect of "Zero is an okay number on the berm – hold the standard." Aware of the heightened attrition, RADM Howard's intent was to convey to his commanders and their staffs that their focus should not be on numbers, and to create space for them to not take risk on character, integrity, judgement, or reliability in the candidates. Some cadre may have misunderstood his intent and both BTC and NSWCEN leadership made deliberate efforts to correct misperceptions. [Encls 30, 56, 57, 106, 125, 192]

I.L. Candidate Self-Policing

174. Candidates are intentionally invested with responsibility for each other to build and assess capacity for leadership, teamwork, and selflessness. [Encls 77-102]

175. Some candidates indicate that there is mixed messaging from BTC instructors on encouragement of teamwork versus filtering out weak performers. [Encls 103, 113, 114, 134, 135, 277]

176. Because much of BUD/S training is conducted as team evolutions, candidates feel they will be negatively assessed when weaker members of their training evolution teams hold the team performance back. This creates an incentive, especially earlier in 1st Phase, for candidates to filter out weaker candidates within their teams. [Encls 103, 113, 114, 115, 118, 124, 129, 135, 137, 150, 201, 205, 260, 277, 348]

177. Some candidates reported incidents of candidates pressuring other candidates to DOR, particularly if they think they will fail and may hurt other candidates in the process. Some have heard rumor of "kangaroo courts," or group peer pressure sessions, but none reported witnessing them. [Encls 62, 103, 112, 113, 114, 118, 124, 129, 134, 135, 137, 150, 201, 205, 277, 348]

178. 1st Phase leadership emphasizes to candidates that the curriculum will filter out candidates not meeting the standards, and that 'kangaroo courts' do not benefit Class teamwork or meet NSW values. [Encls 13, 59, 61, 62, 65, 67, 139, 147]

179. CAPT Geary recognized during late 2021 and early 2022 that some overly ambitious and inexperienced class leadership felt they had a role in upholding the standard and filtering candidates. He reemphasized to candidate class leadership that these "kangaroo courts" are not part of BUD/S; assessment and selection is the job of the instructor cadre. [Encls 56, 125, 134, 205, 232]

I.M. Instructor Role in Candidate Monitoring

180. Instructors are expected and understand their duty to closely monitor candidates for safety and medical concerns. [Encls 13, 59, 62, 67, 147, 154, 201]

181. Candidates displaying safety concerns are pulled from an evolution to protect themselves and/or other candidates. They are then evaluated by the instructors to return to the evolution or to be performance pulled for further phase leadership assessment. [Encls 13, 67, 73, 201]

182. Candidates pulled for medical concerns are directed to the BTC Medical corpsman supporting the evolution for evaluation. [Encls 13, 62, 67, 139, 201]

183. Instructors often add a layer of screening before medical care by presenting candidates the option of pushing through pain and lesser injuries to remain in the training evolution or to get medical care and miss training when pain or injuries are more severe. [Encls 23, 61, 62, 73, 76, 107, 118, 139, 201, 202, 348]

184. When candidates miss a significant amount of training while receiving medical care, they are rolled back in training to the next class. [Encl 13; Ref as]

185. (b) (6) experience was that the instructors pay very close attention to candidates' condition, and will nearly always identify possible injury and direct a candidate to the field corpsman for assessment before the field corpsman intervenes. [Encl 110]

II. *Risk Management & High Risk Training Safety during Class 352*

This sub-section examines the systems supporting the commander's intent on balance of risk and mission accomplishment in the BUD/S pipeline during Class 352, beginning with the operational risk management and high risk training safety programs. After covering governing regulations, the section identifies whether the personnel, training, and tools were in place to assess and mitigate risk appropriately, and to maintain proper oversight. The focus here is whether the safety architecture adequately identified accumulating risk, accurately assessed hazards, mitigated risk, and raised risk decisions to the proper level in execution of BUD/S evolutions.

II.A. NSW High Risk Training Safety Governance

186. Because special operations personnel "routinely engage in high risk operations including parachuting, high-speed boat and unconventional vehicle operation, demolitions employment, and waterborne activities to include scuba diving…NSW SEAL and SWCC training programs are among the most physically and mentally demanding in the world and are considered extremely high risk." [Ref n]

187. NSW high risk training safety is governed by top-level Navy guidance, implemented through NSW, NSWCEN, and BTC instructions. [Refs k, r, ag, an, bb, be]

a. The NETC instructions implementing Navy high risk training guidance in greater detail for the rest of the Navy, and adding enhanced safeguards such as additional trained safety presence for high-risk training environments such as Hell Week, do not apply to NSW. [Ref k]

b. Recognizing the demanding nature of their training, NSW instructions add additional high risk training program requirements: [Ref r, an, be]

1) ORM and planning considerations.

2) High-Risk Instructor and support staff Job Qualification Requirements (JQR); Core Unique Instructor Training (CUIT) plans; qualification/certification;

3) Emergency Action Plans.

4) Internal/external scheduled and unscheduled high-risk training safety assessments.

5) Mishap/near mishap reports and statistical analyses.

6) Internal/external lessons learned.

7) Maintenance and/or certification of facilities, training platforms, training ranges/areas, and Equipment Authorized for Navy Use (ANU).

II.B. NSW High Risk Training Safety Structure

188. Beginning from BTC execution of the BUD/S pipeline, HRTS responsibilities are executed at the ground level by the AHRTSOs. [Encls 59, 141, 142, 147; Refs r, ag, be]

a. AHRTSOs are members of the Phase instructor cadre and thus fully integrated into Phase planning, risk management, and operations. [Encls 59, 141, 142, 147; Refs r, ag, be]

b. The AHRTSOs report to the Phase OIC and Deputy OIC, who are in turn responsible to the BTC Training Officer for safety matters. [Encls 59, 141, 142, 147; Refs r, ag, be]

c. The BTC Training Officer reports safety issues for Phase evolutions to the BTC CO, via the BTC Operations Officer. [Encls 59, 141, 142, 147; Refs r, ag, be]

d. The BTC Training Officer also acts as a liaison to the HRTSOs at NSWCEN. [Encls 59, 141, 142, 147; Refs r, ag, be]

e. The NSWCEN HRTSOs report to the NSWCEN Director of Training. [Encls 59, 141, 142, 147; Refs r, ag, be]

f. The NSWCEN Director of Training works directly for Commander, NSWCEN. [Encls 59, 141, 142, 147; Refs r, ag, be]

g. Thus safety issues at BTC would rise to NSWCEN both by operational reporting from the BTC CO to the NSWCEN Commodore, and through the liaison relationship between the BTC Training Officer and NSWCEN HRTSOs. In turn, those HRTSOs are responsible for reporting issues through the NSWCEN Director of Training to the Commodore. [Encls 59, 141, 142, 147; Refs r, ag, be]

189. From NSWC down, in practice (b) (6), the NSWC Safety Manager/HRTSO, is responsible for implementing the high risk training safety program from the Echelon II level. [Encl 141; Ref r]

a. However, the NSWC HRTS instruction does not detail or outline the responsibilities of the NSWC HRTSO/Safety Manager. [Ref r]

b. The NSWC High Risk Safety Manager position was gapped from 2010-2014. (b) (6) was hired in 2014 and "revamped" the safety program in 2016, although the current NSWC HRTS instruction is dated 2015. [Encls 141, 142, 358]

190. Under the Navy HRTS program, TSOs are concerned with every aspect of providing safe training, evaluation, and monitoring. They are also responsible for ensuring safety reviews, investigations, and proper mishap reporting occur. [Ref k]

191. Navy guidance requires TSOs complete a JQR particularized to the high risk training they will be supervising, but does not set requirements for that JQR. [Ref k]

192. NSWCEN has two designated HRTSOs, (b) (6). [Encl 142, 359 and 360]

a. NSW HRTSOs must complete the NSWC JQR, the COMNAVSAFECEN Mishap Investigation Course, and the two day ORM Course. [Ref r]

b. HRTSOs are required to review governing instructions; however, the NSWC JQR does not require HRTSOs to review all standing risk assessments, review all EAPs, review all evolution briefs, or review DOR/TTO procedures. [Encl 143, Refs r and an]

c. The NSWC HRTS instruction does not clearly delineate oversight responsibilities from NSWC down the chain of command.[Ref r]

193. A NAVSAFECOM assessment in 2015 noted as a discrepancy that NSWCEN HRTS oversight was provided by (b) (6) based on a verbal arrangement with no written oversight requirements. This discrepancy remains unmitigated, with no written responsibilities for the administration, oversight, and implementation of a HRTS program across Ech II-IV levels. [Encls 21,160; Ref an]

194. Navy HRTS regulation allows designation of AHRTSOs when a TSO requires assistance due to physical location, type, or quantities of training conducted at specific sites. [Ref k]

195. AHRTSOs will be qualified by course at site-specific TSO JQRs and act as the TSO in the absence of the TSO. [Ref k]

196. BTC has eight personnel designated as AHRTSOs, assigned to each Phase as "the division/phase subject matter expert on all matters concerning training safety." [Ref be]

a. The Phase AHRTSO positions are filled by enlisted special operator instructors, usually an SO1 or SOC. [Encls 141, 142]

b. All designated AHRTSOs serve in that capacity as a collateral duty. [Encl 59, 147]

c. AHRTSOs are required to complete a JQR, but not additional formal training. [Ref r, be]

d. The NSWC JQR requires AHRTSOs to review all standing risk assessments, review all EAPs, review all evolution briefs, and review DOR/TTO procedures. As noted above, HRTSOs are not required to complete those items. [Ref an, Encl 143]

e. By NSWCEN instruction, the BTC Training Officer and Deputy Training Officer are to coordinate their safety program with NSWCEN HRTSOs and act as the liaison between the NSWCEN HRTSOs and the AHRTSOs assigned to BTC. There are no formal lines of communication, subject matter expertise, or support directly between BTC AHRTSOs and NSWCEN HRTSOs. [Encls 59, 142, 147; Refs an, ag]

197. Navy HRTS guidance directs that "the designated TSO or high-risk TSO should be directly responsible to the CO, OIC, or director of training for the safe conduct of formal high-risk training." [Ref k]

a. The NSWCEN HRTS instruction directs that the NSWCEN Command Safety Officers (HRTSOs) report to the Operations Officer. [Ref an]

b. The HRTSOs identified their reporting chain as directly to the NSWCEN Director of Training. [Encl 166]

c. The AHRTSOs at BTC work for and report to the Phase OIC and the Deputy OIC. [Encls 59, 141, 142]

II.C. Execution of High Risk Training Safety Requirements

198. The AHRTSOs at BTC are expected to conduct the majority of HRTS duties for BTC evolutions, including: (Refs bb, an)

a. documenting HRTS observations,
b. ensuring mishaps and near misses are reported,
c. conducting monthly EAP reviews,
d. documenting quarterly EAP walkthroughs and annual drills,
e. conducting the annual training safety review, and
f. maintaining an AHRSTO binder.

199. **High Risk Instructors Requirements.**

200. **Screening**. Navy HRTS policy requires that all HRT instructors be medically and psychologically screened by qualified medical personnel and interviewed by the CO or their designee. [Ref k]

a. The Phase 1 Instructor CUIT recognizes that, "[a]n important element for instructors assigned to BUD/S is recognizing your own temperament in working with new and unskilled students. The command will make every attempt to reassign you to an appropriate phase level or to an advanced training division to work more on a peer level should this be a problem." [Encl 145]

b. BTC provides no guidance or discussion on HRT suitability screening processes or responsibilities in their instructions; it did not mention the topic or amplify guidance from higher authority. [Ref r, be, bb, ay]

c. Navy policy requires that the high risk instructor screening process must begin at the detaching activity, and the gaining activity must contact the detaching activity to provide appropriately tailored screening requirements and forms for recording screening milestones. Gaining training activity COs, OICs, or directors of training may wish to repeat portions of the screening, but all training activities must screen incoming instructor candidates. [Ref k]

d. High risk instructors often transfer to BTC without this step complete. [Encl 146]

e. Pre-COVID, instructors were screened as part of the IQC. When IQC became virtual during COVID, there was a breakdown in medical/psychological screening processes. [Encls 146]

f. Post-COVID, beginning around December of 2021, the Primary Care Division of NSWCEN Medical conducts the psychological evaluation and if someone needs further assessment, they are sent to the psych division. [Encls 146]

g. BTC instructors were generally screened by the psychologist at NSWCEN, but during periods of high workload or low manning, they were screened by the Independent Duty Corpsman. Both options satisfied the instruction. [Encl 146; Ref k]

h. However, medical and psychological screenings/suitability are not identified as a major 'Program Element' for NSWCEN or BTC. For NSW, it is mentioned by reference to other references. [Ref k, r, an, be]

201. **Interview**. BTC instructors were interviewed by the Command Master Chief, who has a written delegation letter from the CO. [Encls 171, 239; Ref k]

202. **Training.** As discussed above, BTC instructors completed a CUIT as well as additional NSW centric training. BTC instructors were subject to quarterly observation by the AHRTSOs. However, as discussed below the evaluation was often informal, infrequent, and incomplete. AHRTSO conduct the annual training safety review, which by instruction should be conducted by the CO, OIC, or Director of Training. [Encls 59, 127, 147, 171, 239; Ref k, an, bb]

203. **Students.**

a. Medically screened**.** BUD/S candidates are medically screened using the Special Operations Duty Physical Exam, which must be current within 12 months of reporting to initial NSW training and on file in their medical record to participate in the BUD/S pipeline. [Encl 238]

b. Safety briefs**.** Students received safety briefs before each evolution, including training time out procedures. Students were briefed on drop on request procedures but many showed misunderstanding of what actions would lead to drop on request, versus a medical drop, or a medical roll. [Encls 112, 113, 115, 122, 124, 149, 150, 205, 245, 172, 208]

204. **Programmatic planning**. As discussed in detail below, each Phase generates or revises deliberate risk assessments for each high risk evolution, including an emergency action plan (EAP) and training time out procedures. These assessments have additional guidance on cold and heat stress environmental mitigations as appropriate. [Encl 151]

II.D. High Risk Training Emergency Action Plans

205. **Emergency action plans (EAP).** Emergency Action Plans prepare instructors and medical personnel in the field with essential data on immediate actions to be taken in the case of certain incidents. Must be reviewed monthly, have quarterly walkthroughs, and have annual drills. EAPs will exist for each high risk evolution and include at a minimum: primary and alternate communications; call signs; locations of emergency response personnel; locations of emergency equipment; equipment shutdown procedures; muster site and control of the scene; and all immediate emergency procedures. [Ref k]

206. At the time of Class 352, NSWC required all Emergency Action Plans (EAP), including casualty evacuation (CASEVAC) plans, be approved by the Commander responsible for the training and by their Group SMO before initiation of training. [Ref o].

207. At the time of Class 352, BTC required each Phase to maintain an EAP binder, and to ensure covering medical staff are briefed on event protocols. [Ref ar]

208. The EAP in place at the time of Class 352 was generated in 2019 and signed off by the 1st Phase ATSO, 1st Phase OIC, BTC Training Officer, NSWCEN Training Officer, and CO, BTC. The signature block for NSWCEN SMO was signed by an HM1 IDC. [Encls 152]

a. In conflict with the NSWC Medical instruction, the BTC instruction designated the BTC Medical Department Head as the reviewing authority for all EAPs and did not require NSWCEN SMO review. [Ref ar, au]

b. The unsigned NSWCEN Medical SOP did not address or define the role of the NSWCEN Medical Department or SMO in review and endorsement of EAPs at the time of Class 352. [Encls 153, 228]

c. The EAP in place at the time of class 352 has a signature block specifically for the NSWCEN SMO. [Encl 152]

d. The EAP in place at the time of class 352 was not signed by the NSWCEN SMO but was instead signed by (b) (6), an independent duty corpsman in the BTC Medical Department. [Encl 152]

e. While he believed generally that he did not have authority to review BTC medical documents, (b) (6) recalls reviewing EAPs from BTC. [Encl 154]

209. The 1st Phase EAP in place during Class 352 addressed eight of the required areas but not muster sites for students/staff or methods to maintain control of the scene, which are required by the Navy HRTS instruction. [Encls 152, 154; Ref k]

210. Navy HRTS guidance requires EAP drills are required to be conducted annually. [Ref k]

211. Between 2019-2022, the BTC EAP program shows several gaps of a year or longer between annual EAP drills, including a gap of 21 months that included the period of Class 352. [Encl 156]

212. Navy HRTS guidance requires quarterly EAP walkthroughs. [Ref k]

213. BTC EAP walkthroughs were generally conducted quarterly, but some appears to be post-dated and no walkthroughs were conducted between September 2021 and May 2022. [Encl 157]

II.E. Mishap reports and analysis

214. Mishap reporting in the Navy is required by every command. Mishaps are divided into five categories (Class A through Class E), based on the degree of harm caused. For personnel incidents: [Refs h, l]

a. Class A mishaps register a fatality or permanent total disability, [Refs h, l]

b. Class B mishaps register permanent partial disability or three or more persons hospitalized as inpatients, [Refs h, l]

c. Class C mishaps register nonfatal injury resulting in loss of work time beyond the day of the injury, [Refs h, l]

d. Class D mishaps register an on-duty injury or illness not otherwise classified as a Class A, B or C mishap (e.g., illness or injury that involves medical treatment beyond first aid, loss of consciousness, light or limited duty for military personnel or restricted work or job transfer for on-duty Navy and Marine Corps civilian employees), [Refs h, l]

e. Class E mishaps register a reportable event in which the resultant total cost of damages to DoD or non-DoD property is greater than $0, but less than $25,000. Class E mishap reporting is not a mandatory DON requirement, but may be required by specific communities. [Refs h, l]

215. The Risk Management Information (RMI) Program of Record is the sole official DON web-based database application for safety reporting. Navy and Marine Corps personnel must use RMI to report mishaps, hazards (including near misses), and incidents. It replaced the Web Enabled Safety System (WESS), which was previously used to report mishaps. This system cannot access mishap reporting or analysis from the SOCOM enterprise. [Refs h, l]

216. RMI does not currently provide effective analytic tools to users to identify trends and lessons learned. As a result NSW has developed a capability within Defense Ready on SIPR to capture and track incidents for trend analysis. [Encl 163]

217. NSWCEN currently use a locally developed knowledge management portal within a Sharepoint site to receive initial mishap reports from Echelon IV commands, which are then investigated and entered into RMI and Defense Ready. NSWCEN uses the sharepoint system for Echelon IV reporting to alleviate burdensome data entry from the Phase leadership. [Encls 158, 163]

218. The Phase instructor cadre, Safety Observer, and BTC medical team report mishaps occurring during a BUD/S evolution through the sharepoint portal. The NSWCEN Occupational Health manager pulls the data from the sharepoint and enters it into RMI as well as Defense Ready, a mission readiness tracking system on SIPR. [Encl 163; Refs an, bb]

219. NSWC has worked with SOCOM knowledge management to add analytic tools to Defense Ready to allow better mishap analysis. NSWCEN Operations Department uses both the sharepoint site and Defense Ready to provide local mishap analysis. [Encl 158]

220. Between 2000 and 2022, NSWCEN systems show four Class A personnel mishaps and one Class B personnel mishap. [Encl 159]

221. In doing their mishap analysis, NSWCEN identifies deficiencies, lessons learned, and additional mitigations. However, particularly in the area of heat casualties, there were repeated similar events without additional mitigations identified and applied. [Encls 159, 340]

222. Mishaps involving similar injuries are reported at varying levels of severity, without explanation. [Encl 159]

223. NSWCEN analysis of 152 incidents between 2000 to 2022 identified inadequate real time risk assessment as the cause in 80 incidents. No mitigations were identified. [Encl 159]

224. Some candidate incidents regarding loss of consciousness recalled by BTC staff and observers were not recorded in the mishap data as required by instruction. [Encls 77, 159, 200; Refs h, l]

225. No events involving SIPE were recorded in mishap reports prior to 2020 and only four cases have been reported since 2020, despite personnel reporting frequent occurrences. Three mishaps involving pneumonia were reported. Because candidates with SIPE who continue training are not entered into any tracking system, there is no data on the total number of SIPE cases occurring. [Encls 67, 110, 154, 159, 173, 188, 242, 247]

226. During Class 357 Hell Week evolutions, certain reportable incidents observed, including four cases of SIPE, were not entered into the mishap system. [Encls 144, 158]

II.F. Oversight and Inspection Process for Safety Compliance

227. Under Navy regulation, Navy Safety Command (NAVSAFECOM) is required to conduct assessments of Echelon II high risk training safety programs, including NSWC, every three years. [Ref k; Encl 160]

228. (b) (6) as the NSWC Safety Manager/HRTSO is required by Navy policy to inspect NSWCEN's HRT and ORM programs once every three years; this is executed as part of the triennial command Inspector General's inspection. [Refs k, r]

229. Under Navy and NSW policy, NSWCEN is required to conduct and report to NSWC an annual self-assessment of their HRTS and ORM programs using specified forms. [Refs k, r]

230. Under Navy and NSW policy, NSWCEN is required to inspect every high risk course at BTC once every three years utilizing the same checklists. [Refs k, r, an]

231. NSWCEN is required to ensure that BTC conducts an annual safety review [Ref r]

232. The BTC annual assessment is directed to be conducted by the CO and to include "a comprehensive review of high-risk training conducted by training, safety, and, as appropriate, medical personnel to ensure courses are being taught with minimum risk to students and instructors." The following areas are to be examined: [Ref r]

a. mishap data,
b. curriculum and instructional techniques,
c. safety requirements incorporated into course curricula
d. training records,
e. student critiques,
f. instructor qualifications and evaluations are examined.

233. There is not a requirement for NSWC inspections of BTC. [Ref r]

II.G. Safety Inspection Results

234. NAVSAFECOM conducted HRTS oversight assessments at NSWC from 2015-2017. The last assessment completed was of training in Kodiak and was completed on 19 October 2022, with no discrepancies noted. [Encl 361] The NAVSAFECOM assessment was limited in scope and provides neither a standard checklist nor means of baselines evaluation points that are covered, evaluated, or discussed. Hell Week has never been assessed by NAVSAFECOM. [Encl 160, 361]

234A. USSOCOM IG conducted a "rapid" inspection of the high risk training program in October 2020, in which it recognized NSW for a best practice for its Navy Training and Readiness Management System. It also found deficiencies and/or concerns across the services, including complacency and a lack of leadership involvement in oversight. It does not appear the SOCOM HRTS inspection specifically looked at BUD/S. [Encl 362]

235. There was a five year gap in oversight from NAVSAFECOM caused by their transition to an Echelon I command, by manning shortfalls, and by COVID. [Encls 160, 161]

236. On 01 February 2022, (b) (6), the NSWC Safety Manager/HRTSO, signed an assessment report of all Echelon III NSW commands for HRTS. [Encl 304]

237. For this report, (b) (6) reviewed and incorporated input from (b) (6) regarding NSWCEN and BTC. [Encl 162]

238. The assessment resulted in an overall rating of the Echelon III NSW enterprise as "Significant Deficiencies," but NSWCEN and BTC were not identified with specific concerns. Many of the deficiencies identified were generic and did not specify which commands were not compliant. [Encl 304]

239. General concerns noted by (b) (6) were a lack of HRTS qualified personnel, out of date EAPs, deficient oversight, and that risk assessments did not incorporate lessons learned. [Encl 304]

240. (b) (6) briefed these results and the remediation plan to his direct supervisor, (b) (6) the NSWC Deputy Chief of Staff, in January 2022. He later briefed the NSWC Chief of Staff and the Inspector General in September 2022. [Encls 162, 163]

241. (b) (6) identified as corrective actions that NSW Echelon III and Echelon IV commands assign HRTSOs who are both qualified and have the time to effectively run the program, that all commands improve EAP review, and ensure all contracts address HRTS requirements. These actions have a target completion date of 4th QTR/2022. As of this report, (b) (6) assesses that BTC and NSWCEN have the appropriate number of HRTSOs and AHRTSOs, that they have both improved their EAP review of EAPs but that there is still work to be done, and that

NSWCEN and WARCOM have been addressing HRT requirements in all contracts. [Encls 304, 243]

242. (b) (6), NSWCEN HRTSO, conducted an assessment of the BTC HRTS program on 8 February 2022, but used the MICP checklist instead of the one contained within their instruction. [Encl 363 and 364, Ref r]

243. During that assessment, (b) (6) found that contracted and civilian instructors were not qualified to conduct HRT, that students were at increased risk due to unsuitable personnel performing HRT instructor duties, and that HRT courses were not conducted as safely as possible. No detail on these findings was included, and the final result of the assessment was graded "Satisfactory." [Encl 164; Ref r]

244. For the BTC annual safety reviews conducted between 2018-2022, one was unsigned and dated 11 months into the next year, another year was skipped entirely. [Refs k, an, Encl 365]

245. As part of a regular assessment cycle, BTC AHRTSOs are required to complete HRT safety observations at least once per quarter (minimum of 4 per year). BTC was in compliance with this requirement between 2019-2022 with the exception of one missing quarterly observation in 2019. [Encl 165; Ref an]

II.H. NSWCEN/BTC Operational Risk Management Structure

246. At BTC, ORM is conducted both deliberately and time-critical. Deliberate ORM is conducted of planned evolution to identify all risks and appropriate mitigations. Time critical ORM is conducted as an evolution occurs to address factors that have changed from the deliberate assessment. [Ref j]

247. Deliberate ORM for BUD/S evolutions is required to be conducted, reviewed, printed, and signed before each training evolution by the Person in Charge (PIC) or Safety Observer (SO). [Ref be]

248. Time critical ORM is conducted by the PIC and SO using the five step ORM process throughout the evolution to reassess risk as necessary. [Ref be]

249. Observations of Class 357 Hell Week evolutions confirmed that time critical risk management is being conducted for each evolution. [Encl 158]

250. The SO is required to maintain a 'holistic' approach to safety of candidates and staff on the evolution. Further, "the SO should have the most situational awareness out of any position on the evolution and has overall [responsibility for] safety of the evolution." [Ref be]

251. The Safety Observer position is often filled by the Phase OIC, Deputy OIC, or Senior Enlisted Advisor, who are provided baseline (individual and supervisor) ORM training but no advanced safety training. [Encls 59, 127, 147, 165, 166; Ref be]

252. The PIC is the senior, on-scene instructor in charge of the training evolution. These instructors are qualified HRT instructors and also have baseline ORM training (individual and supervisor). [Ref be]

253. The HRTSOs, Training Officer, and Deputy Training Officer at NSWC and NSWCEN are the only personnel required to have advanced ORM training. [Encl 165; Ref q, bb, be]

254. The personnel developing the deliberate and time critical ORM assessments for BTC evolutions are not trained in advanced ORM. They are not required by instruction or regulation to have this training. [Ref bb, q, be]

II.I. NSWCEN/BTC ORM of BUD/S Evolutions

255. Under Navy regulation, risk assessments should identify the hazards in each step of each evolution, then identify the root cause of the hazard. [Encl 168; Ref j]

256. Without properly identified root causes, control measures can't be properly formulated and applied. [Encl 168; Ref j]

257. All but one of the Hell Week risk assessments rate evolutions as medium risk. [Encls 151]

258. The Hell Week risk assessment form states "EH-Extremely High is Not Authorized." [Encls 151]

259. Some of the 'hazards' identified by the Hell Week evolution risk assessments are the potential injuries rather than the actual condition that could cause an injury. [Encls 151, 168]

260. Some of the 'mitigations' identified by the Hell Week evolution risk assessments are thus treatment of the potential injuries rather than control measures that could prevent injury from occurring. [Encls 151, 168]

261. As an example, risk assessments for several evolutions identified traumatic injury, heat/cold injuries, dehydration, hypoxia, drowning, and fatigue as potential injuries, but did not identified the hazards which could cause them. A hazard for the potential injury of drowning would be rip currents; this was not identified. [Encls 151, 168]

262. In addition, multiple evolutions are combined into one risk assessment, which prevents identification of the specific risks of each evolution. [Encls 151, 168]

263. Enclosures (169) and (170) shows an example of deliberate risk assessment for the Aviation Rescue Swimmer Course and a risk assessment for a similar event conducted during Hell Week. [Encls 151, 168, 169; Ref j]

264. The following examples from the HW risk assessments are provided as examples:

a. On the (b)(2),(b)(5),(j)(2),(k)(2) RA, one of the hazards listed is 'Trauma from ordnance items.' There is no context for the underlying hazard (step, topic, action) that would cause the potential trauma. [Encl 170]

b. One risk assessment was performed for the (b)(2),(b)(5),(j)(2),(k)(2) (b)(2),(b)(5),(j)(2),(k)(2) (b)(2),(b)(5),(j)(2),(k)(2) (b)(2),(b)(5),(j)(2),(k)(2) and lists muscular/skeletal injuries as a hazard with no context for the underlying hazard (step, topic, action) that would cause the potential trauma. This assessment combines seventeen evolutions, and includes classroom, sleep, and meal time. [Encl 170]

c. On the (b)(2),(b)(5),(j)(2),(k)(2) RA, one of the hazards listed is the potential injury, hypothermia. There is no detail what is happening during the evolution or what conditions could potentially cause hypothermia. [Encl 170]

265. None of the Hell Week risk assessments identified SIPE or pulmonary infection as potential injuries tied to Hell Week. [Encls 151, 168]

III. *Structure of Medical Support to BUD/S Pipeline Evolutions*

This section examines the command structure for providing continuity of medical care to BUD/S candidates in the training pipeline, including care immediately following Hell Week. Beginning with the governing directives, it examines lines of authority, responsibility, and oversight, training and integration of medical personnel, capture and communication of medical information, candidate attitudes toward medical care, and medical portions of emergency action plans. The focus here is whether commanders and department leadership ensured that medical personnel and the structure they worked within were trained, organized, integrated, and drilled to ensure continuous medical support to candidates.

III.A. Governing Directives

265A. The most authoritative directive for medical oversight and services is the U.S. Navy MANMED, NAVMED P-117. It sets the continuity of care requirements discussed in the report. Additionally, medical oversight and service requirements are set forth in DoDI 6000.14 – DoD Patient Bill of Rights and Responsibilities in the Military Health System (MHS); Joint Publication (JP) 4-02 – Joint Health Services; OPNAVINST 6320.7B – Health Care Quality Assurance Policies for Operating Forces; BUMEDINST 6010.17C – Navy Medical Staff Bylaws; and COMUSFLTFORCOMINST 6000.1B. At a minimum, the MANMED requires that when a patient is handed over for subsequent care or treatment, the care providers must be coordinated to ensure optimal continuity of care, including a process to receive or share relevant patient information related to the reason for referral, the patient's physical and psychosocial status, a summary of care, treatment, and services provided and progress toward goals, and a list of current medications. [Refs ct, cv, cy, cz, da, db]

266. Each medical department within NSW is required to maintain an organizational document which provides detailed and amplified instruction covering all duties and responsibilities within the department. This document is to be submitted by the current SMO of that department and approved by the respective CO. [Ref o]

a. The NSWC Medical Department instruction is COMNAVSPECWARCOM INSTRUCTION 6000.1B.

b. The NSWCEN Medical Department instruction at the time of Class 352 was an unsigned draft document. [Encl 228]

c. The BTC Medical Department instruction is NSWBASICTRACOM INSTRUCTION 6000.1.

267. NSWC directed and identified the missions, duties, and responsibilities for execution of medical departments within NSW in reference (o), and addressed the credentialing and privileging of licensed Medical Officers in NSW, as well as the oversight and certification of non-licensed medical personnel such as IDCs and corpsmen, in reference (m).

268. NSWCEN did not have a signed directive governing the structure and authorities of the NSWCEN Medical Department or BTC Medical Department, but instead operated from an unsigned standard operating procedure (SOP). This SOP had a block prepared for signature by the prior NSWCEN SMO, (b) (6) [redacted], but was never signed by either the past or current NSWCEN SMO or the NSWCEN Commodore. [Encl 173, 228]

a. The unsigned NSWCEN SOP did not specifically address medical practice, protocols, or standard operating procedure for the delivery of health care to candidates in the field or at evolutions during SEAL/SWCC training, to include Hell Week. [Encl 173, 228]

b. BTC Medical operated under reference (ar), which articulated the general duties and responsibilities of the department and Department Head, but did not specifically address medical practice, protocols, or standard operating procedure for the delivery of health care to candidates during SEAL/SWCC phase training to include Hell Week. [Ref ar]

III.B. Oversight and Supervision

269. Medical oversight within NSW is performed through a process of Medical Readiness Assessment (MRA) Inspections and Assist Visits. [Ref o]

a. MRA Inspections and Assist Visits are conducted using an established Medical Inspection/Assessment checklist that serves as a guide and standard for assessment. [Ref o]

b. MRA Inspection and medical oversight of NSWCEN Medical Department is performed by the NSWC Medical Department [Ref o]

c. MRA Inspection and medical oversight of BTC Medical Department is performed by NSWCEN Medical Department. [Ref o]

d. The MRA Inspections and MRA Assist Visits process occurs biennially, or every other year. [Ref o]

e. NSW Group level commands, such as NSWCEN, are responsible for providing clinical, operational, and administrative medical oversight to component Medical Departments, such as BTC. [Ref o]

270. RADM Hugh Howard, as Commander, Naval Special Warfare Command (NSWC), was ultimately responsible for mission accomplishment by all NSW commands, including NSWCEN and BTC. [Encl 168]

271. (b) (6), as the NSWC FMO, was the overall supervisor for every medical department in NSW at the time of Class 352. He did not understand there to be any change to the structure of NSWCEN Medical during his tenure. His understanding was that NSWCEN Medical was responsible for ensuring quality care by all Echelon IV commands, which had their own medical departments. He was never made aware of any issues with the existing structure, or with the flow of medical information through it. (b) (6) had regular monthly meetings with (b) (6), as well as informal meetings most weeks. There were no required reports from NSWCEN Medical Department to NSWC Medical Department on care of candidates. [Encl 177; Ref o]

272. Before Class 352, NSWC provided the following medical direction to NSWCEN, through Ref (o), which defines the mission of the NSW medical department for all NSW commands. [Ref o]

a. Among the tasks applicable to all NSW Medical Departments was to "provide medical oversight, quality assurance, and policy guidance" to subordinate commands. Reference (o) specifically notes that "NSW Groups [Echelon 3 commands] are responsible for providing clinical, operational, and administrative medical oversight to component Medical Departments." [Ref o]

b. At the time of Class 352, the existing medical guidance for NSWCEN cited by both (b) (6) was an unsigned SOP for the Primary Care Division of NSWCEN revised in 2019. That document does not address the use of contractor EMTs. That document also does not specify how candidate encounters with BTC Medical Department personnel during Hell Week or otherwise outside of NSWCEN Medical Department clinical settings are to be documented. (b) (6) noted that logbooks were used for encounters "in the field," although they were not integrated in medical records and not codified. [47, 228]

c. Medical Readiness Assessments (MRAs) were another tool for ensuring appropriate clinical, operational, and administrative medical oversight to subordinate

medical departments, including BTC. The most recent "inspection" by NSWCEN Medical Department of BTC Medical Department was August 2021. [Encl 47, 173; Ref o]

d. The BTC Medical Department Senior Medical Department Representative (SMDR) was directed by NSWC to consult with the NSWCEN SMO for guidance, and the NSWCEN SMO and Senior Enlisted Medical Advisor (SEMA) were required to conduct with the NSWC Force Medical Office (FMO) when necessary. [Ref o]

e. There existed direction for NSWCEN Medial Department to provide policy guidance to BTC Medical Department at the time of Class 352. That direction also described tools to ensure adequate communication for the identification of gaps in the a policy guidance form NSWCEN Medical Department to BTC Medical Department and to request assistance from the NSWC FMO to overcome obstacles in promulgating such guidance.[Ref o]

273. CAPT Brian Drechsler, as Commander, Naval Special Warfare Center (NSWCEN), was ultimately responsible for mission accomplishment by both NSWCEN departments and by his subordinate commands, including BTC. [Encl 168]

274. Reference (o) and FFs 265A through 273 delineate the responsibility of oversight and supervision of medical care for Echelon III components. It also specifies the responsibilities of the NSWCEN SMO regarding clinical, operational and administrative medical oversight and provides the mechanism for executing those responsibilities. Despite these responsibilities delineated by instruction, (b) (6), NSWCEN SMO, described the system of medical care within and beneath NSWCEN at the time of Class 352 as comprised of four components operating adjacently but independently of each other. These four components were: [Encl 173]

a. The NSWCEN Medical Department, specifically the medical clinic, under the command and control of the NSWCEN Commodore and directed by the NSWCEN SMO as the Medical Director. [Encl 173]

b. The BTC Medical Department under the command and control of the BTC Commanding Officer and directed by the Medical Department Head at BTC who is a Chief Petty Officer Independent Duty Corpsman. [Encl 173]

c. The NSW Advanced Training Command (NSWATC) Medical Department under the command and control of the NSWATC Commanding Officer and directed by the Medical Department Head at NSWATC who is a Chief Petty Officer Independent Duty Corpsman. [Encl 173]

d. The contracted Civilian Emergency Medical Technician Paramedic (EMT-P) capability, controlled by the BTC Operations Department and executing practice as paramedics under the Medical Control Authority of a Civilian Medical Doctor located in Imperial Beach, California. [Encl 173]

275. (b) (6), NSWCEN SMO, states that a 'split,' or disaggregation of the NSWCEN and BTC Medical Departments occurred in 2018 before his assignment as NSWCEN SMO. [Encl 173]

a. (b) (6), NSWCEN SMO, believes the 'split' was executed with concurrence of the previous NSWC Commodore. [Encl 173]

b. There is no authoritative document from the NSWCEN Commodore directing the 'split' and formation of a disaggregated medical system within NSWCEN. [Encl 173]

c. (b) (6), NSWCEN SMO, states the NSWCEN Commodore was aware of the disaggregated system of medical care and support to operations, and had directed a review. The review was delayed as the NSWCEN supply department was being reviewed and restructured first. [Encl 154, 173]

276. (b) (6) understanding of the NSWCEN and BTC medical departments is reflected in the NSWCEN Medical Task Organization Chart and the unsigned NSWCEN Medical SOP from the time of Class 352. [Encl 228]

277. The NSWCEN Medical Task Organization Chart does not include the medical departments of NSWBTC and NSWATC as entities under NSWCEN Medical Department. [Ref ab]

278. Similarly, the NSWCEN Medical Task Organization Chart showed the NSWCEN SMO exercising direct authority only over the NSWCEN Medical Clinic Staff and not the medical departments within BTC and ATC. [Ref ab]

279. The unsigned NSWCEN Medical SOP identified the following responsibilities of the NSWCEN SMO at the time of Class 352: [Encl 228]

a. Principal staff medical advisor to the Commodore, NSWCEN, and subordinate units. [Encl 228]

b. Exercises technical supervision over all medical personnel assigned under the cognizance of the Commodore. [Encl 228]

c. Advises unit commanders on matters affecting the health of assigned personnel. [Encl 228]

d. Ensures individual NSWCEN command medical departments maintain the highest state of medical readiness. [Encl 228]

e. Ensures readiness with routine site visits, as requested, to medical spaces locally and at remote sites. This includes but is not limited to the observation of sick call, training, drills, and the work of IDCs. [Encl 228]

f. Monitors and ensures that all health care professionals meet all privileging or certifying requirements. [Encl 228]

g. Provides counseling and leadership as required to subordinate NSWCEN command medical departments. [Encl 228]

280. Despite this, (b) (6), NSWCEN SMO, believes that at the time of Class 352, his duties were limited to serving as Medical Director of the NSWCEN Medical Clinic. He does not believe that he had medical authority or oversight of subordinate medical departments, including BTC Medical or the contracted paramedic capability in BTC Operations. [Encl 173]

281. At the time of Class 352, the unsigned NSWCEN Medical SOP did not reflect NSWCEN Medical or the NSWCEN SMO having a relationship, authority, or oversight over the subordinate medical departments, including the BTC Medical Department. [Encl 228]

282. (b) (6) acknowledged that he was the Independent Duty Corpsman (IDC) Program Manager for all IDC at commands subordinate to NSWCEN. [Encl 154]

a. An IDC is not a board-certified physician and is not licensed, credentialed, and privileged to practice medicine. The IDC is a medically certified professional but not licensed by a State Board of Medical License. [Encl 47; Ref m]

b. IDC have authority to practice medicine under the supervision of an appointed supervising Medical Officer and within a managed IDC program. [Ref d]

c. At the time of Class 352, (b) (6) was the physician supervisor for (b) (6) (b) (6) in his practice as an IDC. Currently, it is (b) (6). [Encls 47, 173, 175]

d. An IDC physician supervisor is not an executive medicine responsibility and only provides clinical supervision of a specific IDC's performance of medical care. [Ref d]

e. (b) (6) responsibility as IDC physician supervisor did not include supervision of the executive level task, duties, and responsibility of (b) (6) as a Medical Department Head of BTC Medical. [Ref d]

f. Similarly, (b) (6) duties as the IDC Program Manager, and the inspections he conducted of BTC Medical under that authority, extended only to determining whether (b) (6) (b) (6) and any other IDC at subordinate commands were performing duties within their approved scope of medical care, and were properly trained and certified. His oversight and inspections did not extend to (b) (6) work as the Medical Department Head for BTC or his direction and oversight of the BTC corpsmen in supporting BUD/S evolutions. [Encl 154; Ref d]

283. CAPT Bradley Geary, as Commanding Officer, Naval Special Warfare Basic Training Command (BTC), was ultimately responsible for mission accomplishment by all BTC departments, including the BTC Medical Department. [Encl 168]

284. (b) (6) was responsible by BTC instruction for the overall management of medical support during BTC training evolutions. [Ref ar]

a. (b) (6) believes that the NSWCEN SMO was the Medical Director for the BTC Medical Department. [Encl 47]

b. The BTC Medical Department instruction did not identify the NSWCEN SMO as the Medical Director, and did not reference or cite to any obligations or responsibilities of the NSWCEN SMO or the NSWCEN Medical Department. [Ref ar]

285. At the time of Class 352, there were no regular meetings, cross-trainings, or other synchronization processes between NSWCEN Medical and BTC Medical. [Encl 154]

286. (b) (6), NSWC FMO, confirmed that BTC Medical is, by NSWC instruction, a subordinate component of the NSWCEN Medical Department under the unified medical direction of the NSWCEN SMO. [Encl 45; Ref o]

III.C. BTC Medical Mission Sets and Manning

287. BTC Medical Department is responsible for conducting sick call for BTC staff; running urinalysis, EKG testing, and testing for performance enhancing drugs (PEDs); conducting preventive medicine prophylaxis; and supporting every evolution in the BUD/S and SWCC pipeline, including those in remote locations. [Encl 47, 70, 178]

288. Depending on the environmental conditions, up to 20 students may seek medical attention at certain Hell Week shifts. [Encl 110]

289. The BTC Medical Department was manned solely by corpsmen, without an assigned medical officer in the department. **[**Ref ar]

290. At the time of Class 352, the BTC Medical Department had 13 hospital corpsmen assigned, as well as (b) (6) serving as the BTC Medical Department Head. Currently, BTC Medical Department has 17 hospital corpsmen assigned. [Encl 178]

291. Hospital corpsmen billets at BTC are shore billets, which allows them to be gapped. Four hospital corpsmen billets were gapped at BTC Medical at the time of Class 352. BTC captured this delta via a 2012 SOCOM Manpower Survey, an Enlisted Manning Inquiry Report as early as 2015, and included it as the top priority in NSWCEN's FY20 POM Commander's Statement of Concerns dated 11 Dec 17. Given the no-growth POM cycle, NSWCEN also looked at realignment of corpsmen internally from both the active and reserve component. [Encls 47, 127 174, 179, 206, 213]

292. Ultimately, to ensure a reliable fill of this manning shortfall, BTC Operations Department, supported by the NSWC Contracting Office, contracted for three civilian paramedics to support

BUD/S evolutions. The contracted paramedics took general tasking to support BTC medical operations from the contracting officer representative in BTC Operations, but took specific direction on which evolutions to support from BTC Medical Department. [Encls 47, 127, 179]

293. Previously, hospital corpsmen were interviewed by NSWCEN Medical Senior Enlisted Advisor (b) (6) before being offered orders to BTC Medical, to include (b) (6). However, HM billets at NSWCEN and BTC are not coded as instructors on the AMD. Subsequently, HM personnel do not require screening. [Encl 110]

294. BTC corpsmen and the NSWCEN Senior Enlisted Medical Advisor quantified the long-term harm of reduced manning through reducing long-term sustainment, including the inability to seek advanced qualifications; delaying departmental initiatives; and delaying personal development opportunities like higher education. [Encls 108, 110, 179. 182, 183]

295. (b) (6), BTC Medical Department Head, expressed no concerns with the current manning level. [Encl 47]

III.D. NSWCEN Medical and BTC Medical Culture

296. As evidenced in the 15 through 30 April Defense Organizational Climate Survey (DEOCS) for BTC, there was significant dissatisfaction among BTC Medical Department corpsmen with (b) (6) during 2021, including a lack of medical competency, lack of leadership, poor temper, and inappropriate threats to subordinates of administrative or disciplinary action. [Encl 366]

297. Some BTC corpsmen felt that (b) (6) should not leading BTC Medical. [Encl 366]

298. CAPT Geary was aware of this sentiment and these issues, but decided to mentor (b) (6) (b) (6) instead of relieving him. [Encl 56]

299. (b) (6) stated he experienced challenges from increased responsibilities due to COVID-19 administrative and oversight requirements and has ongoing challenges with emerging PEDS requirements. [Encl 47] Later DEOCS surveys did not include negative comments about (b) (6) leadership. [Encl 128]

300. (b) (6) believes that the department climate has greatly changed for the better in the last 18 months. [Encl 47] Later BTC DEOCS surveys did not include negative comments about (b) (6) leadership. [Encl 128]

301. (b) (6) felt that NSWCEN Medical was disconnected from support of evolutions, and occasionally had difficulty reaching duty providers. [Encl 110]

III.E. Evaluation, Indoctrination, and Training of BTC Medical Personnel

302. By instruction, BTC IDCs are required to provide indoctrination and competency evaluations for new medical staff. The training jackets for current BTC Medical corpsmen do not contain any competency evaluations. [Encl 185, 186, 187, 188, 189, 190; Ref ar]

303. BTC instruction states that the medical department head will ensure BTC Fleet Marine Force/Dive Medical Technician corpsmen and augmented medical staff will maintain all proficiencies and requirements for certification. [Ref ar]

a. Navy training standards for Hospital Corpsmen require biannual basic life support instructor certification and tactical combat casualty care certification every three years. [Ref dc, dd, de, df, dg]

b. Training jackets for BTC Medical corpsmen show completion of required training certifications for basic lifesaving (BLS) and tactical combat casualty care (TCCC). [Encls 185, 186, 187, 188, 189, 190]

c. The BTC training schedule hampers BTC Medical personnel's ability to attend outside medical trainings necessary to maintain required and recommended qualifications. [Encls 179, 182]

304. NSWBTC Instruction 6000.1 states command IDCs shall conduct periodic or weekly sustainment training for medical staff and maintain a department medical training binder. [Ref ar]

a. (b) (6) stated that BTC Medical conducts in-house training and (b) (6) recalls the previous training officer conducting training using flowcharts of appropriate treatments made for this purpose. [Encls 47, 110]

b. The training jackets for (b) (6), (b) (6) all do not contain any evidence of sustainment training. [Encls 185, 186, 187, 188, 189, 190

305. (b) (6), the prior departmental Training Petty Officer, created a series of 'Environmental Field Protocols' which are flowcharts for treatment of three conditions: hyperthermia, hypothermia, and hypoglycemia. [Encl 191]

a. These flowcharts are labelled as 'Enclosure (3),' but BTC Medical personnel were unsure of their origin. [Encls 47, 110, 178, 191]

b. (b) (6) sent out the flowcharts via email for corpsmen to train on. [Encl 182]

c. These flowcharts were used for training but were not taken out to BUD/S evolutions. [Encls 47, 110]

306. BTC did not have a signed instruction standardizing orientation, training, or setting qualification standards for hospital corpsmen supporting the BUD/S pipeline. [Encl 185, 187]

a. At the time of Class 352, BTC Medical Department used two different, undated, unsigned personnel qualification standards (PQS) to train reporting corpsmen on their responsibilities while providing medical support to BUD/S evolutions, common medical conditions seen, and when candidates should be transferred to NSWCEN Medical. [Encls 185, 186, 187, 188, 189, 190]

b. Both PQS contain five sections and a total of 82 line items that includes familiarization with common medical issues faced by BUD/S candidates. [Encl 185]

c. By September 2022, none of the hospital corpsmen assigned to BTC Medical, including enlisted leadership, had completed their PQS. Several of the hospital corpsman have been attached to BTC Medical for over two years. [Encls 185, 187, 186, 188, 189, 190]

d. Though not formally required in writing, (b) (6) , BTC Medical Training Petty Officer, stated that a corpsman should normally complete his or her PQS within seven to eight weeks after checking in, supported by on the job training. [Encl 108]

e. As a result, individual corpsmen show high familiarity with the types of conditions commonly occurring during BUD/S, including variations with time of year and type of evolution. But while this knowledge was passed informally to new medical gains, without completion of the PQS, there was no formal system to ensure a baseline standard of knowledge. [Encl 110]

307. On arrival, BTC corpsmen would begin supporting evolutions paired with a second, more senior corpsman. There was no formal system for certifying that BTC corpsmen were ready to support an evolution alone. When either of the First Class Petty Officers decided that a corpsman was ready, they were considered certified without further examination by the Medical Department Head or chain of command. [Encls 47, 108, 110]

308. The contracted paramedics received no formal training, orientation, or qualification process upon being hired or before beginning work. BTC Medical conducted an informal 'under-instruction' period of about seven weeks, where the paramedic would shadow a BTC hospital corpsman supporting evolutions. In the case of (b) (6) , who was a certified EMT-P under California law, this under-instruction period was with (b) (6) . [Encls 47, 108, 127, 195]

a. BTC policy makes the BTC Medical Department responsible for the overall management of medical support during training evolutions, but doesn't directly address contractor medical personnel. [Ref ar]

b. (b) (6) did not issue trainings jackets to contracted paramedics and the contracted paramedics did not have PQS or training evaluations being maintained by BTC Medical Department. [Encl 47]

c. (b) (6) stated paramedic certifications ran through the Contract Officer Representative to the licensing medical doctor and not through BTC Medical. [Encl 47]

309. The BTC Operations Department did not conduct medical indoctrination or orientation for the contracted paramedics, believing they would receive orientation on local procedures and processes from BTC Medical. [Encl 127]

310. The view of BTC Operations was that they exercised administrative control of the contracted paramedics, and the Medical Department exercised operational control. [Encl 127]

311. No integrated training or drills exercising the full process of providing continuous medical support to candidates in BUD/S training were directed or conducted by either (b) (6) from NSWCEN Medical or (b) (6) at BTC Medical [Encls 47, 173]

III.F. Medical Portions of the Emergency Action Plans (EAP)

312. Medical personnel supporting NSW training evolutions are required to create a comprehensive medical briefing and casualty evacuation (CASEVAC) plan for those events. All CASEVAC plans must be approved by the Commanding Officer responsible for the training and the SMO prior to the initiation of training. [Ref o]

313. At the time of Class 352, however, (b) (6) did not generally review orders, instructions, SOPs, EAPs, or guidance for BTC evolutions. [Encls 154, 173]

314. (b) (6) acknowledged that he had a duty to review EAPs for their medical content. [Encls 154, 173]

315. Instead, the 1st Phase EAP in place at the time of Class 352, which covered Hell Week, was signed by (b) (6) in place of the Senior Medical Officer. [Encl 152]

316. The 1st Phase EAP did not include an expiration date to review, edit, or make changes to the EAP. [Encl 152]

317. At the time of Class 352, BTC Medical personnel relied on the 'NAB Coronado emergency medical procedures' portion of the 1st Phase EAP to guide treatment of candidates in the field. [Encl 47, 110, 182, 183, 108]

318. The 1st Phase EAP addressed the situations of near drowning, traumatic injury, heat injury, hypothermia, shallow water blackout/hypoxia, and diving casualty, but did not include treatment plans for those conditions. [Encl 152]

319. At the time of Class 352, BTC Medical personnel did not have a medical protocol or medical standing orders for the medical treatment of any training related medical conditions or injuries. [Encl 152]

320. While the EAP addressed emergency response to hypoxia associated with shallow water black out, it did not address hypoxemia. [Encl 152]

321. Hypoxia is a condition of low oxygen delivery to the brain leading to unconsciousness and eventual death. While Hypoxemia can be seen with Hypoxia, they are not the same. [Encl 41]

322. Hypoxemia is a condition of low or abnormal oxygen content in the blood. Normal Pulse Oximetry should be 95% to 100% while breathing communal or normal outside air. A Pulse Oximetry reading below 90% is considered low. [Encl 41 and 367]

a. The initial treatment of hypoxemia is the administration of supplemental oxygen. [Encl 367]

b. Oxygen is initially started at a low concentration (2 L/min) using nasal prongs. Then the flow is titrated up to maintain oxygen saturation of 92% or greater. Selection of delivery system is based on the level of oxygen support required and the severity of hypoxia. Other factors include age, presence of underlying disease, or level of health. [Encl 367]

c. There are many conditions that can cause Hypoxemia such as: Water aspiration or Near Drowning, Pneumonia, Bronchitis, Respiratory Tract Infections, Chronic Obstructed Pulmonary Lung Disease, Cystic Fibrosis, Pulmonary Edema, Interstitial Lung Disease, Heart Failure, Bronchiectasis, Asthma, [Encl 368]

323. At the time of Class 352, the BTC field corpsmen did not have an associated medical protocol or standing medical order for the treatment of the condition of hypoxemia, to include the use of high or low flow supplemental oxygen. [Encl 152]

324. At the time of Class 352, BTC Medical personnel did not have a written guide controlling administration of oxygen or for field treatments of SIPE. [Encl 47, 110]

III.G. BTC Medical Competence to Support BUD/S Evolutions

325. BTC corpsmen expressed that they felt competent and trained to adequately address the range of medical conditions normally present during their training evolution assignments. [Encl 110, 182, 183, 108]

326. NSWBTC Instruction 6000.1 directs the servicing care provider to call 9-1-1 to activate local emergency medical services for cases of life, limb, or eyesight threatening illness or injury at NSWBTC. [Encl 152; Ref ar]

327. For non-life-threatening injuries, the current 1st Phase EAP states the corpsman will evaluate the injury, administer appropriate treatment, and to notify NSWCEN Medical Officer for further evaluation or treat as necessary. [Encl 152]

328. Sections 5.2 and 5.3 of both PQS required the corpsman to identify what to do with both non-life-threatening injuries and life-threatening injuries and who to call for each. [Encls 185-190]

329. BTC is required to annually review and update the EAP, with (b) (6) reviewing the medical portion and the SMO approving it. [Encl 47]

330. BTC corpsmen expressed a clear understanding and comfort with the criteria and procedures for sending a student for elevated care to NSWCEN Medical. [Encl 110, 178, 182, 183]

331. (b) (6) stated even when a corpsman cannot reach NSWCEN Medical, the corpsman will send a student to NSWCEN Medical without positive communication beforehand to ensure they receive adequate care. [Encl 110]

332. (b) (6) assessed that the contracted paramedics were well trained and comfortable on whether to refer a student with a serious injury to NSWCEN Medical or not. [Encl 110]

III.H. Responsibility for Medical Support and Continuity of Medical Care through the BUD/S Pipeline

333. Responsibility for medical support to BUD/S evolutions was divided between the NSWCEN Medical Clinic and BTC Medical Department during Class 352. [Encls 47, 110; Ref ar]

334. BTC Medical was responsible for providing field coverage of BUD/S evolutions to maintain and preserve the health of the BTC staff and students during the rigorous training pipeline. [Ref ar]

335. At the time of Class 352, BTC field corpsman kept no records of candidates seen or care provided at the site of an evolution during the first 3 weeks of 1st Phase. [Encl 154]

336. BTC field corpsmen were assigned to every BUD/S evolution where there was a risk of injury and continuously observed the candidates during execution for signs of significant injury. [Encls 47, 108, 110, 178]

a. If a candidate was visibly injured or was brought to the corpsman, the corpsman performed an evaluation of whether the candidate was fit to train, and an assessment of the candidate for any conditions requiring medical care. [Encls 47, 110]

b. If a candidate required medical care or if the corpsman needed support with evaluation, they would call the NSWCEN Medical duty provider. [Encls 47, 108, 110, 195, 259]

c. Some BTC Medical corpsmen had difficulty reaching the NSWCEN duty providers via cell phone during BUD/S evolutions. [Encl 110]

337. NSWCEN Medical was responsible for in-clinic medical support, to include pre-scheduled medical checks and any acute injuries that required more substantial evaluation. [Encls 154, 173, 175, 228]

338. NSWCEN Medical also conducts sick call for candidates, Monday through Friday from 0700 to 0830, where candidates are assessed by medical providers. Candidates would attend sick call on their request with approval from their instructors, or if directed to report there by the field corpsman the day before. [Encls 175, 228; Ref av]

339. Some BTC Medical personnel felt that NSWCEN Medical was not well integrated with BUD/S evolutions, and experienced pushback when candidates were sent to them for care. [Encl 110]

340. At the time of Class 352, regular sick call notes were record electronically in the ITRMS. [Encl 154]

341. 1st Phase instructors understood their role in identifying potential candidate injuries and sending them to the corpsman for assessment. [Encls 61, 63, 64, 139]

342. 1st Phase instructors saw the decision to pull a candidate from training for medical reasons as theirs to make, but informed by the field corpsman. [Encls 63, 139]

343. BTC field corpsmen understood their responsibility to identify injured candidates and provide treatment; normally a candidate would be identified as needing assessment by the instructor and sent or brought to the corpsman, but the corpsman would engage directly if the condition was emergent. Some candidates encountered corpsmen who were very skeptical of less visible candidate medical complaints, and pushed candidates to continue training. [Encls 103, 108, 110, 112, 117, 118, 150, 232]

344. Some former candidates recount rumors of instructors telling candidates that they would have to DOR to get medical care, but were unable to provide specific names. 1st Phase cadre describes some candidates who, having been cleared by the on-site corpsman as fit-to-train, are still reluctant to return to training. These candidates are presented with options of going back to training or DOR. They speculate that this is a source of the claims. [Encls 61, 67, 103, 114, 196, 197]

345. Both corpsmen and instructors become very familiar with the symptoms of common BUD/S conditions, such as SIPE, chaffing, and swelling. In some cases, this can lead to

underestimation of the severity of an injury both at the site of the evolution and at the NSWCEN Medical Clinic. [Encls 110, 198]

III.I. Candidate Attitudes toward and Role in Medical Care

346. Candidates were expected by their instructors to self-assess their condition and identify when they needed medical care. [Encls 114, 115, 125, 135, 139, 149, 150, 196]

347. Most candidates require some medical care during 1st Phase. [Encls 184, 199, 340]

348. Candidate orientation on potential medical issues encountered during BUD/S was limited and occurred mainly in the form of review of the candidate guide during induction and NSWO. Some common medical conditions were described, but without significant explanation of the symptoms, of signs that an injury is becoming more serious, and unaccompanied by substantive explanation from instructors on the candidate's role and responsibility in this area. [Ref av]

349. As part of being assessed for being fit to train, candidates were asked whether they wanted to continue training by both instructors and medical personnel. [Encls 67, 114, 138, 195, 196, 201, 202, 259. 340]

350. Because it relates to the demands of NSW combat missions, ability to continue training through discomfort and some degraded physical condition was seen as a positive trait by instructors and this was understood by candidates. [Encls 67, 125, 340]

351. Some candidates were reluctant to seek medical care because they did not want to be rolled back and have to repeat parts of training, and did not want to be seen as "weak" by instructors or fellow candidates. [Encls 112, 124, 184, 248, 340, 348]

352. As a result, candidates are unlikely to identify their own or other candidates' need for medical care to instructors or medical personnel. Candidates strongly see the choice on whether to seek medical help to be the individual candidate's decision. [Encls 112, 184, 199, 340]

353. Some candidates sought out civilian medical care to avoid medical roll back or drop, despite it being prohibited for other than emergency care. These included candidates being seen for SIPE, muscle and ligament damage, and broken bones. [Encls 23, 112, 114, 115, 117, 118, 154, 184, 198, 202, 203, 204, 205, 340; Ref aw]

354. Some candidates sought out civilian medical care due to the lack of availability of military medical services on their limited off-duty time, which were late night hours and weekends. [Encls 113, 184, 198, 204, 205, 236, 251, 340]

III.J. Planning of Medical Support to Hell Week during Class 352

355. Evolutions run 24 hours a day during Hell Week, with BTC Medical Department assigning one corpsman or paramedic to each 8-hour Hell Week shift to support. [Encls 110, 225]

356. (b) (6) created the medical support plans for each Class going through BUD/S training. No approval authority is annotated on the medical support plan. [Encls 108, 225]

357. The medical support plan is a spreadsheet detailing which training evolutions require medical support coverage, at what times and locations. [Encl 225]

358. At the time of Class 352, BTC Medical personnel supporting Hell Week evolutions kept a written log of all injuries they treated and treatment given, stored in the ERV. [Encls 47, 110, 178]

359. At the time of Class 352, BTC corpsmen did not have a codified procedure concerning the substance or procedure for turnover of candidate condition and treatment at shift transitions or to NSWCEN Medical at medical checks. [Encl 47, 110]

360. At the time of Class 352, BTC Medical personnel understood that they were to call the NSWCEN duty provider before administering any drugs, but were allowed to administer oxygen and then return a student to training on their own evaluation. [Encl 110]

III.K. Prophylactic Care of Candidates

361. Candidates are given doxycycline prophylactically each day during Hell Week to reduce the risk of cellulitis and pneumonia. This practice was in place for Class 352. [Encls 207]

362. Candidates were previously given Bicillin prophylactically before Hell Week to reduce the risk of close-congregate bacterial pneumonia. This practice was likely ended due to a Bicillin shortage. After Class 352, candidates are now given Bicillin the week before Hell Week. [Encls 47, 154, 173]

IV. *BTC PEDS Policy during Class 352*

This section addresses the policies in place during BUD/S Class 352 to control use of PEDS, then reviews prior instances of detected PEDS use, testing, searches, and other deterrent efforts made, perceptions of staff and candidates of use, and prevalence of use during Class 352. The focus is on the additional risk to candidates that performance enhancing drugs and supplements introduce into BUD/S, and what efforts were made to deter and detect such use.

IV.A. Prior PEDS Use Incidents and Testing Requests at BTC

363. PEDS use has arisen at BTC and NSWCEN at least twice in the ten years before 2021. [Refs cl, cm]

364. In 2011, three separate investigations revealed steroid and human growth hormones use by five candidates, resulting in an open Captain's Mast for the accused candidates. [Encl 56; Ref cl]

365. In 2013, NSWC requested authority from SECNAV (MRA) to use hair follicle testing (HFT) for administrative and disciplinary purposes, driven in part by suspected steroid use within NSW. This request was denied. [Encl 293; Ref co]

366. In 2018, an investigation revealed PEDS use by four candidates. [Ref cm]

a. The four candidates were found to have used PEDS, including testosterone, SARMS, human growth hormones, and other performance enhancers. [Ref cm]

b. The candidates received non-judicial punishment from the BTC CO in March and May of 2018. [Ref cm]

367. On 19 November 2020, NSWC requested permission from the CNO to use HFT results for administrative and disciplinary purposes force-wide to supplement the Navy's urinalysis program; this request was predicated in part on potential steroid use. [Encl 261]

368. On 11 February 2021, this request was denied by ASN (M&RA), who stated that urine drug testing was defensible in a court of law and therefore was the preferred method of deterrence. [Encl 255]

369. The denial stated that if, in the future, HFT met the minimal standards set by the Department of the Navy for the drug testing, they would revisit the addition of HFT to the Drug Demand Reduction Program. [Encl 255]

IV.B. Policy on PEDS Use at BTC during Class 352

370. During Class 352, BTC Student Policies were contained within the Student Guide. [Ref as]

371. The Student Guide covered all "basic required knowledge for [a candidate's] time at NSWBTC." [Ref av]

372. Per the Student Guide, the responsibility lay with the student to ensure he or she fully understood the information provided within the Guide. [Ref av]

373. Under the 'Medicine and Dietary Supplement Policy' section of the Student Guide, certain substances were banned for use by SEAL/SWCC candidates. [Ref av]

374. These substances were: (a) Any product with a "Supplement Facts" label; (b) bulk protein powders (even with a Nutrition Facts label); (c) Food Drug Administration unapproved substances; (d) World Anti-Doping Agency prohibited substances (HGH, Ephedra, etc.); (e) Controlled substances (narcotics, illegal drugs, steroids, designer drugs, or spice, etc.); (f) any energy drinks that contain stimulants (e.g. caffeine) or high concentration or vitamins or herbs. [Ref av]

375. This policy also stated that candidates must have medical clearance to take any product containing a "Supplements Facts" label and cautioned students that if they had any doubt as to the purity or safety of a product, they were not to purchase it. [Ref av]

376. The policy also indicated that any violation could be punishable under the Uniform Code of Military Justice. [Ref av]

377. All candidates were required to sign a NAVPERS 1070/613 (Page 13) administrative counseling and warning indicating that they understood the supplement use restrictions. [Encl 209; Ref av]

378. The Page 13 signed by candidates stated: "**All** products with a 'supplemental facts' label, bulk protein powders, FDA unapproved substances, World Anti-Doping Agency prohibited substances (HGH, Ephedra, etc.) and **all** energy and sports drinks containing caffeine, guarana or taurine are **OFF LIMITS** and strictly prohibited unless cleared by the NSWCEN Medical Department." [Encl 131; Ref as]

379. Candidates also acknowledged that introduction onto Navy property, possession, use, or solicitation of any illegal drug, including controlled substances, was strictly prohibited. This section specifically listed steroids and synthetic testosterone as prohibited substances. [Encl 131; Ref av]

380. Candidates also acknowledged within the Page 13 that violation of this policy may result in immediate disenrollment from training and appropriate administrative or disciplinary action. [Encl 131; Ref av]

381. SN Mullen signed his Page 13 on 27 July 2021. [Encl 234]

IV.C. Candidate PEDS Education during Class 352

382. Candidates did not receive any formal training on PEDS or their effects. [Encls 113, 209]

383. Instead, the nutritionist at NSWCEN Medical would provide a brief on general health and he would speak on supplements during his presentation during NSWO. [Encls 112, 209]

384. Instructors informally discussed the dangers of PEDS with candidates. [Encls 113, 209]

385. The PEDS policy was presented to Class 352 prior to the start of Week 1 training by (b) (6) while filling in for the class proctor, (b) (6). [Encls 137, 143, 149, 150, 211, 214-219, 245, 254]

386. Candidates present recalled varying versions of (b) (6) discussion of PEDS. Taken together, (b) (6) used words to the effect of: "I'm a performance guy, do what you need to do to get through. All types of people make it through BUD/S. Steroid monkeys and skinny strong guys. Don't use PEDS, it's cheating, and you don't need them. And whatever you

do, don't get caught with them in your barracks room." [Encls 137, 143, 197, 211, 214-219, 245, 254]

387. After an awkward silence, (b) (6) then said: "that was a joke." Candidates in Class 352 recalled different parts of the above statement and some felt it was an implicit endorsement of PEDS use while most felt that (b) (6) made clear that PEDS use was contrary to orders and unnecessary. [Encls 103, 137, 149, 150, 211, 214-219]

388. (b) (6) stated that he has never condoned PEDS use and had only rewarded good performance. [Encl 219]

IV.D. PEDS Testing, Searches, and Deterrent Efforts Surrounding Class 352

390. Department of Defense policy did not authorize random testing or unit sweeps for steroid misuse. Specifically, DoDI 1010.16 stated that "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." [Ref a]

391. As a result, NSWC, NSWCEN, and BTC did not have a program or policy for testing for PEDS during Class 352. [Encls 209, 154, 170; Ref av]

392. Enforcement of the PEDS policy was accomplished through random barracks inspections and probable cause searches when appropriate. [Encls 56, 209]

393. All SEAL/SWCC candidates are required to maintain a barracks room in building 602 during 1st Phase. Individuals entitled to BAH are authorized to leave base on weekends and stay at their residences in town only after Hell Week. [Encl 210; Ref aq]

394. Construction onboard Naval Amphibious Base Coronado is ongoing, with several barracks buildings unable to be occupied. This has led to candidates frequently shifting rooms and some areas being left unoccupied. [Encl 210]

395. Under the candidate barracks policy, candidate barracks rooms are subject to room inspections 24 hours a day, seven days a week. Division officers, the Executive Officer, the Command Master Chief, the Building Manager, the CMAA, Class Proctor, and Phase Instructors are each charged with conducting or accompanying room inspections. [Ref aq]

396. While the interior of candidate lockers are not an inspectable item on the BTC Daily Room Inspection Sheet, candidates are told to unlock and open their lockers during inspections. [Ref an; Encl 209).

397. During Class 352, room inspections were occurring once a week, by the BTC 1st Phase personnel. Other Phases There are one to two random barracks inspections conducted of a Class per Phase. [Encls 209, 212]

IV.E. BTC PEDS Events in 2021

398. There was a perception among some candidates during 2021 to 2022 that many candidates in the pipelines were using PEDS. [Encls. 137, 103-107, 214-218]

399. However, very few candidates were directly told or directly observed activity they thought involved use of PEDS. [Encls 114, 118, 150, 196, 203, 245, 254, 324, 332, 338, 339]

400. Most staff and candidates from these Classes believe that the large majority of PEDS use discussion is either conjecture or falsehood, that the actual level of PEDS use is much lower, and have never actually seen anyone using PEDS. [Encls 67, 104, 124, 125, 138, 149, 202, 257, 325, 326, 327, 328, 329, 330]

401. A backpack containing suspected SARMS was discovered by (b) (6) on 12 October 2021 on base and was ultimately determined to belong to (b) (6). [Encls 56, 333; Ref cn]

a. (b) (6) states that he bought the SARMS at a store in Oceanside, California, called 760Nutrition. [Ref cn]

b. Due to the move of Prep to NSWO, BTC CO said he was informed that (b) (6) had not signed the Page 13 ordering him not to use SARMS. [Encl 56]

c. He was further advised that without the page 13, (b) (6) was not in violation of any Navy policy. [Encl 56; Ref c]

d. Because BTC CO believed he had not yet signed the BTC Page 13 which banned use of any supplements, he did not punish him. [Encl 56]

e. (b) (6) was later disenrolled from training for unrelated misconduct. [Encl 56]

402. On 15 October 2021, during a random barracks inspection, two vials of liquid SARMS were discovered in (b) (6) barracks room. [Encls. 331, 332; Ref cp]

a. (b) (6) admitted to use of the SARMS. [Encl 56]

b. (b) (6) was initially disenrolled by CAPT Geary but was later allowed to continue in training after the SWCC schoolhouse Command Warrant Officer changed his recommendation to retain. [Encl 56]

c. The decision to allow (b) (6) to continue was based on his truthfulness in admitting use, contrasted with the lack of accountability shown by other Sailors regarding the SARMS discovery described below. [Encl 56]

403. On 25 October 2021, while conducting a random barracks inspection, (b) (6) found a vial labeled "SCIENCE" behind a drawer underneath the sink in a bathroom. [Ref cn]

a. The vial could not be proven as belonging to anyone. [Encl 56; Ref cn]

b. After the PEDS events in October 2021, CAPT Geary states that his policy was that when a candidate accepts a room, they are responsible for searching and cleaning it thoroughly because anything found in that room would be attributed to the candidate. [Encl 56]

c. This policy was not documented and current BTC personnel are unaware of it. [Encl 220]

404. After these events, CAPT Geary directed stepped-up barracks inspections and had the military working dogs go through the barracks for deterrence. [Encl 56]

405. CAPT Geary reinforced to the command and with the candidates that anyone found with PEDS would be administratively dropped. [Encl 56]

406. After these incidents, BTC did not find indications of continued PEDS use. [Encl 56]

IV.F. BTC PEDS Events involving Class 352

407. During BUD/S Class 352, there was a widespread perception that many candidates were using PEDS, but that those who did were not high performers and were not still in the class. [Encls 113, 134, 221, 334, 335, 336, 337]

408. In January 2022, a SEAL officer was approached by a Sailor in Phoenix Division who described widespread PEDS use at BTC. That officer reported this conversation to CAPT Geary. CAPT Geary recalls speaking to CAPT Drechsler, NSWCEN Commodore, one to two days before Class 352's Hell Week about this disclosure. Ultimately, CAPT Geary and CAPT Drechsler decided not to pause Hell Week based on a rumor. [Encls 56, 204]

409. Approximately three weeks before Hell Week, SN Mullen called his mother to tell her that he was thinking about purchasing various PEDS. [Encls 222, 340]

a. SN Mullen told her that he was planning to take PEDS because he did not want to be at a disadvantage since many other candidates were taking PEDS. His mother encouraged him not to use PEDS and that he didn't need them. [Encl 222, 340]

b. After SN Mullen's death, a bottle of pills marked as sildenafil and vials labelled as testosterone and human growth hormone were found in his vehicle, along with syringes and needles. [Encl 180]

410. Review of SN Mullen's phone showed several text message conversations related to PEDS use:

a. On 6 January 2022, SN Mullen had a text conversation that discusses a bad vial of PEDS and that SN Mullen's buttocks were swollen at the injection site. [Encl 263]

b. Starting on 14 December 2021, SN Mullen had a conversation that discusses the purchase of "more T." "SN Mullen is sent a contact card for a person to purchase the "T" from. [Encl 263]

c. On 6 January 2022, SN Mullen is sent a video of someone holding up a needle with testosterone to a light. [Encl 263]

d. On 16 December 2021, SN Mullen sends a text asking for an "h needle." [Encl 263]

e. Between 3 January 2022 and 8 January 2022, SN Mullen had a text conversation that discussed the purchase of "H", "T", "test", and "Eutropen" and where to meet to pick it up. [Encl 263]

f. The search of SN Mullen's phone also revealed internet searches for the following: (1) anastrozole with taking testosterone; (2) viagra and edema; (3) viagra and SIPE; (4) albuterol. [Encl 263]

411. On 5 February 2022, CAPT Geary, CAPT Drechsler, the BTC Executive Officer and CMC, and the NSWCEN legal team met to discuss options for detecting PEDS use among the candidates. At the meeting, participants discussed PEDS testing, including unit sweeps, but were advised they lacked authority and resources for that testing. Participants also discussed searching candidate's vehicles, but were advised they needed probable cause or consent. Ultimately, all candidates were asked for and gave consent to their vehicles being searched. [Encls 30, 56, 106, 125, 223]

412. On 7 - 8 February 2022, Class 352 students who completed Hell Week were urine tested. [Encl 224]

a. (b) (6) tested positive for Tamoxifen and Anastrozole, two anti-estrogens. [Encls 224, 263]

b. (b) (6) tested positive for GW1516, a Peroxisome Proliferator-Activated Receptor Delta used to increase physical performance/endurance. [Encls 224, 263]

CLASS 352 HELL WEEK SUPPORT STRUCTURE AND TIMELINE

This section works chronologically through the execution of BUD/S Class 352 Hell Week by the structure laid out above. Instructor execution and safety processes are addressed, with findings focused on medical touchpoints, data flow and retention, and care of Class 352 candidates both during and after Hell Week.

I. *Class 352 Hell Week Phase Leadership and Instructor Cadre*

413. Class 352's Hell Week instructor cadre was led by (b) (6), the 1st Phase OIC, (b) (6) the Deputy OIC, (b) (6), the Phase SEA, and (b) (6), the Phase LCPO. [Encl 225]

414. The 1st Phase instructors supporting Class 352 Hell Week were (b) (6) (b) (6) (b) (6) [Encl 225]

415. During Hell Week, the required ratio of candidates to instructors shifts to 15:1; this ratio does not include the safety observer or corpsman. [Encls 77-102]

416. To meet the ratio requirement as well as to support the 24-hour nature of Hell Week evolution, 1st Phase was augmented by instructors from NSWO, SQT, ATC/NSWCEN, and 2nd and 3rd Phase: (b) (6) (b) (6) [Encl 225]

417. During each Hell Week shift, the PIC maintained a log that tracked current Class size, any drops or medical rolls, any information received from the corpsman about a candidate, and checklists for shift turnover. [Encl 226]

418. At each shift turnover, the ongoing and offgoing cadre ran through a checklist, signed by the offgoing and oncoming LPO and OIC of each shift, including: [Encl 226]

a. Number of candidates assigned to a Class and present;
b. Number of DOR, performance, medical, or safety pulls;
c. Condition of the Class generally;
d. Medical awareness, including names and conditions of specific candidates and any medications;
e. High risk medical field with names and conditions;
f. Good and poor performance evaluations of candidates; and
g. Lessons learned and problems during shift.

II. *Class 352 Hell Week Medical Support*

II.A. Medical Personnel Supporting Class 352

419. (b) (6) was assigned to Class 352 as the Phase corpsman, supporting them throughout 1st Phase. [Encls 108, 110, 195, 225, 259]

420. As the Phase corpsman, (b) (6) created the medical plan for Class 352 Hell Week along with the 1st Phase LPO. [Encls 47, 108]

421. (b) (6) was responsible for creating the BTC Medical manning roster for Hell Week. [Encls 47, 108]

422. (b) (6) provided the medical support plan brief before Hell Week. [Encls 47, 108]

423. (b) (6) were assigned to work the Hell Week shifts for Class 352. [Encls 108, 110, 195, 225, 259]

a. (b) (6) worked the Alpha shift, from 1600-2400 each day.

b. (b) (6), a contracted paramedic, worked the Bravo shift, from 2400-0800 each day.

c. (b) (6) worked the Charlie shift, from 0800-1600 each day.

424. (b) (6), a credentialed EMT-P, worked Class 351 Hell Week under instruction of (b) (6). His shifts during Class 352 Hell Week were the first that he supported alone. He received informal orientation but completed no formal qualification process beforehand. [Encls 47, 108]

425. NSWCEN medical was to be manned 24/7 during Class 352 Hell Week, split into two shifts: morning and night. [Encl 227]

426. These shifts had required types of personnel:

a. Day shift: Minimum one (1) medical officer, one (1) IDC and one (1) Radiology Tech and two (2) staff HMs will be onboard. [Encl 228]

b. Night shift: Minimum one (1) medical officer, one (1) IDC and (1) Radiology Tech and one (1) staff HM will be onboard. [Encl 228]

427. Either a doctor, Physician's Assistant, or Independent Duty Corpsman was assigned as the NSWCEN Medical duty provider at all times and carried the duty phone during Hell Week. [Encl 229]

428. If there were multiple doctors, PAs, or IDCs on a particular shift during Hell Week, then they rotated daily who was the duty provider on that shift. [Encl 229]

429. The NSWCEN Medical morning shift ran from 0545 to 1745 during Class 352 Hell Week. [Encl 227]

430. The NSWCEN Medical morning shift consisted of: [Encl 227]

a. (b) (6) SMO/Undersea Medical Officer (UMO)
b. (b) (6) psychologists
c. (b) (6) UMO
d. (b) (6) Physician's Assistant (PA)
e. (b) (6) LCPO/X-ray Tech
f. (b) (6) IDC
g. (b) (6) General Duty HMs.
h. (b) (6) PT Tech
i. (b) (6) Intern
j. (b) (6) N10 Deputy/PT
k. (b) (6) Nurse Case Manager;
l. (b) (6) Physical Therapists

431. The morning shift personnel were supplemented by three medical students - (b) (6) (b) (6) (b) (6) – and two IDC students, (b) (6) [Encl 227]

432. The NSWCEN Medical night shift ran from 1745 to 0545 during Class 352 Hell Week. [Encl 227]

433. The NSWCEN Medical night shift consisted of: [Encl 227]

a. (b) (6) PA
b. (b) (6), UMO
c. (b) (6) SEA/DIVE IDC;
d. (b) (6) General Duty HM/X-ray OJT;
e. (b) (6) General Duty HM.

II.B. Medical Touchpoints during Class 352 Hell Week

434. Candidates receive their first medical check on the Wednesday before Hell Week. [Encls 228, 229]

435. Formal medical checks then occur daily at NSWCEN Medical from Tuesday to Saturday of Hell Week, with additional medical checks at the discretion of the Shift OIC and the senior medical provider on duty. [Encl 228]

436. During Class 352 Hell Week, daily medical checks by NSWCEN Medical began on Tuesday, 2 February 2022. [Encl 16]

437. The medical checks during Hell Week are performed to the standard of a medical screening to confirm fitness to continue training, as opposed to a more in-depth physical examination and treatment. [Encl 175]

438. At the time of Class 352, medical checks occurred within the NSWCEN Medical Clinic and consisted of the following steps:

a. All candidates remove all uniform items with the exception of their tri-shorts and proceed through a hygiene station to remove sand. [Encls 175, 228]

b. Candidates are organized in a systematic and orderly fashion on the medical ramp. [Encls 175, 228]

c. Vital signs are taken on all candidates. A screening temperature of <95 F requires a core temperature be obtained. A corpsman can initiate rewarming prior to medical provider evaluation if the core temp is <94° Fahrenheit. Core temp of <92° Fahrenheit prompts immediate evaluation by a medical provider. [Encls 175, 228]

d. A medical provider assesses each candidate and attempts to maintain as much visual and auditory privacy as possible. The provider determines necessary treatments and makes a recommendation regarding the candidate's fitness for duty. [Encls 175, 228]

e. After receiving necessary medical treatments, candidates return to training if they are determined fit to train. [Encls 175, 228]

439. A BTC Medical field corpsman supporting Hell Week was present for every Hell Week evolution, constantly monitoring the candidates, discussing their condition with the instructors, assessing candidates for injury, and providing treatment as necessary. [Encls 47, 108, 110]

440. In the field, oxygen saturation levels were taken by corpsmen using pulse oximeters. [Encls 47, 108, 110]

441. After the final medical check was completed, candidates were moved to their barracks at building 602, onboard Naval Amphibious Base Coronado, to rest and recover. [Encls 13, 67, 242]

442. Candidates were monitored at building 602 by the "building 602 watchstanders" manned by 'whiteshirts' or personnel waiting to class up. [Encls 13, 67, 242]

443. The building 602 watchstanders were given no formal training or guidance on duties of the watch, and conducted the watch under an informal SOP drafted by (b) (6), also a whiteshirt awaiting class up. [Encls 148, 231, 266, 276]

444. The role of the building 602 watchstanders was to monitor the candidates and assist them as they recovered. [Encls 148, 231, 232, 233, 276]

445. The building 602 watchstanders were instructed to call duty medical personnel if there were any candidate medical concerns. [Encls 231, 232, 233, 276, 282, 283]

446. None of the 602 watchstanders were medically trained, and none were trained to conduct cardiopulmonary resuscitation (CPR). [Encls 148, 231, 232, 233, 276]

447. NSWCEN Medical personnel conducted one walk-through of the barracks in the afternoon of the Friday of Hell Week to check candidates' conditions. [Encls 231, 232, 233, 276, 282, 283]

II.C. Medical Data Tracking during Class 352 Hell Week

448. NSWCEN Medical tracked information about candidates during Hell Week in two ways: using a physical medical file in a brown folder and a 'high risk' whiteboard watchlist. [Encls 175, 228]

a. Each medical check of a candidate conducted by NSWCEN Medical was documented on a Chronological Record of Medical Care form, Standard Form 600 (SF600), retained in a brown folder created for each candidate for Hell Week. [Encl 175]

b. The folders were created so that the subsequent NSWCEN medical providers could quickly see what complaints and actions were taken with a candidate at prior medical checks [Encl 175]

c. Candidates who were cleared to return to training, but about whom there was still concern for evolving issues were identified as 'high risk' and annotated on a whiteboard which was updated throughout Hell Week. [Encl 228]

449. The roster of BTC Medical corpsmen supporting Hell Week usually includes the Phase corpsman who had supported a Class during the prior three weeks for 1st Phase I. [Encl 108]

450. This Phase corpsman carried information on candidate condition earlier in 1st Phase forward into Hell Week, but did not record it or formally brief it to other medical providers. [Encl 108]

451. The BTC Medical corpsmen meet for a medical brief focused on general emergency medical procedures together with the instructor cadre and CO/XO on the Sunday before Hell Week begins. [Encl 108]

452. BTC Medical corpsmen tracked information about candidates during Hell Week using a physical log maintained in the ERV called the Hell Week Logbook. Corpsmen supporting Hell Week evolutions would note any medical encounters with students during Hell Week evolutions, documenting the complaint and corresponding treatment via handwritten notes. [Encl 207]

453. NSWCEN Medical personnel were not provided the BTC Medical log for review prior to conducting their medical checks. [Encl 229]

454. Off-going Hell Week shift BTC Medical corpsmen regularly met with the oncoming shift corpsmen to discuss student issues and treatments of note. This practice was not codified and did not have any specific requirements as to timing, detail, or consistency. [Encls 110, 195, 259]

455. (b) (6) recalls that field corpsman would synchronize understanding with NSWCEN Medical by calling or texting the duty physician before coming onto shift. [Encl 110]

456. (b) (6) recalls a practice where the field corpsman would turnover with NSWCEN Medical at the end of a shift, but others, including (b) (6), do not recall this practice. [Encl 110, 195, 259]

III. *Observations, Assessment, and Treatment of SN Kyle Mullen during Class 352 Hell Week*

III.A. 1st Phase Prior to Hell Week

457. While a part of Class 350, SN Mullen suffered heat stroke in August 2021. [Encls 65, 234, 235, 340]

458. Due to this injury SN Mullen was medically "rolled" (removed) from Class 350 and was enrolled in Physical Training Rehabilitation and Remediation (PTRR) from 18 August 2021 through 8 October 2021. [Encl 234]

459. On 22 November 2021, SN Mullen was assessed by (b) (6) as fit for full duty during his follow-up with NSWCEN Medical. [Encls 234, 235]

460. On 3 December 2021, having been assessed as recovered from heat stroke and with rehabilitation complete, (b) (6) requested an interim waiver from BUMED for SN Mullen to class up. This interim waiver was granted. [Encls 230, 234, 235]

461. In January 2022, SN Mullen classed up to BUD/S Class 352. [Encls 234, 340]

462. On 10 January 2022, Class 352 began 1st Phase. [Encls 212, 234]

463. Between 10 and 14 January, the first week of 1st Phase, two candidates in Class 352 recalled SN Mullen having breathing issues or SIPE symptoms. SN Mullen told his mother around this time that he had SIPE. [Encls 113, 236, 237, 340]

464. SN Mullen seemed to recover quickly and "seemed fine" during weeks two and three of 1st Phase. [Encl 236]

465. At 1000 on Wednesday, 26 January 2022, SN Mullen received his pre-Hell Week medical check. [Encls 212, 228, 229]

466. SN Mullen was assessed as fit to train by (b) (6) of NSWCEN Medical. No medical issues are noted. [Encls 16, 238]

III.B. Sunday to Monday, 30 January – 31 January: Hell Week Evolutions

467. On 30 January 2022, the 58 remaining candidates of Class 352 began Hell Week. [Encl 16]

468. Between 30 January and 31 January, BTC field corpsmen evaluated five candidates for shortness of breath or SIPE symptoms. [Encl 207]

469. All five of these candidates were sent to NSWCEN Medical for further evaluation. [Encl 207]

470. All five of these candidates were added to the NSWCEN Medical "high risk" whiteboard to continue monitoring for SIPE. [Encl 207, 240]

471. SN Mullen was not one of these five candidates. [Encls 207, 240]

472. There are no reported medical issues for SN Mullen on 30 or 31 January 2021. [Encl 238]

III.C. Tuesday, 1 February 2022: Hell Week Evolutions

473. During midnight rations on 1 February, between 0000-0100, (b) (6) was evaluated by the BTC field corpsman. [Encl 207]

474. (b) (6) oxygen saturation level on outside air was 92%, so the corpsman sent him to NSWCEN Medical. [Encl 207]

475. NSWCEN Medical added (b) (6) to their high risk whiteboard to continue monitoring for SIPE and sent him back to training. [Encl 240]

476. At the 0100 cadre shift turnover, (b) (6) was identified for medical awareness as 'high risk' with onset of SIPE in the cadre logbook and identified to the oncoming shift. He varied in the log between 'high risk' and general medical awareness for the rest of Hell Week based on current assessment. [Encl 226]

477. At 0237, another candidate with SIPE symptoms was sent to NSWCEN Medical by (b) (6) the BTC field paramedic. [Encl 207]

478. This candidate was added to the high risk whiteboard for SIPE. [Encl 240]

479. At 0655, (b) (6) was brought to the ambulance by an instructor because he was coughing up blood and pink, frothy sputum. [Encl 207]

a. (b) (6) oxygen saturation on outside air was 94% and he was complaining of difficulty breathing when exerting himself. [Encl 207]

b. The log states that (b) (6) was noted as high risk by an instructor and that field corpsmen would continue to monitor him. [Encl 207]

480. At 1130, (b) (6) was sent to NSWCEN Medical for a medical check. [Encl 207]

481. At this same time, two other candidates were also sent to NSWCEN Medical with SIPE symptoms. These candidates were not added to the main high risk whiteboard, but were included under a different column labeled "to watch." [Encls 207, 240]

482. At 1300 on Tuesday, 1 February 2022, at his second medical check, SN Mullen was assessed as fit to train by (b) (6) of NSWCEN Medical. [Encls 16, 238]

a. SN Mullen is noted as having chaffing on his upper, inner arms. [Encl 238]

b. SN Mullen's chief complaints are marked as "N/A." [Encl 238]

c. SN Mullen's oxygen saturation was at 100%. [Encl 238]

483. At 1515, (b) (6) and the two other candidates that were sent to NSWCEN Medical were given a stress test at the Clinic. Each had an oxygen desaturation in "the low 90s" but were able to recover quickly to 95-97% and were returned to training. [Encl 207]

484. Time was set aside for a 'Skin Inspection' from 2245-2330 on 1 February 2022, but it wasn't executed. [Encl 16]

III.D. Wednesday, 2 February 2022: Hell Week Evolutions

485. On Wednesday morning, there were 24 candidates left in Class 352. [Encl 226]

486. By Wednesday, (b) (6) observed SN Mullen experiencing medical issues and coughing up fluid. [Encl 236]

487. By Wednesday, (b) (6) assessed SN Mullen's condition as "deteriorating." [Encl 241]

488. At 1300 on 2 February 2022, SN Mullen was assessed as "FFFD," or fit for full duty, at his third medical check. [Encl 238]

a. (b) (6) conducted the medical check. [Encl 238]

b. SN Mullen is noted to have chaffing on his arms and swelling in his leg. [Encl 238]

c. SN Mullen's chief complaints are marked as "no issue." [Encl 238]

d. SN Mullen's oxygen saturation was marked as 100%. [Encl 238]

489. (b) (6) was the Safety Observer from 0000-0800 on 2 February, and observed SN Mullen's legs as "noticeably swollen." [Encls 60, 242]

490. Hell Week instructors indicate that SN Mullen's performance on 2 February was average to below average, with no noticeable additional injuries or illness [Encls 59, 61, 63, 64, 147]

491. Candidates indicate that SN Mullen's performance and physical condition began to decline on Wednesday, 2 February. He was falling behind in boat evolutions and began coughing up fluid and phlegm at meal and break times. [Encls 105, 112, 113, 124, 149, 221, 232, 236, 256, 289, 290, 348]

492. From 1800 to 2000 on 2 February, Class 352 had their first sleep session. [Encl 16]

493. (b) (6) recalls that he "couldn't sleep…because [he] could hear [SN Mullen] hold his breath." [Encl 150]

494. SN Mullen was not seen by the field corpsman during any Hell Week evolutions from 30 January to 2 February 2022. [Encl 207]

III.E. Thursday, 03 February 2022: Hell Week Evolutions

495. At 0315 on 3 February 2022, (b) (6) was sent to the ambulance because he was falling behind during transit. [Encl 207]

a. (b) (6) oxygen saturation on outside air was 86%. He had rales and rhonchi in both lungs. [Encl 207]

b. (b) (6) was given 12 liters per minute of oxygen by (b) (6) via non-rebreather mask. [Encl 207]

c. After five minutes on outside air, (b) (6) oxygen saturation was 98% and he was sent back to training. [Encl 207]

d. The log notes that medical will continue to monitor (b) (6) for probable SIPE. [Encl 207]

496. At 0446 on 3 February 2022, SN Mullen was brought to the ambulance during the (b)(2),(b)(5),(j)(2),(k)(2) (b)(2),(b)(5),(j)(2),(k)(2) evolution. [Encl 207]

497. (b) (6) sent SN Mullen to be seen by medical at the ambulance because he noticed SN Mullen's boat crew was moving slower than the others, and he recalled seeing that SN Mullen's legs were swollen the prior day. [Encls 60, 67, 242]

498. SN Mullen was seen at the ambulance by (b) (6), the contracted paramedic. [Encls 225, 259]

a. SN Mullen told (b) (6) that he had had knee pain for two days. [Encl 207]

b. While the medical log notes left knee pain, (b) (6) recalls that SN Mullen was complaining of pain in his right leg. [Encl 259]

c. (b) (6) assessed SN Mullen and found no medical issues other than knee pain. [Encl 259]

d. (b) (6) assessed SN Mullen as able to walk without assistance. [Encl 207]

e. SN Mullen stated to (b) (6) that he was able to continue training and that he did not want to be seen by NSWCEN Medical. [Encl 207]

f. (b) (6) cleared SN Mullen to continue training based on his assessment, and SN Mullen returned to training. [Encl 207]

499. At the 0800 field corpsman shift change, (b) (6) informed (b) (6) that he had treated SN Mullen for knee pain. [Encls 225, 259]

500. SN Mullen's knee pain was also noted in the instructors' Class 352 Hell Week Log, for turn over from shift B4 to C4. This was the first entry regarding SN Mullen or his medical condition in the instructors' Class 352 Hell Week Log. SN Mullen was not annotated as high risk. [Encl 226]

501. At 0815 on 3 February 2022, SN Mullen was assessed as fit to train at his fourth medical check. [Encls 16, 43, 238]

a. This Medical Check was performed by (b) (6), USA, a medical student, and (b) (6) USN. [Encl 238]

b. SN Mullen's chief complaint was right knee pain. [Encl 238]

c. SN Mullen was assessed to have chafing on his legs and dependent edema in his right leg. [Encl 238]

d. (b) (6) recalls SN Mullen appearing "similar to the other candidates" and notes that most of the candidates were experiencing exhaustion and had "difficulty catching their breath." [Encl 43]

e. SN Mullen's vitals were stable and his lungs were "fairly clear." [Encl 43]

f. SN Mullen's temperature was 97.1° Fahrenheit, and his oxygen saturation was at 97%. [Encl 238]

g. Vaseline was applied to SN Mullen's chaffing sites and he was prescribed 500mg of Naprosyn. [Encl 238]

h. Naprosyn is a drug that reduces inflammation of tissue in the body and through that reduction of inflammation it will also reduce pain. It is in a class of drugs called Nonsteroidal Anti-inflammatory Drugs. [Encl 246]

502. The BTC medical log summarizes the results of this NSWCEN medical check and does not note any breathing issues or SIPE symptoms amongst the candidates. [Encl 207]

503. Following the medical check, (b) (6) observed SN Mullen coughing up yellow blood at the demolition pit during the (b)(2),(b)(5),(j)(2),(k)(2) [Encls 16, 257]

504. On this day, (b) (6) states that SN Mullen was in "full messed up mode," including having inflamed legs and coughing up a dark-colored fluid. [Encl 236]

505. SN Mullen appeared to (b) (6) to be coughing up a lot more fluid and fluid of a different consistency than that coughed up by candidates with SIPE. [Encl 236]

506. During a transit back to the beach, (b) (6), the field corpsman, observed SN Mullen falling behind; when she asked him how he was doing, he caught back up to the group. SN Mullen did not exhibit signs of distress to (b) (6), but appeared tired, worn down, and beat up. [Encl 110]

507. (b) (6) noticed SN Mullen struggling to stay under his boat during the day on 3 February. [Encl 111]

508. From 1300-1500 on 3 February 2022, Class 352 had its second sleep session. [Encl 16]

509. (b) (6) was sleeping next to SN Mullen. (b) (6) states that it sounded like SN Mullen was gargling water every time he took a breath. [Encls 232, 248]

a. (b) (6) woke SN Mullen up and a dark-colored fluid began pouring out of SN Mullen's mouth and nose when he sat up. [Encl 248]

b. SN Mullen had a deep and hacking cough. [Encls 232, 249]

c. Other candidates noticed SN Mullen's condition and expressed concern to SN Mullen and amongst each other. [Encls 112, 113, 134, 232, 237, 249, 251, 252, 253, 254]

d. SN Mullen expressed reluctance to seeking medical attention and stated he did not want to be pulled from the class. [Encl 134, 232, 251]

510. (b) (6) and other candidates convinced SN Mullen to leave the tent with him to go see the BTC field corpsman. [Encl 134, 232, 248]

a. On their way to medical, they ran into (b) (6). [Encls 232, 248]

b. (b) (6) explained to (b) (6) that they were going to medical, but (b) (6) replied that it wasn't the time for that, that the candidates were about to be woken up, and that there would be sick call. [Encl 232, 248]

c. (b) (6) then told them to return to the tent. [Encls 232, 248]

d. (b) (6) does not recall this interaction but states that he would have sent students back if he saw them outside the tent. [Encl 111]

e. (b) (6) later told (b) (6) what had happened with (b) (6). [Encl 242]

511. After the sleep period and during dinner from 1630-1730, SN Mullen was spitting into and filling a cup up with fluid. [Encls 16, 104, 248, 297]

512. At 1600 on 3 February 2022, instructor cadre shift C4 turned over to shift A5. SN Mullen's right knee pain was again annotated and turned over in the Class 352 Hell Week Log. SN Mullen was not identified as high risk. [Encl 226]

513. On the evening of 3 February 2022, SN Mullen continued to cough up fluid and display shallow breathing during the (b)(2),(b)(5),(j)(2),(k)(2) Encls 16, 248, 256, 257]

514. SN Mullen exhibited determination and continued to physically push himself during the final days of Hell Week. He had told friends and family that he would "not ring the bell no matter what," and would die before he quit. [Encls 103, 138, 222, 256, 340]

515. Instructors do not recall observing SN Mullen coughing or having trouble breathing on 3 February. [Encls 63, 64, 65, 139]

III.F. Friday, 04 February 2022: Hell Week Evolutions

0200: (b)(2),(b)(5),(j)(2),(k)(2)

516. At the beginning of 4 February 2022, there were 21 candidates remaining in Class 352. [Encl 226]

517. For Friday of Hell Week, the number of instructors is decreased due to the typical attrition of candidates, which requires fewer instructors to maintain the candidate to instructor ratio. The A5 shift is then extended to 0200 to allow B5 to cover the Class through Hell Week secure. [Encl 258]

518. With this extension, (b) (6) was the BTC field corpsman covering Class 352 evolutions from 1600 on 3 February to 0200 on 4 February. [Encl 225]

519. At the 0200 medical shift change, (b) (6) was told by (b) (6) to "keep an eye on" SN Mullen because his performance was falling. [Encl 259]

520. (b) (6) notes however that SN Mullen looked better than the other candidates at the time of her turnover. [Encl 110]

521. At 0200 on 4 February 2022, the A5 instructor cadre shift turned over to the B5 shift. SN Mullen's knee pain was noted in the instructor log and turnover, but he was not identified as high risk. This is the final entry in the instructors' Class 352 Hell Week Log regarding SN Mullen and his medical condition. [Encl 226]

522. Time was set aside at 0200 for a 'Skin Inspection,' but it wasn't executed. [Encl 16]

523. (b) (6) sat next to SN Mullen during an early morning evolution and states SN Mullen was coughing up a lot of mucus. [Encl 260]

524. SN Mullen was not heard by candidates or instructors to ask for medical help, and his classmates opined that he "would never have voluntarily moved forward in training without completing all the Hell Week evolutions alongside his classmates." [Encls 138, 248, 348]

525. No Class 352 candidates were seen by (b) (6) during the (b)(2),(b)(5),(j)(2),(k)(2) [Encl 207]

0600-0730: Transit to (b)(2),(b)(5),(j)(2),(k)(2)

526. At 0653, SN Mullen is brought to the ambulance while Class 352 was transiting from Silver Strand State Beach to the (b)(2),(b)(5),(j)(2),(k)(2), which is conducted at the (b)(2),(b)(5),(j)(2),(k)(2) on the west side of the Silver Strand Highway across from Fiddler's Cove Marina. [Encls 67, 207, 242]

527. Between 0630 and 0730, (b) (6) pulled SN Mullen out of training and brought him to the ambulance because he saw SN Mullen stop as his boat crew continued forward, put his hands on his knees, and spit out a bloody, brown colored fluid. [Encls 60, 67, 242]

528. SN Mullen was seen at the ambulance by (b) (6). [Encl 259]

a. At the beginning of this evaluation, (b) (6) states that SN Mullen "didn't sound great" and was only speaking in two to three word sentences. [Encl 259]

b. SN Mullen appeared swollen, but did not appear worse than any of the other students, and had no signs of infection. [Encl 259]

c. SN Mullen was complaining of symptoms of SIPE, including shortness of breath and was coughing up a small amount of yellow fluid. [Encl 259]

d. SN Mullen was assessed as having fluid in his lungs, an elevated heart rate of 138 beats per min, and a blood oxygen saturation of either 84 or 85%. [Encls 207, 259]

e. He had rales and rhonchi on both sides of his lungs. [Encl 207]

f. A physical exam showed that SN Mullen was alert and oriented in four ways: to person (knew who he was), places (knew where he was), time (knew the date and time of day), and situation (understood his current situation)]. [Encl 207]

g. (b) (6) treated SN Mullen with high flow oxygen at 12 liters per minute using a non-rebreather mask.[Encl 259]

h. After the oxygen mask was removed for five minutes, SN Mullen's blood oxygen saturation was at 94%. [Encls 207, 259]

i. After receiving supplemental oxygen, SN Mullen was speaking more comfortably and coherently, and spoke to (b) (6) about playing football at Yale and Taylor Swift. [Encl 259]

j. SN Mullen stated that he wanted to continue training. [Encls 62, 259]

k. Because he believed SN Mullen's vital signs were stable, (b) (6) was comfortable with SN Mullen continuing training. [Encl 259]

l. The generally accepted standard is normal resting oxygen saturation of les than 95% is considered abnormal. Therefore, it remains vital to observe patients for the clinical markerr of hypoxemia. [Encl 368]

m. All Navy Corpsman are trained on the administration of oxygen. However, there were no treatment guidance in place for Class 352 that addressed the conditions of hypoxemia, oxygen saturation levels, or governed the administration of oxygen. There was guidance on hypoxia, which has a wider list of potential symptoms than hypoxemia, but no separate treatment guidance was outlined for hypoxemia. [Encl 47, 108, 152, 368, ref dh]

n. SN Mullen was returned to training. [Encls 62, 207]

o. (b) (6) notes in the log that Hell Week medical personnel will continue to monitor SN Mullen's SIPE symptoms. [Encl 207]

0730-0830: (b)(2),(b)(5),(j)(2),(k)(2)

529. During the (b)(2),(b)(5),(j)(2),(k)(2), (b) (6) observed SN Mullen vomiting a "weird looking fluid" every time he came out of the water for air. [Encls 130, 245]

530. (b) (6) also observed dark-colored fluid coming out of SN Mullen's mouth and nose. [Encl 248]

531. At 0816, SN Mullen is brought to the ambulance for evaluation after the (b)(2),(b)(5),(j)(2),(k)(2), (b)(2),(b)(5),(j)(2),(k)(2). [Encl 207]

532. SN Mullen was brought to the ambulance by (b) (6). [Encl 195]

533. (b) (6) brought SN Mullen to the ambulance because his performance was falling. [Encls 67, 195]

534. (b) (6) remembers seeing SN Mullen coughing up blood and being directed to medical for evaluation. [Encl 61]

535. SN Mullen was evaluated by (b) (6). [Encl 259]

a. SN Mullen's chief complaint was shortness of breath. [Encl 207]

b. A physical exam showed that he was still alert and oriented in four ways. [Encl 207]

c. SN Mullen's heart rate was elevated at 112 beats per minute, and his oxygen saturation on outside air was 86%. [Encl 207]

d. SN Mullen had rales and rhonchi in both lungs. [Encl 207]

e. (b) (6) did not observe SN Mullen coughing up fluid. [Encls 195, 259]

f. (b) (6) again treated SN Mullen with high flow oxygen at 12 liters per minute via a non-rebreather mask. [Encls 44, 207, 259]

g. After five minutes on outside air, SN Mullen's oxygen saturation was 94%. [Encls 207, 259]

h. (b) (6) discussed whether to pull SN Mullen from training. [Encl 259]

i. (b) (6) wanted SN Mullen to stay with his class if (b) (6) was confident that he was stable and did not need to go to medical. [Encls 67, 195]

j. (b) (6) decided to have SN Mullen driven in the ambulance to the location where the students would secure Hell Week rather than pulling SN Mullen entirely. [Encl 259]

536. No other Class 352 candidates were seen by (b) (6) during the (b)(2),(b)(5),(j)(2),(k)(2). [Encl 207]

III.G. 04 February 2022, 0830-0930: Ceremony to Secure Hell Week

537. At approximately 0830, an instructor drove the ambulance to Hell Week securing ceremony location on the berm while (b) (6) stayed in the back with SN Mullen. [Encls 73, 104, 195, 259]

538. SN Mullen was given high oxygen flow at an increased flow rate of 15 liters per minute via non-rebreather mask during ambulance transit. [Encl 207]

539. SN Mullen was in the ambulance for about an hour. [Encl 259]

540. Before SN Mullen exited the ambulance, (b) (6) conducted a last check of vitals and heartrate. (b) (6) recalls SN Mullen's oxygen saturation level as 94%, but a vitals sign assessment is not recorded in the BTC medical logbook. [Encls 195, 207, 259]

541. When they arrived at the berm, SN Mullen was breathing on his own without supplemental oxygen. [Encl 195]

542. While (b) (6) recalls SN Mullen at the securing ceremony as delirious and disoriented, (b) (6) recalls SN Mullen as cognitively aware. [Encl 237, 248]

543. SN Mullen was assisted by (b) (6), and other candidates to the top of the berm to secure. [Encls 104, 138, 247, 248, 252]

544. At approximately 0930, Hell Week was secured by RADM Hugh Howard, Commander, Naval Special Warfare Command. [Encl 16]

545. RADM Howard interacted very briefly with SN Mullen, shaking his hand and presenting a gift. He does not recall noting anything different about SN Mullen's appearance or condition from other candidates. [Encl 192]

546. After securing, SN Mullen is described as cheerful and happy to have finished Hell Week. [Encls 104, 237, 241, 253, 256]

547. After SN Mullen exited the ambulance, (b) (6) checked out with (b) (6), went back to the office, and then returned to his home without informing anyone about SN Mullen's condition or that he had received oxygen. [Encl 195]

548. (b) (6) was not aware of a turnover requirement with NSWCEN Medical. [Encl 195]

III.H. 04 February 2022, 1000: Final Medical Check at NSWCEN Clinic

549. At approximately 1000, final medical checks began at the NSWCEN Medical Clinic. [Encls 16, 129]

550. The medical check at the conclusion of Hell Week was performed to and consistent with the standard of care for a regular routine primary care of a sick call medical appointment, meaning a more in-depth physical examination and treatment occurred. [Encl 175]

551. At this point during Hell Week, every candidate demonstrates a significant degree of exhaustion and difficulty with physical mobility. The physical appearance of these candidates could be surprising to those who do not have association or familiarity with BUD/S candidates and Hell Week evolutions. [Encls 42, 43, 44]

552. This physical state of the candidates is anticipated and expected. [Encls 42, 43, 44]

553. During his final medical check, SN Mullen's chief complaint was pain and swelling in his right knee. [Encl 238]

554. SN Mullen was seen by (b) (6). [Encls 44, 277]

555. (b) (6) was the first to evaluate SN Mullen. [Encl 277]

556. (b) (6) showed SN Mullen's swollen calves to (b) (6). [Encl 44]

557. (b) (6) saw no indication of a blood clot or any other medical issue related to the swelling. [Encl 44]

558. SN Mullen had a "raspy" voice during the medical check, but (b) (6) noted that his voice sounded the same through the week. [Encl 44]

559. (b) (6) saw no cause for concern because SN Mullen reported no pain in his swollen calves, was not struggling to breathe, and did not otherwise have any indications of respiratory issues. [Encl 44]

560. When (b) (6) entered the exam room to review SN Mullen's file, (b) (6) had already conducted vital checks. [Encl 277]

561. Neither (b) (6) were provided any written or verbal reports of the medical care SN Mullen had received in the field, including the BTC medical log. [Encl 175]

562. No instructors or other Class 352 candidates relayed any information or concerns about SN Mullen to (b) (6). [Encl 175]

563. (b) (6) did not recall seeing any BTC Medical corpsmen present during the final medical check. [Encl 175]

564. SN Mullen's blood oxygen saturation levels were at 98%. [Encl 238]

565. SN Mullen had a normal temperature of 97.2° Fahrenheit. [Encl 238]

566. (b) (6) noted that SN Mullen's vitals looked good, that he was alert, and he did not appear in distress while lying on the exam table. [Encl 277]

567. (b) (6) listened to SN Mullen's lungs and heard a faint crackle that was more prominent on the right side of his body. [Encl 277]

568. Medical providers did not note any other breathing issues with SN Mullen. (b) (6), a fellow candidate, noticed SN Mullen coughing up phlegm. [Encls 105, 277]

569. SN Mullen was speaking in full sentences without breaks and was responding appropriately to all questions. [Encl 175]

570. At this time, SN Mullen's lungs were assessed as "abnormal" due to the diffuse crackles. [Encl 238].

571. In the absence of reported symptoms, a field report of respiratory issues, or abnormal vital signs, the diffuse crackles in the lungs were not enough by themselves for (b) (6) to trigger SIPE protocol or pursue any further diagnostic workup. [Encl 175]

572. SN Mullen expressed some concern about swelling in the lower extremities, but (b) (6) assessed the swelling as correlated to training demands. [Encl 277]

573. SN Mullen also stated he had pain when urinating and that his urine was dark yellow. (b) (6) examined SN Mullen's genital area and assessed his pain most likely resulted from dehydration and genital chaffing. [Encl 277]

574. SN Mullen was instructed to continue to monitor his urine volume, frequency, and color and to notify NSWCEN Medical if there were any changes. [Encl 175]

575. SN Mullen did not raise any concerns with respect to cough or difficulty breathing, or mention receiving oxygen in the field. [Encl 175]

576. (b) (6) estimates his exam of SN Mullen lasted five to ten minutes and that he did not observe anything abnormal. [Encls 175, 277]

577. SN Mullen was assessed as fit to train and only advised to elevate his leg. [Encl 238].

578. A note on his medical record states "F/U [follow up] tomorrow w [with] post HW med checks." [Encl 238]

579. The Standard Form 600 (SF 600) documenting this medical visit was signed by (b) (6), MC, USN, and (b) (6), MC, USN. [Encl 238].

580. At the time of Class 352, these SF 600 medical records were not loaded into a candidate's electronic medical record. [Encl 229]

581. Throughout the entirety of Hell Week, seven (7) Class 352 candidates were placed on the NSWCEN white board, indicating they were "high risk" for SIPE. [Encls 228, 240]

582. Six of these seven candidates were eventually medically pulled from Hell Week. [Encl 240]

583. Of the seven candidates being monitored for SIPE on the whiteboard, only (b) (6) was eventually deemed fit for full duty. [Encl 240]

584. Excluding SN Mullen, three members of Class 352 were sent to the hospital to be evaluated for pneumonia. Of these, one was diagnosed with a different strain of bacterial pneumonia than SN Mullen, and two others had a discharge diagnosis of "productive cough", likely due to SIPE with "some concern" for pneumonia. Only one of those individuals, (b) (6), was listed on the whiteboard as being monitored for SIPE. [Encls 154, 170, 240]

585. SN Mullen was not on the NSWCEN Medical whiteboard, and was therefore not one of the candidates that the NSWCEN Medical staff had been monitoring all week. [Encl 277]

III.I. 04 February 2022, 1100-1200: Debrief in NSWCEN Classroom

586. After their medical check was completed, Class 352 candidates went to a classroom at Donnelly Hall. [Encl 269]

587. (b) (6) saw SN Mullen in the classroom at this point and described him as looking "way better." [Encl 251]

588. The candidates then received a post-Hell Week brief, which included a medical debrief created by NSWCEN Medical. [Encl 269, 323]

589. The debrief consisted of medical advice and recommendations such as stay hydrated, keeping legs elevated to reduce swelling, and to watch out for such things as a change in urine color. [Encls 269, 323]

590. Each candidate was given a hard copy of the medical debrief. [Encl 268]

591. The hard copy of the NSWCEN medical debrief provides the phone number for the Duty Medical Officer and stated: "*DO NOT* go and see other medical providers. We will see you at any time (If it is a true emergency call 911). Contact the Duty Medical Officer by calling the quarterdeck and having them page the Duty Medical Officer. IF YOU GO AND SEE OTHER MEDICAL PERSONNEL WHO DO NOT UNDERSTAND HELL WEEK, THEY MAY ADMIT YOU TO THE HOSPITAL OR GIVE YOU MEDICINES THAT ARE NOT COMPATIBLE WITH TRAINING." [Encl 323]

592. The candidates were all given pizza and Gatorade. [Encl 236]

593. SN Mullen appeared to eat and drink. [Encls 251, 262]

594. After the brief, SN Mullen stayed behind in the classroom with his head on the desk. [Encl 237]

595. Several candidates observed SN Mullen spitting "bloody mucus" into a Gatorade bottle between his legs. [Encls 103, 104, 105, 134, 138, 232, 237]

596. SN Mullen told (b) (6) he was fine and that he was going to remain in the classroom for a little while to make some phone calls. [Encl 237]

597. At 1126 Pacific Standard Time, SN Mullen called his mother. [Encl 263]

598. SN Mullen told her, "I did it." [Encl 222]

599. His mother states that SN Mullen did not sound well and she could tell he was having breathing issues. He was having difficulty formulating words. [Encl 222]

1200

600. At approximately 1200, (b) (6), a CATS candidate, arrived at Donnelly Hall. [Encl 262]

601. (b) (6) found SN Mullen seated in a chair in the classroom with his head down on the desk in front of him. [Encl 262]

602. There were other Sailors in the room, but SN Mullen was the only candidate from class 352 still there. [Encl 262]

603. (b) (6) asked SN Mullen if he wanted to go to the barracks and SN Mullen said that he did. [Encl 262]

604. (b) (6) grabbed a wheelchair that was sitting in the room and helped SN Mullen into it. [Encl 262]

605. (b) (6) stated that SN Mullen was visibly swollen and he did not think SN Mullen would be able to walk to the barracks by himself. [Encl 262]

606. SN Mullen told (b) (6) that he was 40 to 50 pounds heavier than usual due to the swelling in his body. [Encl 262]

607. SN Mullen was "hacking up" a lot of orange-red "slime" into an empty Gatorade bottle. [Encl 262]

608. As SN Mullen was coughing up this fluid he tried to catch it in the bottle, but got fluid on himself and his shirt. [Encl 262]

609. (b) (6) estimates the bottle was ¼ full of the orange-red fluid when they were still at Donnelly Hall. [Encl 262]

610. They were in the classroom for ten to 15 minutes before (b) (6) pushed SN Mullen in the wheelchair over to the barracks at Building 602. [Encl 262]

611. (b) (6) was getting off his watch shift at Building 602 when he saw SN Mullen being pushed in the wheelchair. He described SN Mullen as being in the worst physical shape of anyone in class 352. [Encl 264]

612. (b) (6) was standing watch at Building 602 from 0900 to 1200 and reports that SN Mullen was the last person to leave medical. [Encl 265]

III.J. 04 February 2022, 1220: Transit to Barracks BLDG 602

613. Class 352 candidates were sent to Base Enlisted Quarters (BEQ), building 602 aboard Naval Amphibious Base Coronado, to sleep and recover from Hell Week. [Encls 282, 283]

614. Once they reached SN Mullen's room in building 602, SN Mullen got out of the wheelchair on his own and laid down on the mattress that was on the floor. [Encl 262]

615. (b) (6) a building 602 watchstander, states that he assisted SN Mullen onto the mattress. [Encl 265]

616. SN Mullen did not have a roommate. [Encl 303]

617. (b) (6) states that SN Mullen's difficulty breathing got significantly worse when he was laying down. [Encl 262]

618. (b) (6) placed approximately four pillows behind SN Mullen's head to prop him up. [Encl 262]

619. (b) (6) heard a "gargling" sound coming from SN Mullen's lungs as he tried to breathe. [Encl 262]

620. (b) (6) states that SN Mullen was not speaking clearly and seemed to be choking on his words. [Encl 262]

621. (b) (6) states that it sounded as if SN Mullen was drowning. [Encl 265]

622. SN Mullen would try to talk, start coughing, and then a large amount of orange-red fluid would come out of his mouth. [Encl 262]

623. (b) (6) state that color of the fluid was darker than what they had seen candidates with SIPE cough up. [Encl 262]

624. (b) (6) states that SN Mullen was "in and out" of sleep and that he did not see SN Mullen get off the mattress at all. [Encl 262]

625. (b) (6) stayed in SN Mullen's room for 10 to 30 minutes. When he left, he told the Sailors on watch to keep a close eye on SN Mullen because he was struggling to breathe. [Encl 262]

626. (b) (6) was concerned about SN Mullen, but left his room thinking that SN Mullen would be ok because he had been cleared by medical. [Encl 265]

627. From 1200 to 1600, (b) (6) (b) (6) had watch at Building 602. [Encl 148, 266, 267]

628. When (b) (6) first arrived, he saw SN Mullen in his room and observed that he was in "pretty bad shape." [Encl 267]

629. (b) (6) designated (b) (6) to post outside SN Mullen's room and keep a close eye on him. [Encld 148, 274]

630. Either (b) (6) had eyes on SN Mullen for their entire watch. [Encls 282, 283]

631. SN Mullen went back and forth from his room to the bathroom several times. [Encl 267]

632. At one point, he appeared to fall asleep on the toilet. [Encls 282, 283]

633. At some point, SN Mullen ate a scoop of ice cream and immediately went to the bathroom to vomit. [Encl 267]

634. SN Mullen was coughing and spitting up what appeared to be blood into a Gatorade bottle. [Encl 267]

III.K. 04 February 2022, 1300: Medical Walk-through of Building 602

635. At approximately 1300-1400, (b) (6) (b) (6) performed a walk-through of the barracks to check on the candidates. [Encl 268]

636. The medical team was to "lay eyes" on each candidate to ensure they were ok. [Encl 268]

637. (b) (6) observed SN Mullen without waking him. [Encls 44, 269]

638. (b) (6) states that SN Mullen appeared to be sleeping and that he looked like he was breathing well. [Encl 269]

639. (b) (6) also visually assessed SN Mullen and stated he appeared "very comfortable" and that he did not complain of any discomfort at that time. [Encl 44]

640. SN Mullen was laying on the bed on his left side, with an eye mask covering his eyes, country music playing in the room, and a diffuser on that smelled like Vicks VapoRub. [Encl 44]

641. (b) (6) states that the medical staff that conducted the checks from 1300-1400 only confirmed SN Mullen's presence in the barracks and did not evaluate him further. [Encl 267]

642. After the medical walkthrough of the barracks was complete, NSWCEN Medical Clinic secured for the day, with (b) (6) as the duty provider by phone. [Encls 268, 271]

643. At approximately 1330, (b) (6), not in Class 352, visited SN Mullen in his room. [Encls 272, 273]

644. (b) (6) stats that SN Mullen was "jamming out" to Taylor Swift, but that he was not speaking well. [Encl 272]

645. SN Mullen fell asleep mid conversation and had exaggerated and loud snoring. [Encl 272]

646. (b) (6) also observed SN Mullen cough up "a lot" of red phlegm into a Gatorade bottle. [Encl 272]

647. Before departing, (b) (6) helped SN Mullen retrieve a scarf from his backpack to cover his eyes due to the level of brightness in the room. [Encl 273]

648. At approximately 1345, when (b) (6) departed Building 602, he told the Sailors on watch to keep ensure they were checking on SN Mullen. [Encl 272]

III.L. 04 February 2022, 1400: Deteriorating Condition

649. At around 1400, (b) (6) states that SN Mullen started "getting bad". His breathing was short and his sentences were one word at a time. [Encl 274]

650. (b) (6) emptied SN Mullen's spitting Gatorade bottle for him twice in the bathroom. [Encl 148, 233]

651. SN Mullen was spending 30-45 minutes to the toilet on each trip to the bathroom, spitting and defecating. [Encls 148, 274, 282, 283]

652. At some point prior to 1430, (b) (6) went to the "BUD/S medical center" to get help for SN Mullen, but no one was there. [Encl 267]

653. At 1435, (b) (6) called the duty phone number posted on the door of the medical center. He told the physician who answered the phone that SN Mullen was having difficulty breathing, spending most of his time in the bathroom, and coughing up blood. [Encl 267]

654. (b) (6), a NSWCEN Medical Physician's Assistant, was the NSWCEN duty medical provider on 4 February 2022. [Encl 271]

655. (b) (6) states that (b) (6) told him that they could go to the hospital if SN Mullen was "in bad shape," but that SN Mullen would be admitted because the hospital was not used to the condition of BUD/S candidates. (b) (6) also stated there would be another medical check in the morning wherein all candidates would be evaluated. [Encl 267]

656. After this call, (b) (6) spoke to SN Mullen through the bathroom stall door while SN Mullen was on the toilet. SN Mullen declined to go to the hospital and said he would wait for medical checks in the morning. [Encl 267]

657. (b) (6) states that SN Mullen was "so adamant" about not going to the hospital, despite them asking multiple times. [Encl 274]

658. (b) (6) and (b) (6) spoke to SN Mullen about going to the hospital approximately two to three times. SN Mullen stated he did not want to go and "nah, I am alright." [Encls 148, 233, 282, 283]

659. (b) (6) states that SN Mullen did not seem to be "in his right mind." [Encl 267]

660. (b) (6) stated he heard SN Mullen talking to himself in the bathroom, stating "I am such a pussy." [Encl 267]

661. (b) (6) was the Staff Instructor on Duty and was tracking the condition of SN Mullen via phone from the whiteshirt watchstanders. When called about the candidates' condition, he told the watchstanders to call the duty provider for guidance. [Encls 63, 282, 283]

662. SN Mullen returned to his room and sat on his bed. SN Mullen seemed "very uncomfortable" and unable to stay still. [Encl 267]

663. SN Mullen kept trying to lay on the bed, roll over onto his side, and sit up, but no matter his position he could not stop coughing. [Encl 267]

664. (b) (6) states that SN Mullen asked to have his legs lay flat, to which (b) (6) told him that he had to remain in the "V" position so his lungs could drain properly. SN Mullen relayed that it was hard for him to breathe in the "V" position. (b) (6) assisted SN Mullen with laying his legs flat, but (b) (6) kept SN Mullen's back elevated. [Encl 274]

665. At some point, SN Mullen stated that he could not see or that his vision was blurry. [Encls 233, 267]

666. Around 1545, SN Mullen's condition declined significantly and he was "gasping for air" as though he was "being drowned." [Encl 267]

667. Between approximately 1200 and 1549, (b) (6), another Class 352 candidate, was also having difficulty breathing. [Encl 289]

668. At 1549, (b) (6) called the duty medical provider, (b) (6). [Encl 274, 289]

669. (b) (6) told (b) (6) that he needed medical attention. [Encl 274, 289]

670. (b) (6) conversation with (b) (6) was on speaker, and (b) (6) impression was that (b) (6) was trying to convince (b) (6) not to go to the hospital because he would be admitted. [Encl 274, 289]

671. (b) (6) was overheard telling (b) (6) that was fine and that he should go back to sleep. When (b) (6) relayed that he was not ok, (b) (6) told (b) (6) to wait an hour and see how he felt. [Encls 231, 276]

672. (b) (6) relayed that he couldn't breathe and wanted to go to the hospital. [Encls 231, 274, 276]

673. Two watchstanders came to tell (b) (6), an officer candidate in Class 352, that (b) (6) was not doing well. [Encls 113, 266]

III.M. 04 February 2022, 1600: Emergency Services Called

674. At 1603, (b) (6) stated that he determined SN Mullen required medical assistance and called the duty medical provider, (b) (6). [Encls 113, 236, 266, 278]

675. (b) (6) states that (b) (6) told him that the medical office was closed until 0730 the next day, that they were unable to treat SN Mullen, and to call 911 directly if necessary. [Encl 113, 236]

676. (b) (6) called 911 and told them that two candidates "needed to go to Balboa [hospital]." [Encl 279]

677. (b) (6) was referring to SN Mullen and (b) (6). [Encl 236]

678. The first 911 call was disconnected. [Encl 279]

679. (b) (6) called 911 again immediately afterwards. The dispatcher told (b) (6) that Federal Fire was currently en-route to his location. [Encl 279]

680. (b) (6) tells dispatch that there are two sailors who are "messed up," who cannot walk or breathe, and states that they are conscious but "kinda barely holding on." [Encl 279]

681. (b) (6) tells dispatch that both Sailors are breathing, but are producing blood when they cough. [Encl 279]

682. (b) (6) notes that both Sailors have had medical problems throughout the week. [Encl 279]

683. (b) (6) tells the dispatcher that SN Mullen is in the "worst shape" and is "severely damaged." [Encl 279]

684. At 1609, the Federal Fire Department received a call from (b) (6) and dispatches emergency response vehicles at 1610. [Encl 280]

685. At 1610, (b) (6) received a call on the duty phone from (b) (6), who confirmed that (b) (6) called 911 and that two ambulances are on their way. [Encl 271]

686. While awaiting emergency medical services, (b) (6) and (b) (6) saw that SN Mullen was hunched over with spit, phlegm, and potentially blood coming out of his mouth. [Encls 148, 282, 266, 283]

687. (b) (6) knew something was wrong because SN Mullen was on his side and was not coughing, choking, or breathing. [Encls 282, 266, 283]

688. SN Mullen was not responsive as (b) (6) held him and patted his back. [Encls 282, 266, 283]

689. At some point, (b) (6) calls out for help from SN Mullen's room. [Encl 266, 284]

690. (b) (6), arriving early for watch, heard this and went into SN Mullen's room, where he observed (b) (6) supporting SN Mullen as he lay on his side. [Encl 284]

691. (b) (6) states that SN Mullen's appearance was bloated, with an enlarged neck and discolored, blueish skin. [Encl 284]

692. (b) (6) made eye contact with SN Mullen for a moment and then SN Mullen's entire body went limp, though his eyes remained open. [Encl 284]

693. (b) (6) returned to SN Mullen's room and observed (b) (6) holding SN Mullen up from behind. SN Mullen appeared unconscious and his mouth was open. [Encls 274, 282, 283, 266]

694. (b) (6) states that SN Mullen's body was completely limp and his chest was not moving. [Encl 233]

695. None of the watchstanders attempted CPR, as they had not been trained. [Encls 233, 282, 283]

696. (b) (6), Building 602 Watchbill Coordinator, flagged down the first ambulance that arrived to Building 602. [Encls 231, 276]

697. When EMS arrived, (b) (6) yelled for them to immediately attend to SN Mullen, which they did. [Encls 282, 266, 283]

698. (b) (6), Paramedic, (b) (6), Paramedic, and (b) (6), EMT-Basic, responded from Federal Fire Station 13. [Encl 285]

699. (b) (6) directed his team to get (b) (6) on vitals and monitors and then went to attend to SN Mullen. [Encl 285]

700. SN Mullen was unresponsive when (b) (6) arrived to provide care. [Encl 285]

701. SN Mullen was in a seated position because (b) (6) was "cradling him up." [SN Martin statement, Encl 285]

702. Two candidates helped (b) (6) take off SN Mullen's sweatshirt so that he could attach monitors to his chest. [Encl 285]

703. As (b) (6) was conducting medical checks, to include checking for a pulse, his partner (b) (6) came into the room. [Encl 285]

704. At 1625, SN Mullen's vital signs were first taken by Federal Fire. [Encl 280]

705. At 1625, (b) (6) called (b) (6) to update him on SN Mullen and (b) (6). [Encls 231, 276]

706. (b) (6) was unable to find a pulse on SN Mullen and initiated cardio-pulmonary respiration (CPR) while (b) (6) applied pads. [Encl 285]

707. (b) (6) then began Advanced Life Support treatment. [Encl 285]

708. ALS measures were two minutes of CPR and epinephrine every three to five minutes. [Encl 286]

709. (b) (6) originally gave SN Mullen CPR on the mattress on the floor, but later moved SN Mullen onto the floor when more help arrived. [Encl 285]

710. (b) (6) then removed the mattress from SN Mullen's room to make more room for the EMTs to perform CPR. [Encls 148, 233, 282, 266, 283]

711. Another medical team brought an automatic machine to assist with CPR. [Encls 285, 286]

712. When the transport crew came into the room, (b) (6) attempted to establish an IV. However, all pressures were lost and SN Mullen's veins collapsed. [Encl 285]

713. SN Mullen had no heart rate but machine readings showed that CPR was being applied properly and was effectively moving blood from the heart to the lungs. [Encl 285]

714. Additional medics arrived from Coronado Fire. [Encl 285]

715. At some point, (b) (6) called (b) (6) to inform him that a candidate was "coding" and EMS was applying life saving techniques. [Encl 281]

716. The Chief Staff Officer of NSWCEN also called (b) (6) and notified him that a candidate was "non-responsive." [Encl 281]

717. The medical team decided to transport SN Mullen to Sharp Coronado Hospital to receive higher treatment and medications. [Encl 285]

718. (b) (6) arrived as EMS personnel were transporting SN Mullen out of the barracks on a gurney. [Encl 242]

719. (b) (6) briefed the EMS personnel on SN Mullen's symptoms during Hell Week, specifically what (b) (6) believed to be SIPE. [Encl 242]

720. At 1643, the ambulance departed the scene with SN Mullen. [Encl 280]

721. At no point did (b) (6) see anyone clean SN Mullen's room before or after he was taken to the hospital. [Encls 233, 282, 283]

III.N. 04 February 2022, 1700: Sharp Hospital

722. (b) (6) was taken to Balboa Naval Hospital for treatment, was intubated, and was subsequently diagnosed with bacterial pneumonia. [Encls 289, 290, 301]

723. (b) (6) went in the ambulance with SN Mullen. The auto pulse for CPR was still pumping SN Mullen's chest and (b) (6) continued ALS treatment. [Encl 285]

724. There was no return of a pulse, but there was still oxygen exchange. [Encl 285]

725. From 1625 to 1650, the Federal Fire Incident Log describes SN Mullen as "unresponsive." [Encl 280]

726. At 1651, the ambulance arrived at Sharp Hospital. [Encl 280]

727. Sharp Hospital staff continue lifesaving care for SN Mullen. [Encl 285]

728. At some point, (b) (6) arrived at Sharp Hospital. [Encl 281]

729. (b) (6) overheard (b) (6) and a Sharp emergency room doctor who was attending to SN Mullen agree that SN Mullen was a non-survivable resuscitation. [Encls 281, 286]

730. At 1725, SN Mullen was pronounced dead. [Encl 287]

731. (b) (6) had also arrived at the hospital and were there when SN Mullen was pronounced dead. [Encls 67, 242]

III.O. Medical Examiner Report

732. SN Mullen's cause of death was determined to be Acute Pneumonia due to *Strepococcus pyogenes*. [Encl 288]

733. Bacterial testing revealed Group A *strepococcus pyogenes* infection of the lung tissue, airway, and nasopharynx. [Encl 288]

734. Cardiomegaly was considered a contributing factor in his death. [Encl 288]

735. The predicted normal heart weight for a male at the age, weight, and height of SN Mullen is 438 Grams. [Encl 291]

736. At his autopsy, the weight of SN Mullen's heart was 700 grams, 63% heavier than predicted normal. [Encl 291]

737. The autopsy indicates that the structure and appearance of the heart was normal except for a thickening of the left ventricular wall (the largest of the four chambers of the heart). [Encl 291]

738. The left ventricle is the chamber of the heart that pumps blood away from the heart out into the body. [Encl 291]

739. There are many disease and non-disease conditions that can cause thickening of the heart muscle tissue, including systolic hypertension, exercise-induced cardiac tissue remodeling, and chronic use of PEDS. [Encl 291]

740. The autopsy toxicology screen was negative for alcohol, or screened drugs of abuse or medications. [Encl 288]

741. SN Mullen was not tested for exogenous testosterone because testing required a 10mL sample of urine, which the medical examiner did not have. [Encl 292]

742. SN Mullen was not tested for human growth hormone because his blood was hemolyzed and no serum was able to be collected for testing. [Encl 292]

743. The armed force medical examiner reaffirmed their conclusions on 19 August 2022. [Encl 298]

III.P. 04 February 2022, 2300: Search of SN Mullen's Car

744. At approximately 2300 on 4 February 2022, NCIS Agent (b) (6), (b) (6) opened SN Mullen's barracks room wall locker in order to locate his next of kin paperwork. [Encl 305]

745. They did not located SN Mullen's paperwork, but they did locate the keys to his car. [Encl 305]

746. At approximately 2321, NCIS and the security personnel opened SN Mullen's car to locate his next of kin paperwork. [Encl 305]

747. During the search, a suspected controlled substance was found and SN Mullen's vehicle was secured. [Encl 305]

748. On 5 February 2022, NCIS conducted a more thorough, follow-up search of SN Mullen's vehicle and subsequently located: (1) Vial labeled HGH Somatropine 50 IU; (1) Pill bottle labeled Anastrobol 1, 80 tabs of 1mg; (1) Package labeled "Big Genes Recombinant Human Growth Hormone," containing (3) vials labeled "HGH Somatropine" and (2) vials labeled of "Sterile Diluent"; (1) Pill bottle labeled Sildenafil, 50 mg, containing 15 white pills; (1) Box labeled "Karachi Labs INC.," containing vial labeled "Testosterone Cypionate Hormones, 200mg per 10ml vial."; (1) Vial labeled "Test C 250 Testosterone Cypionate, 250 mg per ml vial"; (1) Vial labeled "Sterile Diluent 5ml"; (11) Syringes labeled "Easy Touch"; (6) 3ml Syringes labeled "Brandzig"; (10) Syringes labeled "Easy Touch"; (4) 3ml Syringes labeled "Brandzig"; and (1) Syringe with clear colored liquid. [Encl 180]

III.Q. Other Class 352 Candidates Requiring Medical Treatment

749. Ultimately (b) (6) [redacted] were also admitted to Naval Hospital Balboa for treatment of pneumonia. [Encl 301, 307]

750. (b) (6) [redacted] from Class 352 also later needed care at Naval Hospital Balboa. [Encl 104, 301, 307]

CHANGES TO POLICY OR PROCEDURE AFTER CLASS 352

This section addresses changes made to NSW policies and procedures following Class 352, covering adjustments to instructor training, manning, and curriculum execution, changes to the medical structure, training, and reporting requirements, changes to the safety program, and changes to performance enhancing drug deterrence and detection.

I. *Changes to Instructor Selection, Assignment, Training, or Experience*

I.A. Emphasis on 1st Phase Execution

751. BTC Commanding Officer understands that the instructors and medical personnel supporting BUD/S evolutions need to understand the constellation of factors building for each candidate throughout training, and emphasizes this with the Phases. [Encl 119]

752. CAPT Sulick, current BTC Commanding Officer, understands the importance of shifting the instructors' mindset from "hunting the back of the pack" to hitting the standard. He emphasizes with instructors that their role is to raise the candidates up to the standards, not drive them to quit. [Encl 106, 119]

I.A. Civilian Tensions

753. The view of CAPT Sulick, BTC CO, is that the civilian cadre are responsible for educating the active duty instructors as they come in, are second in command of each Phase, but that ultimately responsibility for execution rests on the active duty component. [Encls 70,119]

754. Tensions between active duty and civilian deputies continue, but the current BTC leadership has ensured the civilians are involved in decisionmaking and that the active duty personnel understand their role as mentors. [Encls 70, 106]

I.C. Training

755. Beginning in September 2022, all BUD/S instructors are required to complete 23 hours of additional instruction following IQC. Direct guidance is given to instructors from NSWC, NSWCEN, and BTC leadership on the role on instructors in executing the curriculum, and not changing the standards. Twenty-five topics specific to the SEAL/SWCC school house are addressed, including: [Encls 41, 106, 145, 154, 302, 313]

a. Proper execution of training evolutions
b. Introduction from NSW Commander/Force Master Chief addressing awareness of force generations impact on mission readiness.
c. Introduction from NSWCEN Commodore discussing his ownership and overall authority of the curriculum, high-risk training safety, and instructional development.
d. Introduction from NSWBTC CO discussing his ownership and overall authority of curriculum execution, safety management, and Instructor Development.
e. The history of Naval Special Warfare
f. Production requirements to regenerate force and the impacts of training on that production.
g. Curriculum Design and Management
h. Instructor Development
i. High-Risk Training Safety
j. Operational Risk Management
k. Chaplain Services
l. Fleet and Family Services
m. Medical/Sick-Call procedures
n. Women in SOF
o. NSWBTC Business Rules addressing all command training instructions governing the training, management and administration of candidates.
p. Discussion of the role of the instructor cadre in assessing, selecting and training.
q. Discussion on mental toughness is reinforced during stressful training events and how to remind candidates to use mental toughness.
r. Discussion on effective counseling procedures
s. Discussion on effective remediation and its purpose (skill/physical), Review the remediation guidelines listed in the Staff Instructor Performance Remediation Guidance.
t. Proctorship discussion to understand the role and responsibilities of a class proctor
u. A facilitated discussion of case studies highlighting training mishaps and key indicators and warnings that were missed.

I.D. Curriculum Execution and Standardization

756. After direction from CAPT Drechsler, CAPT Geary gave guidance to his Phase leadership on executing the curriculum and not adding to the physical load, to address the 'lack of slack' noted. Medical personnel confirmed that they saw a shift in instructors no longer filling time with additional physical evolutions. [Encls 56, 110]

757. CAPT Geary also instituted several changes to address heightened attrition:

a. 1st Phase training evolutions at some point in 2016 began to incorporate the use of rucks. After Class 352, the use of rucks in 1st Phase was eliminated from training in response to high attrition rates. [Encls 56, 125]

b. CAPT Geary and staff also realized that the practice of providing a BUD/S class with the daily schedule the night before had lapsed as a result of classes attempting to "game" the system. This resulted in classes having to prepare for every possible evolution every night

necessitating extra work. This was reversed and afforded the class more after hours "white space," with no reported negative impact to training. [Encl 30, 56]

c. Linked to this, CAPT Geary mandated six hours of sleep, minimum, before Hell Week during 1st Phase to safeguard against overzealous Class leadership resulting in Classes mustering unnecessarily early for evolutions, the creation of double work, or micromanagement. [Encls 56, 125]

758. As of April 2022, NSWCEN established and began operating the Training Safety and Assessment Program (TSAP) and Training Safety and Assessment Team (TSAT). [Encls 30, 106; Ref am]

a. TSAP focuses on ensuring the efficacy of high-risk training within the NSWCEN enterprise by enhancing existing assessment and lessons learned processes. [Encls 106, 312; Ref ad]

b. TSAP supports existing organic assessment by subordinate commands with subject matter expertise and longitudinal data. [Encl 312; Ref ad]

c. The N34 Instructor Development Division of TSAP also conducts regular training assessments and instructor evaluations to identify additional training opportunities to improve instructor skills and knowledge. [Encls 106, 312; Ref ad]

d. TSAP organic training assessments support BTC with ensuring compliance and alignment with High-Risk Training policies and procedures. [Encl 312; Ref ad]

e. The TSAP/TSAT were formalized in October 2022. [Encl 312; Ref ad]

759. CAPT Drechsler, NSWCEN Commodore, has directed execution of the first Curriculum Review Board (CRB), scheduled to commence on 16 November 2022.

a. This is different from a Formal Curriculum Review (FCR), which was last conducted between 10-14 January 2022 and a Formal Curriculum Evaluation which is scheduled for 09-13 Jan 2023. [Encls 30, 119, 294, 295]

b. The task of the CRB is to continually assess each Phase of training across the BUD/S pipeline, identify any deviation from operationally-validated standards, and highlight those to the Commodore for action. [Encl 295]

c. As opposed to the FCR/FCE which focus on only one course of instruction, the CRB provides a status update on all scheduled courses to ensure they are ready, recent, and relevant to train to the current mission/operational requirements. [Encl 295]

II. *Changes to NSW Safety Policy, Structure, or Execution after Class 352*

760. The EAP for Phase 1 training was updated in May 2022, but notably has become less robust and does not address the following areas required under the Navy HRTS instruction: locations of emergency equipment (first aid kits, emergency oxygen, fire extinguishers, communications), primary and secondary means of communication, muster sites for students/staff, and methods to maintain control of the scene. [Encl 152; Ref k]

761. This EAP revision was used by the Phase AHRTSO during the required annual drill on 8/11/22, without noting or correcting any of the missing elements. [Encl 156]

III. *Changes to NSW Medical Policy, Structure, or Procedure after Class 352*

III.A. Restructuring of NSWCEN and BTC Medical Departments

762. Under direction of the NSWCEN Commodore, the NSWCEN Medical Department absorbed BTC Medical on 20 October 2022 to provide unity of command for medical support to BTC evolutions. [Encls 30, 154, 173, 299, 300]

763. Completion of required task organization, realignment, and positioning of the medical staff into the consolidated NSWCEN Medical Department is to be completed by 16 November 2022. Consolidation of BTC medical personnel into the NSWCEN Medical Department is a 180 day trial and evaluation and not permanent command policy. Changes to the NSWCEN Standard Organization and Regulations Manual (SORM) to reflect this consolidation will not occur until after a review of the 180 day trial and evaluation period. [Encl 42, 300]

764. While the required actions to formalize the consolidation of the NSWCEN Medical Department were ongoing at the time of Class 357, the NSWCEN SMO stated that for Class 357 Hell Week they were operating as a consolidated NSWCEN Medical Department. [Encl 42]

765. The consolidated NSWCEN Medical Department is now organized into four divisions: Primary Care, Mental Health, Physical Therapy, and the newly developed Medical Operations Division. [Encl 299]The newly developed Medical Operations Division is responsible for developing and promulgating medical policy, standing medical orders, and medical clinical practice guidelines that support and guide field corpsmen in the delivery of health care in the field. [Encl 42]

766. (b) (6) the former BTC Medical Department Head, now serves as the NSWCEN Medical Operations Chief, and (b) (6) is the NSWCEN Medical Operations Officer. Their responsibility includes management of the field corpsmen providing direct support to BTC evolutions. [Encls 154, 173, 179, 299; Ref ao]

767. Despite the order to consolidate the medical force, there is no directive, instruction, or authoritative document from the NSWCEN Commodore to the consolidated NSWCEN Medical Department directing them to provide medical support and medical planning support to the BTC CO for BTC operations, to include Hell Week. [Encls 42, 300]

768. There continues to be confusion amongst former BTC corpsmen on their new chain of command and to whom they report. An all hands medical staff meeting was held approximately two weeks prior to Class 357 Hell Week to provide information to all medical personnel on the consolidation of all medical departments into one single NSWCEN Medical Department. However, not all personnel were present as field corpsmen were covering BTC evolutions. [Encl 42]

769. The contracts for all remaining contracted paramedics ended in October 2022 and were not renewed. [Encl 127]

770. BTC is concerned about the loss of unity of command involved with transfer of their medical department to NSWCEN. [Encls 70, 119]

III.B. NSWCEN Medical Standard Operation Procedure

771. The consolidated NSWCEN Medical Department operates off a new draft SOP that is unsigned and still undergoing revisions. [Encls 42, 299]

772. The October 2022 draft of the unsigned SOP does not have an instruction cover page attached to it to support the SOP being endorsed by the NSWCEN Commodore so that it can be promulgated as a command instruction and order by the NSWCEN Commodore. [Encl 299]

773. NSWCEN Medical leadership did not originally intend to submit the document for endorsement by the NSWCEN Commodore, but as of Class 357 now plans to have the NSWCEN Medical SOP signed and issued by the NSWCEN Commodore as command policy. [Encl 42]

774. The unsigned SOP contains a newly organized NSWCEN Medical Department Task Organization Chart, which accurately designates the NSWCEN SMO as the Medical Director of all NSWCEN medical personnel. [Encls 42, 299]

775. Although the unsigned SOP does not state in the SMO position description that he is the Medical Director, it does specifically state the SMO will exercise technical supervision over all medical personnel assigned under the cognizance of the NSWCEN Commodore. [Encls 42, 299]

776. The unsigned SOP does not articulate the scope, mission, or purpose of each of the aforementioned divisions of the Medical Department or the position descriptions of the division officers. [Encls 42, 299]

777. The unsigned SOP has elements within it supporting the practice of medicine, however, it does not contain clearly defined and organized medical standing orders to support the practice of medicine. [Encls 42, 299]

III.C. Consolidated Medical System Manning and Workload

778. The consolidated NSWCEN Medical Department still has four gapped HM billets, but these have been prioritized for fill by NSWCEN. [Encls 30, 47, 127, 179, 206, 213]

779. Proper medical manning to allow sufficient training, rest, and rotation is viewed by BTC leadership as essential to the success of BUD/S evolutions. [Encl 70]

780. Newly instituted 'Safe-to-train' PEDS testing, discussed below, and EKG screening, in addition to command urinalysis, are currently conducted by medical personnel supporting BTC. [Encls 47, 70]

781. During Hell Week, NSWCEN Medical Department now staffs the Medical Clinic 24 hours a day with a medical provider (physician or physician's assistant) and additional corpsmen and IDCs. [Encl 299]

782. Instead of closing on Friday after medical checks, the Clinic remains open until the candidates are released from the ROC on liberty on Saturday morning. [Encls 42, 299]

783. During Class 352, only one corpsman supported each Hell Week evolution. By Class 357, this support has increased to two field corpsmen per Hell Week evolution. [Encl 316]

784. Due to staffing limitations, the shifts during Hell Week operations in the NSWCEN Medical Clinic are 12 hours, whereas field corpsmen are on 8-hour shifts. [Encl 42, 229]

785. For Class 357 Hell Week, the staffing on each NSWCEN Medical and field corpsmen shift was not demonstrative of an equitable division of talent and experience. While some shifts only had senior and experienced medical personnel familiar with BUD/S candidates and Hell Week evolutions, others had personnel with only two or three months of experience. [Encl 42, 229]

III.D. Medical Personnel Training

786. Revamped initial and sustainment training is planned under the unsigned NSWCEN Medical SOP: [Encls 154, 299]

a. The Training Petty Officer will assign and track the completion of the Medical PQS and ensure that an annual refresher is completed. [Encls 154, 299]

b. The Training Petty Officer shall create a Long-Range Training Plan annually, and training shall be conducted on a weekly basis. [Encls 154, 299]

c. The training schedule and topics shall be maintained by the Training Petty Officer. Required training will include topics pertinent to maintaining Corpsman skills, safety, Naval Heritage and traditions, and advancement training. [Encls 154, 299]

d. The Training Petty Officer will maintain training binder, and training folder for all active-duty personnel. [Encls 154, 299]

787. This enhanced training has not yet begun and the NSWCEN Medical Department does not have an organized medical department training plan with identified training topics, training curriculum, or training schedule. [Encls 42, 154]

788. Once implemented, this training is expected to include drills of commonly seen medical issues during Hell Week. [Encl 42]

789. The NSWCEN Medical Department does not currently conduct drills in the field for corpsmen on specific listed occurrences or events described in the EAP. [Encl 42]

790. The NSWCEN Medical Department does not conduct proficiency training on any of the equipment used in the NSWCEN Medical Clinic or used by the corpsmen in support of field evolutions. [Encl 42]

III.E. Emergency Action Plans & Medical Treatment Guides

791. The consolidated NSWCEN Medical Department has generated new treatment guides covering falls, shortness of breath, hypoglycemia, heat injury, and hypothermia to guide what care is given, when to contact NSWCEN Medical, and when to return to training. [Encls 47, 108, 110]

a. The treatment guides were formulated by (b) (6) in response to the Safety Investigation findings sometime in the spring of 2022 but they could not point to where they were officially signed by a medical doctor or incorporated in an instruction. [Encls 47, 108, 110, 182, 183]

b. Corpsmen supporting BTC evolutions generally understood that the treatment guides had been updated once without an exact understanding of when or what the changes entailed. [Encls 47, 108, 110, 182, 183]

c. The training jackets of all medical personnel supporting BTC evolutions include the treatment guides. The current PQS addresses the five underlying medical conditions without referencing the actual treatment guides. [Encls 185, 186, 187, 188, 189, 190]

d. As part of on the job training, medical personnel assigned to support BTC evolutions are familiarized with these treatment guides but they are not required to have them at an evolution training site. [Encl 108]

e. As a matter of practice, a copy of the treatment guides are now often within the Phase EAP binder, and some field corpsmen use them to reference a particular procedure. [Encl 110]

792. NSWCEN has updated and standardized the 1st Phase Emergency Action Plan used by the BTC instructor and support staff. [Encl 194]

793. The new standardized EAP contains immediate actions for common conditions, injuries, and occurrences encounter in training environment. [Encl 194]

794. Some of these immediate actions in the EAP require action by medical personnel but the EAP is not required to contain specific or detailed medical treatment orders or medical treatment policy. [Encl 194]

795. The new standardized EAP contains specific EAP guidance for the conditions, injuries, or occurrence of: Near Drowning, Traumatic Injury, Heat Injury, Hypothermia, and Hypoxia [Encl 194]

796. The new standardized EAP does not contain specific guidance for: respiratory distress or hypoxemia (oxygen saturation less than 95% on pulse oximetry that does not resolve with rest and room air). [Encl 194]

797. The unsigned NSWCEN Medical Department SOP contains medical practice policy (called "Rules of Engagement") for field medical personnel to notify a physician or physician's assistant for the following: [Encl 299]

a. Any blood sugar reading less than 60 (oral glucose source may be given while provider is being called or the patient is being transported) [Encl 299]

b. Any pulse oximetry reading with an oxygen saturation less than 95% that does not rapidly correct while breathing room or outside regular air. [Encl 299]

c. Core temperature less than 95° Fahrenheit. Rewarming should be initiated while the duty provider is being called or patient being transported. [Encl 299]

d. Systolic blood pressure less than 90 or greater than 160. [Encl 299]

e. Diastolic blood pressure less than 50 or greater than 100. [Encl 299]

f. Heart rate less than 45 or greater than 110 beats per min when resting. [Encl 299]

g. Respiratory rate less than 8 or greater than 24 respirations per minute. [Encl 299]

h. No medications will be given unless specifically directed by a NSWCEN medical provider (physician, physician's assistant, or IDC) [Encl 299]

i. Oxygen is only to be used while the patient is being transported to NSWCEN Medical Clinic or if specifically directed by a NSWCEN provider (Physician, Physician Assistant, or IDC) or FEDFIRE. [Encl 299]

j. All diving injuries must be reported to a NSWCEN Undersea Medical Officer. [Encl 299]

798. The draft unsigned NSWCEN Medical SOP states that common medical conditions encountered during Hell Week include SIPE, hypothermia, hyperthermia, hypoglycemia, stress fractures, significant skin breakdown, and cellulitis. The SOP furthers states that the Medical Department shall be trained and equipped to manage these conditions. [Encl 299]

799. However, the draft SOP does not contain specific or detailed medical standing orders, clinical treatment practice guidelines, or medical treatment policy specific to any medical condition, event, or injury that would be routinely or emergently encountered in the BTC training environment or its associated EAP. [Encl 299]

800. Field corpsmen still determine oxygen saturation levels of Hell Week candidates using pulse oximetry, which is inaccurate in low temperature conditions. [Encl 42, 319]

801. Field corpsmen are heavily focused on the pulse oximetry results to assess candidates, and underuse other methods to assess the severity of their condition. [Encl 42]

III.F. Candidate Treatment Tracking and Continuity of Medical Information

802. After Class 352, NSWCEN Medical changed their practice and directed field medical personnel supporting BTC evolutions to provide updates on candidates seen and treatment given to NSWCEN Medical via command cell phones. [Encls 47, 108, 110, 154, 173]

803. For Class 353, the field corpsman was given a government cell phone with email capability in order to write subjective, objective, assessment and plan (SOAP) notes on all candidate interactions into an email that is sent to the NSWCEN Medical email distribution list for their situational awareness. [Encls 47, 108, 110, 154]

a. This SOAP note email policy is not contained in any policy or directive, and the unsigned SOP only directs that corpsman in the field supporting Hell Week submit an end of shift "Patient Log" via email to the NSWCEN Medical email distribution list. [Encl 299]

b. The draft SOP states that field corpsmen "will provide patient turnover information to help facilitate the triage and treatment of service members transported from field operations to higher echelon levels of care," but it does not provide further detail on what information should be provided or how. [Encl 299]

c. Confusion remained amongst field corpsmen during Class 357 Hell Week on which candidate interactions required them to submit SOAP notes or emails to NSWCEN Medical. The NSWCEN Medical policy was therefore clarified via email on the Wednesday evening of Class 357 Hell Week: "The following will be required for **every candidate** that seeks medical attention with field corpsman: (1) Call Duty Provider to discuss patient; (2) Log Book entry of medical encounter; and (3) Email to this group with SOAP note. The intent is to ensure that all medical encounters with candidates are captured and documented." [Encls 42, 154, 322]

d. Before this clarification, Class 357 candidates were seen during Hell Week by field corpsmen without any accompanying SOAP note. [Encl 42]

e. Beginning with Class 357 Hell Week, field corpsmen now use a computer tablet with Wi-Fi puck to write and send SOAP notes to the email distribution list. [Encls 52, 47, 110, 178]

f. It is the responsibility of the NSWCEN Medical duty provider to respond to any SOAP notes that are sent by field corpsmen. [Encl 42]

g. Field corpsmen and NSWCEN Medical Clinic staff could not articulate or show in writing the communication plan in the event of degraded communication capabilities. [Encl 42]

804. Content from these emailed SOAP notes are entered into the NSWCEN Medical Department Patient Tracking Spread Sheet Report and may be entered into the NSWCEN Individual Tracking and Readiness Management System (ITRMS), to provide continuity of information. ITRMS is a database system created and used only by NSWCEN. There is no written instruction directing reporting in ITRMS, and ITRMS entries by NSWCEN Medical staff do not occur in a consistent manner. (b) (6) has discussed broader use of ITRMS to allow improved medical information sharing across NSWCEN, but no plan with target dates has been established. [Encls 42, 154]

805. Field corpsmen are required per the draft SOP to continue to use a Hell Week Medical Logbook to document their interactions with candidates in the field. The SOP requires that documentation of 'high-risk' candidates in the logbook include the following: name; chief complaint; alertness to person, time, place and situation; and any examination, diagnostic results, interventions, and treatments prescribed. [Encl 299]

806. Neither the SOP nor any other guidance defines when a candidate would become 'high risk.' Documentation in the Hell Week Medical Logbook thus continues to be based on the independent discretion of each corpsman in the field to determine if the medical event encountered or medical action warrants inclusion. During Class 357 Hell Week, candidate were observed being assessed by the field corpsman, but the interaction was not included in the logbook. [Encl 42]

807. Documentation in the Hell Week Medical Logbook during Class 357 Hell Week was not uniform across all field corpsmen shifts. [Encl 42]

808. NSWCEN Medical no longer uses the whiteboard to track 'high-risk' candidates that are seen by NSWCEN Medical. [Encl 42]

809. Instead, they now use an internal spreadsheet that is updated throughout Hell Week and is only accessible by NSWCEN medical personnel. [Encl 42]

810. Although the draft SOP requires the use of the internal spreadsheet tracker, it does not dictate what information must be included. [Encls 42, 299]

811. Prior to each pre-scheduled Medical Check, the NSWCEN Medical team holds a sync with the field corpsmen on duty. [Encl 42]

812. The field corpsmen ensure that the NSWCEN Medical 'high-risk' spreadsheet tracker is consistent with what they have been seeing and treating in the field, but there is no set checklist or protocol for what material must be covered or turned over. [Encl 42]

813. After medical checks are completed, the NSWCEN Medical team holds another sync with the field corpsmen. [Encl 42]

814. NSWCEN Medical updates their internal tracker with new 'high-risk' cases and briefs the field corpsmen on what they observed and treated during the medical check. [Encl 42]

815. The NSWCEN duty provider then sends an email to the field corpsmen with the updated medical information on all 'high-risk' candidates so that the field corpsmen can provide this information to the oncoming field corpsmen, Shift OIC, and Safety Officer during shift turnover. [Encl 42]

816. The instructor serving as the Shift OIC and Safety Officer during Hell Week also occasionally attend this post-medical check sync to learn about new or ongoing 'high-risk' candidates, but their attendance is not uniform and is not required by any written guidance. [Encl 42]

817. Beginning with Class 354, NSWCEN Medical now scans and uploads all SF600 completed during Hell Week into candidates' electronic medical records. [Encl 175]

818. At the securing of Hell Week, the field corpsman on the final shift is directed to provide all medical logs and documentation to NSWCEN Medical and will remain present through the final medical check in the Clinic. [Encl 299]

III.G. Recovery Observation Center

819. Beginning 16 March 2022, any candidate securing Hell Week will be escorted to the Recovery Observation Center (ROC) for check in after an initial medical check. As was previously true, any candidate dropping on request or pulled for medical or performance will also go to the ROC. [Ref ak, ay]

820. BTC is responsible for operation of the ROC, with BTC Operations Department responsible for its manning and operations. [Ref ak, ay]

821. All candidates will spend a minimum of 24 hours under ROC observation. [Ref ak, ay]

822. This is a change from earlier practice, where only candidates who were medically pulled, performance pulled, or DOR were required to stay in the ROC. [Ref ax]

823. The 24 hours begins when the candidate checks into medical and not when they are removed from Hell Week. [Ref ak, ay]

824. Twenty four hours is the minimum time that a candidate must be observed within the ROC. A candidate may have to remain longer than 24 hours if psychological or final medical assessment have not been completed. [Ref ak, ay]

825. When a candidate completes or fails to complete Hell Week, they will first be seen by NSWCEN Medical. [Encl 42]

826. All candidates will be assessed by NSWCEN Medical as Green or Low Risk, Yellow or Medium Risk, or Red or High Risk. [Encls 42, 299]

a. Green: Candidates are assessed as 'Green' if found to be low risk. These candidates are stable for rest and recovery for 24 hours in the ROC with a corpsman and instructor present at all times. Candidates sleep in an open room for constant monitoring. [Encls 42, 299]

b. Yellow: Candidates assessed as 'Yellow' need additional supervision, and so remain in the NSWCEN Medical Clinic under the direct observation of a medical provider (physician or physician's assistant), until they are assessed as low risk. [Encls 42, 299]

c. Red: Candidates assessed as 'Red' need higher or advanced medical care and are sent to Naval Hospital Balboa, or to Sharp Memorial Hospital Coronado Island if the concern is an emergency. [Encls 42, 299]

827. Low risk candidates are free to transfer to the ROC to begin their 24-hour period. [Encls 42, 299]

828. Medium risk candidates are treated and kept at NSWCEN Medical until they are assessed as low risk. [Encls 42, 299]

829. High risk candidates are transported to Naval Hospital Balboa for higher care. [Encls 42, 299]

830. On 21 October 2022, a new NSWCEN instruction directed that each ROC shift be comprised of four separate and distinct roles: (1) a ROC person in charge; (2) a duty medical provider at NSWCEN Medical; (3) a corpsman within the ROC who is able to provide supervision and care; and (4) CATS personnel to provide support as directed [Ref ak, ay]

a. The ROC person in charge is required to be a NSWCEN staff member who is an E-5 or above and a high-risk safety instructor. This person must be mature and able to manage a staff. [Ref ak, ay]

b. The ROC PIC is responsible for the supervision of all personnel within the ROC, as well as maintaining 100% accountability for all candidates within the ROC and ensuring each completes their requirements for release. [Ref ak, ay]

c. Up until the Class 357 Hell Week secure, the ROC PIC was an instructor in the grade of E-6 or above. Instead of remaining in the ROC, a corpsman instead came every four hours from the Clinic to take vitals of the candidates within the ROC. The frequency with which the corpsman was to visit the ROC was not specified in any instruction or document. [Encls 42, 342]

d. Once Hell Week secured, the PIC was an E-6 corpsman who by definition did not qualify to fill the position of the ROC PIC under NSWCEN's instruction. No high-risk safety instructor remained in the ROC. [Encl 42]

e. The corpsman filling the role as ROC PIC was responsible for not only the medical oversight of the candidates within the ROC, but also the administration of the ROC and management of the CATS personnel. Despite a second corpsman coming into the ROC every four hours to take vitals, the corpsmen serving as the ROC PIC was the only individual on the ROC watchbill for that time period. [Encls 42, 342]

f. The CATS personnel inside the ROC indicated that they did not know who was in charge or to whom they were reporting. [Encl 42]

g. The corpsman filling the role as the ROC PIC attended the medical sync following Friday's medical check to receive information on the candidates in the ROC. However, he did not receive clear information on which candidates were required to take medication and when. As a result, this corpsman was required to read through each candidate's brown folder to determine if any of the candidates not discussed during the medical sync were taking medications. [Encl 42]

831. By instruction, each candidate receives a Candidate Removal Tracking Form that indicates their reason for removal from Hell Week, what time they reported to the ROC, and, eventually, that they have completed all necessary steps to be removed from the ROC. [Ref ak, ay]

832. The ROC PIC also utilizes a digital Tracking and Accountability Dashboard and a whiteboard to track each candidate that has been removed, has dropped on request, or has secured from Hell Week. [Encl 42]

833. The dashboard indicates via color code whether a candidate is Low Risk (green), Medium Risk (yellow), or High Risk (red). [Encl 42]

834. NSWCEN Medical updates candidate medical information on the ROC digital dashboard utilizing an ITRIMS spreadsheet that is separate from their internal medical patient tracker. No instruction or policy guided the use or information entry of data into the ITRIMS spreadsheet. [Encl 42]

835. However, this spreadsheet does not consistently update the dashboard, meaning medical information in the ROC could be out of date. [Encl 42]

836. The ITRIMS spreadsheet was also used inconsistently, meaning it could be missing medical information on candidates within the ROC that was only known to the providers at NSWCEN Medical Clinic. [Encl 42]

837. Similarly, as the ROC continues its shift from paper forms to a digital dashboard, there is an overreliance by the ROC PICs on the Candidate Removal Tracking Form, which is not a medical form and does not always indicate the medical condition or medications of the candidates in the ROC. If medical information was missing from the form, the ROC PIC did not always contact NSWCEN Medical to receive those details. [Encl 42]

838. Per instruction, it is the responsibility of the ROC PIC to ensure the candidates within the ROC are taking their prescribed medications on time. However, there is no clear mechanism or communication plan by which the ROC PIC receives information on which candidates are required to be taking medications and when. [Encl 42; Ref ak, ay]

839. This places the onus back on candidates who may be in a degraded physical or mental condition to ensure they are taking their medications properly and at the proper times. [Encl 42]

840. The first ROC shift begins one hour prior to the beginning of Hell Week and is stood down upon clearance of every candidate by medical staff. [Ref ak, ay]

841. The construct for execution of the ROC remains unclear. The governing instruction from NSWCEN directs the Commanding Officer of BTC to assume responsibility for the ROC and makes the BTC Operations Department responsible for its manning and operation. However, medical oversight of the ROC is provided by the NSWCEN Senior Medical Officer. Fully manning a ROC shift requires both qualified BTC or NSWCEN instructor cadre and NSWCEN medical personnel. This construct results in a subordinate command tasking a parent command's personnel in the execution of their duties and no clear authority for the establishment of a watch bill. [Ref ak]

842. NSWCEN Medical Department updated the language contained in their medical debrief provided to the candidates that secured Hell Week. The medical debrief is now given on Saturday when the candidates are released from the ROC. Each candidate is provided a card that reads: "Contact Duty Medical for any medical concerns after hours of operations, or in case of emergency call 911. If you need to visit the ER the first option is Balboa Hospital, if that is not possible, please visit the nearest ER. If you are seen at a non-military medical facility, please contact Duty Medical for continuity of care." [Encl 42]

III.H. Candidate Screening and Education

843. BTC has begun conducting EKG screening of candidates during NSWO, to detect any cardiac anomalies and establish a baseline. [Encls 47, 154]

844. After Class 352, (b) (6), NSWCEN SMO, added elements to his brief to candidates during NSWO on the dangers of not bringing injuries forward to medical personnel for treatment early, focusing on the risk that a treatable injury, resulting at worst in rolling back to a later Class, can become a disqualifying injury without treatment, leading to a medical drop from the pipeline. [Encl 154]

III.I. Phoenix Division

845. Phoenix division, whose population ranges between 165 and 220 personnel, is currently run by four personnel, with billets 50% manned. NSWCEN has recouped 8 billets specifically to reclassify students after disenrollment. They are also in the process of looking to contract for two psychologists to support continued care of Phoenix personnel while they go through the transfer process. [Encls 106, 306]

846. NSWCEN has developed and is implementing a plan to revamp the structure and care given to Sailors in Phoenix division, led by the NSWCEN Operations Master Chief. The Division will be divided into sections progressing through stages of getting healthy, being reclassified, and transferring to the Fleet; have regular PT sessions; arrange mentorship by area communities; and work to accelerate reclassification and transfer. To support this effort long-term, NSWCEN requires additional manning of an O-3 OIC, an E-8 SEA, an E-7 LCPO with recruit division commander (RDC) experience, and E-6 as LPO, and 2 E-5s. [Encls 106, 306]

IV. *Changes to NSW PEDS Policy or Procedure after Class 352*

IV.A. 'Safe to Train' PEDS Testing

847. CAPT Sulick, the BTC Commanding Officer, stated that his discussions with Commodore Drechsler on assuming his position included a focus on PEDS detection and deterrence. [Encl 119]

848. Commander, NSWCEN, sought permission from OPNAV N17 to implement a permanent PEDS testing protocol at NSWCEN on 31 May 2022. This request was amplified and clarified by NSWC on 18 August 2022. [Encl 344]

a. This request was favorably endorsed by OPNAV N17 on 8 August 2022. On 19 September 2022, the Assistant Secretary of the Navy (Manpower and Reserve Affairs) endorsed the request to the Director of the Department of Defense Office of Drug Demand Reduction, requesting authority to conduct a prevalence study to evaluate blood and urine for PEDS and, if prevalence of detection warrants it, to proceed to random testing and unit sweeps for PEDS. [Encl 320, 321]

b. As of the date of this report, NSWCEN has not received approval from the Department of Defense for either a prevalence study or a permanent PEDS testing protocol. [Encls 30, 154, 173]

849. While awaiting decision on permanent, systematic PEDS testing, NSWCEN implemented an interim ‘Safe to Train’ testing policy on 26 July 2022: “Until additional testing protocols are approved by the DoD, the safety screening process outline in this interim policy optimizes the tools available to ensure candidates are safe to train.” [Ref u]

850. The NSWCEN instruction defines PEDS as including, but not limited to: “anabolic agents or steroids and those substances explicitly listed in classes S1, S2, and S4 of the world anti-doping code prohibited list (including updates and amendments by the World Anti-Doping Agency (WADA)).” [Ref u]

851. Under this policy, NSWCEN ordered BTC to test every candidate for PEDS during each phase of SEAL and SWCC assessment and selection pathways. [Encl 119, 347; Ref u]

a. NSWCEN policy does not direct at what point during each Phase that a candidate must be tested. [Ref u]

b. Currently, a single urine sample is collected by field corpsmen from each candidate during each phase of training. The date that candidates must provide their urine sample is determined by the BTC Commanding Officer. [Encls 47, 347; Ref u]

852. The ‘safe-to-train’ testing screens candidates for testosterone and epitestosterone (T/E) ratio elevations. [Encls 57, 119; Ref u]

a. The current testing policy relies on elevated T/E ratios to suggest a health concern, including use of PEDS, that warrants further screening to ensure candidates may safely continue training. [Encl 57; Ref u]

b. This policy utilizes one of the tests in the WADA 'Athlete's Biological Passport' which uses urine T/E ratios above the 'normal' level as an indication of exogenous (external) use of testosterone or its analogues. [Encl 49]

c. WADA determines a 'normal' T/E ratio to be 1.0 and considers a T/E ratio above 4.0 to be suspect. [Encl 49]

d. NSWCEN uses a urine T/E ratio of 1.0 as normal. [Ref u]

e. Samples are sent to Naval Medical Center San Diego for tracking and forwarded to Lab Corp for the testing. [Encl 47]

f. Testing and results typically take two weeks. [Encl 47]

853. A T/E ratio of less than 4.0 is determined 'safe to train.' [Encls 57, 119; Ref u]

854. Candidates with a T/E ratio of 4.0 or greater will be immediately removed from training and placed on hold as a risk mitigation measure, pending further medical testing and evaluation. [Encl 119; Ref u]

a. A candidate that has a T/E ratio of 4.0 or greater is required to submit for further medical urine testing to ensure a medical condition is not causing the elevated ratio. [Encl 119; Ref u]

b. A T/E ratio of 4.0 or greater could establish either probable cause for further urine testing, and further testing can be ordered by the BTC Commanding Officer. [Ref u]

c. Urine samples from probable cause testing are processed through Navy Drug Screening Lab (NDSL) Great Lakes and sent to the Sports Medicine Research and Testing Laboratory (SMRTL) in South Jordan, Utah. [Encl 308]

d. The Department of Defense maintains a contract with SMRTL specifically for PEDS testing. [Encls 308, 309]

e. Under the contract, the Navy and Marine Corps are funded for 400 PEDS tests at SMRTL per year. [Encls 308, 309]

f. SMRTL tests for S1 anabolic agents, including anabolic androgenic steroids and other anabolic agents such as SARMS; S2 peptide hormones and growth factors related substances and mimetics; and S4 hormone and metabolic modulators using gas and liquid chromatography with mass spectrometry. [Encls 308, 310, 311]

g. An initial screening test is performed for PEDS in the sample received by SMRTL. [Encl 308]

h. If the initial screening procedure is negative, SMRTL will not test the sample further and will report it back to NDSL as negative. [Encl 308]

i. If the screening procedure performed on urine samples from NDSL is positive, SMRTL will conduct an additional test on the sample to confirm the presence of that drug or supplement. SMRTL will stop after only one positive, however, and will not test for every single positive that comes up on the initial screening process. [Encl 308]

j. If a sample is positive for PEDS, SMRTL will send a report to the command detailing which substance was found. [Encl 308]

k. The entire process from the receipt of urine sample by NDSL Great Lakes to delivery of the test result to the command takes approximately 6-8 weeks. [Encl 308]

855. Positive results for a prohibited or controlled substance from NDSL/SMRT testing could result in a candidate being removed from the program and processed for additional disciplinary and/or administrative action. [Ref u]

856. While awaiting results from SMRTL, a candidate may be required to submit to further 'Safe to Train' testing to determine their fitness for training. [Encl 119; Ref u]

857. Even if the SMRTL test is returned negative, BTC CO, upon consultation with medical, may still determine a candidate's T/E ratio in these subsequent tests makes them unsafe to train. They will be dis-enrolled from training and placed in Phoenix Division. [Encl 119; Ref u]

858. As of the date of this investigation, 1461 candidates have been tested under the 'safe-to-train' program, with 62 candidates showing T/E levels above 4.0. This approximates to a 4.24% positive rate above 4.0. [Encl 47]

859. As of the date of this investigation, 49 candidates have undergone NDSL/SMRT testing and two have had positive results for prohibited or controlled substances. The two positives came from Class 352 candidates. [Encl 47]

860. Most candidates expressed that testing for PEDs is an effective deterrent of its use in BUD/S. However, there was concern about the accuracy and consistency of a testing program, and whether it could result in false or inconsistent positive test results. [Encls 289, 290]

861. BTC leadership remains concerned about missing a candidate using PEDS due to limited testing and exposing them to unquantified risk in the Hell Week crucible events. [Encl 119]

862. BTC leadership is also concerned about wrongly implicating a candidate as using PEDS based on the limited testing available; as result, there are about 20 candidates awaiting disposition while additional information is gathered. [Encl 119]

863. Finally, BTC leadership is concerned that the command will lose credibility if it isn't able to follow through on administrative or disciplinary action for PEDS users, due to the limited DoD testing capacity usable for those purposes. [Encl 119]

IV.B. PEDS Deterrence

864. BTC leadership is aware that human growth hormone and testosterone are readily available in the civilian sphere. [Encl 119]

865. BTC is also aware of a perception that BUD/S difficulty has risen, which may drive some candidates to use PEDS. [Encl 119]

866. (b) (6), NSWCEN SMO, conducts a PEDS informational session with new candidates during NSWO, covering risks of use, lack of significant benefits, and the 'safe-to-train' testing program. [Encl 154]

867. NSWO leadership is developing a comprehensive PEDS training program for new candidates incorporating a Human Performance Program representative, a doctor or endocrinologist, and a current SEAL to detail the negative side effects of PEDS use. NSWO plans to codify this training within the next 30 to 45 days. [Encl 209]

868. BTC updated the Student Guide, renaming it the Candidate Guide, on 18 May 2022. There were no changes to the Medical and Dietary Supplement Policy. [Ref aw]

869. NSWCENINST 6001.1 also updated the Page 13 the candidates are required to sign, which now specifically lists SARMS and bioidentical hormones as examples of prohibited substances. [Encl 136]

870. No changes have been made to the barracks instruction schedule or the way in which barracks are randomly inspected. [Ref aq]

871. The interior of candidate lockers are still not an inspectable item on the BTC Daily Room Inspection Sheet. [Ref aq]

872. No additional vehicle searches are conducted. [Encl 119; Ref aq, aw]

873. No changes have been made to NSWCEN or BTC policy regarding candidates having vehicles on base. [Encl 119; Ref aq, aw]

874. On 19 August 2022, Commander, Naval Special Warfare Command released "Trident Order 14" to the force. [Encl 345]

875. Trident Order 14 directs the following as it relates to PEDS deterrence: [Encl 345]

a. Education and training on prohibited PEDS starting in the NSW Assessments, Selection, and Training pathway with continual reinforcement throughout NSW service.

b. Whenever prohibited PEDS use, possession, or distribution is detected, such occurrence must be fully investigated and appropriately addressed.

c. Personnel must understand the scope of prohibited PEDS, anabolic steroids, anabolic agents, SARMS, and prohibited dietary supplements.

d. Updated requirements on reporting suspected use, possession, or distribution of prohibited PEDS to alert NSW leadership to new trends and problems associated with PED use.

OPINIONS

The convening order for this investigation directed inquiry both into the facts and circumstances of BUD/S Class 352 Hell Week as they related to SN Kyle Mullen's death, as well as into seven specific aspects of BTC's planning, execution, and oversight of Hell Week. To answer the specific questions tasked, as well as to gain a full understanding of the circumstances surrounding SN Mullen's death, this investigation looked in depth at the systems involved in supporting the BUD/S process, including instructor training and qualification, the high risk training safety program, medical support, and the deterrence and detection of performance enhancing drug and supplement use by BUD/S candidates. The perspectives of candidates no longer in the training pipeline, candidates continuing through training, the civilian and military instructors conducting it, and the senior civilian and military staff supporting them were critical to forming complete opinions. While this mandate was broad and stretched beyond the specific incident, this section provides opinions and analysis focused on identifying sources of unidentified, accumulating, unmitigated risk to BUD/S candidates. Opinions are organized in four areas:

- The risks to candidates introduced by the curriculum as implemented, and the insufficient oversight in place to identify and correct deviations.

- The risks to candidates left unmitigated by a safety program with personnel lacking tools, information, training, and experience to identify all sources of accumulating risk, accurately assess hazards, and apply available mitigations.

- The risks to candidates created by the failure of NSWCEN and BTC leaders to ensure their medical system was trained, organized, integrated, and drilled to ensure continuous effective medical support to candidates.

- The risks to candidates created by use of performance enhancing drugs and supplements during BUD/S, and the lack of effective means to deter and detect such use.

Common to all areas was inadequate recognition, appreciation, assessment, and effective mitigation by leaders and staff of these additional sources of risk to candidates already undergoing an arduous training pipeline.

1. **Critical Moment during Class 352.** The moment on the beach at 0816 on 4 February, when SN Mullen was taken to the ambulance a second time, illustrates many of the issues described below. [FF 531]

a. An attentive instructor, busy with monitoring 20 other fatigued Sailors executing a crucible training event, identified a struggling, possibly injured candidate, and brought him to a trained medical professional for evaluation. [FF 531-534]

b. Despite prior mishaps involving bacterial pneumonia, reintroduction of Bicillin as a prophylactic had not been identified as a mitigation. [FF 54.d, 362]

c. The candidate's symptoms resembled SIPE, a common condition seen during BUD/S, usually not dangerous to candidates, and one which both the instructor and paramedic had been conditioned by experience to expect. [FF 51, 52, 345]

d. There were no treatment guides or other aides to identifying when similar symptoms might indicate a different, more serious problem, and the Emergency Action Plan did not address serious possible conditions such as hypoxemia. [FF 324]

e. The candidate had suffered progressively worsening symptoms throughout the second half of the week but had not brought them to instructors or medical professionals out of a fear of being medically rolled, a desire not to be seen as weak, and a very high personal motivation to complete the course. [FF 505-507, 509.a-d, 511, 513-515, 519, 523-524, 526-527, 528.a-o, 529-533, 535.a-j, 538, 539, 542, 543]

f. When previously evaluated for these symptoms, the candidate's desire to continue was accommodated by the paramedic and instructor cadre in returning him to training. [FF 498.f, 528.j, 528.n]

g. The medic did not consult with a duty medical provider about his assessment, the treatment given, or whether further medical care was needed. [FF 534]

h. Information about this evaluation, the symptoms seen, the treatment given, and the recent history of such symptoms was recorded in a log book, but was never communicated to medical providers at the Clinic as there was no requirement to do so and no integrated drills had been conducted to identify this gap. [FF 311, 359, 456, 548, 789, 790, 791]

i. An instructor wanted to allow the candidate to complete training with his boat crew and stand on the berm with his Class to secure Hell Week. [FF 535.j]

j. The candidate, intent on doing everything possible to complete the pipeline, was at increased risk of serious injury during Hell Week conditions of extreme fatigue and environmental exposure, with decreased ability to compensate and recover from such injuries. His unknown cardiomegaly, regardless of cause, was an unappreciated source of accumulating risk. [FF 69.b, 75.a-f, 76, 398, 409.a-b, 410.a-f]

k. After securing training, all candidates were entrusted for monitoring to very junior enlisted watchstanders, with no medical or emergency care training, and were encouraged not to seek civilian medical care as it might result in treatment incompatible with training. A duty medical provider repeatedly advised the watchstanders not to call for medical aid outside NSWCEN Medical, and the candidate declined to call for medical care as he did not want to be medically rolled back. [FF 443, 446, 656- 658, 670, 671, 695]

2. **Not a Singular Event.** SN Mullen's death was not a singular, unforeseeable event. At least 11 visits to medical occurred by candidates for pneumonia during Classes 347-357, with 112 other visits for SIPE or pneumonia, there have been at least three prior mishaps involving pneumonia. Four candidates in Class 352 either got pneumonia or were sent to the hospital to be treated for potential pneumonia, ultimately being diagnosed with productive cough, with some concern for pneumonia. Two of those candidates, (b) (6) , were admitted to the hospital on the same night as SN Mullen, with (b) (6) requiring intubation. Neither of these candidates tested positive for PEDs. In both cases, those candidates were cleared at the final NSWCEN medical check. They only received treatment because (b) (6) persisted against (b) (6) , the duty medical provider, and (b) (6) called the ambulance. The same accumulating, unidentified, and unmitigated risks contributing to SN Mullen's condition impacted these other candidates. As addressed below, these risks were the result of a variety of factors including, inadequate oversight, insufficient risk assessment, and poor medical command and control. [FF 52, 584, 671, 672, 674-683, 722, 733, 749]

3. **BUD/S Curriculum.** The BUD/S curriculum is well-developed, linked directly to elements of community warfare tasking, and, after validation in 2005 and then again in 2015 by the Naval Heath Research Center, has successfully produced special operators to sustain the SEAL community for 17 years. The difficulty of its evolutions, the stress on and inherent risk to candidates participating, and the historical attrition rates represent a rigor necessary to producing Naval special operators capable of fulfilling arduous real-world operational tasking. Senior naval special operators recounted that the crucible of Hell Week provides future SEALs a better understanding of what they are capable of and a model of perseverance they can reach back to during trying periods of real world operations. As discussed below however, controls on curriculum execution, robust risk management, and integrated medical support are required to manage the risk to candidates. [FF 30, 31, 32, 33, 34, 36, 37, 38]

Instructor Training, Qualifications, Experience, and Curriculum Management and Execution

This section addresses risks to candidates introduced by the curriculum as implemented, and the insufficient oversight in place to identify and correct deviations.

4. **Curriculum Execution during Class 352.** No direct connection was found between SN Mullen's death and the BUD/S curriculum or how it was executed. However, the execution of the curriculum with limited rest and recovery periods during the time of Class 352 produced more fatigued, compromised candidates. Some of the civilian cadre brought the issue of increased intensity to CAPT Geary's attention as early as Classes 348 and 349, and he considered this factor in his analysis of the possible reasons for increased attrition. But he did not take actions until after Class 352, when he mandated sleep and removed ruck runs. Allowing continued execution of the curriculum in this manner while accompanied by historic, rapid, and significant changes to attrition demonstrated insufficient oversight by CAPT Geary, the BTC Commanding Officer, as well as the Executive Officer and Command Master Chief of BTC. (b) (6) as the 1st Phase OIC was directly responsible for the execution of the curriculum by his instructors. [FF 19, 45.d, 63.a, 86, 161, 165-168, 171.f, 188.b, 197, 261, 413]

5. **Controls Required.** As in any training curriculum, managing risk and ensuring proper execution of the BUD/S curriculum required controls in the form of deliberate evaluation and management of curriculum changes; processes to evaluate whether instructors have appropriate temperament, maturity, training, and experience; processes to promote a learning culture supported by timely data capture and analysis to identify negative trends; and oversight to identify and correct deviations in stride. Controls in place at the time of Class 352 were inadequate, as addressed in detail below. [FF 24- 29, 36-38, 42-45, 187, 189, 192-193, 197, 200-202]

6. **Candidate Population.** For 1st Phase in particular, most candidates are new to the Navy and have just come from an initial induction pathway, either boot camp or an officer accession program. They have minimal military experience, are highly motivated and often singularly focused on successfully completing training, and are unaware of the existing mechanisms for seeking help, giving feedback, or reporting misconduct. This is a particularly challenging training audience that requires additional maturity and perspective from instructors to train effectively and safely. This is recognized in the 1st Phase instructor CUIT, stating that "instructors assigned to BUD/S [must recognize their] own temperament in working with new and unskilled students." [FF 49, 84, 115-116, 171.b, 177, 179, 200.b]

7. **Organizational Drift.** When controls are inadequate or degraded, organizational behavioral drift is a possible result. Organizational drift, or accumulating risk blindly, is the most significant causal factor found in mishaps. As outlined in enclosure (346), behavioral drift is the establishment of unofficial practices that by repetition become unintended standards, often arising from instructor attempts to improve the program outside of formal validation processes. Organizational behavioral drift is a challenge in every training environment. Organizational drift is mitigated by careful instructor selection, clear guidance from leadership on execution, attentive supervision by experienced personnel, improved training on the purpose and effectiveness of approved standards, and effective oversight. Noted outcomes of organizational drift are unintended increased risk for students, failure to meet intended outcomes, and students ill-prepared for real-world situations. Commanders of training units bear the responsibility to ensure adequate processes are in place to detect organizational drift, that instructors and safety personnel adhere to standards, and that standards are reviewed for efficacy and appropriateness. As detailed below, BTC, commanded by CAPT Geary, showed organizational drift in execution and oversight of the BUD/S curriculum during Class 352. [FF 42-44, 200.b, 202, 206-208, 210-213, 222, 226]

8. **Deviation during Class 352.** During Classes 346 to 354, from February 2021 to May 2022, the controls in place for 1st Phase were inadequate which resulted in drift in curriculum execution and contributed, along with other factors, to heightened attrition. Attrition from BUD/S naturally rises and falls between Classes with seasons, environmental conditions, and less tangible factors such as strong Class leadership and Class maturity. BUD/S classes on average start with 148 candidates, with 69 candidates or 46% attriting prior to Hell Week. Of those, on average, 44 candidates DOR, 13 are medically rolled, 1 is medically dropped, 8 are performance rolled, and 3 are performance dropped. Attrition of Classes 346 to 354 was notably higher than historical average. At the approximate peak of attrition during this time frame, Class 353 started with 131 candidates with 103 candidates or 78% of the class attriting by the beginning to Hell Week. Of

the candidates who did not make it to Hell Week, 87 candidates DOR, 5 were medically rolled, 7 were medically dropped, 4 were performance rolled, and none were performance dropped. Throughout this period, average attrition before Hell Week due to DOR was 21 percentage points higher than the historic average while attrition due to medical reasons was relatively unchanged. BTC's target annual production is 175 qualified naval special operators. By Class 353, BTC was on track to under-produce by 100 personnel and this deviation was known to NSWCEN and NSWC leadership. This deviation had multiple potential contributing factors: impacts from COVID, dissolution of the 800 division at RTC, movement of enlisted preparation to NSWO, and the virtual nature of SOAS. Additional factors were the temperament and inexperience of 1st Phase instructors at the time, a distorted view of the goal of the selection program, limited oversight from other experienced personnel, and limited quality assurance review of execution. [FF 9, 39, 162-173, 757.a-c]

9. **Instructor-dependent Curriculum Execution.** While the BUD/S curriculum uses every opportunity for objective measure and standardization, the majority of the evaluative criteria in the BUD/S pipeline are still subjective, relying on instructor discretion. Instructors also have significant discretion to adjust the intensity of execution, to create situations revealing characteristics of candidate fortitude, teamwork, and cognition under stress. Exercising this degree of latitude while executing high-risk training requires mature, experienced instructors who have appropriate instruction on this specific training environment. As addressed below, these qualities were not fulfilled during the period of Class 352. [FF 33, 158]

a. **Instructor Seniority, Maturity, and Experience.** Currently, there is no pre-screening or selection process for BTC instructor billets. Billets at deployable commands are often more professionally rewarding, special pays from other commands lapse while at BTC, and many BTC instructor billets are filled with personnel early in their special warfare careers due to low force-wide density of experienced operators. This is true of both the instructor cadre and some of the Phase leadership. The result is that the quality, suitability, and motivation of BTC instructors varies. During Class 352, the 1st Phase OIC had not led as a SEAL Department Head and Class 352 was only the 3rd BUD/S Class for the Phase civilian Deputy OIC. [FF 23, 85, 92, 96-101, 412]

b. **Instructor Training and Qualification.** The four-week IQC conducted by NSWCEN at the time of Class 352 covered all essential indoctrination, but most practical instructor training and evaluation occurred 'under instruction,' through OJT and mentorship by existing cadre and Phase leadership. Evaluations occurred regularly, but after IQC were often conducted by other instructors in the same Phase who are likely to have the same blind spots and normalized deviations. This meant that senior SEALs and training subject matter experts had very limited opportunities to continue educating instructors and, as discussed below, this opportunity was reduced further by command direction for civilians to step back. [FF 23-29, 102, 154]

c. **High Workload.** 1st Phase manning is sufficient to conduct training during weeks 1-3 but not sufficient to conduct Hell Week without augmenting the cadre with instructors from other Phases. 1st Phase instructors are also routinely required to work long hours and manage collateral duties while Classes are in training. The result is a burden on Phase leadership to

monitor evolution execution and correct deviations, while these officers and senior enlisted personnel are also occupied by the safety, medical, and personnel requirements of running a high-risk training program, as addressed below. 1st Phase leadership must also continuously monitor the integration of instructors, as well as their stress and fatigue, to ensure instructor performance. These additional requirements require additional training, standardization, and oversight. [FF 18-22, 103-104, 180, 196, 414-415]

10. **Attrition Focus.** One factor in the heightened attrition surrounding Class 352 was the deviation in curriculum execution by instructors. It is intended that instructors adjust the intensity of execution to appropriately stress the candidates and achieve evolution objectives. During this period however, 1st Phase cadre executed the majority of evolutions each day at a high intensity, often requiring excessive repetitions of physical exercises between skill events. They also did not allow 'slack,' or rest and recovery during periods without set exertion requirements, as was common in previous and subsequent classes. As an example, instructors continued conducting 'burnout' or hours-long physical training to complete exhaustion, throughout the week proceeding Hell Week when it had traditionally been tapered down to allow candidates to rest and heal minor injuries. One part of this mindset was a consciousness of the changes to platoons in the SEAL Teams, and RADM Howard's quote while Commander, NSWC: "Zero is an okay number; hold the standard." His intent was to relieve pressure to produce a certain number and maintain focus on character attributes, but was understood by some cadre as encouraging attrition. Both civilian mentors and senior special operators noted a divergence from a production mindset, one of building special operators, to an attrition mindset. Stemming from their inexperience, execution of the 1st Phase curriculum focused on 'weeding out' candidates and "hunting the back of the pack" of the Class during the first three weeks. As a result, they lost the intent of evolutions such as Surf Passage to build teamwork, and instead continued to push fatigued candidates hard. [FF 34, 81-85, 140, 164, 171, 173, 751]

11. **Reduced Oversight.** This application of the curriculum at the far end of the acceptable spectrum of intensity was facilitated and perpetuated by the sidelining of the experienced civilian mentors. While there is an extensive formal curriculum review structure at NSWCEN and BTC, it is largely administrative in nature and operates on annual / triennial timelines. The civilian mentors had been hired to provide continuity of execution, and to give perspective and act as a temper to the active duty cadre, most of whom had no prior instructor experience. They also acted as a first line of oversight able to spot and correct deviations and raise continued issues to command leadership. These civilians maintain a longer-term view of the BUD/S pipeline, focused on production and building SEALs from candidates. Shortly after taking command, the BTC Commanding Officer, CAPT Geary, made a deliberate decision to reduce this control on instructor execution of the curriculum. Directing the civilian mentors to step back and defer to the active duty Phase leadership, he reduced the influence of these experienced, mature cadre. He also ignored the warnings of senior civilians in BTC about curriculum deviation as early as Classes 348 and 349, even as they more aggressively highlighted deviations and accompanying heightened attrition as it continued through 2021 and into 2022. CAPT Geary maintained a view that the high attrition was caused, among other reasons, by the current generation having less mental resilience, or being less 'tough.' As a result, while he removed ruck-runs and added

mandatory sleep, he made the decision to take no additional action on the deficient controls on instructor cadre execution and heightened attrition continued through Class 353. [FF 36, 143, 147-156, 162, 171-172]

12. **Corrective Actions.** The NSWCEN Commander and BTC Commanding Officer currently conduct thorough oversight of curriculum execution, and have made substantive changes codified in written guidance. The current 1st Phase instructor cadre conducts training within curriculum standards and within the boundaries of instructor intensity set by BTC and NSWCEN guidance. NSWCEN and BTC responded to the heightened attrition in several ways. First, by moving experienced leadership into 1st Phase; the current 1st Phase leadership includes an officer with multiple leadership tours and a Master Chief SEAL as the SEA. They also revitalized curriculum oversight by empowering the civilian mentors, re-engaging BTC Operations spot observations of evolutions, and adding external evaluation by the NSWCEN TSAT to physically observe instruction, identify lessons learned, and improve instructor execution. The convening of a CRB by CAPT Drechsler will also allow a holistic look at whether there has been other intensity creep not connected to warfare requirements, as was identified with the 'ruck runs' added to 1st Phase. NSWCEN added specific initial instructor training for BTC instructors, including personal guidance from BTC and NSWCEN Commanders to instructor cadres to ensure their intent on execution is understood. Observation during Class 357 showed universally professional, safe, and rigorous execution of evolutions. The return of attrition to historical averages once corrective actions were taken is one indicator of successful corrective actions. [FF 167, 759]

Safety Oversight and Risk Management of BUD/S

This section addresses risks to candidates inadequately unmitigated by a safety program with personnel lacking tools, information, training, and experience to identify all sources of accumulating risk, accurately assess hazards, and apply available mitigations.

13. **Safety Management during Class 352.** No direct link was found between a safety or high risk training program deficiency and the death of SN Mullen. However, inconsistently executed safety programs led to an accumulation of unidentified and unmitigated risks which contributed to SN Mullen's compromised condition. This was perpetuated by underreporting of mishaps and poor tools for their analysis, slowing effective institutional learning. The result was inconsistent identification of risks and mitigations. NSW successfully introduced mitigations such as use of doxycycline and changing the order of evolutions. However, identification of pneumonia as an injury could have identified associated indictors for instructor and medical personnel to distinguish it from SIPE, and cue different care decisions. It may also have identified available mitigations such as Bicillin. The current system of safety management rests primary responsibility for safe execution of the curriculum on the Phase OICs, but the BTC Commanding Officer and Operations Officer did not ensure they had the training, tools, information, or structure required for best execution of those responsibilities. [FF 25, 28, 29, 41-45, 87, 188-189, 192-193, 196-197, 200, 202, 205-213, 214, 222-226, 252, 255-265, 362]

14. **Structural Requirements for Effective Safety Management.** Effective personal and organizational learning depends on consistent and accurate data gathering, analysis to isolate lessons learned, and timely, tracked implementation of those lessons into practice. Leaders need to transparently share what they learn to make others more successful, and make the time for subordinates to do the same. Complete hazard identification and consistent reporting of mishaps are essential to the data gathering process. Timely analysis to prevent organizational drift and normalization of deviations requires data manipulation tools. Implementing mitigations requires resources and leadership oversight. Using leading indicators in this manner is more likely to provide overall assurance of a safe working environment, rather than reacting to individual hazards after the fact using lagging indicators. At the time of Class 352, as detailed below, the personnel executing the BTC and NSWCEN safety programs did not have the training, tools, or data to consistently and fulsomely identify and mitigate risk in the BUD/S pipeline. [FF 25, 28, 29, 41-45, 214-226]

15. **Training and Experience for Hazard Identification.** There is a substantial, deliberate process to plan the BUD/S curriculum, and to weigh the impact of any recommended changes to that curriculum. That process is run by subject matter experts with long experience in curriculum management and focuses on the tie between the evolutions and the warfare requirements they support. The deliberate and time critical assessment of risk in execution of that curriculum, however, are the responsibility of the Phase OIC and Deputy OIC who receive only baseline ORM training. SEAL operators are highly proficient at rapidly assessing risk in operational situations, mitigating where possible in planning, and executing at a high level to manage it further. They develop this ability during BUD/S and gain additional valuable experience operating alongside other highly proficient and experienced personnel in combat scenarios they have been specifically trained for, and aimed at important objectives that must often be accomplished despite significant risk. This risk assessment ability does not directly translate to assessment of the risks occurring during execution of deliberate, initial qualification training of untrained, inexperienced recruits in a controlled training environment. In addition, the Phase OICs who commonly serve as the Safety Observers responsible for maintaining a holistic view of evolution safety are not required to qualify as high risk training instructors, nor are they required to complete any additional safety training. The AHRTSOs at BTC, intended to be the Phase experts on safety compliance, are collaterally tasked with this duty, receive only minimal additional training for this role, and have no direct line of reporting and follow-up with the specially-trained NSWCEN HRTSOs. Instead the AHRTSOs coordinate through the BTC Training Officer, who is not a trained HRTSO. Conversely, the NSWCEN HRSTOs do not provide sufficient mentorship and training to the BTC AHRTSOs. [FF 30-31, 41-45, 196-197, 246-254]

16. **BTC Deliberate Risk Assessment Program.** An effective risk assessment program requires personnel trained to identify hazards in each step of an evolution, possible injuries that can result from those hazards, the likelihood mishap will occur, and mitigations. The result is a deliberate, predictable execution, with personnel conducting time critical risk management armed with indictors of emergent risk to allow quick response. Currently, Phase personnel with only baseline formal risk management training are producing risk assessments that do not identify all hazards in the evolutions, sometimes identify the potential injury as the hazard, and thus may

not accurately assess the level of risk for each step of the evolution or identify mitigations appropriate to the cause of the hazard. Risk assessments for several evolutions identified traumatic injury, heat/cold injuries, dehydration, hypoxia, drowning, and fatigue as potential injuries, but did not identified the hazards which could cause them. An example would be not identifying rip currents as a hazard for the potential injury of drowning. As a result, the controls implemented were primarily treatment of those injuries and not measures to prevent or reduce their occurrence. [FF 41-45, 254-265]

17. **BTC Functional Risk Assessment.** In practice, much of the deliberate risk identification by BTC cadre happens in developing the Evolution Brief Sheets and associated documentation. Phase personnel deliberately consider areas of risk during evolutions, degrees of possible harm, and highlight indicators for each other. These efforts are driven, however, by received wisdom of prior brief sheets and the experience of instructors present, not a formal process based on trained professionals reviewing data. The results thus vary with the particular cadre assigned to run an evolution, with inconsistent identification of risk across evolutions and failure to identify some hazards for mitigation. NSWCEN identified real time risk assessment as the cause of 80 incidents between 2000 to 2022, with no mitigation identified in the system. The additional instructor training at NSWCEN incorporates discussion of risk management and past mishaps, but cannot be well informed by robust analysis of past mishaps, for the reasons addressed below. [FF 32, 41-45, 158, 204, 218, 223-224, 246-248]

18. **Mishap Reporting and Analysis.** Responding to mishaps that have already occurred is insufficient to effectively manage risk, particularly while conducting high-risk training. Predictive identification, mitigation, and appropriate acceptance of risk require quality data on and analysis of past events. Learning organizations gather and analyze “near-misses” and other leading indicators in order to be proactive. When quality data is not reported or analyzed effectively, organizations and individuals are unable to make fully informed risk-based decisions and may accept greater risk than intended. [FF 41-45, 214-216, 221]

a. BTC Operations, the Phases, and NSWCEN Medical regularly report mishaps as they occur, and route those reports to NSWCEN Operations Department for reporting, tracking, analysis, and identification of mitigations. However, BTC and NSWCEN have allowed mishaps to recur without instituting mitigation or controls, and this investigation found some prior reportable events were not reported as mishaps. Because of this, these commands normalize deviation and do not learn, improve, and make training safer and more effective in these areas. Recurring unreported SIPE cases are a good example of this behavior. [FF 218, 220, 224-226]

b. More significantly, NSWCEN and BTC do not have a robust tool for analyzing mishaps and identifying trends. The Navy-wide RMI mishap tracking system does not allow substantial data analysis to identify trends and lessons learned. Similarly, SOCOM does not provide a mishap system across components that allows learning from similar SOF-induction programs, or operational commands. As a result, NSWCEN Operations conducts some analysis with an in-house tool developed by NSWC and has worked with SOCOM to add analytical tools to Defense Ready to support better reporting. These are commendable NSWC initiative,

but this analysis is still reactive, rudimentary, and lacks the capability to learn from a larger pool of results from an integrated service or combatant commander system. The inadequacies of the formal mishap reporting and tracking systems, specifically the difficulty of use and inability for users to obtain helpful mishap analysis, creates a disincentive for thorough and timely mishap reporting. It also prevents BTC and similarly situated commands from making fully informed risk management decisions. Without the benefit of detailed mishap data and tools to identify trend precursors to mishaps, BTC and NSWCEN do not have the tools to accurately identify risk to commanders and leaders conducting training. This extends to a reduced ability to identify trends in medical risk to candidates, highlight indicators for instructors, and identify mitigations before recurrence. [FF 215-217]

19. **Emergency Action Planning.** Emergency Action Plans prepare instructors and medical personnel in the field with essential data on immediate actions to be taken in the case of certain incidents. The EAP for 1st Phase training did not address all required elements at the time of Class 352, and the recent revision did not correct this deficiency. EAPs are currently reviewed every three years in compliance with instruction, but not frequently enough to incorporate changes to the physical environment, communications pathways, responsible entities, or other changeable conditions. [FF 41-45, 205-213]

20. **Training Safety Program Oversight.** The high risk training safety structure at NSWCEN and BTC has inconsistent and sometimes informally defined lines of responsibility for administration, oversight, and implementation of changes. Much of the oversight at the NSWCEN level for example is performed based on a verbal agreement. Regular inspections and observations occur, but without direct lines of reporting and follow-up to findings, many of the benefits of a robust HRTS program are not being gained. Delayed NAVSAFECOM assessments have prevented NSW from receiving a consistent, objective, external examination of their safety measures over the past several years as well. Assessment of the overall HRTS program identified areas for further review beyond the scope of this investigation, including instructor screening; mishap reporting, analysis, mitigation implementation, and recordkeeping; HRTS organizational structure; and adequacy of current CUITs, instructions, risk assessments, and emergency action plans. [FF 41-45, 188-197, 227-245]

Continuity of Medical Care for Candidates

This section addresses risks to candidates created by the failure of NSWCEN and BTC leaders to ensure their medical system was trained, organized, integrated, and drilled to ensure continuous effective medical support to candidates.

21. **Continuity of Medical Care during Class 352.** The NSWCEN and BTC medical system failed to ensure continuity of medical care, which if properly executed would have allowed the provided to accurately assess his condition and provide potentially life-saving medical care. Information about SN Mullen's condition and treatment during Hell Week evolutions would

have been essential to providers conducting the final medical check at the NSWCEN Medical Clinic. Their assessment of SN Mullen at that check determined whether he was sent for further care or was judged to be safe to rest overnight at the barracks. These organizations were not organized, however, to ensure complete, accurate information about SN Mullen's condition was available to those making decisions on his treatment. The NSWCEN and BTC Medical Departments were not integrated, and so had no standardized individual training to ensure this essential information was gathered in the field, or mechanism in place to ensure that it was passed to other providers. Further, they conducted no integrated training or drills to ensure all medical personnel understood their roles and the requirements of other providers in the system. These failures were the result of ineffective oversight by both medical department leaders and command leadership, permitting uninformed risk decisions at the wrong level and unrealized accumulation of risk. The result was a disaggregated medical care system without clear written guidance, formalized processes, lines of communication, or ownership for providing continuity of health care for candidates. [FF 62, 63, 266-268, 272, 274-285, 291-292, 301, 311, 333-337, 339, 358-360, 434-440, 448-456, 526-585]

Command and Control of Medical Care

22. **Failed Command and Control (C2) of Medical System.** Ensuring that candidates have continuous, adequate medical care is a core responsibility of the NSWCEN and BTC commanders. During Class 352, the command and control of medical support to BUD/S was unclear in both written policy and practice, leading to gaps in candidate care. This situation was created and perpetuated by conflicting written guidance at NSWC, NSWCEN, and BTC on which command was responsible overall for ensuring continuity of medical care. (b) (6) as the BTC Medical Department Head was responsible for adequate medical care of the candidates in BTC training pipelines. (b) (6) as the NSWCEN Senior Medical Officer was responsible for medical oversight, quality assurance, and policy guidance to subordinate medical departments. Ultimately, CAPT Drechsler, NSWCEN Commander, and CAPT Geary, BTC Commanding Officer, were each responsible for ensuring effective medical care of candidates, but both looked to the medical personnel on their staffs to identify and raise any issues. [FF 58, 60, 62-63, 266-268, 272-286, 296-301, 302-311, 333-345]

a. **NSWCEN Medical C2**. CAPT Drechsler, as the NSWCEN Commodore, is responsible for accomplishment of NSWCEN missions, including provision of clinical-level care to candidates in the BUD/S pipeline. He also has a duty to aggressively seek out areas of deficient performance in his own or subordinate commands, and remove any barriers to mission accomplishment his subordinate commands encounter. As the Commodore at the time of Class 352, CAPT Drechsler bears responsibility for the overall failure of his subordinates to ensure continuity of medical care to candidates in the BUD/S pipeline. As he assumed command of NSWCEN, CAPT Drechsler was focused on fulfilling RADM Howard's vision for the stand up of NSWAC. Below him, CAPT Drechsler had CAPT Geary, an officer with proven experience, in command of BTC. CAPT Drechsler relied on CAPT Geary and on his SMO, (b) (6), to identify any deficiencies in the medical architecture. Neither brought a gap in the medical system to his attention or asked for assistance in executing their parts of the medical mission. CAPT Drechsler and (b) (6) had identified the medical system for review to build efficiencies, but prioritized it below the supply department. As a result, CAPT Drechsler's focus was on

correcting inefficiencies in the supply department and on standing up NSWAC. As the NSWCEN Senior Medical Officer, (b) (6) bears responsibility for the failed continuity of medical care of candidates existing at the time of Class 352. (b) (6) relied on an unsigned NSWCEN SOP to assert that he had no responsibility or authority over the BTC Medical Department, despite the NSWC instruction assigning him responsibility for "medical oversight, quality assurance, and policy guidance" to subordinate medical departments. His own SOP recognized a duty to "provide counseling and leadership as required to subordinate NSWCEN command Medical Departments." As the NSWCEN Senior Medical Officer, (b) (6) was responsible, at a minimum, for ensuring that subordinate medical departments had all the tools necessary to successfully perform their mission and that his medical department was prepared to care for candidates at the Clinic, including by having assured communication of all essential facts from the field corpsmen. If that wasn't happening, he had a responsibility under the NSWC instruction to coordinate correction of the seam or, if BTC personnel would not cooperate, to communicate the issue to his commander, CAPT Drechsler. He took neither of those actions. (b) (6) also failed to exercise proper oversight or issue required policy guidance. He had no regular meetings with or required reports from (b) (6), the BTC Medical Department Head, and conducted no integrated exercise of the medical system to proactively identify seams. [FF 58, 60, 62-63, 266-268, 272-286, 296-301, 302-311, 333-345]

b. **BTC Medical C2.** CAPT Geary, as the BTC Commanding Officer, was responsible for the safety and medical care of candidates within the BTC training pipeline, along with his Executive Officer and Command Master Chief. His Medical Department Head, (b) (6), was inexperienced and ill-suited for leadership and yet was left responsible for ensuring the health of candidates at all BUD/S evolutions. In practice, most of these duties were carried out by two overtasked First Class Petty Officers. CAPT Geary was aware that (b) (6) was struggling to lead his department, but elected to retain him in his position. Subsequent DEOCS surveys did not identify additional issues with (b) (6) but interviews of his subordinates revealed continued issues in his department. CAPT Geary did not exercise sufficient oversight to realize the lack of training, orientation, or formalized processes within his Medical Department. As a result, he also remained unaware of the minimal candidate medical information retained day-to-day during 1st Phase, or of the seam between field corpsmen and the NSWCEN Medical Clinic. It was CAPT Geary's responsibility to aggressively seek out areas of risk to his mission and to his candidates, and to identify those risks to CAPT Drechsler if he could not mitigate them himself. This obligation rested as well on his operations staff and the 1st Phase leadership who are responsible to the Commanding Officer for the care of BUD/S candidates in their part of the training pipeline. Both the 1st Phase and Operations Department leadership exercised minimal oversight of medical personnel supporting evolutions however, and neither noted seams in candidate care to their leadership. [FF 58, 60, 63, 266-268, 272-286, 289-294, 296-301, 302-311, 333-345]

23. **Consequences of Failed Command and Control of Medical.** As a result of this failed medical command and control, and as addressed in detail below, the overall NSWCEN medical system at the time of Class 352 had:

a. Corpsmen supporting BUD/S evolutions with incomplete training, uneven orientation to the training environment, over-consideration of candidate preferences, and normalized

deviation of common conditions such as SIPE. The civilian contractor paramedics supporting evolutions were even less prepared than their corpsmen counterparts. While qualified under California state regulations, the contractor paramedics received only informal and undocumented orientation by BTC medical personnel. [FF 50-56, 302-311, 349, 456, 528, 547-548]

b. Disorganized, disconnected communication of medical information, resulting in no medical common operating picture. Communication breakdowns happened both between the first three weeks of 1st Phase training and Hell Week, and within Hell Week itself. Only medical chits resulting in a candidate being sick in quarters were recorded for the first three weeks of 1st Phase. In Hell Week, two separate systems of tracking evaluations and care were run, with inconsistent, ad hoc information flow between BTC field corpsmen and the NSWCEN Medical Clinic where candidates attended sick call or received more extensive medical care. [FF 57-63]

c. Inadequate, untrained support for the care of candidates after securing Hell Week. [FF 442-447, 695]

24. **Reorganization Post-Class 352.** While both CAPT Drechsler and (b) (6) identified that the medical system needed review to bolster efficiency before Class 352, work had not begun at the time of that Class due to assessment that other departments needed more urgent review. Pursuant to CAPT Drechsler's direction, the NSWCEN and BTC Medical Departments have now been formally unified as the NSWCEN Medical Department under NSWCEN command as of 20 October 2022. This consolidation of the medical staff is for a trial 180-day period, with a decision on permanent consolidation occurring after a review of the results. (b) (6) has described desired systematic changes to training and certification of hospital corpsmen supporting evolutions, use of additional corpsmen from NSWCEN to bolster those supporting BUD/S evolutions, production and promulgation of clear treatment guides for common conditions encountered during BUD/S, and changes in how medical information about candidates is recorded and disseminated during Hell Week. Many of these planned changes have not yet come to fruition and NSWCEN Medical has not effectively defined or clarified these desired changes in a well-organized command instruction or directive. Further, the communication of these changes and the plan for their implementation to all personnel in the consolidated NSWCEN Medical Department has been ineffective, with many personnel remaining unaware or misinformed on the new policies in place. The cumulative effect is a medical department that remains unclear on medical expectations, policies, processes, and way forward. This demonstrates continued poor medical command and control, and inadequate oversight by the NSWCEN Commander and SMO. [FF 275, 762-769, 772-791, 803-819]

Training, Qualification, and Preparation for Medical Care of Candidates

25. **Medical Care during Class 352.** SN Mullen presented a challenge to the NSWCEN and BTC medical departments that they were unprepared to meet. SN Mullen never approached medical providers about his deteriorating condition, and was noted by fellow candidates as continuing to push himself through evolutions throughout Hell Week. From his statements to his fellow candidates, this came from a desire not to be seen as weak and to stay with his Class.

Because there were no clear written standards, SN Mullen was never identified as high risk by NSWCEN Medical while others with similar conditions were. During Thursday and Friday of Hell Week, on 3 and 4 February, (b) (6), Phase OIC, correctly and repeatedly identified that SN Mullen was injured and took him for medical assessment. However, both the Phase OIC and the civilian contractor paramedic showed normalized deviation in assuming that SN Mullen was suffering from SIPE, despite continued deterioration in his condition and differences in the type, volume, and frequency of his symptoms. If pneumonia had been recognized or suspected, SN Mullen would likely have been transported directly to the Clinic for further assessment. While in a deeply fatigued state, SN Mullen's preference to continue training was also asked for and considered by the paramedic. Both the instructor and paramedic overvalued SN Mullen's desire to complete all Hell Week evolutions and "stand on the berm" with his Class, over transporting him to the Clinic to receive the advanced medical care he needed. Their understanding of his need for such care is demonstrated by their decision to keep SN Mullen in the ambulance with available supplemental oxygen for nearly an hour before the ceremony, without notifying a medical provider. Instead, SN Mullen was deposited at the berm, (b) (6) travelled home, and the critical information about SN Mullen's condition and past treatment was never transmitted to the doctor conducting his Friday medical check. As addressed below, the absence of a common medical operating picture of candidate condition throughout the pipeline amplified the negative effects of normalized deviation of conditions and candidate reluctance to seek medical care. [FF 497, 514, 524, 526-542, 547-548, 561-562, 585]

26. **Clearly Understood Medical Responsibilities.** The Phase OIC has broad responsibilities for ensuring 1st Phase training is carried out in accordance with the BTC Commanding Officer's policies, plans, and intent. When filled by the correct officer, the Phase OIC exerts overall control over the team supporting the evolution on the beach, including ensuring timely and appropriate medical assessment and care of the candidates. From both interviews and direct observation, BTC instructors constantly monitor candidate health during evolutions and send them to the field corpsmen for assessment if injury is suspected. Field corpsmen also monitor candidates for injury during evolutions, assess candidates for fitness to train when sent to them, and recommend candidates be sent to NSWCEN Medical for further evaluation or treatment if not fit to train. BTC instructors are recognized as the ultimate decision-makers on whether a candidate is sent to NSWCEN Medical Clinic for treatment, but no medical personnel has experienced an instructor overriding their recommendation for treatment. There was no credible reporting of candidates being denied needed medical treatment. [FF 21, 57, 87-97, 135, 140, 145, 188, 251, 267, 289-294, 333-336, 341-345, 413, 449-454, 468, 473-474, 479-481, 489-490, 495-500, 517-522, 526-528, 535-541, 766-767, 769, 804-806]

27. **Inconsistent Medical Monitoring and Care from Undertrained and Unintegrated Personnel.** Poor leadership by (b) (6) and lack of oversight by BTC Commanding Officer, CAPT Geary, meant that care of candidates during Class 352 relied on the individual initiative and prior experience of BTC medical personnel for quality care of candidates, as the BTC Medical Department had no written guidance or formal system for training, evaluating, and certifying corpsmen to support BUD/S evolutions. There were no written guides for treatment of candidates in the field, clear guidance for corpsmen on the extent of their discretion, or written standards for turnover between corpsman shifts or with the NSWCEN Clinic. While there was a training PQS, none of the corpsmen in the department had completed it over the preceding two

years. Instead, new personnel were paired with an experienced corpsman and then assigned to support evolutions alone once one of the First Class Petty Officers approved them. Contracted paramedics, properly credentialed by California, began working with BTC Medical without formal training, orientation, or written guidance on their role. Orientation to the unique aspects of supporting BUD/S evolutions was accomplished only through an informal under instruction period with one of the First Class Petty Officers, lasting around seven weeks. BTC Operations Department believed they exercised only administrative responsibilities over the paramedics and that the Medical Department would train and orient them. The BTC Medical Department under (b) (6) viewed the paramedics as a part of the Operations Department and already fully qualified – more than the BTC Medical corpsmen. The lack of clear written guidance and standards, and the ad hoc qualification process, led to inconsistent treatment and fragmented understanding of candidates' condition across BTC and NSWCEN Medical. Field corpsmen and paramedics varied significantly in the extent of field treatment they gave, in their triggers for referring a candidate to the NSWCEN Clinic, and in the data about candidates they logged or reported to other medical providers. For example, (b) (6) was sent by a corpsman to NSWCEN Medical during Class 352 Hell Week when his oxygen saturation remained low after supplemental oxygen; SN Mullen's oxygen remain low both times he was given oxygen by the civilian contractor paramedic but he was allowed to first continue training and then to participate in the graduation ceremony, instead of being transported to the Clinic for additional assessment. (b) (6) was added to the 'high risk' whiteboard in NSWCEN Medical after having SIPE symptoms, but two other candidates with similar symptoms were not. SN Mullen, noted in the field log as having SIPE symptoms, was never added as 'high risk.' The seams in this disconnected system were often covered by experienced medical personnel acting on their own initiative to pass information, but without a systematic approach, there wasn't consistency between shifts in the information passed or assurance that providers would have essential information. [FF 63, 283-285, 290, 292, 295-300, 302-332, 473-483, 495-501, 519-585, 667-672, 722]

28. **Lack of Integrated Training, Drills, or Processes.** Poor medical command and control by NSWCEN and insufficient oversight by the BTC Commanding Officer, CAPT Geary, also meant that no integrated exercises or drills of the medical system were conducted, to identify gaps that could impact care to candidates. This failure amplified the negative effects of the lack of training or written guidance described above. It also meant that disparities in patient assessment, normalization of some medical conditions, flaws in medical record keeping, and, most importantly, incomplete and inadequate communications between field corpsmen and the NSWCEN Medical Clinic providers were not identified. As a result, none of the potential gaps in care or medical information transfer were identified and none were corrected. Many of these deficiencies were covered by ad hoc efforts by field corpsmen to pass information to the next shift, or to synchronize understanding with NSWCEN Clinic. But the lack of ownership created by poor command and control meant that there was no assured, reliable common medical operating picture. [FF 57-63, 274-294, 301, 302-311, 325-345]

29. **Candidate Reluctance to Seek Medical Care.** The identification of candidate medical risk during the BUD/S pipeline is complicated by the reluctance of many candidates to self-identify their need for care. Candidates are intentionally vested by BTC staff with responsibility for assessing their own health and identifying if they need treatment or cannot continue training.

This responsibility is appropriate as it connects to special warfare requirements to self-assess in order to maintain mission readiness. However, BUD/S candidates arrive with significant motivation to complete training, sometimes with an 'at all costs' mindset, which is reinforced by influence from both instructors and peer candidates to push themselves through discomfort to support their team and become conditioned to operating well while under physical and mental stress. Conversely, given the intensity of training, there is also a history of some candidates feigning or exaggerating injuries to gain rest. Some candidates also showed misunderstanding of the different drop, roll, and setback processes, and their consequences. This presents a challenge to instructors when attempting to uniformly apply the curriculum to candidates, and to medical personnel who do not want to facilitate or incentivize candidates to avoid training periods. Taken together, most candidates are reluctant to report injury or illness as they do not want to appear weak, let down their team, or, as discussed above, trigger a medical roll to a later Class. Other candidates are met with some skepticism regarding injuries not easily assessable. This creates undesirable additional risk to candidates, and sometimes progression of minor injuries to more serious ones. The reluctance of candidates to self-identify as needing medical care was a known risk; Phase cadre were noted for sending candidates to be assessed if they observed any signs of injury. Medical personnel should also have been made more cautious but often took the candidate's desire to continue training into account in assessing fitness to train. Ultimately, as discussed below, BTC and NSWCEN medical leadership failed to mitigate this known risk by creating a reliable common medical operating picture of candidate condition throughout the pipeline. [FF 116, 346, 351-353]

30. **Candidate Desire to Continue.** Candidates are also intentionally given ownership over their continued participation in training through the drop on request process. Unless they suffer a disqualifying injury or fail to meet set criteria, most candidates will continue in training until they choose to drop. In addition, both candidates and instructors place value on a candidate completing both training evolutions during 1st Phase generally and Hell Week as a whole. As a result, instructors and, particularly, medical staff afford a level of deference to candidates' desire to continue training through pain or injury while weighing other factors such as severity of the injury, need for immediate care, and ability to modify the training evolutions. Most candidates' desire to complete the training at any cost was a known risk, but both instructor cadre and medical personnel failed to properly account for this when they overweighed a candidate's desire to continue training in deciding whether to send them to the Clinic for further assessment. This uncorrected acceptance of unnecessary risk resulted from insufficient training and oversight by BTC leadership, 1st Phase leadership, BTC Medical Department, and NSWCEN Medical Department. [FF 49, 349, 524, 528]

31. **Normalized Deviation of Common Conditions** Both instructors and corpsmen were subject to normalized deviation regarding conditions such as SIPE and heat injuries which occur frequently among candidates. The result is both underreaction to these conditions when they appeared, and a risk of missing other conditions with similar symptoms due to defaulting to such diagnoses. For example, from Class 347 through Class 357, there were approximately 26 visits by candidates to medical for SIPE, and 123 suspected SIPE or pneumonia visits to medical, in the three weeks preceding Hell Week. Repeated exposure to these conditions caused both

instructors and medical personnel to underreact to their seriousness, or to mistake other similar conditions for their symptoms. In most cases, SIPE resolves on its own with rest, but in their clinical assessment, corpsmen relied heavily on pulse oximetry devices to assess candidates showing respiratory issues. These devices may produce a falsely high reading during cold temperatures, which could contribute to underappreciating the seriousness of a candidate's condition. Inaccurate, falsely high oxygen saturation levels can provide false reassurance that a candidate is stable, delaying diagnosis and care. Underreaction to certain conditions, such as SIPE, led to unidentified accumulation of risk for these candidates as their conditions worsened without the care required. [FF 51-53, 55, 345, 528, 584, 719]

32. **Changes to Medical Care Preparation for Hell Week after Class 352.** Candidates continue to be exposed to unnecessary medical risk and inconsistent care under the consolidated NSWCEN Medical Department. (b) (6) has revised the medical SOP providing guidance to its members, but the document remains unsigned, unpromulgated, and many medical personnel have not been oriented to its contents. [FF 762-843]

a. **Qualification**. NSWCEN Medical Department still lacks a formal method of measuring the performance and competency of a corpsman before they are assigned to work alone. Corpsman initial qualification training has been planned for standardization by NSWCEN but remains incomplete, with most corpsmen still having not completed qualification for one to two years. [FF 762-843]

b. **Field Assessment and Care.** The consolidated department has produced new treatment guidelines, clarifying specific procedures to be taken in response to common conditions incurred in the field, but these remain ungrounded in instruction or policy and have no set process for update or version control. As a result, corpsman in the field continue to routinely rely on their best judgement and opinion instead of any clearly defined field medical practice policy. The revised unsigned and draft medical SOP lays out requirements for the field corpsman to call the duty provider when certain thresholds are crossed, but corpsmen showed inconsistent understanding of these limits. For example, field corpsmen were observed during Class 357 Hell Week returning a candidate who was evaluated for possible hypothermia to training as fit to train, but without any communication of the encounter to NSWCEN Medical Clinic. [FF 762-843]

c. **Assessment at Clinic.** The quality of the initial intake and vital sign screenings at each medical check during Class 357 Hell Week was excellent, efficient, consistent, and conducted with genuine concern for the candidates. However, because the medical providers are behind closed doors evaluating other candidates, they are unable to observe symptoms, such as coughing, that the candidates fail to report for fear of being medically rolled or dropped. The continued unreliable systems for collecting and disseminating field observations of candidates also prevents providers from considering that context. [FF 762-843]

d. **Distribution of Experience.** During Class 357 Hell Week, two corpsmen were assigned to each shift to allow timely care of multiple candidate casualties. However,

experienced personnel are not distributed between shifts and lack of drills still results in flaws in response. One observed shift was staffed entirely with newly assigned, junior corpsmen who had never been drilled on multiple casualty response. Field corpsmen in general continue to be highly tasked, with new PED testing, EKG screening, NSWO support, and ROC medical initiatives increasing the manpower demands. [FF 762-843]

e. **Support Relationship Unclear**. The command relationship between the consolidated NSWCEN Medical Department and BTC for medical support to the BUD/S pipeline remains unclear, without details on roles, expectations, tasks, and who can give authoritative direction. Without a directive or instruction denoting NSWCEN Medical Department's role and associated responsibilities as a direct support element to BTC for such evolutions, the NSWCEN Medical Department runs the risk, as evidenced by observations of Class 357 Hell Week, of remaining a silo of reactive support instead of posturing as an integrated and proactive capability of medical support to BTC. [FF 762-843]

Recording, Maintenance, and Communication of Medical Information

33. **Medical Information Management during Class 352.** Lack of coherent medical command and control between NSWCEN and BTC, and inadequate oversight of the medical system by the NSWCEN Commander and BTC Commanding Officer, led to fragmented systems capturing separate pieces of candidate medical information, without a common medical operating picture. Medical providers lacked essential information when assessing candidates, leading to incorrect decisions about candidates' medical risk. For SN Mullen, NSWCEN Clinic providers had none of the information about his deteriorating condition, assessed SIPE symptoms, or field treatment given, including administration of oxygen. No guidance was given to (b) (6) by NSWCEN or BTC Medical on turnover with the Clinic, so he departed base after taking SN Mullen to the berm. NSWCEN and BTC did not conduct integrated training or drills that may have highlighted this deficiency. As a result, the final medical check at NSWCEN Medical Clinic concluded incorrectly that SN Mullen was not at risk and would be able to safely rest at the barracks overnight. [FF 57-63, 208, 266-286, 333-345, 355-360, 448-456, 486-585]

34. **No Common Medical Operating Picture.** Candidates were exposed to greater medical risk throughout the pipeline, and particularly during Hell Week, by the lack of a common medical operating picture of candidate condition. No leader identified the fragmented medical information systems and issued clear guidance on collection, collation, and dissemination of critical candidate information. As a result, information about candidate condition during most of 1st Phase was never captured in written or digital form, or known beyond the immediate provider. This medical context thus didn't follow candidates into Hell Week. During Hell Week information was stovepiped in multiple, disconnected formats, unavailable to medical providers making key assessments and care decisions. [FF 62-63, 272-286, 301, 302-311, 333-345, 358-359, 448-456]

a. **Medical Data Pre-Hell Week.** During the first three weeks of 1st Phase, BTC medical did not direct field corpsmen to record information on encounters with candidates.

Those corpsmen were not directed or requested to brief NSWCEN Clinic on candidate condition. Generally, this meant only the corpsman assigned to support a Class throughout the first three weeks of 1st Phase had background on past field assessments and treatment of candidates, and that understanding was undocumented. There was also no written guidance for the Phase corpsman to brief shift corpsman or medical providers at NSWCEN Clinic ahead of Hell Week on candidate medical background. Such information was only passed sporadically, on the initiative of the Phase corpsman. [FF 336, 340, 449-450, 454-456]

b. **Medical Data During Hell Week.** During Class 352's Hell Week, both the BTC corpsmen at the site of evolutions and NSWCEN Medical recorded their evaluations and treatment of candidates separately. Field corpsmen recorded candidate encounters in a logbook kept in the ambulance, while NSWCEN Medical recorded encounters on SF600 paper forms stored in folders for each candidate. These folders did not contain previous medical information. NSWCEN Medical also tracked certain candidates deemed high risk on a dry erase whiteboard in the Clinic. However the NSWCEN SMO, (b) (6), promulgated no written guidance on what information must be recorded in the logbook, what qualified a candidate to be recorded on the "high risk" whiteboard, or what information should be shared between the two systems. Again, NSWCEN and BTC medical relied on initiative by the field corpsman or paramedic to relay information. This led to several effects: [FF 285, 301, 311, 333-337, 339, 358-359, 452-453, 448, 817]

1) While field corpsmen and paramedics often conducted informal turnover at shift changes, and had the Hell Week logbook available to review, there was no template for essential information to pass. This meant the situational awareness of the duty provider depended on the initiative of the corpsman or paramedic involved. [FF 311, 333-337, 339, 358-369, 456, 547-548]

2) Similarly, there was no process for the BTC field corpsmen to review the SF600s generated by NSWCEN Clinic at the medical checks throughout Hell Week. [FF 359, 434-438, 448]

3) While some BTC field corpsmen recalled conducting turnover with NSWCEN Medical after their shifts, this was not a written requirement and was never explained to (b) (6), the contracted paramedic rostered by BTC Medical to support Hell Week. NSWCEN Medical also did not expect such a turnover, as no one noted (b) (6) absence during the final medical checks of Class 352. [FF 456, 547-548]

4) Criteria for listing candidates on the NSWCEN medical white board as 'high risk' was not standardized, leading to uncertainty of candidates needing particular attention. [FF 448, 481, 585]

35. **Medical Common Operating Picture after Class 352.** NSWCEN has taken inadequate measures to correct medical command, control, and communication, leading to continued unnecessary risk to candidates. With medical resources and medical control now centralized at NSWCEN, the NSWCEN Commodore and the NSWCEN Medical Officer under him are responsible for closing these gaps in medical communication. As observed during Class 357 Hell

Week, communication of relevant medical information remains inconsistent in periodicity, content, and quality. The NSWCEN medical personnel remain unclear on what information about candidates they should collect and how they should report and retain that information. As a result, medical communication both within the medical department and to instructors, ROC staff, and the broader command still failed to establish and maintain a complete common medical operating picture regarding candidates. [FF 762-764, 768-769, 772-778, 800, 803-819]

a. **Inadequate Written Guidance, Uneven Practice**. NSWCEN Medical has not issued clear written guidance on documenting candidate medical information and communicating it between field corpsmen and Clinic providers. This insufficient guidance results in lower situational awareness for medical providers and instructors. The draft medical SOP remains unsigned and unpromulgated, limiting its effectiveness and leading many medical personnel to remain unaware of changed requirements. Documentation and communication requirements are poorly organized within the unsigned SOP, and aren't integrated into a clear plan for a common medical operating picture.

1) Field assessment and treatment of candidates during the first three weeks of 1st Phase (prior to Hell Week) continue not to be captured in any log or other system, with none of that context available to later medical providers.

2) Addition of cellphones, tablets, and field laptops aid in rapidly passing information from the field, but there is no clear written guidance on how to integrate these tools with existing reporting and recording methods such as ITRMS.

3) The hard copy Hell Week field log book also continues to be used based on verbal direction from NSWCEN Medical Officer but without clear written guidance on content. In practice, field corpsmen observed varied widely in what medical care was logged and what information was shared with NSWCEN Clinic. As an example, field corpsmen were observed not logging or communicating with NSWCEN Medical about a hypothermia assessment conducted, and failing to complete the log even when prompted by observers. As a result, other medical providers continue to lack the context of field encounters for their assessments and care.

4) The unsigned SOP directs field corpsmen to turn over all "high-risk" candidates to the Safety Observer, Phase OIC, and duty provider at the end of each shift. However "high-risk" is undefined, resting this requirement on field corpsman discretion and resulting in observed inconsistencies in both the understanding of what a high-risk candidate is and what is reported at turnover.

5) Field corpsmen are also required to brief NSWCEN Medical Clinic personnel on the condition of the Class before Hell Week medical checks occur. There is no written guidance on the content of this requirement, however.[FF 762-764, 768-769, 772-778, 800, 803-819]

b. **Unreliable, Uneven Access to Candidate Medical Information**. Inconsistent collection of candidate data is compounded by inadequate systems for collating and displaying that data for medical providers and other key command members.

1) At the NSWCEN Clinic, the field logbook is not available and there is no system to routinely ingest its information for providers to review. ITRMS is incomplete due to the lack of written SOAP note policy, and requires improvement to allow easy access and manipulation of data. The NSWCEN Medical Department maintains a Hell Week spreadsheet to track medical treatment and observations of candidates, but this is separate from ITRMS and accessible only to NSWCEN medical personnel. [FF 762-764, 768-769, 772-778, 800, 803-818, 820-840]

2) At the Recovery Observation Center, a whiteboard and a digital ITRMS dashboard effectively track candidates. These systems do not automatically communicate with the NSWCEN spreadsheet however, and there is no written guidance on what information should be included. As a result, both the ITRMS dashboard and whiteboard were observed during Class 357 Hell Week to routinely hold incorrect information or be missing critical information about candidates that was available at NSWCEN Clinic. The ROC PICs had not been trained on use of the digital dashboard and were observed to default instead to the hardcopy candidate tracking form. These forms were often missing or had inaccurate medical information about candidates. [FF 762-764, 768-769, 772-778, 800, 803-818, 820-840]

c. **Unexercised, Untrained System**. Initiating integrated drills or inviting outside observation would provide an opportunity to highlight any continuing deficiencies caused by inadequate guidance and deficiencies in medical communications. Integrated training and drills would highlight critical gaps in continuity of care in Hell Week evolutions as well as the ROC. NSWCEN's continued failure to conduct drills or integrated training contributes to seams in continuity of care. [FF 772-778, 804]

Care for Candidates after Hell Week

36. **Unrecognized, Unmitigated Candidate Risk during Class 352.** The BTC Commanding Officer and NSWCEN SMO accepted significant risk to candidates in Class 352 by their implementation of medical monitoring and care after Hell Week secured. The wholly inadequate medical monitoring and care described below resulted from a failure to identify the medical risk during this period. This was caused in turn by a nearly sole focus on identification and mitigation of candidate risk during training evolutions, and a feeling that the moment of risk had passed when candidates were not on the beach. [FF 442-446, 588-591, 635-642, 653-655, 667-671, 674-675, 588-591, 695]

a. **Minimal Medical Monitoring.** After completing extremely arduous training, fatigued and often having received medical care during Hell Week, candidates were sent after a final medical check to their barracks room, with no medical personnel either present to monitor them or conducting routine checks for deteriorating condition. The sole medical check performed during this time was 'eyes only' with no check of vital signs and no real examination

of candidate condition. After this check, NSWCEN Clinic secured for the day, leaving no BTC or NSWCEN medical providers on site. The duty provider was available only by phone, unable to effectively assess candidates if there were concerns. BTC watchstanders on-scene were very junior, completely untrained in medical assessment or emergency care, had no written command guidance on their role, and did not have a clear chain of command for concerns. [FF 442-446, 588-591, 635-642, 653-655, 667-671, 674-675, 588-591, 695]

b. **Delayed Emergency Care.** The cumulative effect of this unmitigated accumulated risk was two candidates, SN Mullen and (b) (6), slowly degrading to critical medical conditions, unassessed and untreated. The watchstanders went beyond their guidance to seek care for the candidates, running to the Clinic for help to find it closed and waking (b) (6), an officer from the Class. The watchstanders and (b) (6), who was struggling to breathe, then encountered a duty provider, (b) (6), who insisted care wasn't needed. Ultimately, medical services were called only when (b) (6) determined SN Mullen required emergency care. When the emergency medics arrived, SN Mullen was already without a pulse. (b) (6) ultimately required intubation at the hospital. [FF 442- 446, 588-591, 635-642, 653-655, 667-671, 674-675, 588-591, 695]

c. **Specific Deficiencies.** The following were particularly inadequate or faulty measures after the candidates completed Hell Week evolutions: use of 'whiteshirt' personnel with no medical or CPR training, and no positional authority, to monitor candidates; no watch leadership by a responsible officer or senior enlisted to give authoritative direction; written direction to not seek medical providers outside of NSWCEN Medical, connected with a warning that if a candidate did so they might be admitted or treated with medicines not compatible with continued training; the lack of medical personnel on hand at the barracks or physically on duty nearby to be available to assess candidates as needed; the minimal 'eyes on' evaluation performed by medical staff at the barracks in the afternoon; difficulty reaching (b) (6), the duty provider, and continued encouragement from (b) (6) not to seek outside care when reached. [FF 442-446, 588-591, 635-642, 653-655, 667-671, 674-675, 588-591, 695]

37. **Structure for post-Hell Week Care of Candidate after Class 352.** NSWCEN and BTC have not closed the gaps in medical information communication, monitoring, and candidate care required to adequately mitigate risk to candidates post-Hell Week. The ROC as designed would provide a comprehensive system of monitoring and care, but execution during Class 357 did not meet this standard.

38. **Post-Hell Week Medical Check.** Following Class 352, all candidates securing Hell Week are first seen by NSWCEN Medical Clinic and classified as Green, Yellow, or Red, which represents their level of medical risk and sets their follow-on monitoring and care. Clinical assessment and care of candidates by the NSWCEN Medical Department after Class 357 Hell Week, including at the final medical check, was observed to be efficient, consistent, and conducted with genuine concern for the candidates but as addressed below, candidates remain at risk in the ROC immediately after securing from Hell Week due to ineffective implementation of the ROC plan. [FF 820-842]

39. **Execution of Post-Class 352 System of Candidate Monitoring and Care.** The Recovery Observations Center (ROC) remains incompletely implemented, leaving continued gaps in continuity of medical care.

a. **Insufficient Manning and Training.** Observation during Class 357 showed that personnel tasked to support the ROC had not received training to understand their responsibilities, and the ROC was not sufficiently manned to provide adequate care to candidates. Failure in some responsibilities, such as ensuring medications are taken, and in some support, like continuous medical presence, means candidates continue to be exposed to risk following Hell Week. [FF 831, 838, 839]

1) ROC PICs interviewed had not read the ROC instruction and were unfamiliar with certain responsibilities, such as their requirement to ensure candidates took their medications. [FF 839]

2) Due to a lack of training on the transition from paper forms to a digital dashboard, there is an overreliance by the ROC PICs on the Candidate Removal Tracking Form, which is not a medical form and does not always indicate the medical condition or medications of the candidates in the ROC. If medical information was missing from the form, the ROC PIC had not received training to know to contact NSWCEN Medical to receive those details. [FF 838]

3) Manning the ROC as directed by instruction is required to manage candidate care. The ROC is directed to be manned with a high risk safety instructor to act as the Person in Charge (ROC PIC), a corpsman to monitor candidates and provide medical oversight, and CATS personnel to support them. Leadership by an instructor or other staff not immediately engaged in medical surveillance of the candidates is necessary to maintain cohesion of effort, coordinate quick response to issues with candidates, and maintain overall situational awareness of the candidates in the ROC and their current condition. In practice, after Class 357 Hell Week, the ROC was being run by a corpsman who was the only person on watch. This corpsman was overtasked with the medical care of more than 20 candidates, oversight of the CATS personnel, and administration of the ROC. In this role, the corpsman was unable to adequately monitor, assess, and respond to emergent conditions. Despite the instruction requiring a corpsman remain in the ROC at all times, during Hell Week a corpsman was sometimes only provided once every four hours to check candidate vitals. [FF 831]

4) The CATS ‘white shirt’ candidates had received no training or briefing on their responsibilities or how to assist the candidates. When asked, they often did not understand their duties or to whom they reported. As a result of this deficiency and the lack of a ROC PIC, ROC operations were uncoordinated directly after Hell Week was secured, medical monitoring devices were not implemented, and candidates were not provided either timely assistance getting situated in the space to rest or with medical concerns they brought to the corpsman. [FF 831]

b. **Inadequate post-Hell Week Common Medical Operating Picture.** ROC watchstanders continue to have incomplete understanding of candidate medical condition, inhibiting complete monitoring, timely care, and heightened attention to indictors of deteriorating condition. Information about candidates in the ROC is maintained in two systems still under development, with the former paper system phased out. Review of the files on all candidates medically rolled, assessed as green, and sent to the ROC, showed the ITRMS Electronic Tracker, ROC whiteboard, and hard copy accountability tracking form relied on by the ROC PIC were often either missing important medical information or possessed inaccurate medical information. The result is watchstanders without the knowledge to actively monitor and manage the condition of candidates. Further, there is no clear mechanism in place to inform the ROC PIC which candidates were required to take medications and when. This placed the onus back on candidates in a degraded physical and mental condition to ensure medications are taken properly and at the proper times. In an example from Class 357, a candidate classified yellow and held in the Clinic was reclassified green by the duty provider one hour later and sent to the ROC. However the only information about the candidate passed to the ROC watchstander was the hard copy tracking form, blank in the medical information section and lacking information on the inhaler the candidate was required to periodically use. As a result of this information seam, the candidate's condition progressively worsened, with shortness of breath and indications of airway constriction, ultimately requiring a return to the NSWCEN Medical Clinic for treatment. Further, there was not a clear process for transmitting all relevant medical information from NSWCEN Medical to the ROC PIC following the final medical check on Friday. Verbal passdown of candidate condition observed during Class 357 secured was deficient. The corpsman filling the role as the ROC PIC attended the medical sync following the final medical check. However, he did not receive clear information on which candidates were required to take medication and when. As a result, this corpsman was required to read through each candidate's brown folder to determine if any of the candidates not discussed during the medical sync were taking medications. [FF 820-842]

PEDS Detection and Deterrence

This section addresses risks to candidates created by use of performance enhancing drugs and supplements during BUD/S, and the lack of effective means to deter and detect such use.

40. **Prevalence of PEDS Use in BUD/S Pipeline.** PEDS use by BUD/S candidates was detected and punished in 2011 and 2018, and SARMS were discovered several times on board BTC in 2021 and 2022. Some candidates during this time believed there was wide PEDS use in BUD/S while many others felt the rumors exaggerated the extent of the problem. Four months before Class 352, four candidates were discovered with various SARMS. Vials labelled testosterone and human growth hormone were found in SN Mullen's car, and review of text messages he sent discussed purchase of 'T,' 'H,' needles, and swelling at an injection site. Two candidates in Class 352 tested positive for use of PEDS. The weight of the evidence from the Class 352 timeframe, and the results of the 'Safe to Train' T:E ratio testing of subsequent Classes show that PEDS use does exist within BUD/S, but the prevalence of use at either the time of Class 352 or currently cannot be precisely determined. The current safe-to-train testing regime has returned an

approximately 4% positive rate for levels of testosterone that WADA would consider suspect. However, current once-per-Phase periodicity of testing may miss some users, and the current testosterone-only testing will not capture use of other common PEDS such as human growth hormone or SARMS. [FF 363-366, 398-412, 848-864]

41. **Risk of PEDS Use during BUD/S Training.** Undetected PEDS use creates significant, unquantified, and unmitigable risk to candidates going through the high intensity training of the BUD/S pipeline. Unauthorized use of PEDs increases the risk of serious medical complications by causing negative side effects to the cardiovascular system by altering the heart muscle, blood vessels, and elevating blood pressure; to the endocrine system by directly altering hormonal concentrations or metabolism; to the gastrointestinal system including liver damage and failure; to the immune system, including suppressing immune function and increasing susceptibility to infection; and by enabling induced arrhythmias in individuals pushing beyond normal physiologic limits. Use also potentially creates risk for other candidates by inducing over-fatigue trying to keep up. Undetected PEDS use by candidates creates an unappreciated and unmitigable risk in this intense training environment, and current BUD/S training and oversight does not adequately control for this additional risk. The illicit and often illegal nature of PEDS use adds another layer to the accumulating risk in the training pipeline. [FF 64-80, 733-743, 866-867]

42. **PEDS Response before Class 352.** At the time of Class 352, candidates received no formal brief on PEDS and their possible negative effects, but were clearly told their use was prohibited. The BTC Commanding Officer, CAPT Geary, was aware of prior PEDS incidents at BTC, but had no indications of a current issue until October 2021 when SARMS were discovered first in a backpack and then twice in the barracks. CAPT Geary and his staff exercised available authorities to address the issue, conducting additional barracks inspections and directly addressing candidates, but did not raise concerns to CAPT Drechsler at this time. DoD policy prohibits random or unit sweeps for steroid use, so no additional testing was conducted. CAPT Drechsler first became aware of a potential PEDS issue just before Class 352 Hell Week began, after a former candidate alleged widespread use. Without further information, investigation was begun, which accelerated directly after Class 352 into exploring options for vehicle searches, for unit testing, for NCIS investigation, or for use of an informant. Without testing authority to detect use and hold PEDS users accountable, they were forced into very limited efforts at deterrence. [FF 77-80, 370-380, 382-384, 390-391, 401-406, 408]

43. **Current Ineffective PEDS Deterrence.** Without a rigorous testing program producing timely results, NSWCEN and BTC will be unable to effectively deter use of PEDS by some candidates. BTC has instituted ‘safe to train’ testing for testosterone and epitestosterone ratios as an immediate first step available under existing authority. But the limited nature of the test means that non-testosterone based PEDS remain undetected and continue to introduce risk into the training environment. These non-testosterone based PEDS include SARMS, erythropoietin, aromatase inhibitors, and growth hormone, among others. Broader testing for PEDS remains limited by the DoDI 1001.16 prohibition of random testing and unit sweeps for the use of steroids and other performance enhancing substances. Until an exception to this policy is approved, NSWCEN will not be able to comprehensively test for PEDS in its candidates. Most candidates and instructors view PEDS use as a distraction to training, unfair in the selection

process, and not morally in-line with NSW values. Overwhelmingly, candidates and instructors believe comprehensive testing for PEDS, if consistent and accurate, will be an effective deterrent. However probable cause tests, usable for disciplinary and administrative action, can currently take up to 8 weeks to be reported to the command. This timeframe does not support effective decision making about safety of candidates to train, or serve as an effective deterrent where results are far removed from the time of sample. The 8-week timeframe could mean that candidates who utilize PEDS are continuing to participate in high-risk training, jeopardizing their health and the safety of candidates around them, while awaiting those results from NDSL/SMRTL. Approval of the exception to policy would allow initial urine samples to be sent directly to NDSL/SMRTL, significantly reducing the time required for results. [FF 390, 398-400, 411, 848-876]

44. **Candidate Education.** Trident 14 Order directed education of staff, instructors, and trainees about PEDS and their effects and adverse effects, but thus far no systematic training program has been created or documented. Currently the NSWCEN SMO includes discussion of the dangers of PEDS in his brief during NSWO. However, candidates' extreme motivation to complete the pipeline, and the perception of some that they will be unable to do so without PEDS, will make education efforts alone insufficient to deter use. [FF 409, 865, 867-868, 875-876]

45. **Need for Expert Consultation and Careful Consideration of Current Results.** NSWCEN 'Safe to Train' policy references and utilizes WADA for development of its policy but does not mandate consultation of medical and laboratory experts trained and experienced in interpretation of test results. Both candidates and staff fear that inaccurate PEDS results could result in candidates being wrongly dismissed from training. Tests for PEDS include laboratory tests for substances and hormones that can be native to the human body such as testosterone and growth hormone and their analogues. These are not necessarily foreign substances as is found in routine DoD urinalyses for banned drugs. Interpretation of these results require expertise. WADA does mandate this and states that the role of experts is to: [FF 850-855, 858, 861-864]

a. Review data and results from testing to identify any possible pathological or confounding conditions that may have impacted an athlete's analytical results.

b. Recommend follow-up testing and/or suggest possible clinical testing that may be required to (1) confirm the assessment or (2) collect further evidence to support or confirm possible pathologies.

c. Review any explanations given by the athlete and provide an opinion on whether test results were likely the result of the use of a prohibited substance or prohibited method.

46. While 'Safe to Train' testing is intended to be performed during each Phase of training, current NSWCEN policy does not indicate specific frequency of testing during each Phase. If current policy is limited to a single test per Phase, candidates could be able to use PEDS after the test is complete and defeat detection in the weeks leading up to another 'Safe to Train' test.

Other Opinions

47. BUD/S candidates are often misinformed on various parts of the selection and training program due to unofficial course information in public sources, rumors from candidates in previous Classes, and self-developed expectations of course standards. This includes poor understanding of the medical roll, medical drop, and performance drop processes. Coupled with most candidates' extreme desire to become a SEAL, candidates sometimes focus on incorrect information to the detriment of their performance and safety. When a candidate drops from the course, some with accompanying emotions of denial and confusion, they often continue to fuel rumors and breed misunderstanding in future candidates. [FF 116]

48. Phoenix division personnel have been underemployed and disconnected from the rest of NSWCEN, with most having only a daily muster and no daily tasking. This situation was exacerbated by the dissolution of the Training Support Centers, and recently by the movement of NSWO to Coronado, resulting in candidates who would previously have attrited at Great Lakes now becoming part of Phoenix Division. Spending up to six months in a holding period awaiting orders was not a productive use of their time or the Navy's resources. In addition, lengthy or undesirable reclassification or re-designation processes increased the stress on these personnel. NSWCEN has recently created a program of continued mentorship and education to ease and quicken transition to another field in the Navy. While this new effort is commendable, NSWCEN is not manned to manage this population and is currently using shifted internal resources which degrades other mission areas. Despite significant differences in volume and type of candidate from other initial training pathways, there is no formal initiative coordinated with Navy Personnel Command to more rapidly repurpose these personnel. [FF 128, 129, 846, 847]

49. There was no evidence found that SN Mullen was subject to policing by other candidates; to the contrary, his teammates frequently encouraged him to continue, only suggesting he go to medical when they became worried about his health. There were no organized candidate or instructor-endorsed 'kangaroo courts,' and no evidence that candidate self-policing was a common occurrence. However, there were limited incidences of candidates encouraging others to quit, and one factor in heightened attrition during 2021-2022 was overly enthusiastic Class leadership creating extra work at the expense of rest. Both of these issues were corrected by direct guidance from the BTC Commanding Officer to Class leadership. [FF 140, 171, 176, 178, 179]

RECOMMENDATIONS

The goal of these recommendations is to provide executable courses of actions that close or mitigate the remaining seams identified above. The key to their effectiveness will be ownership not just by the NSW commands directly involved, but by all the commands with subject matter expertise identified below, to move out aggressively on supporting NSWCEN and BTC in improving their processes and outcomes. Each recommendation is directed at specific organizations to enable effective ownership and follow-on actions. Simply adding requirements often does not resolve a problem. Additional requirements may create additional burdens and, at worst may have unforeseen negative impacts Where possible, the recommendations are drafted to retain decision space for Commanders to determine the most effective course while still identifying necessary actions to correct the persistent deficiencies noted above.

Instructor Selection, Experience, Qualification, Training, and Curriculum Execution

1. **Instructor Screening and Selection.** Recommend that Naval Special Warfare Command (NSWC) work with Naval Personnel Command (NPC) to identify ways to address the following areas that may disincentivize or impose costs on personnel serving as BTC instructors, and to ensure appropriate screening and selection of BTC instructors.

a. Evaluate special pay policies for instructor billets. Transferring to BTC from operational commands often comes at a financial cost when special pays are not maintained. Special Warfare Development Group AIP provides a good example. One method may be attaching a special pay to attaining qualification as a master training specialist.

b. Review administrative and statutory board precept language in the NSW Community Briefs to consider favorably the value of instructor duty for both officers and enlisted personnel.

c. Recognizing the low-inventory of such personnel, NSWC, BTC, and NPC consider prioritizing assignment of post-Department Head officers and post-leading petty officer enlisted personnel to 1st Phase, where their maturity and broader experience will make them more likely to be suited to working with inexperienced candidates.

d. Recommend a manpower review of NSWCEN and BTC be conducted to assess the correct manning of Phase cadre to ensure appropriately selected, trained, experienced, and integrated instructors are available to support all BUD/S pipeline events, particularly the crucible events of Hell Week, and to improve instructor rotation and opportunities to gain and maintain qualifications. As discussed below, the study should assess BTC medical manning as well.

e. Recommend that NSWCEN, in coordination with NSWC and NPC, consider options to nominate and screen personnel incoming to BTC instructor billets. Consider screening prospective cadre for suitability to this challenging mission, which requires a particular temperament and specialized skillsets. Screened, motivated cadre will alleviate part of the burden

on NSWCEN instructor training and Phase leadership to mentor, monitor, and correct curriculum execution.

f. Although psychological screening of instructors by IDC is allowed per reference (k), consider leveraging the trained psychologists attached to NSWCEN to give the best possible information to the BTC commanding officer and to aide instructors in decision making. Further, NSWC should ensure detaching commands complete the screening prior to prospective instructor departure, as required by reference (k), to feed the screening process recommended above.

2. **Instructor Indoctrination and Training.**

a. NSWCEN has taken action to improve instructor indoctrination training. Recognizing that cumulative additional requirements must be balanced, consider building on the current 23-hours of additional instructor training provided by NSWCEN for BTC instructors and reviewing the IUT instruction for BTC instructors to ensure rigorous graded evaluations are conducted for prospective instructors to ensure they:

1) Are fully trained on their safety and medical monitoring responsibilities, including specifically mishap reporting, analysis, and incorporation of lessons learned;

2) Have appropriate knowledge of injuries common during the BUD/S pipeline, risk factors and symptoms to watch for, signs that a minor conditions is progressing to a more serious one, and signs that symptoms in fact are caused by a more rare and serious injury;

3) Are trained on and receive direct commander's intent regarding the proper balance between respecting candidate choice and pulling a candidate for injury or unsafe performance;

4) Are trained specifically that candidates are poorly positioned in terms of mindset, experience, and motivation to self-assess injury and ask for needed care, and that this places the burden on the instructors and medical personnel to identify candidates needing evaluation and treatment;

b. Leverage the early identification of deviation in curriculum execution by both the TSAT and BTC Operations Department to support the BTC Commanding Officer in providing direct, clear guidance to both active duty BTC instructors and civilian mentors on their role in executing the curriculum.

c. Personnel serving in safety roles, including the Phase OICs who often fill Safety Observer roles and the instructors who serve as AHRTOs, should receive advanced ORM training during their indoctrination process to reinforce proper risk assessment methods, help them recognize differences between their operational ORM experience and the training environment, and should have their role as a safety manager or assessor emphasized as a primary duty. Ensure these personnel are not otherwise over-tasked during evolution preparation and execution.

3. **Instructor Evaluation and Standardization of Curriculum Execution**

a. Consider expanding efforts to ensure standardization of instructor execution, to include: expanding the NSWC 360 review process, incorporating direct feedback from students into TSAT; incorporating a regular, formal Phase lessons-learned process; and supporting a formal instructor evaluation and feedback mechanism at BTC separate and more frequent than annual evaluations. Consider incorporating appropriate best practices from the NETC Field Learning Standards Officer program.

b. Execute the CRB as planned, and continue to formalize a process for routine NSWCEN assessment of standardization of curriculum execution. Integrate data regarding attrition caused by both DOR and medical issues to more rapidly identify deviation from historical averages and assess whether causes are normal variance or mitigatable deviations; evaluate the regular, outside observations conducted by TSAT to identify desirable or undesirable trends in instructor practice. Establish a review and assessment period to ascertain effectiveness of these changes.

c. No change to the curriculum as it is currently written is recommended, outside of any identified improvements from the CRB process. The curriculum as it stands is sound and achieves the desired result when applied under proper oversight.

Safety

4. **Enhanced Training.** As addressed above, NSWCEN and BTC ensure personnel tasked with safety and high-risk training safety requirements, including those serving as Safety Observers and as AHRTSOs, are given training at the appropriate level and are sufficiently supported with manning to allow focus on this part of their mission.

5. **Direct Access to SME.** BTC and NSWCEN review methods to improve direct communication between AHRTSOs and HRTSOs to give access to the subject matter expertise of the HRTSOs and promote iterative improvement of the program. This could be achieved through additional training and qualification of BTC Operations personnel or by regular synchronization between current NSWCEN and BTC HRTS personnel.

6. **Review Existing Assessments.** BTC, supported by the NSWCEN, conduct a review of existing risk assessments to ensure these documents effectively identify hazards, injuries, mitigations, and the overall residual risk for each step of evolution, in accordance with references (i) and (l). Updated risk assessments should then be used to update the Evolution Brief Sheets to ensure all hazards of each step of evolutions and available mitigations are briefed to and understood by instructor cadre.

.

7. **Mishap Analysis.** Naval Safety Command review potential improvements to the RMI system to allow users to more easily search for data on mishaps, hazards, abatement, trends, and

lessons learned across other similar enterprises. SOCOM evaluate institution of a mishap reporting system allowing component commands to access mishap data, analysis, and lessons learned from other special operations commands. Until enterprise solutions are available, NSWC continue to develop mishap analysis using its organic system and promulgate findings to address deficiencies before mishaps recur.

8. **Mishap Review.** BTC and NSWCEN evaluate current mishap classifications against the standards in reference (f), and add training on these standards, the mishap process, and both common and recent mishaps to the supplemental training given to instructors post-IQC. Proper identification and classification of mishaps should be added as an evaluative criteria for identifying lessons learned and areas of improvement in curriculum execution.

9. **Best Practices.** NSWC consider outside review of HRTS program, to identify potential areas for improvement. Suggested areas for review connected to the findings, opinions, and recommendations of this report are instructor screening; mishap reporting, analysis, mitigation implementation, and recordkeeping; HRTS organizational structure; and adequacy of current CUITs, instructions, risk assessments, and emergency action plans. Specifically recommend NAVSAFECOM conduct an inspection of Hell Week.

System of Medical Care of Candidates

10. **Formalize the Consolidation Plan.** Recommend NSWCEN establish a detailed, deliberate formal plan of action and milestones (POAM) to implement planned changes to medical command and control. Ensure involvement and accountability is clearly understood by medical personnel and BTC instructors. Drill to this plan.

11. Written Medical Guidance. The current SOP and treatment guides are a significant improvement over the previous lack of guidance. Recommend incorporation into an instruction with clear effective date, version, and revision plan. Recommend adding specific training on the risks of common conditions, such as SIPE or heat injuries, as well as identifying specific indicators or benchmarks that a candidates requires additional assessment or care at the Clinic. Focus should also be on adjacent conditions or those with similar symptoms that could be more serious, such as pneumonia.

12. Training and Qualification of Medical Personnel. NSWCEN conduct a full review of the training and qualification jackets of assigned medical personnel, and direct currently assigned medical personnel to complete qualification. Revise initial and periodic training to include:

a. The expanded reporting requirements for evaluations and treatment of candidates.

b. The contents and limits of the updated treatment guides.

c. Medical portions of the Phase Emergency Action Plans.

d. Requirements for turnover of candidate condition at shift changes and with the NSWCEN Clinic.

13. **Manning and Screening of Medical Requirements**

a. NSWCEN request a manpower study in coordination with NAVMAC to validate medical manpower requirements.

b. NSWC and NSWCEN consider requesting reserve medical support as well as contracting for personnel to support ongoing collateral duties such as PEDs testing, urinalysis, EKGs, and prophylactic antibiotic shots that consume active duty bandwidth and strain ability to support training evolutions. Ensure that contracted personnel are fully integrated with the BUD/S mission, trained to support their mission, and conduct necessary integrated training with active duty personnel.

c. BTC and NSWCEN Medical return to the practice of screening corpsmen targeted to receive orders for BUD/S support to ensure their experience, training, and maturity are suitable for the demands of the billet.

d. Consider drawing on qualified medical personnel from other NSW commands, or from the reserve community, to alleviate manning concerns during periods of increased training support requirements such as Hell Week.

e. Clarify the support relationship of the consolidated NSWCEN Medical Department to BTC for medical support to the BUD/S pipeline, with detail on roles, expectations, tasks, and authoritative direction.

Continuity of Medical Care of Candidates

14. **Documentation of 1st Phase Care.** Consider adding weekly medical checks to the first three weeks of 1st Phase, allowing early identification and monitoring of issues and making candidate concealment of injury more difficult. Consider requiring medical documentation and reporting of evaluation and treatment processes during the first three weeks of 1st Phase to improve provider context for assessment and care during Hell Week, particularly of non-musculoskeletal injuries such as SIPE and pneumonia.

15. **Appropriately Man Medical Support Shifts**. Continue to provide additional corpsmen as required to support BUD/S evolutions with the additional reporting requirements, the number of candidates remaining in the Class, and events with higher risk of serious injury or of multiple injuries. Improved metrics on types of injuries seen and treatment will support this process. Develop a standard for the position of shift senior field corpsman to manage and coordinate overall medical response, communication, and transport for further care. Develop a PQS for this

role and assess the competency of the shift senior field corpsman through regular performance of EAP-relevant drills.

16. **Comprehensive Review of Medical Information Requirements.** Conduct a comprehensive review of medical information requirements across NSWCEN and BTC, focused on all personnel whose duties require up-to-date understanding of candidate condition. .

17. **Clear policy and oversight.** Formalize and standardize direction on gathering, documenting, collating, and disseminating candidate medical information. Issue clear written guidance on what encounters will be documented, with what content, in what system, and how this information is disseminated. Formalize the discretion available to field corpsmen to return candidates to training. Conduct training of all field corpsmen and Clinic medical providers on these standards, addressing any deviations.

18. **Integrated Drills.** Conduct integrated drills of the redesigned medical support system as it is instituted, focused on the understanding of personnel involved and on exercising the gathering, recording, transmission, and access of candidate information at the site of evolution, at the Clinic, and at the ROC where users will require access during real-world training. Use results from the drills in a regular cycle to improve and refine medical continuity of care processes.

19. **Post-Hell Week Care.** Review the current NSWCEN ROC instruction to ensure roles, requirements, and expectations are clearly defined.

a. Clarify in writing the supported-supporting relationship between BTC as the command responsible for the ROC, and NSWCEN as the command providing instructors and medical personnel to staff it.

b. Issue clear written guidance on what medical information will be passed to the ROC from the NSWCEN Medical Clinic and in what formats. Train ROC watchstanders to this process.

c. Ensure standardization of NSWCEN ROC watchstanding to ensure instruction requirements are met both during and post-Hell Week.

d. Establish thorough training for all ROC staff, to include ROC PICs, corpsmen, and CATS personnel to ensure they understand their roles, responsibilities, and to whom they report within the ROC.

e. Develop and maintain an EAP binder specific to the ROC, regularly updated with lessons learned to address identified deficiencies and support proactive execution of ROC duties.

PEDS Education, Detection, and Deterrence

20. **Request for Testing Authority.** Recommend that the Department of the Navy continue to pursue additional PEDS testing authority from the Department of Defense. Without frequent, random testing for PEDS, their use by candidates cannot be effectively deterred and will continue to introduce unmitigatable risk to candidates in the BUD/S pipeline.

21. **Broader PEDS Testing.** In absence of an exception to policy, consider methods to expand interim 'Safe to Train' testing to WADA testing requirements, to include testing for testosterone, its analogues, human growth hormone, SARMS, and other PEDS affecting a candidate's health, risk of injury, and ability to safely train.

22. **Randomized, Repeated, Unannounced Testing.** Consider conducting more frequent, random testing to increase the deterrence effect. Funding for a permanent PEDS testing regime should allow for a testing capability that allows more frequent testing than once a Phase, and returns results in less than the current quoted time of eight weeks to increase the deterrence effect and permit quicker determinations on a candidate's ability to continue to safely train.

23. **Consultation with Subject Matter Experts.** As interpretation of PEDS results is different from that for other controlled substances, BTC and NSWCEN leadership should consult with medical and testing authorities to understand the test results and effects on candidates' ability to train. Consult with subject matter experts to set result standards that are clear indicators of PEDS abuse, to address concerns of both candidates and staff on the risk of falsely attributing a natural condition to PEDS.

24. **Education.** While education alone will not be sufficient for deterrence, in accordance with TRIDENT Order 14, a recurring, comprehensive, and codified training and education program should be created and executed for NSWCEN and subordinate unit staff, instructors, and candidates. This training and education program should include discussion of PEDS policies and consequences of use. Consider incorporating senior special operators to emphasize the lack of benefit and that use of PEDS is incompatible with the character required of SEALs. Include education on high reliability of test results.

25. **Other Deterrence Measures.** Consider requesting consent from BUD/S candidates to search personal vehicles kept on base as a part of the initial Page 13 all candidates are required to sign.

Other recommendations

26. **Candidate Self-Assessment.** BTC, supported by NSWCEN Medical, should incorporate deliberate briefs to candidates on their responsibility to assess and report their physical condition, particularly on injuries, and present themselves for medical evaluation. These briefs should include the risk that concealing an injury can convert a recoverable situation into a disqualifying

one, give more substantial orientation to common conditions than that in the candidate guide, and should include indicators that differentiate more serious illnesses or injuries from less serious ones.

27. **Reduce Medical Stigma.** Ensure changes are made to the post-Hell Week medical brief removing direction not to seek outside medical care. Ensure candidates understand that NSWCEN Medical is available 24/7 to answer questions or evaluate them, and their providers have the best context for common BUD/S ailments, but that candidates should call for emergency care if needed. Continue to address the risk of ignoring and concealing a minor injury; that a recoverable injury can escalate quickly to a disqualifying one, and the candidate may move from a short CATS recovery to a more serious condition that disqualifies him from BUD/S or even the Navy.

28. **Phoenix Division**. Recommend Naval Personnel Command and NSWC support NSWCEN in evaluating a formalized program of support for Phoenix Division, including mentorship and connection with other opportunities in the Navy. Evaluate whether additional expertise and capacity at NSWCEN is required to provide sufficient oversight and leadership, and ultimately to accelerate the opportunity for these Sailors and officers to fill other key Navy assignments. Better informed students with motivation for other Navy service opportunities help break the chain of misinformation. Consider changing the induction pathway for enlisted Naval special operators to require selection of several additional open ratings at the time of enlistment, with those personnel leaving the BUD/S pipeline automatically reclassified to one of the pre-selected ratings.

29. Develop a formal procedure for turnover and handoff of medical information through training phases from medical provider to medical provider, including from field personnel to clinic personnel, and conduct periodic checks on compliance with these turnover and handoff procedures.

30. BUMED liaise with Navy Personnel Command, Naval Special Warfare Command, U.S. Fleet Forces Command, U.S. Pacific Fleet, the Type Commanders, and the numbered Fleets to ensure proper milestone screening, to include qualifications and training, for Echelon 2 and Echelon 3 Fleet and Force Surgeons to select those best prepared for the duties of those positions.

31. BUMED ensure instructions and guidance, such as the Manual of the Medical department, have clear definitions and are aligned with DoD, Joint, and OPNAV directives regarding operational healthcare in garrison, afloat, and in the field. BUMED should coordinate with the Fleet to develop or update other directives and guidance to ensure safe healthcare throughout the Navy in accordance with High Reliability Organization principles and in alignment with the CNO’s Get Real Get Better imperative.

32. BUMED coordinate with other Navy Echelon 2 commanders and their surgeons and other staff to ensure proper medical oversight of subordinate commands, including headquarters, through processes such as medical assist visits mentor/train/evaluate evolutions, inspections, and certifications in order to provide safe and highly reliable healthcare throughout the Navy.

33. To assist medical personnel in identifying whether a candidate's capacity for decision-making is affected by stress or fatigue, NSWC seek outside assistance in conducting a research study on the topic; and work with BUMED to review Navy and/or DoD policy to evaluate what responsibility medical personnel currently have, or should have, to assess patient capability for self-assessment, reporting and decision-making regarding their care when in a physically or mentally degraded state.

34. To ensure the appropriate level of life-saving and medical care is present at every high risk training evolution, including Hell Week, establish requirements for:

a. Instructor, medical staff, and watch stander training and certifications in Basic Life Support and;

b. The presence of personnel trained and certified in Basic Life Support throughout high risk training evolutions, including Hell Week.

Appendix A: References

a. DoD Instruction 1010.16, “Technical Procedures for the Military Personnel Drug Abuse Testing Program,” dtd 15 June 2020

b. USSOCOM Directive 10-1, “Terms of Reference – Roles, Missions, and Functions of Component Commands,” dtd 25 August 2008

c. SECNAV Instruction 5300.28F, “Military Substance Abuse Prevention and Control,” dtd 23 April 2019

d. OPNAV Instruction 6400.1D, “Training, Certification, Supervision, and Employment Of Independent Duty Corpsman,” dtd 24 January 2019

e. OPNAV Instruction 5450.221E, “Missions, Functions, and Tasks of Naval Special Warfare Command,” dtd 23 January 2018

f. OPNAV Instruction 5350.4E, “Navy Alcohol and Drug Misuse Prevention And Control,” dtd 28 March 2022

g. OPNAV Instruction 5350.4D, “Navy Alcohol and Drug Abuse Prevention And Control,” dtd 4 June 2009

h. OPNAV Instruction 5102.1E, “Navy Safety Investigation and Reporting Program,” dtd 23 September 2021

i. OPNAV Instruction 5100.23H, “Safety and Occupational Health Program,” dtd 5 June 2020

j. OPNAV Instruction 3500.39D, “Operational Risk Management,” dtd 29 March 2018

k. OPNAV Instruction 1500.75D, “Policy and Governance for Conducting High-Risk Training,” dtd 10 August 2017

l. OPNAV Manual M-5102.1, “Navy and Marine Corps Safety Investigation and Reporting Manual,” dtd 27 September 2021

m. NAVSPECWARCOM Instruction 6320.1F, “Naval Special Warfare Credentialing, Privileging, and Adverse Privileging Action Program,” dtd 5 April 2019

n. NAVSPECWARCOM Instruction 6000.1C, “Naval Special Warfare Medical Department Manual,” dtd 1 August 2021

o. NAVSPECWARCOM Instruction 6000.1B, “Naval Special Warfare Medical Department Manual,” dtd 14 August 2018

p. NAVSPECWARCOM Instruction 5450.9, “Missions, Functions, and Tasks of Commander, Naval Special Warfare Center,” dtd 15 October 16

q. NAVSPECWARCOM Instruction 3500.2C, “Naval Special Warfare Operational Risk Management,” dtd 27 January 2017

r. NAVSPECWARCOM Instruction 1500.1, “Naval Special Warfare High-Risk Training Safety Program,” dtd 23 October 2015

s. NAVSPECWARCOM Instruction 1412.2E, “SEAL Officer Command Qualification Program,” 4 October 2021

t. Deleted

u. NAVSPECWARCENT Instruction 6001.1, “Safety Screening Guidelines to Train in a High Risk Training Environment,” 26 July 2022

v. Deleted

w. Deleted

x. NAVSPECWARCEN Instruction 3550.1D, “Naval Special Warfare Center Obstacle Course and Rope Climb Policies and Procedures,” dtd 11 May 2020

y. Deleted

z. NAVSPECWARCEN Instruction 3500.4, “Standard Operating Procedures for Water Rescue Craft,” dtd 8 January 2007

aa. Deleted

ab. NAVSPECWARCEN Instruction 3120.1, “Naval Special Warfare Center Standard Organization and Regulations,” dtd 31 March 2021

ac. Deleted

ad. NAVSPECWARCEN Instruction 1600.1, “Student Awaiting Transfer Policies,” 29 July 2019

ae. NAVSPECWARCEN Instruction 1550.2, “Naval Special Warfare Formal Course Review and Formal Course Evaluation Program,” dtd 18 March 2021

af. NAVSPECWARCEN Instruction 1550.1E, “Naval Special Warfare Curriculum Management,” dtd 6 June 2022

ag. NAVSPECWARCEN Instruction 1540.4F, “Instructor In-Service Training, Qualification, Certification, and Curriculum Application Adherence,” dtd 26 January 2011

ah. Deleted

ai. NAVSPECWARCEN Instruction 1520.1, “SEAL Officer Assessment and Selection Removal Policy,” dtd 1 June 2018

aj. Deleted

ak. NAVSPECWARCEN Instruction 1500.6, “Naval Special Warfare Recovery Observation Center,” dtd 20 October 2022

al. Deleted

am. NAVSPECWARCEN Instruction 1500.4, “NSWCEN Training Safety and Assessment Team,” dtd 20 October 2022

an. NAVSPECWARCEN Instruction 1500.3J, “NSWCEN High-Risk Training Safety Program Policies and Procedures,” dtd 14 November 17

ao. NAVSPECWARCEN Policy Memorandum 22-4, “Optimization of Assigned Medical Personnel under Naval Special Warfare Center Medical Department,” dtd 20 October 2022

ap. Deleted

aq. NSWBTC Instruction 11103.1C, “Candidate Barracks Policy,” dtd 14 January 2021

ar. NSWBTC Instruction 6000.1, “Medical Department Standard Operating Procedures,” dtd 7 September 2018

as. NSWBTC Instruction 5100.5E, “Candidate Review Board Policy and Procedures,” dtd 27 July 2021

at. Deleted

au. NSWBTC Instruction 3120.1, “NSWBTC Standard Organization and Regulations Manual,” dtd 21 January 2021

av. NSWBTC Instruction 1500.7C, “Student Guide,” dtd 4 November 2009

aw. NSWBTC Instruction 1500.7D, “Candidate Guide,” dtd 18 May 2022

ax. NSWBTC Instruction 1500.6B, “Hell Week/Tour Student Recovery Observation Center,” dtd 22 September 2022

ay. NSWBTC Instruction 1500.6C, “Hell Week/Tour Candidate Recovery Observation Center,” dtd 16 March 2022

az. Deleted

ba. NSWBTC Instruction 1500.4B, “Class Proctor Guidance and Administrative Responsibilities,” dtd 25 June 2019

bb. NSWBTC Instruction 1500.3A, “NSWBTC High-Risk Training Safety Programs and Procedures,” dtd 10 May 2018

bc. NSWBTC Instruction 1500.2D, “Instructor Performance, Remediation, and Student Setback Guidance for SEAL and SWCC Basic Pipeline Training,” dtd 3 July 2019

bd. NSWBTC Instruction 1500.2E, “Instructor Performance, Remediation, and Candidate Setback Guidance for SEAL and SWCC Basic Pipeline Training,” dtd 5 April 2022

be. NSWBTC Instruction 1500.1C, “NSWBTC High-Risk Training Safety Program,” dtd 10 May 2021

bf. Deleted

bg. NSWATC Instruction 5400.1A, “Standard Organization and Regulations Manual of Naval Special Warfare Advanced Training Command,” dtd 9 July 2015

bh. BUMED Instruction 6220.8B, “Recruit Streptococcal Infection Prevention Program,” dtd 20 June 2014

bi. Deleted

bj. Deleted

bk. Deleted

bl. Deleted

bm. MILPERSMAN 1220-300, “Special Warfare Operator (SO) Rating,” dtd 24 June 2022

bn. MILPERSMAN 1210-220, “Naval Special Warfare (NSW) Officer – Sea-Air-Land (SEAL),” 8 November 2021

bo. NAVEDTRA 135D, “Navy School Management Manual,” dtd 10 August 2018

bp. NAVEDTRA 134 (Series), “Navy Instructor Manual,” dtd August 2009

bq. NAVEDTRA 133A, “Training Requirements Review Management Manual,” dtd January 2016

br. NAVEDTRA 130B, “Task Based Curriculum Development,” dtd September 2009

bs. K-431-000 series, Training Course Control Documents

bt. K-431-0024B, Training Course Control Document for Basic Underwater Demolition (BUD/S) 3rd Phase

bu. K-431-0034, Training Control Document for Basic Underwater Demolition (BUD/S) 2nd Phase

bv. K-431-0037B, SEAL Pipeline 60 Weeks; Training Course Control Document for Basic Underwater Demolition/SEAL (BUD/S) 1st Phase CH-1

bw. K-431-0097A, Training Course Control Document for BUD/S 2nd Phase CH-2

bx. K-431-0037B CH-1, Training Course Control Document for BUD/S 1st Phase

by. K-431-0300A Course Master Schedule for NSW Instructor Qualification Course

bz. K-431-0300B, Training Course Control Document for NSW Instructor Qualification Course

ca. K-431-0350A, Training Course Control Document for Naval Special Warfare Orientation

cb. K-431-0400, Training Course Control Document for NSW SERE

cc. K-431-1110, Training Course Control Document for Advanced Training

cd. Deleted

ce. Deleted

cf. Deleted

cg. K-431-1120 Training Project Plan for Seal Qualification Training (SQT) - Professional Military Education

ch. A-431-1123, Training Project Plan for SQT - Maritime Operations

ci. K-431-0350A, Letter of Promulgation for BUD/S Naval Special Warfare Orientation

cj. A-431-0037, Training Project Plan for BUD/S 1st and 3rd Phase pipeline

ck. Deleted

cl. (b) [redacted] USN, Command Investigator, ltr of 12 October 2011

cm. (b) [redacted] USN, Command Investigator, ltr of 22 May 2018

cn. (b) [redacted] USN, Command Investigator, ltr of 13 October 2021

co. Assistant Secretary of the Navy (Manpower and Reserve Affairs) ltr of 4 August 2021

cp. (b) [redacted] USN, Command Investigator, ltr of 28 July 2022

cq. [redacted] (b) USN, Command Investigator, ltr of 12 Sept 2022

cr. Commander, Naval Special Warfare Command ltr Ser N00/L081 dtd 13 September 2022

cs. NCIS Investigation CCN: 04FEB22-SWND-00078-7HNA

ct: DOD Instruction 6000.14, “DoD Patient Bill of Rights and Responsibilities in the Military Health System,” 26 September 2011, incorporating change 2 effective 3 April 2020.

cu: BUMEDINST 6300.17A, “Navy Medical Clinical Case Management,” 23 September 2016.

cv: NAVMED P-117, “U.S. Navy Manual of the Medical Department (MANMED),” dtd 6 Feb 23.

cw: National Institutes of Health, Medline, Medical Encyclopedia, medlineplus.gov/ency/article/007535.htm

cx: Https://www.defense.gov/Spotlights/Coronavrus-DOD-Response/Timeline

cy Joint Publication (JP) 4-02, “Joint Health Services,” 11 December 2017, incorporating Change 1 effective 28 September 2018.”

cz: OPNAVINST 6320.7B, Health Care Quality Assurance Policies for Operating Forces,” 16 December 2022.

da: BUMEDINST 6010.17C, “Navy Medical Staff Bylaws,” 5 February 2018.

db: COMUSFLTFORCOMINST 6000.1B, “Shipboard Medical Procedures Manual,” 9 November 2020.

dc: OPNAVINST 6400.1D, “Training, Certification, Supervision, and Employment of Independent Duty Corpsman,” 24 January 19.

dd: BUMEDINST 1500.15F, “Resuscitation Education and Training Policy,” 17 October 17.

de: DODI 1322.24, Medical Readiness Training, dtd 16 March 18, change 1 effective 15 February 22.

df: DoDI 6040.47, Joint Trauma System, dtd 28 September 16, change 2 effective 14 June 22.

dg: OPNAVINST 1500.86, “Tactical Combat Casualty Care Training,” 12 April 21.

dh: NAVPERS 18068F, Vol I, “Navy Enlisted Manpower and Personnel Classifications and Occupational Standards Manual,” January 2023.

Appendix B: Enclosures

(1) Commander, Naval Education and Training Command ltr N00J/286 of 13 September 22
(2) Extensions of 6 October 22 and 27 October 22
(3) Commander, Naval Special Warfare Command 2022 Posture Statement before the 117th Congress Senate Armed Services Committee, 27 April 2022
(4) Naval Special Warfare Center, My Navy Assignments Manning Data, 27 September 2022
(5) Naval Special Warfare Basic Training Command, Operations Department, 1st Phase, Weeks 1-4, Classes 307-356 Analysis
(6) Naval Special Warfare Basic Training Command, Activity Manpower Document of December 2021
(7) Director, Military Personnel, Plans, and Policy ltr N13/144 dtd 25 August 2022
(8) Naval Special Warfare Center Command Brief dtd 16 September 2022
(9) Commander, Naval Special Warfare Center ltr dtd 26 July 2022
(10) Director, Military Personnel Plans and Policy (N13) ltr N13/392 dtd 21 November 2019
(11) Deputy Chief of Naval Personnel ltr dtd 27 January 2021
(12) Director, Military Personnel Plans and Policy (N13) ltr N13/270 dtd 16 October 2020
(13) Interview of (b) (6) dtd 27 September 2022
(14) Message Traffic 071917ZJAN21 SUBJ/TRIDENT Order #09
(15) Naval Special Warfare Basic Training Command, 60 Week SEAL Pipeline Chart
(16) Naval Special Warfare Basic Training Command, Class 352 Hell Week Schedule
(17) Naval Heath Research Center, Hell Week Validation Report, 2005
(18) Naval Special Warfare Basic Training Command Organizational Chart, October 2022
(19) (b) (6), Basic Training Command Deputy Operations Officer, email dtd 25 October 2022
(20) Naval Special Warfare Basic Training Command, Activity Manpower Document of August 2022
(21) Commander, Naval Safety Center ltr 03/0406 dtd 17 September 2015
(22) (b) (6), Assistant NSW Detailer/Placement (PERS-415), email dtd 5 October 2022
(23) Interview of (b) (6) dtd 28 September 2022
(24) (b) (6), Naval Special Warfare Center Command Warrant Officer, dtd 5 October 2022
(25) Naval Special Warfare Center High Risk Instructor Requirements
(26) Evolution Brief Sheet – (b) (5)
(27) Lesson Plan – (b) (5)
(28) Naval Special Warfare Basic Training Command, Operations Department, 1st Phase, Weeks 1-4, Classes 307-356 Analysis
(29) Evolution Brief Sheet – (b) (5)
(30) Interview of CAPT Brian Drechsler dtd 18 October 2022
(31) (b) (6), 1st Phase Formal Curriculum Evaluation email dtd 24 October 2022
(32) Government Accountability Office, Report on Navy Training, GAO/NSIAD-89-119, March 1989

(33) Memorandum for the Record on RDML (Ret.) James Hancock, MC, USN, Keynote Address of 09 August 2022.
(34) 42 CFR § 483.70 – Administration
(35) Aide to Capacity Evaluation (ACE) Standard
(36) Musculoskeletal and Medical Morbidity Associated with Rigorous Physical Training (Linenger et al., 1994)
(37) A. Shwayhat, et al. "Profiles of exercise history and overuse injuries in Among United States Navy Sea, Air, and Land (SEAL) Recruits". Am J Of Sports Medicine Vol. 22 No, 6 1994; 835-840
(38) Naval Special Warfare Center, Medical Department, Injury and Illness Statistics During the First Three Weeks of 1st Phase, BUD/S Classes 347-357
(39) Swimming-Induced Pulmonary Edema Expert Analysis (Shah et al., 2018)
(40) Pneumonia Facts, Risks, and Treatment, Center for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases Last Reviewed: September 30, 2022
(41) Advanced Trauma Life Support, Tenth Edition, 2018 American College of Surgeons
(42) Investigation Observations of Class 357 Hell Week (Medical Team)
(43) NCIS Interview of (b) (6), USA, dtd 8 February 2022
(44) NCIS Interview of (b) (6), USN, dtd 8 February 2022
(45) Interview of (b) (6), MC, USN, dtd 27 September 2022
(46) NSWCEN and BTC Building Map
(47) Interview of (b) (6), USN, dtd 27 September 2022
(48) Performance Enhancing Drugs and Supplements Overview (A. F. Shwayhat, 2022)
(49) World Anti-Doping Code, World Anti-Doping Agency, 2021
(50) Harm Reduction in Male Patients Actively Using Anabolic Steroids and Performance Enhancing Drugs (A. Bonnecaze et al., 2021)
(51) Cardiovascular Effects of Performance-Enhancing Drugs (La Gerche et al., 2017)
(52) Naval Special Warfare Basic Training Command, My Navy Assignments Manning Data, 12 October 2022
(53) (b) (6), USN, Immunology Review of 18 August 2022
(54) Article 112a, Uniform Code of Military Justice, 10 U.S.C. 47
(55) RADM H. W. Howard, "Frogmen Solve Hard Problems – From and on the Sea," Proceedings, Vol. 148/4/1,430, US Naval Institute (April 2022)
(56) Interview of CAPT Brad Geary, USN, dtd 20 October 2022
(57) Interview of (b) (6), USN, dtd 30 September 2022
(58) Naval Special Warfare Basic Training Command Long Range Schedule FY23- FY24
(59) Interview of (b) (6) dtd 29 September 2022
(60) Class 352 Hell Week Shift Roster
(61) Interview of (b) (6), USN, dtd 5 October 2022
(62) Interview of (b) (6), USN, dtd 13 October 2022
(63) Interview of (b) (6), USN, dtd 4 October 2022
(64) Interview of (b) (6), USN, dtd 4 October 2022
(65) Interview of (b) (6), USN, dtd 5 October 2022

(66) [redacted], Assistant NSW Detailer/Placement (PERS-415), emails of 4 and 5 October 2022
(67) Interview of [redacted], USN, dtd 18 October 2022
(68) Active Duty Community Briefs - FY17, FY20, FY21, FY22, FY23
(69) [redacted], SEAL Officer Community Manager / BUPERS-311D, email of 21 October 2022
(70) Interview of [redacted], USN, dtd 29 September 2022
(71) [redacted], N801, email dtd 24 October 2022
(72) [redacted], Naval Special Warfare Center Director of Instructor Development, email dtd 28 October 2022
(73) Interview of [redacted], USN, dtd 13 October 2022
(74) Interview of [redacted], USN, dtd 4 October 2022
(75) Evolution Brief Sheet - [redacted]
(76) Interview of [redacted], USN, dtd 4 October 2022
(77) Evolution Brief Sheet [redacted]
(78) Evolution Brief Sheet
(79) Evolution Brief Sheet
(80) Evolution Brief Sheet
(81) Evolution Brief Sheet
(82) Evolution Brief Sheet
(83) Evolution Brief Sheet
(84) Evolution Brief Sheet
(85) Evolution Brief Sheet
(86) Evolution Brief Sheet
(87) Evolution Brief Sheet
(88) Evolution Brief Sheet
(89) Evolution Brief Sheet
(90) Evolution Brief Sheet
(91) Evolution Brief Sheet
(92) Evolution Brief Sheet
(93) Evolution Brief Sheet
(94) Evolution Brief Sheet
(95) Evolution Brief Sheet
(96) Evolution Brief Sheet
(97) Evolution Brief Sheet
(98) Evolution Brief Sheet
(99) Evolution Brief Sheet
(100) Evolution Brief Sheet
(101) Evolution Brief Sheet
(102) Evolution Brief Sheet
(103) Interview of [redacted], USN, dtd 6 October 2022
(104) Interview of [redacted], USN, dtd 21 October 2022
(105) Interview of [redacted], USN, dtd 21 October 2022
(106) Interview of [redacted], USN, dtd 18 October 2022

(107) Interview of [redacted], USN, dtd 6 October 2022
(108) Interview of [redacted], USN, dtd 26 September 2022
(109) Interview of [redacted], USN, and [redacted], dtd 3 October 2022
(110) Interview of [redacted], USN, dtd 30 September 2022
(111) NCIS Interview of [redacted], USN, dtd 16 February 2022
(112) Interview of [redacted], USN, dtd 13 October 2022
(113) Interview of [redacted], USN, dtd 5 October 2022
(114) Interview of [redacted], USN, dtd 27 September 2022
(115) Interview of [redacted], USN, dtd 28 September 2022
(116) Interview of [redacted], USN, dtd 27 September 2022
(117) Interview of [redacted], USN, dtd 27 September 2022
(118) Interview of [redacted], USN, dtd 29 September 2022
(119) Interview of CAPT Timothy Sulick, USN, dtd 29 September 2022
(120) BUD/S Class 352 Roster
(121) Exit Interview Information, Classes 351-353
(122) Classes 329, 341, 350, 352 Student Surveys
(123) [redacted], Naval Special Warfare Basic Training Command Operations Officer, email dtd 19 October 2022
(124) Interview of [redacted], USN, dtd 6 October 2022
(125) Interview of [redacted], USN, dtd 27 October 2022
(126) Defense Organizational Climate Survey Report, Naval Special Warfare Basic Training Command, 2019
(127) Interview of [redacted], dtd 27 September 2022
(128) Defense Organizational Climate Survey Report, Naval Special Warfare Basic Training Command, 2022
(129) Interview of [redacted], USN, dtd 6 October 2022
(130) Interview of [redacted], USN, dtd 25 October 2022
(131) 2019 BUD/S Candidate PG 13
(132) Naval Special Warfare Basic Training Command, 1st Phase Review, 31 January 2022
(133) Naval Special Warfare Basic Training Command, Operations Department, 1st Phase, Weeks 1-4, Classes 307-357 Analysis
(134) Interview of [redacted], USN, dtd 25 October 2022
(135) Interview of [redacted], USN, dtd 4 October 2022
(136) 2022 BUD/S Candidate PG 13
(137) Interview of [redacted] USN, dtd 1 October 2022
(138) Interview of [redacted], USN, dtd 20 October 2022
(139) Interview of [redacted], USN, dtd 14 October 2022
(140) [redacted], SEAL Officer Community Manager/BUPERS-311D, email dtd 23 September 2022
(141) Interview of [redacted], dtd 27 September 2022
(142) Interview of [redacted], dtd 28 September 2022
(143) High Risk Training Safety Officer / Assistant High Risk Training Safety Officer Job Qualification Requirements
(144) [redacted], Naval Special Warfare Center Safety Officer, email dtd 7 November 2022

(145) Core Unique Instructor Training (CUIT) for 1st Phase Instructors, K-431-0037A, K-431-0024A
(146) Interview of (b) (6), USN, dtd 14 October 2022
(147) Interview of (b) (6), dtd 24 October 2022
(148) Interview of (b) (6) USN, dtd 14 October 2022
(149) Interview of (b) (6), USN, dtd 20 October 2022
(150) Interview of (b) (6), USN, 5 October 2022
(151) Class 352 Hell Week Deliberate Risk Assessments
(152) Naval Special Warfare 1st Phase Emergency Action Plan, 2019
(153) Naval Special Warfare Center Medical Department, Standard Operating Procedure, October 2022
(154) Interview of (b) (6), USN, dtd 17 October 2022
(155) Naval Special Warfare 1st Phase Emergency Action Plan, 2022
(156) Annual Emergency Action Plan Drills
(157) Emergency Action Plan Quarterly Walkthroughs
(158) Investigation Observations of Class 357 Hell Week (Safety Team)
(159) Naval Special Warfare Basic Training Command Mishap Report 2000- present
(160) Commander Naval Safety Center ltr ser 03/0406 dtd 17 September 2015
(161) (b) (6), Memorandum for the Record, dtd 17 November 2022
(162) (b) (6), Naval Special Warfare Command, High Risk Training Safety, email dtd 25 October 2022
(163) (b) (6) Naval Special Warfare Command, High Risk Training Safety, email dtd 4 November 2022
(164) Naval Special Warfare Command, High Risk Training Safety Inspection or Assist Visit Findings Form, dtd November 2019
(165) Assistant High Risk Training Safety Officer Observation Forms, 2019-2022
(166) (b) (6), Naval Special Warfare Center Safety Officer/High Risk Training Safety Officer, email dtd 25 October 22
(167) (b) (6), Naval Special Warfare Center Safety Officer/High Risk Training Safety Officer, email dtd 26 October 22
(168) Chief of Naval Operations, The Charge of Command, 6 April 2018
(169) Aviation Rescue Swimmer Course Risk Assessment
(170) Naval Special Warfare Center, (b) (5) risk assessment
(171) Naval Special Warfare Basic Training Command Instructor Training Records Review Report, dtd 3 November 2022
(172) Classes 351, 352, 353 Exit Interviews
(173) Interview of (b) (6), USN, dtd 27 September 2022
(174) (b) (6), Naval Special Warfare Center, Instructor Qualification Course Manager, email dtd 26 October 2022
(175) Interview of (b) (6), USN, dtd 14 October 2022
(176) Interview of (b) (6), USN, dtd 16 August 2022
(177) (b) (6), USN, email dtd 15 November 2022
(178) Interview of (b) (6), USN, dtd 27 September 2022
(179) Interview of (b) (6), USN, dtd 27 September 2022

(180)NCIS Investigation CCN: 04FEB22-SWND-00078-7HNA, Investigative Action: Search of V/Mullen Privately Owned Vehicle
(181)Interview of (b) (6), USN, dtd 20 October 2022
(182)Interview of (b) (6), USN, dtd 4 October 2022
(183)Interview of (b) (6) USN, dtd 3 October 2022
(184)Survey, Drop on Request / Medical Drop Candidates
(185)Personnel Qualification Standard of (b) (6)
(186)Personnel Qualification Standard of (b) (6)
(187)Personnel Qualification Standard of (b) (6)
(188)Personnel Qualification Standard of (b) (6)
(189)Personnel Qualification Standard of (b) (6)
(190)Personnel Qualification Standard of (b) (6)
(191)Naval Special Warfare Basic Training Command, Medical Environmental Field Protocols
(192)Interview of RADM Hugh Howard, USN, dtd 10 November 2022
(193)(b) (6), Naval Special Warfare Basic Training Command Deputy Operations Officer,e mail dtd 10 November 2022
(194)Emergency Action Plan, BUD/S 1st Phase, 2022
(195)Interview of (b) (6), dtd 6 October 2022
(196)Interview of (b) (6), USN, dtd 26 September 2022
(197)Interview of (b) (6), dtd 28 September 2022
(198)(b) (6), USN, email dtd 31 October 2022
(199) Survey, Candidates in BUD/S Pipeline
(200)(b) (6), USN, Naval Special Warfare Basic Training Command Training Officer, Assessment of K-437-0037A BUD/S Class 357 1st Phase, undated
(201) Interview of (b) (6), USN, dtd 4 October 2022
(202)Interview of (b) (6), USN, dtd 21 October 2022
(203)Interview of (b) (6), dtd 27 September 2022
(204)Interview of (b) (6), USN, dtd 31 October 2022
(205)Interview of (b) (6), USN, dtd 6 October 2022
(206) Naval Special Warfare Basic Training Command Operations Department, White Paper Instructor/EMT Contract, dtd 22 March 2018
(207) Class 352 Hell Week Medical Observation Logbook
(208) Exit Interview Analysis, Classes 351-353
(209) Interview of (b) (6), USN, dtd 30 September 2022
(210)(b) (6), USN, Naval Special Warfare Basic Training Command, email dtd 24 October 2022
(211) Interview of (b) (6), USN, dtd 28 September 2022
(212)Master Schedule Class 352
(213)Commander, Naval Special Warfare Center, ltr ser 00/356 dtd 11 December 17
(214)Summary of Interview of (b) (6), dtd 14 March 2022
(215)Summary of Interview of (b) (6), dtd 15 March 2022
(216)Summary of Interview of (b) (6), dtd 12 May 2022
(217)Summary of Interview of (b) (6), dtd 12 May 2022
(218) Summary of Interview of (b) (6), dtd 16 May 2022

(219) Summary of Interview of [redacted], dtd 5 April 2022
(220) [redacted], Naval Special Warfare Basic Training Command, Operations Officer, email dtd 26 October 2022
(221) Interview of [redacted], USN, dtd 20 October 2022
(222) NCIS Interview of [redacted], dtd 15 March 2022
(223) Interview of [redacted], USN, dtd 16 November 2022
(224) [redacted], Naval Special Warfare Basic Training Command, Medical Department Head, email of 5 April 2022
(225) Class 352 Hell Week Shift Roster
(226) Class 352 Hell Week Cadre Log
(227) Class 352 NSWCEN Medical Shift Schedule
(228) Naval Special Warfare Medical Department Standard Operating Procedure, 2019
(229) [redacted], Naval Special Warfare Center, Medical Operations Officer, email dtd 26 October 2022
(230) Chief, Bureau of Medicine and Surgery ltr ser M35/21-1009-40-01 dtd 3 December 21
(231) Interview of [redacted], USN, dtd 14 October 2022
(232) Interview of [redacted], USN, dtd 13 October 2022
(233) Interview of [redacted], dtd 15 October 2022
(234) Training Record, SN Kyle Mullen, Naval Special Warfare Basic Training Command
(235) Medical Chits, SN Kyle Mullen, Naval Special Warfare Center, Medical Department
(236) NCIS Interview of [redacted], USN, dtd 11 February 2022
(237) NCIS Interview of [redacted], USN, dtd 11 February 2022
(238) Chronological Record of Medical Care, SN Kyle Mullen, Naval Special Warfare Center
(239) Instructor Training Record, [redacted]
(240) Photograph of Naval Special Warfare Center, Medical Department, Class 352 Whiteboard
(241) NCIS Interview of [redacted], USN, dtd 11 February 2022
(242) NCIS Interview of [redacted], USN, dtd 16 February 2022
(243) [redacted], Naval Special Warfare Command, High Risk Training Safety, email dtd 14 November 2022
(244) Lesson Plan for Naval Special Warfare Center Instructor Qualification Course, K-431-0300A
(245) NCIS Interview of [redacted], USN, dtd 11 February 2022
(246) Naprosyn Drug Facts, Physician's Desk Reference (PDR), American Society of Health-System Pharmacists (ASHP)
(247) NCIS Interview of [redacted], dtd 16 February 2022
(248) NCIS Interview of [redacted], dtd 11 February 2022
(249) NCIS Interview of [redacted], USN, dtd 11 February 2022
(250) NCIS Interview of [redacted], USN, dtd 11 February 2022
(251) NCIS Interview of [redacted], USN, dtd 11 February 2022
(252) NCIS Interview of [redacted], USN. dtd 11 February 2022
(253) NCIS Interview of [redacted], USN, dtd 11 February 2022
(254) NCIS Interview of [redacted], USN, dtd 14 February 2022
(255) Deputy Assistant Secretary of the Navy (Military Manpower and Personnel) ltr dtd 11 February 2021

(256) NCIS Interview of [redacted], USN, dt 11 February 2022
(257) NCIS Interview of [redacted], USN, dtd 14 February 2022
(258) [redacted], Naval Special Warfare Basic Training Command, Operations Officer, email dtd 1 November 2022
(259) NCIS Interview of [redacted] dtd 16 February 2022
(260) NCIS Interview of [redacted], USN, dtd 11 February 2022
(261) Commander, Naval Special Warfare Command, ltr ser N00/612 dtd 19 November 2020
(262) NCIS Interview of [redacted], USN, dtd 9 February 2022
(263) NCIS Investigation CCN: 04FEB22-SWND-00078-7HNA, Investigative Action: Review of Phone
(264) NCIS Interview of [redacted], USN, dtd 6 May 2022
(265) NCIS Interview of [redacted], USN, 9 February 2022
(266) Interview of [redacted], USN, dtd 20 October 2022
(267) NCIS Interview of [redacted] USN, dtd 9 February 2022
(268) NCIS Interview of [redacted], USN, dtd 8 February 2022
(269) NCIS Interview of [redacted], USN, dtd 8 February 2022
(270) NCIS Interview of [redacted], USN, dtd 8 February 2022
(271) NCIS Interview of [redacted], USN, dtd 8 February 2022
(272) NCIS Interview of [redacted], USN, dtd 9 February 2022
(273) NCIS Interview of [redacted], USN, dtd 9 February 2022
(274) NCIS Interview of [redacted], USN, dtd 9 February 2022
(275) NCIS Interview of [redacted], USN, dtd 6 April 2022
(276) NCIS Interview of [redacted], USN, dtd 9 February 2022
(277) NCIS Interview of [redacted], USN, dtd 8 February 2022
(278) NCIS Investigation CCN: 04FEB22-SWND-00078-7HNA, Photo of Medical Call Log
(279) NCIS Investigation CCN: 04FEB22-SWND-00078-7HNA, 911 Audio File Review
(280) NCIS Investigation CCN: 04FEB22-SWND-00078-7HNA, Federal Fire Log Incident # FSD2202040204
(281) NCIS Interview of [redacted], USN, dtd 8 February 2022
(282) NCIS Interview of [redacted], USN, dtd 4 February 2022
(283) NCIS Second Interview of [redacted], USN, dtd 30 March 2022
(284) NCIS Interview of [redacted], USN, dtd 9 February 2022
(285) NCIS Interview of [redacted], dtd 15 April 2022
(286) NCIS Interview of [redacted], dtd 29 April 2022
(287) NCIS Investigation CCN: 04FEB22-SWND-00078-7HNA, SN Mullen Death Certificate
(288) Defense Health Agency, Armed Forces Medical Examiner, Autopsy Report, ME22-0018
(289) NCIS Interview of [redacted], USN, dtd 11 February 2022
(290) Interview of [redacted], USN, dtd 21 October 2022
(291) [redacted], Navy Cardiology Specialty Leader Memorandum, dtd 17 August 2022
(292) [redacted], Armed Forces Medical Examiner, email dtd 2 August 2022
(293) Commander, Naval Special Warfare Command, ltr dtd 30 September 2022
(294) [redacted], Naval Special Warfare Center, Curriculum Systems Director, email dtd 24 October 2022

(295) [redacted], Naval Special Warfare Center, Curriculum Systems Director, email dtd 27 October 2022
(296) [redacted], Naval Special Warfare Center, Director of Training, email dtd 27 October 2022
(297) Interview of [redacted], USN, dtd 20 October 2022
(298) Defense Health Agency, Armed Forces Medical Examiner, ME22-0018 Case Review, dtd 19 August 2022
(299) Naval Special Warfare Center, Medical Department Standard Operating Procedure, 2022
(300) Commander, Naval Special Warfare Center, Policy Memo 22-4, dtd 20 October 2022
(301) [redacted], Naval Special Warfare Center, Senior Medical Officer, email dtd 12 April 2022
(302) Naval Special Warfare Center, Instructor Indoctrination Topics and Speaker Spreadsheet
(303) Class 352 Post-Hell Week Building 602 Barracks Room Assignments
(304) Naval Special Warfare Center, High Risk Training Safety Control and Risk Assessment
(305) NCIS Investigation CCN: 04FEB22-SWND-00078-7HNA, Search of SN Mullen Barrack Room
(306) [redacted], Naval Special Warfare Center, Operations Master Chief, email dtd 2 November 2022
(307) [redacted], Naval Special Warfare Center, Senior Medical Officer, List of Class 352 Candidates Sent to Hospital
(308) Interview of [redacted], dtd 13 October 2022
(309) [redacted], Deputy Navy Drug Testing Program Manager, email dtd 19 October 2022
(310) Department of Defense Information Paper, Sports Medicine Research and Testing Laboratory, 19 October 2022
(311) Sports Medicine Research and Testing Laboratory Testing Sample
(312) [redacted], Naval Special Warfare Center, Chief Staff Officer, email dtd 27 October 2022
(313) Instructor/Cadre Indoctrination Schedule 18-20 November 2021
(314) Naval Special Warfare Basic Training Command, Class 357 1st Phase Cadre Roster
(315) Memorandum of Agreement between Commander, Naval Special Warfare Command and Senior Medical Officer, Naval Special Warfare Center, undated
(316) Class 357 Corpsmen Watchbill
(317) Hell Week Medical Checks Review, rev 18 May 2021
(318) Hell Week Shift Corpsman Rules of Engagement, rev 20 March 2021
(319) Pulse Oximetry: Fundamentals and Technology Update (Nitzan et al., 2014)
(320) Director, 21st Century Sailor Office (N17), ltr ser N17/V063 dtd 8 August 2022
(321) Assistant Secretary of the Navy (Manpower and Reserve Affairs), ltr dtd 19 September 2022
(322) [redacted], Naval Special Warfare Center, Medical Department, email dtd 2 November 2022
(323) Class 352 Post-Hell Week Medical Brief
(324) Summary of Interview of [redacted], USN, dtd 6 March 2022
(325) Summary of Interview of [redacted], USN, dtd 17 March 2022
(326) Summary of Interview of [redacted], USN, dtd 21 March 2022

(327) Summary of Interview of [redacted], USN, dtd 21 March 2022
(328) Summary of Interview of [redacted] USN, dtd 24 March 2022
(329) Summary of Interview of CAPT Brad Geary, USN, dtd 29 March 2022
(330) Summary of Interview of [redacted] USN, dtd 5 April 2022
(331) Summary of Interview of [redacted] USN, dtd 8 April 2022
(332) Summary of Interview of [redacted], USN, dtd 11 April 2022
(333) Summary of Interview of [redacted] USN, dtd 16 August 2022
(334) Summary of Interview of [redacted], USN, dtd 16 May 2022
(335) Summary of Interview of [redacted] USN, dtd 16 May 2022
(336) Summary of Interview of [redacted], USN, dtd 16 May 2022
(337) Summary of Interview of [redacted] USN, dtd 16 May 2022
(338) Summary of Interview of [redacted], USN, dtd 24 March 2022
(339) Summary of Interview of [redacted], USN, dtd 24 March 2022
(340) Interview of [redacted], dtd 9 November 2022
(341) [redacted], Naval Special Warfare Center, High Risk Training Safety Officer, email dtd 7 November 2022
(342) Class 357 Recovery Observation Center Watchbill
(343) Naval Special Warfare Basic Training Command, Standard Organization and Regulations Manual, relevant sections 10
(344) Commander, Naval Special Warfare Command, ltr ser N00/467 dtd 18 August 2022
(345) COMNAVSPECWARCOM, 191545ZAug22, Trident Order 14
(346) Behavioral Drift background and references
(347) [redacted], Naval Special Warfare Basic Training Command, Medical Department Head, email dtd 8 November 2022
(348) Interview of [redacted], USN, dtd 5 October 2022
(349) Interview of [redacted]
(350) Interview of [redacted]
(351) Interview of [redacted]
(352) Naval Health Research Center Hell Week Validation Report of 2015.
(353) Attrition Data
(354) Thomas Stedman (2005), *Stedman's Medical Dictionary* 28th Ed.
(355) Resume of [redacted]
(356) [redacted] email dtd 5 Nov 22
(357) Mission Critical Team Institute Research Inquiry of 8-10 Feb 22
(358) Memorandum for the Record, [redacted] dtd 16 Mar 23
(359) Commander, Navy Special Warfare Center Ltr 1200 SER 00 of 6 Sep 19, [redacted] High Risk Training Safety Officer Letter of Designation
(360) [redacted] HRTSO Job Qualification Requirements of 16 May 19
(361) Commander, Naval Safety Command ltr 4730 of 19 Oct 22
(362) USSOCOM High Risk Training Inspection of 28 Oct 20
(363) [redacted], Manager's Internal Control Assessment 2021
(364) [redacted], Manager's Internal Control Assessment 2022
(365) Annual Safety Reviews from 2018-2022
(366) BTC DEOCS dtd April 2021
(367) Clinical Procedures for Safer Patient Care, Section 5.6 Management of Hypoxia
(368) Hafen BB, Sharma S (2022), "Oxygen Saturation," StratPearls Publishing LLC.

(369) Class 352 Pneumonia Medical Records of 4 February 2022