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THESIS

**RETURN ON INVESTMENT: ENSURING SPECIAL
FORCES CAN FIGHT ANOTHER DAY**

by

Kevin J. Key

December 2011

Thesis Advisor:
Second Reader:

Leo Blanken
Guy Lemire

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**RETURN ON INVESTMENT: ENSURING SPECIAL FORCES CAN FIGHT
ANOTHER DAY**

Kevin J. Key
Major, United States Army
B.A., University of Nevada, 1998

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**NAVAL POSTGRADUATE SCHOOL
December 2011**

Author: Kevin J. Key

Approved by: Leo Blanken
Thesis Advisor

Colonel Guy LeMire
Second Reader

John Arquilla
Chair, Department of Defense Analysis

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ABSTRACT

The purpose of this research is to identify possible cultural and policy changes within the Special Forces Regiment that can elongate the operational lifespan of a Special Forces operator through improved physical conditioning and recovery. Since inception, Special Forces Soldiers have conducted operations differently from any other Soldiers or Service Members. These differences are not only in the types of operations or missions themselves, but in frequency, duration, austerity, and level of resources. As Special Forces Soldiers have continued to succeed at the challenges set before them, many have prematurely worn their bodies down and become less than fully physically capable to continue in their highly demanding field of work. In the situations where these exceptional Soldiers are removed from an operational role, their units lose the vast amount of experience that the individual Soldier had, and need to use additional resources training a replacement. This thesis argues that improving the Special Forces Regiment's focus on physical readiness through some slight cultural and policy changes can significantly decrease the inevitable losses of Special Forces Soldiers to operational units, and allow the individual Green Beret to remain at a healthy state throughout his career and beyond.

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LIST OF ACRONYMS AND ABBREVIATIONS

1SG: Army First Sergeant

ACE: American Council of Exercise

AR: Army Regulation. Pertaining to a manual

ARFORGEN: Army Force Generation

ARSOF: Army Special Operations Forces

ASI: Additional Skill Indicator

AQAP: Al Qaeda in the Arabian Peninsula

CCDR: Combatant Commanders

CPT: Certified Personal Trainer

CT: Counter Terrorism

CP: Counter Proliferation

DA: Direct Action

DoD: Department of Defense

ECP: Extreme Conditioning Programs

FID: Foreign Internal Defense

FM: Field Manual

HN: Host Nation

IED: Improvised Explosive Device

IO: Information Operations

JFK SWCS: JFK Special Warfare Center and School

KLE: Key Leader Engagement

MOS: Military Occupational Specialty

MSG: Army Master Sergeant

MSG(P): Army Master Sergeant (Promotable)

NASM: National Academy of Sports Medicine

NCO: Non Commissioned Officer

NCOES: Non Commissioned Officer Educational System

NPS: Naval Postgraduate School

NSCA: National Strength and Conditioning Association

ODA: Operational Detachment Alpha

OPT: Optimum Performance Training Model designed by NASM

OPTEMPO: Operational Tempo

OSS: Office of Strategic Services

PAO: Public Affairs Office

PCS: Permanent Change of Station

PMI: Phased Maintenance Inspection

PMCS: Preventative Maintenance Checks and Services

PMS: Preventative Maintenance Services

PRT: Physical Readiness Training

PT: Physical Training

PTSD: Post Traumatic Stress Disorder

RAW: Ranger Athlete Warrior

SEAL: Sea Air Land; U.S. Navy SEALs

SGM: Sergeant Major

SF: Special Forces

SFG(A): Special Forces Group (Airborne)

SFODA: Special Forces Operational Detachment Alpha

SFQC: Special Forces Qualification Course

SOCOM: Special Operations Command

SOF: Special Operations Forces

SOP: Standard Operating Procedure

SOTAC: Special Operations Terminal Attack Controller

SR: Special Reconnaissance

TDY: Temporary Duty

THOR3: Tactical Human Optimization Rapid Rehabilitation and Reconditioning

TM: Technical Manuals

TLP: Troop Leading Procedures

TTP: Tactics, Techniques, and Procedures

USASOC: United States Army Special Operations Command

USSFC: United States Special Forces Command

USSOCOM: United States Special Operations Command

UW: Unconventional Warfare

UDT: Underwater Demolition Teams

WWI: World War One

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I. THE IMPORTANCE OF THE GREEN BERET INVESTMENT

The cost in time, money and the national treasure of the nation's young men is put to great value when a Special Forces Soldier dons his Green Beret for the first time and becomes a part of the Regiment poised to meet the most demanding challenges. It is of the utmost importance that from all levels a Green Beret is treated as the valuable asset that he has become. From the highest levels of Special Forces command, to the actual Green Beret, culture and policy must do what they can to retain each individual of the Special Forces Regiment in the highest physical state possible. This is not only to ensure he is ready to meet the demanding challenges of the multitude of Special Forces missions, but to also have a full and rewarding career that he can complete and not be left in a physically depleted state. For as the nation's youth continues to find heroes amongst the worthy warriors of days gone by, they will undoubtedly find many an elder man who once stood as a fighting Special Forces Soldier from battles that only exist in history books. When this old warrior who once donned the Green Beret continues to stand proud and strong to tell his stories long after his service to the nation is done, it will be unquestionable that the Special Forces Regiment has done its job in valuing its most important asset and built something that lasts.

A. STATEMENT OF PURPOSE AND SCOPE

The purpose of this project is to look at the potential for a Special Forces Soldier to remain operationally deployable for a maximum possible time. The importance of retaining Special Forces Soldiers in an operationally deployable role will minimize the need to send Soldiers to critical skills schools and maximize the available experience on deployable units, thus increasing the operational capabilities of said deployable units. This project will show that adaptations in Special Forces culture, as well as implementations of policy with regards to physical fitness can greatly increase the likelihood that the individual Soldier will retain more career endurance, and in turn facilitate an increase in the operational capabilities of the Special Forces deployable unit.

B. BACKGROUND

The current lifespan of a Special Forces Soldier is often very short with some remaining operationally deployable for only a few years. This turnover drives a need to continue incorporation of new soldiers into operationally deployable units, and continues to send these new Soldiers to specialty skill schools in order to maintain the overall effectiveness of the Special Forces unit. Much of the turnover that currently exists is due to injuries and the inability for certain Soldiers to conduct all assigned physically related tasks. Most non-combat injuries can be avoided from proper precautions, and those who are physically strong will usually recover faster and be less injured in the first place. When a Soldier is preoccupied with other activities that prevent him from conducting effective physical training over an extended time, he is not taking the proper precautions to maintain his strength and his likelihood of avoiding injuries increases. Specifics of Special Forces deployments often influence individuals and the deployed units to limit their physical training. This is often because of the lack of specific attention given to long-term benefit oriented physical training, current culture within the Special Forces Regiment with regards to physical readiness, and general policies that fail to maximize the potential a Special Forces unit is always ready to meet all likely physical challenges.

C. RESEARCH QUESTION

The Question this thesis intends to answer is: What are the conditions under which Special Forces personnel may extend the lifespan of operational effectiveness, while minimizing post-career physical impairment?

D. ARGUMENT

Culture matters, and the current and unique SF culture does not encourage operationally effective physical fitness throughout a Soldier's SF career. As part of the SF culture, individual Soldiers choose to emulate their leadership. However, there are significant portions of SF leadership at all levels that are not highly physically fit. Therefore, many junior SF Soldiers embody different traits. Additionally, culture becomes habitual. If certain practices are not common in a given culture, it is difficult to

implement them. Widespread in depth education in physical fitness is not common in the SF community, and thus there is resistance to it becoming an important part of a SF Soldiers long-term education.

Command Focus drives the priorities for subordinate units, and if physical fitness is not listed as a priority, the unit is less likely to train for it. The less than ideal fact is that many SF Operational Detachments do not conduct effective physical training while deployed because there is limited command focus on it. If a commander does not place focus on certain tasks the operational units and organic individuals will not likely make said tasks a priority. When a SF unit deploys and is not given guidance to conduct physical training with specific goals, they will not place a high degree of emphasis on it.

All Special Forces Soldiers are familiar with the SOF truth that “humans are more important than hardware,” yet the SF community does not place the same degree of emphasis on ensuring a maximized operational lifespan of the individual SF Soldier as it does many pieces of equipment. For example, if something’s (a Soldier or piece of hardware) operational lifespan is determined to be important there will be imposed checks, procedures, and guidelines to maintain the “thing’s” operational effectiveness for as long as reasonably possible. The amount and regularity of these checks, procedures, and guidelines can be used as a measure of how important the “thing” is to the command. Using the emphasis of policies that dictate the mandated attention a given “thing” receives, if a SF Soldier has less checks, procedures, and guidelines implemented to sustain his operational lifespan, his longevity can viewed as less important as the hardware.

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II. LITERATURE REVIEW:

This thesis will examine literature in the sports medicine, elite athlete arena, as well as athletic based military pieces of literature. Much of this literature can be applicable to the tactical athlete, or specifically, the Special Forces Soldier. In spite of extensive knowledge sets, broad case studies, and some of the brightest minds in the realm of Human Performance, very few pieces of literature have been written addressing the Special Forces Soldier specifically and many of the unique demands such as:

- Long and frequent deployments to the most austere locations in the world
- The frequent need for low visibility to be maintained throughout many deployments
- Multiple previous injuries being more common amongst Special Forces Soldiers than regular Army Soldiers

This thesis will look at useful elements of both types of literature, and explain current limitations and constraints that impair Special Forces soldiers from effectively participating in current civilian and Military programs. Additionally, this thesis will describe how Special Forces can effectively apply elements seen in both types of literature.

A. SPORTS MEDICINE AND ELITE ATHLETE PIECES OF LITERATURE

NASM Essentials of Personal Fitness Training, by the National Academy of Sports Medicine. NASM published this, their latest training manual for Certified Personal Trainers (CPTs) in 2008. As one of the civilian fitness community's premier training organizations, this piece of literature identifies ways to train a person who may have little to no fitness background. However, the literature does cover effective ways of building an individual's fitness over time to an area where one can become an elite athlete. The literature is based around NASM's "Optimum Performance Training model" which builds progressive fitness first focusing on stabilization, then developing strength, and finally building the capacity for power. It is a highly effective manual for understanding exercise science and general aspects of fitness. In terms of this piece of

literature's helpfulness to Special Forces Soldiers, it would be most effective in rebuilding strength of a wounded Soldier to minimize chances of further injury.

Essentials of Strength Training and Conditioning, by Thomas R. Baechle, and Roger W. Earle. This 2008 publication is the latest by the National Strength and Conditioning Association (NSCA). A primary role of the NSCA is to standardize physical training, and trainers. The book is set up like a textbook and is highly comprehensive as well as vast in material. There is also great attention given to testing and evaluation. Topics covered include: all aspects of the human body, different types of training (anaerobic and aerobic), mental aspects, nutritional factors, exercise techniques, program design, and organization in conjunction with administration of athletic programs. It is essential for Human Performance research for the Tactical Athlete to remain partially involved with the NSCA because of the fact that they currently serve as the single most in depth organization as it relates to accepted functional fitness. However, it is also essential that the Special Forces Tactical Athlete remain aware of the differences between their job requirements and those of the general public, or even elite athletes.

Movement, Functional Movement Systems, by Gray Cook. Like the name implies, this piece of literature focuses on movement. It explores common injuries in the inactive population, semi active population, and athletes to include experienced as well as newer Soldiers. Cook gives a great deal of attention to poor movement habits that lead to injuries. This point is one that seems to be an increasing phenomenon in our society. Mr. Cook then goes into a great variety of specific movements that can help individuals prevent and if necessary, recover from injury using good body alignment, and in many cases re-learned muscle memory. The topics in this book can be highly useful to the Tactical Athlete. However, to fully apply the techniques and principles discussed in a deployed environment, a vast amount of education is required for a trainer element of a deployable Special Forces unit. Furthermore, additional studies and experiments of how mission specific movements and weight loads on the individual Soldier will apply based on mission requirements, which will likely be different during each deployment.

Force of Nature, by Laird Hamilton. This is a holistic look balancing ones mind, body, and family as part of being a world-class athlete. Mr. Hamilton covers effective building blocks of training, specific techniques, nutrition, and a detailed look at injuries and how to balance continued training with rest and recovery. Some unique and valuable elements of this book to the Special Forces tactical athlete are working through significant injuries, using ones mind to maximize potential/results, and particularly, finding a productive balance with family and things that matter outside of ones job or focus area. Few pieces of Human Performance literature explore the importance of family and what Laird Hamilton refers to as “spiritual beliefs,” which can arguably increase the effectiveness of a Special Forces Soldier if given the appropriate level of focus. Where the book lacks in full relevancy, is its focus towards the individual. Special Forces Soldiers must train with, and rely on their teammates. Additionally, sacrifices and balances must be made to accomplish the missions at hand that do not always optimize what is best for the individual Soldier.

B. MILITARY ORIENTED PIECES OF LITERATURE

The U.S. Navy SEAL Guide to Fitness and Nutrition, by Patricia Deuster, Ph.D, M.P.H., Anita Singh, Ph.D., and Pierre A. Pelletier, ENS, MC, USNR. This civilian industry produced book specifically for the U.S. Navy SEALs is a comprehensive look at physical training and proper eating. The book is divided in two parts with the first part focusing solely on physical fitness and the second on nutrition. The fitness aspects of the literature cover physiology, and principles in detail. The exercises and training are highly geared towards SEAL specific missions with over 20 pages specifically addressing swimming. The nutrition portion looks at specific foods and exact calories that will most effectively enhance the body for specific types of missions. With over 150 pages dedicated to eating, there is extensive information on the science behind the food and its effects on the body. Although this manual is geared towards Navy SEALs, it could be useful to Special Forces. However, the amount of scientific data is likely less useful to the average Soldier, and much of it serves as a better piece of valuable reference for specific scenarios.

THOR3: Humans are More Important Than Hardware, an NPS Thesis by Major Benjamin W. Knipscher. Major Knipscher's thesis explores the implementation of THOR3 by USSOCOM within the SOF Community. The foundation of this piece is the value of the SOF warrior and the identification of specific steps that can prepare this warrior to meet the unique challenges that only SOF Soldiers face. Major Knipscher looks at how to better educate, train, recover when necessary, and physically develop SOF warriors. The emphasis is on the broad scope of USSOCOM Service Members, the applicability of current civilian and military training models being used in the SOF community, and the implementation of THOR3. The thesis does not explore the unique requirements, and physical training challenges of a U.S. Army Special Forces Soldier.

Ranger Athlete Warrior Manual, 3.0. This manual is oriented specifically towards the 75th Ranger Regiment and serves as a "how to" and "why" manual of effective Human Performance and program design. The manual covers how and why the program came about, the program's philosophy, and detailed specifics of how to implement effective physical training. The training specifics outline various drills, exercises, and even cover scheduling. This manual is highly effective for elite individual Soldiers or small groups/units that can rely and resource a consistent physical training program, to include training time requirements and facilities. It is not fully applicable to the Special Forces Soldier who is likely to spend a great deal of time deployed to locations where there are limits on the availability of physical training facilities, as well as a lack of consistency of available time to establish a physical training routine.

TC 3-22.10, Army Physical Readiness Manual (March 2010). Recently updated, this manual is aimed at the entire Army. There are useful drills and vast amounts of information on nutrition, importance of physical fitness, and responsibilities from the individual Soldier, to his/her immediate supervisor, the unit Commander, and even the installation. There is a high degree of useful information to the Special Forces Soldier within this manual. Particularly with regards to what can be expected from an Army installation as well as resources available from the Army to the Soldier with regards to

training, and rehabilitation programs. Similar to the *Ranger Athlete Warrior Manual, TC 3-22.10* lacks in accounting for the unique mission requirements of Army Special Forces Soldiers.

C. THE VALUE OF FITNESS LITURATURE TO SPECIAL FORCES

The take-away from military-specific and civilian-oriented pieces of fitness literature from the perspective of this thesis is that there currently are few if any pieces of literature that directly address Special Forces. This fact is possibly because arguably, no athletically oriented organization has broader parameters of physical mission requirements than Special Forces. However, there are very few pieces of literature that cannot provide some type of value to Special Forces. As one unit may find themselves conducting riverine training with a Host Nation element, pieces of literature designed for SEALs may be highly effective. Other Special Forces units preparing for and then conducting DA missions may look towards the RAW program for useful athletic guidance. Moreover, the individual Green Beret sent out to operate on his own may find elite athletic programs geared towards the individual athlete most effective for him. Additionally, as missions change, and the focus of the individual Green Beret shifts there is likely a need to redirect athletic focus to something that is more ideally effective, as opposed to getting stuck in a non-effective pattern. Most important to the Special Forces Regiment, is to acknowledge that there are different pieces of literature aimed at slightly different niches. With this knowledge, and an open mind towards functional fitness for the tactical athlete, the broad range of literature simply means there is a broad range of tools to put in the fitness kit bag.

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III. METHODOLOGY AND CHAPTER SUMMARIES

A. THESIS METHODOLOGY

This thesis will explore the development of SF-specific human performance, and operational effectiveness with regards to physical fitness at the individual level and how this relates to the unit level. The unit of analysis in this thesis is a Special Forces unit within the Special Forces Regiment, and the dependent variable will be the operationally deployable SF unit, and the portion of the Soldiers who are fit for operations, or in contrast, are not fit to conduct operations.

In order to conduct this research the following assumptions are made:

- a) The SF community is its own unique culture
- b) SF Soldiers will have limited access to modern work out facilities while deployed, and deployments will regularly last longer than 90 days.
- c) SF Units physical training techniques will vary greatly while deployed as compared to time spent in garrison.

The factors that are assumed to affect the Deployable Operational Special Forces unit are:

- a) Physical Training Education aimed at long term goals
- b) Physical Training
 - i. Properly applied Functional Movement
 - ii. Improperly applied Functional Movement
- c) Consistency over time of Physical Training
- d) Rest
- e) Previous Injuries
- f) Nutrition
- g) Culture of SF Community
- h) Mission of the operational deployable unit

B. CHAPTER DESCRIPTIONS

Chapters (IV. - IX.) of this thesis build off one another. Each chapter maintains a constant theme of looking at the issues presented from the perspective of Special Forces. Moreover, all elements of this thesis attempt to define what are the best solutions for the Special Forces Regiment with regards to effective physical fitness training.

Chapter IV. Finding the Best Policy for the Special Forces Warrior will describe the importance of this thesis. Moreover, the chapter will define primary argument, and explore the hypothesis of this thesis.

Chapter V. Why Historical Training Examples are relevant to Special Forces will draw upon consistencies and examples that can be valuable take away from other successful military units in history. In an effort to show how broad, different, and separated by time with their receptiveness to the Special Forces of today case studies will be done of 5th Century Roman Empire and WWI U.S. Infantry.

Chapter VI. Special Forces Culture and Policy towards Physical Readiness Training is constructed to look at the current state of Special Forces, and how Army Policies apply to the uniqueness found within the requirements of the Regiment. Additionally, this chapter looks at lessons from Special Forces past, the ongoing present, and the assumed future in order to define cultural and policy changes that may benefit the Regiment's assurance of continues success.

Chapter VII. Other Cultures and Policy towards Physical Readiness and Fitness looks at other SOF examples of the U.S. Army Rangers, and U.S. Navy SEALs. Additionally, this chapter reviews the recent THOR3 SOCOM human performance initiative, and evaluates potential to SOF from other civilian athletic cultures. From these examples this chapter looks at effective specifics of each separate culture, and evaluates whether or not these specifics can be applied to Special Forces.

VIII. Effective Training and Policy for Special Forces takes examples from the current SF practices, Army guidance, other organizations, and the National Sports and Medicine Association and provides recommendations for possible techniques and specific physical readiness training that can apply to SF. The intent of this chapter is not

to recommend a set way of doing things. In contrast, this chapter's intent is to offer training examples that are part of a greater methodology, that if followed will contribute to elongating the effective operational lifespan of a Special Forces Soldier.

IX. Summary and Way Ahead will wrap up the findings of this thesis and offer suggested areas where additional research can be done in the future that would contribute to increase the operational effectiveness of the Special Forces Regiment, and ensure that the finest standards that have become a hallmark of SF, are continually maintained and in many cases improved upon.

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IV. FINDING THE BEST POLICY FOR THE SPECIAL FORCES WARRIOR

Culture and Policy provide foundation for the normative and standard behavior found in any organization, and the Special Forces Regiment is no different. Based on mission requirements that vary as much as the multitude of countries and scenarios today's Green Beret finds himself in, one of the only certain constants is the need to be prepared for variation. In order to remain as prepared as possible Special Forces Operational Detachments - A (SFODA or ODA for short) train hard together, and also ensure they maintain broad skill sets from snipers, Rangers, linguists, SOTACs (Special Operations Terminal Attack Controller), to the multitude of other ASIs (Additional Skill Indicators), and MOS specific skills. The Special Forces Regiment must ensure that its unique cultural aspects, as well as its policies aimed at influencing physical readiness are designed to fully support the operational effectiveness of all Green Berets.

This chapter will first explain the relevance of culture to Special Forces. Second, policy and how it not only relates to culture, but much of the direction of the Special Forces Regiment will be examined. Third, this chapter will look at why it is essential for Special Forces to remain focused on ensuring culture and policy support effective long-term oriented physical readiness training. Fourth, attention will be drawn to policies that often place a higher degree of emphasis on equipment than the Soldier. Fifth, this chapter will give a detailed look at how culture and policy matter to specific actions and specific Soldiers. Sixth, this chapter will examine of the importance of command focus to a long and effective operational career of a Green Beret, and finally, this chapter explores effective cultural and policy changes within the Special Forces Regiment.

A. CULTURE DEFINED

The importance of culture to this chapter and thesis overall is paramount. In his book *Culture and Related Corporate Realities* (1985), Vijay Sathe defines culture as “the set of important assumptions (often unstated) that members of a community share in common.” Though Sathe's book focuses on culture in its relationship to corporations the similarities between a business organization and the Special Forces Regiment are

applicable to the degree in which “members of a community” act in accordance with their perceived realities of the organizational word that surrounds them. Special Forces culture has grown over the years to be one in which achieving the tasks at hand to the highest standards are a shared norm. However, the Regiment’s culture lacks in a prevalence of effective long-term oriented physical readiness training commonalities. It has become an excepted part of SF culture that Soldiers will break down, and may not last a long time in an effective operational role.

B. THE ROLE OF POLICY TO SPECIAL FORCES

Policy is intrinsically linked to culture. Policy, as it applies to the Special Forces Regiment is seen in formalized SOPs, Training Manuals, Field Manuals and official Army and DoD publications. As certain cultural norms become standard over time they are often morphed into policy when they are seen as an effective methodology of dealing with given scenarios that should be conducted by all. Conversely, when certain cultural norms are seen by levels of command as hindering unit effectiveness policies are often put into place that are an attempt to stop the cultural phenomenon.

Examples of recent cultural norms that have been adopted into policy are current guidelines in IED clearing, and Key Leader Engagements (KLEs). Both of these actions conducted by todays SF operators started out as Tactics, Techniques, and Procedures (TTPs) and lessons learned. As the cultural phenomenon grew of effective ways to both clear Improvised Explosive Devices (IEDs) and conduct KLEs, Standard Operating Procedures (SOPs) were established by commands, and doctrine was written to broaden the influence of the best techniques.

Examples of cultural phenomena that have been countered by policy in recent SF related history are acceptance of Soldiers who suffer from Post Traumatic Stress Disorder (PTSD), to the cyber security threats that now exist. Less than a decade ago Soldiers were often seen as weak if they suffered emotional issues from traumatic stress. Today, the SF Command, and medical community have embraced programs that looks for the signs of PTSD, and step in to help Soldiers work through their issues. Similarly, as cyber

security was hardly spoken of and culturally ignored in many respects, today's SF Command has created effective policies to ensure this growing threat is effectively dealt with at all levels within the SF community.

The latter point dealing with the lack of cultural attention to cyber security that led to effective policy changes to make it forefront speaks in similarity most to the need to create policies and a cultural acceptance of physical readiness training aimed at sustaining the Special Forces operator over time. Today's culture and policies remain focused on effectively achieving the tasks at hand with less than optimal focus on sustaining the Green Beret in an operational role for a maximum amount of time.

C. WHY IMPROVING PHYSICAL TRAINING CULTURE AND POLICY IS IMPORTANT TO SPECIAL FORCES

Much of the training conducted at both the ODA and individual level are essential, and over time is what makes each detachment the highly capable instrument of the U.S. military that it continues to prove to be. However, when a Soldier is lost for whatever reason, the detachment loses an integral part of the team and a valuable set of skills that can be hard to fully replace. The loss can be even more extreme when a detachment loses a member with years of operational experience. Replacing not only the lost team member, but also the lost skill sets is expensive in both time and resources. It is often challenging to acquire school slots for critical skill schools, and even more challenging for any given detachment to maintain their operational proficiency in their mission preparations while either training up new team members, or missing integral team members while they are away at a school. By finding ways to modify Special Forces culture and official policies towards effective physical training, it is possible to maximize the operational lifespan of the Special Forces Regiment's Green Berets, and ultimately increase the expected effectiveness of Operational Detachments.

Sadly, since September 11, 2001, the Special Forces Regiment has experienced its greatest losses since the Vietnam War. In addition to mounting Green Beret KIAs, the Regiment's wounded Soldiers add to the solemn toll. As cited by the *Green Beret Foundation* in March-April-May *Special Warfare* journal (2011): The Special Forces Regiment "has endured the highest numbers of casualties in the U.S. Army Special

Operations Command with more than 900 Special Forces Soldiers being wounded in combat” (p. 5). As is the case with combat, many of these wounds were unavoidable, and a multitude of them have taken these brave Soldiers forever away from their chosen career path on an Operational Detachment. In addition to the wounds received on the battlefield injuries in training continue to be a concern, and it is rare if not impossible to find any detachment that has not lost a team member for either a short or long time period due to some sort of injury within the last year. However, with advancements in medical responsiveness and physical therapy, many of these Soldiers are able to once again return to an ODA, whereas only a decade ago many were not.

A manipulable variable in maximizing the chances of a SF operator’s chances to fully recover from injury and return to duty on a detachment is his level of physical fitness and musculoskeletal strength. As according to the National Academy of Sports Medicine (NASM) (2008): “The less conditioned our musculoskeletal systems are, the higher the risk of injury” (Clark et al. p. 6). Thus, effective programs must exist at all levels to ensure each and every Green Beret is maintaining a high degree of physical fitness so that he minimizes his chances of injury and ergo, depleting the effectiveness of his unit.

It cannot be argued that the pipeline provided in the SFQC provides highly capable and physically fit Green Berets ready for assignment to ODAs. Furthermore, throughout the Regiment there are some of the most physically fit service-members of today’s armed forces. Nevertheless, as it can be said that a detachment is “only as strong as its weakest link,”there are far too many examples of Green Berets who pose a risk to their unit’s operational effectiveness by not continually maintaining an effective state of physical fitness and musculoskeletal strength, thus increasing their risk of injury and ability to ultimately recover if injured.

In the instances where a lack of physical fitness exists in the individual Soldier, and sometimes even within the detachment as a whole, there often exist a vast amount of reasons. There are instances where a focus on the physical state of the individual Green Beret is not paramount for either a short duration, or over time. Second, the culture and policies of the Special Forces Regiment focuses on such a broad range of requirements

that sustained physical capabilities that can elongate a Green Berets operational career are often not at the forefront of day-to-day training and operations. Finally, when physical fitness is not prominent in command guidance and focus, Soldiers will naturally place it secondary to the tasks and standards that are prominent.

With only slight modification to instances where physical fitness lacks in its importance within the Special Forces Regiment it is possible to increase the operational lifespan of a vast amount of Green Berets. Moreover, with the operational lifespan increased the overall effectiveness of each ODA will improve as injuries will be reduced, recovery time from any injuries will be decreased, more experience will be retained, and there will be a decreased requirement for replacing lost Soldiers and the skill sets they poses.

D. ENSURING HUMANS REMAIN MORE IMPORTANT THAN THE HARDWARE THEY OPERATE

All SF Soldiers are familiar with the SOF truth that “Humans are more important than Hardware.” It is hard to fault any commander who places his people first, and remembers they and their families are to be cared for, and the man is to be equipped, not the equipment manned. However, when looking at particular policies that demand a high degree of attention to certain types of equipment it is conceivable how these notions of putting the Soldier first can be neglected, and the mission of sustaining the Green Beret in an effective operational capacity for a long productive career be forgotten.

For instance, if criteria for analyzing how important the lifespan of a Soldier verses equipment are the amount and regularity of checks, procedures, and guidelines pertaining to operational performance, the Soldier may fall short of many pieces of equipment. As an example, UH-60 variant helicopters have a total of four Technical Manuals (TMs): *TM 1-15201237110 Operators Manual*, *TM 1-1520-237- PMI, Phased Maintenance Inspection Checklist*, *TM 1-1520-237-PMS Preventative Maintenance Services*, and *TM 1-1520-237-PMD Preventative Maintenance Services*. The Operator’s manual alone is over 900 pages of instruction pertaining to effective operation of a helicopter. Additionally, the PMD manual covers the more than 120 checks that must be conducted daily, whereas the PMS covers the more than 200 checks that must be

conducted every 40 hours of operation. These policies governing required checks aimed at increasing the effective lifespan of a piece of equipment dwarf the daily and routine checks a Green Beret must undergo to ensure he is ready for operations.

Even SF-specific pieces of equipment such as the RG-33 require more steps to ensure an elongated operational lifespan than a Soldier. The BAE Systems Operator Training Guide (May 2008) highlights the eight main areas that must be checked daily during Preventative Maintenance Checks and Services (PMCS), and the more than 25 total checks that must be conducted (pp. RG33 PMCS-9-10). The RG33 checks listed only cover the basic vehicle, and fall short of even addressing the hundreds of additional checks that must be conducted on weapons systems, communications equipment, and other mission essential equipment.

Of course there are a multitude of checks and requirements dictated by current policy that must be conducted by the individual Green Beret: annual suicide training, airborne and special skills sustainment, marksmanship training, medical training, and new equipment training, all of which have their own individual checklist. However, these comparisons though aimed at aspects of performance are not specifically aimed at ensuring the operational lifespan of a Soldier is maximized as are the checks incorporated into the UH-60 and RG33 TMs. Moreover, just as if basic maintenance of a helicopter, SF vehicle, weapon or other piece of valuable equipment is neglected, when the Green Beret's basic physical readiness is neglected, he will not last as long.

Nevertheless, an appropriate solution is not simply to incorporate mandated and elaborate checklists for the individual Green Beret into his daily routine. Just as the Special Forces Regiment wants its equipment to last, guidelines for long-term effective physical readiness training need to be based around ensuring sustainment over time of the Soldier. As it is an unwritten human resources mission to sustain Soldiers in their operational role for longer versus shorter durations, it is imperative to ensure steps are made to make this mission a success. Just as with all military missions, effective time must be given to the lowest levels while supervised from above. Within the Troop Leading Procedures (TLPs) found in the FM 7-8 (2009), leaders must give their subordinates 2/3 of the time available to properly prepare for any mission. If a mission

for the Green Beret is to remain effectively operational for a career of 10 years for example, he must be appropriately integrating all essential skills that will allow him to continue to shoot, move, and communicate over that time period. This will undoubtedly include effective physical fitness training aimed at ensuring he has musculoskeletal strength to not only last the entire operational period, but also to continue his life with minimal amounts of follow-on medical problems. In doing so, considering that two-thirds of his time be spent in all aspects of operational preparedness to include effective physical training amongst combat specific skills, and administrative requirements the only argument that remains is to ensure it is done by individuals and units where it is not, and it is a constant in the training process.

E. CULTURE AND POLICIES MATTER

Culture and policy drive what is acceptable and not in the Special Forces Regiment. Individuals and subordinates will often emulate their leadership in activities that they deem acceptable and appealing. Additionally, acceptable normative actions often become habitual as they are conformed to by the masses, and if these actions become integral to actual operations they are destined to become policy. One such activity that has become commonplace in all Special Forces Groups is the acceptance of the few, but notable deconditioned Green Berets. NASM defines deconditioned as “A state of lost physical fitness, which may include muscle imbalances, decreased flexibility and a lack of core and joint stability,” it is important to remember that this state can inflict even highly fit Soldiers in periods of only a few weeks of inactivity. Based on the acceptance of these deconditioned men, it can be argued that the current SF culture does not sufficiently encourage operationally effective physical fitness throughout all Green Berets’ careers, or across the board.

As previously mentioned, because of culture pressures, individuals will choose to emulate their leadership and those around them as they “conform” to what they see as acceptable and appealing. As described in *Dissuading Terror* (2005) by Cragin and Gerwehr: “Conformational pressures arise from contextual or environmental cues that trigger individuals to behave in a manner that seems appropriate or correct, given the situation” (p. 17). If some find it appealing to put forth minimal effort in physical

conditioning, and they see peers, senior NCOs, or even leaders who are in a less than optimal conditioned physical state, then they themselves find reinforcement that this is an acceptable status and are more likely to follow suit. Naturally, the more a problem of deconditioned Soldiers exists, the more it is likely to grow. In contrast, the more it is commonplace to be in a highly conditioned physical state, the less likely a unit is to have deconditioned Soldiers, and the more that type of poor behavior will be discouraged. As Cragin and Gerwehr cite how “research demonstrates that the greater the unanimity of the peer group, the greater the influence on an individual’s behavior” (p. 17).

In many cases leaders inadvertently encourage their soldiers to be deconditioned, such as during times of block leave, or even intensive schooling situations where there exist minimal time for effective physical training. This inactivity then leaves the Soldier more vulnerable to injury, and thus a potential loss to his unit if he is in fact injured. As NASM research has shown, even when fitness programs are specifically designed to avoid injury there can be a 50% or higher injury rate and a high chance of overtraining when individuals are deconditioned (p. 6).

In order to minimize the chances of deconditioned Soldiers within the Special Forces Regiment, and thus optimize the expected physical preparedness, it is imperative that being deconditioned be an unacceptable SF cultural phenomenon. This will require a conversion of the uncommon few that find it acceptable to remain in a less than optimal physical state, and an expected behavior change of all that even in times of schooling and block leave physical readiness training must continue. As there become fewer and fewer deconditioned Soldiers within the Special Forces Regiment, the less likely others will emerge. Cragin and Gerwehr demonstrate research supporting this as they describe the state of “conversion” as: “desired behaviors eventually emerge without prompting, once the attitudes that underlie them have changed” (p. 19).

F. IMPORTANCE OF COMMAND FOCUS TO A LONG AND EFFECTIVE OPERATIONAL CAREER

Green Berets are Soldiers, and when ordered to conduct a task by their command, they will do so. Additionally, as commanders issue guidance they are describing where emphasis should be placed on whatever the mission is at hand. Where command

guidance may often fall short is in the realm of effective physical fitness. Although many Special Forces units may see effective physical fitness training as a given, the less than ideal truth is that all do not. Further, if units are told by their command to ensure mission success is achieved in a plethora of other important tasks that take an absorbent amount of time, and physical fitness is omitted from these tasks, it is more than likely that many operational units will neglect effective long-term oriented physical training, thus setting many of their Green Berets up for careers shortened by injury, and decreasing their units optimal operational capabilities over time.

It is a given that Soldiers will be less likely to make certain tasks a priority if they are not directed, as they focus on what they have been given guidance to do. Hence, if a Special Forces unit is conducting training over a given period of time, or even deploys downrange and is not given guidance to conduct physical training as a specific goal they will be less likely to do so, and may even see the physical training as something that is only to be done when all other tasks are accomplished. The latter may be the most appropriate case in some survivability scenarios such as conducting necessary refit from combat patrols, or ensuring a high priority mission is fully resourced. However, in order to avoid a prevalence of deconditioned Soldiers who are prone to injury, the Soldiers must understand and be held accountable by the command to remain effectively physically conditioned.

A commander should not necessarily be expected to tell his Green Berets when and where to work out. Nevertheless, if his soldiers understand that they will be held accountable for maintaining themselves in states of operational effectiveness to include their physical abilities it is hard to argue that they will not do so. Additionally, when there are incentives through rewards and punishments for those that follow command guidance that pertains to operationally effective physical fitness, SF units will likely see a decrease in injury rates, and maintain higher operational capabilities through not only being more physically fit, but retaining valuable experience and skill sets over a longer period of time. The simple change this alludes to is to ensure those commanders who are not placing emphasis on continued effective physical readiness training simply begin to do so.

G. IMPLEMENTING EFFECTIVE CULTURAL AND POLICY CHANGES

With slight changes to the current state of affairs and accepted normative behaviors within the Special Forces Regiment pertaining to physical fitness it is highly conceivable that the overall effectiveness can be improved by decreasing the chances for injury of SF operators. This in turn will broaden the retention of irreplaceable operational experience, and decrease the continued cost in time and resources to train newer Soldiers in important skill sets. By ensuring the Regiment continues to put humans above hardware in importance, understanding the risks and benefits of culture towards remaining effectively conditioned, and ensuring effective command guidance aimed at maintaining the SF operator it is clear how a broad and effective change can overtake the Special Forces community. As the SF Regiment looks to continually build the most effective systems for the future, it will also be necessary to continue to learn from the past, as the next chapter will show.

V. WHY HISTORICAL TRAINING EXAMPLES ARE RELEVANT TO SPECIAL FORCES

War is not about who is right, it is about who is left

Sun Tzu

In order to be effective in combat, organizations that are structured to fight and win on the field of battle have devised training methods and techniques of ensuring their troops are as prepared as possible. This has remained true since the inception of warfare. Often, as military cultures have bred activities that become routine, certain aspects of training their troops for combat have lost the reasons behind the training methods, and units have in turn, lost some of their ability to remain adaptive and relevant to the world around them. Throughout the history of warfare, societies have witnessed many effective military organizations come and go. Some of these organizations were defeated on the field of battle, some disappeared with the society they belonged to, and others were determined to be irrelevant, and were disbanded. Nevertheless, military organizations throughout history have displayed varying degrees of training effectiveness that can be measured in how these organizations were able to develop and sustain themselves as a useful military force to the society they supported. Technological advances in weaponry and equipment have required training in tactical proficiency that has changed extensively. However, one constant in training from the earliest military organization to present has been the need to develop systems to select, train, and sustain those physically able to conduct the often-challenging tasks that exist in the environments where military forces are needed. When one looks at the dynamic environments that today's Special Forces operate in, it is arguably intuitive that the demands will continue to change. Therefore, it is essential that today's Special Forces Regiment learn important lessons in selection, training, and sustaining an effective force from military organizations throughout history to maintain and improve the Regiment's relevance in the future.

Modern military scholars are familiar with what Admiral William McRaven refers to as the "six principles of special operations" in his book *Spec Ops* (1996): "simplicity,

security, repetition, surprise, speed, and purpose” (p.8). Arguably, each of these principles is directly affected by the physical training and readiness of a military organization and its individual troops to a degree. This chapter will look particularly at McRaven’s principles of simplicity, repetition, and speed to analyze the degree to which a given military organization’s physical training could contribute to its overall effectiveness. Specifically, this chapter will review how external, and internal historical lessons can apply to Special Forces, and specifically look at lessons learned from two vastly different, but effective military units: the 5th Century Roman Empire, and the U.S. Army WWI Infantry. Finally, this chapter will look at how lessons from the past can be applied to the current goals of the Special Forces Regiment.

A. DRAWING FROM THE PAST AND LOOKING TO THE FUTURE

Today’s Special Forces can draw certain similarities to many past and present conventional units such as their need to shoot, move, communicate and provide medical aid to their wounded comrades. However, Special Forces also have some very unique aspects that do not always draw parallels when compared to other military organizations, as pointed out by Dick Couch in *Chosen Soldiers* (2007), “[Special Forces have] the unique ability to move within a culture – to gain the trust of the village chief or tribal elders” (p. 19). These unique requirements of Special Forces to work up close and personal with partner nation forces while deployed demands specific organizational and training imperatives that often differ from conventional units. A negative side effect of these acknowledged differences is the disregard of many within the Special Forces community in taking valuable lessons learned from conventional or “non special” units.

With proper analysis, the Special Forces Regiment can learn from other military organizations throughout history with regards to training, and this has the potential to improve the Regiment’s overall effectiveness. This chapter defines an “effective military organization,” as an organization that was able to support the policy objectives of the society it supported. In order to look at how effective the physical training was in contributing to the organization as a whole, this chapter will also explore how certain principles of military operations could be affected by comprehensive training.

Even though a given military organization may not constitute a special operations force, attention will be given to how certain training techniques and methods can possibly be applied to Special Forces. To define whether the Special Forces Regiment can learn from historical examples of military training, this chapter will look at the following criteria:

- How important was selection to the organization?
- What training activities were conducted by the military organization, and to what degree did they become routine?
- Did the organization train effectively to remain relevant to this purpose?
- To what degree could the training conducted complement McRaven's principles of simplicity, repetition, and speed, and be applied to modern Special Forces?

McRaven's principles can be an excellent measure of how a military organization performs, or even expects to perform. McRaven looks specifically at these principles as what is necessary to achieve what he defines as "relative superiority [which] favors small forces" (p. 8). Relative superiority is described as essential to McRaven's theory of special operations, and he defines it as "a condition that exists when an attacking force, generally smaller, gains a decisive advantage over a larger or well-defended enemy" (p. 4). Once a unit achieves relative superiority it has passed the tipping point of the operation where odds that may have been previously stacked against the unit are now no longer as relevant, and the likelihood of mission success has been greatly increased based on how effectively the given unit applied the principles of special operations.

Since before recorded history, mankind has been assembling in societies and attacking others, as well as defending against one another. As these early societies advanced, they inherently knew that practiced, rehearsed, and coordinated efforts worked more effectively to defeat their enemies more than just conducting limited actions in haste. Likewise, they knew that having greater strength, endurance, and stamina could help in delineating an advantage over an opponent. As certain advantages were learned, early military organizations began to practice and rehearse them. Based on advances in weaponry and tactics, these practiced, rehearsed, and coordinated efforts have advanced

from a mass of men concurrently throwing stones, to the complexities of what can be seen on today's battlefield in the concert of firepower from the land, sea, air, and the cyber world. However, in order to defeat an enemy there is often much more that must be considered than the moment at which the firepower (or concurrently thrown stones) is brought to bear. Military forces must train to be proficient, and physical training is no different. As indicated in the *Army Physical Readiness Training Manual 3-22.20* (2010): "Physical Readiness Training prepares Soldiers and units for the physical challenges of fulfilling this mission in the face of a wide range of threats, in complex operational environments and with emerging technologies" (p. xix).

As various military organizations throughout history have been discontinued for differing reasons it is applicable for the Special Forces Regiment to understand that they are not immune from being disbanded, and they must remain relevant to the U.S. national policy objectives. This is the case whether the U.S. Army develops policies that are fully relevant to SF or not. In particular, SOF have been historically more likely to find themselves in danger of being disbanded because of a lack of perceived relevance as pointed out by Susan Marquis in *Unconventional Warfare* (1997). As Marquis particularly looks at SOF in U.S. military history, she describes the continued struggle these forces have had in becoming a sustained portion of the force: "American special operations forces have experienced a roller coaster of dramatic highs and lows" (p. 4). Though an applicable physical training program is not likely to be the key element as to Special Forces institutional success or failure, it is likely to be a predominant fundamental in ensuring the strongest and most determined men are selected, forged into elite warriors, and sustained in the Regiment. To study how this can most effectively be done the two distinct yet highly effective military organizations of the 5th century Roman Empire and WWI U.S. Infantry will be analyzed.

B. CASE STUDY: 5TH CENTURY ROMAN EMPIRE

Much of what is known today about the Roman military can be learned from the 5th century writings of Flavius Vegetius Renatus. Vegetius authored a piece of literature that likely served as a type of Field Manual for Roman commanders. This literature, *On Roman Military Matters*, was first translated and published in 1767, and can give Special

Forces a glimpse into how the Roman Empire created one of the longest standing dominant world powers the world has ever known.

By the simple fact that the Roman Empire existed for almost 2,000 years, and conquered much of the known world at one time or another, one can deduce that it must have been supported by a highly effective military during the majority of its existence. Countless battles can be determined Roman losses, or victories, and thus at various points in time, elements of the military organization performed very well and achieved its objectives, while at other times the opposite was true.

A valuable aspect of reflecting on the Roman military organization is that much of what they viewed as important 2,000 years ago, can be viewed as important to today's military organization, and in particular the Special Forces Regiment. Like Special Forces, Vegetius speaks of the importance of physical strength being selection criteria of new recruits: "the height of a man is not to be regarded so much as his strength; and for this we have the authority Homer, who tells us that the deficiency of stature in Tydeus was amply compensated by vigor and courage" (p. 10). Vegetius goes on to indicate that men who naturally find work such as "smiths, carpenters, butchers, and huntsmen," are much better suited to be Soldiers than those who prefer work that should "more properly belong to women" (p. 11). He also elaborates that before the candidate can earn the right to be considered a "Roman Soldier," he must be able to prove that he can pass certain physical tests such as: first marching 20 miles in five hours, and then 24 miles in the same amount of time in their battle uniform (pp. 12–13). Additionally, Vegetius speaks of important skills that every Roman Soldier must know, such as marching long distances as part of their unit, leaping, swimming, and use of their basic weapons with emphasis on exhausting battle drills with extra weight against thick wooden posts that will enable a Soldier to practice aiming at certain body locations and build muscle memory over time.

To ensure that the importance of training is incorporated at all levels of the Roman military organization, Vegetius advises that several elements of physically oriented training be conducted routinely such as vaulting, walking long distances with heavy loads, digging defensible positions, and keeping ranks on uneven terrain (pp. 19–26). He advises that even veteran Soldiers practice vaulting with and without arms

regularly, which can be equated to a basic obstacle course that are seen on military bases today (p. 19). With regards to carrying heavy burdens, Vegetius focuses on the younger soldier but advises that they carry “no less than sixty pounds,”not including their arms (p. 19), very similar to loads carried by Special Forces today. Recognizing that a Soldier must maintain endurance for long foot marches, it is advised that all elements of the military march three times per month at least 20 miles, and doing so over varying terrain and pitches (pp. 25–26).

The Roman’s military training could prove to be effective complements to the majority of McRaven’s six principles if applied correctly. The principle of simplicity is difficult to analyze without looking at a specific operation. However, the very nature of the way the Roman military trained and organized facilitated simplicity. For example, Vegetius writes that the focus must be on creating strong infantry and cavalry, and that specialty skills like javelin throwing, use of a bow, or a sling, should be reserved for specially selected individuals (pp. 16–19). In conjunction with constant drilling (good use of repetition), and signals such as music, which informed the Soldiers of what maneuver to perform, it was highly likely that a good commander could use the training and organizational structure of a Roman Legion to perform well using a simple plan (p. 47). Security to the Roman military could be increased by their devotion to entrenching and digging strong defenses as well as training continuously to remain in ranks while marching.

Because the Roman military practiced maneuvers with both infantry and cavalry operating together, the conditions existed where they could exploit the flexibility of their cavalry to use speed to their advantage in many instances, such as reconnaissance, opening lines of communication (message traffic), or flanking maneuvers. Also, because the Roman military practiced marching long distances regularly, they were likely able to move further and faster than their opponents on foot alone.

There are several lessons from the Roman military’s physical training that can be applied to the U.S. Army Special Forces Regiment as well as be identified as unexpected parallels. For example, the way in which the Roman military sought to select likely candidates, but then ensure they could pass physical requirements, and prove their

courage, is something Special Forces does today, and must continue to do to remain the high caliber organization that they are. However, unlike how the Romans only sought out candidates from certain walks of life such as “smiths, carpenters, butchers, and huntsmen” (Vegetius, p. 11), Special Forces has gained strength in its organization by seeking out candidates from all portions of society provided they can meet the standards required.

The Roman’s focus on physical fitness standards for all Soldiers is an applicable lesson that could improve Special Forces units. The benefits gained from routinely practicing agility exercises such as leaping or vaulting (obstacle courses), weapons training in a physically demanding environment, and long weight bearing movement exercises were an instrumental part of the Roman military culture. Though these activities could be extensive, they increased unit proficiency, skill sharing, and competition to inspire collective excellence.

Finally, when applying how the Roman’s training could have facilitated effective implementation of McRaven’s principles of simplicity, repetition, and speed one finds that the Romans could be analyzed as an effective military organization.

First, the Romans focus on the most essential and basic skills as a foundation of the organization led to them being poised at any given moment to conduct simple and effective military operations. With them leaving more advanced skills such as use of javelins, bows, and slings to select individuals who were specially trained and chosen limited unneeded complexity in their operations. As a learning point, Special Forces should maintain core training on basic skills, and ensure there is continuous attention given to physically demanding movements and performance with individual weapons.

Second, with the Roman military mandates to continuously train on certain skills and tasks, the principle of repetition was built into their organization. This was likely effective because of the routine focus on basic skills, and unit maneuvers, that were a common requirement on the battlefield of the day. The Special Forces Regiment can take away the learning point from this of maintaining proficiency at battle drills and unit

Standard Operating Procedures (SOPs) through continuous rehearsals. For it is the battle drills and SOPs that are often the common requirements on today's battlefield.

Third, speed was possible to effectively employ in the Roman military based on physical conditioning and training standards that allowed the Roman legions to move further and faster than other military organizations of the time. Also, the use of cavalry, which trained with the infantry regularly, allowed adaptive speed on the battlefield. Special Forces can take away from Roman's use of speed a need to maintain a high degree of physical fitness that allows movement through challenging terrain further and faster than the potential foes. Also, the incorporation of integrated dismounted and mounted movement techniques to capitalize on both elements advantages can give a similar advantage that the Roman's gained from coordinated infantry and cavalry.

Finally, and perhaps most importantly, the Special Forces Regiment must take into account how they incorporate these and all lessons learned to partner nation forces they find themselves working with and instructing.

C. CASE STUDY: WORLD WAR I. U.S. INFANTRY

The U.S. entered World War I in 1917 after it had been raging in Europe for three years. The U.S. did not have an effective ground force at this time and needed to rapidly build one. In an attempt to create this military force, the U.S. Government tasked Major William H. Waldron to write *The Infantry Soldier's Handbook*, which was originally published by the Harvey Press in 1917, just in time to standardize U.S. infantry maneuver units and their employment in the European theater. Through this piece of literature, one can identify how the U.S. Infantry unit trained, and was organized. Additionally, this handbook served as the forerunner of what would become a long series of ever improving training manuals that would continue to become more effective in their instruction of effective military training.

The effectiveness, and particularly the caliber of U.S. Infantry in World War I is debatable. It is widely agreed that Woodrow Wilson's presidential declaration of war on April 6th 1917, signaled the tipping point in the war that led to the Allied victory, meaning that U.S. involvement alone is what was needed in terms of resources and

manpower. Based on the lack combat experience alone, it is not likely that the U.S. Infantry units were among the best units. Nevertheless, these U.S. units did effectively take the burden of fighting off the other Allied units, and conduct the tasks they were assigned to do. As indicated by John Keegan in *The First World War*: with U.S. entering the war, “by March 1918, 318,000 had reached France” (p. 372). This reinforcement to the allied forces with fresh troops allowed the tide of the war to turn.

In order to build up this infantry force quickly there was a limited selection process. The primary means of recruiting for the U.S. WWI infantry was conscription as introduced by the Selective Service Act of May 18, 1917. With the U.S. raising an army so fast, they were unable to effectively develop selection criteria that could work. Instead, the U.S. Infantry, as shown in Waldron’s *Infantry Soldier’s Handbook*, devised standardized drills, regulations, and training guidelines that covered every conceivable aspect of an infantry Soldier’s life. This standardization helped make the U.S. infantry flexible and able to learn from a baseline of common skills while in combat and play a more important role as their involvement in WWI progresses. A Keegan points out: “the ever-stronger American army was taking an increasingly important part in operations” as the war progressed (p. 411).

The importance of training and repetition in Waldron’s book is present throughout, as is pointed out in the introduction: “Success in battle is the ultimate object of all military training; success may be looked for only when the training is intelligent and thorough” (p. 4). The handbook goes to great extent to standardize most activities from how to pack, dress, signal, and exercise, but also uniquely addresses that the intent is more important than overly focusing on miniscule details: “Quibbling over the minutiae of form is indicative of failure to grasp the spirit” (p. 4). The handbook addresses that all Soldiers, officers, and enlisted, will train in the tasks presented (p. 5).

Thirteen percent of the *Infantry Soldier’s Handbook* is devoted to physical training, thus showing its importance to the WWI U.S. Infantryman. The handbook’s devotion to moving as an organized military unit focuses on the squad size element, and much attention is given to verbal, musical, and visual signals (pp. 6–41). This provides the units with the flexibility and effective redundancy of how to execute the

commander's orders with regards to positioning on the battlefield. Additionally, the handbook directs all Soldiers to regularly practice bayonet training, and covers specific drills for different trench warfare scenarios (pp. 66–80).

The portion of the handbook that is dedicated to solely physical fitness focuses primarily on callisthenic like exercises (pp. 112–144). Waldron directs units to conduct routine physical training five times per week, at 45 minutes each session, approximately two hours after breakfast, and if possible conduct the training outside (p. 113). Remarkably, strength is considered less important than agility and gymnastics exercises such as jumping and vaulting (p. 114). The handbook covers several precise exercises with given commands to execute them that are generally static in nature with very limited running or implementation of equipment that would be used in combat (pp. 117–123).

The physical training conducted by the Word War I Infantry units was by no stretch an amazing display of comprehensive fitness. Nevertheless, based on the requirements of the U.S. military to rapidly prepare and deploy to combat, the *Infantry Soldier's Handbook* serves as an effective tool to standardize conscripts, and give them the basic physical preparedness to fight on the field of battle.

The way in which the handbook is organized lends itself to McRaven's principle of simplicity. Simplicity was likely effective in employing in combat to the U.S. infantryman of WWI due to the focus on the most essential and basic skills as a foundation of the U.S. infantry organization. A learning point to Special Forces Regiment is that when time is limited to train a partner nation force, a focus on the standardization of basic skills, physical standards, and techniques may be all that there is time for; such as in the *Infantry Soldier's Handbook*.

Further, the degree of focus the handbook gives to repetition will likely prove effective when the rehearsed skills are employed in combat. This principle should serve as a constant reminder to Special Forces to maintain proficiency in battle drills and important SOPs through continuous rehearsals.

Finally, McRaven's principle of speed is not a paramount topic that can be directly found in the *Infantry Soldier's Handbook*. Nevertheless, certain indirect

references do exist such as similarities to the modern military saying “slow is smooth, and smooth is fast.” References such as this can be found in particular under bayonet training. “Progression in bayonet training is regulated by obtaining first correct position and good direction, then quickness. Strength is the outcome of continual practice” (p. 67). The handbook covers most aspects with little explanation of the importance of time. This serves to remind Special Forces that when conducting unilateral, or partner nation training, tasks must be first learned to standard, but then the principle of speed must be applied to the degree it is relevant on the field of battle, even if it cannot be found in whatever manual is being referenced for training; in this case.

D. APPLY HISTORICAL LESSONS TO TODAY’S GOALS

Ultimately, for a military unit to be effective, it must consist of forces that are physically prepared for combat. In combat, the stakes for the individual are life and death, and the contest on the battlefield will be physically challenging by the pure nature of combat. Moreover, the stakes for the society or nation that sends their military organization into battle can often be the livelihood of its citizens, or even its state of existence in extreme circumstances. In sustaining effective military organizations, the fitness of the Soldier must be paramount in order to maximize the survivability of the Soldier, and ensure the nation can meet its objectives without significant loss. Special Forces are obviously no different.

In looking at military units throughout history, the designation that they existed in ancient times does not necessarily preclude them from being an effective example of how the Special Forces Regiment can learn from things they did well in training and organization. Additionally, understanding McRaven’s theory of special operations with regards to how a unit performs in combat can assist Special Forces commanders in designing a comprehensive physical training plan. This is done by looking at the desired outcome in combat, and understanding that pre-emptive physical training must take place to properly prepare the unit for the optimal outcome. This training plan gives the unit a long-term strategy that can ensure it is physically prepared to apply McRaven’s theory of special operations, and win on the field of battle. Additionally, the normative culture that is made up by consistent training helps to strengthen any unit.

The Special Forces Regiment in particular, has a culture and policies all their own that compliment their predictable success. The next chapter will take a more detailed look at the SF Regiment's culture and policy towards physical readiness training.

VI. SPECIAL FORCES CULTURE AND POLICY TOWARDS PHYSICAL READINESS TRAINING

Physical readiness and its importance are relevant to all military services as they continually work to meet requirements, many of which are physical in nature. In order to meet these requirements, the services institute physical readiness training policies and supportive cultural norms, which allow them to maximize their effectiveness. Often caught in the middle of these policies and cultural norms are the Special Operations Forces, whose physical readiness requirements can be slightly different from those of their parent services. To this point, the U.S. Army Special Forces are no different. Special Forces have unique mission requirements and a culture all their own that effectively supports their tasks at hand. These differences can make it challenging to fully apply all aspects of the Army Physical Readiness Training guidelines to SF unit readiness. However, through effective understanding of the past, present, and future of Special Forces policy and culture, Army Physical Readiness Training could be implemented based on the principles outlined by the Army to maximize Special Forces unit readiness.

All SOF are slightly different, and a PRT policy that works for one, may not work for another. This chapter will review components of the Army Physical Readiness Training (PRT) policy outlined in *TC 3-22.20*, and why it is important to all Soldiers including SF. Furthermore, this chapter will examine what makes SF unique from other SOF, as well as the Army as a whole, and how lessons can be learned from the past, present, and assumed future to maximize SF PRT policy and culture.

A. CAN THE ARMY PRT WORK FOR SF?

According to the newly updated Army PRT manual, *TC 3-22.20* (March 2010): “Physical readiness is the ability to meet the physical demands of any combat or duty position, accomplish the mission and continue to fight and win” (p. 1.1). The Army sees PRT as mandatory for all Soldiers, and a must that commanders emphasize its importance and make PRT a cultural norm in their units (p. 1-2). Additionally, even though the

Army may not design a fully applicable program to Special Forces, they do effectively describe the importance of physical readiness, and how it applies to all Soldiers (p. 1-1):

Military leaders have always recognized that the effectiveness of Soldiers depends largely on their physical condition. Full spectrum operations place a premium on the Soldier's strength, stamina, agility, resiliency and coordination. Victory—and even the Soldier's life—so often depend upon these factors. To march long distances in fighting load through rugged country and to fight effectively upon arriving at the area of combat; to drive fast-moving tanks and motor vehicles over rough terrain; to assault and run and crawl for long distances; to jump in and out of craters, and trenches, and over obstacles; to lift and carry heavy objects; to keep going for many hours without sleep or rest—all these activities of warfare and many others require superb physical conditioning.

Areas of conflict as they apply to the Special Forces Regiment within *TC 3-22.20*, stem from the ARFORGEN (Army Force Generation) concept. As outlined by the Headquarters, Department of the Army Posture Statement (2010): the “purpose of ARFORGEN is to provide combatant commanders (CCDR) and civil authorities with a steady supply of trained and ready units that are task organized in modular expeditionary force packages and tailored to joint mission requirements.” This concept applies directly to the Army PRT guidelines in *TC 3-22.20*, as “ARFORGEN uses a structured progression of increased unit readiness over time” (p. 5-36). ARFORGEN is made up of: Reset Phase, Train/Ready Phase, Available Phase, and Deployment. Issues in implementation of the PRT and ARFORGEN to SF come from SF's unique deployment requirements. According to *TC 3-22.20*, the Reset Phase is designed to take 180 days of set time scheduled workouts and build up exercises. Next, the following Train/Ready Phase (though not given a specific time requirement) details the number of times a unit should conduct certain types of exercises and drills (pp. 5-37 – 5-38). The problem for SF units is that there is often little time between deployments, and some deployments can come up unexpectedly giving the unit only minimal time to prepare. Because of these facts, Special Forces must regularly maintain themselves in a constant “Available Phase” status when not on deployment, and in some cases may even expect to deploy directly from one mission to another. This ensures that, when called upon, a SF unit can do anything tasked, anytime, and anyplace.

However, the challenges of applying ARFOGEN to SF do not make *TC 3-22.20* inapplicable. In fact, the principals outlined and the purpose behind them is highly applicable to SF as well as all Soldiers, as the manual outlines that PRT is “required by law for all individuals and units” (p. 1-2). The principles of the Army PRT are intentionally linked into the Army Field Manual 7-0, *Training for Full Spectrum Operations* (Dec 2008), and are (p. 1-2):

- Commanders and Other Leaders are Responsible for Training
- Noncommissioned Officers Train Individuals, Crews and Small Teams
- Train as You Will Fight
- Train to Standard
- Train to Sustain
- Conduct Multiechelon and Concurrent Training
- Train to Develop Agile Leaders and Organizations

The above principles can, should, and are applied every day to Special Forces training and preparedness. Additionally, the Army PRT covers Warrior Tasks: Shoot, Move, Survive and Adapt, as well as Battle Drills: React to Contact and Evacuate a Casualty, all of which are paramount tasks to SF (p. 1-4). The manual insightfully identifies the appropriate physical requirements of these tasks, such as pulling, pushing, running, sprinting, and jumping, and then outlines specific exercises that can effectively enhance them (pp. 1-4 – 1-7). Whether a SF unit is asked to train other Host Nation (HN) forces, or conduct missions unilaterally, there is no aspect where *TC 3-22.20* principles and application could be discounted.

Aside from the principles of PRT, as laid out in *TC 3-22.20* there are four chapters, and over 200 pages of specific exercises covered within the manual. Furthermore, section 5-18 specifically covers Field Training, and gives excellent forethought to effective exercises that can be conducted while not in a garrison environment. Not all of these exercises or PRT techniques will apply to a given SF mission. However, it is inconceivable that there is not value to be found that would directly apply to any given SF mission.

There are several off the shelf fitness programs such as Crossfit, P90X, Insanity, and dozens of others that can be found local athletic clubs. Additionally, there are

countless pieces of Athletic training literature put out by the National Academy of Sports Medicine (NASM), the American Council of Exercise (ACE), the National Strength and Conditioning Association (NSCA), and untold other organizations. There is highly valuable and cutting edge fitness related information that can be applicable to the SF Soldier in each one of these fitness concepts. However, all of the previously mentioned are primarily aimed at the civilian market. Within each, one can expect to find instructions related to scheduling, rest, and recovery. The SF Soldier does not always have the luxury of deciding when he will schedule his rest, recovery, and workouts. As previously mentioned this is problematic when trying to apply the PRT concepts in TC 3-22.20 to SF. Nevertheless, only the TC 3-22.20 incorporates unit training (Section 4-6), leader responsibilities (Sections 3-1 and 4-7), specific combat related tasks (Section 1-14), field training (Sections 5-14 and 5-18), and military specific activities such as foot marches (Section 10-20), and obstacle negotiation, including the wear of full combat gear (Appendix E). Although SF missions can be highly unique, and no single publication can cover all aspects of how the SF warrior must prepare, there is distinct value that can be found in TC 3-22.20.

In looking at the uniqueness of the Special Forces Regiment common literature often lumps SF with other SOF, yet all elements within SOCOM have unique attributes, and what is good for one unit, may not be as good for others. According to JP 3.05.1 “Special Operations Forces (SOF) are small, specially organized units manned by people carefully selected and trained to operate under physically demanding and psychologically stressful conditions to accomplish missions using modified equipment and unconventional applications of tactics against strategic and operational objectives. The unique capabilities of SOF complement those of conventional forces” (p. xi).

The previous definition of SOF certainly applies to SF. However, SF itself is unique for many reasons, but mostly in their emphasis on Unconventional Warfare (UW), as pointed out by *FM 3-05, Army Special Operations Forces*, and the fact that they often operate in very austere positions far beyond effective support or resupply of other friendly forces (2006, p. 3-2). In addition to UW, SF has six other Mission Essential Tasks of: Direct Action (DA), Foreign Internal Defense (FID), Special Reconnaissance

(SR), Counter Terrorism (CT), Information Operations (IO), and Counter Proliferation (CP). The uniqueness of SF is that not only do the units need to remain continuously ready to perform these complex tasks themselves, but also they must ensure that they remain ready to train and work directly with HN Militaries in conducting UW or FID. Although it is ideal, and at times the case that a SF unit is given a mission far in advance of the actual deployment, thus giving them effective time to fully prepare, often missions arise unannounced with limited time. Such was the case following 9/11 when SF Soldiers from the 5th Special Forces Group (Airborne) were tasked to conduct UW in Afghanistan with minimal time for preparation, in which the stakes were extraordinarily high. This ever-looming potential of being called upon with little to no notice, in order to meet strategic objectives is something that every SF Soldier lives with, and in turn, drives a culture of continued preparedness and lack of ability to always effectively comply with ARFORGEN or 10 week PRT calendars as shown in TC 3-22.20 (pp. 5-8 – 5-13).

B. SPECIAL FORCES PAST

From inception, SF has operated differently than other forces. In the book *Chosen Soldier* (2007), Dick Couch brings to light once again the vision of the SF Soldier in Vietnam, where he describes a 12-man detachment encamped near a small Vietnamese village who were tasked with training, equipping, and leading a 700-man tribesmen force of Montagnards against the Vietcong (pp. 22–23). As Couch points out, most other SOF such as SEALs, were primarily focused solely on DA, or SR (p. 24). The concept of SF operating in such austere conditions can be traced back to WWII. Units such as the 1st Special Service Force, which was “considered one of the forerunners of our current Special Forces was the First Special Service Force, a joint U.S.-Canadian unit,” which was assigned to operate behind the lines in Italy and France. (Couch, p. 27). Furthermore, other cultural lineage can be traced back to the OSS, where teams worked throughout Europe to organize and train resistance fighters, similar to today’s SF UW mission (Couch, p. 29). These historical examples have brought about a unique cultural mindset of the SF Soldier. PRT was certainly challenging in these behind-the-lines scenarios. In addition to challenges of PRT in the field that continues to the ongoing SF operations of today. Simply, it is often highly challenging to conduct effective physical

fitness training when operating in an extremely austere location, with minimal support and a high chance of enemy contact as was the case in these early SF missions, and continues even to this day.

C. SPECIAL FORCES PRESENT

In addition to ongoing efforts in Iraq and Afghanistan, today's Green Berets are finding themselves operating in some of the most imaginably challenging environments such as Yemen. As Richard Fontaine addressed in *Twilight of a Strongman* (2011), in addition to the \$150 million in CT aid promised from the U.S., "U.S. Special Forces are present in the country for training and partnership." Fontaine points out that much of the difficulties of this country where these SF Soldiers find themselves stems from the fact that "Al Qaeda in the Arabian Peninsula (AQAP) has used the country as a base to launch attacks." Furthermore, Yemen was the home of the recently killed Anwar al-Awlaki, who reportedly communicated with the Ft Hood Shooter, Maj Hasan, as well as Faisal Shahzed, the attempted Times Square bomber. The relevance of ongoing SF missions such as the one in Yemen is the political sensitivities and strategic importance.

When the stakes are so high for such a limited number of deployed Soldiers, certain tasks like PRT can often be overlooked, although they should not. This is due to a mission ready effective culture of SF putting forth all available effort at the most essential tasks. However, the negative effect is that it can often leave these Soldiers less than optimally prepared over time at the unit/team level, and more prone to injury with shortened career expectancy at the individual level. To avoid this Green Berets must remember that no matter how absorbing the operational tasks are, effective physical fitness training must remain a constant.

D. SPECIAL FORCES LIKELY FUTURE

In identifying the future of the Special Forces Regiment, it is a strong assumption that U.S. policy will continue to demand their efforts in areas of political instability and low intensity conflict. As Michele Malvesti, from the Center for a New American Security brings to light in *To Serve the Nation: U.S. SOF in an Era of Persistent Conflict* (June 2010), SF can continue to expect to be deployed all over the globe, as they can

operate in and out of war zones to achieve a “decisive effect” (p. 23). With foresight, Malvesti sees longer-term assignments overseas for SF, to build lasting relationships with the HN (p. 29).

If what Malvesti believes is true, SF could continue to conduct missions as they have since inception, and add a new dimension of longer rotations overseas that may resemble more of a PCS than a TDY type scenario. This in turn could bring about new challenges for effective PRT depending on specifics of each potential SF assignment. If deployments are to increase in time to austere locations, the self-motivation that is a hallmark of the Green Beret must carry over to effective physical fitness training, and be an expected constant.

E. APPLYING WHAT WORKS

As with all Military organizations, SF has found difficulties in maximizing their mission readiness, and balancing the ongoing requirements of the tasks-at-hand. Although some well-applied readiness solutions such as ARFOGEN apply to regular Army units, they do not apply as holistically to SF. Nevertheless, SF must not set aside concepts such as the Army PRT guidelines as found in *TC 3-22.20*. As SF looks at its operations and operational tempo from examples in the past and ongoing present, in addition to what the perceived future is, it is certain that SF will need to remain in a constant state of physical readiness both in garrison, and while on deployment. Given this certainty, and ongoing need for strong PRT to attain the degree of readiness required, Army SF can apply the principles found in *TC 3-22.20* to achieve effective results. Additionally, SF can follow PRT guidelines in a flexible adaptive way to optimize the preparedness of the deployable units/teams, as well as the individual Green Beret. In order to look at other sources of valuable information that can enhance SF readiness, this thesis will next look at other athletic cultures and surmise ways that the Special Forces Regiment can learn from them.

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VII. OTHER CULTURES AND POLICY TOWARD PHYSICAL READINESS AND FITNESS

Current literature and pop culture often list SOF warriors among the finest caliber of athletes, although they have an athletic culture all their own. Within SOCOM, each element often has its own uniqueness with regards to physical readiness and fitness. However, each SOF element can gain from one another with regards to shared knowledge in many operational aspects to include physical fitness. Additionally, there is value in looking at the latest civilian fitness market place and remaining proactively involved in a sharing of knowledge that can benefit all communities interested in functional fitness and human performance.

Recent initiatives by SOCOM in the arena of human performance have led to the development of the THOR3 program, which is currently spreading with excellent effectiveness throughout the SOF community, and particularly the SF Regiment. Nevertheless, there remain distinctions and variations of how fitness programs are adapted into each SOF culture, and to what extent they are becoming universal amongst the organization's operators.

As mentioned in the previous chapter, SOF often have difficulties conforming to their parent service's readiness guidelines with regards to physical fitness. This is because of the unique mission requirements of all SOF, and their need to stay operationally agile enough to operate and succeed doing a broad array of tasks anywhere at anytime. As each SOF element has found success in their own, and often overlapping niches they have developed unique physical fitness cultures. In an effort to link much of this together, the THOR3 initiative has built a strong foundation over the last few years. Nevertheless, there exist valuable potential for all SOF elements in continuing to share lessons learned and develop relationships with regards to building effective tactical athletes. Moreover, there are excellent opportunities to learn from the civilian arena of high performance athletes that can often cross over into the cultures of today's SOF warrior.

In order to pick two of the more profound examples of elite SOF warriors with regards to physical fitness, this chapter will examine the fitness cultures and policies of the U.S. Navy SEALs and U.S. Army Rangers. Next, a short look at SOCOM's THOR3 initiative will be addressed. Finally, this chapter will look at some civilian fitness cultural trends and evaluate them for their applicability to the SOF community.

A. THE 75TH RANGER REGIMENT

“Rangers Lead the Way,” is not just the last four words of the Ranger Creed. Leading the way is something the Ranger Regiment prides itself in. The Ranger motto “sua sponte,” or “of his own accord” perpetuates the Ranger culture in the Regiment’s strides to mold and sustain motivated Soldiers who take the initiative. Arguably the fittest of the ARSOF Soldiers, Rangers were among the first to lead the way in developing an organizational wide fitness program built on functional human performance, and sustaining their SOF warriors. The RAW (Ranger Athlete Warrior) system is designed to “provide education and training that optimize the physical/mental development and sustainment of the Regiment’s most lethal weapon – the individual Ranger” (*RAW PT, v.3.0, 2008, p. 4*). The Ranger fitness culture, now based around the RAW concept fits the unique physical readiness requirements of the Ranger Regiment.

The Rangers trace their lineage back to the days of Roger’s Rangers of the French and Indian War. Today’s all-volunteer Ranger Regiment was formed in 1974, and has grown to a Regimental strength of three Ranger battalions, and a Regimental headquarters. They are ARSOF’s premier light infantry force, and as according to *FM 3-05 (2006)*: “Rangers are a rapidly deployable airborne light infantry organized and trained to conduct highly complex joint DA operations with or in support of other SO units of all Services,” in addition to being able to work with conventional forces as required (p. 3-5).

In order to meet the objectives of being a force “capability to deploy a credible military force quickly to any region of the world” (*FM 3-05, p. 3-5*), it is imperative that they maintain a high standard of physical fitness, which is standardized throughout the Ranger Regiment. *RAW PT, v.3.0* specifically states, “Rangers at each battalion should

develop similar physical proficiencies. PT need not look exactly the same at each battalion, but physical capabilities should be more or less the same across the Regiment” (2008, p. 2). This standardization allows each battalion to remain similar in their capabilities of rapid deployment, mission readiness, and operational effectiveness.

Some of the aspects that make the Ranger fitness culture unique are typical Ranger deployment lengths, and the fact that Rangers are an all-volunteer force, but do not hold MOSs that are exclusive to the Ranger Regiment. First, Ranger deployment lengths can range from a few weeks to upwards of three months. These generally shorter deployments allow the Ranger force to recuperate from deployments much faster than units that deploy for longer periods. This carries over into their fitness culture by establishing techniques designed to build up and prepare for a deployment, conduct necessary sustainment while deployed, and refit after a deployment in their preparation to begin the next train-up cycle. This scheduling guidance is found within *RAW PT, v3.0* in its four phases of “Traditional Phased Approach to PT Scheduling” (pp. 67–68):

- **Phase I – Transition:** is designed to take place when Rangers return from deployment and begin refit.
- **Phase II – Foundation:** is designed to take 14 weeks and slowly begins to build Ranger’s strength and endurance up.
- **Phase III – Assessment and Validation:** is intended to last three to four weeks and allows leaders to assess their Rangers, and validate their physical readiness.
- **Phase IV – Sustainment:** is conducted while Rangers are deployed, and works to maintain them at peak performance.

Second, the fact that the Ranger Regiment does not have MOSs that are exclusive to their ranks allows them to relieve Soldiers from their duty in the Regiment that are not meeting Ranger standards, but are still capable of meeting the conventional Army standards. Moreover, because all MOSs found within the Ranger Regiment exist elsewhere in the Army, there exists a vast pool of qualified and available Soldiers to keep the Ranger ranks full. To date, there have been no significant issues with the Ranger Regiment maintaining its personnel strength.

Aside from the scheduling uniqueness of the RAW program, other specifics that resonate into the fitness culture of the Ranger Regiment can be found in the RAW philosophy. As all SOF place “humans as more important than hardware,” the primary

belief of the RAW philosophy is: “the individual Ranger is the Regiment’s most lethal weapon” (p. 5). Other concepts that are prevalent throughout *RAW PT, v.3.0*, are a belief in good nutrition, rest, injury recovery, maintaining mental toughness, and an uncertainty how difficult the next mission will be. These beliefs carry over to a fitness culture where Rangers must ensure they do all they can to prepare for the most difficult scenarios conceivable. The manual covers physical training aspects such as movement preparation, strength, endurance, movement skills, and hybrid drills. There are easy to understand descriptions and photographs that help standardize all exercises, which in turn makes *RAW PT, v.3.0* user friendly and likely has attributed to its vast acceptance within the Ranger Regiment.

Since inception, Rangers have been asked to conduct highly physically demanding tasks and have continued to successfully adapt to meet all requirements set before them. Although their unique, and often shorter deployments make much of their fitness culture inapplicable to other SOF, they have effectively implemented sound fundamentals based on functional movement and combat oriented tasks that can be of great value to other tactical athletes outside the Ranger Regiment. More importantly, they have standardized an internal fitness culture that ensures every Ranger strives to “move further, faster, and fight harder than any other Soldier” (the Ranger Creed).

B. THE U.S. NAVY SEALS

Often thought of as the premier military athletes, the U.S. Navy SEALs no doubt have a strong physical fitness culture. Unique amongst the SEALs as compared to other SOF is their link to the civilian side of the fitness industry. It would be challenging to find any civilian oriented bookstore that did not carry more Navy SEAL fitness books geared toward the average person on the street than all of the other SOF fitness books combined. This unique linkage seems to work the other way as well. Whereas the U.S. Army Rangers internally developed the *RAW PT, v.3.0*, the U.S. Navy SEALs looked to the civilian market place to collaborate in the development of their premier human performance publication, *The U.S. Navy SEAL Guide to Fitness and Nutrition*. Nevertheless, the publication was “prepared for the SEAL community” with the following goals that are not as applicable to the civilian as they are the tactical operator (2007, p. 1):

- *Enhance the physical abilities required to perform Special Operations mission-related physical tasks;*
- *Promote long-term cardiovascular health and physical fitness;*
- *Prevent injuries and accelerate return to duty;*
- *Maintain physical readiness under deployed or embarked environments.*

The Navy SEALs draw their lineage from the Underwater Demolition Teams (UDTs) of World War II. However, like many other SOF like organizations the UDTs were largely disbanded after the war playing only a minor role in Korea. As Susan Marquis tells in her book *Unconventional Warfare* (1997), it wasn't until "the 1960s [when] UDTs and naval special warfare were rediscovered as a result of the Kennedy administration's interest in unconventional warfare" (p. 25). As a result of morphing the UDTs into an organization that was more commando-like in their abilities to conduct on-shore raids from water infiltration the SEALs were born. Navy SEALs were shortly thereafter deployed to Vietnam where they made a name for themselves as a premier fighting force earning 14 Medals of Honor, seven Navy Crosses, and more than 50 Silver Stars (Marquis, p. 26).

The U.S. Navy SEAL motto "the only easy day was yesterday" provides insight to a culture where one must continue to meet more and more difficult challenges as time goes on. *The U.S. Navy SEAL Guide to Fitness and Nutrition* is the SEAL community's answer to meet this expected challenge, and sustain the Navy SEAL. The publication is essentially two separate intrinsically linked books; the first part focusing primarily on physical activity, and the second focusing on nutrition and its effects on the body.

A unique aspect of *The U.S. Navy SEAL Guide to Fitness and Nutrition* is its focus on sustaining a SEAL throughout his career more than other SOF human performance publications seem to. This is likely because of the SEAL's need to "grow their own." Similar to other SOF the SEALs are an all-volunteer force. However, unlike SF or the Ranger Regiment, the SEAL community is not able to draw on available forces from their parent service the Navy. As retired SEAL Dick Couch points out in his book *The Finishing School* (2004): "SEAL teams have no pool of infantry talent from which to

draw their officer and enlisted trainees. The Navy is simply not a ground combat-arms service” (p. 42). This fact drives the SEAL culture to do what it can to sustain their SEALs over time with perhaps greater importance than other SOF. As a result, *The U.S. Navy SEAL Guide to Fitness and Nutrition* pays a great deal of attention long-term benefits of physical fitness and nutrition.

Even with high demands on the individual SEAL over time, there is little difference between their OPTEMPO and that of other SOF. Like SF, SEALs can expect to be deployed anywhere between a few weeks and upwards of a year, which is notably longer than a Ranger’s potential deployment time frame. To meet these deployment demands and ensure there is a strong effort to sustain the individual SEAL for a maximum operational lifespan, *The U.S. Navy SEAL Guide to Fitness and Nutrition* takes a detailed look at some unique problems. In particular, the publication addresses the “High Mileage SEAL,” which it defines as an operator near the age of 40, and who commonly exhibits physical issues such as “chronic musculoskeletal injuries [that] involve the neck, back, elbow, knee, ankle and foot” (p. 237). The guidebook then goes on to address common causes, and recommendations of how to recover, and continue to maintain the SEAL in an operational role (pp. 238–239).

A separate highly distinct element of the SEALs predominant human performance publication is its detailed focus on nutrition. Although no SOF could effectively deny the importance of nutrition in sustaining the Service Member, the SEAL publication goes in great detail down to the exact calorie count, and type of food to eat for specific activities to be conducted, or with regards to recovery, were just conducted. The principles of nutrition come from what *The U.S. Navy SEAL Guide to Fitness and Nutrition* describes as the “U.S. Navy Special Warfare 10 Commandments of Nutrition, which are:

1. *Don’t believe anything you read about nutrition written by someone trying to sell you something.*
2. *Read the labels on food products. Total calories and weights of carbohydrate (CHO), protein, and fat per serving are usually provided.*
3. *Most Americans need no supplemental vitamins, but use the inexpensive “one-a-day” type if you want to increase your vitamin*

intake. Megadose quantities of costly wonder-vitamins serve mainly to increase the vitamin content of your body waste products.

- 4. Don't take protein and amino acid supplements. One gram of protein per pound of body weight per day is the maximum recommended protein intake, even for weight training and bodybuilding. Most non-vegetarian athletes take in more than this in their normal diet.*
- 5. Limit fat intake to less than 30% of total calories (1 gram of fat = 9 calories). Items to watch are red meat, peanuts, solid dairy products, and french-fried anything.*
- 6. For specific endurance events such as prolonged missions, long cold dives, or triathlons, CHO load with 1500 extra CHO calories a day for 3 days before the event and decrease fat and protein intake. Cut back on your training schedule and avoid stressful cold exposures during this time*
- 7. For prolonged intense aerobic training schedules (BUD/s or triathlon training), take in enough extra CHO calories to maintain your desired weight. The best sources are pasta, fruits, breads, potatoes, and rice.*
- 8. Eat fresh fruits, fresh vegetables, and high-fiber cereal products every day.*
- 9. Short-term weight reduction diets are generally useless and occasionally dangerous. Lasting weight modification is accomplished only with long-term changes in your eating and exercise habits.*
- 10. The most common nutrition problem in this country is too much nutrition. Don't eat when you're not hungry and stop eating as soon as you've had enough, not when your plate is empty.*

Because of a culture replete with intense activities in underwater scenarios, Navy SEALs have been, and must continue to be focused on building and sustaining men who can operate under extreme physical duress. The SEAL's primary publication, which addresses the cultural imperative of maintaining elite tactical athletes does just that, and then some. *The U.S. Navy SEAL Guide to Fitness and Nutrition* serves as a good insight to the tactical athletic culture that exists within the U.S. Navy SEALs. However, with over 500 pages the publication is likely too detailed to be as commonly read and culturally understood as other pieces of SOF fitness literature such as the *RAW PT, v.3.0*. Nevertheless, the SEAL fitness culture offers much that other SOF can benefit from. In particular the need for the SEALs to "grow their own," and sustain their force has created some cultural uniqueness such as addressing the "The High Mileage SEAL." This

concept of taking care of the operator over time can be highly valuable to any SOF element in saving the most valuable resource, the individual operator. Additionally, even though there exists data to counter some of the exact nutritional science that is presented in *The Navy SEAL Guide to Fitness and Nutrition*, the concept of paying detailed attention to what a SOF operator puts into his body with the intent of ensuring he lasts to and through the next operation is highly valuable. Particularly, because all SOF want to ensure that as “humans [remain] more valuable than hardware,” and appropriate training methods are implemented to ensure the operator is maintained over time.

C. THOR3

SOCOM’s recent initiative, THOR3 is a cross of bringing in some of the brightest minds in the fitness world, and adapting comprehensive fitness concepts for today’s SOF tactical athlete. Since its inception in 2009, this trend has been gaining momentum, particularly in the SF Regiment where a team of THOR3 cadre is being stood up at each active duty Special Forces Group, in addition to training future SOF operators in the JFK Special Warfare Center and School. THOR3 stands for Tactical Human Optimization, Rapid Rehabilitation and Reconditioning program, and as pointed out in the July-August-September *Special Warfare Magazine* (2011): it is designed “to increase [SOF operator’s] combat performance and effectiveness, prevent injuries, improve health and longevity, and facilitate a rapid return to duty post-injury” (p. 40).

In order to maximize the effected SOF population of THOR3, the cadre focus on a train-the-trainer model so that the knowledge and training techniques can reach a maximum number of personnel. As Special Warfare points out, the THOR3 trainers are more than just standard athletic trainers. THOR3 cadre are typically made of five individuals consisting of a “human-performance program coordinator, or HPCC; a rehabilitation program coordinator; performance/sport dietitians; certified strength and conditioning specialists; and physical therapists” (p. 40). The goal of the program is not to simply be a rehabilitation program for injured or wounded operators, but an “optimization of human performance” for all SOF operators, “achieved through a solid strength-and conditioning program that is fully integrated into unit training” (p. 40).

Like the SEAL internal culture, this SOF-wide initiative is more focused on sustaining the operator over time than traditional military fitness programs. As Capt. Jennifer Bocanegra, USASOC PAO sighted the USASOC Surgeon's office in her article *Professional Strength Conditioning Program at 3rd SFG (A)* (March 2011): THOR3 is a "prehabilitative program." Bocanegra goes on to describe this as: a program that "aims to reduce Special Operations manpower losses due to injury and disease through services and education provided by a team of Human Performance Enhancement Professionals." The education part is increasingly important, as the majority of injuries to SOF operators continue to be in training, although the most serious remain in combat (Bocanegra).

A distinct uniqueness of the THOR3 program from other more traditional military fitness programs is its focus on recovery and rehabilitation of the SOF operator, in addition to the value of tying this process into the ongoing training aimed at being a "prehabilitative program." Furthermore, the fact that experts with the most current athletic education sets from outside the military are being brought into the THOR3 program, makes it an assurance that the participating SOF operators will have the most up-to-date athletic education, to make them the best possible tactical athletes.

THOR3 has yet to become an all-encompassing SOF fitness cultural phenomenon. As the saying goes: "you can't teach an old dog new tricks," many SOF operators stick to what they know, and although it may have worked for them up until now, the question that remains is if it could have worked better for the others who's careers were cut short because of overtraining or preventable injuries; something THOR3 works to prevent. As previously indicated in *chapter IV., section A.* of this thesis: SOF operators will "act in accordance with their perceived realities of the organizational word that surrounds them." If THOR3 is to catch on, it not only needs the buy in of the command at all levels, but appropriate time and attention of the preponderance of the individual operator's level in order to fully take effect as a SOF tactical athletic phenomenon. Nevertheless, there has likely never been a potentially more effective program in the SOF community to date than THOR3, as it incorporates world-class physical training, injury prevention, nutrition, recovery and rehabilitation, and education. It is certainly of value to all SOF operators.

D. ELITE ATHLETIC CULTURES

As specific SOF units are developing unique programs, as well as all-encompassing SOF fitness initiatives like THOR3, there exist concurrent advancements in fitness in the civilian world. From professional sports, to the multitude of civilian oriented training concepts, to elite fitness gurus, there are perhaps too many to even consider listing. Nevertheless, a far many civilian fitness programs can in fact offer valuable techniques and principles to the SOF warrior.

Virtually all SOF have had high caliber athletes come from collegiate and professional sports teams to their ranks. These accomplished athletes have brought with them the knowledge sets they have attained in maximizing their performance. Additionally, as previously mentioned, athletic cultural trends such as *Crossfit* that are primarily geared towards the civilian marketplace have become highly popular with many in the SOF community. Finally, the most popular fitness market is still dominated by the mainstream gyms such as *World's Gym*, *Gold's Gym*, *24 Hour Fitness*, etc. These mainstream gym cultures have some of the most extensive research behind their training techniques in the world. Organizations such as the *National Academy of Sports Medicine (NASM)*, the *American Council of Exercise (ACE)*, the *National Strength and Conditioning Association (NSCA)*, each educate and sustain countless Certified Personal Trainers (CPTs), and invest millions of dollars in fitness based research every year with the mainstream gyms as their primary output channel. Many of these traditional civilian athletic cultures can offer valuable insight to any athlete, to include the tactical athlete.

With regard to professional and collegiate sports teams, there is arguably no programs that exist that SOF would not be able to benefit from aspects of their expertise. In particular, value in premier athletic organizations comes from a shared focus on maximizing human performance in an attempt to outperform an adversary. Additional concepts shared by the elite sports athlete and the tactical athletes are the importance of avoiding injuries to the fullest extent possible, and recovering from them when they occur. Just as with a SOF operational unit, if one operator is removed due to injury it is often a significant blow to the unit, the same is true with elite sports teams and their players. Therefore, both cultures have relied heavily on sports medicine concepts that

look to recuperate the individual and return them to duty as soon as reasonably possible. However, a significant distinction between the elite sports athlete and the tactical athlete lies in the off-season, or lack thereof. Whereas a football player for example may only focus directly on his sport for half of any given year, the SOF tactical athlete never gets an off-season. Nevertheless, valuable evidence based research is available to the SOF operator from the elite sports athlete in areas such as advanced human performance training techniques, rapid rehabilitation and recovery, and sustainment of the athlete over time/seasons.

Several fitness trends are gaining popularity amongst elite civilian athletes and the SOF community that are a breakaway from mainstream gyms, concepts such as *CrossFit*. Although there are many high performance fitness programs on the market, few have been as successful as *CrossFit*. *CrossFit* in particular even offers advice and discussions aimed at Service Members while deployed, and how to remain involved in *CrossFit* in extremely austere locations on their website *crossfit.com*. The focus that *CrossFit* gives to functional fitness, and achieving personal bests in high athletic performance coupled with the organizations attention to diet can be highly valuable to any individual seeking peak performance, to include the SOF operator.

Nevertheless, though concepts such as *CrossFit* do effectively train many individuals for peak performance, they often neglect some of the realities that apply to a SOF operators operational requirements such as rapidly building up and sustaining abilities to walk long distances under heavy load, train to work on little sleep and food, and perform at high levels under extreme stress and weather conditions. Additionally, recent studies have shown that activities such as *CrossFit*, *Insanity*, *Gym Jones*, etc. can be dangerous. In a article from the American College of Sports Medicine by Bergeron et al., *Consortium for Health and Military Performance and American College of Sports Medicine Consensus Paper on Extreme Conditioning Programs in Military Personnel* (Nov 2011) points out that “Extreme Conditioning Programs (ECPs: e.g., *CrossFit*, *Insanity*, *Gym Jones*, and others) are characterized by high-volume aggressive raining workouts that use a variety of high intensity exercises and often timed maximal number of repetitions with short periods between rests.” This lack of rest, and high intensity can

be highly dangerous, especially for a novice with minimal experience in programs likened to ECPs. “That is, there is an apparent disproportionate musculoskeletal injury risk from these demanding programs, particularly for novice participants, resulting in lost duty time, medical treatment, and extensive rehabilitation” (p. 383).

Though much of the training philosophies in intense concepts such as *CrosFit* are in fact highly valuable, the intelligent SOF operator must not forget that it is not even close to all-encompassing of what they are required to do with regards to functional performance in their chosen career fields, and may even place their fitness in great risk. This again is highlighted by Bergeron et al: “programs [such as *CrossFit*] are not sufficiently inclusive of all conditioning and training needs” of the warfighter (p. 385).

Where concepts such as *Crossfit* are gaining in popularity, mainstream gyms, the traditional CPTs who occupy them, and the programs they offer are often ignored by the SOF operator and other elite athletes. However, the traditional mainstream gyms and the various athletic organizations that provide educational support systems for those gym’s employed CPTs make up the largest fitness culture in the world.

Reasons why SOF and other elite athletes have steered clear of this area can be obvious. The traditional gym is not focused on peak performance, but providing general fitness guidance to the average person in the population wherever the gym is located. However, because of the vast amount of research that this industry provides to the fitness community, there is value in much of what is produced. For example, the principles behind NASM’s OPT (Optimized Performance Training) bases a sequenced process of developing the individual to safely reach performance objectives. As shown in *NASM Essentials of Personal Fitness Training* (2008): the OPT starts with building stabilization, then builds strength, and finally advances to power (p. 8). NASM’s research shows that following the OPT model will decrease the risk of injury, and produce physiological, physical, and performance benefits (pp. 7–11). Although the requirements of SOF are far more extreme than the average civilian to which the mainstream gym and organizations such as NASM are geared to, there exists a broad range of valuable concepts such as the OPT that can apply to varying degrees to minimize injury and increase performance.

E. THE TAKE-AWAY. CONTINUING TO LEARN AND IMPROVE

Naturally, all SOF share a common thread of persistence in working to achieve success. This persistence often leaves little time for reflection and looking for other ways to do things more effectively. It is unquestionable that all SOF organizations want their operators to sustain themselves for a maximum amount of time. In finding the optimal solution, all SOF must be willing to share valuable insights into their own human performance programs, and look to the civilian world for other techniques. To date, no one program for any type of athlete has been able to provide the end-all-be-all answers, and some are even dangerous to many. Therefore, SOF, and SF in particular must remain open minded and build off of what works, and continue to look to new areas for functional answers with regards to human performance. As history has continually shown, the best lessons learned can often come from the most unexpected places. Additionally, the best weapon that SF has is the individual operator. Thus, it is essential that each operator be afforded the opportunities to continually improve his primary fighting position: his mind and body.

The next chapter of this thesis will identify some of the applicable PRT techniques that can work for Special Forces. Particular attention will be given to generalized scenarios that a given Special Forces unit may find itself in.

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VIII. EFFECTIVE TRAINING AND POLICY FOR SPECIAL FORCES:

“When all else fails, look in the manual,” or so the saying goes. As any good Soldier looks for how to operate a piece of equipment, or conduct training he may look to his peers, superiors, subordinates, or in the manual. One issue with conducting effective PRT for the SF Soldier, as pointed out by this thesis, is that there are too many manuals to even count, all of which may be effective to varying degrees in different aspects. Further, as one training technique with its supportive manuals, in conjunction with research that can back it up may be highly effective for some SF units or individuals, the same techniques could be ineffective or even dangerous for others. This can be attributed to the current physical state of the individual Soldiers, previous training conducted, differing interpretations of the training, differing or shifting standards, or even the amount of time available to conduct the training techniques. Therefore, the most important aspects of a good PRT program are sound principles and set standards that establish a foundation for training goals. The principles should allow for SF Soldiers to build on the physical capabilities they have without pushing the limits of the less physically apt Soldiers too far, but still increasing the stamina and strength of the more physically fit. Standards that training programs use should be universal throughout the Regiment, and maintain the operational capabilities of a Green Beret throughout his career. Additionally, a good PRT program must ensure there is consistency in maintaining physical readiness of the entire SF unit. The goal must be to make all members of the team as strong as possible without causing injury, and promoting a physical fitness culture that will keep the individual Green Berets in an operational role for as long as possible.

This chapter will focus on general principles that can work to elongate the operational effectiveness of a SF Soldier’s career. Though not all-inclusive, the concept behind the information provided in this portion of the thesis is intended to give a proposed answer to effective training concepts and policy changes. First, this chapter will look at training concepts that apply to the garrison environment. Second, a look at

PRT concepts that can apply to various SF deployment scenarios will be addressed. Finally, this chapter will provide recommended changes to Special Forces policy intended to mandate physical readiness requirements that can be supported in part by the sound PRT principles provided.

A. OPTIMAL TRAINING WHILE IN GARRISON – THE START

One would think that the best PRT could be conducted while in garrison. However, for many SF units, this is not always the case. Conflicting issues may be other mandatory training and qualification standards that must be met, important and often limited quality time with family members, NCOES schools, inventories, and the often injury recovery time. However, neglecting PRT is the wrong answerer in any environment. As shown in chapter VII of this thesis, neglecting physical fitness over time can ultimately lead to increased injuries and other conditions that could expire the operational effectiveness of a Green Beret far too early in his career. Therefore, command climate must encourage PRT, and effective techniques must be adopted to continue to maintain the physical aptitude of all Special Forces Soldiers.

As *TC 3-22.20* states: “PRT is the commander’s program” (p. 1-2), and as shown in *Chapter IV*, without command focus on any given training, it is less likely to happen or be a priority. Often, unit responsibilities while in garrison can get in the way of PT. As a habit, most Army units conduct PT during the morning hours. If unit requirements or training is scheduled during the early hours of the morning, then more often than not no PRT is conducted. However, a simple fix to this inefficiency is a break from the status quo. If commanders simply mandate that PT will be conducted at a time later in the day, during non-traditional PT hours, it is almost surly to happen. Furthermore, if commanders set physical fitness standards that must be met within a given time period there will be accountability from the unit level down to the individual, which in turn will surely increase attention to a comprehensive PRT program at all levels. The garrison environment provides commanders a unique stability to set guidance for PRT that must be met as well as standards. Even though not all of a given SF unit may be in garrison at the same time, the same standards can and should be applied to their time “out of the box.”

Time spent in garrison is also a time when training that is more diverse can likely be conducted. In contrast to many deployed scenarios controls can be put in place to conduct several types of unique PRT such as long foot marches, swimming, running, and combat oriented training like stress shoots or obstacle courses. The advantages of having medical personnel on hand, access to world-class medical facilities, and increased assurances of all-encompassing safety measures limit the risks associated with a multitude of safety concerns. Additionally, direct and regular access to individuals such as THOR3 trainers and physical therapists allow for incorporation of injured Green Berets into training under additional controls. This for example allows an SFODA to train to the fullest extent possible with all available members in preparation for their next mission.

However, in addition to commanders ensuring PRT happens, and SFODAs taking advantage of a multitude of training opportunities, if the training is not quality training, it may do more harm than good, or be of little value. While training in garrison, or anywhere, sound PRT principles must be applied. As listed in *TC 3-22.20*, the seven Principles of Training are:

- 1. Commanders and Other Leaders are Responsible for Training*
- 2. Noncommissioned Officers Train Individuals, Crews and Small Teams*
- 3. Train as You Will Fight*
- 4. Train to Standard*
- 5. Train to Sustain*
- 6. Conduct Multiechelon and Concurrent Training*
- 7. Train to Develop Agile Leaders and Organizations*

The above principles are directly linked to *FM 7-0*, and are unique to other training principles of other fitness programs. This is because the focus of the *TC 3-22.20* is to create an effective war fighting team, with responsibility resting at all levels of leadership, whereas other programs are generally focused on the individual.

Applying military focused principles into sound PRT principles is the key to developing a comprehensive program that can incorporate all SF Soldiers who are able to conduct training. Soldiers of any given unit cannot be expected to be at equal levels of

physical fitness. Issues such as time in schools, injuries, genetics, age, and time in the unit can often play a distinct factor in the physical aptitude of Soldiers. In order to overcome these issues SF Team Sergeants and senior NCOs must remain versatile and creative in order to maximize the output of training scenarios for all, and minimize the risk of injury. This can be done by implementing training plans that first develop stability, then strength, and finally power, all the while conducting consecutive training for all Soldiers of a given unit that appropriately fits the right training to the right Soldier. If done correctly, this training concept can be applied to train all Soldier in similar tasks at the same time, all the while ensuring the injured or newer Soldiers are first developing a solid foundation before they move to more advanced loads or movements.

One model that provides an example of effective principle employment in PRT is the OPT Model by NASM. NASM describes the OPT Model as “built on a foundation of principles that progressively and systematically allow [an individual] to achieve optimum levels of physiologic, physical, and performance adaptations” (pp. 7–8). The key focus of the OPT model is to first develop stabilization, then strength, and finally power. By following this training path, individuals can progress with set goals, limit injury, and then maintain abilities. By varying intensity, time, distance, and load, multiple Soldiers can be trained in the same tasks at the same time while ensuring all are challenged, but none to dangerous levels. The following paragraphs will explain specifics of each phase of the OPT model.

Stabilization Training. As pointed out by NASM, the stabilization phase of training is designed “to increase muscular endurance and stability while developing optimal communication between one’s nervous system and muscular system” (pp. 8–9). During this phase of a training method, one must focus on proper form, the ability to do increased repetitions, balance, and work to develop flexibility. A Soldier can still do the same exercises as others who may be more physically apt, but they must not move to higher intensity levels of training until they can perform movements correctly and with a development of muscular endurance. “Research has shown that inefficient stabilization can negatively affect the way force is produced by the muscles, increase stress at the joints, over load the soft tissues, and eventually, cause injury (NASM, p. 9).

Examples of implementing stabilization training for newer or injured Soldiers would be mandating a slower and shorter run, while supervising the individual for good running form. Additionally, body weight movements such as body weight squats, pull-ups, pushups, and sit-ups should be conducted slower, and again under supervision with focus on form, and building the muscular endurance to simply conduct a maximum amount of without regard for time but full regard for correct form.

Strength Training. The emphasis of strength training is to “maintain stabilization endurance while increasing prime mover strength” (NASM, p. 9), meaning strengthen the primary muscles used. Strength training must be broken up further into first continuing to build endurance, flexibility, and stabilization. Second, increasing loads and lowering repetitions. Third, maximizing loads under minimal repetitions. The benefits will be an increase in muscular capacity, increased flexibility, and sustained stability. All of which will increase the body’s immunity to injury.

Ways of effectively conduct strength training can be implementing supersets where two exercises of similar of the same muscle groups are exercised back to back. This is most effective when an exercise with a higher load is followed with good stability exercise with a lower load. For instance, conducting a barbell bench press for 10 repetitions followed by dumb bell press while laying horizontally on a stability ball for 10 repetitions. Another example would be a barbell squat for 10 repetitions followed by a body weight squat conducted on a stability ball for 10 repetitions. As one increases the strength phase of training, they can decrease repetitions, and increase load to develop additional strength and stability capacity.

Power Training. The culminating principle of developing a sound PRT program is to develop power. Power training “emphasizes the development of speed and power” (NASM, p. 10). By the time a Soldier reaches this phase of training, he has developed habits in the form of muscle memory in good form, solid balance, and stability throughout all movements, flexibility, and strength. To fully develop power the intensity should be increased with goals of “enhanced neuromuscular efficiency, enhanced prime mover strength, increased rate of force production (power), [and] enhanced speed strength” (NASM, p. 11).

In order to effectively train power, the intensity should be increased to maximum levels. The output will be increased joint and musculoskeletal strength, which will further decrease the likelihood of injury. Excellent exercises are sprints, agility drills, max body weight exercises in a given amount of time, and Olympic weight lifting exercises. A garrison environment can usually provide a vast amount of PRT options available to the creative trainer. Next, this chapter will look at how these same principles can apply to a deployed environment.

B. OPTIMAL TRAINING WHILE DEPLOYED – MAINTAINING

Under ideal situations, Special Forces deploy with a trained and fully mission capable unit, and maintain unit integrity throughout a given deployment. However, the ideal situations are usually not the norm. Further, although it is ideal to develop a sound foundation of PRT standards while in garrison, it may not always be achievable. Nevertheless, the same phases of training similar in concept to NASM's OPT model will apply to any environment. Expected differences in a deployed environment will be the lack of flexibility and resources (including time) that are often found in garrison. Special Forces often find themselves in demanding situations with limited time, and limited facilities or equipment that can be used to effectively conduct PRT. Additionally, deployed SF units may even be asked to incorporate new members to their ranks to replace injured or previously missing Green Berets.

In order to effectively implement the same concepts and principles that work in garrison while on deployment is difficult, but achievable. First, as with in garrison, there must be command emphasis on maintaining PRT standards. Admittedly, this can be challenging when the real world requirements of any given SF mission are brought to fruition. Time and other resources can be huge challenges. Additionally, as survivability is paramount, SF units may find themselves spending countless hours conducting necessary tasks that will ensure all is done to stack the odds appropriately in a deployed unit's favor. However, as previously pointed out in this thesis, if a SF unit continues to neglect PRT over time, they are decreasing the operational longevity of their Soldiers,

and putting themselves at greater risk of being less than optimally capable in the long run. Therefore, PRT must be worked into all SF deployments, and this must be emphasized throughout all levels of the command.

Second, the same principles that apply to a garrison PRT program can apply to a deployed SF unit. Even when assimilating new members to a unit while deployed the same principles that were effective in garrison can be applied while deployed. Although it can be expected that there will likely be increased strain in options and resources available to conduct PRT, a slower but steady program can be effective.

Modifications in conducting PRT will likely be needed while a SF unit is deployed. There may be less space available to conduct distance movements such as foot marches or running, and there may be a lack of fitness training facilities. This is in addition to an expected lack of time for PRT while deployed. SF units can work around these issues by conducting shorter exercises or spreading workouts over longer periods by incorporating them into other necessary activities. For example, Tabata drills have been proven highly effective. These are conducted over an eight minute stretch of time where maximum repetitions of a given exercise are conducted in 20 seconds, followed by a 10 second rest. Given that the entire workout is designed to take eight minutes, there will be 16 exercises conducted with 16 sets of rest as well. Exercises can vary from any body weight exercise to jumping rope, or even wind sprints in any direction. This effective use of time can help sustain Soldiers, and even improve certain aspects of their physical capabilities. The more varied, diverse, and frequently conducted the Tabata drills, the better.

Additionally, leading causes of injury are often overstraining on joints. To maintain joint strength Soldiers must train in all directions of motion, and emphasize good control, stability, and balance. This will prevent certain joints and their corresponding tendons and muscles from becoming neglected and more prone to injury. Initial exercises that work well in the stability phase of training are forward, rear, side, front lateral, rear lateral, and crossover lunges. As a Soldier's basic balance and stability increase, they can conduct agility drills moving in all directions with abrupt changes in

direction and sudden stops. These exercised can take limited time, and if conducted multiple times a week can ensure joints, tendons, and muscles remain strong and less prone to injury.

Another element of deployment will be times when conducting PRT is simply not feasible. To effectively account for these periods, good training plans should adapt to take a few steps backwards. For instance, when there has been a laps in time available for PRT, a refocus focus on stability training will be appropriate to ensure Soldiers are ready for the more advanced training they may have traditionally been used to. Likewise, when assimilating new Soldiers into a deployed SF unit, they still must effectively build up stability and strength before moving to higher intensity training. Leaders must ensure that their newer Soldiers are ready for more straining and complex tasks, and vet them into the given PRT system at a challenging, but safe level. Moreover, commanders must understand this assimilation period for recently added Soldiers.

Further important concepts that will apply to a deployed SF unit will be the actual tasks of a given mission. Naturally, leaders should place physically stronger individuals in tasks that are more physically challenging. Though it sounds intuitive, it is often not done, and job assignments are given to someone who holds a certain position in unit rather than on physical capabilities. In order to limit injury, demanding physical tasks should not be given to Soldiers who are not fully ready to bear the physical intensity. This will ultimately allow all Soldiers to gain effective physical capabilities, and lead to a stronger unit over time, that may even be better cross-trained.

Finally, incorporating a fitness culture based on continued progression that expands from garrison to deployed environments will extensively help in ensuring PRT is performed. For example, SF units that form habitual norms of conducting body weight squats, stretches, lunges, pushups, or other exercises when pauses take place in a given mission, planning, or administrative cycle will be more apt to continually sustain and improve their fitness attributes. Additionally, a unit culture of competition can build incentive in all Soldiers to continue to strive to be better. It is also important to note that cultural norms that focus on the cohesiveness of the unit and team spirit will also play an important role to not disregard the weaker Soldiers, but instead work to make everyone

stronger. Consequently, a stronger core of Soldiers will make the unit as a whole stronger and more effective. This final element is what separates effective military PRT from other fitness training. As listed in *FM 7-0*, leadership and effective training principles are paramount. To address the role of leadership and policy, the next portion of this chapter will address policy changes that can more effectively ensure Special Forces are always ready to conduct the assigned mission both while deployed and in garrison.

C. THE PHYSICAL TRAINING ANSWER FOR SPECIAL FORCES – MOVING FORWARD

Today's Special Forces Regiment has an unrivaled reputation for being able to conduct some of the most unique and broadly defined mission sets. Ongoing transformations in the training, sustainability, and mission readiness all have successfully held onto valuable lessons from the past, and adapted TTPs for the evolving battlefields of the present and the future. Additionally, Special Forces unique language and cultural abilities have brought PRT concepts to countless other HN forces, and the Regiment has been able to learn from them in many ways in return. However, in order to ensure that the Green Beret is held in higher regard than the equipment he operates, and lasts in an operationally effective role for a long and worthy career, there must be slight improvements in the attention and action given to effective SF PRT.

This thesis has shown that command focus is essential to implementing any effective program, such as Physical Readiness Training that maximizes a Green Beret's operational lifespan. A complement to effective command focus that spans all levels of influence to a Green Beret's sustainment of physical fitness should be physical readiness standards within the SF Regiment. *Army Regulation 614-200, Chapter 5* outlines criteria that a Soldier must meet in order to qualify for initial assessment and training in order to become a Special Forces Soldier. However, short of U.S. Army standards there are limited physical readiness standards that dictate what a Soldier must do to remain operational within the Special Forces Regiment. Nevertheless, as shown in Chapter VI of this thesis, Special Forces must remain at a higher standard of readiness than the regular Army.

A problem for the Special Forces Regiment that does not exist for units such as the U.S. Army Rangers is that once a Soldier becomes a Green Beret, he now holds a specific MOS that is not part of other conventional units to any large degree. For example, if a Ranger fails to meet standards that are specific to the Ranger Regiment, he can be assigned to a conventional Army unit. This fact does not stand for Special Forces. Therefore, even though a Soldier must perform to a higher standard to become a Green Beret, once SF qualified, he essentially only needs to meet Army standards to remain a in the SF Regiment.

In order to effectively ensure the Special Forces Regiment not only receives the most qualified Soldiers within its ranks, the Regiment should adopt and enforce more specific physical readiness standards that ensure each SF Soldier continues to earn the coveted Green Beret every day. These standards should include all aspects that are essential to a SF operator's operational effectiveness, to include physical fitness capabilities. If a Green Beret is unable to meet physical readiness standards, then he should have the option to apply to the Army for MOS reclassification, or face discharge for failing to meet the requirements of his assigned duty. Under conditions of extreme negligence of SF Soldiers meeting their assigned standards, they should face Special Forces tab revocation, and discharge. Naturally, there will be injured, wounded, and otherwise operationally incapable Special Forces Soldiers who still possess great value to the Regiment. For this reason, Green Berets who fall victim to extreme circumstances must have the opportunity to apply for an exception to policy from the Special Forces Command to remain on Special Forces status given they have the support of their chain of command.

The current standards for avoiding termination from SF Duty can be found in *AR 614-200, Chapter 5., paragraph n.*, and read as follows:

Soldiers will be terminated from SF duty, CMF 18 MOS withdrawn, and reported for reclassification and assignment when –

- (1) They request termination from SF duty or airborne status.*
- (2) They refuse to jump from an aircraft while it is airborne.*
- (3) Their security clearance is withdrawn.*

(4) They lose physical qualifications.

(5) They fail to fulfill professional requirements or are found unsuitable, as evidenced by any of the following (not all inclusive):

(a) Civil convictions (whether or not an appeal is pending resolution) for a felony offense or an offense involving moral turpitude or any other conviction for civilian criminal offenses that result in the suspended or unsuspended punishments of more than 6 months confinement or a fine in excess of \$5,000.

(b) Initiation of any adverse administrative elimination action for reasons specified in AR 635–200.

(c) Repeated failure to perform MOS – or ASI – related duties after counseling and rehabilitative reassignment.

(d) Any other act or series of acts inconsistent with the integrity, professionalism, and conduct required of a SF Soldier.

The above list provides a broad scope that attempts to ensure less than desirable Soldiers are removed from the Special Forces Regiment. However, this list can lead to some ambiguity, and does not fully cover specifics that a Green Beret is commonly expected to conduct as part of his duties such as a requirement to speak a foreign language to train with HN forces, and specific standards relating to physical readiness. Certain standards that are required under *AR 614–200, Chapter 5*, for SF selectees for assessment and training should be maintained throughout a Green Berets career, such as standards 1 – 4 of the proposed additions below. Additionally, proposed standards 5 – 8 provide non all-inclusive specifics that every Green Beret must be able to do at a minimum, thus ensuring some exacting physical readiness standards are maintained for all operational Green Berets.

In addition to the standards that currently exist in *AR 614–200*, this thesis proposes that in order for one to retain their Special Forces MOS with the right to wear the Green Beret, in addition to ensure physical readiness of the SF Regiment, each Special Forces Soldier must:

1. Meet medical fitness standards as outlined in *AR 40–501*.
2. Maintain a DLPT score of 0+/0+ or higher.
3. Be able to swim 50 meters wearing boots and battle dress or Army combat uniform.

4. Be able to score a minimum of 229 on the APFT, with no less than 60 points in each event, using the standards for age group 17–21.
5. Not be continually barred to reenlistment for greater than six months.
6. Be able to climb and descend a 20-foot rope in combat uniform.
7. Be able to conduct a foot march under a 65-pound or greater load for eight miles in less than two hours.
8. Remain qualified in the use of primary and secondary weapons systems.

All standards that can be tested should be completed once annually ensuring that Special Forces Soldiers understand they must maintain appropriate skills and train accordingly. Given the ongoing strains of deployments and other requirements of today's Green Beret, this thesis recommends that a grace period of no more than six months be instated for a SF Soldier who may find himself delinquent in a standard. This six-month period can and should coincide with a bar from reenlistment as indicated above in number five.

With enforcement the current and proposed standards will set a foundation that each Green Beret can be held accountable for. In turn, this policy change will lead to rapid cultural shifts where each SF Soldier understands that he must earn his Green Beret continuously, or lose it. The outcome will be undoubtedly be invigoration in effective PRT programs, and command support, both of which are essential. Moreover, if commanders are held accountable to ensure their assigned SF Soldiers are meeting certain standards, incorporation of effective PRT into their guidance is sure to follow. Although not specifically addressed in the proposed standards, establishing good stability, strength, and then power will also be paramount in effective training. This will serve as preventative training that will limit possible injuries from conducting forced marches under load by strengthening joints. With these simple policy changes, and emphasis not only on the individual Green Beret, but on the SF command at all levels, the nation can expect that Special Forces Regiment continues to remain operationally effective for all the challenging tasks assigned, and maintain its Green Berets in an operational role as long as possible.

IX. SUMMARY AND WAY AHEAD

This thesis has shown the importance to the Special Forces Regiment of attention to human performance, and how it can be enhanced in certain aspects to ensure the operational lifespan of a SF operator is maximized. First and foremost, culture and policy must align with command focus to construct an environment where an effective performance based Physical Readiness Training program is integral to SF life. Next, today's Special Forces have a broad array of useful training concepts and examples that can be of value to any physical training plan. For instance, history, today's conventional Army, other SOF, and elite athletic cultures all provide examples of valuable programs that can work in varying ways for a Green Beret and his unit. However, ultimately military PRT principles such as the *TC 3-22.20* will provide the most effective foundation in building a training concept due to its link to uniqueness of military deployments, leadership, teamwork, and mission requirements. Areas of inapplicability can be ignored, but the foundation can be brought to fruition in training concepts. Finally, this thesis explored specific principles that can affect SF physical fitness training in garrison and while deployed, and how to implement small modifications to standards that can likely provide a significant change in the return on investment of this nation's Green Berets.

Although not pervasive, cultural and philosophy challenges do continue to hinder advancement in the physical readiness of the Special Forces Regiment. As long as it is acceptable within the Regiment for one Green Beret in any given duty position to become out of shape, avoid seeking physical improvement, and neglect his military professional appearance, others will likely assume this unprofessional lack of activity is an acceptable standard. Sadly, this has been shown to be a small but notable plague that depletes the SF Regiment's operational effectiveness, and reputation. To be clear, the deconditioned Green Beret should never be confused with the disabled wounded warrior who, though not able to live up to the same physical standards he once could, continues to inspire others and give back to the Regiment with his unique motivation and capability sets. Moreover, SF commanders at multiple levels have often neglected to emphasize the importance of maintaining a strong PRT program over time. Though often focused on the perceived

critical time sensitive tasks, this lack of prioritization of the importance of the operational lifespan of SF Soldiers has undoubtedly led to many unnecessary injuries, and several careers cut short.

Additionally, policy challenges have existed within the SF Regiment that have neglected to adequately define standards that a Green Beret must meet in order to remain within the Regiment's ranks. Current policies with regards to the mandatory physical readiness standards for SF Soldiers can be interpreted in differing ways, and lack specifications that are required on a multitude of common SF missions. The implementation and enforcement of clear standards will greatly limit deconditioned Green Berets in the Regiment, motivate individuals to live up to the set standards, encourage commanders to develop comprehensive PRT programs, and ensure all Green Berets are treated as an asset of the Regiment that must last.

There were a vast amount of valuable topics not addressed in this thesis, or barely touched on that can also be of great value to enhance the physical readiness of a Special Forces Soldier. They can likely be the subject of future studies and hopefully effective implementation into SF life. Topics such as the importance of maintaining and training a stable and sound mind to prepare for adverse situations are of great importance to an operationally effective SF Soldier. Additionally, nutrition plays a key role in sustaining health, recovering from injury, and maintaining mental alertness and attitude. Although not directly discussed in this thesis, they are directly linked to an effective PRT program. Hopefully, as today's Green Berets continue to improve on years of excellence, they will adapt ways of training the mind and body that will ensure they remain ready to fight, win, and then fight another day.

APPENDIX

BOOK REVIEW OF: *ARMY PHYSICAL READINESS TRAINING. TC 3-22.20. CAN THE ARMY'S PHYSICAL READINESS TRAINING (PRT) WORK FOR SPECIAL FORCES?*

The importance of physical readiness is certainly not forgotten, but where to look for guidance sometimes is. Based on some concepts that are designed for the conventional Army that may not seem fully applicable to today's Green Beret, many have looked to off-the-shelf civilian oriented fitness programs. There is undoubtedly value within many of the latest fitness trends available; however, they may not offer Special Forces a complete answer that effectively relates to physical readiness.

According to the newly updated Army PRT manual, *TC 3-22.20* (March 2010): "physical readiness is the ability to meet the physical demands of any combat or duty position, accomplish the mission and continue to fight and win" (p. 1.1). The Army sees PRT as mandatory for all Soldiers, and a must that commanders emphasize its importance and make PRT a cultural norm in their units (p. 1-2) . Additionally, even though the Army may not design a fully applicable program to Special Forces, they do effectively describe the importance of physical readiness, and how it applies to all Soldiers (p. 1-1):

Military leaders have always recognized that the effectiveness of Soldiers depends largely on their physical condition. Full spectrum operations place a premium on the Soldier's strength, stamina, agility, resiliency and coordination. Victory—and even the Soldier's life—so often depend upon these factors. To march long distances in fighting load through rugged country and to fight effectively upon arriving at the area of combat; to drive fast-moving tanks and motor vehicles over rough terrain; to assault and run and crawl for long distances; to jump in and out of craters, and trenches, and over obstacles; to lift and carry heavy objects; to keep going for many hours without sleep or rest—all these activities of warfare and many others require superb physical conditioning.

Based on the previous paragraph excerpt, it is clear that the concepts and principles within the *TC 3-22.20* are applicable to today's SF Soldier. However, areas of conflict as often stem from concepts such as ARFORGEN (Army Force Generation). As outlined by the Headquarters, Department of the Army Posture Statement (2010): the "purpose of

ARFORGEN is to provide combatant commanders (CCDR) and civil authorities with a steady supply of trained and ready units that are task organized in modular expeditionary force packages and tailored to joint mission requirements.” This concept applies directly to the Army PRT guidelines in *TC 3-22.20*, as “ARFORGEN uses a structured progression of increased unit readiness over time” (p. 5-36).

ARFORGEN is made up of: Reset Phase, Train/Ready Phase, Available Phase, and Deployment. Issues in implementation of the PRT and ARFORGEN to SF come from SF’s unique deployment requirements. According to *TC 3-22.20*, the Reset Phase is designed to take 180 days of set time scheduled workouts and build up exercises. Next, the following Train/Ready Phase (though not given a specific time requirement) details the number of times a unit should conduct certain types of exercises and drills (pp. 5-37 – 5-38). The problem for SF units is that there is often little time between deployments, and some deployments can come up unexpectedly giving the unit only minimal time to prepare. Because of these facts, Special Forces must regularly maintain themselves in a constant “Available Phase” status when not on deployment, and in some cases may even expect to deploy directly from one mission to another. This ensures that when called upon, a SF unit can do anything tasked, anytime, and anyplace.

Nevertheless, the challenges of applying ARFOGEN to SF do not make *TC 3-22.20* inapplicable. In fact, the principals outlined and the purpose behind them is highly applicable to SF as well as all Soldiers, as the manual outlines that PRT is “required by law for all individuals and units” (p. 1-2) . The principles of the Army PRT are intentionally linked into the Army Field Manual 7-0, *Training for Full Spectrum Operations* (Dec 2008), and are (p. 1-2):

- *Commanders and Other Leaders are Responsible for Training*
- *Noncommissioned Officers Train Individuals, Crews and Small Teams*
- *Train as You Will Fight*
- *Train to Standard*
- *Train to Sustain*
- *Conduct Multiechelon and Concurrent Training*
- *Train to Develop Agile Leaders and Organizations*

The above principles can, should, and are applied every day to Special Forces training and preparedness. Additionally, the Army PRT covers Warrior Tasks: Shoot,

Move, Survive and Adapt, as well as Battle Drills: React to Contact and Evacuate a Casualty, all of which are paramount tasks to SF (p. 1-4). The manual insightfully identifies the appropriate physical requirements of these tasks, such as pulling, pushing, running, sprinting, and jumping, and then outlines specific exercises that can effectively enhance them (pp. 1-4 – 1-7). Whether a SF unit is asked to train other Host Nation (HN) forces, or conduct missions unilaterally, there is no aspect where *TC 3-22.20* principles and application could be discounted.

Aside from the principles of PRT, as laid out in *TC 3-22.20* there are four chapters, and over 200 pages of specific exercises covered within the manual. Furthermore, section 5–18 specifically covers Field Training, and gives excellent forethought to effective exercises that can be conducted while not in a garrison environment. Not all of these exercises or PRT techniques will apply to a given SF mission. However, it is inconceivable that any given deployed SF unit would not find value within *TC 3-22.20* that could directly contribute to any given mission.

Much of the current resistance to look for fitness guidance from *TC 3-22-20* resides in recent trends within the SF community to reach into the civilian market for valuable physical fitness training techniques. There are several off the shelf fitness programs such as *Crossfit*, *P90X*, *Insanity*, and dozens of others that can be found at local athletic clubs. Additionally, there are countless pieces of Athletic training literature put out by the *National Academy of Sports Medicine (NASM)*, the *American Council of Exercise (ACE)*, the *National Strength and Conditioning Association (NSCA)*, and untold other organizations. There exists highly valuable and cutting edge fitness related information that can be applicable to the SF Soldier in each one of these fitness concepts. However, all of the previously mentioned are primarily aimed at the civilian market. Within each, one can expect to find instructions related to scheduling rest and recovery that are not fully applicable to the SF Soldier.

Different from the civilian athlete, the SF tactical athlete does not always have the luxury of deciding when he will schedule his rest, recovery, and workouts. As previously mentioned this can even be problematic when trying to apply the PRT concepts in *TC 3-22.20* to SF. However, only the *TC 3-22.20* incorporates unit training (Section 4-6),

leader responsibilities (Sections 3-1 and 4-7), specific combat related tasks (Section 1–14), field training (Sections 5-14 and 5-18), and military specific activities such as foot marches (Section 10–20), and obstacle negotiation, including the wear of full combat gear (Appendix E). Although SF missions can be highly unique, and no single publication can cover all aspects of how the SF warrior must prepare, there is distinct value that can be found only in *TC 3-22.20* that applies to the SF tactical athlete.

As with all Military organizations SF has found difficulties in maximizing their mission readiness, and balancing the ongoing requirements of the tasks at hand. Although some well-applied readiness solutions such as ARFOGEN apply to regular Army units, they do not apply as holistically to SF. Regardless, SF must not set aside concepts such as the Army PRT guidelines as found in *TC 3-22.20*. The SF Regiment can remain certain that there will be a continued need to remain in a constant state of physical readiness both in garrison, and while on deployment. Given this certainty, and ongoing need for strong PRT to attain the degree of readiness required, the principles and combat oriented functional training found in *TC 3-22.20* can be of great value to the SF unit/team, and the individual Green Beret.

LIST OF REFERENCES

- BAE Systems (May 2008). *Operator training RG33 family of vehicles operator training course student guide*. XX
- Bergeron, M. et al. (November 2011). *Consortium for health and military performance and American college of sports medicine consensus paper on extreme conditioning programs in military personnel*. American College of Sports Medicine. November/December 2011 - Volume 10 - Issue 6 - pp 383–389. doi: 10.1249/JSR.0b013e318237bf8a. Retrieved from: http://journals.lww.com/acsm-csmr/Abstract/2011/11000/Consortium_for_Health_and_Military_Performance_and.15.aspx
- Bocanegra, J. (March, 2011). *Professional strength conditioning program at 3rd SFG (A)*. USASOC Public Affairs, USASOC News Service. Release Number: 110302–01. Retrieved from: <http://www.soc.mil/uns/Releases/2011/March/110302-01.html>
- Clark, M., Lucett, C., Rodney, C. (2008). *NASM essentials of personal fitness training*. Baltimore, MD: Lippincott Williams & Wilkins.
- Couch, D. (2007). *Chosen soldier. The making of a special forces warrior*. New York: Random House.
- Couch, D. (2004). *The finishing school*. New York: Three Rivers Press, Random House.
- Cragin, K. & Gerwehr S. (2005). *Dissuading terror. Strategic Influence and the Struggle Against Terrorism*. Santa Monica, CA: Rand Corporation.
- CrossFit official website. Retrieved from: <http://www.crossfit.com/>
- Cucullu, G. (LTC, U.S. Army), (14 Dec 2005). *The passing of a hero*. Retrieved from: <http://archive.frontpagemag.com/readArticle.aspx?ARTID=6264>
- Department of the Army. (Sep 2006). *FM 3-05 Army special operations forces*. Headquarters, Department of the Army, Washington, D.C.
- Department of the Army. (Dec 2008). *Army field manual 7-0, training for full spectrum operations*. Headquarters, Department of the Army. Washington, D.C.
- Department of the Army. (August 19, 2009). *FM 7-8, infantry rifle platoon and squad*. Headquarters, Department of the Army, Washington, D.C.

- Department of the Army. (Sep 2009a). *TM 1-1520-237-10, Technical Manual, Operator's Manual*. Headquarters, Department of the Army, Washington, D.C.
- Department of the Army. (Sep 2009b). *TM 1-1520-237-PMI, Technical Manual, Phased Maintenance Inspection Checklist*. Headquarters, Department of the Army, Washington, D.C.
- Department of the Army. (Sep 2009c). *TM 1-1520-237-PMS, Technical Manual Preventative Maintenance Services*. Headquarters, Department of the Army, Washington, D.C.
- Department of the Army. (Sep 2009d). *TM 1-1520-237-PMD, Technical Manual Preventative Maintenance Services*. Headquarters, Department of the Army, Washington, D.C.
- Department of the Army. (Mar 2010). *Army Physical Readiness Training. TC 3-22.20*. Headquarters, Department of the Army, Washington, D.C.
- Department of the Army (2010). *Army posture statement, ARFORGEN*. Retrieved from: [https://secureweb2.hqda.pentagon.mil/vdas_armyposturestatement/2010/addenda/Addendum_F-Army%20Force%20Generation%20\(ARFORGEN\).asp](https://secureweb2.hqda.pentagon.mil/vdas_armyposturestatement/2010/addenda/Addendum_F-Army%20Force%20Generation%20(ARFORGEN).asp)
- Fontaine, R. (April 12, 2011). *Twilight of a strongman. How will the U.S. fight al Qaeda without local tyrants like Ali Abdullah Saleh?* Foreignpolicy.com. Retrieved from: http://www.foreignpolicy.com/articles/2011/04/12/twilight_of_a_strongman
- Fukuyama, F. (1999). *Playing by the rules. In the great disruption*. New York: Touchtone.
- Green Beret Foundation* (Mar–Apr–May, 2011). *Special Warfare* journal. Fort Bragg, NC.
- Headquarters, Department of the Army. (March, 2010). *TC 3–22–20, Army physical readiness training*. U.S. Army, Washington, D.C.
- Joint Chiefs of Staff (Apr 2011). *Joint publication 3–05, special operations*. United States Special Operations Command. MacDill Air Force Base, FL.
- Keegan, J. (1998). *The first world war*. New York: Random House.
- Kuran, K. (2004). Cultural obstacles to economic development: Often overstated, usually transitory. In *Culture and Public Action*. Stanford University Press.

- Michele Malvesti, M. (June 2010). *To Serve the Nation: U.S. SOF in an era of persistent conflict*, pp. 23–30. Center for a New American Security. Retrieved from: http://www.cnas.org/files/documents/publications/CNAS_To%20Serve%20the%20Nation_Malvesti.pdf
- Marquis, S. (1997). *Unconventional warfare. Rebuilding U.S. special operations forces*. Washington, D.C.: Brookings Institution Press.
- McRaven, W. (1996). *Spec ops. Case studies in special operations warfare: theory and practice*. New York: Presidio Press of Random House.
- Meierhenrich, J. (2004). *Forming states after failure*. In *When states fail: Causes and consequences*. Princeton, NJ: Princeton University Press.
- Ranger Regiment (May, 2008). RAW PT, v.3.0. 75th Ranger Regiment. Retrieved from: http://www.25idl.army.mil/pt/rawptguide_bp.pdf
- Sathe, Vijay, (1985). *Culture and related corporate realities*. Homewood, IL: Richard D. Irwin.
- Special Operations Command Official Web Page, U.S. Army Special Operations Command, Special Forces Command. Retrieved From: <http://www.soc.mil/USASF/USASF.html>
- U.S. Army JFK Special Warfare Center and School (Jul, Aug, Sep 2011). *Fitness, THOR3, what is THOR3? Special warfare*, 24(3). U.S. JFK SWCS. Fort Bragg, NC
- Vegetius Renuat, F. (1767). *On Roman military matters. A 5th century training manual in organization, weapons and tactics, as practiced by the Roman legions*. St Petersburg, FL: Red and Black Publishers.
- Waldron, W. (2000). *The infantry holdier's handbook*. Ney York: The Lyons Press. Originally published by the Harvey Press, 1917.

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