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KEY PERSPECTIVES ON SPECIAL FORCES

A photograph of special forces soldiers in tactical gear, including helmets and vests, moving forward. One soldier in the foreground is holding a flashlight, which illuminates the scene. The background is dark and blurry, suggesting a night or low-light operation.

FORCE MULTIPLIER FOR
THE ASYMMETRICAL AGE

Foreword by COL LAM SHIU TONG
CHIEF COMMANDO OFFICER /
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Edited by CPT YAP KWONG WENG

Key Perspectives on SPECIAL FORCES

Force Multiplier
for the Asymmetrical Age

Edited by
CPT Yap Kwong Weng



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*This book is dedicated to the soldiers who have
served and sacrificed*



*for the freedom, peace and stability
of Singapore.*

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Foreword

The question of what Special Forces are remains a mystery to many today. However, people do know that when a crisis happens, the Special Forces will be ready to solve the problem. Since the attacks on the twin towers on 11 September 2001, the global security landscape has changed tremendously with more conflict and international terrorism.

As the Singapore Armed Forces (SAF) continue to undergo a major transformation to modernise itself into a 3rd Generation Armed Forces, a key component of its reconfiguration is the establishment of the Special Operations Task Force (SOTF). In short, SOTF affords the integration of assets and Special Forces from the Army, Navy and Airforce to open new avenues for capability development in a more efficient and flexible manner. This new task force enhances the SAF's ability to deal with the complex security challenges of today and the future. Nonetheless, as Special Forces are proven to be extremely effective in their line of business, little is discussed about them and what they really do.

For this reason, I am delighted to introduce *Key Perspectives on Special Forces*. This publication introduces the first comprehensive monograph involving Singapore's Special Forces, and provides a critical examination on the history, theory and experience of Special Forces, as well as key reflections on the future of special operations. This monograph presents a series of articles about the Special Forces, which is beneficial for debate and discussion for readers in and out of the military.

I hope you will seize the moment and enjoy the readings.

COL LAM SHIU TONG
Chief Commando Officer/
Commander SOTF
October 2009

Preface

Imagine if you were required to write all that happened in the last 30 minutes, you would most likely have to reproduce your thoughts in a simplified form or list everything down item by item. Theory is needed to meet this objective because actions are derived from theory in practice. The question is not how people can relate theory to practice, but rather, how theory is inevitably used in practice.

Key Perspectives on Special Forces is designed to outline theory and practice, and serves to bring together specialised individuals in the field to provide a unique resource of knowledge. Throughout this project, the authors ponder over some key considerations – What is so special about Special Forces today? How should Special Forces (SF) move ahead of the curve? There is no simple answer to these questions. These essays attempt to discuss these areas to lend greater clarity to the issue in question.

The book begins by introducing readers to the evolution of Special Forces, and briefly answers why Special Forces are a competitive and sustainable advantage in this globalised era filled with asymmetrical threats. The essays in this publication underscore the interplay of theory and practice through selected readings from discussions on ethics to valuable experiences on leadership and training. In the end, the main purpose of this book is to allow readers to shape their own conclusions from the literature presented.

This is not a complete textbook on Special Forces. But it does shed light on key aspects of the history, training and strategies in special operations. Similarly, the content in the essays offers new perspectives for readers to understand a range of issues in SF, and enables organisations to realise the urgent need to adapt to changes due to escalating demands of the 21st century. The articles offer useful examples from theory and experience and suggest approaches that may be used conceptually, diagnostically and practically to drive possibilities for action.

Special Forces around the globe are now positioned at a critical juncture, as creative transformation is needed to counter new threats and challenges from all angles and areas. We need international cooperation to make sense of the security environment in a more efficient, and flexible manner. Therefore, cooperation between critical agencies, coupled with the building of organisational resilience and individual adaptability is needed as we accelerate the pace of collaboration against the asymmetric adversary.

I would like to express thanks to my colleagues who had contributed significantly towards the quality of this book. Particular gratitude is given to COL Lam Shiu Tong who has taught me the strengths of simplicity and objectivity; he also provided me with the opportunity to start this project. I am also indebted to COL Simon Lim whose intelligence, understanding, and results-orientation is pivotal towards my development in the past year. I am also grateful to Dave Lee for the successful design of the book, and the constructive comments on the manuscript. I like to thank Dr. David Chew, who has provided so many ideas as well as his friendship. Finally, I like to thank Sally Ho (Editor, *POINTER*) and Sim Li Kwang (Assistant Editor, *POINTER*) who has provided tremendous assistance to prepare this edition.

I have learned immensely from all of them, and am fortunate to have had their help.

CPT YAP KWONG WENG

Part I

**UNDERSTANDING
SPECIAL FORCES**

CPT Yap Kwong Weng

SETTING THE CONTEXT: EVOLUTION AND CHALLENGES FOR CONTEMPORARY SPECIAL FORCES

“Generally, in battle, use the normal force to engage; use the extraordinary to win.”

- Sun Tzu

Introduction

SINCE ANCIENT TIMES, THE USE OF MILITARY FORCES to conduct special operations is imperative for a nation’s defence. In response to the current asymmetrical threats that have redefined how battles are fought in the modern landscape, militaries and governments have changed their ways of dealing with these threats. In today’s unpredictable landscape, Special Forces (SF) are the logical response to deal with the new crises created from terrorism and conflicts.² Thus, it is important to link technological advancement with human capital to defuse the adversary. With relevant response and precise crisis management to mitigate risks at all levels in operations, the SF of today must be prepared to engage and respond to multi-dimensional threats under all situations at all times. Using literature from the broader context of military history, crisis management and security studies, this article details key issues in SF that the reader may wish to reflect upon as they work through the remaining articles. The article first provides a broad overview of the evolution of SF and discusses asymmetric warfare along with its challenges in the current context. It concludes with broad recommendations on possible challenges faced by SF.

Evolution of Special Forces

SF operations have existed from ancient to modern times. From the special operations conducted by the Spartans to the two World Wars to the current “War on Terrorism”, special operations are included in almost every war throughout the course of history. For this reason, I have divided this discussion on the evolution of SF into three epochs:

1st Epoch – First World War to Second World War

In the First World War, development in special operations emerged in various parts of the world to meet the rising political challenges across Europe. This created the rising need for small unit operations to further the strategic defence objectives of nations. Among the first “Special Forces” units formed during World War Two was Germany’s “Brandenburgers”, a unit that was used for special operations in 1939. While Germany used SF to counterstrike the Allies, it was however, the British that developed and expanded SF operations in World War Two. As part of then-British Prime Minister Winston Churchill’s military strategy to neutralise the German soldiers³, Churchill gave specific direction for the set-up of specially trained troops in the war for he fully understood the importance of units that could create huge damage with small numbers. This command gave rise to special units such as the Commandos, the Special Air Service (SAS) and the Long Range Desert Group (LRDG) that set the stage for unconventional warfare.⁴

The creation of SF units increased significantly during and after Second World War, where Special Operation Forces (SOF) became a global phenomenon as they were paradoxically “born in crisis from a position of weakness”.⁵ The British and American forces proved a case in point as key military units moved towards special operations. This was evident in the 1950s, the US Army created the Special Warfare Center, which developed into several SF groups used primarily to locate Soviet headquarters and nuclear installations.⁶ It was also at this point where the nature of conflict transited into an era when nuclear weaponry was used as a medium to tilt the balance of power among states.

2nd Epoch – Post-Second World War to Pre-9/11

Since World War Two, the development and employment of SF around the world grew dramatically due to increased demands for special operations. It was also at this juncture that the Singapore Commando unit was formed.⁷ With the creation of more special units around the globe, the dramatic growth coupled with the extensive demands of unconventional warfare, was reinforced by the successes of numerous operations, particularly in Raid and Reconnaissance operations. With little doubt, Raid and Special Reconnaissance operations became the “hallmark” of special operations since then.

In the 1960s to 70s, the Vietnam War created chaos at the political and ideological front. This sparked off an exponential increase of fresh capabilities in counter-terrorist units in the 1970s, where the clear lack of intelligence in operations led to a major organisation of the US SF community, and new counter-terrorist teams emerged as a result of weakening SF capabilities.⁸ Since the post-Cold War era, as the events in terrorism increased to a larger scale, SF were successfully employed on several occasions on both international and local contexts to deal with “new” situations such as bombings, assassinations, and more notably, the hijacking of aircrafts in Europe and the Middle Eastern countries.⁹ This was evident in the 1970s which resulted in a major dimensional shift in the nature of special operations. During this time, international terrorists waged continuous hijack attempts on airlines in Athens, Rome and Zurich. The 1972 Olympics in Munich, West Germany, and the 1975 terrorist assault on the headquarters of OPEC in Vienna, Austria¹⁰ in particular, sent a clear and evident signal on the dangers of terrorism. Thus, it is logical to say that even with the temporary decline of SF after the Vietnam War, uncertainty from global terrorist events created even more emphasis on special operations and units.

The exponential increase of terrorist activities of the 1970s has dual-effects on states. On one hand, there was a prominent cause to strengthen their SF capabilities. On the other hand, it was difficult to predict the exact intentions of the adversary, as political turmoil and conflict across nations were widespread. Nevertheless, counter-terrorist units reacted to the call of duty resolutely in the areas of capability and structural developments. For instance, the SAS reacted to the need for critical forces to deal with urban airport and counter-terrorist operations, and developed its anti-terrorist Counter Revolutionary Warfare Wing (CRW) in 1973 with US forces following suit to create their own “black” operators termed as “Delta”¹¹ force in 1977. Similarly, the US Navy SEALs developed their elite SEAL Team Six in 1980 that focused on “black” operations.¹²

Despite the gradual formation of acclaimed forces such as the Delta Force and SAS CRW troop, “the response towards terrorism (in the 1970s) has been slow and piecemeal”¹³ despite notable counter-terrorist rescues such as the Entebbe hijack rescue of an Air France jet in 1976 by the Israelis Commandos and the successful execution of the Iranian Embassy hostage rescue by the SAS in 1980. With much uncertainty looming over the western regions that was filled with social and political ramifications, the 1980s presented more opportunity for employment of SF in strategic campaigns. Some examples were the deployment of the SAS to the Falklands Islands in support of Britain’s main campaign to regain ground. Likewise, US SF responded in Operation Just Cause when America invaded Panama with the 1st Special Operations Command leading critical missions amid the grand scheme of war.

The 1990s was a time of mixed proportions where multiple wars were fought. While there are many ways to view the 1990s in the context of the SF, the key elements of SF operations and training remain relevant till this date.¹⁴ The clear shift of conventional warfare to smaller scale terrorism in the 1990s implies that SF cannot fight conventionally; they have to defeat unconventional threats with limited resources and response time. Terror groups have grown to become more resilient to conventional methods of response. Not only was there a significant increase in casualty rates, the willingness of the terrorists to conduct attacks had also risen dramatically¹⁵ (See Figure 1).

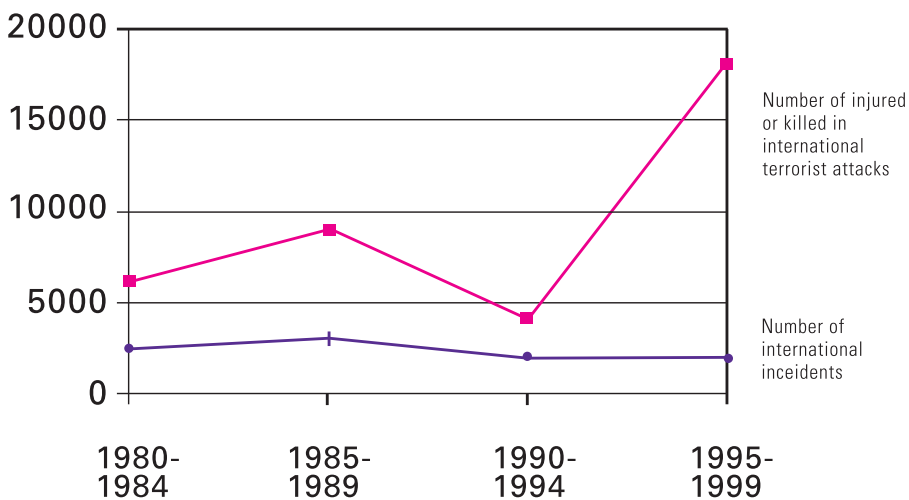


Figure 1: Increase of Terrorist attacks in the 1990s

The 3rd Epoch – The War on Terrorism

Today, globalisation has advanced in almost every level – economically, culturally, militarily and even linguistically. The millennium created new frontiers in technology with the Internet boom positioned as a key driver for change across organisations around the globe. Similarly, the nature of terrorist threats has also changed, and is still changing to become even more asymmetrical. Since 9-11, the popular term “War on Terrorism” has invariably created a new strategic environment.¹⁶ Efforts are now placed on SF to use strategic strikes to decapitate the Taliban/Al Qaeda positions in the mountains and rural areas of Afghanistan. With the fall of the Taliban within months, SF teams achieved their goals by being “highly responsive, focused and creative under fluid, dangerous situations”.¹⁷

More important to note is the realisation of asymmetrical warfare used by the adversary to create destruction, from terrorist to insurgent attacks in different parts of the globe. In this sense, the obvious consequence of the current “War on Terror” is the increased impetus for SF to counter asymmetric threats. Although SF is widely regarded as the force of choice for most nations to defeat terrorists¹⁸, the primary concern here is to point out that there is really “no quick fix to defeating the enemy”¹⁹, as it is self-evident that battles are now fought on unprecedented dimensions.

Asymmetric Warfare

Today’s warfare is asymmetrical and non-linear by nature. Asymmetric threats have created new demands on organisations, governments and militaries, and can be “best understood as a strategy, a tactic, or a method of warfare and conflict”.²⁰ The concept of asymmetry is known, according to the *US Military Strategy* as: “unconventional or inexpensive approaches that circumvent our strengths, exploit our vulnerabilities, or confront us in ways we cannot match in kind”.²¹ In a parallel vein, professors Metz and Johnson of the US Strategic Studies Institute attempt a more comprehensive definition of asymmetric warfare. They describe asymmetric warfare as:

“Acting, organising and thinking differently than opponents in order to maximise one’s own advantages, exploit an opponent’s weaknesses, attain the initiative or greater freedom of action. It can be political-strategic, military-strategic, operational or a combination of these. It can entail different methods, technologies, values, organizations, time perspectives or some combination of these”.²²

They argue that there are no specific variables to form the nature of asymmetric threats as transformation of the threat takes place in so many spheres and dimensions. Furthermore, they assert that western security structures and military organisations are not designed to deal with such fluid threats.²³ Strictly speaking, since the risks that asymmetric warfare presents are dangerously elusive, it is only logical to form critical infrastructures and systems within these organisations that concentrate on sustainable counter-measures, pre-emptive operations, and adaptive cultures that go beyond routine tasks. This is coupled with the view

that terrorists remain as the most prominent asymmetric threat that threatens global stability in this century.²⁴ Based on these reasons, asymmetric threats can be categorised into three distinct categories²⁵:

- a. Vulnerabilities from Information Technology
- b. Use of Weapons of Mass Destruction (WMD)
- c. Terrorism on a War-like scale

The rise of Information Technology poses a danger as well as a platform for advancement. The use of computing technologies to manipulate and harm people is a clear and present danger. In a similar vein, the use of WMD presents catastrophic consequences to humanity. There is also potential of groups using religion, ideology and negative political agendas to threaten global stability. This may sound elusive but the threat is evident and perilous. In this regard, it should, however, be noted that routine emergencies and crises result in conflict, but not asymmetry. Asymmetric warfare does not focus on routines. Rather, it takes advantage of the known to exploit the unknown. On this note, ancient military strategist Sun Zi suggested that asymmetry has been around since ancient time as he placed heavy emphasis on the notion of psychological prowess, which can be seen as a form of exploitation to gain an advantage over the adversary. He explained in the *Art of War* that:

“All warfare is based on deception...When capable, feign incapacity; when active, inactivity... Offer the enemy bait to lure him; feign disorder and strike him... Pretend inferiority and encourage his arrogance... I make the enemy see my strengths as weaknesses and my weaknesses as strengths”.²⁶

As pointed out earlier, asymmetric warfare is fought based on linear methods. Akin to unconventional warfare, responses to asymmetric warfare require more attention, towards more “unconventional” approaches to manage emergent crises and defeat the enemy.²⁷ Asymmetrical threats are multi-dimensional and attack from myriad angles, thus, it is definitely critical for SF to continuously be creative, resilient and adaptive to change, both at the strategic and tactical levels. Likewise, it is in this connection that “a better understanding of SF and intelligence in asymmetric warfare, as well as existing problems therein, provide a means to counter travesties such as 9/11”.²⁸

Key Elements of Special Forces

“It was not our numbers but our ideas which made a big difference”²⁹

- SAS Officer, Dhofar Campaign

As conventional operations become more intertwined with special operations in the current military environment³⁰, one might question the relevance of today’s SF. Are SF still as relevant in the current security landscape? What makes them special today? To put these questions into perspective, these preconditions are set as a basis for analysis: 1) SF operators thrive on their

exceptional qualities and advanced skill sets to meet strategic objectives of the host nation 2) SF are highly adaptive and independent individuals, who can operate interdependently with other security agencies 3) SF cannot be mass-produced and must be managed carefully.

PRINCIPLES OF SPECIAL FORCES	
1.	Special Forces thrive on exceptional qualities and advanced skills.
2.	Special Forces are highly adaptive individuals, who are independent and can operate interdependently.
3.	Special Forces cannot be mass-produced and must be managed carefully.

Figure 2: Table featuring Key Principles of Special Forces

To SF, successful accomplishment of the mission is everything – this makes them extraordinary. The pursuit for excellence in their training and inherent culture makes them “the most valuable assets on the battlefield”³¹, who can “succeed in hostile, ambiguous and unconventional environments”.³²

In the current landscape where asymmetrical warfare abounds, the use of SF to counter unpredictable threats is especially relevant due to the skills and qualities they hold. Without this basic grounding, it is difficult to accomplish difficult missions, not to mention react and adapt to fluid situations in battle. With high organisational commitment levels, unique skills, innate abilities and self-motivation³³, the abilities of SF to solve problems are extremely crucial to emergency response operations and unconventional warfare.

One key observation that conventional warfare uses the Cartesian or reductionist approach to solve a problem is explored. This approach uses tools such as formulas, templates and “norms”³⁴ to provide mental interpretation and conclusion. But the essence of SF depends on intuition, skills and all their abilities to collectively solve problems by “getting on the ground and making the best of what could be a bad situation”.³⁵ As a result, SF have to be trained to be extremely self-reliant and effective improvisers, and take initiative without explicit commands in operations as well as crisis situations. From these viewpoints, it is suffice to say that the institutionalisation of SF on a global scale is not just essential for states; the integration and development of SF can be seen now as a military innovation to support national security strategies in their quest towards countering threats to achieve global peace and stability.

Demand for Crisis Management and Adaptability

Today, SF has shaped the international security environment by effective response across a range of potential crises.³⁶ With contemporary terrorism positioned at the top of the list as the primary asymmetric threat³⁷, crisis management offers a unique proposition for SF, especially in the areas of interrelated tasks around anticipation, prevention and response. Effective crisis management allows sense-making, critical decision-making, coordination and communication to be optimised. What is needed overall, is research “that addresses the challenge of designing resilience into our critical infrastructures”³⁸, and adaptability at the individual soldier levels.

While preparation for attacks is essential in organisations, it is almost impossible to predict the exact courses of action by the adversary. However, it is still possible to identify a generic set of warning signs or signals, which advocate adaptive mechanisms and structures that withstand multiple challenges in the post 9-11 security environment. SF units learn from current crises, and avoid strong tendencies to record all procedures, routines and detailed plans³⁹ for the purpose of “re-use” per se. The reliance on precedence can be viewed now as backward and redundant in most cases when dealing with asymmetric threats, which are fundamentally multi-dimensional.

Besides countering threats effectively, one of the prominent strengths of SF is to respond in crisis emergencies with precision. Still, it is necessary for SF to be adaptive to change, particularly where threats are elusive. Researchers Leonard and Howitt posit that in the response process during a crisis, the mental understanding that emerges in a crisis is critical as it addresses both the cognitive and physical aspects of adaptability.⁴⁰ Equally important is the execution of the response process that requires physical application to restore imperfections during the crisis cycle.

Since SF is constantly exposed to constant stress and environmental pressures, it is reasonable to hypothesise that SF is a highly possible variable to research in terms of emergency crisis management. In light of this *problematik*, the notion of adaptability is explored generally in this article. As researchers from the US Army Research Institute for the Behavioral and Social Sciences conclude that, adaptability is “an effective change in response to an altered situation”.⁴¹ In a similar vein, as a US Special Forces Officer notes, “Adaptability is central to what we do...an adaptive individual is someone who consistently performs well, even when things go bad”.⁴²

Although contingency planning can be used to prevent an event from escalating to the point of damage, it cannot account for all situations, particularly in unconventional situations where extensive risk can spread both rapidly and exponentially. Clearly, adaptive actions taken at this point are most crucial, as “the performance of the organisation here will also be a function of its previous testing of its contingency plans, the training of teams, and the integration of learning from previous crisis events”.⁴³ Therefore, the ability to identify risks and adapt to change is of vital importance to crisis management. It should be noted that emergent crises are difficult to predict and hard to manage once it moves into a “crisis” stage. Analysis on the incubation period of crisis is vital towards the overall outcome of the crisis. As the saying that “prevention is better than cure” suggests, it is only logical to identify and respond to warnings at the early stage before damage is done. But in reality, this is problematic because events that could potentially escalate to a crisis are difficult to spot, and hard to contain.

Challenges for Contemporary Special Forces

Modern SF are required to “manage ahead of the curve” for force sustainability and operational reasons. As a consequence, they should be well equipped, educated and trained with excellent resources. Because of the evolution of the nature of threats and operations, SF could face three key critical challenges today:

Meaningful Employment

In the contemporary society where there is a constant requirement to address key areas in digitalisation, materiel and human capital management as well as increased operations due to the demands of the operating environment, there is good reason to hypothesise that SF could be overly “taxed”, thus enabling a potential “diluting” effect in their performance. SF should focus on their primary combat roles and allocate other fields of specialisation to relevant agencies so that they can concentrate, and continually strengthen their core business in special operations. Of particular importance to SF is dedicated research and development in technology, structural enhancement, education and talent management to match the rising challenges of the global landscape.

Emphasis on Education

It is vital to increase the depth of knowledge in unconventional warfare and asymmetric threats. Relevant education in these areas will allow SF troopers to understand the requirements of their own forces as well as the adversary at greater length, thereby enabling better analysis during operations. It is in this view that education for SF should be enlarged and continuously improved to create awareness of the disposition and motivation of the adversary today. The question is really not just how the adversary fights, but rather, why they carry out such extreme activities, and how SF can devise innovative counter-measures to move ahead of the curve in counter-terrorism operations.

Realise the Paradox of Prevention

Preventive efforts do not equal effectiveness in operations. While preventive measures can increase the chances of detection or early warning, they do not provide solutions to wider issues of terrorism. However, this is not to say that preventive measures are not needed, rather, “fixed-type” of incident management systems are not recommended in the long run as it is impossible to prepare for all types of incidents. On the contrary, what is more important is the ability of the SF trooper to adapt to the dynamic challenges at the present moment and the future. Therefore, in the modern context, it is not possible to just look at how the past works, but also to look 1) *sideways*, “by identifying and confirming associations between individuals and activities linked to conspiracies..”, it is also necessary to 2) *look forward*, “by identifying the warning signs of criminal or terrorist activity in preparation”.⁴⁴

Conclusion

SF rose from a series of conflicts since World War Two. In the aftermath of 9/11, SF are heavily involved to deal with multi-dimensional threats across a spectrum of operations. One of the key objectives of SF is to conduct special operations from multiple platforms to defeat the enemy. But today, SF has evolved into a fighting force capable of effective crisis response and counter-terrorism to complement national security initiatives. Arguably, the balance of power has shifted in recent years due to the significant rise in terrorism across the globe, which has shaped SF training and operations to become generally sharper and more relevant. For these reasons, the need for flexible sharing and networking across organisations becomes crucial towards adaptation to the new and ever-changing threats of the battlefield in the 21st century. Today, it is ultimately how SF mitigate the threat, calculate the risks involved, and use their initiative to turn the tides on the adversary that creates real competitive advantage. Finally, SF personnel are strategic assets, which bring a suite of advanced skills to complement the blocks of the nation's defence. They must be employed appropriately to address emerging challenges, and exploit new opportunities to transform into a force multiplier for the asymmetrical age.

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SPECIAL MEDICINE FOR SPECIAL OPERATIONS

Introduction

THE DEVELOPMENT OF SPECIAL OPERATIONS MEDICINE has progressed by leaps and bounds since its conception. Over the years, several unified commands of Special Operations Forces have been established globally. This has enabled medical practitioners in the Special Operations environment to collate and analyse relevant medical information.¹

It is vital to note that individuals in Special Operations are subjected to rigorous selection processes and arduous training before embarking on gruelling missions. Support for these missions can be limited while the operators are constantly challenged physiologically by the harsh environments or by the injuries they may sustain. The medical support for these units must be optimised to ensure a seamless approach is achieved in peacetime and conflict.

Objectives have to be clearly defined by organisational structures, missions and environmental demands, in order to facilitate effective tactics, techniques and procedures. This will enhance the healthcare of special operations personnel.

It is important to recognise that Special Operations Medicine is a unique form of Military Medicine with different application principles in situations where conventional methods may be a liability. This can be attributed to mission-specific requirements, and operating in harsh environments with limited resources. One size does not fit all.

The evolution from third to fourth generation warfare has accentuated certain aspects of Special Operations, thus requiring different emphasis in pre-operational medical requirements and casualty management. It is necessary to study the intricacies before embarking into complex operations where the medical support provided has to be both responsive and dynamic. On top of basic medical knowledge, advanced medical training, skills and equipment may differ between units. For instance, diving medicine and underwater rescue equipment are essential in a diving unit; retrieval medicine and extrication equipment are vital for a combat search and rescue medicine. The system has to be structured in a unified command so that a holistic approach is adopted in covering such diverse demands.

Specific Requirements

Medical support for Special Operations can be divided into four broad categories,

- 1) Routine Medical Care
- 2) Pre-Deployment Medical Care
- 3) Deployment and Operational Medicine
- 4) Post-Deployment Medical Care

Although this may be similar to the medical support for conventional forces, there are details within each category that are unique to Special Operation Forces (See Figure 1).

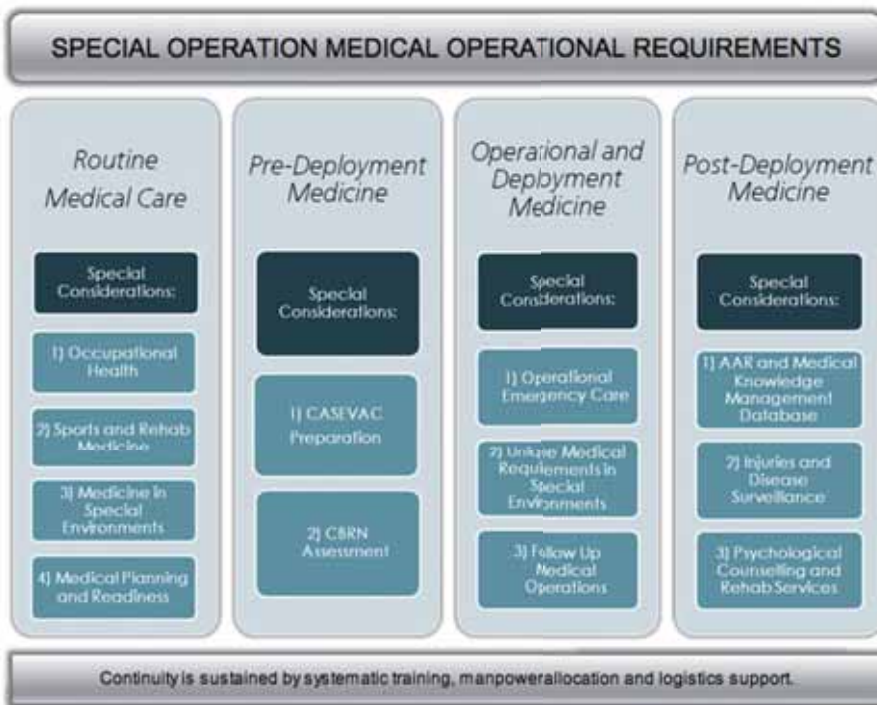


Figure 1: Broad Schematic of Special Operation Medical Operational Requirements

1) Routine Medical Care

Routine medical care is provided to Special Operations personnel when they are not engaged in any form of operations or deployment. In addition to Primary Healthcare, the following should be emphasised.

Occupational Health

There are specific occupational hazards that occur in the Special Operations environment. Regular monitoring should be instituted and preventive measures taken to maintain the overall well being of the operators.

Common threats include:

- a) Environmental stresses like extreme heat or cold can cause injuries, which left unmanaged, can lead to chronic disabilities.
- b) Risk of lead poisoning in personnel who are involved in numerous live firing trainings in enclosed areas, especially close quarter battles. Also, conductive deafness can occur due to repeated exposure to small arms fire or loud noise associated with vibration in a helicopter cockpit when proper ear defenders are not used appropriately.
- c) Special Infiltration and Exfiltration techniques expose the operators to an increase of incidence of injuries. This was described by Glorioso et al, the myriad of musculoskeletal injuries that are related to different phases of training in Military Free Fall.²

Sports and Rehabilitation Medicine

Personnel from Special Operation units have to undergo intense physical training to maintain high standards of fitness. This involves repeated and increased levels of stress to various parts of the body, and can lead to stress injuries if the problem is not arrested early. This not only adversely affects the long term health of the personnel, but also has an impact on the unit's operational readiness and human resource planning. Prevention is better than cure; in 2007, the National Strength and Conditioning Association in the United States developed a Tactical Athlete Program for units such as the Navy Seals and Special Forces, which focused on improving fitness coupled with injury prevention. This proved to be efficacious and was demonstrated in deployment and selection courses.³ The medical personnel should also be equipped with supplemental training in rehabilitation and basic knowledge of physiotherapy. Well supervised in-house-management may speed up recovery in minor injuries. For major injuries, long term rehabilitation is managed by specialist centres familiar with the injuries sustained in special operations.

Medicine in Special Environment

A good grasp of aviation medicine is required when providing medical advice and services to Special Operations aviators and aircrew. Operators are constantly involved in clandestine penetration of denied and hostile airspace to conduct or support special operations. Even minor medical illnesses such as rhinitis can adversely affect performance. Units such as the 160th Special Operations Aviation Regiment conduct flight examinations each week to ensure operational readiness of its personnel.⁴ Medical providers in this specialty should also advise unit commanders on the physiological aspects and its effects of the operators during training or operations.

Diving Medicine in Special Operations is markedly different from other forms of diving medicine. It is vital to understand the limitations of the various closed circuit systems that include mixed air or oxygen. The mixed air system is a safer alternative for deep dives, but there are other considerations such as increased risk of narcosis. The employment of Submersible Delivery Vehicles (SDV) requires complex dive tables⁵ and graduated training programs to

ensure that decompression sickness does not become a hindrance to operations. Submersible hyperbaric chambers could be attached to the submarines in the form of a Dry Deck Shelter that can not only deploy a SDV, but also provide the Dive Medical Officer a site where definitive medical treatment can be implemented for dive casualties.

Medical Planning and Readiness

The global landscape in defence, politics and socio-economics has undergone dynamic transformations. For Special Operations units and forces, it is a constant challenge to stay above the curve in 'crystal balling' future flashpoints or kinetic operations. Medical planning must be in tandem with the command's intent and directions. Medical intelligence analyses medical threats and capabilities such as expected casualty rates associated with patterns of injuries from enemy weapons (e.g. conventional weapons or booby traps like improvised explosive device), presence of infectious diseases, public health status and conditions of foreign medical treatment facilities. The foundation of long range medical plans is critical in the support of special operations. Finances and resources should be allocated to supporting medical logistics that in turn have to be ready to respond to sudden surge in operational demands. Medical equipment and drugs should be stockpiled and compartmentalised or palletised for individual subunits.⁶

2) Pre-Deployment Medical Care

Medical care in the pre-deployment phase should focus on areas such as immunisation, site or area specific medical intelligence, Chemical Biological and Radiological Nuclear (CBRN) assessments, Casualty Evacuation (CASEVAC) preparation, coordination with medical support units from conventional units, pre-deployment training, checks on medical equipment and logistics. Two of the considerations are especially important in special operations

CASEVAC Preparation

The dynamic nature of Special Operations requires detailed CASEVAC plans to ensure the swift evacuation of casualties. Points to note in Special Operations are

- a) Long distances and special environments/terrain involved (mountainous, dive casualties or urban).
- b) Different platforms utilised (land based vehicles to aircrafts) and the suitability.
- c) Methods can include sequential or parallel telescopic CASEVAC and link up casualty transfers.
- d) Command, Control and Communication that may require specialised telecommunications in the coordination of complex situations (e.g. large distance from Forward Edge of Battle Area).
- e) Vicinity and resources available for the medical treatment facilities.
- f) Special equipment and teams available.
- g) Types of casualties expected (hostages, friendly forces or enemies involved) will determine the evacuation platforms requirements.

There should be dedicated platforms, equipment and teams available for CASEVAC. Rehearsals should be performed to make fine adjustments for the loading and unloading of casualties and teams.

CBRN Assessments

With the increase of CBRN threats associated with asymmetrical and irregular warfare, medical personnel in Special Operations units must be equipped with the knowledge on the impacts of these weapons and the risk of medical derangements with the use of personal protection equipment. Operating procedures in triage, decontamination, screening and treatment of affected casualties should be incorporated into the force protection plan. The familiarity and the physiological effects of pre-treatment and treatment regime with antidotes such as atropine and antibiotics in different CBRN scenarios are critical when operating in such non-permissive environments.

3) Deployment and Operational Medicine

Differences between medical support in this phase and those in training are described below. There is also a greater emphasis in trauma management where casualty care for injured personnel is paramount.

Norms in Times of Exigencies

While training, safety regulations are adhered to meticulously whereas during operations, especially in special environments, these regulations may be altered. The medical practitioners in these units should have access to senior medical consultants to better prepare the operators for the tasks.

Areas of concern in special operations diving medicine include closed circuit scuba canister operating limits, decompression procedure and limits of oxygen exposure. For example, during the planning of a combat swimmer operation, the dive medical officer may be tasked to advise on the medical risks involved in continued utilisation of the closed circuit scuba unit when the operational limit of carbon dioxide absorbent canister is reached due to an unexpected delay, and the alternative of surfacing in a hostile environment.

Likewise in aviation medicine, guidelines that highlight the criteria for waiver of infirmed Special Operations aviators and aircrew such as aerial gunners require modification. Case-to-case basis assessments and different standards of waiver from peacetime would be implemented. This is crucial in the maintenance of sufficient manpower during operations and has to be applied carefully without compromising the outcome of the operations.⁷

Operational Emergency Medical Care (OEMC)

Since the 1990s, Special Operation Forces from various countries deployed in operations have borne the brunt of conflicts. Statistics from the United States Special Operations Command (USSOCOM) archives indicated that deployed Special Operations servicemen made up 3% of all forces deployed by America, and yet they sustained 30% of all casualties. The British and Australian Special forces had similar patterns. These alarming results demonstrate that casualties in Special Operations are significantly higher compared with the rest of the services.

The trauma management of pre-hospital casualties has evolved tremendously to meet the trauma care in Special Operations. This was initiated when evidence showed that Advanced Life Trauma Support (ATLS) although valuable in the hospital environment, has proved inappropriate in a pre-hospital setting. Furthermore, even though there are already existing civilian based standards in pre-hospital management of casualties; they do not translate well

in a combat and tactical environment.⁸ Statistics have shown that 90% of combat deaths occur on the battlefield before reaching a medical treatment facility. 15% of these deaths can be prevented and are classified as preventable deaths. 60% of preventable deaths occur due to haemorrhage from extremities, 33% of these are due to tension pneumothorax and 6% are caused by airway obstruction in maxillofacial injuries.⁹ All these could potentially be resolved with the use of good haemorrhage control, correct procedures in decompressing tension pneumothorax and expeditious control of airway. The impetus for change was further hastened when numerous trauma casualties were sustained in Operation Restore Hope (Somalia, Mogadishu 1993) where USSOCOM suffered 18 deaths.

Subsequently, Special Forces around the world in the 1990s revolutionised the concepts of care for the wounded in tactical environment by spearheading the development of various guidelines, decision making and medical care for trauma casualties in the battlefield. This was later adopted by civilian tactical units.

The dynamics of the battlefield constantly changes and although different phases of care are distinct they can be interchangeable especially in Special Operations where the potential of a delay in CASEVAC can be high. Flexibility is required in the application of the principles of OEMC.

OEMC and Tactical Leadership

Numerous special operations units both military and civilian have incorporated trauma care into their leadership training, the reason being that the commander of the mission has the responsibility to make sound, tactical decisions when faced with casualties. There is great importance in maintaining the momentum of the tactical flow by combining appropriate tactics with the right level of medical care.

OEMC ultimately achieves the salient objectives in Force Health Protection and Force Protection:

- a) Treat the casualty with operationally appropriate procedures
- b) Minimise the effects of injuries
- c) Reduce preventable deaths
- d) Prevent additional casualties
- e) Complete the mission

This can be summed up by a quote from one of the prominent Chief Medical Officer of a renowned Special Operations Command during a post-mortem workshop on tactical medical lessons in Urban Warfare “We have to deal with a combination of medicine and tactics that medical literature will never be able to address adequately. You (Special Operations medics and personnel) will have to use good judgment. Evidence-based medicine is a good goal but you are probably going to save more lives with smart tactics than evidence-based medicine.”

The Effectiveness of the OEMC

It has been well documented that the Coalition forces in Afghanistan and Iraq are experiencing the highest casualty survival rates and one of the contributing factors is effective tactical field care. This was advocated by senior enlisted medics from various Special Forces who had extensive experience in treating casualties with these methods and was further supported by trauma surgeons who usually received patients from these medics at Combat Casualty Conferences and Trauma Care Conferences in 2005 (London). It clearly demonstrated the profound influence of Special Operations units on other armed services when the casualty care system was widely disseminated and accepted by various military and civilian tactical units.

Follow Up Medical Support in Operations

In a counter-terrorist operations, medical support for the operators is just as important as for the hostages. The Moscow theatre hostage crisis in 2002 culminated into rescue operations that ended with 129 hostages killed. This could have been prevented with proper medical assistance planning and knowledge the kind of anesthetic gas used.¹⁰ It is not uncommon that barricaded situations develop in hostage rescue operations and in these circumstances special medical support such as stand off medical assessment will be beneficial.

This will also include humanitarian aid assistance medicine where there is a transition to stabilisation operations. There should be integration with cultural intelligence in places where working with local populace is essential. Tele-medicine has been used in various foreign internal defence missions where preventive medicine is taught to the local population and continued care provided by this medium. Preventive medicine plays a big role and pre-planned supplies of medications and equipment must be adequate to ensure that the mission objectives are achieved even when combat operation ceases. This may just be the beginning of the next phase of operations in reconstruction efforts.

4) Post-deployment Medicine

After action medical reports should be documented as part of knowledge management and lessons learned can assist in auditing current protocols and contribute to the research for better practices to remedy problems.

Diseases and injuries surveillance is necessary in the study of threats posed by a particular environment or enemy, and this could help predict treatment requirements, disease rates and injury patterns.

Psychological and rehabilitation support in Special Operations although relevant in all phases of medical care, should be emphasised during post deployment. Those suffering from physical and psychological trauma are given structured support to aid them in their road to recovery.

Training

Special Operations healthcare providers must be trained to provide a wide spectrum of medical management in diverse mission environments. The training should not only focus on trauma management skills, but also other areas of Special Operations medicine like combat diving medicine, altitude medicine for high altitude parachute operations, aeromedical retrieval medicine, preventive medicine in military operations other than war and tactical/rescue medical skills.

Leadership in Special Operations medical development not only increases the level of medical training but also increases the inter-operability between the units as demonstrated by the establishment of Joint Special Operations Medical Training Centre at Fort Bragg.

Area specific medical training is catered for personnel operating in specific theatres and regions, especially when there are medical threats such as malaria (endemic in parts of Southeast Asia). This usually occurs in the pre-deployment phase.

There is always a conundrum in maintaining relevant medical skills in Special Operations medics as the accrediting establishments have to provide flexible systems to accept personnel involved in long deployments. In addition, precious time has to be catered from busy schedules to sustain medical capabilities. Part of the solution is to ensure that medical training is part of the overall tactical training.

The Future

With the changing face of warfare, the Special Operations personnel who constitute the 'tip of the spear' march towards the sounds of the guns.

Missions conducted in military operations other than war or low-intensity conflict present the Special Operations medic with different permutations. They must be adaptable to the operational tempo that could easily escalate. Relatively peaceful conditions can change into hostile environments, as illustrated in Sierra Leone in 1999 where United Kingdom Special Forces staged a rescue operation after a patrol of Irish Rangers were captured.

Medicine as a force multiplier in the winning of hearts and minds can be seen evidently in numerous 'bush wars' especially in the Middle East and Southeast Asia operations conducted by the Special Air Services in the 1960s. Hence, it is vital that the medics are deployed strategically and their individual skills utilised well. Again, to properly optimise these assets it is essential to recognise the lack of medical logistics and senior consultants in these austere environments. To circumvent this requires a paradigm shift amongst Special Operations units globally towards the development of unconventional warfare medicine that will prove extremely valuable in irregular warfare.¹¹

The likelihood of Special Operations medical personnel working with civilian counterparts will rise with the increase of Non-governmental organisations (NGOs) around the globe. Therefore, knowledge in civil-military relationship is required in dealing with these organisations while maintaining operational security even in the face of media.

As described above, operational medical emergency care systems have contributed dramatically in improving the mortality and morbidity rate amongst those wounded. Technological advancements in conjunction with these guidelines have produced a number of military medical innovations that have become part of standard equipment in numerous

military units. They range from the one-handed tourniquet and haemostatic agents to casualty carrier system like the SKED stretcher. Future research includes appropriate painkillers (analgesias) in combat situations such as ketamine nasal spray and the use of recombinant VIIa in haemorrhage control.

Currently, the challenge remains for the Special Operations medics who have to be a warrior first and medic second. The time taken to maintain the necessary medical skill sets and the re-certification process may be unachievable operationally unless a proper sustainable system is in place.¹² In addition, medical personnel in the Special Operations community may find a lack of incentive to maintain their medical skills when the route of advancement in their career removes them from medical practice.

Conclusion

Together, with one of the maxims that clearly states, that Special Operations Forces cannot be mass produced, and the ability to provide Special Operations medical support is both critical and integral in the sustainability of military forces.

The tension created by recruitment shortages in special operation forces has further driven the need to retain experienced personnel. Continuous efficient medical care in these units is paramount in producing long-term solutions particularly in the rehabilitation of those injured and reintegration into their units.

It is recommended that Special Operation Commands which have not adopted the operational emergency medical care systems and special operations medicine explore this specific area with the aim of overcoming the medical crisis with the right skill sets and operational support. The success evident in some of the Special Operations forces can be attributed to funds allocated for the purpose of Special Operations medical research, which resulted in the enhancement of healthcare amongst Special Operations personnel. The well-funded initiatives have also provided the medical personnel with specialised equipment and platforms to perform medical skills in Special Operations. These are strategic policies that truly recognise the need to honour and conserve those who serve at the tip of the spear.

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SPECIAL FORCES AND MANOEUVRE WARFARE

“Battles are won by slaughter and manoeuvre. The greater the general, the more he contributes in manoeuvre, the less he demands in slaughter.”

- Winston Churchill

Introduction

“THERE HAS NEVER BEEN A CASE WHERE A NATION has gained from protracted military operations... In war it is better to go for swift victories rather than a prolonged military campaign.”² WWII was the decisive period in the history of SF operations, because of the sheer number of operations carried out and the multiplicity of SF established to conduct these missions.³ The employment of SF in conventional war is an art, as it is about economy of force and disproportionate returns. Over the years however, SF have been mystified and misemployed for quick fixes. They were employed for plugging gaps in conventional battle lines, used against targets not suited for them and worst of all, used as a final gamble to stave off potential defeat.⁴ The resultant failure has tarnished the true value of SF and has increased reluctance to employ them in conventional war.

This article aims to highlight the importance of manoeuvre-centric approach and more importantly, the significant value that SF operations bring to the conventional forces and their application in MW. With manoeuvre theory as the backdrop, the employment of SF in MW will be discussed in order to understand how it creatively adds to the effectiveness of operations.

The Importance of Manoeuvre Warfare

Attrition Warfare

In Attrition Warfare (AW), defeating an adversary is to physically destroy him; the focus is to destroy the adversary's war-fighting capabilities. The intent is to overwhelm the adversary by sheer force and numbers and to wear him down by depleting his resources for waging war. Seeking to bring him to battle and to defeat him in battle after battle where force and exchange ratios are vital to winning. However, AW fails in two vital aspects: time and resources. Resources are finite and a prolonged war will drain it to depletion. The longer the war means the longer the nation suffers or is burdened by it.

Manoeuvre Warfare

MW, an antithesis to AW, is a philosophy where war is a psychological contest of the wills where defeat is a psychological phenomenon. It places a premium on creativity, emphasising the human psychology and deception to defeat the adversary; and seeks to defeat the adversary in the shortest possible time with minimal resource. The emphasis is thus on creative employment of all form of forces, rather than force ratio. Some parts of MW include the following components⁵:

Dislocation

Dislocation seeks to remove the strength of the enemy from the decisive point of the battle, rendering them useless or irrelevant; in the form of positional or functional dislocation. Positional dislocation renders the adversary's strength irrelevant by removing them from the decisive point of the engagement. In the history of the fall of France in 1940 WWII, the French forces were deceived by Germans' feint coming through Belgium. Upon responding to the feint, the Germans' main effort came through Ardennes Forest, cutting the French forces off and penetrated deep into France. The strength of the French forces was thus rendered irrelevant at the point of the Germans' decisiveness. Functional dislocation operates in the cognitive domain, where it seeks to render the adversary's strength inappropriate or deny him from employing his coup de grace.⁶ This can be elaborated through John Boyd's decision cycle theory's Observe, Orientate, Decide and Act (OODA) loop. Boyd's theory states that in the cognitive or system level, to respond in a competition, one must undergo a decision flow of gathering information, assessing it, determining the causes of actions and lastly responding by executing the decided actions. Operation tempo can cripple an opponent's ability to resist by constantly denying him the ability to complete his OODA loop. The adversary's strength is denied or made irrelevant, being unable to employ it in time when the need arises. With the constant inability to complete the OODA loop, the adversary's level of effectiveness to continue with the conflict will decrease until he becomes ineffective or his system collapses⁷ – a state of cognitive paralysis.

Disruption

Disruption assumes that a centre of gravity (COG) exists in a conflict, and when this COG is destroyed or neutralised, it can induce the collapse of an opponent through paralysis, either in the cognitive domain or system level. In MW, to disrupt is to hit the adversary's COG – it advocates the need to avoid destruction of the entire physical component of the adversary but to paralyse him by attacking his Achilles' heel.

The key difference between MW and AW is that MW allows the war-fighter to do more with less. In WWII, Germany adopted MW to overcome the attrition deadlock in the trench warfare of WWI and achieved initial success in WWII. After 1991's Gulf War, the US Army and Marines adopted MW after military downsizing.⁸ MW allowed the Germans to fight against a larger adversary and the Americans to fulfil their mission with lesser resource. Most importantly, as what Sun Zi says, no nation has ever benefited from a prolonged war – a swift and decisive war through MW is thus paramount.

Thomas' work on WWII shows that it is no coincidence that armies which adopted manoeuvre-style of warfare readily became adept at SF operations, but armies which followed a doctrine of AW never grasped the concept of SF operations, or attached any value to SF. It is important that the larger conventional community be exposed to the SF operation profile to understand how SF can be employed in conjunction with the conventional forces.

According to Thomas, the value of SF operations in any army is affirmed by four essential criteria: the existence of a formal military command structure authorised to conduct SF operations, including the functions of these operations in war-planning, and ensuring the adequate capability for their execution in the formulation of strategy and doctrine; the acceptance of SF operations as an important form of warfare; the presence of a coherent doctrine for the employment of SF forces; and the recognition of the value of integrating SF operations with the mission of conventional forces. The existence of SF has been mainly to address strategic challenges in peacetime and war. Apart from this, the employment of SF has but been in enhancing operational/tactical level attrition (increasing the success of strike operations). Therefore, the intent of this article to bring about the awareness of the capabilities of SF and how they can be employed under the ambit of MW in conventional forces' operations.

Special Forces in Manoeuvre Warfare

SF in general has a suite of capabilities that can be employed to meet all levels of requirements – from strategic to tactical levels of war and contingencies in peacetime to war, covering a full spectrum of operations. These capabilities are mainly counter-terrorism, special reconnaissance, strike, direct actions and unconventional warfare. In the context of MW strike, direct actions and unconventional warfare, or a combination of types enable an armed force or military to scheme the means of defeat when engaging an adversary. A such, it is necessary to understand what these highlighted capabilities encompass.

The strike missions that are undertaken by SF are mainly in the form of augmenting the final leg of precision-guided missiles in hitting the target through lasing means, confirmation of target location, or conducting block operations to fix enemy targets for the strike assets for destruction.⁹ Precision destruction is the focus of strike operations by the SF. Direct action operations are generally characterised by short-duration or small-scale offensive actions aimed at destroying, capturing, denying or damaging adversary's targets of strategic or operational significance. Unconventional warfare is mainly covert or clandestine operations that engage in indirect activities of subversion or sabotage. On the surface, these SF operations have seemingly little significance to conventional war or for that matter, MW. History has shown us otherwise, the employment of SF operations in conventional war is similar to what is demanded of the manoeuvre theory—creativity.

In the fall of France, the Germans orchestrated one of the most spectacular manoeuvres when they dislocated the French forces by luring the main bulk of the defence to the north and attacked the French COG from an unguarded flank through Ardennes Forest that resulted in their defeat. To successfully lure the French forces to the north, the Germans had to project a sizeable force through Belgium, which separates France from Germany: The Germans had to first overcome the Belgium Fortress guarding the main bridges for the projection across Albert Canal (a major obstacle to the German's projection). This heavily defended fortress had to be captured, but forcefully capturing the fortress using conventional forces would trigger the Belgians to destroy the bridges using the cannons onboard. The Germans therefore sent in SF using gliders to first capture the fortress to prevent the Belgians from destroying the bridges and thereafter secured these bridges for the projection of the luring force. These SF, sixty-nine in total, successfully captured the fortress guarded by a battalion of Belgian soldiers and destroyed the cannons positioned to destroy the bridges. The successful entry of the German forces through Belgium made the French military believed that the German's main effort was coming through Belgium. The creativeness of employing the SF and inserting them using gliders (this was the first time an insertion of such a nature was used) caught the Belgians off-guard, temporarily paralysing their ability to respond.

The inconceivable victory of a smaller force taking on a larger force in a heavily defended position and winning the engagement occurred. These SF were instrumental in the success of the entire operation. The lessons learnt in this historical event are: there is a role for SF in conventional operations and when employed suitably, yield disproportional returns; the covertness of SF operations is in line with the philosophy of MW and has the ability to shock the adversary's cognitive domain and defence system; the concept of relative superiority allows a relatively smaller size SF to take on a larger conventional force; and SF can be employed to effect the means of defeat that a conventional force schemed to defeat his adversary.

In other examples from WWII, the Soviet Red Army's SF aided their war efforts by weakening the offensive military capabilities of the German *Wehrmacht* at the warfront, by disrupting communications, assassinating key officers, and sabotaging vital facilities in the rear. The British Special Air Service (SAS), in support of the effort of the British Eighth Army, conducted sabotage operations to weaken the German Air Force in North Africa and obliged General Rommel to commit substantial forces to prevent raids against the logistical system of the *Afrika Korps*.

These effects were achieved through the ingenuity of the war-fighters of that era. With the current technological advancement to realise the concept of precision warfare, the employment of SF in MW is limited only by the war-fighters' creativity. Therefore, as Thomas observed, armies that are manoeuvre-oriented must become adept in employment of SF.

Special Forces – Catalyst in Manoeuvre Warfare

With the lessons learnt from the above case study, how can SF be employed to effect the means of defeat? Dislocating the adversary in the form of disrupting his OODA loop and/or disrupting his COG through precision warfare is where SF can value-add to the conventional operation. The key to understanding how SF operations improve the overall performance of conventional operation from the strategic to tactical level paradoxically resides in the concept of cognitive attrition.¹⁰ Cognitive attrition subscribes to the same philosophy that war is a psychological contest of the wills and defeat is a psychological phenomenon. Given that attrition is widely understood as the extended materiel erosion of combat power in sustained offensives over time, cognitive attrition however aims at eroding the adversary's will over time. By virtue of SF's ability to accomplish what was previously thought impossible and inconceivable, a single operation by the SF against the adversary can inflict disproportionate morale damage and to a certain extent, materiel damages. To achieve cognitive attrition, SF may be employed in a series of strike or direct action missions against the decision-making component of the adversary or components that the adversary holds dearly. The cumulative effect of the morale damages inflicted on the adversary is thus cognitive attrition—a pre-cursor to functional dislocation.

The application of cognitive attrition through SF serves to bring MW to fruition under the ambit of Thomas' work. To appreciate how cognitive attrition can be part of the MW theory, it would be clearer to provide practitioners of MW with a quantifiable representation of what manoeuvre means and graphically depict the two key variables: time and resource (See Figure 1). The concept of war falls in the psychological realm, but there exist key quantifiable variables that can be appreciated: the ability to wage war, resources that have to be committed, and time. Looking at how war unfolds in a fundamental aspect would better illustrate these three variables.

In the period of transiting to war, the parties involved start to build up their war-fighting capabilities in terms of materiel stockpiling and intensifying training to enhance the armed forces' readiness. When war commences, resources are poured into the armed forces to sustain the fights. The last variable is the duration of the conflict, the time it takes till the adversary is defeated. When we focus on these three variables and project them graphically, we can track the key phases of war and illustrate the theories of manoeuvre or attrition warfare. The following graph illustrates the unfolding of war. Before war commences, the adversary begins his build-up in his war-fighting ability. Upon the commencement of war, the ability of waging war decreases as a result of battles and engagements since both sides will suffer some level of attrition. The ability to wage war will decrease till a point that it is no longer effective and the adversary sues for peace, which is depicted by the point where the "Ability to wage war" line intersects with the "Line of defeat".

In MW, SF can aid the conventional forces by slowing down the build-up of the adversary’s readiness. It may not be in the form of materiel readiness, but the mental readiness of the leadership and soldiers. Employing unconventional warfare through sabotaging the credibility of the leadership, disrupting the adversary’s cohesiveness as a force and constantly harassing the leadership is to deny him of the mental concentration required in building up his war fighting means. By creating a distracted adversary, the conventional forces’ chances of success through pre-emption could be enhanced.

Through dislocation, SF can conduct a suite of operations aimed at disrupting the adversary’s OODA loop to deny him the ability to respond to conventional forces action through hitting or harassing their command and control systems and rendering them ineffective via direct-action operation or leveraging on the effects of precision fire. These actions, coupled with the actions of conventional forces’, such as fighting at a higher tempo than the adversary, will increase the adversary’s rate of decline in his ability to wage war, and to shorten the conflict.

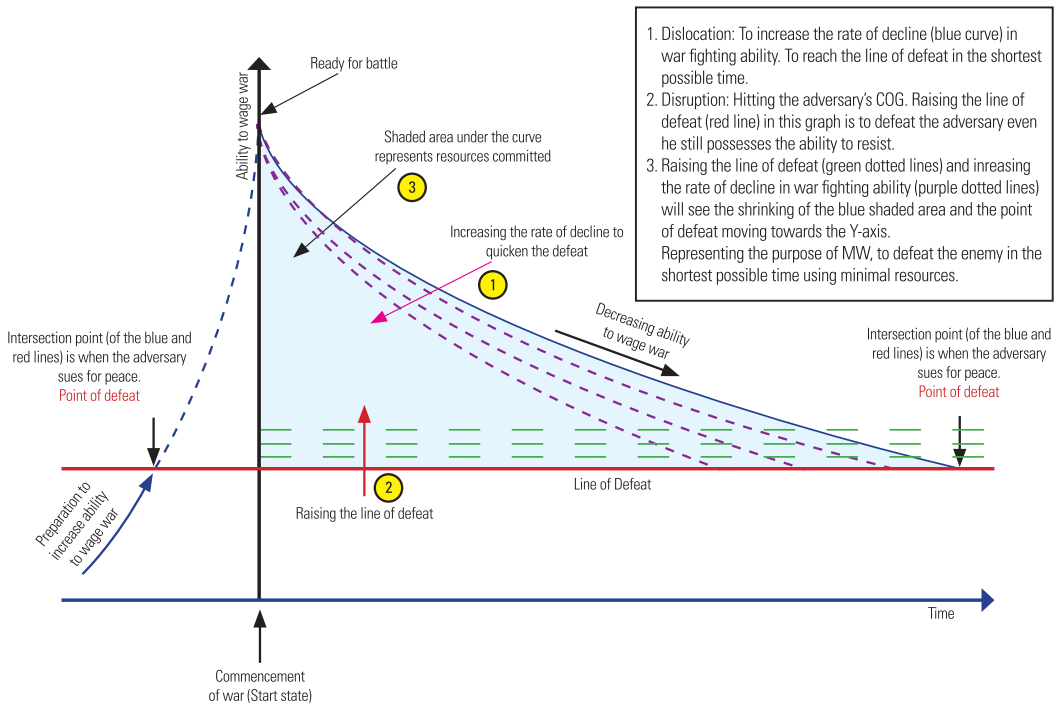


Figure 1: Manoeuvre Warfare Graph

Next, through disruption, the practitioner could hit the adversary’s COG to raise the “Line of defeat” to the level so that his adversary will sue for peace even if he still possesses the ability to fight the war. SF, being a more nimble and less detectable means in the military is thus the preferred force to be employed to seek out the adversary’s COGs. SF can be given the role to seek out the COGs so as to allow conventional forces to focus their effort in destroying these COGs or if permissible, SF can employ the concept of cognitive attrition to disrupt these COGs.

Precision warfare will allow the SF to do even more with less to effect defeat. SF is the *means* by which the adversary is decisively defeated through tactical excellence and operational relevance. MW would be the *way* that shapes the ends. Precision warfare comprises precision manoeuvre, precision fires, and precision information; SF's value to precision warfare is its ability to sense and make sense, decide, execute the directing of precision fires and perform damage assessments. SF are living ground sensors with the ability to process and make critical decisions. In spite of the current advancement of modern sensing technologies, there are still many limitations that can only be resolved by having boots on the ground. SF, equipped with cutting-edge technology, possess the capability to enable precision information and fire, giving them the ability to collect time-sensitive information and truncating the processes within the sensor-shooter loop to effect responsive calibrated precision fires – a value proposition that is difficult to match by current technologies or any other forces.

In the graph, the shaded area represents the resources the practitioner has to commit to bring his adversary to defeat. The quicker he brings the adversary to defeat, the smaller the area, implying the lesser the amount of resource spent; thus raising the line of defeat (in red) and increasing the rate of decline in the adversary's ability to wage war will reduce the shaded area as depicted. This graph shows the importance of applying both dislocation and disruption to the adversary. Applying these two means individually will achieve similar results of reducing time and resource, but when applied in combination, the desired results will be achieved even quicker. This is where the series of operations conducted by the SF through precision warfare bring about cognitive attrition to effect both dislocation and disruption.

By incorporating SF into conventional force's manoeuvre-oriented approach, SF serve to penetrate and weaken the will of the adversary, thus creating a more conducive condition in defeating the adversary. SF alone will not achieve defeat, but in conjunction with conventional forces, will quicken the effects of dislocation and disruption, further reducing the shaded area – further minimising the resources consumed and time taken to defeat the adversary. These cumulative effects inflicted on the adversary by the SF in conjunction with conventional operations is therefore a more rapid and less costly dissolution of the adversary's will to fight than by conventional means alone.¹¹

Overcoming the Inertia of Employing Special Forces

The above discussion has shown how SF could value-add to the conventional forces in MW, but as identified using Thomas' criteria, there is a need to have a coherent doctrine that recognises the value of SF alongside the conventional forces. Doctrinally, the employment of SF should be designed as part of the mainstream education process from the early stages of military education. This will serve to ensure that SF will be naturally assimilated into the conventional warfare framework. SF operations to a certain extent can be relatively sensitive because of the methods and means used. In order not to impede the assimilation of SF into conventional warfare, SF's operation concept should focus on education. It is also important to recognise the distinct difference between conventional forces and SF, that is, the concept of relative combat power. In conventional warfare, even in MW, there is always a need to ensure that a relatively significant force is used to defeat the adversary at the point of decisiveness. Therefore, SF employment seems counterintuitive. How then can the SF realise the concept of cognitive attrition?

To understand how SF can be part of the overall scheme of conventional manoeuvre, it is important to highlight the concept of relative superiority in SF operations. Sun Zi and Clausewitz have both mentioned this in their respective works, about how a relatively smaller force gains decisive advantage and defeats a larger force. Contemporary thinker William McRaven further developed this concept specifically for SF operations. He states that relative superiority is achieved at a pivotal moment in engagement. The initiative held by the SF attack could shock the adversary into a state of temporal paralysis where they momentarily lose their ability to respond; a vital opening for the SF to take advantage of to ensure mission success. Once achieved, it must be sustained in order to guarantee victory. Therefore, it is crucial that the SF take actions to maintain or widen the advantage. If relative superiority is lost, it is difficult to regain. The adversary will be able to respond and neutralise the advantage that the SF have gained. McRaven emphasised that the key to a special operations mission is to gain relative superiority early in the engagement. Time over target must be as short as possible. The longer the engagement, the lower the probability of success as the exposure to the will of the adversary and uncertainty increases (See Figure 2). What McRaven has shown is the uniqueness of SF and the reason for their success, which is contradictory to the wisdom of conventional forces.¹²

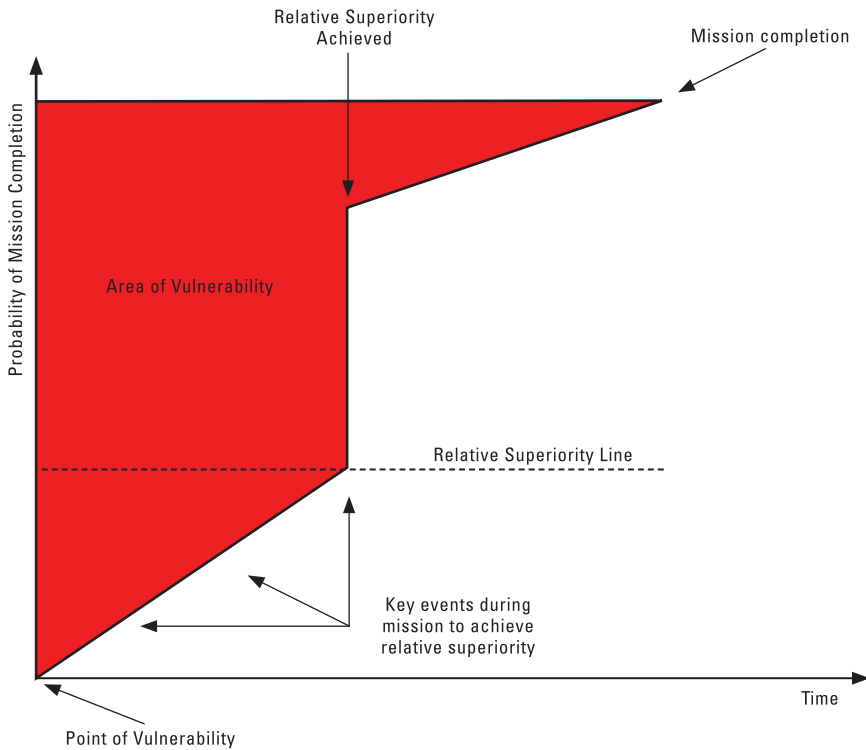


Figure 2: Relative Superiority Graph

Relative superiority is the core of SF. In war, the larger conventional forces are in certain ways limited by their sheer size and footprints where terrain, force structure and logistical tail allow the adversary to predict their probable courses of actions. SF on the other hand are less bounded by such limitations. Leveraging on asymmetry and propelled by cutting-edge technology, the countless permutations of SF operations denies the adversary the ability to

predict the probable actions that will be conducted against them. To address SF initiatives, the adversary will need to divert a significant portion of their resources and these efforts are likely to be in vain. Their only way is to respond (forced into a constant reactive mode); therefore, the opening initiative will always reside with the SF. Understanding this concept of SF's relative superiority is crucial, as they would enable commanders to appreciate the value of SF operations and give them the assurance that SF can be part of their overall scheme of manoeuvre.

The stringent selection and the specialised training that SF undergo allow them to undertake a wide range of operations and achieve results disproportionate to that of conventional forces. However, it is important to note that SF is not the panacea to all military problems. SF is but one on the many instruments that the war-fighters can employ to defeat his adversary. It has its limitations unique to itself just like the rest of military forces. Therefore, in the employment of SF, similar to other forces, the war-fighter must consider the force's limitations and capabilities so that the right mix of instruments of war are used to address the many challenges in war.

Conclusion

To reap the promises of MW, conventional forces alone will not suffice; the art of manoeuvre is to incorporate all instruments of military power to defeat any adversary to achieve political goals as efficiently as possible. To do so, understanding SF operations in the context of MW is integral. The employment of SF is an art – war-fighters will benefit from the economy of force, see disproportionate returns and realise the full potential of what manoeuvre theory offers. SF has to be employed effectively in conjunction with conventional forces to defeat an adversary – so that less will suffer for the price of victory.

Endnotes

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MAJ Leung Shing Tai

ETHICAL DECISION MAKING FOR SPECIAL FORCES⁺

Prologue

SPECIAL FORCES (SF) ARE INCREASINGLY FACING many ethical challenges in their operations today as their role expands to cover a wider range of operations, from the traditional missions of direct action and counter-terrorism to their contemporary tasks in information operations and civil affairs. As SF operations constantly involve work with and amongst the civilian population, SF troopers are constantly faced with ethical dilemmas. Should a SF trooper shoot at terrorists using civilians as human shields? Should a SF unit call for fire onto a strategic target located next to a hospital? Is it morally right to bring about the submission of the population through the indirect aggression of psychological operations? What approach should SF units or troopers take in addressing these ethical challenges? Can some of these orders be disobeyed based on ethical and moral grounds?

The *Nost-Ost* Siege in Moscow, Russia is a good example of when ethics was breached during SF operations. On 23 October 2002, about 40 to 50 armed Chechen terrorists seized the *Nord-Ost* musical theatre in Moscow. They took 850 hostages and demanded for the withdrawal of Russian forces from Chechnya and an end to the Second Chechen War. After a two day siege, Russian SF pumped an unknown chemical agent into the ventilation system of the theatre to incapacitate the terrorists before raiding the building. All the terrorists were killed during the raid but over a hundred hostages died as well. Most of the dead hostages were killed by the chemical agent. The surviving hostages were treated in hospital for gas poisoning.¹ The method used by the Russian Special Forces in the *Nord-Ost* siege was called to question by both local and international authorities because of the human collateral damage it caused.² Was the use of the chemical agent necessary? Was the sacrifice of human lives justifiable? If the SF commander on the ground received such an order, would it be right for him to refuse the order knowing that it would cause the death of the civilian hostages?

⁺ The following essay titled *The Ethics of Disobedience* was written by the author during his studies in the United States Command and General Staff College. This essay was selected to be presented at the Fort Leavenworth Ethics Symposium, an annual intellectual forum where US military commanders and academics gather to discuss ethics and legal issues.

Special operations revolve around “irregular warfare”. As with the word “irregular”, such missions often require unconventional methods to accomplish. The problem with such methods, however, is that it sometimes impinges onto ethical boundaries, calling into question the rightfulness and necessity of certain actions. How does a SF unit or trooper decide what is ethical and should unethical orders be obeyed?

The following essay *The Ethics of Disobedience*, written by the author during his studies in the United States Command and General Staff College explores the mechanics behind making such ethical decisions. Although the article uses conventional warfare as its context, the proposed decision making model, the “ethical triangle”, is still applicable to Special Operations, particularly in today’s context where both conventional and Special Forces face similar challenges in its battle against terrorists and insurgents.

THE ETHICS OF DISOBEDIENCE

DISOBEDIENCE IS THE ANTITHESIS of the military establishment, an extremely intolerable behaviour in an institution that stresses the values of loyalty, duty and discipline. Yet in today's operational environment such conduct is necessary in certain circumstances, must be tolerated and, sometimes, even forgiven on grounds of ethics and morality.

The Necessity for Obedience

Obedience is an important prerequisite for an effective military and the foundation on which its success is based upon. Commanders and soldiers in the lower rungs of the military hierarchy seldom understand the larger intent behind an operation. Although it is ideal for every commander and soldier to understand the policies and rationale behind an order given, the time taken to provide a detailed explanation would degrade the level of responsiveness in a combat environment and will probably lead to the subsequent failure of the entire operation. This reality, therefore, drives the need for obedience in the military, particularly during combat where a few seconds of inaction could significantly change the outcome of the battle. If soldiers do not obey the orders of their commanders, no army, no matter how powerful, can be made to move against the enemy. Without obedience, there can be no coordination between various combat elements to realise the advantages of superior manoeuvre and firepower. Disobedience, therefore, negates the might of any armed forces.

It is the constitutional duty of any military professional to obey orders from their superiors and ensure that the orders are executed to the best of their abilities. A US Army Field Manual expresses the relationship between duty and obedience:

Duty is obedience and disciplined performance, despite difficulty or danger. It is doing what should be done when it should be done. Duty is a personal act of responsibility manifested by accomplishing all assigned tasks to the fullest of one's capability, meeting all commitments, and exploiting opportunities to improve oneself for the good of the group. Duty requires each of us to accept responsibility not only for our own actions, but also for the actions of those entrusted to our care.³

This articulation equates obedience to the professional military duty of accomplishing all assignments as effectively as possible. Professional duty, however, is just one of the requirements for obedience.

The Effects of Ethics

Another important requirement that must be taken into consideration is ethics. Military history is replete with examples of situations where the professional duty to obey orders comes into conflict with ethics during execution. Commanders and soldiers operating at the tactical level are often faced with moral dilemmas when executing their orders. Does a soldier obey

the orders of his sergeant who has commanded him to fire into a civilian crowd shielding armed insurgents shooting at his unit? Does a company commander, ordered to lead his platoons in a frontal assault on an enemy position, carry out his orders knowing full well that the position cannot be penetrated and mass casualties are a certainty? When such orders are considered from the perspective of professional duty, the decision is clear; execute the orders according to the instructions given. However, when ethics are taken into the account, the same orders become questionable and will inevitably cause commanders and soldiers to think twice about their subsequent actions and related consequences.

The role that ethics play in military decision-making and the execution of orders is more significant in today's operating environment than it has ever been before. The asymmetric and amorphous threats of insurgency and terrorism that military forces face necessitate them to take a different view of their role and purpose in relation to the threat. Military operations in the theatres of ungoverned territories are no longer focused on physically destroying the enemy but rather to win over the hearts and minds of the local populace so as to erode the enemy's base of support and their will to fight.

As such, most operations now take place within population centres where military forces can more easily influence the local populace. The presence of civilians and the importance of their attitudes, opinions and participation in the conduct of operations complicate the operating environment and inevitably make ethics a critical consideration in military decision-making and the execution of orders.

The Ethical Triangle

When a military professional faces an order that creates a conflict between his professional duty and ethics, he must decide whether he should obey the order or disobey. The "Ethical Triangle" is proposed as a decision-making model to assist the military professional in overcoming this dilemma. The Ethical Triangle is "simply a device by which [military professionals] may analyse a decision which has ethical dimensions or implications."⁴ The Ethical Triangle has three dimensions: (1) obligations-duties; (2) consequences; and (3) virtues. A diagrammatic representation of the Ethical Triangle is shown below.

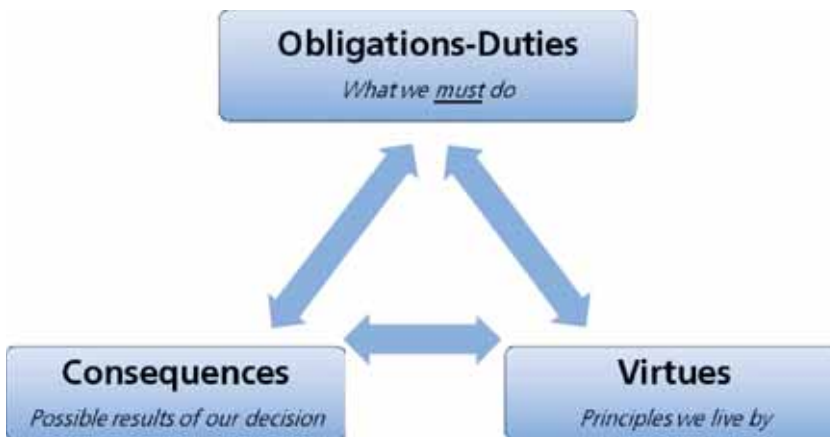


Figure 1: The Ethical Triangle

Obligations-Duties are rule-based considerations and are “things [military professionals] must do because of religious dictates, international law, federal law, lawful orders of superiors, mission, rules or regulations, and other sources of authority.”⁵ Consequences are ends-based considerations and are “results [military professionals] wish to achieve (or avoid) based upon the course of action.”⁶ Virtues are character-based and are “the character qualities or principles [military professionals] wish to demonstrate or exercise in [their] decision.”⁷

Case Studies

Two case studies will be used to examine the utility of the Ethical Triangle. These case studies are taken directly from Anthony Hartle’s work, *Moral Issues in Military Decision Making*, to illustrate the moral dilemmas that military commanders at the tactical level face when the conflict between professional duty and ethics forces them to choose between obeying orders and preserving the lives of innocent civilians and their soldiers.

The Operations Officer⁸

Captain Green is an infantry battalion operations officer serving with American forces fighting in the Vietnam War. His battalion has been fighting intense but brief battles with enemy units on the northern edge of the Mekong Delta. The unit is protecting the capital city of Saigon by blocking routes to the city from the southwest and attacking enemy units in the area.

The southern part of the battalion’s area of operations has been declared a “free fire zone” under the rules of engagement, which means that all persons considered friendly to the Vietnamese government have been evacuated. Any persons remaining in the zone are to be considered enemy and can be fired on if it has been established that no friendly military activity is under way in the zone.

The method of operation employed by Captain Green’s battalion is that of occupying patrol bases of company and platoon size to block any movement toward Saigon. Frequently, the battalion consolidates and conducts heliborne operations against enemy concentrations. The battalion is about to conduct such an assault. The infantry units are in the air aboard helicopters, and Captain Green, along with the battalion commander and other staff officers, is in a command and control helicopter above the landing zone (LZ) the battalion will use. Helicopter assaults are seldom conducted outside the range of supporting artillery, but this attack is an exception. Since it is outside supporting artillery range, the LZ is being fired upon by armed helicopters before the landing in order to eliminate or suppress potential enemy resistance, though no enemy forces have been observed in the vicinity. Following his established pattern for such operations, the battalion commander gives his orders to Captain Green, who then uses the helicopter’s communications system to coordinate execution.

The battalion commander has been intently observing a small village about 400 meters from the area in which the helicopters will land. He is uneasy about the risk involved should the Viet Cong (VC) offer significant

resistance during the landing. The LZ and the village are just north of the free fire zone boundary, so the operation has been carefully coordinated with the Vietnamese district chief who controls this area. Any fires delivered in the district other than in situations requiring immediate return fire in self-defense must be approved by the district headquarters. The village causing the battalion commander concern has not been fired upon during the LZ preparation by the armed helicopters.

The battalion commander turns to Captain Green and asks if the village is outside the area cleared by the district headquarters for the LZ preparation. Captain Green replies that it seems to be right at the edge of the clear-to-fire area according to his map overlay. The battalion commander directs Captain Green to have the armed helicopters hit the village with rockets and machine gun fire as the landing begins. He suspects some automatic weapons may be emplaced in the village that could fire on the lift helicopters as they approach the LZ. Captain Green points out that they have seen women and children running to what appear to be earthen shelters in the village during the LZ preparation, but the battalion commander is firm: he wants the village taken under fire.

Captain Green is struck by indecision. He has no inclination to disobey his commander's order – quite the contrary. At the same time, he recognises that firing on the village will almost certainly cause injuries among what appears to be non-combatants. Further, the rules of engagement in this area preclude firing into built-up areas without coordination and prior approval unless such action is immediately necessary in self-defense.

Captain Green tells the battalion commander that they should seek approval from the district headquarters since no enemy elements are actually known to be there. The battalion commander decides to refrain for the time being. Moments later, however, one of the armed helicopter pilots reports that he has received automatic weapons fire from the village and requests permission to initiate suppressive fires. The battalion commander tells Captain Green to “take care of it.”

In this situation, Captain Green is faced with a conflict between his professional duty to carry out the orders of his battalion commander, and his ethics to avoid creating unnecessary casualties among the village population. Should he obey and execute his orders or disobey them based on humane and ethical grounds?

According to the Ethical Triangle, Captain Green must consider the three dimensions of obligations-duties, consequences and virtues before making his decision.

The obligation-duty dimension covers his professional obligation. Captain Green as a military professional must obey the orders of his superior officer. However, it is also Captain Green's professional duty to ensure that the orders given are within the legal boundaries of the law of war. If the fire by the enemy is life-threatening to soldiers in the battalion, then firing back on the armed combatants in the village will be legal under the law of war. Although there is a potential of sustaining civilian casualties in the crossfire, injuries and the loss of life is one of the tragedies in war that has to be regrettably accepted. However, if the situation is not life threatening, then the order to fire into the village becomes illegal and unethical. In such a case, Captain Green has every right to disobey his battalion commander.

For the purposes of examining the problem further, the situation is assumed to be life-threatening and suppressive fire is therefore necessary to suppress the armed combatants and mitigate the threat to Captain Green's battalion. Knowing that innocent civilians will inevitably be harmed, should Captain Green still fire into the village?

Captain Green should now look into the consequences of his subsequent actions. Firing into the village will cause extensive civilian casualties but will serve to preserve the lives of his troops. The opposite consequence is true if he does not fire. At this point, Captain Green must consider which action will result in the greater good. Since the survival of his troops will mean more manpower contributing to the overall objective of conflict-resolution in Vietnam, it can be argued that protecting the lives of his troops will be for the greater good.

Finally, before making a decision, Captain Green must consider the virtues of his actions. Is firing into the village an action that is consistent with his personal ethics and values? Is he able to live with himself, knowing full well that his decision has caused the deaths of innocent men, women and children? Dr James Toner, a professor of international relations and military ethics at Air War College, suggests that military professionals should never compromise their personal integrity and moral code.⁹ He argues that loyalty is a virtue that is contextual and conditional. Although loyalty is the default position expected of military professionals, circumstances may arise which restrict its practice. "[Service personnel] must remember that ... if and when the values of the country clash with what a [military professional] determines is an eternal value, the . . . first loyalty must be to 'soul,' as he chooses to define it."¹⁰

From the perspectives of obligations-duties and consequences, the Ethical Triangle points out that firing into the village is the correct thing to do; whereas from the virtues standpoint, the decision is left up to Captain Green's personal conviction and his ability to live with his actions thereafter.

In such situations, the decision is not about right or wrong, but rather about two rights with different consequences.

The Company Commander¹¹

Captain White commands an infantry company participating in an antiguerilla campaign in a small Central American nation. American forces have been committed to combat to help maintain a tottering democratic government that is opposed by well-organised revolutionary forces supported by various states, primarily Cuba. The American forces provide security for sensitive areas in the country, thereby freeing the beleaguered government forces for offensive operations. Captain White's company patrols a sector through which small guerrilla raiding forces have moved for some time. The company is part of a network of units securing a large port and logistical centre on the coast.

Each day, twenty-one company-sized units providing security receive a requirement to send out a certain number of patrols and ambushes into designated areas within their sectors of responsibility. In response to these orders, each company submits a plan showing patrol routes and ambush locations to their various battalion headquarters. These are in turn forwarded to the Logistic Support Centre Command (LSCC).

The daily routine has gone on for nearly six weeks. Casualties in Captain White's company have been rather high, and most of them have occurred

in Area B-7, a reference to a particular portion of the company's sector. The B-7 subsector is an elliptical area with the long axis running north and south, framed by two rivers created when a larger tributary splits into two channels at the north end. The two channels rejoin at the southern point, creating an island three-fourths of a mile wide and two miles long. In the centre of the area is a village of perhaps one hundred people who work small plots of land in the vicinity. Each day Captain White receives a requirement to conduct one moving patrol and one ambush patrol within B-7. Time and again, as his units move into the area, they are themselves ambushed or encounter mines and booby traps. The men in Captain White's company have nicknamed Area B-7 "the Cemetery."

The area in which the company operates is a patchwork of dense jungle and open areas resulting from past efforts at cultivation. Within B-7, the ground is mostly level and open, but along the river banks, the growth is impenetrable. There are only two foot routes into B-7: small footbridges on the east and west sides. The approaches to the footbridges are continually bobby trapped, and it is almost impossible to move into the Cemetery undiscovered.

Captain White's security responsibilities are such that he cannot leave a force in B-7 permanently. He is dubious about leaving them there in an isolated position anyway. Helicopter support is infrequent, making reinforcement by air unreliable. All airmobile assets other than medical evacuation are devoted to offensive operations. Captain White has told his commander of his difficulties and requested that the B-7 patrol requirements be dropped. He has used boats on the river in an attempt to find other entrances to B-7 but to no avail. He has talked to the headman in the B-7 village, but the villagers are struggling to remain neutral and want to avoid retribution by either side in the conflict, though they always manage to avoid booby trap locations. Captain White suspects that there are guerrillas among the villagers, but he knows that the command policy concerning civilians is extremely strict. The American command is determined to avoid the abuses that occurred on occasion in Vietnam.

Each day the patrols go into B-7, and almost each day one or more men are lost. The non-commissioned officers in the company have worked an informal policy in which each man, after making four patrols into B-7, is assigned to other missions until all men in the unit have made four trips to the Cemetery. The turnover rate has been such that few men have had to make more than the four patrols.

On the previous day Captain White accompanied one of the patrols in the Cemetery. A bobby trap consisting of small mortar shell surrounded by crockery killed two men and wounded a third. The device was located about fifty yards from the bridge across the river. Though the patrol's approach had been extremely cautious, with a search for bobby traps and mines, the command-detonated shell was not discovered before it exploded.

Captain White is respected by his men, as are his officers and sergeants. They know that Captain White has gone into B-7 many times. Morale is

extremely low, however, and the pressure of the daily patrols against an enemy seldom seen but constantly threatening is taking a severe psychological toll. Captain White recognises that unless the pattern changes, his men may one day refuse to go into the Cemetery.

The requirement is one imposed by a distant headquarters that displays no sensitivity to “minor patrolling losses.” Captain White’s commander is an experienced career soldier whose primary concern is efficiency and mission accomplishment. He appears unwilling to make an issue of B-7 with higher headquarters. In Captain White’s assessment, the B-7 requirement most probably stems from a staff officer’s aversion to asymmetry in the dots on the map reviewed daily at LSCC headquarters. He has come to the conclusion that his men are casualties of bureaucracy and inertia more than enemy action. The previous day’s losses have crystallised his growing misgivings. He feels that further casualties in an apparently senseless mission are intolerable.

A night of intense introspection has revealed several possible actions. The most radical of these is to refuse to send his men into the Cemetery again on routine patrols. Captain White recognises that such a protest would result in his rapid replacement by another company commander who would, initially at least, continue the B-7 missions. He could report patrols but simply not send his men out. That possibility, however, is one that Captain White simply cannot accept. It conflicts with his fundamental view of himself as a professional officer with the standards of performance that he applies to his conduct. In addition, for technical reasons – including regular infrared and “people sniffer” missions by intelligence elements – such an evasion would soon be detected.

Various alternative techniques of meeting the patrol requirements, such as infiltration and stay-behind patrols, have been tried and failed to solve the difficulty. Restrictions on the use of supporting fires make “firepower solutions” unacceptable. If required to go into B-7, Captain White would prefer to go in behind a wall of artillery fire, but that is not possible in this situation.

After Captain White examines all the potential solutions that he has identified, he believes that he faces a fundamental choice: either (1) refuse to obey orders, or (2) continue sending men to death and injury for no defensible reason.

Like Captain Green in the previous case study, Captain White is conflicted between his professional duty of obeying orders from his superior headquarters and his ethical obligation of preserving the lives of his soldiers by not sending them on a futile mission that creates unnecessary casualties.

The Ethical Triangle can be applied in this scenario to determine the appropriate actions Captain White should take. From the obligations-duties standpoint, Captain White is required to obey the orders of his battalion commander, and unlike the previous case study, there is no question about the legality of the order. Captain White is also right to rule out the option to falsely report his patrolling activities as that will go against professional military values.

Captain White is certain of the consequences to his company and soldiers if he continues to send his soldiers into B-7. Being a Company Commander, however, Captain White will have no knowledge of the consequences if he fails to perform his mission as he might not understand the higher intent of the campaign and the impact of his mission to the overall operation.

From the virtues perspective, Captain White recognises that it is his moral obligation as a commander to protect his soldiers. It clearly appears senseless to him to send his men into B-7 for no apparent reason other than to follow orders from his HQ. He finds the attrition of his company to be intolerable and it is not ethically acceptable to him for his company to continue patrolling B-7.

The application of the Ethical Triangle reveals that obligations-duties is in conflict with consequences and virtues. The virtue argument, however, is strong in this case. Captain White's soldiers have surrendered their rights to the self-determination of their own lives in order to achieve objectives justified by the greater good of conflict resolution as a desired consequence.

However, since Captain White believes that the mission no longer contributes to the end state, and is instead destroying his company, it will not be wrong for him to refuse to carry out the mission. Ethics, in such situations, outweighs the professional duty to obey orders. Such a move, however, may result in negative ramifications for Captain White's career, but it may very well be an action that he has to take so as not to compromise his personal moral code and integrity.

The Criteria for Disobedience

As illustrated by the case studies above, the Ethical Triangle provides military professionals with a useful mental model when confronted with orders that create conflicts between professional duty and ethics. By examining the relationship between the dimensions of obligations-duties, consequences and virtues, military professionals will be able to make better ethical decisions.

So when is it acceptable for a military professional to disobey controversial orders? The Ethical Triangle offers a solution to this problem with the use of its three dimensions as a set of screening criteria. One, if the orders are against one's obligations-duties they should be discarded as it is professionally wrong to carry out orders that are against existing laws, codes and conventions. Two, if the orders results in consequences that do not serve the common good they should be questioned. The orders should be clarified with higher headquarters to ensure that its background context and intent are properly understood before determining if they are worth executing. Three, if the orders go against personal moral code, values, and integrity they should be disobeyed. Ethically controversial orders that go against one's conscience and "gut" feeling will often turn out wrong. This screening process is depicted in the diagram (See Figure 2).

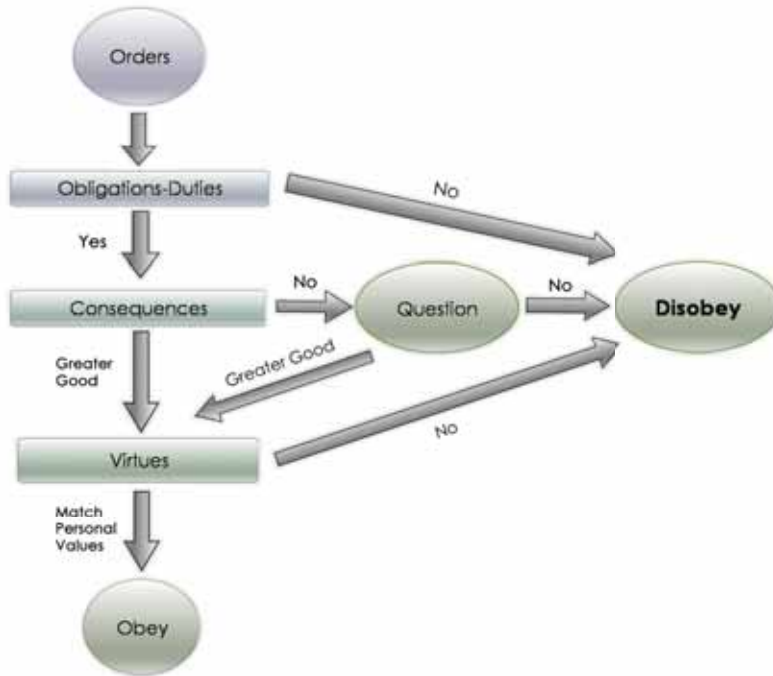


Figure 2: The Screening Process

Conclusion

The process of making ethical decisions to execute orders is particularly important in today's operating environment as heavy-handed military actions are counter-productive to building popular support in winning the Long War. In a high tempo setting where orders, based on incomplete information, are being churned out to meet constantly changing operational demands, it is vital for the ethics and moral judgement of military professionals to act as a check on the military system to ensure the orders given are consistent with the situation on the ground and contribute to the desired end state.

Disobedience of orders may be necessary at times to make the right decisions, but making such decisions based on ethical conclusions can be extremely difficult and will require a great deal of mettle and moral courage. Nevertheless, military professionalism requires that the ethics involved in professional decisions be fully considered so that an ethical choice to disobey orders will be the professionally correct one as well.

Postlude

The author proposes the "ethical triangle" as a possible ethical decision making model for the SF. Special Operations, particularly in the current operating context, often tread on a fine line between ethical and unethical conduct. With the media being so pervasive in today's military operations, unethical conduct by the SF, or any other forces for that matter, could easily blow out of proportion and bring about unnecessary attention and disruption to a military campaign. To win any war, it is important for legitimacy to be maintained and success must begin from the ground where right ethical decisions are made.

Endnotes

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MAJ Kong Eu Yen

THE ROLES OF SPECIAL FORCES
IN COMBATING TERRORISM

Introduction

THE ROLE OF SPECIAL FORCES (SF) in combating terrorism is widely recognised. Ongoing campaigns in Afghanistan and Iraq abound with reports of SF undertaking various operations to combat terrorism. It is easy to think that the role of SF in combating terrorism is predicated on one broad course of direct action. However, if one looks deeper, it becomes clear that combating terrorism by utilising SF involves deploying them in various roles depending on the type of terrorist threat faced, the competency of other domestic security agencies, and national military strategy against terrorism.

This essay will expound the various roles played by SF in combating terrorism. In doing so, it hopes to facilitate more thought on how SF can be best trained and deployed to deal with the terrorist threats faced today. Firstly, the role of SF in securing the homeland with domestic security agencies will be explained. Secondly, the use of SF to secure national interests from terrorists outside the homeland through regional and international arrangements will be explored. It should be noted that this article highlights the roles of SF in combating terrorism and will leave the debate on issues regarding the legitimacy, morality and legality to a more appropriate forum.

Securing the Homeland

The role of SF in securing the homeland can be designed to complement domestic security agencies such as the police, emergency services and national intelligence agencies in combating terrorism. Terrorism has shown itself to be a multi-faceted threat and many governments have adopted a whole-of-nation approach to dealing with it. This approach requires that various agencies bring their respective areas of expertise into the arena to combat terrorism comprehensively and effectively. SF can contribute to this approach in a few ways.



SOTF troopers storming Rasa Sentosa Hotel in Exercise NORTHSTAR VII

Beefing up the Numbers: A Problem Shared is a Problem Halved

Expertise takes time, money and effort to build up – many security agencies were already overwhelmed coping with their responsibilities even before the 9-11 attacks that heralded the beginning of an era of terror. With heightened threat conditions forcing strategic refocus and deployment of resources to combat terrorism, many domestic agencies are stretched thin. Therefore, the deployment of SF to complement domestic security agencies in their myriad security responsibilities is a natural next step. However, there are several issues that need to be addressed in deploying SF to supplement domestic security.

For one thing, SF typically belongs in the military domain, and unless the protocols for their deployment in domestic security duties are clearly spelt out, their presence may be a source of confusion in the areas of command and control when pandemonium breaks out. In national cultures where there is a high level of distrust and animosity between the police and military, the deployment of SF may even be counter-productive to the overall security situation. Secondly, SF are highly specialised in a particular skill; therefore the situations in which they are deployed and their specific roles should be clearly articulated. To maximise the utility of deploying SF for domestic security functions, governments need to have a coherent national security policy that articulates chains of command, jurisdiction and responsibilities. An example of such a national security structure is that practised by the Singapore government in managing domestic crises. While no structure will be perfect, the articulation of a clear command and control structure in peacetime will buy precious time in times of chaos.

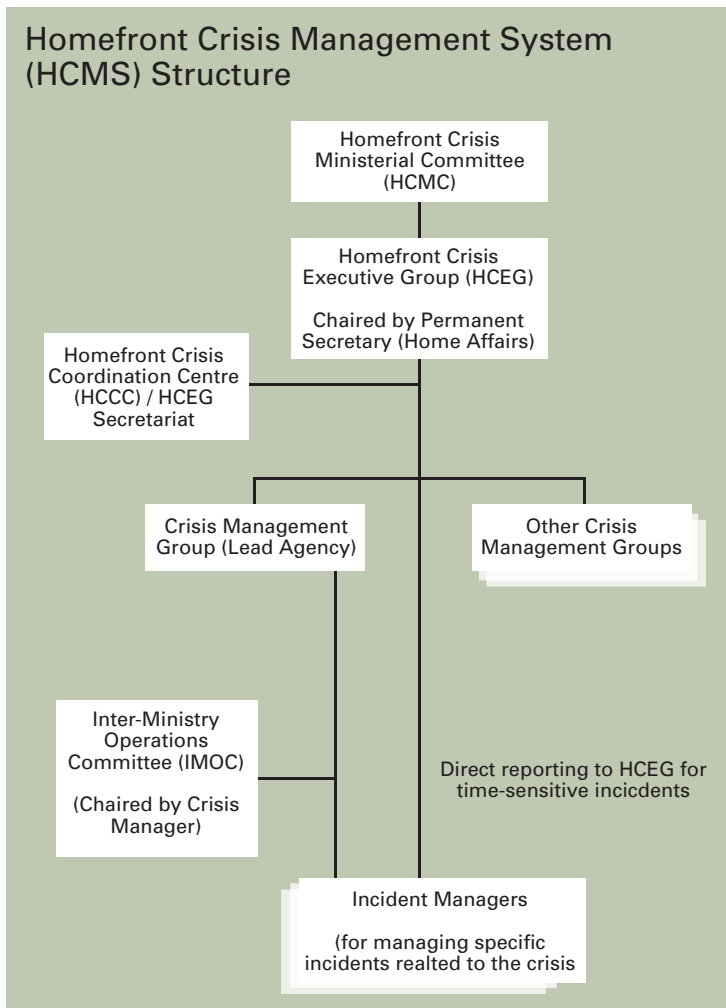


Figure 1: Homefront Crisis Management System Structure¹

Tip of the Spear: Quality Troops for the Homeland

SF are the elite troops in most military organisations – a large proportion of resources has been devoted towards their development than other troops. The selection and training of SF operators weed out many who do not meet the required standards – entry into their hallowed ranks is an honour as old as the martial tradition itself.² Without surprise, SF have traditionally been regarded as the tip of the spear in a country's arsenal of military options.

The particular quality that sets SF apart from their contemporaries is not the toughness of selection or training. Rather, the treasure lies in the highly motivated individuals who make it through the arduous process. With them, quality in training and operations can be self-generating and sustainable – which leads to the virtuous cycle of generating quality troops who excel in their areas of expertise and possess a high capacity for learning and adaptation. Their frequent deployment on the frontlines of national security operations also allow them to gain valuable operational experience and insights.

Thus, the inclusion of SF in combating terrorism brings expertise and experience to domestic security forces combating terrorism. As such, the value of SF combat experience should not be under-rated. In a world where technology has rendered physical borders porous, an increasing number of terrorists are equipped with the knowledge, or even experience, in mission planning, operating military-grade weapons, rigging improvised explosive devices and a whole gamut of other deadly skills. Unfortunately, they do not play by the rules of civilised nations; the asymmetric style of warfare they wage is exactly of the type that most conventional militaries were not designed to excel in. Taken together, the ability to deploy highly independent, experienced and skilled SF on the ground against these terrorist forces is an edge that no government should forsake.

Defending with the Purple Edge

As the leading edge of the military's fighting capability, SF frequently participate in joint operations with their compatriot services – more so than conventional military forces and domestic security agencies. Therefore, their ability to operate with joint assets from all three traditional services is better honed from more frequent exposure. This edge in joint operations is critical when such operations are necessary to combat terrorism within a country's vast territorial expanse and domestic agencies may not have the resources, expertise or experience to deploy to similar effect. Having a core of high readiness, well trained SF maintain pressure on terrorists and keep them running.

SF also bring military-grade firepower to the frontline against terrorism. Terrorists may be trained and equipped to do battle at a level above what domestic security agencies can deal with. The tactics employed and heavy weaponry by terrorists can overwhelm lesser-armed security agencies. In situations (like the Mumbai attacks) where terrorists may not be interested in negotiations or survival and their mission is to wreak maximum havoc and gain publicity through sheer destruction; bringing in overwhelming military force to swiftly end hostilities may decrease casualties and minimise disruption to recovery efforts. As recent attacks in urban centres have shown, the ability to move swiftly into action and fight precisely to minimise collateral damage are important attributes and SF are the masters of this in the military arsenal.

As a consequence, it is important that SF continue to push the envelope of joint operations within the military and integrated operations with other government agencies. The relatively small size of SF units and their adaptability to new modes of operations puts them in good stead to maintain their edge. The pioneering work done by SF will blaze a trail for conventional military forces to build upon their work for larger scale, more complex joint and integrated operations.

Extending the Long Arm of the Law

The varied and extensive geography of nations can make the administration of government and justice difficult. Inaccessible places are also favoured by terrorists as a sanctuary where they can train, accumulate material and recruit at will. In this case, governments usually send SF in to de-escalate the situation first.

SF can also be deployed for surveillance and reconnaissance prior to the deployment of larger military forces in troubled regions. Their small footprint and skills sets pre-dispose them for such tasks.

As highly trained, disciplined and mature soldiers, SF can also shoulder civil action responsibilities on the ground, interacting with locals in a hearts and minds campaign to decrease support for terrorist elements.

Countering Low Intensity Conflict

Terrorists may engage in sophisticated low-intensity warfare against government forces. As the Irish Republican Army's (IRA) operations in Northern Ireland during the "troubles" in the 1980s showed, terrorists with domestic sympathisers can be elusive and deadly. One of the ways to defeat such elements is to conduct close surveillance and intelligence operations – tasks that may be performed by SF in various guises.

The selection and training of SF makes them suitable candidates for moulding into operatives that can be deployed to counter terrorists engaging in low-intensity warfare. The penetration of terrorist networks is dangerous and unpredictable, but the results can be important and the victories strategic. By virtue of their dedication and determination, SF can be an important resource in such operations and should be reserved as an option for policy makers.

Having explored the roles that can be played by SF in domestic operations, the following section explores SF roles beyond the boundaries of the homeland in order to achieve national security objectives.

Beyond the Homeland

Fighting terrorism at source is an important strategy that puts the terrorists on the back-foot and denies them the time and space to operate. While it may not eradicate elusive terrorist organisations, it certainly disrupts their resources and allows both domestic and international forces to operate more effectively against them. SF that are trained to raise indigenous forces can also swiftly gather such elements to effect operations that the SF detachments might not be able to perform themselves. Smaller raids conducted by SF alone to disrupt terrorist operations at source are also plausible. In that instance, SF provided an incisive tool for policy makers to fire precisely, with controlled force and limited objectives. SF have featured heavily in combating terrorism beyond national borders. This section outlines the roles played by SF in battle.

Defeat Terrorism by Winning Hearts & Minds

The links between terrorism and local populations vary greatly depending on factors like geography, religion, culture and economy – to name a few. Regardless of whether they may be tenuous or not, the ability to win the hearts and minds of the local population will be a cornerstone of success in contemporary military operations against terrorists. Combating terrorism is as much a psychological and emotional challenge as it is a physical one. Many terrorist organisations base their support around an enemy that challenges their beliefs and tenets. Therefore, the ability to win over the belief and support of local populations in their respective legitimate governments is crucial to promote long term peace and stability.

SF feature strongly in such operations because they are often the first boots on the ground and have access to influential members and leaders of local communities. They are the proverbial *strategic corporals* outlined by General Petraeus whose actions at the tactical level can have

strategic consequences.³ If the initial actions by SF do not set the stage correctly, they will encumber the follow-on actions by other agencies that may arrive after them.

It is necessary for SF to have a sound understanding of the strategic as well as the tactical situation. While their lethal actions are governed by strict 'Rules of Engagement', their non-lethal engagements should be conducted with diplomatic tact and an appreciation of the situation on the ground. Thus, the degree of knowledge and maturity demanded from an SF trooper is onerous and it should be the goal of governments to build-up their SF towards such professional standards for operations combating terrorism.

Supporting International Efforts

The final SF role to be highlighted involves the deployment of SF in support of international efforts to combat terrorism. SF operators from various countries have already been deployed in the international fight against terrorism at various levels. Some were deployed to form a component of United Nations (UN) forces while others were deployed as part of international forces established by the UN and with the support of organisations like the North Atlantic Treaty Organisation (NATO). These constructs are important for supporting the legality of military deployments by participating nations – without which few countries would have the political strength to proceed independently.

Whichever mandate they may be deployed under, SF are a significant foreign policy tool of many nations. For most nations, such deployments are also a precious opportunity to test the operational readiness of their forces and to allow valuable operational experiences to be gained.

The exact nature of SF missions in international deployments can vary widely; they can be part of a security force for civil-action actors or humanitarian organisations. Humanitarian efforts are critical to the rebuilding of impoverished strife-torn regions and the re-establishment of government and security – both critical to defeating terrorism.⁴

Conclusion

Having explored the roles played by SF in combating terrorism, this article seeks to offer some clarity in deliberations regarding the training and deployment of SF in order to support these roles. Additionally, the supporting structures required for SF to perform their roles need to be in place – these include clear chains of command for integrated operations domestically and internationally, legal provisions to authorise and circumscribe the actions of SF; and legitimate institutions through which SF can be deployed.

The roles of SF will continue to evolve with the threats. Conventional threats have diminished but have not disappeared. Advances in technology, communications, international financing and logistics have allowed terrorism to strike the civilised world with a vengeance. Combating terrorism is as much a gunfight as it is a battle for the hearts and minds of a community that rejects the values, structures and motivations of the world we live in. SF must advance to be much more than good gun-slingers for that is only sufficient to soothe the symptoms and not institute a cure. SF should epitomise the best attributes of a warrior-diplomat, winning not just the battle for ground but more critically, the battle for the minds. The first step towards that is enriching their own minds with the tools and knowledge to accomplish their mission.

Endnotes

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Part II

SPECIAL FORCES IN PRACTICE

COL Lam Shiu Tong

THE RED LIONS: AN EXAMPLE OF SPECIAL FORCES LEADERSHIP

The Super Puma helicopter circled for almost an hour, waiting for the cue to release the skydivers. Every “Red Lion” was eager to jump off the aircraft as the anticipating crowd below waited anxiously for the drop at the Marina Floating Platform spectators’ gallery. When the pilots signalled for the skydivers to get ready, the team leader spotted a patch of dark clouds hovering right above the landing point. At this moment, the team leader shook his head confidently to the aircrew, signalling for jump abort. One might conveniently lament that this was yet another jump cancelled; another day of preparation gone wasted. This decision to abort the jump seemed easy. Such a decision requires courage, experience coupled with physical and mental competencies. In this short stint with the Red Lions, the essence of Special Forces (SF) leadership was exemplified through a set of inner qualities rather than loud but superficial actions.

From 10,000 feet free-falling down to 4,500 feet, the views were majestic and the feeling exhilarating. The tactical aspects to look out for will be the descent height and the timely pulling of the ripcord; taking into account the procedures for “cut away” to activate the reserve chute, should there be malfunction in the main chute. After the successful opening of the parachute, all is not done yet. There needs to be pinpoint accuracy to hit your drop zone and land on your designated location. The gut feel and sense of direction, the prevailing wind conditions and accurate steering of the parachute plays a significant role to make a safe and accurate landing. These factors relate to the skills and training that a Special Force trooper should possess, and the ability to react to fire and the attention to detail he has to employ in operations. Such a response may strike a “civilian” as strange, perhaps overly assertive and irrelevant for some. However, if one was to look deeper into the analogy, there is some truth and logic behind it.



Red Lions Jumping off an Aircraft

Introduction

The Red Lions are the only Skydive display team in Singapore. Formed in 1990, the Red Lions have participated in almost every National Day Parade (NDP) as it continues to be the perennial crowd favourite.² As Chief Commando Officer, I am privileged to be part of the Red Lions display team for NDP 2009. After spending more than 10 Saturdays and 20 jump sessions preparing and performing for the NDP display, I finally understood what it takes to be a Red Lion.³ This short essay outlines my journey in parachuting as I list my convictions around the deeper realms of Special Forces leadership.

Purpose is Key

To understand leadership, one must understand its nature. And in order to lead the team, the mission and outcome must be crystal clear. The ‘mission’ for the Red Lions is a ‘simple’ one. They would jump from 10,000ft, and land directly in front of the spectators gallery. While this mission seems highly straightforward, it is not. First, the freefall display is carried out within the Central Business District (CBD), where towering buildings – some exceeding 800ft in height – form obstacles to the Red Lions. Second, if there was a parachute malfunction in the context of this jump, the consequences would be drastic because of the urban landscape of the city packed with cars, buildings and highways. In fact, the Red Lions were instructed to ‘go for the waters’ if they cannot find an alternate landing position in an emergency! In addition to the risk involved during the jump, the environment where the jump was carried out was seldom favorable. Winds were strong and water obstacles were plentiful. This could severely affect the skydiver’s accuracy and performance. However, the Red Lions understood their mission clearly – to land with precision and grace.

As I relate the emphasis of purpose to special operations, a clear understanding of the mission intent will enhance the success rates in operations. The pursuit for excellence for mission success in the Special Forces is extraordinary, because of the will and conviction that each Special Forces trooper possesses. They excel at what they do as they test their own limits.

No Heroes Please

Contradictory to typical stereotypes, skydivers are people who treasure and love their lives. The Red Lions are no exceptions. All the twelve Red Lions who participated in the NDP parachute jump display are married with children and live happily. Like most people, they love their families and treasure their lives. All members of the team understand that they are not heroes, but are performing their task, and contributing to Singapore's defence. They realise that the overwhelming feeling of being a hero might lead to arrogance or worse still complacency. Once complacency sets in, it endangers the lives of others. This is also the reason why the Red Lions are reserved, humble and often "camera-shy". Although their parachuting skills are demonstrated during the display, they prefer that the glamour, be accorded to the team and the support staff such as the air force squadrons, ground logistics and safety crew.

Similarly, Special Forces leaders share the same attributes. Special Forces leaders are not *Gungho*⁴ soldiers who have no regard to danger that they are exposed to. On the contrary, they are mindful of the risks they are subjected to in the course of work, always incorporating operational safety and training as part of their mission requirements.

Special Forces train as they fight in combat. Special Forces trainees are evaluated on their personality profile to see if they have low self-esteem or a pre-existing inferiority complex. People who are likely to 'show-off' or boast to others on how good they are usually deemed unsuitable to become Special Forces, and are very likely to be sieved out during selection and training.

Recognising Strengths and Weaknesses

The Red Lions freefall display is a clear demonstration of individual mastery in skydiving. It is also an excellent representation of teamwork. Every Red Lion needs to have sharp competencies in skydiving to successfully manoeuvre in the air, and land accurately. At the command 'Go', they exit the helicopter in a stable posture and link up at the assigned "rendezvous" point with the rest of the teammates (they are flying at a speed of approximately 100 feet per second) to form the designated formation.⁵ However, it should be noted that any wrong action will result in a high possibility of an accident. Once the Red Lion opens his canopy, he will have to follow the 'stack' sequence and pilot his own parachute to land within 10m of the landing strip. In this case, the difference between a good landing and a broken limb may be metres or inches away. Everything at this stage is purely dependent on the parachutist's assessment and decision-making skills. No help can be provided at this point!

Besides parachuting with distinction, the team assists those who are weaker. The Red Lions have to understand in full every jumper's strength and weakness. In this year's display, I had the least number of jumps and my experience in sports skydiving was average. The team knew my inadequacies, and guided me along. They also adjusted the jump formation and landing sequence to ensure team success. Moreover, the team planned for me to land as the

last jumper, so I could land at my own pace. They also paired me with the most experienced jumper of the team, who enabled me to learn better flight mechanics, and increase the success of a safe and accurate landing. Without doubt, these actions enhanced my jump experiences significantly.

It is imperative that the Special Forces troopers harness their strengths to mitigate the weaknesses of team members. To do so, one needs strong situation awareness and a sharp eye to identify and capitalise on their strengths and weaknesses. On this note, the team leader is no exception.

In the Special Forces community, it is common to highlight one's weaknesses when he first joins the team. It is best that weaknesses are made known, so that others can watch his back. For example, I reminded my team (not that they did not already know) about my weaknesses when I first joined the Red Lions for preparatory training. In this process, they looked after, and looked out for me. A Special Forces leader is trained to accept that teams comprise of different individuals with different experiences. Camaraderie is constantly emphasised throughout their development. There is simply no room for complacency in the Special Forces, regardless of rank or position.



Red Lions in an 18-way Formation

Discipline and Adaptability

The constant need to follow procedures and yet adapt to situations is a difficult task. I like to relate this proposition to a particular incident during one of the parachute displays in the National Education (NE) show. The team leader of the Red Lions did not follow the coordinated procedures, as discussed with the pilots and air crewmen before the jump. Consider the situation before the jumping out of the aircraft. Before exiting the aircraft, the air crewman on board the helicopter would signal to the Red Lions. At this point, the team leader assessed that the helicopter had 'over shot' the drop zone. He then made the decision to get the jumpers to get into position before the aircrew responded.

Technically, the Team Leader did not follow the plan. However, the team leader's experience and expertise allowed him to effectively adapt to the situation, which was critical to mission success. If that call in the aircraft was delayed further, we would have missed the exit zone, and the jump task will also have to be cancelled. From this incident, it is observed that situations change, so we need to adapt and respond appropriately. If the standard procedure were followed, we would have missed landing site totally.

Special Forces regularly encounter danger and uncertainty in the course of their work. Therefore, it is absolutely important that they know their business well, and are fully aware of the risks involved. Apart from understanding the operating environment, Special Forces understand the consequences from the decisions and actions taken. Otherwise, they will not be able to adapt to sudden changes during the conduct of a mission. Identification of changes in the situation and positive adaptation to the environment enables Special Forces to meet overall mission intent.

In order to achieve mission success, it is vital to develop a workable plan, rehearse it and possess the operational discipline to follow it. In the Special Forces, much time and effort is spent on contingency planning and wargaming to identify possible scenarios to react to changes in the plan. It is through this process that allows Special Forces to become more adaptive in operations.

Adaptive training is a guarded feature in Special Forces training. It is introduced at various phases in the form of presenting surprise scenarios and situational testing. This sort of training develops a nimble mind, and enhances the troopers' composure to handle unpredictable situations. More importantly, effective adaptability can help save lives in times of peril.

Confidence and Humility

It sounds absurd to jump out of a perfectly serviceable aircraft without a high degree of confidence. In the Red Lion team, besides being confident to execute the necessary drills in an emergency situation, he is also confident that the rest of the teammates are competent to do things right and safely.

In addition to unwavering confidence, the Red Lions often demonstrate humility. They have no hesitation about admitting mistakes made. During one of the rehearsal jumps, one jumper manoeuvred very closely to the lightning cable, which was dangerous. He admitted to his error in judgment, and addressed the issue openly so others could learn from it.

A Special Forces leader must be confident of himself, and confident of his team in training and in operations. Without this attribute, he cannot earn the respect and trust from those under his charge. Special Forces leaders are critical of their own performance, but at the same time, they should possess the moral courage to admit their mistakes. On the part of the team, there should always be a sense of empathy to try to look at things from the other person's perspectives to gain a better understanding of ground issues. After all, no one is perfect. It is good to accept the mistake, learn from it, and let others know so that they will not commit the same error.

Special Forces also believe in practicality and equality. They do not demand for special treatment and prefer to be equal in terms of welfare received between them and their subordinates. This unique character of Special Forces leaders is not formally taught but is transferred by role-modelling. Seniors in the Special Forces lead by example by "putting their hands on the deck" to show how exactly the job gets done. In the same process, junior leaders

learn the rope and values displayed by their seniors. This is one of the hallmarks of the Special Forces – they hold a deep sense of humility and respect for people.

Think–Talk–Do

The ability to communicate is an essential quality of a leader. In a high performing team like the Red Lions, there are clear lines of communication to enhance mission or task performance. The process is simple – the team leader articulates clearly what he wants in the jump or mission. The other members listen, clarify and counter-propose any changes to the plan. Speaking rights are not exclusive to the team leader alone because members in the team have the confidence and commitment to speak out to clarify and contribute to the plan. Nothing is left in the heart and unspoken.

Without clear communication, there will be confusion and misunderstandings. In parachuting, miscommunication can result in serious mistakes such as deploying the parachute at the wrong height and even causing collision between parachutists.

Contrary to stereotypes, communication is not confined to verbal forms. In fact, non-verbal communication such as hand signals, facial expressions and even key movements contain specific meanings. In parachute operations, a blowing gesture refers to wind data; pointing to the waist watch means the direction of wind. Similarly, during freefall, the waving of hands and shaking of legs contain deeper meanings that require some action to be completed in mid-air.

Besides “thinking” and “talking”, Special Forces must carry out specific tasks that meet the mission intent. It is about how to approach a problem and ensure that all actions carried out must be accomplished to meet the end state. This can first be done through visualisation of the battle, and translating these visual frames to action. Hence, good sensemaking and assessment skills are necessary. These individual attributes are complemented via a systematic process that is used in wargaming where opportunities are given to stakeholders to test plans without the risks of real world decision-making using a set of scenarios as basis for analysis and exploration.

Conclusion

It has been an honour for me to join the Red Lion team as part of the NDP 2009 celebrations. This stint allowed me to better appreciate the risks and challenges the Red Lions face in the course of work. Additionally, the experience enabled me to relate how Special Forces leaders carry out their duties, and respond under adversity. Special Forces leaders, unlike most leaders in the corporate world, frequently deal with life and death situations. For this reason, their judgment and decision-making skills are critical because lives are at stake. The need for stringent selection to choose suitable candidates for Special Forces troopers is essential. Special Forces training are designed to enable every trooper to master basic fundamentals and specialise deeply in a subject, which will eventually test their judgment and analytical abilities. The Red Lions demonstrated the qualities of Special Forces leaders under a very different setting but the message is still the same – they are leaders who get the job done with excellence. On this note, I salute the Red Lions for their excellent skills, their commitment to the team, and their loyalty to the Commandos and the SAF. Finally, I like to thank the Red Lions for allowing me to be part of the team and to make me realise how little I knew about parachuting.

Endnotes

- ¹ The Red Lions refer to the Singapore Armed Forces Commando parachute display team. The Red Lions are the only Skydive display team in Singapore. Formed in 1990, the Red Lions have participated in almost every National Day Parade. Survey results by the executive committee of the parade have also revealed that the parachute display is one of the favourite items in the parade celebrations.
- ² *The Straits Times*, dated 10 August 2009.
- ³ This experience was made possible from the guidance, patience and friendship accorded to me by the Red Lion Team that comprised of Simon, Beng Lee, Clarence, Krishnan, Teck Seng, Melvin, Keng Seng, Wei Lee, Kum Mun, Wei Khian and Eric (he is a Diver from the Naval Diving Unit).
- ⁴ A term commonly used locally to mean bold, fearless, and without restraint.
- ⁵ A twelve men team when 'linked' forms a 12-way Formation.

COL Simon Lim

SPECIAL FORCES: "FINDING AND TRAINING THE RIGHT STUFF"



Special Forces training have been a hallmark of militaries for centuries. It is only now that we can see them in greater detail, but only from afar.

Introduction

SPECIAL FORCES HAVE PLAYED an increasingly important role in military operations throughout the world as part of the war on terrorism, which was initiated in earnest in the aftermath of the 11 September 2001 terrorist attacks in the United States.¹ These operations have always been carried out by specially trained people with a remarkable inventory of skills. Conversely, the training of a Special Force is an extremely demanding one. Many have attempted the Special Forces selection and training regime without successfully completing

the gruelling process. The average failure rate of the US Ranger course² is about 45%, while the attrition rate at the Fort Bragg Special Warfare School for the Special Forces (Green Berets)³ is about 70%, and the same is true for the Navy SEAL Basic Underwater Demolition SEAL (BUDS) course.⁴

Special Forces Selection and Training

Many of the renowned Special Forces schools today use a rudimentary process in their selection and training of potential Special Forces which usually include a basic fitness test and a series of interviews. Although this method in the selection process is fundamentally correct, few Special Forces units have succeeded in the training and development of an integrated Special Forces other than just producing a highly trained soldier that specialises in their field of expertise.

The US Army Rangers undergo a three-week Ranger Indoctrination Program (RIP) after Basic Training, Advanced Individual Training and Airborne School. These personnel are then assigned to units to serve for 5 to 14 months before attending Ranger School for 61 days. Successful completion of the Ranger course entitles the soldier to wear the Ranger Tab. In the case of the US Special Forces, all enlisted personnel and officers who meet the prerequisites may attend the SF Assessment and Selection course (SFAS), a three-week course at Fort Bragg. Successful completion of SFAS allow them to attend the Special Forces Qualification Course (SFQC often referred to as the Q-course) which lasts 143 days.⁵ The Navy SEALs conduct training in Coronado where the soldier is selected for BUDS, he will undergo 2 weeks of physical training and indoctrination before beginning the 29 weeks BUDS program. On completion of BUDS, they will be assigned to a SEAL or SEAL Delivery Vehicle (SDV) team to complete a six month probationary period before being allowed to wear the Naval Special Warfare insignia.⁶

The SAF Special Forces has evolved with the advent of the 3rd Generation SAF transformation efforts. For the Special Forces, this evolution has culminated in the establishment of the Special Operations Task Force (SOTF). Before the inception of SOTF, the selection and training of Special Forces was primarily conducted by the respective Special Forces under the command of the Army Commandos and Naval Diving Unit. SOTF was formed to optimise Special Forces resources and develop capabilities in a more efficient and coherent manner. This provided the impetus for SOTF to consider the amalgamation of the selection, training mechanisms and processes from all the Special Forces units to come under the ambit of SOTF. On the side of training, the Special Forces Training Institute oversees the development and implementation of Special Forces programmes and training courses.



Candidates Undergoing Water Confidence Test During Selection Phase

The Special Forces Training Institute spares no effort in selecting the right people for the job. Elite units such as the UK Parachute Regiment (Paras) put applicants through months of training and selection exercises long before they ever see a parachute. Many fall by the wayside, but those who complete the training and go on to jump training, or P Coy as it is usually known, are the right men for the job. Many Paras later join the Special Forces units such as the SAS⁷ or Pathfinders, where the selection process is tougher. Typically, fewer than 10% of the men who join the Special Forces selection course make it past the first stage. For those who do, there are nine months of training to assess whether they are suitable for SF work. If applicants fail any test, they will be returned to their units but may be given a chance to come back in the next course. Similarly, for SOTF, much emphasis is placed in the recruitment process to attract potential candidates from all Services to take up the challenges to be a member of the Special Forces community. Active sharing during recruitment talks and road-shows at units by SF personnels on their experiences and operational deployments enhance this process by providing a perspective of what life has a special force is like. While Special Forces are trained to undertake special missions, the journey of a Special Force is an adventure of a lifetime not to be missed.



SAF Special Operation Forces Roping Down on
RSN Landing Ship Tank (LST)

The weeks of Special Forces Selection is an arduous one, which entails a series of demanding physical and combat test requirements which the candidates have to undergo in order to determine their suitability to embark on the Special Forces Qualification Course (SFQC). Candidates would also have to undergo a series of interviews and situational tests conducted by psychologists from the Applied Behavioural Sciences Department (ABSD) to assess the candidates' leadership, initiative, self-discipline, independence of mind, ability to work without supervision and physical ability.⁸

In addition, there are a number of elementary tests that include psychological, memory, and interrogation testing as well as group situational tests to assess team dynamics in the candidates. Criteria such as compatibility, integrity and stability were given great weightage throughout the assessment process. In fact, many of these assessment tests were designed by the psychologists and Master Trainers from the operational units based on experience designed in an authentic fashion.⁹ In other words, a candidate can be the fittest in the world but if the psychological testing indicates inadequacies in the findings, such as the inability to work with the other candidates of diverse backgrounds - they will not be accepted into the Special Forces community. This is why only one third of the candidates will typically pass SF selection, and move on to the SFQC. In the end, acceptance into the Special Forces community requires one to have the "right stuff".

Some of the key benefits behind the amalgamation of the Special Forces Selection and the conduct of the SFQC are:

- Greater optimisation of resources from all the Special Forces operational units to better synergise the conduct of training
- Higher quality in the content development in designing the selection tests and training based on the concerted experience of the instructors from the operational units

- A common training standard is achieved in the selection and training to produce first class Special Forces leaders and troopers
- Forge a common Special Forces culture and bond in SOTF at the foundation level
- Create capacity for SOTF and its operational units to focus on operations and capability development

Underlying these benefits is the integration of all Army and Navy Special Forces selection and training under SOTF. Special Forces leaders and troopers can now train under a common platform of training. This training concept will certainly go a long way when SOTF undertakes special operations where all Special Forces merge powerfully under a common operational setting to battle against asymmetrical challenges.

Meeting New Security Challenges

Special Forces worldwide must be ready to respond against a wider spectrum of threats, risks and challenges. Many of them are what Nassim Nicholas Taleb describes as “*Black Swans*”¹⁰; large, impact, hard-to-predict and rare events beyond the realm of normal expectations. For example, we witnessed the unexpected terrorist attack in Mumbai that caused the first death of a Singaporean. More recently, we have seen how terrorists bombed hotels again in Jakarta; these incidents clearly indicate that the current terrorist threat in the region is alive and dangerous. Therefore, we need to be better prepared, more alert and extra resilient to attacks to contend with asymmetric warfare.¹¹ We need to take stock of our resources, review our ways of doing things, and creatively develop new approaches to enhance our capabilities so as to meet the new security challenges of this interconnected world.



Clear and Present Dangers Facing Our Society

Ultimately, it is the risking and creating that characterise the human spirit as we move forward to adapt to emerging threats of the 21st century.¹² Hence, the operational landscape must shape the training outcomes and the training of Special Forces today and in the future must take the necessary form to meet these clear and present challenges.

Perspectives of Special Forces Training

Special Forces operate comfortably in ambiguous situations and possess the necessary skills to successfully complete complex missions. Their advanced skills, combined with outstanding individual attributes, have allowed Special Forces to transform specialist training competencies into relevant capabilities that have proven useful to meet changing threats and future challenges. The shifts of society with the evolving nature of threats will have a significant impact on the selection and training of our future Special Forces. The ensuing paragraphs will look at the evolution of modern Special Forces training and highlight the operational requirements that have made specific training a necessary part of Special Forces today.

Understanding Special Forces Leadership –“Thinking out of the Box”

The future battlespace will be volatile, uncertain, constantly changing and ambiguous.¹³ Conflict will become increasingly complex because of the asymmetric nature of the threat and the use of urban terrain. Therefore, to effectively function in this daunting environment, a reorientation of how we think, train and develop our people to operate on the battlefield will be required. Colonel Bernd Horn, an officer in the Canadian Special Forces believes that the development of Special Forces leaders who can analyse and deal with complex problems in the new multi-faceted environment are essential in this modern age.¹⁴ As such, the ability to move Special Forces leaders from transactional to transformational styles of leadership will require constant emphasis and development. As transformational leaders have been identified in both military and commercial settings to be more effective than leaders who rely heavily on transactional leadership styles, it is necessary to groom leaders to be transformational with daring initiative. Constantly looking at better ways to do things by “Thinking out of the box”, leading well-trained, experienced and technically competent Special Forces troopers in complex operational situations puts far more emphasis on finding better educated and more sophisticated Special Forces leaders.

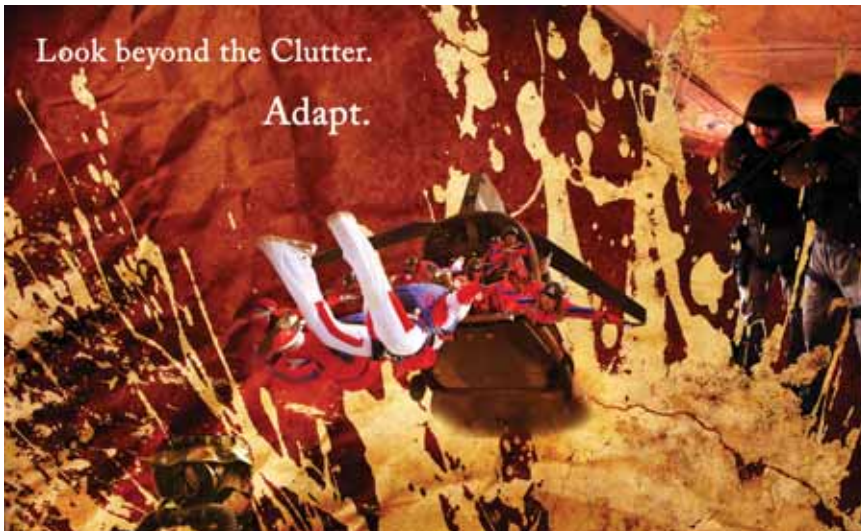
Special Forces leaders today have evolved over time. In a broad sense, these leaders must have basic leadership traits that include critical evaluation and problem detection, envisioning, communication skills, impression management, the capacity to empower followers, excellent physical fitness, the ability to lead by example, the capability to maximise available resources, and the capacity to take criticism and advice from subordinates. These traits have been the hallmark of successful Special Forces leadership since the initial creation of these forces, and it will be this foundation that moves them forward into the future of Special Forces training.¹⁵

On Adaptive Training

While it is important to have strong attributes, it is also vital to react effectively in operations. Special Forces will continue to play an important role in military operations to achieve strategic and operational level effects. John Collins in his book, “*Why Special Operations Forces are Special*”, highlighted that Special Forces must be adaptable to be effective in the ever-changing circumstances in dealing with the terrorists in Afghanistan and Iraq.¹⁶ This competency, specifically the ability to adapt and conduct economy of force operations against

an asymmetric enemy is propelling Special Forces into the forefront of current military activities. For one thing, the notion of adaptability will become a core competency in Special Forces training.

Being adaptive means that one can react flexibly and effectively under varying types of situations.¹⁷ At times, when asymmetric threats form the basis of the larger security environment, it is essential to recognise the need for adaptability, as a core competence needed in Special Forces training. This recognition can start at the basic training levels, with dedicated efforts focusing on adaptive performance, critical thinking and problem solving. Special Forces training can include interventions that encourage experiential learning, and leverage on virtual simulations to increase the human cognitive efficiencies in handling different scenarios and varying conditions.



Adaptability - Look Beyond the Clutter

The future battlespace will be volatile, uncertain, constantly changing and ambiguous. Conflicts around the globe are increasingly complex largely due to the asymmetric evolving nature of the threat. Special Forces have evolved over time to become more modernised with technology. On the other hand, the asymmetric environment challenges how Special Forces critically think, train and optimise their structures and human resources.¹⁸ Therefore, Special Forces leaders cannot just train towards responding to the adversary; they must also learn how the adversary operates and thereafter, derive fresh capabilities and countermeasures to achieve mission success in special operations. Some of the ideas on adaptive performance training have been incorporated in the Special Forces Qualification Course and this important attribute could also be proliferated beyond the Special Forces in the SAF.

Special Forces Ethos and Values

The basic philosophy that governs Special Forces training is to achieve a number of training outcomes, which are guided by instilling a set of ethos and values that creates an atmosphere of mutual understanding, trust, cohesion and operational excellence.¹⁹ Core values are essential and enduring tenets. If circumstances around us change, our core values remain because they are our guiding beacons. You do not change core values; you change strategies.

A core value is simple, clear, straightforward and powerful. It provides substantial guidance with piercing simplicity. Individuals discover core values at their own pace and time; but it is not something we buy into. Therefore, we must have a predisposition to nurture these values and not misuse them. Core values need no justification, nor do they come into or out of fashion.²⁰

That said, Special Forces training must focus on producing leaders and troopers who are independent and versatile, yet able to comfortably work well within the context of a team. In sum, the training outcomes must be designed to produce highly skilled and adaptive leaders and troopers that have a great deal of confidence in their own ability as well as their team members. With trust as the cornerstone, Special Forces must be able to work cohesively and coherently within the team. Therefore, the Special Forces Qualification Course is the foundation of modern Special Forces training to build this trust to meet the future challenges of the security environment.



Instilling the Right SF Ethos and Values

Conclusion

In conclusion, it must be understood that Special Forces hold extraordinary abilities to deliver strategic effects and capability in operations. However, a number of prerequisites must be met before this can happen. Firstly, a robust and comprehensive recruitment and selection process must be put in place to bring the right quality of Special Forces ‘material’, with the right inspiration to join the Special Forces community. Secondly, with the evolving security landscape, Special Forces training must focus on producing Special Forces leaders and troopers who are independent and adaptive, and able to work comfortably well within the context of a team. The time of identifying and training Special Forces purely to achieve extreme high fitness level alone is not enough to meet future operational demands. There is

therefore a need to strike a balance in having Special Forces of the right calibre in intelligence and adaptability, and to develop him competently along the way. In short, Special Forces training will need to produce highly skilled, self-reliant and adaptive leaders and troopers, who must not only be physically and mentally fit, they must also lead with sincerity, integrity and honour. The bedrock towards excellence in Special Forces training and skill sets lies in the continual development of their ethos and values to guide them in their daily actions, not only to do the right things but also to do things right.

We must also be critically aware that as new structures and practices are incorporated, we should not completely re-invent the wheel, but rather, harness past strengths to complement new ideas in the engine of change. For the things that supported our past decades of success, they should remain sound and intact. For the things that will make us stronger, we must embrace and develop those new ideas that can bring us to the next level comprehensively. Whatever the future holds for the Special Forces, its successes will continue to be based on their ability to get the job done. This can only be accomplished with excellent training. Finally, it is important to note that *finding and training the right stuff*, regardless of how good it is, will only be effective if it is given to the right people. Likewise, the right leaders must lead these people.

Endnotes

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CPT Yap Kwong Weng⁺

MANAGING AHEAD OF CRISES:
RISING TOWARDS A MODEL OF ADAPTABILITY

“You can’t solve problems with the same type of thinking that created them.”

- Albert Einstein¹

Introduction

PROCRASTINATION IS THE ENEMY of adaptability. Research has shown that people procrastinate when asked to think without clear instructions.² In today’s environment, asymmetric threats around the world demand more from leaders to face up to complex and uncertain situations. The inability to react effectively and simultaneously may possibly result in fatal consequences for a soldier in a combat zone. Likewise for a business manager, the lack of adaptive skills may cause a company to lose millions within the touch of a button. Arguably, the notions of adaptive leadership have inevitably become a core competency in both military and civilian leadership.³ In this aspect, crisis management is closely aligned with leadership due to its complex interactions between people and organisations as crises are being managed, regardless of context.⁴ While crisis management has been aligned with leadership for many years, research in these areas are particularly limited.⁵ The aim of this article is to consider a range of issues around the core problems of adaptability in crisis situations for SAF to extend its competitive advantage in the global operating environment.

This article describes the crisis management process and proposes two models towards the development of adaptive leadership. These models provide a mechanism to form a schema of steps in order to better comprehend one’s decision-making process. The article is driven by a representation of literature across multi-disciplinary fields from psychology, leadership and crisis management to describe issues of adaptability. Broad recommendations are also provided on the development of adaptive leaders in the SAF. Overall, this study is intended to do more than just illuminate processes. Rather, it seeks to uncover a hidden dimension in the notion of adaptability in the crisis management process, which in turn, sheds new light across myriad fields.

⁺ The author was awarded the Merit award for this essay in the 2008 Chief of Defence Force Essay Competition. Key concepts from this essay were also presented at the Social Context and Risk Research Forum in Beijing Normal University in April 2009. While this article does not address specific issues on Special Forces, it proposes areas for further analysis on adaptive training in the SAF.

Risk, Crisis and Adaptability: Elements of a Relationship

In every crisis situation, it is undeniable that some amount of risk is involved. More so, the ability to identify and “control” these risks within a system or an organisation is vital particularly in today’s uncertain context. In this sense, risk identification and the ability to adapt to new states, cognitively and systematically are required to enable optimal effectiveness in risk and crisis management. Based on this premise, adaptability can act as a function as well as a process to deter failure pathways. One can argue that the relationship of the broad elements of risk, crisis and adaptability are intertwined, especially when contingency plans fail to mitigate the risks involved so as to prevent catastrophic failures.⁶

Defining the Crisis Process

Within the last twenty years, the discipline of crisis management has emerged as an academic specialisation.⁷ Among many other descriptions of crises, the notions of “threat”, “culture”, “contingency” and “urgency” are some key characteristics that affect the processes of crises.⁸ From a strategic standpoint, a crisis is defined “as an adverse incident, or a series of events that has the potential to seriously damage an organisation’s employees, operation, business and reputation”.⁹ Similarly, in a military context, a crisis can critically undermine the ability of soldiers to carry out their tasks effectively, and consequences could be fatal should a mission go wrong.

Over the years, crisis management researchers have developed various models to describe key developments in a crisis.¹⁰ In this context, Mitroff outlined five basic steps to aid a clearer picture of the crisis paradigm.¹¹ He reflected that while crises are similar in nature, it is still necessary to check for any signs of breakage in systems before any crisis unveils.¹² The five steps of traditional crisis phases are outlined as follows:

1. Signal detection
2. Preparation/prevention
3. Containment/damage limitation
4. Recovery
5. Learning

These five steps in a crisis encapsulate a traditional cycle that signifies risk mitigation at each level in an organisation. Professor Denis Smith, a notable researcher in the field of crisis management, suggests that the prevention of crisis is the ultimate goal of any crisis management process. He maintains that defence mechanisms can cause possible escalations towards a crisis¹³, and invariably create crises.

In addition to articulating the different phases of a crisis, a crisis process will enable better comprehension of the crisis phenomena in further detail. Figure 1 thus specifies a typical crisis process which highlights different areas of escalation and containment. The graph attempts to conceptualise the process and “assumes that a crisis is reached when the organisation moves beyond its abilities to contain the task demands of the “event” and it escalates still further beyond the limits of contingency plans”.¹⁴

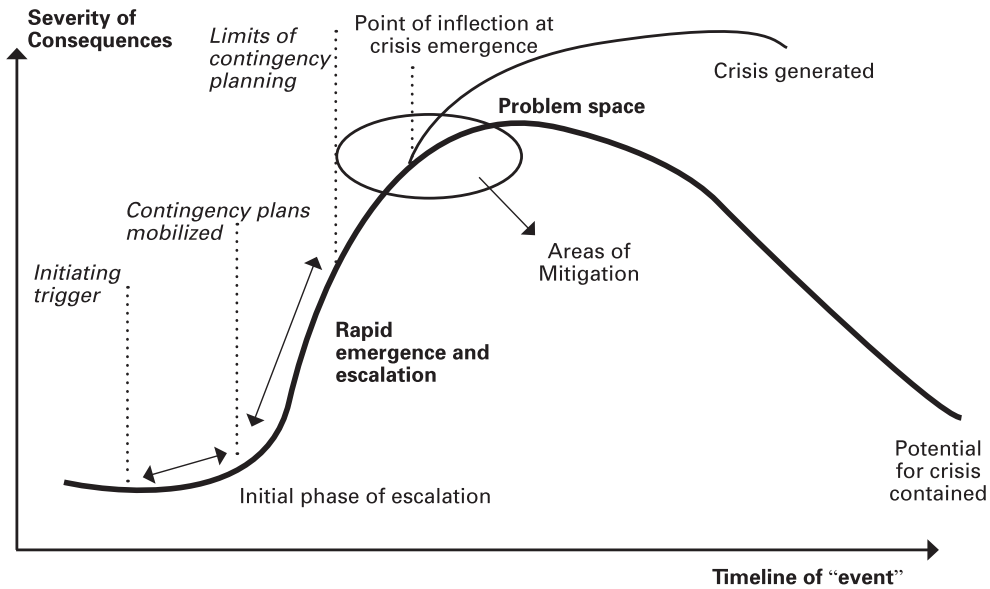


Figure 1: Crisis Emergence and the Point of Inflection

Of particular importance here is the initial phase of escalation where Smith argues that “contingency plans should be mobilised (along with the crisis teams) at the time where it becomes clear that the event has the potential to escalate into a crisis”.¹⁵ When this happens, external resources should take over to recover the “damage” caused.¹⁶ It is also at this point where the crisis moves into a problem space after an extended period of effective escalation due to internal and external pressures. The problem space resides at the point of inflection where problem activities incubate; this is also where contingency planning becomes increasingly impotent.

It would appear from this brief review that although contingency planning can be used to prevent an event from escalating to the point of damage, it cannot account for all situations, particularly in unconventional situation where extensive risk can spread both rapidly and exponentially. Clearly, the decisions and adaptive actions taken at this point are most crucial, and “the performance of the organisation here will also be a function of its previous testing of its contingency plans, the training of teams, and the integration of learning from previous crisis events (both internal and external to the organisation).¹⁷

At the point where the crisis incident moves out of the problem space and when crisis management procedures are activated, two routes are hypothetically formed. According to the demands from the crisis event, a crisis can either be generated or successfully contained. Taken together, these actions imply that the areas of mobilisation of contingency plans to its limits are of critical significance to the outcomes of the crisis event. At the same time, it is also possible that an organisation can still be fundamentally unstable despite appropriate rectification.¹⁸

The final stage, if the crisis is contained will bring the organisation back to a state of stability or a “pre-crisis” mode per se. It is only as a result of such a shift that the stabilisation of the crisis event is achieved. At this point, recovery and learning also takes place to prevent any further escalation. In sum, the graph exemplifies a crisis process that signifies the points of escalation and problem areas. It also establishes a standardised crisis route to allow better focus on effectively reducing uncertainty and mitigating the toxic implications occurring from a full scale crisis.

Adaptive-Crisis Model

The purpose of this model is to illuminate the key processes of adaptability in a crisis situation. Basically, the crisis process starts with an ignition of the crisis situation. The initial phase of the incident, or that period leading up to the initiating event, serves to generate experiences that surround the crisis situation. This subsequently leads to a mental differentiation of situations, where the cognitive processes of forming impressions, storming for ideas, and managing complexity within one’s mental domains are naturally activated (See Figure 2).

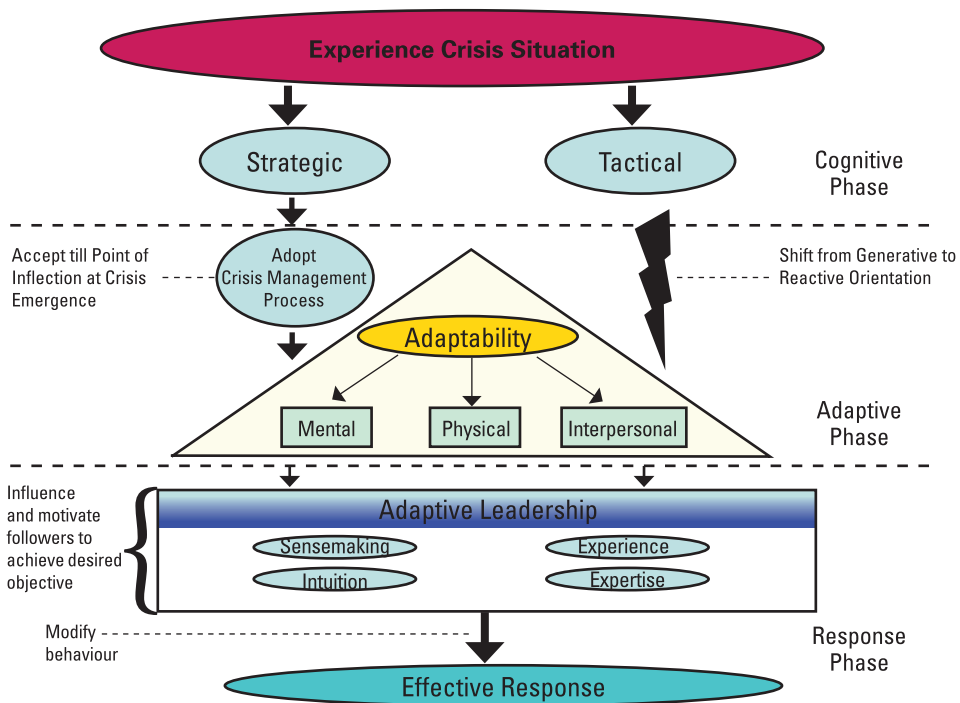


Figure 2: Adaptive-Crisis model showing a Continuous Process of Adaptive Factors

As illustrated in the model, there are two main approaches once the crisis situation occurs. From the strategic approach, the crisis process tends to adopt a traditional method of crisis management as outlined by Mitroff's five phases. It is deduced that this approach will be accepted till the point of inflection in the crisis process whereby adaptability attributes are used to negotiate the problem. Conversely, a tactical approach can be employed to deal with specialised tasks under an essentially "individual" scenario. Inevitably, this calls for adaptive actions to obtain desired outcomes. While behaviour change is a core principle of adaptability, adjustments arise largely mainly from situational and environmental movements. Still in this context, the following processes describe the transitions and movements of a crisis operator till an effective response is met.

- **Shift from Generative to Reactive Orientation.** Effective decision-making is needed to enable accurate judgments in a crisis.¹⁹ The ability to transcend beyond rational thoughts is sometimes required to meet task objectives. Rationality in this context is defined as behaviour that is appropriate to the given situation and takes alternatives and consequences into account. Even though there is acknowledgement that rational analysis is a powerful way to analyse data in a system, this claim might not be accurate in crisis situations due to external as well as internal complications. Therefore, a reactive orientation to adjust to the environment is required for optimal decision-making.

However, in this reactive mode, it is possible that hyper-rationality can occur.²⁰ On this note, Klein argues that hyper-rationality is a "mental disturbance in which the victim attempts to handle all decisions and problems on a purely rational basis, relying on only logical and analytical forms of reasoning".²¹ Put another way, hyper-rationalisation can possibly degrade to para-analysis by analysis – this is of particular relevance especially in situations when time and resources are limited.

- **Adaptive Phase.** The *Adaptive* phase is positioned between the *Cognitive* and the *Response* phase. Researchers from the US Army Research Institute for the Behavioral and Social Sciences concluded that, adaptability is "an effective change in response to an altered situation".²² Similarly, Major Flick of the US Special Forces maintains that, "Adaptability is central to what we do...an adaptive individual is someone who consistently performs well, even when things go bad".²³ Here, it is noted that mental short cuts to develop heuristics are significant to the adaptive leader as it enables effective diagnosis in situational awareness. This allows one to decipher information and translate it to practical experiences more efficiently. The adaptive phase of the Adaptive-Crisis model offers three types of adaptability to support the nature of reaction to crisis situations:

Mental Adaptability

Strong mental skills are essential in response to threats which occur during a crisis. Often, it is critical to diagnose the core problem and make sense of non-routine events.²⁴ With mental simulation, extension of options can be created to assess courses of actions to respond effectively. Adaptability, therefore, involves both reactive and reflective actions that can generate courses of actions in a shorter period of time for review.

Interpersonal Adaptability

Interpersonal adaptability enhances emotional intelligence and allows one to be more critically aware of oneself and others.²⁵ With interpersonal adaptability, communication becomes more effective, which exponentially increases the probability of success in tasks. More significantly, interpersonal adaptability strengthens relationships and directs a different way of being smart. In essence, the ability to understand oneself, as well as others enhances the adaptability process.

Physical Adaptability

Physical adaptability is the ability to perform activities to suit a particular environment. It allows flexibility in response to threats and generates measures that allow organisational objectives to be met efficiently. Put simply, this means putting words in action.

Adaptive Leadership

Metaphorically speaking, adaptive leadership is the capacity that allows mental and physical states to transit into different domains under evolving conditions. This process is a continuous one that is both reflective and simultaneous. Conceptually, the adaptive leadership process is grounded on the following tenets:

a. Intuition/Gut feeling

According to Gigerenzer, intuition or gut feeling refers to a “judgment that (1) appears quickly in consciousness (2) whose underlying reasons we are not fully aware of (3) is strong enough to act upon”.²⁶ Interestingly, intuition has its own rationale, and takes advantage of the capacities of the brain to size situations up unconsciously for the purpose of adaptation.²⁷ Besides using high amounts of practical intelligence, high performance leaders such as the Special Forces, generally make decisions based on instinct, particularly when time and resources are limited due to combat conditions.²⁸

b. Sensemaking

Sensemaking is a process that is unconsciously gathered when sizing up situations. Simply put, sensemaking is about facing an event, looking back at it and thinking about.²⁹ From the perspective of sense making in crisis environments, Weick proposes an “enactment perspective”, which is seen fundamentally as a “process, enactment and a product that is infused with commitment”.³⁰

c. Experience

Experience is a critical predictor of adaptive performance.³¹ Research has shown that adaptive and experienced leaders are more likely to perform in an adaptive manner when put in new situations.³² Kolditz explains that leaders in demanding situations (he refers to such leaders as extremis leaders) provide a strong sense of purpose, and generate options with the use of the knowledge

with experience.³³ In a fast-paced environment where simultaneous decisions are made in compressed situations, the reliance of past experiences inevitably becomes an important component in the overall decision-making process.

Ironically, despite experience being known to aid decision-making, there is also criticism that the over reliance on past experiences will impede performance. Judgment is therefore needed to complement the decision-making process identified through a series of past patterns. As acclaimed thinker Edward De Bono succinctly puts it, “The brain is designed to learn through repeated exposure. Gradually patterns are formed. These patterns are then used on future occasions. The choice of the appropriate pattern depends on judgment”.³⁴ It is in this connection that the formation of mental patterns, coupled with relevant experience that will provide a sustainable advantage to the adaptive leadership process.

d. Expertise

Undeniably, experts are people who have accumulated lots of knowledge in a particular field, and preserve the ability to notice patterns and abnormalities. They are also generally more self-aware of themselves and the situation. With competent adaptive attributes and metacognition, deeper thinking is cultivated within. From another perspective, the “expert” approach transcends logical thought as new dimensions of ideas are generated through injections of ideas to enhance the adaptive leadership process.

Behaviour Modification

Implicit in behaviour modification is the cognitive senses of human beings. Positioned at the final stage of the Adaptive-Crisis model, this process enables the concept of “fitting-in” to take place. Put another way, this mental sequencing becomes an evaluation process, which involves the use of recognition heuristic.³⁵ From a scientific standpoint, this modifying experience can also be known as the sixth sense of a human being that uses the anterior frontomedian cortex (afMC) as a neural correlate that checks and limits one’s desired actions.³⁶ Diametrically, the brain makes modifications to shape one’s adaptive actions.

Developing Adaptive Leaders in the SAF

Leadership is essential in all organisations. It is certainly more relevant in the SAF due to its core business in defence, and its emphasis on human capital development. The primary concern of adaptive leadership is to solve complex and fluid problems effectively. For one thing, organisations in the SAF need to ensure that its prospective leaders are exposed to transformational experiences in their training. As a consequence, it is absolutely critical to think beyond current training systems to engage dynamic societal and technological evolutions.

Now that the tenets of the adaptive process and leadership are being explained, the next question one might ask is: How can these broad concepts be refined to develop adaptive leaders? Using the above literature discussed, it is possible to approach this issue from three positions. First, it is essential to recognise the need for adaptability as a core competence needed at all levels in the organisation. This recognition can start in organisational training,

with dedicated efforts focusing on adaptive performance, critical thinking and problem solving. These training can include interventions that encourage adaptability and experiential learning – this enables minds to move from anticipatory to reactionary domains. Taken together, one of main principles of adaptive training is to enable the integration of lateral and parallel thinking to stimulate critical thinking.

With regard to critical thinking, Halpern’s review of decision-making skills and dispositions illustrates an appropriate basis of how critical thinking can be categorised in practical problem-solving and issues of adaptability. On this note, Halpern defines critical thinking as “the use of cognitive skills or strategies that increase the probability of a desirable outcome”.³⁷ This definition creates a basis of discussion towards the issue of adaptability. The following table highlights Halpern’s categorization of critical thinking skills and how cognitive abilities can merge with the notion of adaptability.³⁸

Likelihood and uncertainty critical thinking skills	Decision-making skills	Problem-solving skills	Skills for creative thinking
<ul style="list-style-type: none"> • Utilising base rates to make predictions • Adjusting risk assessments to account for the cumulative nature of probabilistic events • Thinking intelligently about unknown tasks 	<ul style="list-style-type: none"> • Generating alternatives • Evaluating the consequences of various alternatives • Recognising the bias in hindsight analysis 	<ul style="list-style-type: none"> • Recognising the critical role of persistence • Selecting the best strategy for the type of problem • Actively seeking analogies 	<ul style="list-style-type: none"> • Redefine the problem and goal • Brainstorm (without censoring or evaluation) • Visualise from other perspective

Figure 3: Extract of Halpern’s Categorisation of Critical Thinking Skills

Lastly, it is recommended that training interventions include problem-solving routines in curriculum.³⁹ Additionally, leverage on gaming technologies to increase human efficiencies in hypothesis testing and reflection can further enhance the overall adaptability process. Other recommendations to increase one’s adaptive skills include the use of testing applications, discovery learning and deliberate feedback sessions to train adaptive performance.⁴⁰ With these recommendations in mind, organisational leaders must nevertheless, take the first step to build this “diagnostic” culture. They should continuously learn, relearn and unlearn ways of moving beyond the boundaries of conventional viewpoints in order to gain a competitive advantage in the industry.⁴¹ At the basic level, leaders can address the issue of identification of adaptive characteristics using a generic criteria originated from US Special Forces training.⁴² (See Figure 4 for adaptability characteristics across broad attribute scales).

Training Potential of Adaptability Characteristics			
Stable Attributes		Malleable Attributes	
Cognitive Ability / Intelligence Openess Resilience Tolerance for Ambiguity Achievement / Motivation		Problem-Solving Decision-making Skills Metacognitive Skills General Self-Efficacy Communication Skills (Negotiation and conflict resolution, persuasion, Awareness (self, others, situation) Domain-specific knowledge Varied Adaptive Experience	

Figure 4: Table showing Scale of Adaptability Characteristics.

Discussion

In final analysis, there are a few areas are set out for discussion. Based on the literature set out in the article, the central concern of intuition is to make optimal decisions with the necessary adaptive skills. Against this background, Smith proposes that learning from previous crises, and testing of contingency plans are some options that lower the probability of crisis escalation.⁴³ On the same note, Gigerenzer maintains that more information in a crisis situation might not be necessarily better,⁴⁴ whereas Klien propounds the necessity to train individuals to capitalise on instincts to solve problems without over-reliance on logical thought.⁴⁵ From these assertions, there is indication that the issue here appears to adaptive rather than systematic to solve the *problematik*.

Given the multiple intellectual expressions of leadership and crisis management, it is critically important to illustrate two main observations between crisis management and adaptive leadership. First, crisis management is primarily reactive, and addresses crises only after they have happened.⁴⁶ Second, adaptive leadership seems to be more individualistic but it can, however, transit seamlessly into the strategic and tactical areas of an organisation’s leadership continuum given its flexible nature.

While this article can address some issues on adaptability, it is noted that not all areas of the subject area can be answered. Arguably, the article comes with some limitations. First, the processes highlighted are generalised across occupations and are therefore, not intended to solve all organisational problems. Second, this article focuses on content analysis, which does not rely on scientific deductions. While content analysis is probabilistic, it does enable an accurate analysis of social phenomena, and is “far superior to reading for impression on this score of objectivity or impartiality”.⁴⁷

Overall, the processes discussed in this paper provide a set of guidelines to address the issue of increased demands on adaptability in current times of global institutional failures. This requires a new consciousness and leadership capacity that can fundamentally alter the ways people think about critical issues. It is envisaged that the enhancement of adaptive skills and leadership, will not only increase strategic, but also operational processes within the 3rd Generation SAF. As noted earlier, Einstein said before that the kind of thinking that is responsible for problems cannot be used to solve them. In this age of terrorism and massive institutional failures, the extension of such a thought is especially applicable.

Conclusion

Given the current unpredictable security environment and global economic downturn, the notion of adaptability has become even more crucial for the SAF. It has been suggested throughout this article that adaptive leadership is relevant in organisations. As discussed in the article, the crisis management process highlighted problem areas in a typical crisis situation, whereas the Adaptive-Crisis model illustrated a sequence of processes till an effective response is reached. The other models presented offered insights in risk generation and crisis management as they are predicated on an extensive review of the intended research literature.

While the general qualities of analysis of logical thinking would be of great benefit regardless of contextual application, the study of crisis management and decision-making in particular affords a macro analysis of systems, processes and the flow of information within organisations. The contents in this article indicate that adaptive leadership provides organisations with the ability to anticipate and respond to crisis situations. However, it is also noted that that current leaders should recognise present evolutions, and adjust to future environments by modifying the way they worked in the past. Finally, this discussion marks the beginning of potential dialogue around the issues of adaptability, crisis management and leadership, which may generate new insights into research across multiple areas. The next challenge will be to move from theory to practice.

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MAJ Ng Wei Khian

MILITARY FREEFALL PARACHUTING: A FUNDAMENTAL SPECIAL FORCES SKILL

Introduction

THE IDEA OF SPECIAL FORCES acting behind enemy lines is an old one. In 500 BC, when Chinese strategist Sun Zi wrote his definitive work, *The Art of War*, he described the need for armies to develop units called “Living Agents” to infiltrate into the territory of enemy and return safely with information.¹ He further emphasised that a person who is unwilling to use spies and secret agents in war is not a good general or capable assistant to the ruler as the military intelligence collected would allow the ruler and generals to achieve victories in war that far surpass many others.

Sun Zi’s “Living Agents” still exists today and with a more offensive role than that era – they are commonly known as Special Forces. These elite forces are capable of conducting operations far more than just intelligence collection. Recognising the importance of special forces in war and the changing operating environment as our enemies seek new methods of detecting our movement, the difficult task today is to overcome the myriad of advance screening and early detection technologies to insert Special Forces into the enemy’s territory undetected.

Recounting some of the declassified operations conducted by highly trained military units such as the US Special Forces and UK Pathfinder, this article aims to elucidate the concept and myth behind special forces operations and the application of advanced military freefall (MFF) parachuting and technologies in vital and dangerous tasks demanded by every kind of extreme situation, both in peacetime and in war.

Advantages of Parachute Operations in Combat

“The difficulty about the art of manoeuvring is to convert difficult and torturous routes into direct accesses (to the enemy), and to turn disastrous circumstances into advantageous situations.”²

- Sun Zi

Sun Zi emphasised on arriving at the battleground early as it confers a lot of first mover advantages over the enemy. It is for this principal consideration that many armed forces have researched and invested heavily into developing technologies for rapid force projection and what is notable is that the techniques are not confined to space and time but limited by technology. One of the traits of Special Forces is the ability to infiltrate by air, land and sea anytime, anywhere, and the use of parachuting in combat has overcome the inherent terrain limitations in many ways.

Parachuting is a fundamental Special Forces skill of most armies in the world. It is primarily utilised to project lightly equipped forces expeditiously into areas of operations where surprise and shock actions can create a military advantage. Low-flying aircraft can avoid radar detection and then ascend very quickly to parachuting height just before the paratroopers jump. Alternatively, specialised high altitude parachuting techniques using Ram-Air Parachute Systems (RAPS) can offer standoff low-signature insertion into the areas of operations undetected. These techniques are commonly known as High Altitude Low Opening (HALO) and High Altitude High Opening (HAHO). In the HALO technique, the paratrooper opens his parachute at a low altitude after freefalling for a period of time and this gives great accuracy in landing. This technique is used to airdrop military supplies, equipment or personnel at high altitude where aircraft can fly above surface-to-air missile engagement levels through enemy skies without posing a threat to the aircraft or load. The combination of high speed downwards, and minimal metal and forward air-speed serves to defeat radar, enabling a stealthy insertion. In HAHO, the paratroopers open their parachutes at high altitude after a few seconds exiting from the aircraft. This technique is used to airdrop personnel at high altitude when aircraft is unable to fly above enemy skies without posing threat to the jumpers, and also in circumstances where the covert nature of an operation may be compromised by the loud noise of parachutes opening at low altitude. Typically, paratroopers will exit the aircraft and deploy their parachutes at high altitude, seven to nine seconds after the jump. Thereafter, jumpers will use a compass or Global Positioning System (GPS) for guidance while flying for 30 or more miles depending on the glide ratio³ of the RAPS used. The paratroopers will also use way points and terrain features to navigate to their desired landing zone, and occasionally correct the parachute flight path to account for changes in wind speed and direction (See Figure 1).

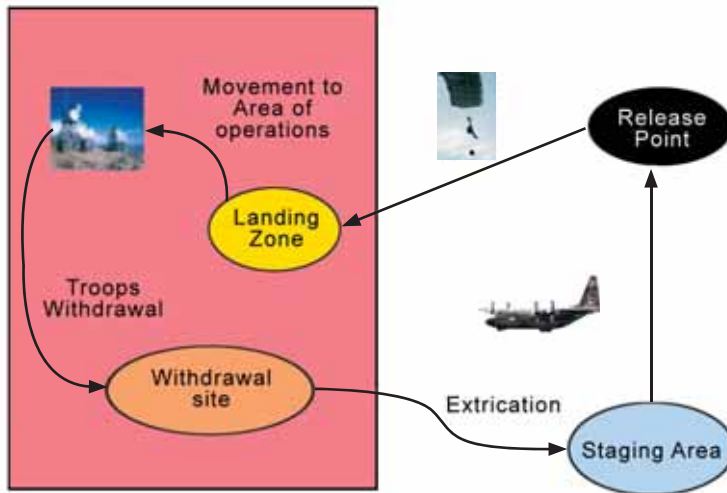


Figure 1: Schematic of a HAHO Operation

SEAL Team Six of the United States Navy expanded the HALO technique to include delivery of boats and other large loads in conjunction with the team members.⁴ They would first drop an inflatable boat loaded with supplies. Once inside the water, they would cut the boat free of its parachute and use it to make their way to the designated coastal landing site. This method is also used if the Special Forces are required to make an attack on enemy surface ship. By parachuting into the sea well away from their target area, Special Forces can be reasonably certain that their infiltration will not be detected.

One of the early proponents to utilise parachute operations to gain military advantages during combat was the German dictator, Adolf Hitler (1889-1945), a World War I veteran. He was quick to embrace the idea of delivering troops into battle by parachute to avoid the trench deadlock he had experienced during World War I. By the outbreak of World War II in September 1939, Germany had a fully trained airborne unit, the 7th Parachute Division. Its effectiveness was proven in May 1940 when its paratroopers captured the Belgian fortress of Eben Emael, and key bridges near Rotterdam, Holland. This operational concept of combining overwhelming firepower (tanks, artillery and air support) coupled with rapid forward movement constituted the German *Blitzkrieg*⁵ (Lightning War) that had crippled the Allied forces and ensured many victories in their campaign during the early phase of World War II.

Evolution of Military Freefall Parachuting

Leslie Leroy Irvin, an American, made the first pre-meditated freefall parachute jump in April 1919 using a hand-deployed ripcord instead of a static line. His contribution revolutionised parachuting and heralded the advent of freefall-parachuting. Freefall-parachuting was predestined to have a military application. The development of HALO dated back to 1960 when the US Air Force was conducting experiments that followed earlier work by COL John Stapp in the late 1940s⁶ through 1950s on survivability factors for pilots needing to eject at high altitude during emergencies. In 1960, CPT Joe Kittinger jumped from a balloon 19 miles above the earth. He fell for four minutes and 36 seconds before deploying his parachute, and that set a world record then. He experimented with the effects of high altitude bailouts on

the body as part of PROJECT EXCELSIOR.⁷ The lessons learnt were used to improve safety for military aviators during high altitude bailouts. A decade later in June 1971 marked the first military application of freefall when the US Special Forces from the Military Assistance Command Vietnam-Studies and Observation Group (MACV-SOG) applied the HALO freefall technique for surreptitious entry into enemy territory. Shortly after, US Special Forces started the MFF School at Fort Bragg, N.C., using lessons learned from MACV-SOG.

Parachute Operations in Modern Warfare

Through the years, the application of MFF become more prevalent as operators continued to research for more innovative methods to enter restricted or denied areas undetected. The use of commercially available RAPS offers the capability to perform extreme standoff High Altitude Parachute Operations (HAPO) with precision GPS and force-tracking systems that allows jumpers to exit, fly and land as a team on unmarked and restrictive landing areas.

“Military Freefall has, historically, been viewed as the last alternative of insertion because of the high risk of the operation. For this reason, commanders usually err on the side of safety by looking at other means of insertion. Furthermore, a traditional MFF team is typically used as a small element for reconnaissance insertions, not for purely offensive operations”

- ODA 074 team members and CPT Karla S. Owen⁸

Since the Vietnam war, the last documented MFF in combat by a Special Forces team was in January 1991 when a 12-man team was inserted into the northwest desert of Iraq in support of OPERATION DESERT STORM. More recently in May 2007, Special Forces from the Operational Detachment - Alpha 074 (ODA 074), 3rd Battalion, 10th Special Forces Group used MFF in support of OPERATION IRAQI FREEDOM. Rarely has a MFF team been inserted to conduct an offensive operation. They used this method of insertion only once per military campaign, and even then, it was used primarily for surveillance or targeting operations. The ODA 074's mission was to capture a suspected terrorist with ties to traffickers in counterfeit US currency and a criminal network known for supporting the movement and funding of foreign fighters, weapons and equipment into the country. The team had to take the village in total surprise for the mission to be successful as the enemy had implemented a robust early warning network, taking advantage of the remote location, and thus giving them the ability to escape or destroy evidence within minutes. After careful study of the terrain and the capabilities of the terrorist network, the team leader elected HALO as the mode of insertion to overcome the early warning system. On the ground, a joint US-Iraqi quick reaction force would provide assault support after the team took the village by surprise. The mission was successfully conducted as the team completely surprised all the villagers it encountered and the objective was achieved within minutes.

Besides the US Special Forces, the Pathfinder Platoon from the British Parachute Regiment is another elite unit that uses parachuting in their military campaigns. The Pathfinders specialise in airborne insertion behind enemy lines and then conduct various long-range intelligence-gathering tasks and marking of Drop Zones (DZ)/Landing Zones (LZ) prior to the arrival

of the main force. Secondary roles include providing light role defence for the incoming assault force, coordination and control of air defence assets and conduct high priority direct action tasks. The Pathfinders have seen many operations since its inception during World War II. They were tasked with dropping in ahead of the main force and securing a DZ for allied Paratroopers. They would then dig in and perform reconnaissance duties. They became the Regiment's "eyes and ears". In OPERATION PALLISER, the Pathfinder Platoon was deployed into Freetown, Sierra Leone in May 2000 to bolster a beleaguered United Nations (UN) peace-keeping force. It was the gun battle that took place in the village of Lungi Loi located 60 km from the main UN base at Lungi International airport that gained the world's attention. The Pathfinders defended the village against the approaching Revolutionary United Front (RUF) guerrillas and military analysts estimated that it was this operation that led to the ceasing of hostilities from the RUF in the country.⁹

Though not widely publicised and documented, many Counter-Terrorist (CT) units in the world also embrace MFF as one of the methods of entry for operations, and one such unit is the Central Security Operations Service¹⁰, NOCS, a special operations division of the Italian police specialising in anti-crime and counter-terrorism. As MFF offers standoff and landing accuracy capabilities, members from the CT unit can be dropped off from the aircraft some distance away from the building under siege and manoeuvre themselves under their canopies to land accurately on top of the building, and from there conduct the direct actions and hostage-rescue.

Future of Military Freefall Equipment and Technologies

The techniques for mission planning of MFF operations are extremely complicated and the jumpers are burdened with a vast amount of information accumulated from many inputs. With the advent of advanced parachuting equipment and technologies, coupled with the changing operating environment and types of mission, it added greater complexity to the planning process. Partnership between military and commercial companies is an important factor to overcome the technology edge. For instance, German company ESG developed a "set of wings" to enable parachutists to travel over a longer distance in the air (See Picture 1). Today, civilian skydiving is a huge market and because of its favourable economical returns, many commercial manufacturers have invested dearly into research and development for advance technologies and parachute systems, and this has benefited the military many ways in terms of skill improvement through better training aids (wind tunnel and simulator), and capability to glide further with the development of superior light-weight parachute materials and powered parachuting such as the paraglider. To remain effective and relevant, MFF teams must be in tune with the current development and constantly acquire and maintain state-of-the-art MFF equipment. Nevertheless, it is worthy to note that in special operations, the human being is more important than the hardware. Technology supports the operator, not the other way round.

Even till date, accurate navigation while under canopy has plagued both HAHO and HALO operations. MFF teams rely heavily on visual in order to navigate to a target area and land properly. During adverse weather conditions such as heavy rain, snow and cloud, it would pose challenges to the MFF teams in navigating to their desired landing zone. However, these are the factors that greatly reduce the possibility of detection by the enemy. The introduction of GPS has changed the way MFF mission are planned. By integrating GPS

with the parachute system, MFF teams will be able to land precisely on target even during adverse weather conditions. Moreover, MFF teams can now plan to operate deliberately within these conditions to avoid detection.

The Natick Soldier Centre is developing a GPS computer terminal - named the Joint Precision Air Delivery System Mission Planner, or JPADS, to be mounted inside the aircraft. This system allows the GPS on the jumpers and the JPADS on the aircraft to communicate wirelessly with each other and also simultaneously transmit updated mission information and meteorological data. The JPADS works through a small torpedo-shaped radiosonde which is released by the aircrew within 50 km of the target. As the radiosonde falls, it acquires real-time meteorological data and transmits the information back to JPADS, which calculates the updates against the mission requirement and transmits the data to the MFF team's GPS. This system boosts mission success and minimises navigational error.



Picture 1: The 'Batman' Suit¹¹ This suit was made by German Company ESG, and was tested by a sports enthusiast to fly across the English Channel.

Conclusion

Sun Zi concluded his whole treatise by emphasising the importance and contributions of “spies” in winning wars. He further added that the enlightened ruler and the capable general must be prepared to put their most capable and intelligent personnel into espionage activities and operations for without them, victories in war cannot be won. Indeed, special operations and intelligence-gathering form an integral part of any military campaign as the planning of strategies and the movement of troops depend heavily on information gathered by them. The application of MFF has allowed rapid and covert deployment of these special operators to carry out their missions in restricted and classified areas undetected. With the advent of advanced technology, MFF equipment is increasingly safer and more reliable, making the MFF option even more relevant today.

Endnotes

- ¹ C. H. Wee, *Sun Zi Art of War: An Illustrated Translation with Asian Perspectives and Insight* (Singapore: Prentice Hall, 2003), p428.
- ² Ibid, p172.
- ³ Glide ratio is a measurement of vertical descent vs. horizontal drift. For example a glide ratio of 1:3 would mean for every 1000 ft of descent, the paratrooper can glide 3000 ft (approximately 1 km) lateral distance.
- ⁴ Mark Divine, *Navy SEALs Air Operations - Free Fall US Navy SEAL 1989 to Present* (2004).
- ⁵ Peter Chrisp, *Blitzkrieg! - Witness History Series* (New York: Bookwright Press, 1991).
- ⁶ Nick T. Spark, "The Story of John Paul Stapp", *The Ejection Site*. Online. Available at <http://www.ejection-site.com/stapp.htm>.
- ⁷ Jeffrey S. Hampton, "Hero of Aviation Speaks About Record-Setting Freefall", *The Virginian-Pilot*. pY1.
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MAJ Lee Swee Hiong Robin

3rd GENERATION SPECIAL FORCES:
MANAGING TRANSFORMATIONAL TENSIONS

Introduction

SPECIAL FORCES (SF) refer to the military units that are relatively small, highly skilled and mobile across different mediums (Land, Sea and Air) that proved to be successful in conducting specialised operations such as Special Reconnaissance, Unconventional Warfare, Direct Action and Counter-Terrorism. Owing to their ‘small footprint’ and ‘high success rate’, many states including Singapore, ensure that their Special Forces remain as their elite forces. As the global security environment becomes unpredictable, SAF Commandos (Cdo)¹ has embarked on the transformation towards a 3rd Generation SF, in order to better handle complex operations full spectrum operations in this new order environment. While the transformation journey is fruitful, transformation tensions have arisen during the transition towards 3rd Generation SF.

The objective of this essay is two-fold. This essay will attempt to contextualise the transformation tensions. In particular, it will look at the cross domain tensions caused by the influx of new factors today. The essay will also propose several initiatives within each domain to manage and overcome the transformation tensions.

Overview of 2nd Generation Commandos

In 1967, Dr. Goh Keng Swee, then Minister of Defence, and his project team established an elite unit to specialise in unconventional warfare for the SAF.² Against the backdrop of political uncertainty and hunger for the nation’s survival, the formation has grown from a small group of regulars (29 officers and other ranks) into a professional force capable of delivering a spectrum of capabilities, which sets them apart from other SAF units. The following segment of the essay presents an overview of the SAF SF.

Capabilities of the SAF Elite

Like any other Special Forces in the world, the SAF SF is specially trained, equipped and organised to conduct operations against targets in pursuit of specific objectives. Fundamentally, the SAF SF possess similar characteristics as that of other renowned Special Forces,³ such as high flexibility, agility and dynamism. The SAF SF enhances the SAF ability to deal with increasing challenges posed by the new security landscape. Of importance, the SAF SF provides the SAF with an expanded capacity to carry out special operations, peacetime counter terrorism (CT) operations and peacetime contingency operations (PTCO) through cross-service integration. In war, the SAF SF will conduct SF operations to achieve specific objectives.

Transformation Tensions in Transformation towards 3rd Generation Special Forces

While the SAF SF is a relatively young military community when compared to other SF such as UK SAS/SBS and US Special Forces, their limited operational experiences and interaction with other states' SF have moulded them to form their own unique learned behaviour patterns and perceptions. The 3 most unique aspects in the Commando Culture are (1) Strong Sense of Mission, (2) 'Never Say Die' Attitude and, (3) 'Can Do' spirit; with each producing distinctive outcome and benefits that stay with the SF.

Like any other organisation undergoing transformation, the SAF's transformation journey will face transformation tensions and this is unavoidable due to the sheer magnitude of transition, in organisation restructuring, new operating process, new warfighting concepts and new technologies. Similarly, the transformation to 3rd Generation SF will face unique transformation tensions (See Figure 1). As the environment becomes more complex with many unpredictable elements (highlighted in red), the current order of work in the 3 domains will grow more susceptible to tensions, typically at the intersection of domains. Understanding these tensions will allow SF to manage potential conflicts and possibly avoid pitfalls, during the process of transformation.

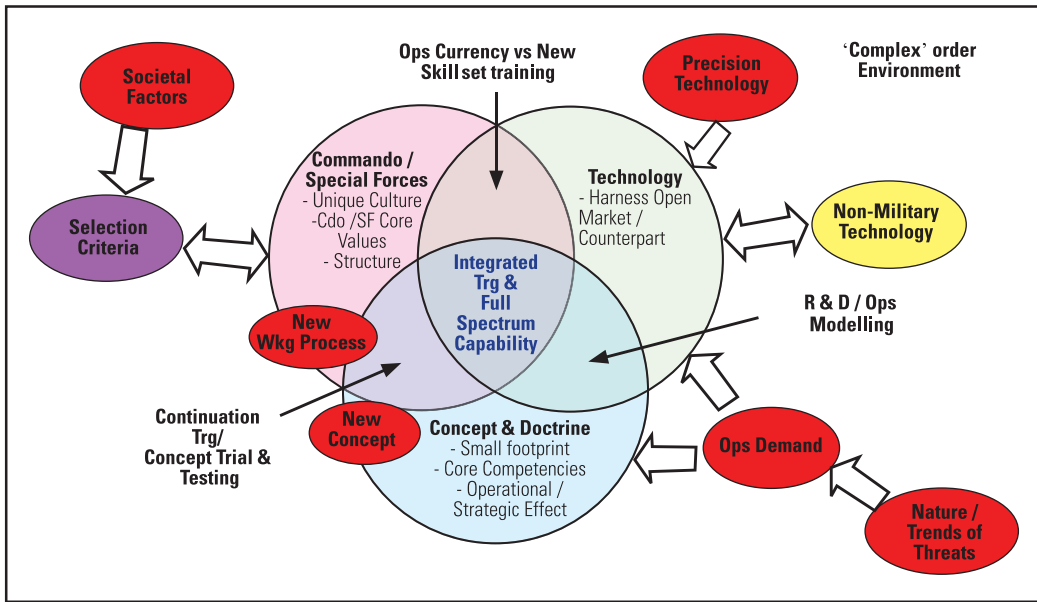


Figure 1: Transformation Tensions Across 3 Domains

Tension 1 – Developing New Edge Versus Sharpening Current Edge

The SAF SF have been enjoying the fruits of the labor seeded by our predecessors and is often tasked to spearhead new possibilities. More importantly, the ability to respond swiftly is essential. The tension arises when transformation efforts are being introduced; it is usually messy and inefficient, disrupting the existing order of things. Resources and efforts that are primarily committed to maintain operational readiness and training may be diluted to develop new capabilities. The tension is further felt when trials and experimentation are not directly beneficial. Such tensions, if left unmanaged, could have negative effects, perhaps resulting in a 'Pay Lip Service' approach being adopted.⁷

Tension 2 - Over-emphasis on Technological Innovation

Traditionally, technology has played a vital role in the SAF's developmental journey. Deeply embedded within the SAF's psyche, it has also manifested in multiple aspects in the capabilities of SF. As the leaders of technology shift from military to civilian, it is logical that SAF would harness the extensive and flourishing science and technology base on Research and Development (R&D), as well as take full advantage of the benefits conferred by new technologies like unmanned vehicles, precision fire weapons and sophisticated networks⁸ in order to create a formidable fighting system. It is therefore much easier to simply default into an existing comfort zone and fully assume that technology alone will transform the organisation. If the same argument is stretched, the idea that 'Technology can replace the Special Forces' could even be imprinted in our mindset. For example, with precision weapon getting more accurate and affordable, the opportunities to employ Special Forces in operations would correspondingly be lowered, eventually rendering the SF irrelevant. Believing this idea can possibly breathe complacency into the training of Special Forces as such examples could

be used to reinforce the negativism of many individuals who are straddling between ‘resisting change’ and ‘embracing change’, which is detrimental to the overall transformation efforts in becoming the 3rd Generation SF.

Tension 3 – Learning What Is Relevant

By and large, the learning approach that is inherent within SAF SF has been systematic.⁹ The new complex environment demands new order of business and places even higher expectation on efficiency, especially when resource optimisation is key. The new order of business entails restructuring of organisation into task-oriented and cross-functional centric. The tension of relearning what is relevant is most apparent as the equation of efficiency sinks in. The old order of working systematically and self-discovery within SF now faces tension as there is a disparity in knowledge and expectation between generations of Commandos, which may lead to potential clashes of mindsets. Doctrine which seems relevant and operationalised painstakingly through this systematic process might not be seen as relevant in the new complex environment. And with multiple functional agencies experimenting with new concepts and doctrine, there is a pressing need to ‘Unlearn the irrelevant’ and ‘Learning the relevant’ as it would affect the transformation efforts to maintain operational capabilities.

Overcoming Transformation Tensions

It is crucial that the above mentioned transformation tensions be managed and addressed to ensure effective transformation. The approach to the transformation tensions must not be the ‘tic-for-tac’ approach as fundamentally, the root cause of these tensions arises through its respective domains. The way to overcome these tensions is to identify the Centre of Gravity (COG) within each domain that can act as an interlocking mechanism with the other two. (See Figure 2). The COGs for the respective domains are (1) People - To create a breed of highly versatile 3rd Generation SF who are multi-disciplined, anchored on SAF and Cdo culture and core values; (2) Technology - To create a sustainable SF R&D inherent within the Special Force community that is built on existing SAF acquisition approach, and (3) Concept - To categorise SF competencies into different priorities that possess the characteristics of ‘Rapid Deployability’ & ‘Scalability’. The following segment of the essay will be focusing on how these Domains’ COG could facilitate the management of cross domain tensions.

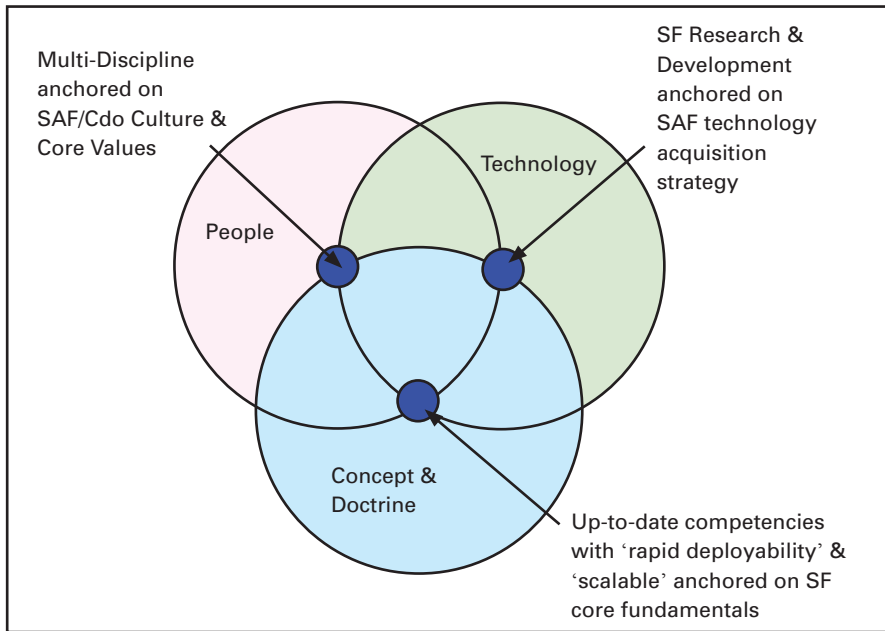


Figure 2: Transformation Tensions across 3 domains

COG 1 (People) – Versatile and Multi-Disciplined 3rd Generation SF

Globalisation has created a fast paced world that is swamped with information. This phenomenon brings about the need to have fingertip situational awareness and making swift and effective decisions, even in the efforts to combat threats in the new order environment. To operate in the new order environment, the 3rd Generation SF needs to be versatile and possess a full suite of hard and soft skills in order to operate effectively and dynamically. Notwithstanding his primary role of eliminating adversary, the 3rd Generation SF is required to play a 'soldier-diplomat' role, one that requires him to be more savvy and coherent with cultural, political and economical intricacies¹⁰ while operating in a multi-agency/coalition setting. While traits of a 2nd Generation SF, such as being flexible, nimble and technologically savvy remain relevant, the new training of versatile and multi-disciplined SF calls for a shift in existing training approaches.

Training for New Order Environment

Training of the 3rd Generation SF must promote decision and calmness in chaos; it must developed an effective response to unfamiliar challenges. The end objective is to cultivate a sense of mission and understanding by the 3rd Generation SF to make logical and efficient decision under all scenarios.

Uncertainty Training / Adaptive Training

The idea of applying what you have learnt in the past to new problems no longer works in this world of uncertainty. The ability to handle uncertainty has been widely attributed to the level of cognitive skills an individual possesses. For the 3rd Generation SF operator, it is important that cognitive skills are to be developed or even levelled up in order to enhance the ability

to handle uncertainty. Based on past empirical tests conducted on US Naval Warfare officers, officers whom are trained to adopt a 'Naturalistic Model' of critical thinking through Recognition/Metacognition process, were better in all 4 aspects of STEP¹¹ decision making under uncertainty.¹² As such, the idea of 'Naturalistic Model & STEP decision making' could be put on trial into tactical leadership training and lower level unit training. Through such exercises, higher level cognitive skills, such as auditory attention and discrimination, listening skills, undivided attention, visual scanning, short-term memory, and faster mental processing speed can be further developed. In addition, as part of Cognitive Training, an education programme (elaborated in COG 3) could be conducted in tandem.

Time-Sensitive Effect Based Training

Peacetime training has always revolved around 'technical/competence training' and 'pre-planned scenario training', both with explicit training objectives to be met. Notwithstanding training safety as the reason for any form of 'predictability' in training, the control culture¹³ that exists within military is partly attributed as a casual factor. A more realistic approach should be adopted to develop an effect-based thinking in the 3rd Generation SF operator. To deliver the overall effect desired it is proposed that a 'time-sensitive effect based training' be adopted within SF training at the detachment and company level in order to react to modern threats. To support this approach, the following initiatives are to be considered: (1) Devise a 2-hour swift Battle Procedure, (2) Incorporate an 'Effect' statement of kinetic and non-kinetic nature, such as physical destruction and effects on enemy/surrounding populace, (3) Create training missions made up of multiple complexities, that includes non-military elements.

COG 2 (Technology) – Special Forces Research & Development

Under the technology domain, the harnessing means should underpin the following two approaches in order to expedite research and development, and advance operational solutions to meet critical and urgent operations. The following means are proposed:

Operational Solutioning

With the wealth of operational experience, the SAF SF should be fused with the technical expertise of local engineers. During the SAR crisis, DSTA and DSO engineers were able to provide quick operational solutions by reconfiguring weapon thermal sight systems into portable body thermal scanner systems. The entire process can be streamlined by constantly engaging engineers and integrating them into the planning process in order to draw alternate perspectives into the problem. While it is understood that some operations remain closed in nature, the engagement process can move beyond the existing partnership with local DSTA and DSO engineers; tapping into the pool of NSmen, who can offer fresh perspectives.

Research & Development

The partnership with engineers can extend to development stage by adopting the horizon scanning approach (elaborated later in COG 3). By researching and analysing trends and patterns of threats or emerging technologies, new solutions could potentially be derived. Modelling and prototypes could be built and put to test and eventually be translated into new operational ideas for capability development.

COG 3 (Concept) – Relevant SF Competencies

In the domain of developing new fighting concept, the COG is to create an up-to-date SF competency that is scalable and rapidly deployable in nature. To do so there is a need to first accord all existing and new competencies by priorities of importance which correspond to threats. To do this, there is a need to gain clarity on emerging threats so as to reinforce the level of deployability, knowledge and mindset of the 3rd Generation SF operator. The following three initiatives are proposed:

Threat Analysis

Anticipating and preparing for future challenges, trends and opportunities is an essential component facilitating the creation for more capacity. It is a systematic examination of potential threats and likely future developments. This can be achieved through 'horizon scanning'. As the threats become unpredictable, the counter measure would be to understand the psyche of potential threats. While the horizon scanning effort is available at the national level (National Security Coordinating Committee – NSCC), the coordination and sharing of information remain compartmentalised, selective and often driven by policy.

Refocusing on SF Core Competencies

Barry Desker pointed out that even though the notion of transformation emphasises on the concepts of 'system of systems', this approach may not necessarily be useful in dealing with Low-Intensity Conflict (LIC).¹⁴ As the SAF moves to create a more coercive fighting system at respective formation level, it still needs to focus on its core competencies to ensure that the 'system of systems' that has been built up over the years remain a relevant one. Although the reorganisation of the Commandos has taken effect, its core competencies remained largely unchanged. Refocusing of Core Competencies need to be taken with careful considerations: (1) The study must be undertaken by a focus group comprising of SF individuals serving beyond the Commando Formation; (2) The understanding of the potential threats must be strong, in order to critically identify the appropriate capabilities required for SF to respond; (3) The mindset of 'Perfecting the present edge' must be suspended by the study group as it would be seen as turf-guarding, hence limiting the options of freeing up existing competencies; (4) Recognise that there will be possibilities that existing capability or competency will be divested to conventional forces, especially duplicating or redundant ones and; (5) To make recommendations on which SF core competencies in the level of

importance and applicability. The outcome of this refocusing effort allows the formation to redefine the SF core competencies. This is taken in tandem with the Horizon Scanning effort that is proposed earlier, where the understanding of threats and their modus operandi is much better.

Education Programme

Education in the 3rd Generation SF is vital to respond to threats effectively. It is important for the 3rd Generation SF operator to attain the ability to look at things through a holistic lens. To do that, it is important that the basic theoretical aspects of warfare are conveyed and an awareness of negative mindsets are cultivated through the education process. One approach can be through the conduct of case studies conducted on a periodic basis anchoring on certain themes or series. It can be used to achieve the following objectives: (1) Understand the idea of Centre of Gravity through the study of relevant asymmetric tactics used in different war contexts.¹⁵ This will aid the 3rd Generation Operator to better appreciate the idea of Effect Based Training; (2) Education of Negative Mindset, where mindset such as ‘Last War’ syndrome can be dangerous; (3) Better understand the relevancy of SF in current operations through a study of ongoing interstate conflicts to identify the intricacies of LIC and understand asymmetric threats. SF who served in UN missions can also share on their roles in missions, which could aid in identifying new areas of development.

Conclusion

The challenges and tensions arising from crucial changes are pivotal to the unit. SF will have to grapple with changes and tensions in the transformation process and continue to anchor upon their unique traits and characteristics along with its inimitable culture and values to deal with an unfamiliar environment. A strong SF identity will help to ease transformational tensions within the organisation and at the same time enables Singapore’s SF to stay relevant with the new world order.

Endnotes

- ¹ SAF Special Forces in this article refers to SAF Commandos, which include SOF & all Commando units.
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- ³ Special Forces such as UK Special Air Service (SAS) and Special Boat Service (SBS), US Green Beret Special Forces (SF).
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- ¹¹ STEP analysis process places emphasis on 4 key aspects: (1) Building stories based on assessment, (2) Test the story using data identified or conflicting knowledge, (3) Making Sense of the story and (4) Formulate Contingency plans.
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COL Tan Tai Tiong

EVOLUTION AND ESTABLISHMENT OF 3rd GENERATION SPECIAL FORCES IN THE SINGAPORE ARMED FORCES

Introduction

THE CREATION OF THE SPECIAL OPERATIONS TASK FORCE, or SOTF, is a significant milestone in the development of its Special Forces (SF) in the Singapore Armed Forces. This essay details the evolution and establishment of the SOTF, in line with the Third Generation drive to transform the SF into a lean and effective edge for Singapore.

Evolution

Among the first recorded special operation in Singapore was in 1943. OPERATION JAYWICK was led by Lieutenant-Colonel Ivan Lyon. He led the Special Operations Executive 136 Force to conduct a successful raid against Japanese ships in the port of Singapore.¹ Using a Japanese coastal fishing boat, the team used two canoes, paddled 50 kilometers, and placed limpet mines on seven Japanese ships,² leaving 40,000 tons of Japanese shipping out of action.

Another significant event was the successful rescue of all hostages on board the hijacked Singapore Airlines flight SQ117. The Special Operations Force (SOF) stormed the plane that was overtaken by four hijackers, who claimed to be members of the Pakistan People's Party. The SOF eventually rescued the entire 118 passengers and eleven crew members unharmed.

The evolution of the Special Forces (SF) in the SAF has three distinct phases. In the early years, SF units were set up respectively in the Army and the Navy.

In the second phase, working committees at Joint level were set up to oversee the development of these SF units, including annual training exercise and capability development. These working committees provided directions and focus for the SF units in the Services.

In the third phase, in line with the vision of a Third Generation SAF, the SF units came together to discuss the establishment of a Headquarters Task Force. The results of the study, spanning across two years, led to the formation of the Special Operations Task Force (or SOTF), which was publicly disclosed by the Deputy Prime Minister and Minister for Defence Mr Teo Chee Hean on 30 Jun 09.³

Establishment

The Need for Third Generation SAF

The SAF embarks on the 3rd Generation SAF journey because of the dynamic security environment, to make efficient use of resources, and to exploit the advanced technology.⁴ The 3rd Generation SAF will be technologically advanced, integrated and networked, and will focus on people and values. What is clear to the SAF leadership is that with more complex security challenges, and evolving threat tactics, no single Service can deal with these challenges as effective as the entire SAF. The SAF has therefore moved beyond looking at single-Service solutions to current security challenges.

The Need for SOTF

In the early years, the concept of individual SF units *within* each Service made sense due to the urgent need to build up the defence capabilities of Special Operations within a short period of time. Moreover, the “eco-system” within each Service enables the SF units to have the necessary support as they concentrate on training in their respective domains. At that point, there were also ample opportunities for knowledge exchange and communication among the SF units because of multi-agency training exercises.

However, while these arrangements were satisfactory, they were not ideal. The range of tasks facing the SF units is wider now. There is a requirement now for SF not just to respond to operations but also contend with an array of threats and respond to peace time activities such as rescue in support of submarine operations.⁵

Modern operations are often complex and uncertain. This saw an urgent need to leverage resources from the entire SAF and Singapore’s defence industries to create a force that is flexible and capable of responding to modern threats. This new task force structure will allow the SAF greater capacity to deal with the evolving threat situation in a more decisive and coherent manner.

Task Force or Command: The SAF Experience

In a command type organisation, the commander is responsible to raise, train, and sustain the forces for subsequent deployment. In a task force organisation, the commander is responsible to accomplishing the task, using the forces that are assigned to him.

The SOTF is an Operational Task Force with a standing HQ. It is responsible for a range of tasks that exist throughout the peace to war continuum. The assignable forces under the HQ SOTF include the SF (Army), SF (Navy), Air component and other SAF combat forces. Appropriate teams will be assigned to SOTF based on the requirements of the task. This arrangement enables the deepening of the domain expertise that resides within the Services, and provides the flexibility to configure the force package from the whole SAF to deal with specific tasks.



SOTF Troopers rappelling from a building

The Future of SOTF

Moving forward, the SOTF shall be guided by several considerations. First, the SF will always be highly trained and must possess deep expertise. Only then will they be considered as “extraordinary forces” as defined by Sun Tzu.⁶ Without deep competencies, the SF would not be able to effectively deal with an enemy that is highly adaptive, while operating in a volatile, uncertain and high-risk environment.

Next, the SOTF recognise that SF cannot be mass produced, and that each SF trooper is given sufficient opportunities to grow and learn. The team is only as strong as individual trooper. The excellence of the troopers should take precedence over its quantity. The quality of relationship among the SF troopers in a single task force is particularly important. To complete every mission successfully, they have to be guided by the core values of honour and team spirit. In addition, the support from the Services is critical in sustaining these SF units. SOTF can now rely on the strong logistical, administrative and capability development systems to sustain the SF units.

Finally, for the SOTF to remain relevant, it must be able to respond to security threats effectively and decisively, on land and at sea. Recent developments suggest that these threats are real and severe. Some terrorists exploited the sea route to launch their attacks in Mumbai in Nov 08.⁷ The high number of piracy attacks off Somalia waters over the last two years also created much concerns in the world.⁸ Being a maritime nation, we must recognise that solutions to problems on land is not complete without dealing with problems at sea, and what happens at sea has its source on land.

Conclusion

The set-up of the SOTF represents a significant milestone in the development of the SF in the SAF, reflecting the level of integration across the three Services. The SOTF is the sharp-end of the high readiness core of the SAF, and will play a crucial role in the defence of Singapore.

Endnotes

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CPT Tan Yukun Alan

LOOKING PAST THE GLITZ AND GLAMOUR: THE PATH AHEAD FOR SOTF

Introduction

IMAGINE YOU ARE SITTING IN THE LOBBY of a well-known 5 stars hotel, in a major city which is the financial centre of the country. While waiting for your friend to join you at your table, you casually sip from your coffee while aimlessly glancing at each passing hotel guest. Sounds familiar? However at this point in time, you notice a man walking through the lobby in a hurry, in the midst of a throng of other guests. Before you can react, a deafening explosion rips through the lobby, shattering every sheet of glass in the vicinity and sending every person in the lobby flying to the ground. Just as you are recovering from the ringing in your ears, a blast goes off in another famous hotel.

The scenario described earlier was modelled after the 2008 Mumbai terrorist attacks, when terrorists assaulted multiple locations simultaneously in a coordinated effort. The Mumbai police were unable to handle the overload, and had to call in the Special Forces to assist. In July, the SAF participated in Exercise NORTHSTAR VII, which was designed to simulate the Mumbai attacks.¹ This exercise tested the response of the newly formed Special Operations Task Force (SOTF), which brought together the very best units the SAF has to offer.

The concept behind SOTF was conceived a few years ago, driven by the rapidly changing operational environment faced by the Special Forces (SF). The complexity of terrorist operations was increasing at an alarming pace, doing away with the haphazard, ill-planned raids of old. There was an increasing need for the various groups within the SAF to work together on a more efficient scale, to become more familiar with each other's operational requirements and to share information and expertise. Bringing all the various branches of the SF under one umbrella has brought about many advantages, and integration seems to be the trend among the SF of the world, including those of the US, UK and France, among others.

Currently, SOTF is organised as a task force, assembling the various Special Forces units in the SAF under one umbrella, gathered from the Naval Diving Unit (NDU) and the Commandos. HQ SOTF controls the overall direction of the Special Forces, exercising operational control and advising MINDEF on special operations. However, doctrine and training are still developed by the relevant experts in the Army and Navy SF.

At the Crossroads

Task Force

The Task Force² concept is on one end of the integration spectrum. In this model, there is only a HQ and a Task Force (TF) commander. The rest of the Task Force is not organic to the task force. The HQ is responsible for the daily administration of the unit, but when the button is pressed, the commander is able to call upon his assets, drawing them from their respective subunits to form the task force. SAF's own Joint Task Force follows this model. In France, the Commandement des Opérations Spéciales (COS) has an inner ring of organic forces supplemented by its second ring of units which may be called in whenever necessary³. The COS can also call upon any unit in the rest of the military if the situation calls for it.

Being such a flexible organisation, the Task Force is akin to an octopus, with legs stretching in various directions. First and foremost, the task force would be able to retain its service ties. This will allow it to tap on the expertise and resources of the various services. For example, the maritime group of the task force can rely on its navy counterparts to provide coaching on piloting fast craft, or provide large ships for training simulations. The Task Force can also depend on the extensive army logistics network to source for any equipment needed, especially from the manoeuvre arms such as the Guards or specific units like the 1st Commando Battalion.

In addition, the doctrine and knowledge development is retained within the individual services under the control of the expert sub-units, e.g. Naval Special Operations under the Navy and military freefall under the Army Commandos. The dispersal of the task force elements implies that the TF headquarters needs to be very deliberate in managing integration matters as well as future development projects, especially when dealing with the various sub-units in the other services. In this sense, a Task Force approach is thus suitable in the current security landscape where asymmetric threats abound.

The Next Spiral for Special Forces

SOTF has been inaugurated, and is developing its capabilities and processes as we speak. In order to stay ahead of the curve, advancements in terms of technology, education and human capital development are necessary and critical. Resources in the SF are scarce and should be handled carefully. In spite of this, SF are meant to be one of the most operational soldiers in the SAF. Anytime they are called upon, the SF are the first to react and ready to be deployed. Without dedicated support, training value may be compromised, and operational readiness will definitely take a beating.

SF now face an imminent threat that is growing by the day. Failures of SF in recent memory include the tragedy in Beslan, Russia⁴ as well as the Mumbai bombings.⁵ Compounding the problem, the form of threat is mutating constantly. These threats now are not just local but international. They are also asymmetrical and extremely hard to predict. As a consequence, having dedicated resources organic to the Special Forces not only enhance the operational capabilities of the SF, it also increases the effectiveness of their reaction to an activation. This is mainly driven by the familiarity the support staff has with the requisite drills and standard operating procedures (SOPs) which only comes from prolonged training. Ultimately, when the SF are called into action, the success of their mission is priceless. For this to be jeopardised by a conflict in resource allocation would be undesirable.

The Way Ahead

As SOTF proceeds with their effective integration of resources and training, it will also grow in knowledge acquisition and organisational maturity. The methods of managing threats need to evolve as well. Hence, advanced doctrine development is critical to the success of training and operations. Eventually, doctrine development can be entrusted solely to internal departments because of the restrictive nature of the SF. However, with experts in other fields increasing and enlarging their scope in thought, management and technological advancement, there is much impetus to improve SOTF's sustainable advantage. In the same vein, efficiencies in terms of resource allocation and manpower management should be sharpened to suit current demands of the fluid security environment.

In addition, there should be initiatives to increase the strengths of SOTF through international cooperation and inter-agency exercises to enhance current systems, particularly in crisis management and emergency response. With the increasing number of threats lurking within the security environment, the need to merely react is no longer sufficient. A systematic yet flexible approach is required to equalise threats before it escalates into a crisis. As a result, SF must continue to learn new ways of doing things, and conduct operations with a sharp edge to maintain their highest operational readiness regardless of context. It is in this view that SF should be regarded as a force that multiplies and integrates with the strengths of other forces, and not as one that merely relies on their own resources. A force multiplier approach, with the task force structural concept will significantly increase its operational capabilities and define its character for the future.

Conclusion

A balance is advocated between prudent sharing and dedicated support without compromising operational readiness. SOTF is the force of choice to spearhead the growth of SAF's Special Forces. Nevertheless, it has to continuously evolve to meet the demands of the security environment and its ever-changing threats. A systematic and careful approach to shape the SF for the future is certainly no easy task. But when the strengths of many combine as one, with dedicated commitment, the SF will definitely create a competitive edge for militaries in this new world situation where uncertainty roams.

Endnotes

- ¹ “Ex Northstar Tests Agency Response During Simultaneous Terror Attacks”, *Channelnewsasia*. Online. Available at <http://www.channelnewsasia.com/stories/singaporelocalnews/view/440695/1/.html>.
- ² SAF Dictionary: A temporary grouping of forces designed to accomplish a particular mission in which the commander is assigned the means to carry out his assigned tasks and mission.
- ³ “Commandement des Opérations Spéciales”, *Wikipedia*. Online. Available at http://en.wikipedia.org/wiki/Commandement_des_Opérations_Spéciales.
- ⁴ In 2004, a group of armed terrorists from Chechen seized a school in Russia and held more than 1100 people hostage. Eventually, Russian security forces stormed the school successfully but it resulted in the deaths of more than 300 hostages, including 186 children. After the assault many questions arose regarding the government’s handling of the siege as well as the troops’ possible use of excessive force. “Terror In Russia: Battle in Beslan”, 04 Sep 2004, *The New York Times*. Online. Available at <http://query.nytimes.com/gst/fullpage.html?res=9402E7DB1131F937A3575AC0A9629C8B63&scp=32&sq=beslan&st=cse>.
- ⁵ In 2008, more than 10 coordinated attacks occurred in Mumbai, India’s largest city, eventually killing at least 170 people. The large scale of the attack coupled with the coordinated timing overwhelmed the police and security forces. It took the Indian Army 3 days to overcome the terrorists and restore peace, partially due to a failure of inter-agency cooperation. “Mumbai Terrorist Siege Over, India Says”, 28 Nov 2008, *The New York Times*. Online. Available at <http://www.nytimes.com/2008/11/29/world/asia/29-mumbai.html?scp=62&sq=mumbai%20attacks&st=cse>.

SWO Peter Estrop

AN INTERVIEW WITH THE FORMATION SERGEANT MAJOR OF THE SAF COMMANDOS⁺

“LEVERAGING ON EXPERIENCES FROM SPECIAL FORCES TRAINING AND OPERATIONS”

THERE WERE NO AIRS, NO FRILLS and lots of recollection from the depths of experience from past to present. This sums up my experience with SWO Peter Estrop. As readers go through the material of this interview session, it is hoped that they will find this an enjoyable read, and benefit by translating relevant ideas into action in their own way.

CPT YAP KWONG WENG: *What is the formula that makes Special Forces so effective in training and operations?*

SWO PETER ESTROP: Besides a solid training foundation, the building of a strong culture within the unit plays a crucial role. This starts with good habits and practices in and out of training. However, the accumulation of such a condition probably takes a lifetime to achieve. For the Commandos, this did not happen overnight. I remember back in 1969, the display of “Mind, Muscle and Nerve” during operations like Ops Laju, Thunderstorm and the cable car incident clearly set the Cdos apart from the rest of the SAF. It also portrayed the unique culture and distinct identity of the Commandos. This culture and identity plays a key role in shaping the Special Forces and their high standards of performance today.

⁺ SWO Peter Estrop is currently Regimental Sergeant Major of the Commando formation. He holds 31 years of experience in the SAF, and has held key appointments in and out of the Commando unit (See SWO Estrop’s full biography for more details).

CPT YAP KWONG WENG: *I understand that culture plays a critical role in defining the unit, but I still don't get the essence of what makes us different. Can you explain what are the key ingredients that make Special Forces special?*

SWO PETER ESTROP: We know what we do are for real. We must be ready to handle all contingencies. For one thing, the Commandos and the Special Forces strive for operational excellence, and most importantly, every single soldier understands that failure is not an option. This pursuit for excellence becomes a norm and is entrenched into our culture. With tough realistic training, we have become a force of choice because we (the Commandos) do it with strength, and our heart. Commandos know that they cannot fail, as they understand their critical role in Singapore's defence. This sort of mentality propels Commandos to want to achieve higher standards. This gives us the extra edge to overcome the odds against the adversary.

CPT YAP KWONG WENG: *What do you think are the attributes that make Special Forces extraordinary?*

SWO PETER ESTROP: First, the pursuit of excellence defines the Special Forces and the Commandos. They all want to succeed, and they do their best in big and small ways. There are no second prizes in our line of business. On the other hand, they are also quiet professionals who do not flaunt their abilities openly. They do the job and move on to the next. Second, Special Forces engage in the notion of self-achievement. They take pride in their work and are extremely result-oriented. For these reasons, they often set benchmarks for themselves in order to achieve excellence. Of course, winning is one thing, but Commandos constantly raise the bar to achieve higher standards in training. To me, having a Special Force that is based on "3G" is needed for success. "3G" is derived as:

1. Grounding
2. Grooming
3. Growth

The training that is received from the infant stages of a Special Forces trooper provides the grounding for his advancement. His development thereafter requires systematic grooming to become an effective Special Forces soldier. With sufficient grooming in areas of training and personal development, the Special Forces trooper achieves self-growth that leads to self-actualisation.

CPT YAP KWONG WENG: *How can soldiers in the Singapore Armed Forces evolve to become better leaders and warriors?*

SWO PETER ESTROP: First, we have to train as we fight. As we engage in operations, there is also a requirement to pull back knowledge from lessons drawn from these operations and apply them in training. Second, units in the SAF can consider strengthening their tactics, techniques and procedures (TTPs) in small unit operations, which is so relevant in the current security context. More importantly, there needs to be partnership in our approach to training because in the end, leadership is formed by followership and ownership. Soldiers need to

know not only their strengths and weaknesses; they also should understand the personalities of their team members, platoon mates or company mates. The eventual outcome is to get the job done with quality results. This is also the reason why trainers should not just focus on drills; they should also teach soldiers how to adapt to situations under complex environments. Metaphorically speaking, slow is smooth, smooth is fast. Soldiers today must innovate, improvise and adapt to situations to move ahead of the curve.

CPT YAP KWONG WENG: *From your perspective, can you provide three quick pointers on how Special Forces can improve themselves?*

SWO PETER ESTROP:

1. Learn from Mistakes.
2. Be Clear of the Mission.

I will share the final pointer, which is from the late MWO Sam Choo, who was my Sergeant Major many years ago. He was an inspiration and his voice still lives within many hearts in the Commandos. This phrase, in particular, still remains vividly in my mind. He used to say that everything we do is about:

“The Men, the Men, the Men”

The men in the unit are ultimately the most important assets that create the advantage at the work place. They are the ones who will define history and make things work. They are the ones who can make a difference between good and great. In the end, work in the military is ultimately taking care of your people, caring for them, and building their commitment to deliver that edge in training and operations.

CPT Yap Kwong Weng

EPILOGUE: POST-MODERN CHALLENGES FOR SINGAPORE'S SPECIAL FORCES



SOTF Troopers storming a building during a Training Exercise

Introduction

THE ARTICLES IN THIS VOLUME have brought together a point of entry into the literature and experiences of the Singapore's Special Forces. The main aim is to initiate new ideas, reexamine the idea of Special Operations or warfare as a norm and create a standard of inspiration. Inevitably, there are gaps within conclusions but these contributions offer a unique opportunity to explore key perspectives on issues that are important to operations in practice. In addition to conceptual analysis, the essays provide myriad viewpoints surrounding the development of Special Forces. At the beginning of this volume, I have provided a basic overview of the Special Forces, which is by no means near a complete account. However, several questions concerning the future of Special Operations for research in theory and practice are raised.

Employment and Ethics

Throughout the course of history, Special Forces are often regarded as mysterious. While their operations seem less “secret” now, the point of contention herein remains – Special Forces are specially selected, highly trained and capable to respond to all types of situations in peace and war. While the adversary constantly uses asymmetric warfare to test the limits of national security, the use of Special Forces in counter-terrorism efforts is especially applicable. In particular, MAJ Kong Eu Yen explains the role of Special Forces in combating terrorism locally and internationally. However, certain principles in the areas of international law must be addressed, de-conflicted and rationalised to maintain peace and stability. In this context, MAJ Leung Shing Tai has proposed a model, known as the “Ethical Triangle” to analyse the tenets of decision-making during ethical dilemma. He concludes that when a soldier is caught between his professional duty and ethics, a decision has to be made, and this requires a logical deconstruction of the situation regardless of context.

The Challenge of Modernisation

Today, globalisation has influenced our way of life and even how battles are fought. While it is true that the continuous presence Special Forces in the “War against Terrorism” is clear and present, threats have become more complex and unpredictable. Modern Special Forces are required to be vigilant, flexible in structure yet adaptive in response as they face transnational threats that use technology to their advantage. On the same token, it is worth noting that the notion of adaptive training is now critical. Adaptability within the Special Forces is required in this century where terrorism is on the rise and where there is no quick fix to defeating the enemy. Hence, the testing of systems, rehearsals and contingency planning is absolutely critical in mission procedures. In a broader sense, Special Forces need to be creative, flexible and adaptive to respond to constant changes both at the strategic and tactical levels.

Special Forces Leadership and Training

The development of skills and leadership abilities are critical for the future of the Special Forces. Special Forces have to be trained to be extremely self-reliant and effective improvisers. They need to take initiative without asking for explicit commands and approval. However, a Special Forces soldier does not only require a wide array of skills, they need a deep sense of purpose is required to get the “job” done. According to COL Lam Shiu Tong, one of the most important leadership competencies that a Special Forces trooper possesses is his extraordinary sense of purpose to accomplish the assigned mission. As such, the modern Special Forces trooper must not only be able to manage guns and bombs to create large scales of damage behind enemy lines, they have to be ready to adapt and respond to vulnerabilities effectively – this requires initiative and “out-of-the-box thinking”, flexibility, and clear pursuit towards excellence in special operations. On this note, COL Simon Lim points out that besides being unique at the tactical levels, Special Forces hold extraordinary abilities to deliver strategic effects in operations. He states in his article that focused initiatives must be put in place to bring the right quality of Special Forces so as to meet the critical demands of the 21st

century. To this end, the focus cannot just be focused on building skills within the Special Forces. Rather, the approach towards a Special Forces trooper's development has to be both simultaneous and continuous to meet global threats and challenges.

Embracing Strengths and Tensions of Transformation

With the advancement of the human condition comes systematic restructuring at the institutional levels. Because of the current instability of international security, it is a natural progression for governments and militaries to adjust systems and structures in order to respond to crises and terrorism in a more effective way. Thus, a multi-faceted approach is needed. For the Special Forces, COL Tan Tai Tiong's analysis on the evolution and establishment of the SOTF, underscores the importance of collaboration among the Special Forces community. He believes strongly that the combination of strengths between the Special Forces will enhance their overall operational readiness. In the areas of force transformation, MAJ Robin Lee argues that cross-domain tensions caused by the influx of new factors, which must be mitigated efficiently and carefully to match demands from society and technology. In this sense, Special Forces must safeguard their priorities by recognising changes both cultural and organisationally. More significantly, Special Forces should define all roles and responsibilities at the Task Force level, with development on policy and guidance to address, detect and deter potential gaps in this new system. The main challenge now is to coordinate resources, integrate capabilities, and leverage on inter-agency cooperation to mitigate gaps and simultaneously synchronise a more effective response to emerging threats.



SOTF troopers heading to storm a ship on an Rigid-hulled Inflatable Boat

Conclusion

The current security landscape presents a wider scope to combat asymmetric threats. This has forced a paradigm shift to how Special Forces train and conduct their operations. As a consequence, Special Forces are now more relevant and ready to combat threats in this new world order. While SF teams can achieve goals in stressful and dangerous circumstances, they must be managed appropriately in order to fully utilise their capabilities. Special Forces today should not merely demonstrate excellent physical attributes, they must also possess: (1) a clear understanding of tasks (2) a deep commitment to each other, and (3) a sense of linkage with the larger strategy.

There are also greater concerns to find multiple methods to gain competitive advantage over the adversary. First, there should be a concerted effort to share knowledge between institutions, governments and armed forces as they work collectively to confront asymmetric threats. Second, vulnerabilities in response and prevention should be addressed in crisis management systems to limit the consequences of an attack. Third, anticipation and identification of new threats should be adopted in training as a principal consideration as homeland security agencies focus on current ones.

Taken together, a deterrence strategy as opposed to a defensive model is perhaps the most ideal approach to stay prepared against transnational threats. Finally, modern Special Forces have to be critically aware that current threats are no longer localised. They are international, interconnected and asymmetrical in nature. It is from this view that Singapore's Special Forces must move ahead of the curve to become stronger as they continue to collectively build their capabilities and culture of excellence to become a World-Class Special Forces.

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KEY PERSPECTIVES ON SPECIAL FORCES

"This is an interesting and timely collection of essays that seeks to bring together a range of perspectives on the ways in which special forces operatives can be used in dealing with a range of 'modern' military problems. The perspectives brought to bear within this collection of essays makes for an interesting and thought provoking analysis of Special Forces from those who are actively involved in the process. In addition, the synthesis of academic research and more practical perspectives also generates important points of interest for the reader who is concerned with the ever-changing geo-political landscape. The book provides an interesting account of the core development of 'Special Forces' as a response to the complex threats facing the military as well as some unusual insights around the challenges that such operations generate for medicine, military strategy, and the ethical issues surrounding the deployment of such troops. The collection provides the reader with a stimulating insight into the workings and thought processes that underpin the selection, training, and deployment of these elite troops. Moreover, it is rare for such a collection to be made available from serving and recent members of elite forces and, for that reason, the book is an important contribution to the literature."

- **PROFESSOR DENIS FISCHBACHER-SMITH**, PROFESSOR OF RISK AND RESILIENCE, UNIVERSITY OF GLASGOW

"I found this book to be an exceptional compilation of literature that encapsulated the essence of Special Operations. A wide range of issues, from specialised medicine to crisis management, were thoughtfully presented and discussed by practitioners themselves. It certainly improved my understanding of these elite soldiers, especially the way they think and train. I highly recommend it to aviators and commanders who have the privilege to work with this group of fine men."

- **MAJ LIM GUAN LENG**, ATTACK HELICOPTER PILOT, REPUBLIC OF SINGAPORE AIR FORCE

"Finally! A book that provides a rare glimpse into the elusive Special Forces! Beyond insights about its training, strategy, and challenges, it's a worthy salute to the many unsung heroes, past and present, who have offered themselves selflessly to be part of this elite force."

- **MS LINNET CHOO**, LEGAL COUNSEL AND DAUGHTER OF THE LATE MWO SAM CHOO (COMMANDO FORMATION SERGEANT MAJOR, 1990-1994)

"I thought the book is well-researched and informative. It give detailed insights into the Special Forces, a military unit of which not much is known to the public. I especially enjoyed reading the chapter 'Finding and Training the Right Stuff' which shed light on the selection process of elite forces. After reading, I understood that the SAF Special Forces is not only one of the most relevant fighting forces the SAF has, but that it also has a bright and exciting future."

- **MR ROBIN CHAN**, STRAITS TIMES JOURNALIST

"Written by experienced individuals on the subject matter, this thought provoking book provides solid perspectives on the history, theory and experience of Special Forces in the modern context. This book will be of great interest even to those who are in the financial and business sectors because of its unique insights on leadership and strategy."

- **LTA (NS) RAPHAEL LEE**, ASSOCIATE DIRECTOR, UBS

"This book provides an understanding of the issues faced by Special Operations that is far beyond the depth of what is available in mainstream media. A great read for both servicemen and members of the public."

- **MR KELVIN CHONG**, BUSINESS AND ACCOUNTANCY UNDERGRADUATE, NATIONAL UNIVERSITY OF SINGAPORE

This book provides a brief overview of the "Special Forces" phenomenon. Written by experienced practitioners, this compilation of essays offers powerful insights for military personnel, civil servants, professionals and others.

