

Canadian
Forces
College

Collège
des
Forces
Canadiennes



NATIONAL MILITARY TIER 1 SPECIAL FORCES: OPTIMAL ORGANIZATION

OTL i.G. M. Faust

JCSP 39

Master of Defence Studies

Disclaimer

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

© Her Majesty the Queen in Right of Canada, as represented by the
Minister of National Defence, 2013, 2014.

PCEMI 39

Maîtrise en études de la défense

Avertissement

Les opinions exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Sa Majesté la Reine du Chef du Canada, représentée par le
ministre de la Défense nationale, 2013, 2014.

CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES
JCSP 39 – PCEMI 39
2012 – 2013

MASTER OF DEFENCE STUDIES – MAÎTRISE EN ÉTUDES DE LA DÉFENSE

**NATIONAL MILITARY TIER 1 SPECIAL FORCES: OPTIMAL
ORGANIZATION**

By OTL i.G. M. Faust

“This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence.”

Word Count: 16 783

“La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale.”

Compte de mots : 16 783

TABLE OF CONTENTS

TABLE OF CONTENTS	v
LIST OF FIGURES	viii
LIST OF TABLES	ix
ABSTRACT	x
CHAPTER	
1. INTRODUCTION AND THESIS	12
<i>Introduction</i>	12
<i>Thesis</i>	14
2. RESEARCH FRAMEWORK	15
<i>Methodology of Work</i>	15
<i>Organization of Research Project</i>	15
<i>Existing Research Information</i>	16
<i>Limitations and Assumptions</i>	17
<i>Practical Relevance</i>	18
<i>Scope and Research Boundaries</i>	19
3. RESEARCH OBJECT - GENERAL	21
<i>Strategic Assets</i>	21
<i>Special Operations</i>	21

	<i>Special Operations Forces</i>	22
	<i>Special Forces</i>	23
	<i>Tier One Special Forces</i>	26
	<i>Special Operations Organization</i>	29
4.	RESEARCH OBJECT - MILITARY TIER 1 SPECIAL FORCES	31
	<i>Selected Nations</i>	31
	<i>United States of America</i>	34
	<i>Great Britain</i>	40
	<i>Canada</i>	46
	<i>Poland</i>	51
	<i>Germany</i>	55
	<i>Excursion: NATO Special Operations HQ</i>	61
	<i>Summary</i>	63
5.	ANALYTICAL CRITERIA	66
	<i>Analytical Point of Reference - Organizational Goal</i>	66
	<i>Analytical Measure - Organizational Effectiveness and Efficiency</i>	69
	<i>Analytical Subject - Organizational Elements</i>	70
	<i>Analytical Criteria – Determinants of Organizational Effectiveness and Efficiency</i>	71
6.	ANALYSIS	76
	<i>United States of America</i>	77
	<i>Great Britain</i>	80

<i>Canada</i>	84
<i>Poland</i>	87
<i>Germany</i>	90
<i>Key Findings</i>	93
7. SUMMARY, CONCLUSION, AND RECOMMENDATION	97
<i>Summary</i>	97
<i>Conclusion</i>	99
<i>Recommendation</i>	100
<i>Concluding Remarks</i>	103
ACRONYMS	105
BIBLIOGRAPHY	111

LIST OF FIGURES

Figure 4.1:	UK's Special Operations Unit's Operational C2 Structure	45
Figure 4.2:	POL's Special Operations Unit's Organizational Structure	53
Figure 4.3:	POL's National Chain of Command and C2 Structure	54
Figure 4.4:	KSK's Organizational Structure	58
Figure 4.5:	DSK's Organizational Structure	59
Figure 4.6:	Notional NATO Special Operations Component Command Structure	62

LIST OF TABLES

Table 3.1:	SF and SOF Mission Spectrum and Examples of Military Units	24
Table 4.1:	Differences between Selected Military Tier 1 Special Forces	33
Table 4.2:	Units of USSOCOM's Sub-Component Commands	38
Table 4.3:	UK Special Operations Units Integrated Under the Coordination of DSF	43
Table 4.4:	CANSOFCOM's Operational Units and their Missions	48
Table 4.5:	CANSOFCOM's standing SOTF	49
Table 5.1:	Goal Sub-set One "Properly Prepare"	67
Table 5.2:	Goal Sub-set 2 Two "Coordinately and Effectively Lead"	68
Table 5.3:	Determinants of Organizational Effectiveness and Efficiency	71
Table 6.1:	Analysis of US Special Operations Organization	79
Table 6.2:	Analysis of UK Special Operations Organization	82
Table 6.3:	Analysis of CA Special Operations Organization	86
Table 6.4:	Analysis of POL Special Operations Organization	89
Table 6.5:	Analysis of GE Special Operations Organization	92

ABSTRACT

Special Operations units, especially Tier 1 Special Forces units,¹ have recently gained increased public attention in the context of critical operations such as “Neptune Spear” against Osama bin Laden.

This paper addresses the research question of whether there is an optimal organization for national military Tier 1 Special Forces units with the objective to support possible activities dedicated to their organizational improvement.

To find a substantial answer, this research project paper first determines criteria for evaluating an organization and then applies these criteria when critically reviewing and comparing selected national military Tier 1 Special Forces units and their overarching national Special Operations Organizations.

The key findings of this analysis show that there is no “one fits all” *optimal* organization blueprint that could be applied to all or any national Special Operations Organizations.

However, the findings do indicate that there are a number of commonalities among medium to highly effective and efficient national Special Operations Organizations that, when taken into account and properly implemented, could very well *optimize* national Special Operations Organizations.

A critical element of the findings is the fact that advanced nations have established a dedicated and separate integrated umbrella Command and Control element that unifies and coordinates all Special Operations capabilities, assets, units – including Tier 1 Special Forces

¹ The term “Tier 1 Special Forces” will be defined and described in detail in Chapter 3 of this research project.

units - and possibly additional enablers for both, non-operational and operational Special Operations matters.

Whereas the analysis shows differences between nations regarding the concrete design of such a centralized umbrella Special Operations Command and Control element, the effective and efficient Special Operations Organizations shared a number of similarities including but not limited to an adequate command level (two-star or higher) with the commander being the senior advisor to top senior military and political leadership, adequate authority, responsibilities and competencies for non-operational as well as operational SO matters, adequate authority over all SO capabilities, assets and units plus over critical Special Operations enablers, sufficient funding and independent procurement authority or prioritized acquisition, a clear and direct chain of command over all levels (from top military leadership, over strategic and operational to tactical level) applying the principle of “Special Operations are led by Special Operations personnel”, and separate and dedicated training, education, and development facilities for Special Operations personnel.

The research paper concludes with a description of how to further optimize national Special Forces Organizations through an integrated and coordinated process.

CHAPTER 1 – INTRODUCTION AND THESIS

Introduction

Special Forces are strategic assets that are employed to achieve strategic political, military and other objectives of national interest. For most of their existence Special Forces around the globe were perceived and treated as sub-organizations inside the traditional loops of warfare. They were stepchildren of a larger family of conventional military elements, performing within a universe dominated by infantry, artillery and armored divisions, maritime battle groups and combat aircraft wings.²

Today, with the current and future disparate, unpredictable and complex security challenges and asymmetric, ambiguous, irregular and dynamic operational environment, and hybrid conflicts and wars³, Special Forces provide governments with an extraordinary spectrum of assets and have shifted to the fore-front of military activities. Nowadays, the "quiet professionals" often are the tip of the spear and play a central, if not the key role in fighting the modern foes.⁴ Consequently, in many countries military Special Forces have expanded in numbers in recent years. They have been increasingly deployed in military operations, have been

² For examples of documented historic global missions and deployments of Special Forces see William H McRaven. *Spec Ops. Case Studies in Special Operations Warfare: Theory and Practice*. New York: Presidio Press, 1996, p. 29-380.

³ For a detailed description and analysis of hybrid warfare see Timothy McCulloh, and Richard Johnson. *Hybrid Warfare*. JSOU Report 13-4, MacDill AFB, FL: The JSOU Press, August 2013.

⁴ Available books, articles and other documentation on current and recent missions and deployments of Special Forces are numerous. One of the monographs that cover a rather broad span of time of US Special Forces is General McChrystal personal account of his experiences and views. See in detail Stanley McChrystal. *My Share of the Task. A Memoir*. New York, NY: Penguin Group, 2013. Examples of other monographs elaborating on recent and ongoing global Special Forces campaigns and deployments (e.g. Afghanistan, Africa, Balkans, Iraq, and Southern America) include Eric Micheletti. *Special Forces in Iraq*. Paris: Histoire and Collections, 2006, and Alexander Stilwell. *Special Forces Today. Afghanistan – Africa – Balkans – Iraq - South America*, Washington, DC: Potomac Books Inc., 2007.

For examples of a look into the future role of Special Forces see in detail Stephen Biddle. *Special Forces and the Future of Warfare: Will SOF Predominate in 2020?* Discussion Paper, Strategic Studies Institute, US Army War College, Carlisle, PA, 24 May 2004, and Oliver North. *American Heroes in Special Operations*, Nashville, TN: Fidelis Books, 2010, p. 285-296.

utilized in special situations, and have been benefitting from growing budgets and public attention.

Accordingly, expectations of political leadership and parliamentary control, media and public opinion, the individual nation's people and the international community, as well as the ambitions of military leadership have risen regarding capabilities, operational effectiveness and mission success of Special Forces. These expectations and ambitions together with regular changes of the environment (i.e. adaptations of mission-spectrum, government spending priorities, budget constraints, structural modifications, transformations, reduction of size and numbers of national armed forces, introduction of new equipment etc.) and other reasons, such as considerations of identified operational lessons, regular internal reviews or simply direct orders of the Ministry of Defence, frequently require to adapt and to optimize Special Forces as an organization.

The purpose of this research project is to examine the question if there is an optimal organization for Tier 1 Special Forces. For that, the following elaborations will determine criteria for evaluating an organization and, applying these criteria, will take a critical look at selected national military Tier 1⁵ Special Forces which have undergone, are in the process of, or are considering organizational changes in order to find the optimal organization for their Special Forces.

⁵ The term "Tier 1 Special Forces" will be defined and described in detail in Chapter 3 of this research paper.

Thesis

The author⁶ suggests that, firstly, military Tier 1 Special Forces should be reviewed and analysed not in isolation but in the context of the overall national military Special Operations Organization. And that, secondly, there is no "silver bullet" organization and that a single "one fits all" optimal organization blueprint for Special Operations Organizations does not exist.

However; he asserts that, when based on a clear set of criteria, there are certain elements that, when taken into consideration and properly applied, will contribute to a concrete organizational design which could be indeed evaluated as an optimal organization under the respective individual environment in which each of the national Special Operations Organizations – including their units such as Tier 1 Special Forces units - has to exist.

In this case, however, it would have to be called an "optimized organization" rather than an "optimal organization" as it is an organizational design that takes into account the individual situation and environment of the particular Special Operations Organization rather than describing an ideal, hence theoretical optimal organizational set-up that neglects any individual framework reality with its constraints and limitations and any differences between nations.

In short terms, the author represents the thesis that although in theory there could be an *optimal* organization for Tier 1 Special Forces, in reality there are only *optimized* organizations for Tier 1 Special Forces that can be put into practice.

⁶ The author is a member of the German Army.

CHAPTER 2 – RESEARCH FRAMEWORK

The second chapter will elaborate on the framework of the research project. This will be done by describing the applied methodology of work and the organization of the research project, by pointing out the existing research information, by introducing limitations and assumptions, by weighting the practical relevance and elaborating on needed key terms, and by fixing boundaries for the later conducted analysis.

Methodology of Work

Based on a comparative analysis of available, accessible, and usable information about selected national military Special Forces (US, UK, CA, POL, and GE)⁷, which are either classified as Tier 1 Special Forces⁸ or have the ambition to become Tier 1, this research project will define and apply a dedicated set of analysis criteria in order to identify if there is an optimal organization for Tier 1 Special Forces and to explain and understand which key factors are the decisive ones for such an organization – if any.

Organization of Research Project

After an introduction and an outline of the thesis (Chapter 1), the research framework (Chapter 2) will be set followed by a general description of the research object (Chapter 3) and a more detailed description of selected military Tier 1 Special Forces (Chapter 4).

⁷ For the rationale behind this selection of nations see Chapter 4 of this research paper.

⁸ For the details of the tier classification system of Special Forces and a definition of Tier 1 Special Forces see Chapter 3 of this research paper.

On the basis of a defined set of analytical evaluation criteria (Chapter 5), Chapter 6 will then take a critical and analytical look at the previously selected Tier 1 Special Forces and their respective national overall Special Operations Organization. Key findings and conclusions of the analysis will be summed up in the final Chapter 7 that will also include recommendations, which purposely will not be addressed at any particular national armed forces but that will be presented in general terms, and closing remarks.

Existing Research Information

Available literature, documentation, research information and other sources on a theory of Special Forces is still scattered and limited⁹ - in contrast to print and visual material on various employments (from single operations to lasting campaigns), which is rather extensive.

The theoretical foundation is comprehensive. This is particularly true regarding the topic of organizations, mainly originating in the academic and practical domains of business administration and micro-economics but also covering the field of military micro-economics¹⁰.

⁹ In 2011, an international workshop of experts on Special Operations Forces came to the conclusion that an articulated and unified theory and associated literature was still lacking. (See Joseph Celeski. *Joint Special Operations University SOF-Power Workshop. A Way Forward for Special Operations Theory and Strategic Art.* JSOU Report of Proceedings. MacDill AFB, FL: The JSOU Press, 22-23 August 2011, p. 3.). There are a number of theoretical basics on the subject, though. One of the earlier fundamental scientific documents on the theory of special operations – focusing on their deployment and mission success – that is still valid and continues to be used as reference today has been written by William H. McRaven in 1995. (See in detail William H. McRaven. “The Theory of Special Operations.” In *Spec Ops: Case Studies in Special Operations Warfare: Theory and Practice*, edited by William H. McRaven. New York, NY: Ballantine Books, 1995.) A more recent document on a theory of special operations has been published by JSOU in 2013. (See in detail Harry R. Yager. *21st Century SOF: Towards an American Theory of Special Operations-* JSOU Report 13-1. MacDill AFB, FL: The JSOU Press, April 2013.).

¹⁰ Military micro- and macro-economics is a rather young discipline among the special sciences of these two academic domains. Classic standard literature includes the books of Johannes Gerber („Europäische Militärökonomie“), Johannes Gerber and Oswald Hahn („Betriebswirtschaftslehre und Streitkräfte“), Oswald Hahn („Militärbetriebslehre“), Günter Kirchhoff („Handbuch zur Ökonomie der Verteidigungspolitik“), and Todd Sandler and Keith Hartly („The Economics of Defense“). For details see bibliography of this research paper.

Literature combining both subjects (a theory of Special Forces and an organizational theory) is still rather limited.¹¹ There have been, however, two interesting practical initiatives dealing with this subject – one on the national (US)¹² and one on the international (NATO)¹³ level. The research information listed in the bibliography includes official documents, studies monographs, articles, books, internet documents and other publications¹⁴, all of which are complemented by the own experiences of the author.

Limitations and Assumptions

Limitations existed predominantly in accessing detailed information on national Tier 1 Special Forces because of their natural need for security and protection. And even when information is accessible, it frequently cannot be documented in the context of a publicly available paper. Therefore, the information used in this research paper was limited to open source information and unclassified documents. Further limitations affecting the research paper include

¹¹ Some authors do, however, recognize the value and therefor the need for a thorough theory of the institutional features such as organization of Special Forces as a basis of improving existing Special Forces organizations. (See in detail Robert G. Spulak Jr. *A Theory of Special Operations. The Origin, Qualities, and Use of SOF*. Joint Special Operations University (JSOU) Report 07-7, Hurlburt Field, FL: The JSOU Press, October 2007, p. 38.)

For one of the rare examples of a critical view on organizational elements of Special Forces see in detail John S. Prairie. “*The Organization of the United States Army Special Forces in the Objective Force*.” Master’s Thesis, US Army Command and General Staff College, Fort Leavenworth, Kansas, 2002, and on an analyses of Special Forces organizations North Atlantic Treaty Organization (NATO) Special Operations Coordination Center (NSCC). *The North Atlantic Treaty Organization Special Operations Forces Study*. SHAPE, 4 December 2008.

The need for deeper analysis of organizational aspects of Special Forces is documented on USSOCOM’s list of topics to be researched (e.g. “SOCOM and SOF organization in a changing environment”). For details see Joint Special Operations University (JSOU). *USSOCOM Research Topics 2012*. MacDill AFB, FL: The JSOU Press, 2012, p. 35.

¹² See in detail Joint Special Operations University (JSOU). *The OSS Model and the Future SOF Warrior*. JSOU Report of Proceedings. MacDill AFB, FL: The JSOU Press, November 2011.

Although the topic of “SOCOM and SOF organization in a changing environment” had been put on USSOCOM Research Topics for 2012 (for a topic description see JSOU, *Research Topics ...*, p. 35-36), at this point, there was no publicly available paper on the JSOU publication data bank.

¹³ See in detail North Atlantic Treaty Organization (NATO) Special Operations Headquarters (NSHQ). *Special Operations Forces Study*. SHAPE, December 2012.

¹⁴ It is worth mentioning that the US JSOU (“Joint Special Operations University”) has specialized on a Special Operations-focused curriculum and has been publishing a number of related studies, articles etc. Because of the US’ long history in the field of Special Operations, a large amount of publicly available information on the subject is available in English and is US-authored.

the focus on a limited number of reviewed national Special Forces and a limited number of applied criteria. The listed limitations restricted the research paper from concluding with dedicated recommendations of how the concrete military Tier 1 Special Forces Organization of a particular country should look. When and where necessary, assumptions were made and will be indicated as such at the relevant position of the research paper.

Consequently, the conclusions and proposed recommendations have a more general character.

Practical Relevance

Special Forces are strategic assets that mainly get employed and deployed on the tactical battlefield. Consequently, the focus of all activities and initiatives to improve the effectiveness and efficiency of Special Forces have a tendency to concentrate on the deployment phase and the immediate preparation for it¹⁵, this way neglecting the fact that there are key success factors that lay outside and/or before deployment of tactical elements. One of these critical factors is the organization of Special Forces.

¹⁵ Undoubtedly, combat is one of the key domains for possible failure and therefore for improvement of Special Forces. *Spulak* describes the “combat process” as being one “source of friction” for Special Forces. (See *Spulak, A Theory ...*, p. 19.) This focus on mission or campaign success is also identified by *Yager* (See *Yager, 21st Century...*, p. 3.) and practiced by a number of authors in conducted analysis (See for instance Michael D. Day, and Bernd Horn. “Canadian Special Operations Forces Command: The Maturation of a National Capability.” *Canadian Military Journal* 10, no. 4 (2010), p. 69-74, William “Dave” Driver, and Bruce E. DeFeyter. *The Theory of Unconventional Warfare: Win, Lose, and Draw*. Master’s Thesis, US Naval Postgraduate School, Monterey, CA, 2008, and James D. Kiras, *Special Operations and Strategy: From World War II to the War On Terrorism*. London and New York, NY, Routledge, 2006.). For examples of analysis of concrete tactical deployments and campaigns of Special Forces in numerous theaters of operations (e.g. Afghanistan, Africa, Balkans, Iraq, South America), their strategic value and success factors see in detail Martin Faust. “Special Operations Case Study. Scud Hunting (Iraq 1991).” JCSP DL 2/DS-545/CPT/CS-04, Component Capabilities, Case Study, Canadian Forces College, Ottawa, ON, 2013, Micheletti, *Special Forces...*, Stilwell, *Special Forces...*, and Kevin Wells. “Eight Years of Combat FID. A Retrospective on Special Forces in Iraq.” *Special Warfare*, Volume 25, Issue 2 (January-March 2012). Accessed 15 May 2014. <http://www.soc.mil/swcs/SWmag/archive/SW2501/SW2501EightYearsOfCombatFID.html>.

This research project will contribute to shifting the focus of improvement initiatives and activities to the domain of organization. It will provide military leaders¹⁶ with a basis for better understanding the key factors of optimizing the organization of Tier 1 Special Forces and the overall national Special Operations Organization, In this way the planning of future organizational adaptations and for the development of the related doctrinal basis will be facilitated.¹⁷

The findings of this research paper will also contribute to eliminating any subjective views, individual preferences and priorities originating in different functions and responsibilities, hierarchy levels, affiliation with services/components etc. of military leaders dealing with evaluating and improving organizational aspects of Tier 1 Special Forces and the national Special Operations Organization as a whole, and to providing an objective perspective.

In order to facilitate a possible practical use, parts of the research paper will be presented in broken down tables or descriptive figures rather than in lengthy text-format.

Scope and Research Boundaries

In order to reduce complexity and volume of the analysis, this research project will concentrate on a limited number of national military Tier 1 Special Forces, on selected evaluation

¹⁶ A sound theoretical basis and a sustainable understanding of military theory by military leaders are key to successful and best possible practical performance. This is even more relevant for smaller forces - such as Special Forces and their overall Special Operations Organizations which typically are a force limited in size. For a detailed elaboration on this correlation between military theory, its understanding and application by military leaders and their performance see in detail Charles S. Oliviero. "Please Sir, May I have Some More Theory?" *Canadian Military Journal*, Vol. 11, No. 1 (Winter 2010), p. 5-6. The validness and actuality of this correlation is very visible in the worldwide study and application of von Clausewitz's military theory by many national armed forces. (For details see Reiner Pommerin, (editor). *Clausewitz goes global. Carl von Clausewitz in the 21st Century*. Berlin: Miles Verlag, 2011.).

¹⁷ The challenge to transform findings into dedicated actions was already known and outlined in the fundamental works of military theory of *von Clausewitz* (See in detail Carl von Clausewitz. *Vom Kriege*, völlig neu bearbeitete Ausgabe, Berlin: Vier Falken Verlag. 1940.), making the military leader the limiting factor for success, effectiveness and efficiency.

criteria, and on dedicated organizational elements. The concrete and respective selections will be introduced in the context of the relevant chapters. However, already at this point it can be stated, that the scope of this analysis will have to look at the national military Special Operations capabilities, assets and units as a whole, as Tier 1 Special Forces units typically will be operating in a joint approach together with other Special Operations assets plus possibly additional enablers.

CHAPTER 3 – RESEARCH OBJECT - GENERAL

This chapter will introduce definitions and explanations of a number of key terms in order to describe the research object at hand in general. A detailed look at selected research objects will follow in the next chapter.

Strategic Assets¹⁸

Special Forces (SF) as well as Special Operations Forces (SOF) are strategic assets that get deployed to achieve strategic political, military, psychological, and informational objectives that represent the fundamental instruments of national power. SF and SOF operate outside the realm of conventional operations or beyond the standard capabilities of conventional forces, thus providing a solution to extraordinary circumstances of political interest when no other option is available or no other viable means of problem-resolution exists.

Special Operations¹⁹

Special Operations (SO) are actions conducted by specially designated, organized, trained, and equipped military, para-military or police forces to achieve (strategic) political,

¹⁸ For details and further reference about this sub-chapter see Martin Faust. “SO, SF, and SOF.” JCSP DL 2/DS-545/Special Operations Discussion, Discussion Post, Canadian Forces College, Ottawa, ON, posted March 29, 2013 1:57 PM, North Atlantic Treaty Organization (NATO). *Allied Joint Doctrine for Special Operations. AJP 3.5. Edition A, Version 1, SHAPE, December 2013, p. 1-1, and United States of America. Joint Chiefs of Staff. US Joint Pub 3-05 Special Operations. Washington, DC: Joint Chiefs of Staff, 18 April 2011, p. I-1 – I-7.* For further reading on this and the following sub-chapters of Chapter 3 see North Atlantic Military Committee (MC). *Special Operations Policy. MC 437/1. NATO Restricted. Brussels, 14 June 2006.*

¹⁹ For details and further reference about this sub-chapter see NATO. *AJP-3.5...*, p. 1-1 - 1-6, North Atlantic Treaty Organization (NATO) Special Operations Coordination Center (NSCC). *SOF Terms & Definitions for NSCC Courses, NATO/PFP Unclassified, Version 1, SHAPE, December 2009, no page, NSCC. Study...*, p. 5-8, and US. *JP 3-05...*, p. ix, I-1 – I-7, GL-12. For a thorough theory of special operations see in detail McRaven. *Theory...*, p. 1-27.

military, economic or psychological objectives by nonconventional capabilities in extreme non-standard conditions including hostile, denied, or politically sensitive environments.

SO are conducted in peace, conflict, and war - either independently, or in coordination with regular/conventional forces; frequently, military special operations are conducted joint and/or combined and in a task-force-manner. Political considerations regularly shape special operations, requiring clandestine, covert, discreet, stealthy, or low-visibility techniques, an oversight on national strategic level, and the prevention of collateral damage. SO differ from conventional operations regarding strategic criticality and value, degree of political and operational/physical risk, operational techniques, mode of employment, media involvement and dependence on detailed operational intelligence and sometimes local or indigenous assets. Preparation and execution of SO usually do not have a second chance. Superiority of SO is often achieved through the skills of operators combined with tactical and/or technical advantages/superiority.

Special Operations Forces²⁰

Special Operations Forces (SOF) are a mix of military, para-military, police or state forces that are able to operate with, train, assist or support Special Forces during preparation or execution of Special Operations. The concrete distinctions between Special Forces and Special Operations Forces vary from nation to nation and within nations between services, institutions and agencies.

Despite the existing differentiation between Special Forces and Special Operations Forces, it is not uncommon, both in military doctrine and other documents as well as in military

²⁰ For details and further reference about this sub-chapter see NATO. *AJP 3.5...*, p. 2-1 – 3-9, NSCC. *SOF Terms...*, no page, NSCC. *Study...*, p. 8-9, and US. *JP 3-05...*, p. II-1 – II-19, and GL-12.

linguistic use, to summarize all those military units and or assets that are capable of and are designated to execute SO, under the blanket- or umbrella-term of Special Operations Forces.²¹ In these cases, it is a regular practice, to then differ between Special Forces and Specialized Forces.

In order to avoid confusion, this research project will use the term “Special Operations capabilities, assets and units” or simply “SO capabilities” or “SO assets” or “SO units” as an umbrella term that includes capabilities, assets and/or units classified as or part of Special Forces (including Tier 1 Special Forces) and. Special Operations Forces.

Special Forces²²

Special Forces (SF) are military, paramilitary, police or state forces that are specially selected, organized, trained, equipped and deployed to successfully conduct Special Operations. Originally, Special Forces were created to conduct unconventional warfare within flexible small unit structures. The changing threat to nations from global nuclear and conventional war to internal destabilization, ethnic conflicts, failing states and insurgencies as well as global terrorism has significantly changed the role of Special Forces, widened their mission spectrum and modified their organizational structures.²³ Today, Special Forces cover unconventional capabilities of land forces, air forces, naval services, marines, border troops, intelligence services, interior troops, customs, state police, special police, regional police, environmental protection services, VIP protection agencies and within non-governmental organizations.

²¹ See North, *American Heros...*, p. 8.

²² For details and further reference about this sub-chapter see NATO. *AJP 3.5...*, p. 2-1 – 3-9, NSCC. *Study...*, p. 8-9, United States of America. U.S. Department of Defense. Joint Chiefs of Staff. *Dictionary of Military Terms*. New revised and expanded ed., London and Pennsylvania: Greenhill Books and Stackpole Books, 1999, p. 351 and US. *JP 3-05...*, p. II-1 – II-19, and GL-12.

²³ For details of the development of Special Forces see for example Linda Robinson. *Master of Chaos: The Secret History of the Special Operations*. New York, NY: Perseus Books Group, 2004, and Linda Robinson. *One Hundred Victories. Special Ops and the Future of American Warfare*. n.p.: Public Affairs, 2013, and for their role in today’s battle-space see Dale Kuska. “The Pen and the Spear.” *In Review. US Naval Postgraduate School Magazine*, April 2012, p. 12-17.

The mission spectrum of Special Forces is nearly unlimited and varies between nations and organizations (military, law enforcement, agencies etc.). For the military, it includes:

- *Direct Action (DA)*: precision operations aimed to specific targets of strategic and operational significance
- *Special Reconnaissance (SR)*: collection of information of strategic and operational value
- *Military Assistance (MA)*: measures to enhance friendly or allied capabilities
- Other: *Hostage Release Operations (HRO)*, *Close Protection (CP)*, *Foreign Internal Defense (FID)*, *Unconventional Warfare (UW)*, *Counter Terrorism (CT)*, *Counter Drug (CD)*, *Psychological Operations (PSYOPS)*, *Counter Insurgency (COIN)*, *Faction Liaison*

Table 3.1 - SF and SOF Mission Spectrum and Examples of Military Units²⁴

	<i>Mission Spectrum</i> <i>(according to NATO MC 437)</i>	<i>Military Units</i> <i>(Examples)²⁵</i>
SF	<ul style="list-style-type: none"> • <i>Direct Action (DA)</i>: precision operations aimed to specific targets of strategic and operational significance (including raids, ambushes, and assaults, terminal guidance operations, recovery operations, precision destruction operations, opposed 	<ul style="list-style-type: none"> • <i>US</i>: Delta Force, Special Forces; Combat Application Forces, Air Force Pararescue, Navy Seals, Marine Special Forces • <i>UK</i>: Special Air Service (SAS), Special Boat Service (SBS)

²⁴ For details of the mission spectrum see NATO. *AJP 3.5...*, p. 2-1 – 2-7 and US. *JP 3-05...*, p. II-5 – II-19.

²⁵ The listed examples are from the United States of America (US), Great Britain (UK), Canada (CA), Poland (POL), Germany (GE) and France (FR).

	<p>boarding operations)</p> <ul style="list-style-type: none"> • <i>Special Reconnaissance (SR):</i> collection of information of strategic and operational value (including environmental reconnaissance, threat assessment, target assessment, post strike reconnaissance) • <i>Military Assistance (MA):</i> measures to enhance friendly of allied capabilities (including training, advising, mentoring, partnering) • <i>Other: Hostage Release Operations (HRO), Close Protection (CP), Foreign Internal Defense (FID), Unconventional Warfare (UW), Counter Terrorism (CT), Counter Drug (CD), Psychological Operations (PSYOPS), Counter Insurgency (COIN), Faction Liaison</i> 	<ul style="list-style-type: none"> • <i>CA:</i> Joint Task Force 2 • <i>POL :</i> GROM • <i>GE:</i> Kommando Spezialkräfte (KSK), Kommando Spezialkräfte Marine (KSM) • <i>FR:</i> Brigade des Forces Spéciales Terre, Commando Hubert
SOF	<ul style="list-style-type: none"> • Support of SF during preparation and execution of special operations (including combat support, combat service support, training, assistance, logistics etc.) 	<ul style="list-style-type: none"> • <i>US:</i> 82. Airborne Div, 101. Air Assault Div, ,75th Ranger Rgt, Marine Corps, 160 Special Aviation Regiment, Long Range Reconnaissance Units • <i>UK:</i> Royal Marines; SF Support Rgt • <i>CA:</i> Canadian Special Operations Regiment (CSOR); 427 Special Operations Aviation Squadron (SOAS) • <i>POL:</i> SFU Commando, and SFU Formoza

		<ul style="list-style-type: none"> • <i>GE</i>: Fallschirmjägerregimenter; Fernspähkompanien • <i>FR</i>: 2e Régiment Étranger de Parachutistes, 13ième Rgt Dragons • <i>All</i>: dedicated and very large training facilities and units for SF and SOF
--	--	--

Tier One Special Forces

Special Forces can be classified in a system of three clusters – Tier One, Tier Two and Tier Three SF. This system has its origin in the United States Special Operations Command (USSOCOM). Today it is commonly applied within the global SF community.²⁶

- *Tier One / Tier 1 Special Forces* units are color coded “black” and typically have to meet the following criteria:²⁷
 - *National Chain of Command /Decision to be deployed*: The chain of command typically bypasses traditional military bureaucracy. The units are directed directly by the Head of State or Government, the Commander in Chief, the Ministry/Secretary of Defence, or the top commanding general.
 - *Military Command and Control (C2)*: Required are full-spectrum planning capabilities and sufficient and capable resources to exercise command and control of all assets during all phases of an operation, on all levels (strategic, operational, tactical), and in any degree of complexity (national,

²⁶ For details see No author. “Special Operations Forces Tier System.” Accessed 15 May 2014. http://sgtng.wikia.com/wiki/Special_Operations_Forces_Tier_System.

²⁷ For details of the following criteria see Bernard J. Brister. “Canadian Special Operations Forces: A Blueprint for the Future.” Originally published in *Canadian Military Journal*, 2008-07-14. Accessed 16 May 2014. <http://www.journal.forces.gc.ca/vo5/no3/special-02-eng.asp>, p. 3-5, and No author. *Tier System*...

joint, combined, inter-agency²⁸, multiple locations etc.) while ensuring situational awareness for the national chain of command (and to coalition where applicable).

Furthermore, technical communication and information technology (IT) should be globally functional in all possible environments as well as within and between all command levels (strategic, operational, tactical), national chain of command, other government agencies, and coalition elements.

Tier 1 Special Forces contain their own and sufficient intelligence capabilities and assets.

- *Power Projection:* Tier 1 Special Forces need to be capable of projecting their assets globally at any time without external assistance and delay into the operational arena. This strategic lift capability can either be organically integrated or reliably contracted.

Tactical or operational land, water, sea and air mobility capabilities in the theater of operations are a further prerequisite. Related to this are critical capabilities such as air-to-air refueling, force protection, operational and tactical lift capabilities etc.

- *Operational Flexibility:* A discrete and effective execution of a mission requires proper and sufficient resources and capabilities to integrate elements from other national services/components, and to plan, command and control, and operate within a joint – and possibly combined and/or inter-agency – task force.

²⁸ For a detailed elaboration on interagency capabilities of Special Forces see in detail Joint Special Operations University (JSOU). *Special Operations Forces Interagency Counterterrorism Reference Manual*. 3rd ed., MacDill AFB, FL: The JSOU Press, September 2013.

- *Tactical Capability*: This prerequisite not only includes the capability of executing the full spectrum of high-order missions²⁹ but also to be able to shift or transition seamlessly from low intensity to high intensity operations and vice versa.

It also includes the ability to conduct sustained operations over a lengthy period of time.

- *Specialist Support*: Tailored to the mission support by special operation forces and other specialty units need to be accessible and available on short notice, in sufficient numbers, properly equipped, with the required capabilities and experience in working with and for Special Forces.

Typical tasks include intelligence, surveillance and reconnaissance (ISR), security missions, quick reaction forces (QRF), medevac capabilities, and nuclear, radioactive, biological, chemical (NRBC) capabilities.

- *Funding*: Sufficient and sustained funding over a significant period of time to finance all the above described prerequisites of Tier 1 Special Forces is an obvious, yet often underestimated or neglected requirement.
- *Implied Prerequisites*: Besides sufficient funding, additional sine qua non elements to reach, sustain and improve all the above capabilities include high quality capabilities in the domain of training, exercise, development, procurement and others.

*Tier 1 Special Forces*³⁰ include US Army Delta Force, US Navy DevGru, CA Joint Task Force 2, UK SAS and SBS, POL GROM (in the process) and with limitations

²⁹ See Table 3.1 of this research paper.

³⁰ The listed units' abbreviations read as follows: US Naval Special Warfare Development Group (DevGru), Special Air Service (SAS), Special Boat Service (SBS), Grupa Reagowania Operacyjno Manewrowego (GROM),

(in the domains of National Chain of Command, C2 and Power Projection) GE KSK and KSM.³¹

- *Tier Two / Tier 2 Special Forces*³² units are color coded “grey”. Examples include US Army Special Forces, US Navy SEALs, US Army 75th Ranger Regiment, CA Special Operations Regiment, UK Special Forces Support Group, GE EGB companies of Airborne Regiments.³³
- *Tier Three / Tier 3 Special Forces* units are color coded “white” or “green” and typically comprise larger infantry, light infantry or airborne elements that provide broad manpower and specialized capability support to Tier 1 during military deployments/engagements. Examples include US 10th Mountain Division, 82nd Airborne Division, 101st Air Assault Division, GE Airborne Regiments.³⁴

This research project will only consider military Special Forces currently classified as Tier 1 or those Special Forces that are in the process or do have the ambition to become Tier 1. Furthermore, the analysis will be limited to Tier 1 Special Forces from five selected nations.

Special Operations Organization³⁵

The term “Special Operations Organization” can be described as the combination of all designated Special Operations capabilities, assets, units, individuals and commands that are organizationally and formally combined or linked together. SO Organizations share a common

Kommando Spezialkräfte (KSK) and Kommando Spezialkräfte Marine (KSM). See also the List of Acronyms of this research paper.

³¹ For details about these units including their correct names see Chapter 4 of this research paper.

³² The listed units’ abbreviations read as follows: Sea, Air, Land (SEALS), Erweiterte Grundbefähigung (EGB). See also the List of Acronyms of this research paper.

³³ See No author. *Tier System* ...

³⁴ See No author. *Tier System* ...

³⁵ This description is based on the example of the SO Organization of the US Armed Forces. For details see Yager. *21st Century...*, p. 47.

system/set of goals or purposes as well as some sort of leadership. Work within SO Organizations is approached systematically through assigned tasks, structural design, allocated responsibilities, and dedicated processes.

As any other organization, SO Organizations need appropriate sources in order to be able to achieve its goals and tasks. In principle, SO Organizations can exist on any hierarchy level. Therefore, it would be correct to address a SO-company as a SO Organization just as well as a SO-division or a SO-service/component. However, for this research paper, the term is understood comprehensively and includes all combined national SO capabilities, assets, units, individuals and commands.

For a description of the terms “organizational structure” and “organizational processes” see Chapter 5 of this research project paper.³⁶

³⁶ See Sub-chapter “Analytical Subject – Organizational Elements” of Chapter 5 this research paper.

CHAPTER 4 – RESEARCH OBJECT - MILITARY TIER 1 SPECIAL FORCES

This chapter will give an overview of selected national military Tier 1 Special Forces (US, UK, CA, POL, GE), focusing on their history and current status, current national environmental reality they exist in³⁷, organizational force and command and control (C2)³⁸ structure, and Tier 1 classification as a basis for the later conducted analysis.

Selected Nations

The selection is intended to apply a dedicated mix of military Tier 1 Special Forces in order to cover a thorough variety in the context of the later analysis and to ensure an objective view. The United States of America (US) have been selected because it globally is the largest; best funded and equipped; most advanced and experienced Special Operations Organization with a long history and evolutionary path that saw a number of reorganizations and organizational adaptations.

³⁷ The individual national environment is a determining reality that has to be taken into account, as it often poses constraints regarding organizational design. Among the key factors to be considered are budgets, overall size and structure of the national armed forces etc. Regarding resources, except for the US, for most of the global Special Forces and Special Operations Forces the situation can be described as "... little money, unclear ends, and big ideas..." (Richard Rubright. "A Strategic Perspective on the Global SOF Network: Little Money, Unclear Ends, and Big Ideas". In *21st Century SOF: Towards an American Theory of Special Operations*, JSOU Report 13-1 edited by Harry R Yager. MacDill AFB, FL: The JSOU Press, April 2013, p. 5.).

For a detailed elaboration on the subject of environmental constraints for SOF see in detail Chuck Ricks. *The Role of the Global SOF Network in a Resource Constrained Environment*. JSOU Report. MacDill AFB, FL: The JSOU Press, November 2013.

³⁸ In this research paper, the term "Command and Control (C2)" will be based on the following NATO-descriptions: "Command is the authority vested in an individual ... to direct, coordinate and control armed forces. It can be described ... as the process by which a commander impresses his/her will and intentions on subordinates to achieve particular objectives. It encompasses the authority and responsibility for deploying and assigning forces to fulfil their missions" and "Control is the authority exercised by a commander. it can be described ... as the process through which a commander, assisted by the staff, organizes, directs and coordinates the activities of the forces assigned to implement orders and directives." (North Atlantic Treaty Organization (NATO). *AJP 01 (C) NATO/PfP Unclassified*, SHAPE, March 2007, p. 5-1.).

The United Kingdom (UK) has been chosen because it was and still is the reference point for many of the global military and non-military Tier 1 Special Forces units in a number of areas (such as training, structure, capabilities, operations etc.) and in many phases of their existence – many international Tier 1 Special Forces units were designed after and with the help of UK Tier 1 Special Forces, that have a level of experience hardly met by others and also have been undergoing a lengthy process of evolution.

Canada (CA) is not only the home of the Canadian Royal Military College and the Canadian Forces College where this research project paper was written it also is the home of a recently reorganized Special Forces Organization with US-accepted and proven Tier 1 Special Forces capabilities and with a substantial operational track record.

Poland (POL) is included in the analysis because its Tier 1 Special Forces not only stem the former East-Bloc but also in the Ministry of Interior. Furthermore, Poland also has been changing its overall Special Operations Organization with the objective of improvement and optimization.

Finally, Germany (GE) was selected because of the author's origin and because of the fact that the German Tier 1 Special Forces are among the younger ones in a global comparison and, naturally, are still following an evolutionary path towards an optimized Special Operations Organization.

The presented national Special Forces Organizations are current NATO-members but differ in the following dimensions:

- *Size of Tier 1 SF* – “large” (US), “medium” (UK, CA, GE), and “small” (POL)
- *Duration of Existence* of Tier 1 SF - “old” (US, UK), “adolescent” (CA), and “young” (GE, POL)

- *Maturity as Special Forces Organization* – “matured” (US, UK), “recently reorganized” (CA, POL), and “under review” (GE)
- *Tier 1 Classification* - “established” (US, UK, CA), “in transition/under way” (POL), and “declared ambition” (GE)

The above dimensional assignments are based on the perception of the author and do not necessarily represent the individual nation’s view.

Table 4.1 - Differences between Selected Military Tier 1 Special Forces

	<i>National Military Tier 1 Special Forces</i>				
	<i>US</i>	<i>UK</i>	<i>CA</i>	<i>POL</i>	<i>GE</i>
<i>Size</i>					
<i>Large</i>	X				
<i>Medium</i>		X	X		X
<i>Small</i>				X	
<i>Duration of Existence</i>					
<i>Old</i>	X	X			
<i>Adolescent</i>			X		
<i>Young</i>				X	X
<i>Maturity as SF Organization</i>					
<i>Mature</i>	X	X			
<i>Recently reorganized</i>			X	X	
<i>Under review</i>					X
<i>Tier 1 Classification</i>					
<i>Established</i>	X	X	X		
<i>In transition / under way</i>				X	
<i>Declared ambition</i>					X

United States of America

History and Current Status

Forces capable of conducting special operations of some kind have been part of American military history since the colonial era. In every conflict since the Revolutionary War, the US has employed special operations tactics and strategies to exploit the vulnerability of their enemies. These operations have always been carried out by very skilled and specially trained people. During WW II, these specially trained people were organizationally unified to conduct their special missions – mainly in the “Office of Strategic Services (OSS)” and the “US/Canadian 1st Special Service Force”, also known as the “Devil’s Brigade”.

Although US special operations capabilities survived the end of WW II in limited numbers and units, it was not until the 1950s/60s that US Special Forces and Special Operations Forces – being strongly advocated and supported by then President J.F. Kennedy - began to operate in significant numbers during the USA’s military engagement in the war in Vietnam.

After the Vietnam War, the US Special Operations suffered a time of distrust within the rest of the US Armed Forces and a significant loss of effectiveness, success, trust, and support. This declining development together with the failure to rescue 55 US-American hostages from the US embassy in Teheran during the hostage rescue operation “Eagle Claw” in April 1980 led to an immediate initiative of the US Department of Defense to significantly revitalize, correct and improve US Special Operations capabilities and organization as a whole, eventually leading to the creation and activation of USSOCOM (United States Special Operations Command).

Today, with approximately 65,000 active duty and reserve military plus civilian personnel US special operations assets, units, and capabilities coordinated and led by USSOCOM are

undoubtedly the largest military special operations organization on the globe.³⁹ US military Tier 1 Special Forces Units are “1st Special Forces Operational Detachment Delta” (1st SFOD-D or simply “Delta Force”) with the US Army and “United States Naval Special Warfare Development Group” (USNSWDG or simply “DevGru”; also known as “SEAL Team 6”) with the US Navy. As all other special operations assets, units, and capabilities, Delta Force and DevGru/SEAL Team 6 also fall under the umbrella and command of USSOCOM. Capability and mission-spectrum cover the complete range of Tier 1 Special Forces with a focus on counter terrorist (CT) and hostage release operations (HRO).

Delta Force was officially formed 1977 based on the initiative of its first commander who previously had finished an exchange with the British “Special Air Service (SAS)”, as the dedicated US-American military counter-terrorist unit. The unit is modeled after the SAS and is commanded by a full colonel; its strength supposedly is below 1.000 personnel (HQ, operators, support, and training).⁴⁰

DevGru/SEAL Team 6 is the naval equivalent of and counterpart to Delta Force and part of the US Navy Seals which consists of Naval Special Warfare groups that command several

³⁹ For details and further elaborations on the previously summarized history of US special operations assets and units see John M. Collins, “1670-1991. From Genesis and Unguided Growth to Second Rejection and Resurrection.” In *U.S. Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carne, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 22-153, Andrew Feickert. *U.S. Special Operations Forces (SOF): Background and Issues for Congress*, CRS Report for Congress, Washington, DC: Congressional Research Service, February 6, 2013, p. 1, Joel Nadel, and J. R. Wright. *Special Men and Special Missions. Inside American Special Operations Forces 1945 to the Present*, London and Pennsylvania: Greenhill Books, 1994, Peter J. Schoomaker. *The Tip of America's Spear*. In *U.S. Special Operations Forces*, edited by Benjamin F. Schemmer (editor), and John T. Carney. Tampa, FL: Special Operations Warrior Foundation, 2003, p. 6-21, and Samuel A. Southworth, and Stephen Tanner. *U.S. Special Forces. A Guide to America's Special Operations Units*. USA: De Capo Press, 2002, p. 1-32, and for a look into the future of US special operations see North, *American Heros...*, p. 285-296.

⁴⁰ For details and further elaborations on 1st Special Operations Detachment Delta (1st SFOD-D) see Charlie A. Beckwith, and Donald Knox. *Delta Force*. New York, NY: Harper Collins Publishers, 2000, Southworth, *US Special Forces...*, p. 125-140, George Forty. *Special Forces*. London: Airlife Publishing Ltd, 2002, p. 91, Gonzalez, Joe. “Delta Force”. *Operator. The Special Forces Magazine*. Tampa, FL: FX Group Inc, May 2014, p. 42-44, No author. “Delta Force.” Accessed 15 May 2014. http://en.wikipedia.org/wiki/Delta_Force, and Chris Ryan. *Fight to Win*. London: Arrow Books, 2010, p. 317. On US Army SF in particular see Tom Clancy. *Special Forces. A Guided Tour of U.S. Army Special Forces*, New York, NY: Berkley Books, 2001, and Beckwith. *Delta* ...

SEAL Teams. Each SEAL Team has a typical strength of around 300 personnel (HQ, operators plus support) and is being led by a full colonel. The Navy Seals got activated 1962. Seal Team 6 was activated later, in 1987.⁴¹

The number of conducted operations, missions and campaigns of US special operations units seems endless. The majority of Delta Force's and DevGru's engagements remain classified. More recent and globally known key operations assumed to have been conducted by or with involvement of the two US Tier 1 Special Forces units include those against Osama bin Laden and Saddam Hussein.⁴²

Current National Environmental Reality

Compared to the majority of other national military Special Operations Organizations the current national environment and circumstance in which US military special operations assets and units exist, is rather comfortable. This is dominantly visible in an approval to increase special operations personnel by 4,000, totaling special operations headcount to 69,700.⁴³

⁴¹ For details and further elaborations on the US Naval Special Warfare Development Group (USNSWDG) / Seal Team 6 see Paul Evancoe. "A SEAL's Perspective from the 1960s". *Operator - The Special Forces Magazine*. Tampa, FL: FX Group Inc, May 2014, p. 14-16, Forty. *Special Forces...*, p. 92-94, No author. "SEAL Team Six." Accessed 16 May 2014. http://en.wikipedia.org/wiki/SEAL_Team_Six, No author. "United States Navy SEALs". Accessed 22 June 2014. http://en.wikipedia.org/wiki/United_States_Navy_SEALs, Ryan. *Fight...*, p. 320, Southworth. *US Special Forces ...*, p.58-79, and Ralph Zwilling. "US Navy SEALs in Deutschland." *K-ISOM. International Special Operations Magazine*, Nr. 4/2013 (Juli/August), p. 16-21.

⁴² For details and further elaborations on selected operations, missions and campaigns of US special operations assets and units see Michiletti. *Special Forces...*, p. 32-153, North. *American Heros...*, p. 22-282, Southworth. *US Special Forces...*, p. 255-273, Stilwell. *Special Forces...*, USSOCOM United States of America. USSOCOM History and Research Office. *United States Special Operations Command 1987 - 2007*. McDill AFB, FL, 2007, p. 29-132.

⁴³ For details and further elaborations on the US defense budget developments and on number of US special operations personnel see Nick Simeone. "Hagel Outlines Budget Reducing Troop Strength, Force Structure." *United States Department of Defense. American Forces Press Service. Washington, DC, February 24, 2014.* Accessed 22 June 2014. <http://www.defense.gov/news/newsarticle.aspx?id=121703>, and on USSOCOM budget Feickert. *US SOF...*, p. 7-8.

Organizational Force and C2 Structure⁴⁴

In order to ensure coordinated and unified command and control of all special operations assets and units, to ensure inter-service coordination with the established services/components, and to strengthen US special operations position within the US Armed Forces, in 1987 the US Department of Defense (DoD) established USSOCOM as a new unified command for special operations.

Since its original establishment USSOCOM has undergone a lengthy evolutionary and maturity path.⁴⁵ Today, it is commanded by a four-star flag officer who may be from any military service and who reports directly to the Secretary of Defense. Additional oversight over USSOCOM activities is granted by an Assistant Secretary of Defense for Special Operations and Low Intensity Conflict (ASD/SOLIC).

USSOCOM's unique role is reflected in its extended responsibilities that include synchronizing DoD's plans to counter global terrorist networks and, as directed, to conduct

⁴⁴ For details and further elaborations on USSOCOM, its special operations assets and units, and the overall C2 structure see Bryan D. Brown, "U.S. Special Operations Command Meeting the Challenges of the 21st Century." *Joint Force Quarterly*, Issue 40, 2006, p. 38-43, Feickert. *US SOF...*, p. 1-6, John Gargus. "U.S. Air Force Special Operations Command." In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carne, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 198-229, No author. "United States Special Operations Command." Accessed 22 June 2014. http://en.wikipedia.org/wiki/United_States_Special_Operations_Command, Forty. *Special Forces...*, p. 87-97, Eric T. Olson. "Special Operations: Context and Capabilities in Irregular Warfare." *JFQ: Joint Force Quarterly* 1, no. 56 (2010), p. 64-70, Southworth. *US Special Forces...*, p. 33-213, Benjamin F. Schemmer. "U.S.: Special Operations Command." In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carney, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 154-167.

For the service/component special operations commands see John M. Collins. "U.S. Army Special Operations Command." In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carne, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 168-197, Benjamin F. Schemmer. "Theater Special Operations Command." In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carney, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 252-271, and US. *JP 3-05...*, p. III-1 – III-15, and George R. Worthington. "U.S. Naval Special Warfare Command." In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carney, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 230-251.

⁴⁵ For details of USSOCOM's evolution and development see US. *USSOCOM ...*, p. 5-28.

global operations against these networks.⁴⁶ USSOCOM consists of a headquarters, four component sub-commands and one unified sub-command.

All of US special operations units are part of the four USSOCOM (service) component commands USASOC (US Army Special Operations Command), NAVSPECWARCOM (US Naval Special Warfare Command), AFSOC (US Air Force Special Operations Command), and MARSOC (US Marine Corps Special Operations Command).

Table 4.2 - Units of USSOCOM's Sub-Component Commands⁴⁷

<i>Operational Units and their Missions</i>
<p>US Army Special Operations Command (USASOC)</p> <p>~ 28,500 soldiers (active duty and reserve) and civilians</p> <ul style="list-style-type: none"> • 75th Ranger Regiment • 1st, 3rd, 5th, 7th, 10th, 19th, and 20th US Special Forces Groups • 160th Special Operations Aviation Regiment (SOAR) – now part of the US Army Special Operations Aviation Command (USASOAC) • 4th and 8th Military Information Support Groups • 95th Civil Affairs Brigade (Airborne) • Sustainment Brigade (Airborne) • John F. Kennedy Special Warfare Center and School (USAJFKSWCS) • 1st Special Operations Detachment Delta / Delta Force
<p>US Naval Special Warfare Command (NAVSPECWARCOM)</p> <p>~ 8,900 soldiers (active duty and reserve) and civilians</p> <ul style="list-style-type: none"> • 1st, 2nd, 3rd, 4th, 10th and 11th Naval Special Warfare Groups with 10 SEAL Teams

⁴⁶ See Feickert. *US SOF ...*, p. 1.

⁴⁷ Table based on sources listed in the three previous footnotes.

- 2 SEAL Delivery Vehicle Teams
- 3 Special Boat Teams
- United States Naval Special Warfare Development Group” (USNSWDG)/DevGru/SEAL Team 6

US Air Force Special Operations Command (AFSOC)

~ 16,000 soldiers (active duty and reserve) and civilians

- 1st Special Operations Wing (SOW)
- 720th Special Tactics Group
- 27th SOW
- 325th and 353th Special Operations Groups
- 193rd SOW (Air National Guard)
- 919th SOW (Air Force Reserve Command)
- US Air Force Special Operations School and Training Center (AFSOTC)
- 550th SOW

US Marine Corps Special Operations Command (MARSOC)

~ 2,600 soldiers (active duty and reserve) and civilians

- Marine Special Operations Regiment
- Marine Special Operations Support Group
- Marine Special Operations Intelligence Battalion
- Marine Special Operations School

USSOCOM’s sub-unified command JSOC (Joint Special Operations Command) is responsible for integrated and coordinated concepts, doctrine, requirements, interoperability, standardization, equipment, exercises, training, plans, tactics etc. JSOC’s primary operational mission is to globally identify and destroy terrorists and terror cells. It is widely assumed that JSOC’s responsibilities also include C2 of the US Tier 1 Special Forces units (Delta Forces and SEAL Team 6), Sf- and SOF-units and additional enablers (Intelligence Support Activity (ISA),

75th Ranger Regiment, 160th Special Operations Aviation Regiment, and 24th Special Tactics Squadron).⁴⁸ Additional command and control responsibilities are vested in “Theater Special Operations Commands (TSOC)” which are HQ elements that support a Geographical Combatant Commander in the areas of special operations logistics, planning and operational control. TSOCs are typically commanded by a general officer. Assignments of US special operations units in the United States and in theater, as well as the details of command and control of special operations units in theater on operational and tactical level, in different roles (leading, supporting, liaising), in cooperation with conventional forces, in inter-organizational coordination or in a multinational set-up are thoroughly regulated in US national doctrine.⁴⁹

Tier 1 Classification

The key criteria to be classified as Tier 1 SF are fully met.

Great Britain⁵⁰

History and Current Status

⁴⁸ See Feickert. *US SOF...*, p. 5.

⁴⁹ See in detail US. *JP 3-05...*, p. III-1 - III-16.

⁵⁰ For details on this sub-chapter see Forty. *Special Forces...*, p. 76-86, James D. Ladd, *SAS Operations. More Than Daring*. London: Robert Hale Ltd, 1999, Peter Macdonald. *SAS im Einsatz. Die Geschichte der britischen Spezialeinheit*. Übersetzung aus dem Englischen. Stuttgart: Motorbuch Verlag, 1994, Micheletti. *Special Forces...*, p. 154-163, No author. “Director Special Forces.” Accessed 15 May 2014. http://en.wikipedia.org/wiki/Director_Special_Forces, No author. “Permanent Joint Headquarters.” Accessed 16 May 2014. <https://www.gov.uk/the-permanent-joint-headquarters>, No author. “Top Ten Special Operations Forces.” Accessed 15 May 2014. <http://www.thetoptens.com/special-operations-forces/>, no author (JFC), No author. “Special Air Service.” Accessed 16 May 2014. http://en.wikipedia.org/wiki/Special_Air_Service, No author. “Special Boat Service.” Accessed 16 May 2014. http://en.wikipedia.org/wiki/Special_Boat_Service, No author. “United Kingdom Special Forces.” Accessed 22 June 2014. http://en.wikipedia.org/wiki/United_Kingdom_Special_Forces, Ryan. *Fight...*, p. 315, 380, 302-384, and Stillwell. *Special Forces...*

UK current special operations assets and capabilities are built around the two British Tier 1 Special Forces units SAS (Special Air Service) and SBS (Special Boat Service). SAS's roots go back to WW II, where "L-Detachment, Special Air Service Brigade" operated deep behind enemy lines in North Africa in 1941 carrying out attacks and conducting surveillance. The unit grew to brigade level comprising two British regiments by 1944 and was suspended 1945.

After WWII, SAS was reestablished as a far from fully manned regiment with the Territorial Army which was transferred, renamed and reorganized in 1952 to "22nd Special Air Service Regiment with the British Regular Army. Over time, the SAS was modified several times – especially adapting its operational capabilities to current and future mission-scenarios – and grew to three regiments (one full time and full size regiment with the Regular Army, two reserve regiments with the Territorial Army).

The number of conducted operations and missions is quite large reflecting both, SAS's quality and demand, and giving it a level of experience barely met by any other Tier one Special Forces and making it a natural reference, model and training/exercise partner for others when it comes to operational success factors, unit structures, training etc.⁵¹ There seems no place in the world, where the SAS has not been engaged in execution of one or several of their mission capabilities – internationally (including Europe and NATO-countries) and domestically.⁵²

SAS's sister unit SBS is also a unit on regiment level and is located with the Royal Navy. Equally, its history dates back as far as WW II when special maritime units (at that time SBS stood for "Special Boat Section") carried out raids against enemy coastline installations. Over

⁵¹ Nations that were directly supported or indirectly influenced when forming their own national military Tier 1 Special Forces or Special Forces include all the nations covered in this research project.

⁵² For details on the previous elaboration on SAS's history including missions, operations and campaigns see Forty. *Special Forces ...*, p.84-86, Macdonald. *SAS...*, Micheletti. *Special Forces...*, p. 154-163, No author. "Elite UK Forces. Special Air Service (SAS) - Gulf War I Desert Storm Operations." Accessed 16 May 2014. <http://www.eliteukforces.info/special-air-service/history/desert-storm/>, No author. *SAS...*, Ryan. *Fight...*, p. 320-321, Ladd. *SAS...*, and Stilwell. *Special Forces...*

time, SBS's capability spectrum evolved, its structure adapted, its size grew, and the meaning of SBS changed over "Special Boat Squadron" to today's "Special Boat Service". Up to present, similar to the SAS, SBS's track record of operations, missions and campaigns is long and strong. In recent campaigns and operations SBS frequently also operated ground-based – often together with the SAS.⁵³

Current National Environmental Reality

Today's British military special operations units exist in a national environment and in circumstances that are characterized by continuing defense budget cuts, related adaptations of national armed forces level of ambition and structure, reduction of size, a certain tiredness of the British population of global British military deployments and engagement, but also by a remaining political anticipation for the need of conducting expeditionary operations in the future.⁵⁴

⁵³ For details on the previous elaboration on SBS's history including missions, operations and campaigns see Forty. *Special Forces...*, p.83-84, Micheletti. *Special Forces...*, p. 154-163, No author. *SBS...*, Ryan. *Fight...*, p. 322-323, and Stilwell. *Special Forces...*

⁵⁴ Announced size reductions include those of the Regular Army by 20,000 to 82,000 by 2018 and budget cuts of 10,6 bn £ until 2021 by 2018. Reserve numbers of the Army should be increased by 30,000. For these numbers and for details of the elaborations of the previous chapter see Andrew Chuter. "Final UK Military Cuts Announced To Meet 2018 Goals." *defensenews*, June 12, 2014. Accessed 22 June 2014. <http://www.defensenews.com/article/20140612/DEFREG01/306120039/Final-UK-Military-Cuts-Announced-Meet-2018-Goals>, and Ewen MacAskill. "MPs say army budget cuts will leave Britain seriously undermanned." *The Guardian*. March 6, 2014. Accessed 22 June 2014. <http://www.theguardian.com/uk-news/2014/mar/06/british-army-budget-cuts-defence-committee>.

Organizational Force and C2 Structure⁵⁵

Outside operations and deployments, UK special operations units are elements of the services'/components' structure of Army, Air Force and Navy, making the components force providers. However, with the joint "Directorate Special Forces (DSF)" there is an overarching organizational element responsible for non-operational special operations matters such as an integrated and coordinated concept for selection, training, exercises, doctrine, development, requirements, equipment, interoperability etc. of all British special operations assets and units. DSF is also the advisory authority on all special operations matters for senior military and political leadership. The directed units include the following:

Table 4.3 - UK Special Operations Units Integrated Under the Coordination of DSF⁵⁶

<i>UK Special Operations Units</i>
<ul style="list-style-type: none">• 21 Special Air Service Regiment (Reserve) (British Territorial Army, structure: HQ, Support Sqn, Ops, Trg Wing, three op Sqn)⁵⁷• 22 Special Air Service Regiment (British Regular Army; structure: HQ, Ops, Trg Sqn, four Sqn; strength: appr. 700 personnel)• 23 Special Air Service Regiment (Reserve) (British Territorial Army, structure: HQ, Support Sqn, Ops, Trg Sqn, five op Sqn)⁵⁸• Special Boat Service (Naval Service; structure: HQ, Ops, Trg Sqn, four op Sqn)• Special Boat Service (Reserve) (Naval Service)

⁵⁵ For details on this sub-chapter see Forty. *Special Forces...*, p. 76-86, No author. *Director...*, No author. "Joint Forces Command." Accessed 22 June 2014. <https://www.gov.uk/government/organisations/joint-forces-command/about>, No author. *Permanent...*, and No author. *UK Special Forces*.

⁵⁶ Table based on No author. *UK Special Forces...*

⁵⁷ 21st and 23rd SAS Regiments supposedly will move from the command of UKSF Group to 1st Intelligence Surveillance and Reconnaissance Brigade September 1st, 2014.

⁵⁸ 21 and 23 SAS Regiments supposedly will move from the command of UKSF Group to 1st Intelligence Surveillance and Reconnaissance Brigade September 1st, 2014.

- ***Special Reconnaissance Regiment*** (British Army)
- ***18 Signal Regiment*** (Royal Corps of Signals, British Army)
- ***Special Forces Support Group***
- ***Joint Special Forces Aviation Wing***
 - 7 Squadron (Royal Air Force)
 - 657 Squadron (Army Air Corps, British Army)
 - 658 Squadron (Army Air Corps, British Army)

DSF is headed by a two-star director and, among others, is one organizational element of the four-star-level “Joint Forces Command (JFC)” which is located at service/component level. Other elements of JFC include the “Permanent Joint Headquarters (PJHQ)” a three-star HQ, with the commander rotating between the services/components, which are responsible to plan and C2 joint and combined UK military operations.

Responsibility for operational planning and C2 of UK special operations generally lies directly with the head of the PJHQ, the “Chief of Joint Operations (CJO)”. CJO PJHQ typically delegates this responsibility to the PJHQ’s “Chief of Staff for Operations (COS Ops)” or to the “Director Special Forces (DSF)”. Either one of the two – COS Ops or DSF - would lead the tailored special operations task force via the assigned commander of the “Joint Task Force” or a SOTF. In some cases, DSF can also be the JTF- or SOTF-commander. If needed or advisable (i.e. for OPSEC reasons or when time is of the essence), the Chief of Defense Staff can appoint DSF to plan and C2 of UK special operations, this way keeping C2 directly at MoD-level.

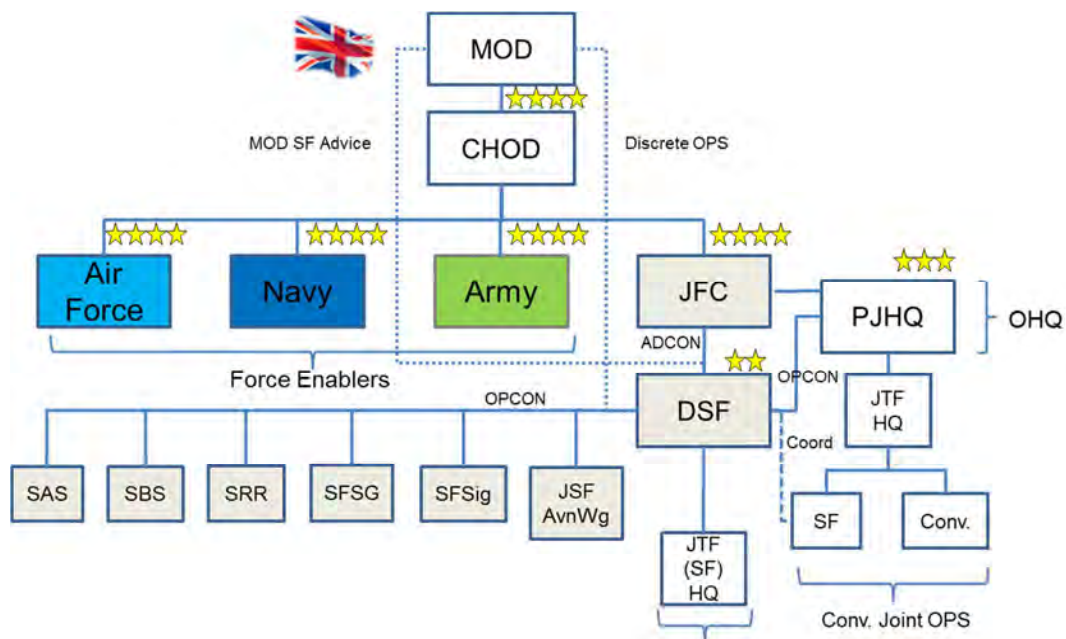


Figure 4.1 - UK's Special Operations Unit's Operational C2 Structure⁵⁹

Tier 1 Classification

SAS and SBS are not only commonly considered and accepted as Tier 1 Special Forces units among the global SF/SOF community, they are also the leading point of reference when it comes to Tier 1 capabilities and experience. The key criteria to be classified as Tier 1 are met. Possible factors risking this status mainly include significant budget reductions.

⁵⁹ North Atlantic Treaty Organization (NATO) Special Operations Headquarters. *Command Structure of Special Forces. NATO Unclassified*. Discussion Paper, SHAPE, September 2013.

Canada⁶⁰

History and Current Status

Canada's military special operations capabilities go back as far as WW II to the "US/Canadian 1st Special Service Force", also known as the "Devil's Brigade". In 2006, after a number of reorganizations and transformations⁶¹, all of Canada's military special operations capable assets and units were unified under the command of CANSOFCOM in order to ensure focus and oversight for all Canadian special operations assets and to significantly improve a coordinated and integrated concept, doctrine, training, exercise, development, budget, procurement, etc. on one hand, and operational planning and command and control on the other hand. CANSOFCOM's assets and units are capable of executing the complete range of SO mission spectrum with "Joint Task Force (JTF) 2" being Canada's Tier 1 Special Forces unit.

JTF 2 roots are considered to be the earlier mentioned "Devil's Brigade". JTF 2 was activated in 1993 when it took over federal CT responsibilities that previously were the task of the "Royal Canadian Mounted Police (RCMP)". At that time, it comprised of around 100 personnel. Strength in 2001 was around 300, assumed headcount in 2007 was approximately 600. The most commonly known engagement of Canadian special operation units is that conducted

⁶⁰ For details about this sub-chapter see Day. *Canadian...*, p. 69-74, Forty. *Special Forces...*, p. 17, Bernd Horn. "We Will Find a Way: Understanding the Legacy of Canadian Special Operations Forces." JSOU Report 12-2, MacDill Air Force Base, Florida: The JSOU Press, 2012, No author. "Canadian Special Operations Forces Command". Accessed 22 June 2014. http://en.wikipedia.org/wiki/Canadian_Special_Operations_Forces_Command, No author. "Joint Task Force 2." Accessed 22 June 2014. <http://www.forces.gc.ca/en/operations-special-forces/jtf2.page>, No author. "Joint Task Force 2." Accessed 22 June 2014. http://en.wikipedia.org/wiki/Joint_Task_Force_2, No author. *Top Ten...*, *Brister. Canadian...*, No author. "Canadian Special Operations Forces Command". Accessed 22 June 2014. <http://www.cansofcom.forces.gc.ca/index-eng.asp>, and Stilwell. *Special Forces...*, p. 65, 132, and 143-144.

⁶¹ For deeper elaborations on the evolution and transformation requirements of Canadian SF/SOF see in detail J. Paul de B. Taillon. *The Evolving Requirements of Canadian Special Operations Forces. A Future Concept Paper*. JSOU Pamphlet 05-2. Hurlburt Field, FL: The JSOU Press, September 2005, J. Paul de B. Taillon. "Canadian Special Operations Forces: Transforming Paradigms." *Canadian Military Journal* (Winter 2005-2006), p. 67-76, J. Paul de B. Taillon. "Coalition Special Operation Forces: Building Partner Capacity." *Canadian Military Journal* (Autumn 2007), p. 45-54, and J. Paul de B. Taillon. "Hitting the Ground with Coalition SOF." *Special Warfare* (November-December 2008), volume 21, issue 6, p. 19-30.

mainly by JTF 2 on and off over several years with changing missions and force packages in Afghanistan.⁶² Other publicly known engagements and activities were executed in Rwanda, Bosnia, Kosovo, Haiti, and Iraq and within Canada.

Current National Environmental Reality

The current national environment and circumstance in which the Canadian special operations units exist is affected by constrained budgets⁶³, review of national armed forces structure, high level of ambition concerning special operations capabilities, and public concerns regarding international military engagement⁶⁴.

Organizational Force and C2 Structure

All of Canada's Special Operations capable assets (Tier 1 Special Forces, Special Forces, Special Operations Forces and dedicated enablers) are integrated under one unified command. COMSOFCOM's organizational structure consists of a headquarters element (HQ) plus five units: Joint Task Force 2 (JTF 2) – Canada's military Tier 1 Special Forces unit; Canadian Special Operations Regiment (CSOR); 427 Special Operations Aviation Squadron (SOAS); the

⁶² JTF 2's engagements during OEF- and ISAF-mandate in Afghanistan are considered a critical turning point in the evolution of Canadian special operations having affected not only international credibility and acceptance but also national support. See Horn. *We will...*, p. 40.

⁶³ Current discussions are based on recommendations to reduce the size of the regular force from 68,000 by ten percent in order to reduce the budget significantly. For details see David Pugliese. "Time To Cut Military Personnel? How Will DND and The Canadian Forces Handle Budget Cuts?" *Defence Watch*, February 10, 2014, last update May 18, 2014. Accessed 22 June 2014. <http://ottawacitizen.com/news/national/defence-watch/time-to-cut-military-personnel-how-will-dnd-and-the-canadian-forces-handle-budget-cuts>.

⁶⁴ After Canada's military engagement in Afghanistan lengthy military deployments are not wanted any more – in exchange for an extended or permanent operational pause. For details see Doug Saunders. "Canada's military policy doesn't add up." *The Globe and Mail*, March 1, 2014. Accessed 22 June 2014. <http://www.theglobeandmail.com/globe-debate/canadas-military-policy-doesnt-add-up/article17160469/>.

Canadian Joint Incident Response Unit – Chemical, Biological, Radiological and Nuclear (CJIRU-CBRN); and the Canadian Special Operations Training Centre (CSOTC).⁶⁵

Table 4.4 - CANSOFCOM’s Operations Units and their Missions⁶⁶

<i>Operational Units and their Missions</i>
<p>JTF 2</p> <p>... its mission is to provide a force capable of rendering armed assistance and surgical precise effects in the resolution of an issue that is, or has the potential of, affecting the national interest. The primary focus is counterterrorism; however, the unit is employed on other high value tasks such as special reconnaissance, DA and Defense, Diplomacy and Military Assistance (DDMA).</p>
<p>CSOR</p> <p>... its mission is to provide high readiness special operations forces capable of force generating for, and conducting, integrated SOTFs to execute operations on behalf of the Government of Canada (GoC). It is also responsible for conducting DA, Non-Combatant Evacuation Operations (NEO) and DDMA.</p>
<p>SOAS</p> <p>... its mission is to generate and employ the integrated aviation element of CANSOFCOM high readiness SOTFs for the conduct of domestic and international operations. Its range of tasks includes CT, DA and DDMA.</p>
<p>CJIRU</p> <p>... its mission is to provide timely and agile broad based Chemical, Biological, Radiological, Nuclear (CBRN) support to the GoC in order to prevent, control, and mitigate CBRN threats to Canada, Canadians, and Canadian interests. The unit is a core member of the National CBRN Response Team, and is also responsible for conducting CT, SR and Counter Proliferation (CP). The unit has three key mandates Respond to CBRN events in conjunction with a. other elements of the National CBRNE [explosive] Response Team; b. Provide an agile integral part of the CANSOFCOM Immediate Reaction Task Force (IRTF); and c. Specialized support to CF expeditionary operations.</p>

⁶⁵ See also Canada. Department of National Defence. *Canadian Special Operations Forces Command: An Overview*, Ottawa, ON, 2008, Canada. Department of National Defence. “Canadian Special Operations Forces Command.” *CANSOFCOM Website*. Accessed 15 May 2014. <http://www.cansofcom.forces.gc.ca>, and Canada. Department of National Defence. *CANSOFCOM. Canadian Special Operations Forces Command: Capstone Concept for Special Operations 2009*, Ottawa, ON, 2009.

⁶⁶ The mission definitions of this table are quotes from Horn. *We will ...*, p. 47-48.

When called upon, COMSOFCOM assembles an integrated and tailored to the mission force and capability package to a “Special Operations Task Force (SOPTF)”. Additionally, COMSOFCOM maintains and has on call several standing SOTF that are capable to respond to specific and predefined tasks.

Table 4.5 - CANSOFCOM’s standing SOTF⁶⁷

<i>SOTF</i>	<i>Tasks (Selection)</i>
<p>Immediate Response Task Force (IRTF)</p> <p>The IRTF is the highest readiness task force available to the Government of Canada; it is deployed on extremely short notice to address issues that could affect national interests. It is comprised of personnel from all four CANSOFCOM units and is led by JTF 2. Its primary focus is counter-terrorism operations, domestic or international.</p>	<p>Hostage rescue, direct action, CBRN response, sensitive site exploitation, counter-proliferation, maritime counter-terrorism.</p>
<p>Chemical, Biological, Radiological and Nuclear (CBRN) Task Force</p> <p>This Task Force is based on the personnel and capabilities of CJIRU and includes the CANSOFCOM contribution to Canada’s National CBRNE Response Team, led by the RCMP. The CBRN Task Force provides a short notice response to crisis or major events within Canada and is primarily focused on counter-terrorism that involves Chemical, Biological, Radiological and/or Nuclear elements. It provides technical response to CBRN incidents and can be enabled by the capabilities of other CANSOFCOM units as required. At the request of the Government of Canada, the CBRN Task Force can also conduct counter-proliferation operations and be deployed internationally.</p>	<p>Reconnaissance, surveillance, sampling, limited decontamination for Task Force personnel and sensitive site exploitation.</p>
<p>Task Force Arrowhead</p> <p>TF Arrowhead is a scaleable, agile force able to respond to threats and incidents around the globe on short notice. While it is internationally focused, it can also be deployed in Canada. It is a high readiness SOTF capable of quickly deploying to a crisis for short periods of time. It is comprised of personnel from all four</p>	<p>Direct action, CBRN response, sensitive site exploitation, counter-proliferation, support to non-combatant evacuation operations, close personnel protection, force protection of</p>

⁶⁷ Table based on CANSOFCOM webpage. See No author. *CANSOFCOM*....

units in the Command and is led by CSOR. TF Arrowhead represents an initial response that could be a pre-cursor to the deployment of another SOTF or conventional task force.	Government personnel and assets.
<p>SOF Teams</p> <p>Small teams of CANSOFCOM personnel perform tasks that fall outside the scope of the three standing task forces. SOF teams generally deploy for short periods of time, typically not longer than six months. SOF teams are made up of personnel and capabilities from all four units.</p>	Defence, diplomacy and military assistance, strategic advice, planning and liaison, strategic reconnaissance and security support to operations of other Government of Canada organizations.

CANSOFCOM is an operational and dedicated two-star command. It is a de facto fourth service within the Canadian Armed Forces besides Army, Air Force and Navy. Regarding the position within the national chain of command, CANSOFCOM’s commander reports directly to the Chief of the Defence Staff, who, in turn, is directly accountable to the Minister of National Defence. Since its inception, JTF 2’s organizational structure has continuously evolved. It is currently a one-star-commanded unit which reports directly to the commander of CANSOFCOM to allow for very timely command and control, access to strategic intelligence, and the needed oversight and situational awareness in both directions.

Tier 1 Classification

After its engagement with and for the US Tier 1 Special Forces during Operation OEF in Afghanistan in 2001/2002, JTF 2 was classified as Tier 1 Special Forces by US officials⁶⁸ and is broadly considered and accepted as Tier 1 among the global Special Operations community.

⁶⁸ For details and the operational background behind this classification see Horn. *We will...*, p. 39-43.

Poland⁶⁹

History and Current Status

Poland's military Special Operations capable assets and units were scattered across the three services/components Army, Air Force and Navy. In 2007 these units were put under one command – POLSOCOM - within the Ministry of Defense in order to improve effectiveness and efficiency in the domains of coordination and intergradation, concept and doctrine, training and exercise, development, budget and procurement etc. as well as operational planning and command and control, making POLSOCOM one of the youngest national joint Special Operations Command. In this context, the limited special operations capabilities from the Cold War era were modified to meet the new threats, battle space and mission scenarios.

Known operational deployments, operations and missions of POLSOCOM units include those in Poland, Haiti, Bosnia, Kosovo, Macedonia, Afghanistan, Persian Gulf, Kuwait, and Iraq. Today, POLSCOM's units and assets cover the complete range of Special Operations mission spectrum with GROM being Poland's Tier 1 Special Forces unit. GROM was founded 1990 as a military counter terrorist unit of the Ministry of Interior in response to the mounting global terrorism threat that started to affect Poland. In 1999 command over GROM was transferred to the Ministry of Defence. Assumed size is around 500 personnel.

⁶⁹ For details about this sub-chapter see Forty. *Special Forces...*, p. 60, Micheletti. *Special Forces ...*, p. 190-195, No author. "GROM." Accessed 16 May 2014. <http://www.grom.wp.mil.pl/en/index.html>, No author. "JW GROM." Accessed 15 May 2014. http://en.wikipedia.org/wiki/JW_GROM, Ryan. *Fight...*, p. 317-318, Carl Schulze, and Clemens Niesner. "Anakonda". *K-ISOM*, Nr. 2/2013 (März/April), p. 22-23, and Stilwell. *Special Forces...*, p. 133, 162-163.

Current National Environmental Reality

Similar to other nations, the current national circumstantial reality and environment in which the Polish special operations units exist can be described with the following attributes: increasing budget constraints⁷⁰, review and possible transformation of national armed forces structure, high level of ambition concerning special operations capabilities.

Organizational Force and C2 Structure

Poland's special operations capable units (Tier 1 Special Forces, Special Forces, Special Operations Forces and selected enablers) are combined under POLSOCOM command and total approximately around 3.000 personnel. The Tier 1 Special Forces unit GROM currently consists of a HQ and two squadrons and is an integrated element of POLSOCOM's force and command structure. POLSOCOM functions as both, force provider and force user. It has independent budget and procurement authority, and has responsibility and authority over concept and doctrine, training and exercise, development and operations. Its organizational structure has undergone a restructuring in 2011. Today, it looks as follows:

⁷⁰ Whereas Poland's special forces originally planned with a sharp rise of the overall defense budget by 6,7 percent to roughly 10 bn US\$ in 2013 and a four percent increase for POLSOFCOM (For details see Jaroslaw Adamowski. "Poland's Spending Up as Most of East Europe Cuts Back." *defensenews*, October 24, 2012. Accessed 22 June 2014. <http://www.defensenews.com/article/20121024/DEFREG01/310240002/Poland-8217-s-Spending-Up-Most-E-Europe-Cuts-Back>), these plans were revised following a growing state deficit which led to an overall cut of the budget to less than nine bn US\$ in 2013. (For details see Konrad Muzyka. "Cuts hit Polish defence budget." *HIS Jane's Defence Industry*, August 27, 2013. Accessed 15 May 2014. <http://www.janes.com/article/26333/cuts-hit-polish-defence-budget>).

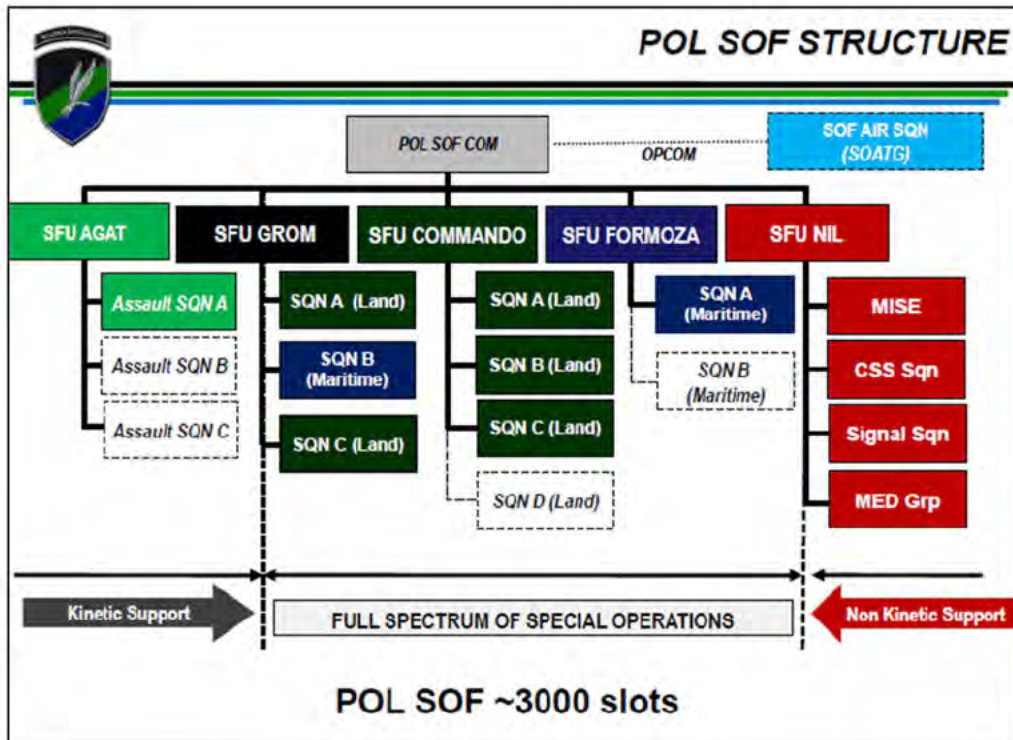


Figure 4.2 - POL's Special Operations Unit's Organizational Structure⁷¹

POLSOCOM itself is considered a separate service/component and dedicated two-star-command located at the same level as Army, Air Force, and Navy. National chain of command from MoD to POLSOCOM is short and direct, making POLSOCOM also the senior advisory authority on SO matters to top senior military and political leadership.

⁷¹ North Atlantic Treaty Organization (NATO) Special Operations Headquarters. *Command Structure of Special Forces. NATO Unclassified*. Discussion Paper, SHAPE, September 2013.

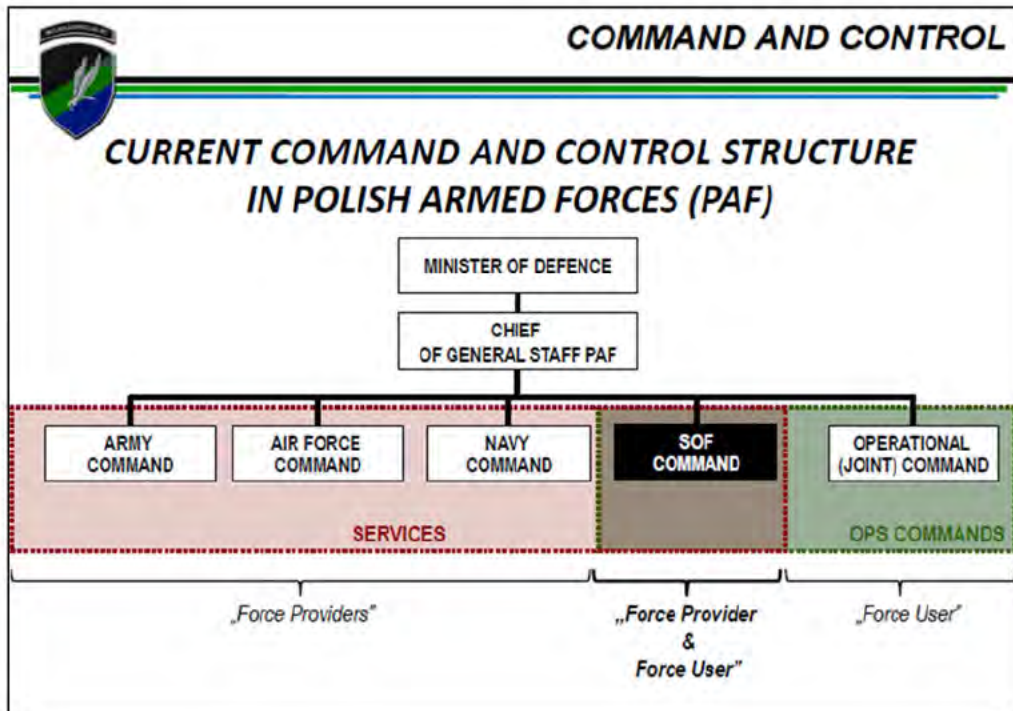


Figure 4.3 - POL's National Chain of Command and C2 Structure⁷²

Tier 1 Classification

Poland's GROM has a good 25 years history as a Special Forces unit. It is debated if GROM actually meets all criteria to be military Tier 1 Special Forces unit⁷³ – Power Projection and Funding are two of those criteria that can be assumed to be having room for improvement. However, undeniably GROM masters the full range of Tier 1 SF operations. Furthermore, the list of successful operations and deployments strongly indicates that the other Tier 1 criteria are well

⁷² North Atlantic Treaty Organization (NATO) Special Operations Headquarters. *Command Structure of Special Forces. NATO Unclassified*. Discussion Paper, SHAPE, September 2013.

⁷³ For an overview of brief descriptions and evaluations of global special operations units see in detail No author. *Top Ten...*

or sufficiently met making GROM one of the prime European Special Forces units with an established professional reputation it has been able to live up to.⁷⁴

Germany⁷⁵

History and Current Status

During the Cold War era, Germany's Armed Forces special operations capabilities were focused on Special Operations Forces units (i.e. airborne, long range patrol and reconnaissance, mountaineer, light infantry and other SOF units), that were all part of the Army. For decades, the only Special Forces asset was part of the Navy (with a limited capability spectrum), which was later supplemented by commando units located with each of the airborne brigades of the Army

⁷⁴ This was one of the reasons why POLSCOM was selected among other national special operations organizations in a NATO study on Special Operation Forces conducted in 2012. (See North Atlantic Treaty Organization (NATO) Special Operations Headquarters (NSHQ). *Special Operations Forces Study*. SHAPE, December 2012.)

⁷⁵ For details about this sub-chapter see Bundesrepublik Deutschland. Inspekteur des Heeres der Deutschen Bundeswehr. *Die Neuausrichtung des Heeres. Kämpfen – Schützen – Helfen – Vermitteln*. Straußberg: Zentraldruckerei Bundesamt für Infrastruktur, Umweltschutz und Dienstleistungen der Bundeswehr, Juli 2013, p. 78, Bundesrepublik Deutschland. Kommando Spezialkräfte. *Das KSK*. Calw, 2013, Forty. *Special Forces...*, p. 28, Markus Gollner. *Das Kommando Spezialkräfte*. EU, 2012, Reinhard Günzel, Wilhelm Walther, and Ulrich K. Wegener. *Geheime Krieger*, Selent: Pour le Merit Verlag, 2006, p. 7-48, Stilwell. *Special Forces...*, p. 18-19, 132, and 170, No author. "Kommando Spezialkräfte." Accessed 15 May 2014. http://en.wikipedia.org/wiki/Kommando_Spezialkr%C3%A4fte, No author. "Kommando Spezialkräfte." Accessed 15 May 2014. http://www.deutschesheer.de/portal/a/heer/!ut/p/c4/DcLBDcMwCADAwbIA_PvrFm1_tCYOwsYR4ETK9I3u8IM3o0MqpQyJhi98_-TxPWFjdijCFhkJJRRqEy7s0yro6J2sjNj5EmrpxGsyR_PrUnI67Ppc_hCu67w!!/, No author. "Kommando Spezialkräfte Marine." Accessed 15 May 2014. http://de.wikipedia.org/w/index.php?title=Spezial:Buch&bookcmd=download&collection_id=e3fa183929fb2d90&writer=rl&return_to=Kommando+Spezialkr%C3%A4fte+Marine, No author. "Kommando Spezialkräfte Marine." Accessed 15 May 2014. http://www.marine.de/portal/a/marine/!ut/p/c4/04_SB8K8xLLM9MSSzPy8xBz9CP315EyprHK93MQivdLUpNSi0rxiECc7JV8vNTOvOC2nJMdQL7s4V78g21ERA07vgdE!/, No author. *Top Ten...*, Timo Noetzel, and Benjamin Schreier. *Spezialkräfte der Bundeswehr. Strukturerefordernisse für den Auslandseinsatz*. SWP-Studie, Berlin, September 2007, p. 13-23, Christin-Désirée Rudolph. *Eyes on Target. Die Fernspäher der Bundeswehr*. Stuttgart: Motorbuch Verlag, 2008, Reinhard Scholzen, *KSK. Das Kommando Spezialkräfte der Bundeswehr*. Stuttgart: Motorbuch Verlag, 2. Aufl., 2004, Norbert Stöbler (editor). *Ein ganz besonderer Auftrag. Spezialkräfte und Spezialisierte Kräfte in der Bundeswehr. Y Spezial. Y - Das Magazin der Bundeswehr*, Nr. 09/2013, p. 6-19, 40-43, 60-79, 82-85, 88-93, Martin Stollberg. "Schlag auf Schlag: KSK". *Y Spezial. Das Magazin der Bundeswehr*, September 2013, p. 60-69. Sören Sünkler. „Kampfschwimmer: Verwendungsreihe 34 und das neue Kommando Spezialkräfte Marine“. *K-ISOM. International Special Operations Magazine*, Nr. 4/2013 (Juli/August), p. 12-15, Sören Sünkler. „Kampfschwimmer: Die Spezialkräfte der Deutschen Marine“. *K-ISOM. International Special Operations Magazine*, Nr. 1/2014 (Januar/Februar), p. 4-7, and Sören Sünkler. „KSK im Einsatz. Aktuelle Ausbildung, Struktur und Einsatzrealität des Kommando Spezialkräfte (KSK)“. *K-ISOM. International Special Operations Magazine*, Nr. 2/2011 (März/April), p. 32-35.

(also with limited capabilities but with a modified special operations mission spectrum).⁷⁶

Germany's Counter Terrorist and Hostage Release capabilities at that time were located with the Federal Police under the authority of the Ministry of Interior.

This changed when triggered by an incident in 1994, where German citizens were held as hostages in Africa and had to be released and evacuated by military assets from Belgium. This traumatic realization of a severe national capability gap led to the foundation of an Army Special Forces Unit in 1996, the "Kommando Spezialkräfte (KSK)".⁷⁷ Today, the KSK as military Special Forces asset, together with its smaller naval sister element KSM (Kommando Spezialkräfte Marine), is the core element of Germany's military Special Operations capabilities – together with a number of dedicated Special Operations Forces units.

Publicly known operational deployments, activities, operations and missions of Germany's special operations assets include but are not limited to those in Bosnia and Herzegovina, Kosovo, Africa and Afghanistan. Presently, Germany's special operations assets cover the complete range of Special Operations mission spectrum with KSK being principally capable to conduct the full spectrum of Tier 1 Special Forces missions.

Current National Environmental Reality

As with other nations, the current national environment and circumstances in which the German military special operations units exist is affected by severe and still increasing budget

⁷⁶ For examples of units see Table 3.1 of this research paper.

⁷⁷ Unlike Canada and Poland, that transferred their Tier 1 SF capabilities from the authority of MoI to that of the MoD (JTF 2, GROM respectively), Germany kept its federal police SF capabilities and unit GSG 9 (with focus on CT and HRO) despite creating strong military Tier 1 SF capabilities with the KSK as in Germany military forces principally can't be legally employed on home soil. This is different in all of the other nations analyzed in this research paper (US, UK, CA, and POL). At this point, it is worth mentioning, that the GSG 9, in case it is being tasked to operate outside Germany heavily relies on military support because of its own limitations in a number of domains (strategic lift, C4ISR capabilities etc.)

constraints and ongoing transformation of national armed forces structure including reduction of their size⁷⁸. Additionally, Germany has been reviewing the organizational structure (both, force structure and Command and Control structure) of its national military Special Operations assets as the present setup has had a number of shortcomings for years.⁷⁹

Organizational Force and C2 Structure

Still today, organizationally the two German military Special Forces units KSK and KSM are part of two different components – Army and Navy - and are based at two different locations. KSK's structure has been adapted several times over the years and presently consists of headquarters, two battalions (operational forces, combat service support forces) and one force development group, making it a brigade size unit and one-star-command with a size of approximately 1.300 personnel.

⁷⁸ The German Armed Forces are currently in the process to be reduced to 185,000 of total strength and to be restructured based on an adapted level of ambition in order to meet a cost savings target of the national defense budget. (For details see Bundesrepublik Deutschland. Bundesministerium der Verteidigung. *Die Neuausrichtung der Bundeswehr*. Berlin: Bonifatius GmbH, März 2013.) Current discussions include further budget cuts and adaptations of level of ambition, capabilities, size and structure.

⁷⁹ For a detailed analysis and evaluation of the C2-structure of Germany's military special operations assets from the year 2007 see Noetzel. *Spezialkräfte...*, p. 13-23.

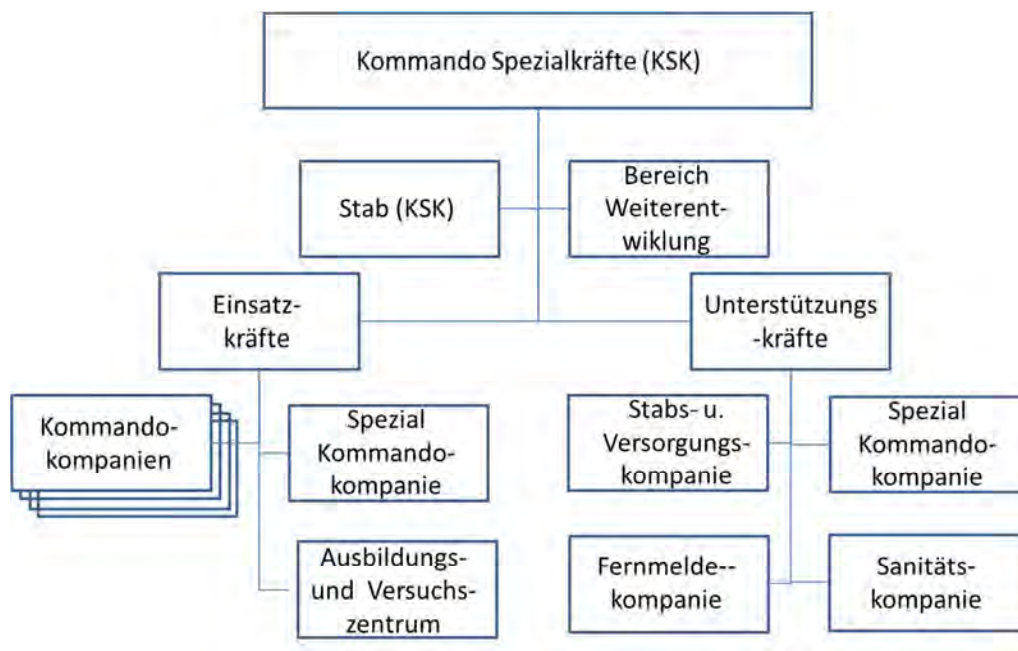


Figure 4.4 – KSK’s Organizational Structure⁸⁰

Together with three SOF/specialized units (one Dutch and two German airborne brigades), three helicopter regiments (one attack and two transportation regiments), and one long range reconnaissance company, the SF brigade KSK forms a division (DSK – “Division Schnelle Kräfte”) that combines the special operations assets and units of the Army under one command. The division’s units are broadly spread across the country.

Although formally commanding the KSK, the DSK division’s HQ has limited authority over its SF asset KSK, as for operations and campaigns involving the KSK (and the KSM), the planning and command and control authority lies elsewhere.

⁸⁰ Figure based on official homepage of the Deutsche Bundeswehr (See No author. *Kommando Spezialkräfte...*). The used German terms can be translated as follows: Kommando Spezialkräfte – Special Forces Command/Brigade; Stab KSK – HQ KSK, Bereich Weiterentwicklung – Development Department, Einsatzkräfte – Operational Forces, Kommando Kompanien – Operational Companies, Ausbildungs- und Versuchs-zentrum – Training and Test Center, Spezial Kommandokompanie – Special Purpose Company; Unterstützungs-kräfte – Support Forces, Stabs- und Versorgungskompanie – HQ- and Supply Company, Unterstutzungskompanie – Combat Service Support Company, Fernmeldekompanie – Signal Company, Sanitätskompanie – Medical Center.

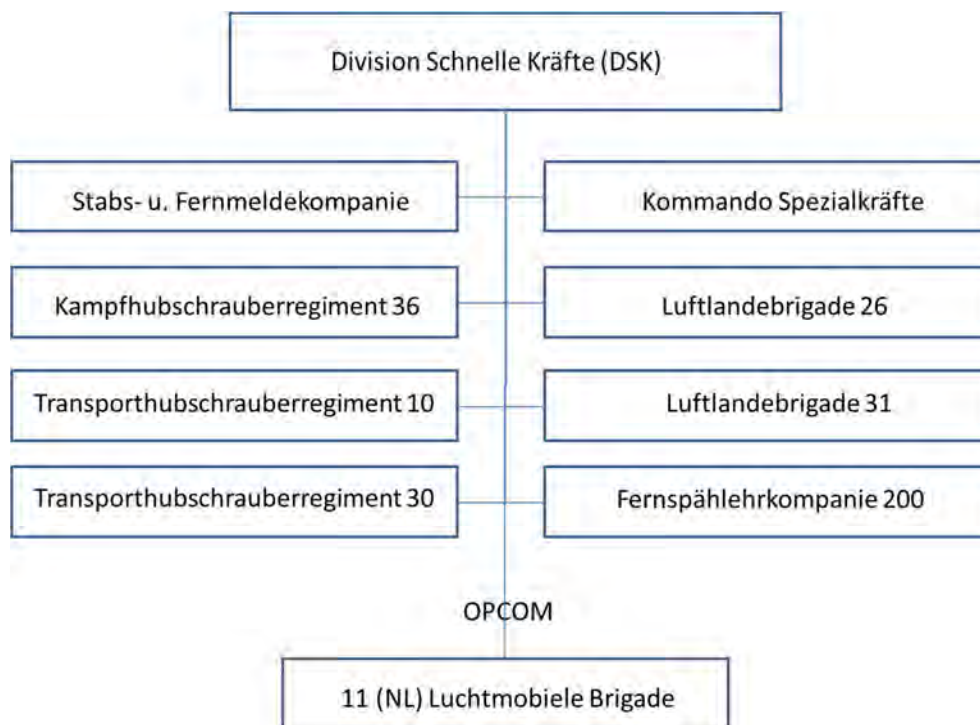


Figure 4.5 - DSK's Organizational Structure⁸¹

The naval special operations assets have recently been reorganized in 2014, including that of the naval Special Forces unit KSM. Today, KSM includes its HQ, one operational company, a training unit and a training boat unit. All KSM units are stationed together and form a unit size on battalion- and OF-4⁸²-level of about 800 personnel. Together with one naval SOF/specialized battalion, the naval special operations assets are organizationally combined under one command on fleet level, which besides its HQ and one Center of Excellence also consists of five naval squadrons. Similar as in the Army, also in the Navy the unit formally commanding the naval SF

⁸¹ Figure based on official homepage of the Deutsche Bundeswehr (See No author. *Kommando Spezialkräfte...*). The used German terms can be translated as follows: Division Schnelle Kräfte – Quick Forces Division, Stabs- u. Fernmeldekompanie – HQ- and Signal Company, Kampfhubschrauberregiment – Attack Helicopter Regiment, Transporthubschrauberregiment – Cargo Helicopter Regiment, Kommando Spezialkräfte – Special Forces Command/Brigade, Luftlandebrigade – Airborne Brigade, Fernspählehrkompanie – Longe Range Reconnaissance and Patrol Company, OPCOM – Operational Command, NL Luchtmobile Brigade – Netherlands Airmobile Brigade.

⁸² NATO classification for military rank of Lieutenant-Colonel (Army and Air Force) / Commander (Navy).

assets has limited authority over the KSM when it comes to operations and campaigns as in these cases the planning and command and control authority lies outside the component/service.

Regarding national chain of command, national constitutional requirements make it legally mandatory that the German parliament authorizes any military operation and deployment of German military units – including SF units. Once the decision to engage with special operations assets has been made, the operational C2 authority over these units (typically, a task force tailored to the mission consisting of a mixture of Special Forces, Special Operations Forces and possibly additional assets, is formed) lies with a separate and dedicated department lead by a full colonel within the three-star-level operational C2 command of the MoD. KSK and KSM as SF units are limited to being force providers during phases of operations and campaigns.

For training, development, doctrine, procurement, personnel, logistics etc. of the two German SF units KSK and KSM the superior peace-time commands (division-level for KSK and fleet-level for KSM) have non-operational C2 authority. Additionally, in these areas coordination with the corresponding departments on component/service level as well as on MoD level is required.

Tier 1 Classification

Although the German Special Forces assets are sufficiently trained and experienced to conduct all Tier 1 Special Forces missions, clear limitations in the areas of National Chain of Command /Decision to be Deployed, Military Command and Control (C2), Power Projection and Funding can be identified to actually und formally classify KSK and KSM as military Tier 1 Special Forces.

Excursion: NATO Special Operations HQ and Command Structure⁸³

In 2010 NATO established the “NATO Special Operations Headquarters (NSHQ)” whose main mission is to serve as the primary point of development, direction, and coordination of all NATO activities related to Special Operations with the objective to optimize employment of special operations assets and to provide an operational command capability when tasked and directed by the “Supreme Allied Commander Europe (SACEUR)”.

This operational planning, command and control capability is embedded in the “Special Operations Component Command (SOCC)”, which is a multinational or national joint component command that is tailored for each operation regarding assigned special operations assets and required degree of C2. The special operations assets are combined in one or several SOTG (Special Operations Task Group), which are the tactical elements of the SOCC. Neither SOCC nor SOTG are standing organizations. As with the other NATO component commands, SOCC reports to a “Joint Forces Command” which is led by SHAPE.

⁸³ For details of this sub-chapter see No author. “NSHQ.” Accessed 22 June 2014. <https://www.nshq.nato.int/nshq/about/>, and NATO. *AJP 3.5...*, p. 31 – 37, and North Atlantic Treaty Organization (NATO) Special Operations Headquarters. *SOTG Manual. NATO Unclassified. 2nd Study Draft*, SHAPE, July 2013. p. 11-13,

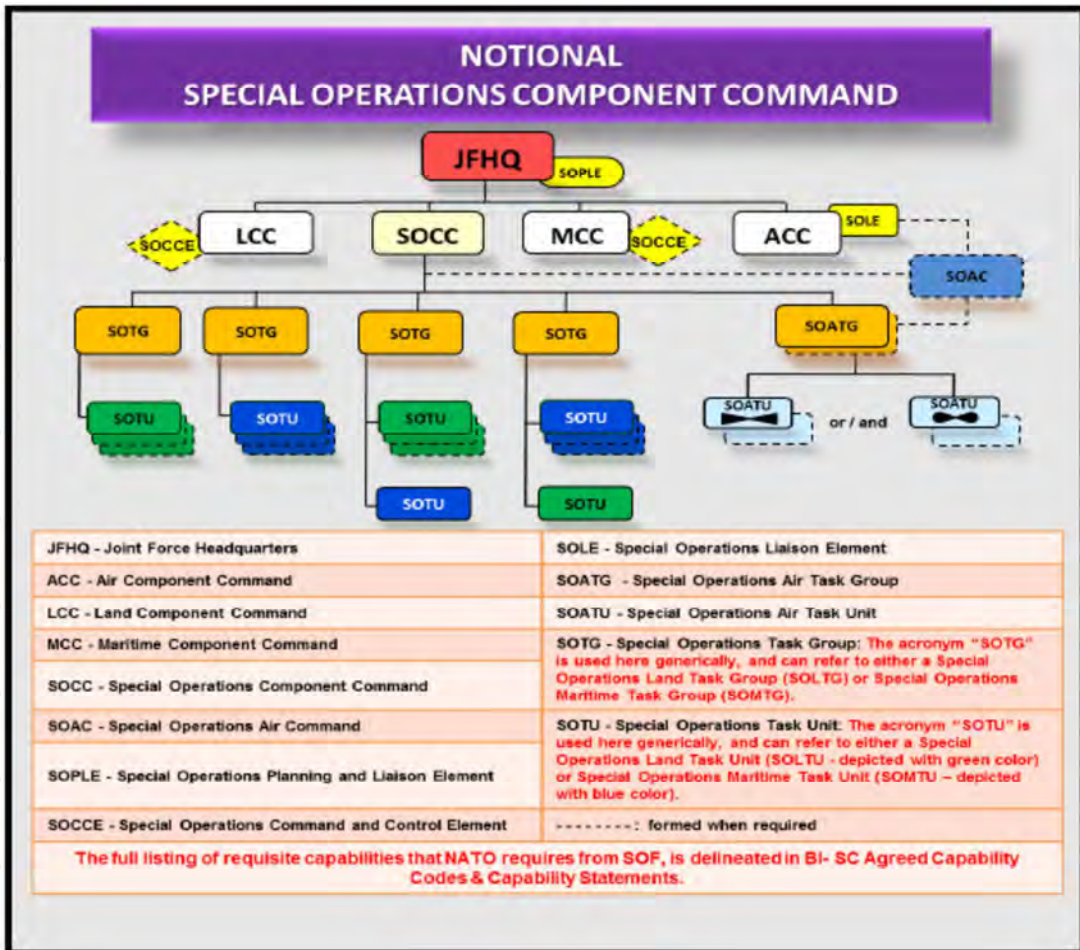


Figure 4-6 - Notional NATO Special Operations Component Command Structure⁸⁴

SOCC is formed on demand by an agreed “Framework Nation (FN)” which provides as a nucleus at a minimum the commander, key staff personnel and base life support functions for the SOCC. The FN is also expected to coordinate the “Combat Service Support (CSS)” functions and possibly the “Command and Control Information Systems (C2IS)”. The remaining personnel and functions of the SOCC are augmented by the contributing nations.⁸⁵

⁸⁴ NATO. *AJP 3.5...*, p. 3.2.

⁸⁵ For a complete list of criteria defined by NATO for special operations framework nations see NSHQ. *Study...*, p. C2 – C-3.

More and more, the capability to fulfil the role as a framework nation for a NATO SOCC becomes a differentiating factor for those NATO countries that want to play and act in the premier league of Special Operation. Therefore, although SOCC FN capability has not yet evolved to be a Tier 1 Special Forces classification criterion, it should be taken well into account when designing, structuring, equipping, staffing - and also optimizing - national Special Operations Organizations, as this capability could well not only determine, if a nation plays in the premier league of special operations, but also if it is a respected, trusted, counted on and needed member in the premier league of NATO countries and global political player nations.

Summary

The briefly described military Tier 1 Special Forces units from the United States of America (Delta Force and DevGru/SEAL Team 6), Great Britain (SAS and SBS), Canada (JTF 2), Poland (GROM) and Germany (KSK and KSM) and the national overall military SO Organizations show a number of commonalities and differences.

Commonalities

All of the addressed five nations have had specially trained and equipped personnel to conduct special missions of some sort in their Armed Forces - in some cases dating back 100 years and longer. All five nations recognize the need for having national military Special Operations capabilities in general, and Tier 1 Special Forces capabilities in particular. However, the political will, support and resources to put these capabilities to reality vary between nations. Because of historic links through exchanges of personnel, experiences, doctrine, equipment and others, through joint training and fighting, and through various support and other activities during

different phases of their existence, naturally, there are a number of commonalities between national Tier 1 SF units – ranging from selection, training, and skill sets of individual operators, over capability sets, structure equipment and tactics of the smallest organizational element, over phases of operations, to battalion-structure.

None of the described national military Tier 1 Special Forces units by themselves can be classified as Tier 1, as a number of prerequisite criteria can only be met or fulfilled by supporting and enabling assets that exist outside the Tier 1 Special Forces units' perimeter (Tier 2 and 3 plus enablers). Therefore, SF Tier 1 units have to be always viewed in the context of the overall national Special Operations Organization.

Based on a number of factors (i.e. changes in the political environment, own experiences, lessons learned from other nations, identified needs, NATO requirements, national military traditions etc.), all of the described nations have undergone changes and adaptations of their SO capabilities, assets and units affecting a number of organizational elements over time. Although speed, frequency and extent of these changes differ between the nations, they all affected the current organizational SO set-up leading to a number of commonalities between those national SO organizational designs – not only for Tier 1 SF units, but particularly for the overall structural SO Organization. These commonalities indicate that there are “better” as well as “less good” organizational designs.

Differences

One key difference is the reasons that led to changes of the national SO organization with its force- and C2-structure and the content and degree of these changes. A related difference is the current phase and status within the national path of establishing, developing, and evolving

national SO capabilities. Another difference is the dimension of a nation's global engagement and employment of its military SO assets and units. Those differences include frequency, mission spectrum, scope, scale, duration, and other operational factors. Factors that were already addressed at the beginning of this main chapter are the size (number of personnel, available budget, number of integrated units, geographic base locations and distribution) and the Tier 1 classification.

Additional key differences include the national environment, in which military special operations units exist (e.g. political will and support, level of funding, stability of Armed Forces structure and size etc.), and the current organizational SO force and command and control structure. Especially the last difference will have implications on effectiveness and efficiency of the SO Organization as a whole and will therefore be in the center of the later analysis.

CHAPTER 5 – ANALYTICAL CRITERIA

This chapter will start with briefly describing the point of reference that is the basis of the analysed organization. It will then select the later applied analytical measure and the organizational elements that the analysis will focus on before outlining the set of analytical criteria.

Analytical Point of Reference - Organizational Goal⁸⁶

Any organization is created with a goal. This goal-based justification and rationale is also applicable for the military or for armed forces as an organization. As a whole, the military's primary goal is that of being a sovereign instrument of governmental politics. The key secondary goal or objective is mission success when armed forces or parts of it get called upon and get employed.

On the basis of this secondary goal, the goals for all of the individual sub-organizations within the armed forces can be derived. The goal for a military sub-organization such as a national military Special Operations Organization can be summarized as to properly prepare and to coordinately and effectively lead national military Special Operations capabilities, assets, and units in order to enable them to successfully conduct any mission they are tasked with.⁸⁷ This goal is the foundation for a number of the almost automatically following tasks⁸⁸ for a national

⁸⁶ For details on the systematic of goals of military organizations see Oswald Hahn, *Militärbetriebslehre. Betriebswirtschaftslehre der Streitkräfte*. Berlin: Berlin Verlag Arno Spitz GmbH, 1997. p. 43-73.

⁸⁷ In short and slightly adapted it can be phrased as "...ensures that SOF are appropriately designed, organized, trained, equipped, and employed to achieve success." NSHQ. *Study...*, p. v.

⁸⁸ For an extensive list of tasks assigned to special operations organizations based on a theory of special operations see in detail Yager. *21st Century...*, p. 42-43.

military Special Operations Organization,⁸⁹ The goal can be divided into the two goal sub-sets “properly prepare” and “coordinately and effectively lead”.

To “properly prepare” as goal sub-set one implies tasks such as those listed in the following table:

Table 5.1 – Goal Sub-set One “Properly Prepare”

<i>Tasks of Goal Sub-set 1 “Properly Prepare”</i>
<p>Based on adequate empowerment, responsibility, authority and competencies,</p> <ul style="list-style-type: none"> • Implement integrated conceptual, doctrinal, tactics and organizational foundation • Ensure coordinated adequate training and staffing of assigned force personnel as well as of various staff organizations and their departments • Plan and conduct dedicated exercises • Ensure constructive and productive development in all domains (concepts, doctrine, structure, tactics, equipment, personnel etc.) based on post-operational processing, lessons learned, and creative initiatives • Ensure best and sufficient technology and equipping for • Provide proper structuring • Ensure availability of needed enablers, support, services and their interoperability and compatibility • Organize appropriate funding • Optimize human capital • Ensure readiness of special operations capabilities, assets, and units for complete defined mission spectrum

⁸⁹ For practical reasons, sub-goals and thereof derived tasks are often prioritized. Such a periodization will not be considered in this research paper. For further and deeper analysis, it could very well be advisable to prioritize the tasks.

To “coordinately and effectively lead” would address both, non-operational as well as operational command and control of all assets. The tasks of this goal sub-set two would include the following:

Table 5.2 – Goal Sub-set Two “Coordinately and Effectively Lead”

<i>Tasks of Goal Sub-set 2 “Coordinately and Effectively Lead”</i>
<p>Based on adequate empowerment, responsibility, authority and competencies,</p> <ul style="list-style-type: none"> • Give guidance and direction • Set and prioritizing requirements and capabilities • Giving clear tasks and provide sufficient and adequate resources for their accomplishment • Assign responsibilities • Execute timely decision making and effective command and control • Identify lessons learned • Provide appropriate situational awareness and information sharing • Ensure “Operational Security (OPSEC)” • Mitigate risk of failure • Monitor preparedness and readiness of SO forces • Plan and operationally command and control operations, missions, and campaigns • Advice senior military and political leadership

The organizational goal is the point of reference and basis for any analysis evaluating if, how, and how well an organization is functioning and will achieve its defined objective. The degree of how well an organization is functioning can be assessed by different measures.

Analytical Measure - Organizational Effectiveness and Efficiency

Organizational assessment has been a key element of discussions among and between scientists and business people. While the latter strive for better performance results of an organization, the former seek to find the best ways to evaluate an organization. Accepted and utilized by both are the use of a number of different measures that can be utilized to assess the degree of how well an organization is functioning and is set up to achieve its goal or goals.⁹⁰ These measures can be used in different phases or stages of the lifespan of an organization and/or for different organizational elements. They differ regarding the dimension - qualitative or quantitative - they measures.

Quantitative measures such as *cost-benefit-analysis*, *cost-performance-analysis*, or *value-benefit-analysis* have to be excluded for application in this this research paper simply because of lack of precise and sufficient data. However, considering the increasing global constraints of defense budgets and the need to reduce costs, it would make sense to conduct an analysis of national Special Operations Organizations based on quantitative measures at some point in time.

Two commonly used qualitative measures are *organizational effectiveness* and *organizational efficiency*. They are closely related and are often used as synonyms⁹¹ – which they are not. Whereas *effectiveness* focuses on the output and the ability-degree of an organization to

⁹⁰ For an elaboration of the challenges of assessing military organizations see Hans Koerdt, „Das Problem einer Bewertung militärischer Organisationen.“ In *Betriebswirtschaftslehre und Streitkräfte*, edited by Johannes Gerber, and Oswald Hahn., Regensburg: Walhalla und Pretoria Verlag, 1980, p. 167-183.

⁹¹ In 1988 some authors defined “military effectiveness” using today’s definition of organizational efficiency. For details see Allen R Millet, Williamson Murray, and Kenneth H. Watman. *The Effectiveness of Military Organizations*. Mershon Center, Ohio State University, 1988. For a more recent detailed elaboration on the differences between organizational effectiveness and organizational efficiency see Iona Bartuševičienė, and Evelina Šakalytė. *Organizational Assessment: Effectiveness vs. Efficiency*. Mykolo Romerio Universitetas, Lithuania, 2013.

achieve its goals⁹², *efficiency* looks at how well an organization transforms input into output.⁹³ A typical analysis subject of organizational effectiveness is the organizational structure, whereas for evaluating organizational efficiency subjects as processes, people, culture etc. are being reviewed. In both cases the achievement of the organizational goal is being considered. In this analysis both measures will be considered and applied,⁹⁴ however, the analyzed organizational elements will be limited, so will be the number of factors that determinate the level of effectiveness and efficiency.

Analytical Subject - Organizational Elements

There are a number of organizational elements worth analyzing including but not limited to organizational force and C2 structure, processes, people, culture, conceptual and doctrinal foundation, development, operational capabilities, mission/operational success, equipment and procurement. This research paper will limit its analytical review on organizational force and C2 structure and selected process elements as they are two critical and linked⁹⁵ key factors influencing organizational effectiveness and efficiency.⁹⁶ The link between structure and

⁹² See North Atlantic Treaty Organization (NATO) Research and Technology Organization (RTO). *Improving the Organizational Effectiveness of Coalition Operations. RTO Technical Report TR-HFM-163. NATO Unclassified*, Brussels: STO/NATO, November 2012, p. 2-5.

For a detailed description of the contribution that the three fields of sciences military history, social sciences and operations research had and today's understanding and definition of the term of military effectiveness see in detail James W. Wright, *Military Effectiveness in the Long War*. Master's Thesis, School of Advanced Military Studies. United States Army Command and General Staff College. Fort Leavenworth, KS, May 2007, p. 5-10.

⁹³ For a detailed elaboration on measuring efficiency of military organizations see Norbert Thom, „Effizienz militärischer Organisationen.“ *In Handbuch zur Ökonomie der Verteidigungspolitik*, edited by Günter Kirchhoff. Regensburg: Walhalla und Pretoria Verlag, 1986., p. 202-208.

⁹⁴ It is not uncommon, that both, effectiveness and efficiency are applied at the same time when analyzing a military organization as the recent assessment of the US Air Force Material Command Reorganization in a report to congress shows. For details see Don Snyder, et al. *Assessment of the Air Force Material Command Reorganization. Report for Congress*. RAND Research Report, Washington, DC et al: RAND Corporation, 2013.

⁹⁵ As one author put it: "...if structure is thought of as the anatomy of the organization, processes are its physiology or functioning..." (Quoted in NATO RTO. *Improving...*, p. 3.9).

⁹⁶ This evaluation is shared by a number of authors. See for example No author. "Measuring Military Capability". *RAND Monograph Report MR 1110*, Chapter 7, p. 133-176. Accessed 22 June

processes is clearly visible when looking at the definitions of the two organizational elements: Organizational structure is understood as “... the formal system of task and authority relationships that control how people coordinate their actions and use resources to achieve organizational goals.”⁹⁷ Organizational processes “... refer to the way the organization implements its objectives in the framework of the given organizational structure.”⁹⁸

Analytical Criteria – Determinants of Organizational Effectiveness and Efficiency

Many factors can determinate the degree of effectiveness and efficiency of an organization and its elements. In this research paper the selected determinants will not be categorized (e.g. degree of impact – influencing, enabling, blocking; hard or soft factors; high or low priority; high or low weighing etc.). However, the selection is based on their relevance⁹⁹ and practical applicability and includes the following determining factors:

Table 5.3 – Determinants of Organizational Effectiveness and Efficiency

<i>Determinant</i>	<i>Brief Description (not exhaustive)</i>	<i>Enabling Factors (not exhaustive)</i>	<i>Affected Goal Sub-set</i>
--------------------	---	--	--------------------------------------

2014 http://www.rand.org/content/dam/rand/pubs/monograph_reports/MR1110/MR1110.ch7.pdf, p. 150-151, and Snyder. *Assessment ...*, p. 35.

⁹⁷ NATO RTO. *Improving...*, p. 3-9.

⁹⁸ NATO RTO. *Improving...*, p. 3-9.

⁹⁹ Determinants for (operational and combat) military success were introduced early in military theory. See in detail von Clausewitz. *Vom Kriege...*, p. 287-320.

The various determinants used in this research paper were suggested and/or applied by a number of military and/or academic individuals and/or institutions who/that had addressed the topic of military organizational effectiveness and efficiency in the past. For details see the footnotes of the following Table 5.3 and footnote 106.

<p><i>Appropriate Command Empowerment</i>¹⁰⁰</p>	<ul style="list-style-type: none"> • Direction and decision authority within led SO organizational force- and C2-structure • Routine advisory and request access and authority to top senior military and political leadership 	<ul style="list-style-type: none"> • Dedicated standing, integrated, joint SO force- and C2-organization with allocated full-time appropriate directive and command responsibilities, authorities and competencies for non-operational and operational C2 	<ul style="list-style-type: none"> • 1 • 2
<p><i>Effective and Timely Decision Making</i>¹⁰¹</p>	<ul style="list-style-type: none"> • Rapid tailoring of scalable integrated force package to meet concrete mission requirements • Timely deployment of forces • Rapid integrated adjustments concerning all SO assets to meet changes during mission or campaign 	<ul style="list-style-type: none"> • Short, direct and streamlined lines of national chain of command • Command authority over all SO assets (including enablers, support, service) and sub-commands • Established routine planning and decision making processes 	<ul style="list-style-type: none"> • Mainly 2 • Also 1
<p><i>Flexibility and Independence</i>¹⁰²</p>	<ul style="list-style-type: none"> • Authority and independence not only to make responsive and quick changes during operations affecting all SO assets and units, but 	<ul style="list-style-type: none"> • Different structural designs are possible and feasible • Flat hierarchy levels 	<ul style="list-style-type: none"> • 1 • 2

¹⁰⁰ See also NSHQ. *Study...*, p. i.

¹⁰¹ See also Day. *Canadian...*, p. 70 and 72, James F. Dunnigan, *How to Make War. A Comprehensive Guide to Modern Warfare for the Post-Cold War Era*, 3rd ed. New York, NY: William Morrow & Co. 1993, p. 17, James E. Jones, "A Blueprint for Change. Transforming NATO Special Operations." *Joint Forces Quarterly (JFQ)*, Issue 45, 2nd Quarter 2007, p. 40, and NATO RTO. *Improving...*, p. 2-5.

¹⁰² See also Day. *Canadian...*, p. 69-70, and Robert G. Spulak Jr. *Innovative or Die: Innovation and Technology for Special Operations*. JSOU Report 10-7, MacDill AFB, FL: The JSOU Press, December 2010, p. ix.

	<p>also to make agile and flexible adaptations regarding non-operational C2 to meet changes within the future operational / battle-space environment</p> <ul style="list-style-type: none"> • Make changes, evolve, transform and develop capabilities, structures, processes etc. • Allow for creative innovation, take initiative for independent changes and improvements based on learning culture and mechanisms 		
<p><i>Unity and Integration of Command</i>¹⁰³</p>	<ul style="list-style-type: none"> • Combines all SO capabilities, assets and units under one integrated C2 structure (no separation of force provider and force user), this way providing needed cohesion, understanding, harmonization and integration for preparation and readiness as well as for planning, execution, and post- 	<ul style="list-style-type: none"> • All SO assets under a separate, dedicated, and formalized SO command umbrella • SO capabilities, assets, and units are being led by SO personnel • One voice inside (directions, guidance, tasking etc.) and to the outside (advice, situational awareness) 	<ul style="list-style-type: none"> • 1 • 2

¹⁰³ See also Day. *Canadian...*, p. 70, Dunnigan. *How to ...*, p. 16, Joel H. Nadel. "Specific Military Factors. Command and Control." In *Military Lessons of the Gulf War*, edited by Bruce W. Watson, 2nd revised ed., London: Greenhill Books, 1993, p. 144, JSOU. *OSS...*, p. iii and 31, NATO. *AJP 01...*, p. 5-1, and NATO RTO. *Improving...*, p. 2-5.

	<p>processing of operations</p> <ul style="list-style-type: none"> • Addressees both, non-operational as well as operational C2 		
<i>Clear Chain of Command</i> ¹⁰⁴	<ul style="list-style-type: none"> • No scattered responsibilities, authorities and competencies • No room for misinterpretation and doubt who is in charge at different command levels 	<ul style="list-style-type: none"> • Clear levels of command with defined and allocated separated roles, responsibilities, authorities and competencies (access to all needed assets) • Maximum of one command/er on each C2 level (tactical, operational, strategic) • Simple C2 relationships with clear lines between commands and limited to none matrix or parallel C2 structures • Possibly flat hierarchy 	<ul style="list-style-type: none"> • 1 • 2
<i>Tailored, Robust, Flexible and Mature Governance Processes</i> ¹⁰⁵	<ul style="list-style-type: none"> • Formalization of workflow to facilitate accomplishment of routine and non-routine tasks 	<ul style="list-style-type: none"> • Processes aligned with organizational structure • Harmonized and optimized processes 	<ul style="list-style-type: none"> • 1 • 2
<i>OPSEC, Situational Awareness, Information</i>	<ul style="list-style-type: none"> • Appropriate degree of information protection • Appropriate degree of information sharing and 	<ul style="list-style-type: none"> • Unity of command • Clear chain of command • Limited complexity of non-operational and 	<ul style="list-style-type: none"> • Mainly 2 • Also 1

¹⁰⁴ See also Day. *Canadian...*, p. 70, Horn. *We will...*, p. 47, Nadel. *Command...*, p. 144, and NATO. *AJP 01...*, p. 5-1.

¹⁰⁵ See also Day. *Canadian ...*, p. 70.

<i>Sharing, and Transparency</i> ¹⁰⁶	<p>transparency across command levels</p> <ul style="list-style-type: none"> • Facilitation of oversight to senior military and political leadership if, when, and where needed 	<p>operational C2 structures</p> <ul style="list-style-type: none"> • Independent dedicated SO organization 	
<i>Appropriate Funding</i> ¹⁰⁷	<ul style="list-style-type: none"> • Sufficient and accessible budgets for ensuring readiness of forces 	<ul style="list-style-type: none"> • Budget request authority • Budget spending authority 	<ul style="list-style-type: none"> • Mainly 1
<i>SOCC FN Capability</i> ¹⁰⁸	<ul style="list-style-type: none"> • Capable, staffed, qualified and equipped to fulfill role as framework nation in NATO-led SO missions, operations, and campaigns 	<ul style="list-style-type: none"> • As per NATO definition and requirements 	<ul style="list-style-type: none"> • Mainly 2

At this point it is worth noting that some of the listed determinants and/or their enabling factors have equivalents in *McRaven*'s system of principles or success-factors for operational mission success¹⁰⁹ - "simplicity" corresponds with "simple and clear C2 relationships", "security" corresponds with "OPSEC", "repetition" corresponds with "established routine planning and decision making processes"; "speed" corresponds with "timely decision making", and "purpose" corresponds with "organizational goals". "Surprise" has no real equivalent.

¹⁰⁶ See also NATO RTO. *Improving...*, p. 2-6.

¹⁰⁷ For the rationale behind this particular determinant see the Sub-chapter "Tier One Special Forces" of Chapter 3 of this research paper. See also United States of America. *U.S. Special Operations Forces (SOF): Background and Issues for Congress*. Report for Congress. Congressional Research Service: Washington, DC: The Library of Congress, February 6, 2013.

¹⁰⁸ For the rationale behind this particular determinant see the Sub-chapter "Excursion: NATO Special Operations HQ and Command Structure" of Chapter 4 of this research paper.

¹⁰⁹ For details and a thorough elaboration on the six special operations principles to achieving mission success see *McRaven. Theory...*, p. 8-23.

CHAPTER 6 – ANALYSIS

This chapter will apply the selected analysis criteria described in the previous chapter when examining those national military Special Operations Organizations that were presented in Chapter 4 in order to identify key findings (i.e. commonalities, patterns, out of the order findings etc.). As Chapter 4 has clearly shown, Tier 1 SF depend on SOF (Tier 2 and 3) and additional enablers and on a coordinating and integrating operational C2 element to achieve operational mission success. They also require a dedicated non-operational C2 element that coordinates and integrates all SO capabilities, assets, and units to ensure the overall national SO preparedness and readiness including that of the Tier 1 SF units. Consequently, any serious evaluation of national military Tier 1 Special Forces units can only be conducted in conjunction with the overall national military SO organization. Therefore, the following analysis will address the individual national Special Operations Organization as a whole. Furthermore, as detailed written descriptions of national military Tier 1 Special Forces and national military Special Operations Organizations as a whole have already been introduced in Chapter 4, and in order to facilitate possible practical considerations of the analysis, the key observations for each nation will be shown in a clearly represented breakdown-table rather than being outlined in lengthy text-format.

To function as a pick-up point, the key information of the individual national special operations organizations are briefly summarized at the beginning of each of the following five sub-chapters.

United States of America

Factual Summary

Tier 1 SF units:

1. Two units: Army Delta Force and Navy DevGru
2. Both units obtain full Tier 1 classification.
3. Both are integrated in the overall organizational set-up of US special operations via SO sub-commands USASOC and NAVSPECWARCOM, respectively. Outside SO matters, both units are elements of their parent services Army and Navy.

Overall SO Organizational Force Structure:

4. SO assets and units cover the complete SO capability spectrum.
5. All SO capabilities, assets, and units for both, non-operational and operational SO matters, are unified under the umbrella command of USSOCOM, a separate joint component command at four-star-level.
6. For matters of force management, force development and base operations SO units remain within their parent services.
7. US SO total size is over 65,000.

Non-operational C2:

8. Centralized approach via USSOCOM.
9. USSOCOM is fully empowered, authorized and responsible for integrating and harmonizing all SO capabilities, assets, and units developing joint SO vision, strategy, policy, requirements, and doctrine, conducting joint SO planning,

training and exercises, acquiring SO specific equipment, resource planning, and training, educating and developing human capital.

10. USSOCOM is well established and has mature structure and processes.
11. It leads and coordinates four sub-commands for SO assets and units of the Army, Air Force, Navy and Marines.
12. The balance of control with SO units' parent services is a permanent challenge for USSOCOM.

Operational C2:

13. USSOCOM plans, coordinates and conducts SO operations either directly via its dedicated standing deployable joint HQ JSOC or via TSOCs in support of Geographical Combatant Commanders.
14. For deployment, USSOCOM takes over full operational command of SO units from parent services.

National Chain of Command and Environment:

15. USSOCOM as a component command is located at the same level as the other component commands of services/components.
16. The commander of USSOCOM is the senior and direct advisor to top senior military and political leadership.
17. There is an approved budget and personnel increase for SO capabilities, assets, and units.

Analysis

Table 6.1 – Analysis of US Special Operations Organization

<i>Determinant</i>	<i>Degree of Occurrence</i>					<i>Indicators drawn from Factual Summary</i>
	<i>zero</i>	<i>low</i>	<i>med</i>	<i>high</i>	<i>n/a</i>	
<i>Appropriate Command Empowerment</i>				X		<ul style="list-style-type: none"> High for SO matters: 5., 7., 8., 9., 11., 13., 14., 15., 16 Limited in the areas of force management, force development and base operations of SO units: 6., 12.
<i>Effective and Timely Decision Making</i>				X		<ul style="list-style-type: none"> High for SO matters: 5., 7., 8., 9., 11., 13., 14., 15., 16 Limited in the areas of force management, force development and base operation of SO units: 6., 12.
<i>Flexibility and Independence</i>				X		<ul style="list-style-type: none"> High for SO matters: 5., 7., 8., 9., 11., 13., 14., 15., 16 Limited in the areas of force management, force development and base operation of SO units: 6., 12.
<i>Unity and Integration of Command</i>				X		<ul style="list-style-type: none"> High for SO matters: 5., 7., 8., 9., 11., 13., 14., 15., 16 Limited in the areas of force management, force development and base operation of SO units: 6., 12.
<i>Clear Chain of Command</i>				X		<ul style="list-style-type: none"> High for SO matters: 5., 7., 8., 9., 11., 13., 14., 15., 16 Limited in the areas of force management, force development and base operation of SO units: 6., 12.

<i>Tailored, Robust, Flexible and Mature Governance Processes</i>				X		<ul style="list-style-type: none"> • High for SO matters: 5., 7., 8., 9., 11., 13., 14., 15., 16 • Challenging when addressing areas of force management, force development and base operation of SO units: 6., 12.
<i>OPSEC, Situational Awareness, Information Sharing, and Transparency</i>				X		<ul style="list-style-type: none"> • High for SO matters: 5., 16. • Challenging when addressing areas of force management, force development and base operation of SO units: 6., 12.
<i>Appropriate Funding</i>			X			<ul style="list-style-type: none"> • Parent services as bottle neck: 6., 12., 16., 17
<i>SOCC FN Capability</i>				X		<ul style="list-style-type: none"> • 1., 2., 8., 13.

Great Britain

Factual Summary

Tier 1 SF units:

1. Two units: Army SAS and Navy SBS
2. Both units obtain full Tier 1 classification.
3. Outside SO matters, SAS and SBS are elements of their parent services Army and Navy. For SO, they are integrated into the UK special operations organizational structure under DSF.

Overall SO Organizational Force Structure:

4. SO assets and units cover the complete SO capability spectrum and are organized under the coordinating SO umbrella command of DSF.
5. For matters of force management, force development and base operations SO units remain within their parent services.

Non-operational C2:

6. DSF as a two-star JFC directorate is the overarching element responsible for an integrated and coordinated non-operational SO approach covering everything from concept, strategy, and doctrine, over selection, training and exercises, development, requirements, equipment, to joint and combined interoperability.
7. In this role DSF has adequate empowerment, authority and responsibility. It could be considered as a joint sub component command (located below the level of the conventional services/component commands).
8. Because DSF has been existing for a long time and was previously a MoD directorate, it is well established and has mature structure and processes.
9. The balance of control with SO units' parent services is a permanent challenge for DSF.

Operational C2:

10. Responsibility to plan, command and control, and post-process joint and combined UK military operations lies with the three-star PJHQ which is (as DSF) also an organizational element of JFC.
11. Responsibility for operational planning and C2 of UK special operations generally lies directly with the head of the PJHQ, the "Chief of Joint Operations (CJO)".

12. CJO PJHQ typically delegates this responsibility to the PJHQ’s “Chief of Staff for Operations (COS Ops)” or to the “Director Special Forces (DSF)”. Either one of the two – COS Ops or DSF - would lead the tailored “Special Operations Task Force” via the assigned commander of the “Joint Task Force” or a SOTF. In some cases, DSF can also be tasked to be the JTF- or SOTF-commander.
13. If needed or advisable (i.e. for OPSEC reasons or when time is of the essence), the Chief of Defense Staff can directly appoint DSF to plan and command and control UK special operations, this way keeping C2 immediately at MoD-level.
14. For deployments, parent services would pass on full operational command of SO units.

National Chain of Command and Environment:

15. DSF is a combination of MoD advisor, non-operational staff directorate and operational sub-component command (in/for those cases, when it is called upon) of UK SO assets and units.
16. The director of DSF is the senior and direct advisor to top senior military and political leadership.
17. All of UK’s Armed Forces face continuing defense budget cuts and related adaptations of structure, reduction of size, procurement limitations etc.

Analysis

Table 6.2 – Analysis of UK Special Operations Organization

<i>Determinant</i>	<i>Degree of Occurrence</i>					<i>Indicators drawn from Factual Summary</i>
	<i>zero</i>	<i>low</i>	<i>med</i>	<i>high</i>	<i>n/a</i>	

<i>Appropriate Command Empowerment</i>				X		<ul style="list-style-type: none"> • High for non-operational for SO matters: 6., 7., 8., 16 • High for operational C2 when actually being tasked: 12., 13., 14. • Limited in the areas of force management, force development and base operations of SO units: 3., 5., 9.
<i>Effective and Timely Decision Making</i>				X		<ul style="list-style-type: none"> • High for non-operational for SO matters: 6., 7., 8., 16 • High for operational C2 when actually being tasked: 12., 13., 14. • Limited in the areas of force management, force development and base operation of SO units: 3., 5., 9.
<i>Flexibility and Independence</i>				X		<ul style="list-style-type: none"> • High for non-operational for SO matters: 6., 7., 8., 16 • High for operational C2 when actually being tasked: 12., 13., 14. • Limited in the areas of force management, force development and base operation of SO units: 3., 5., 9.
<i>Unity and Integration of Command</i>			X			<ul style="list-style-type: none"> • High for non-operational for SO matters: 6., 7., 8., 16 • Medium for operational C2 (only high when actually being tasked). 11., 12., 13., 14. • Limited in the areas of force management, force development and base operation of SO units: 3., 5., 9.
<i>Clear Chain of Command</i>				X		<ul style="list-style-type: none"> • High for non-operational for SO matters: : 6., 7., 8., 16 • High for operational C2 when actually being

						<ul style="list-style-type: none"> tasked: 12., 13., 14. Limited in the areas of force management, force development and base operation of SO units: 3., 5., 9.
<i>Tailored, Robust, Flexible and Mature Governance Processes</i>				X		<ul style="list-style-type: none"> High for non-operational for SO matters: : 6., 7., 8., 16 High for operational C2 when actually being tasked: 8, 12., 13. Challenging when addressing areas of force management, force development and base operation of SO units: 3., 5., 9.
<i>OPSEC, Situational Awareness, Information Sharing, and Transparency</i>			X	X		<ul style="list-style-type: none"> High for non-operational for SO matters: : 6., 7., 8. High for operational C2 when actually being tasked: 12., 13. Medium when not in charge of operational C2: 12. Challenging when addressing areas of force management, force development and base operation of SO units: 3., 5., 9.
<i>Appropriate Funding</i>			X			<ul style="list-style-type: none"> Parent services as bottle neck: 3., 5., 9., 17.
<i>SOCC FN Capability</i>					X	<ul style="list-style-type: none"> ---

Canada

Factual Summary

Tier 1 SF units:

1. One unit: JTF 2

2. JTF 2 has full Tier 1 classification.
3. JTF 2 is integrated into the overall organizational set-up of CA special operations.

Overall SO Organizational Force Structure:

4. SO assets and units cover the complete SO capability spectrum and are able to conduct the full range of Special Operations.
5. All SO capabilities, assets, and units for both, non-operational and operational SO matters are unified under the integrated umbrella command of CANSOFCOM.
6. CANSOFCOM's responsibilities include force management, force development and base operations of its SO units, making it a de facto fourth service/component.

Non-operational C2:

7. Centralized approach via two-star command of CANSOFCOM, that has a well-established and deliberate governance processes.
8. CANSOFCOM is fully empowered, authorized and responsible for integrating and harmonizing SO capabilities, developing joint SO vision, strategy, policy, requirements, and doctrine, conducting joint SO planning, training and exercises, acquiring SO specific equipment, resource planning, and training, educating and developing human capital.

Operational C2:

9. In its role as operational command CANSOFCOM plans, coordinates and conducts, and post-processes SO operations. CANSOFCOM'S operational C2 is based on a functioning system of governance processes and on an integrated operating concept where needed SO capabilities are assembled into an integrated SOTF that is tailored to the mission.

10. Additionally, COMSOFCOM maintains and has on call several standing SOTF that are capable to respond to specific and predefined tasks

National Chain of Command and Environment:

11. CANSOFCOM as a de facto fourth service/component and component command reports directly to the Chief of Defense Staff who is directly accountable to the Minister of National Defense.

12. The commander of CANSOFCOM is the senior and direct advisor to top senior military and political leadership.

13. All of CA's Armed Forces face continuing defense budget cuts and related adaptations of structure, reduction of size, procurement limitations etc.

Analysis

Table 6.3 – Analysis of CA Special Operations Organization

<i>Determinant</i>	<i>Degree of Occurrence</i>					<i>Indicators drawn from Factual Summary</i>
	<i>zero</i>	<i>low</i>	<i>med</i>	<i>high</i>	<i>n/a</i>	
<i>Appropriate Command Empowerment</i>				X		• 5., 6., 7., 8., 9., 10., 11., 12.
<i>Effective and Timely Decision Making</i>				X		• 5., 6., 7., 8., 9., 10., 11., 12.
<i>Flexibility and Independence</i>				X		• 5., 6., 7., 8., 9., 10., 11., 12.
<i>Unity and Integration of</i>				X		• 5., 6., 7., 8., 9., 10., 11., 12.

<i>Command</i>						
<i>Clear Chain of Command</i>				X		<ul style="list-style-type: none"> • 5., 6., 7., 8., 9., 10., 11., 12.
<i>Tailored, Robust, Flexible and Mature Governance Processes</i>				X		<ul style="list-style-type: none"> • 5., 6., 7., 8., 9., 10., 11., 12.
<i>OPSEC, Situational Awareness, Information Sharing, and Transparency</i>				X		<ul style="list-style-type: none"> • 5., 6., 7., 8., 9., 10., 11., 12.
<i>Appropriate Funding</i>			X			<ul style="list-style-type: none"> • 13.
<i>SOCC FN Capability</i>					X	<ul style="list-style-type: none"> • ---

Poland

Factual Summary

Tier 1 SF units:

1. One unit: GROM.
2. GROM masters the full range of Tier 1 operations.
3. GROM is integrated into the overall organizational set-up of POL special operations.

Overall SO Organizational Force Structure:

4. SO assets and units cover the complete SO capability spectrum and are able to conduct the full range of SO.
5. All SO capabilities, assets and units for both, non-operational and operational SO matters are unified under the integrated umbrella command of POLSOCOM, a separate service/component and dedicated two-star-command located at the same level as Army, Air Force, and Navy.
6. POLSOCOM responsibilities include force management, force development and base operations of its SO units, making it both, force provider and force user.

Non-operational C2:

7. Centralized approach via POLSOCOM with well-functioning governance processes.
8. POLSOCOM is fully empowered, authorized and responsible for integrating and harmonizing SO capabilities, developing joint SO vision, strategy, policy, requirements, and doctrine, conducting joint SO planning, training and exercises, acquiring SO specific equipment, resource planning, and training, educating and developing human capital.
9. POLSOCOM has independent budget and procurement authority.

Operational C2:

10. POLSOCOM has the integrated operational C2 command authority for planning, executing, and post-processing operations, missions, and campaigns on strategic level that also covers operative and tactical level C2.

National Chain of Command and Environment:

11. POLSOCOM as a separate and dedicated service/component and component command reports directly to the Chief of Defense Staff who is directly accountable to the Minister of Defense.
12. The commander of POLSOCOM is the senior and direct advisor to top senior military and political leadership.
13. All of POL Armed Forces face continuing defense budget cuts and related review of structure, reduction of size, procurement limitations etc.

Analysis

Table 6.4 – Analysis of POL Special Operations Organization

<i>Determinant</i>	<i>Degree of Occurrence</i>					<i>Indicators drawn from Factual Summary</i>
	<i>zero</i>	<i>low</i>	<i>med</i>	<i>high</i>	<i>n/a</i>	
<i>Appropriate Command Empowerment</i>				X		• 5., 6., 7., 8., 9., 10., 11., 12.
<i>Effective and Timely Decision Making</i>				X		• 5., 6., 7., 8., 9., 10., 11., 12.
<i>Flexibility and Independence</i>				X		• 5., 6., 7., 8., 9., 10., 11., 12.
<i>Unity and Integration of Command</i>				X		• 5., 6., 7., 8., 9., 10., 11., 12.
<i>Clear Chain of Command</i>				X		• 5., 6., 7., 8., 9., 10., 11., 12.
<i>Tailored, Robust,</i>				X		• 5., 6., 7., 8., 9., 10., 11., 12.

<i>Flexible and Mature Governance Processes</i>						
<i>OPSEC, Situational Awareness, Information Sharing, and Transparency</i>				X		<ul style="list-style-type: none"> • 5., 6., 7., 8., 9., 10., 11., 12.
<i>Appropriate Funding</i>			X	X		<ul style="list-style-type: none"> • 9., 13.
<i>SOCC FN Capability</i>					X	<ul style="list-style-type: none"> • ---

Germany

Factual Summary

Tier 1 SF units:

1. Two units: Army KSK and Navy KSM
2. Both units master the full range of Tier 1 SF operations.
3. KSK and KSM are organizational elements of their parent services Army and Navy.

Overall SO Organizational Force Structure:

4. Although the name KSK translates into “Special Forces Command”, and although the one-star commander of KSK is officially also double hatted as the “General for Special Forces” of the Armed Forces, there is no dedicated and separate national

SO organizational element responsible for coordination, integration, harmonization, and non-operational as well as operational command and control of all German SO capabilities, assets, and units.

5. Additionally, responsibilities outside SO-scope such as force management, force development, base operations and funding (and other resourcing matters) of SO units lies with the parent services and other organizational elements of the Armed Forces and/or its Civilian Service Department.

Non-operational C2:

6. Responsibilities for non-operational SO aspects (i.e. doctrine, integration, training, exercises, lessons learned, development, procurement, personnel, logistics etc.), are fragmented and scattered among and/or within KSK, KSM, SOF units, CS- and CSS-units and other enablers, their parent services, the “General for Special Forces”, and various additional functional and administrative commands and departments located on different levels of the Armed Forces and its Civilian Service Department.

Operational C2:

7. In general, operational C2 over SO assets lies with a separate and dedicated department lead by a full colonel and located within the operational C2 command at MoD. Once the decision to deploy SO assets has been made, a “Special Operations Task Force (SOTF)”, tailored to the mission and consisting of a mixture of SO capabilities and assets and additional enablers, is formed. Full operational C2 authority for the assigned assets is then transferred from the parent units.

In rare scenarios, the SOTF reports directly to the senior military leadership via a C2 element of KSK or KSM.

At this point, there exist no SOCC FN capabilities.

National Chain of Command and Environment:

8. Any deployment of any GE military unit has to be authorized by German parliament.
9. Under current constellations, the “General of Special Forces” cannot be fully classified as the senior and direct advisor to top senior military and political leadership.
10. All of GE Armed Forces are affected by severe and still increasing budget constraints and ongoing transformation of national armed forces structure including reduction of overall size.

Analysis

Table 6.5 – Analysis of GE Special Operations Organization

<i>Determinant</i>	<i>Degree of Occurrence</i>					<i>Indicators</i>
	<i>zero</i>	<i>low</i>	<i>med</i>	<i>high</i>	<i>n/a</i>	
<i>Appropriate Command Empowerment</i>			X			<ul style="list-style-type: none"> • 4., 5., 6., 7., 9.
<i>Effective and Timely Decision Making</i>			X			<ul style="list-style-type: none"> • 4., 5., 7., 9. • 6.
<i>Flexibility and Independence</i>		X				<ul style="list-style-type: none"> • 4., 5., 6., 7., 9.

<i>Unity and Integration of Command</i>		X				<ul style="list-style-type: none"> • 4., 5., 6., 7., 9.
<i>Clear Chain of Command</i>		X				<ul style="list-style-type: none"> • 4., 5., 6., 7., 9.
<i>Tailored, Robust, Flexible and Mature Governance Processes</i>			X			<ul style="list-style-type: none"> • 4., 5., 6., 7., 9.
<i>OPSEC, Situational Awareness, Information Sharing, and Transparency</i>		X				<ul style="list-style-type: none"> • 4., 5., 6., 7., 9.
<i>Appropriate Funding</i>			X			<ul style="list-style-type: none"> • 10.
<i>SOCC FN Capability</i>	X					<ul style="list-style-type: none"> • 7.

Key Findings

A number of key findings can be identified based on the conducted analysis of the five national Special Operations Organizations.

1. Organizational structure is one, if not the central/key analytical subject as many determinants of organizational effectiveness and efficiency are based on it and other organizational elements are either linked to it or based on it.
2. National Special Operations Organizations that adapted their organizational structure over time also improved their organizational effectiveness and efficiency.
3. As Tier 1 SF depend on SOF (Tier 2 and 3) and additional enablers plus on a coordinating and integrating operational C2 element to achieve operational mission success, and as they also require a dedicated non-operational C2 element that coordinates and integrates all SO capabilities, assets, and units to ensure the overall national SO preparedness and readiness including that of the Tier 1 SF units, advanced nations have established a dedicated and separate integrated umbrella C2 element that unifies and coordinates all SO capabilities, assets, and units for both, non-operational and operational matters.
4. Typical factors of such a centralized umbrella SO command include the following:
 - Adequate command level (two-star or higher) with the commander being the senior advisor to top senior military and political leadership, and a clear and direct chain of command over all levels (from top military leadership, over strategic and operational to tactical level) applying the principle of “Special Operations are led by Special Operations personnel”.
 - Adequate authority, responsibilities and competencies for non-operational as well as operational SO matters
 - Adequate authority over all Tier 1, 2 and 3 SO capabilities, assets and units plus over critical SO enablers

- Sufficient funding and independent procurement authority or prioritized acquisition
 - Separate and dedicated training, education, and development facilities for SO personnel
5. Special Operations Organizations that have been following an evolutionary path for several decades show that medium to high effective and efficient non-operational and operational C2 can be provided by different feasible structural designs (from separate and dedicated light military SO staff/HQ element at or close to MoD level, over sound separate SO component command, to separate SO service/component) as long as the outlined determinants are fulfilled.
 6. Furthermore, there seems to be a correlation between the content and degree of empowerment of a separate dedicated organizational non-operational and operational SO C2 element, the degree of centralization, and the position within the Armed Forces C2-structure on one side, and the degree of organizational effectiveness and efficiency on the other side: The broader content and degree of empowerment, the more centralized, and the higher the position in the national C2-structure, the higher is the achievable degree of effectiveness and efficiency of the SO organization.

Typically, the minimum command level is two-star with the commander being the senior and direct advisor on all SO matters to top senior military and political leadership.
 7. It seems also that there is a connection between the quality of expected SO operations, missions, and campaigns on one side, and the closeness of an organizational non-operational and operational SO C2 element to senior military and political leadership on the other side: The more likely, the more frequent or often, and the more serious

the strategic military and political impact of expected SO operations (i.e. HRO and CT), the higher in the overall national military C2 structure and the closer to top senior military and political leadership an organizational non-operational and operational SO C2 element is positioned.

8. To a certain degree, structural deficits negatively affecting organizational effectiveness and efficiency can be compensated by technical/IT equipment, informal processes, and personal networks. This, however, has its limits and should therefore not become, be, or remain a permanent status, but should be addressed by a dedicated adaptation of the organizational structure.
9. If SO capabilities, assets and, units remain in parent services for non-SO matters (i.e. force management, force development, base operations, funding and other resourcing matters), this way limiting services/components to be unit providers for SO, coordinating efforts and struggle for control between parent service/component and SO Organization will always be a constant challenge affecting effectiveness and efficiency. There is, however, a trade-off in this structural constellation, as it also means less responsibility and reduced number of tasks to be accomplished for the SO organization.
10. Funding (together with other resourcing matters) is a natural limiting factor regarding organizational effectiveness and efficiency. Consequently, access to a sufficient, adequate, and separate budget for SO purposes is a positive determinant for organizational effectiveness and efficiency.

CHAPTER 7 – SUMMARY, CONCLUSION, AND RECOMMENDATION

The final chapter will draw key conclusions out of the summary of key findings and will conclude with a general recommendation and concluding remarks.

Summary

Tier 1 SF depend on SOF (Tier 2 and 3) and additional enablers and on a coordinating and integrating operational C2 element to achieve operational mission success. They also require a dedicated non-operational C2 element that coordinates and integrates all SO capabilities, assets, and units to ensure the overall national SO preparedness and readiness including that of the Tier 1 SF units. Therefore, any serious review and evaluation – and optimization - of national military Tier 1 Special Forces units can only be conducted through an evaluation – and optimization - of the national military Special Operations Organization as a whole.

The reviewed and analyzed nations have different current status within their evolutionary path of building and enhancing their individual Special Operations Organizations. The present set-up of these SO Organizations also reflects the political beliefs in the need for the highest level of national SO capabilities to extend its spectrum of political options and instruments and the political will to establish a most effective and efficient Special Operations Organization.

The key findings of the analysis show that medium to highly effective and efficient integrated Special Operations Organizations all have a separate, dedicated and independent organizational SO C2 element adequately empowered, staffed, qualified and equipped to

- direct and coordinate all SO related non-operational issues, capabilities, assets and units from all services in an integrated and unified approach and to
- plan, command and control, and post-process SO operations, missions and campaigns including deployable C2 HQ

Beside the level of performance of the individual SO assets and units (including Tier 1 SF units, SF units, SOF units and dedicated enabler units) determinants for being an effective and efficient integrated Special Operations Organization include the following:

- Appropriate Command Empowerment
- Effective and Timely Decision Making
- Flexibility and Independence
- Unity and Integration of Command
- Clear Chain of Command
- Tailored, Robust, Flexible and Mature Governance Processes
- OPSEC, Situational Awareness, Information Sharing, and Transparency
- Appropriate Funding
- SOCC FN Capability

The analysis also showed that the structural designs of medium to highly effective and efficient Special Operations Organizations can differ from each other. The most dominant designs are a separate and dedicated light military SO staff/HQ element at or close to MoD level, a sound separate SO component command, and a separate SO service/component. What all of these designs have in common, though, is a close position of their organizational non-operational and operational SO C2 element to senior military and political leadership – minimum level is a

two-star command, with typically a direct or very short link and advisory authority to top senior military and political leadership.

Although information was not available for the entire analyzed national SO organizations, it can be suggested that effective and efficient SO organizations tend to be likely to be SOCC capable at one point in time of their evolutionary path.

Conclusion

As national military Tier 1 Special Forces can only ensure readiness and mission success together with other assets and units, they need to be analyzed in the context of the national Special Operations Organization as a whole. Theoretically, there is an *optimal* or *ideal* organization for national special operations capabilities, assets and units. Practically, however, there is no silver bullet organizational design for Special Operations Organizations in a sense of the one and only organizational structure that fits the needs of all nations and all of their stakeholders and that always ensures the highest organizational performance.

But, there is such a thing as a *right* or *optimized* organizational design. This is the case, when the organization as a whole and with its individual elements (strategy, structure, processes, members, equipment, capabilities, assets, units etc.) and under its individual circumstances and environment in which it has to exist, has reached the most feasible degree of organizational effectiveness and efficiency while ensuring the achievement of its organizational goals. In principle, the prize for accepting and for having a not optimized organization for national military Special Operations capabilities, assets and units could be accurately calculated with monetary

measures. However, ultimately the price would be an increasing risk that such lack of optimization based on deficits of organizational effectiveness and efficiency can cost lives.¹¹⁰

Additionally, limited and reduced organizational effectiveness and efficiency, too great of organizational differences compared to other national SO organizations and a lack of SOCC capability make non-operational and operational cooperation, coordination and compatibility with other national SO organizations challenging and difficult and could lead to international isolation in the long run. Therefore, it should be a permanent task to review and, if needed, optimize national military Special Operations Organization – unless they are not meant to actually conduct missions in the full Tier 1 SF spectrum.

Ultimately, the political beliefs in the need for the highest level of national SO capabilities to extend its spectrum of political options and instruments and the political will to establish them will be the key determining factor for an optimized national military Special Operations Organization. Although, for none of the analyzed nations there is the possibility to work in a green-field scenario as its national Special Operations capabilities, assets, and units are already organized in some ways, organizational optimization can be reached following a structured path. What this path towards an optimized Special Operations Organization can look like will be briefly outlined in the following recommendation.

Recommendation

Optimization of the Special Operations Organization as a whole and with its capabilities, assets, units, individuals and commands is best being conducted as an integrated and coordinated

¹¹⁰ For some examples of dramatically failed special operations missions that have been assessed as related to poor organizational effectiveness see NSCC. *Study...*, p. 17-18.

stepped process, where three process steps are being taken consecutively, and two process activities are being conducted in parallel to the three steps.

Step One: Based on defined and weighted criteria and determinants, conduct regular reviews and evaluation of the following organizational elements - and adapt theme if needed after a thorough feasibility check:

- Organizational goals and derived tasks: Review content, clarity, validity and prioritization
- Special Operations capabilities (including possible new capabilities or capabilities with changed importance, i.e. cyber warfare, economic and financial warfare, working with NGOs, contractors, other agencies etc. ...): Review need, spectrum, tasks, structure, staffing, equipment, etc.
- Organizational force structure elements (Tier 1, 2 and 3 SO and additional enabler assets and units that are needed to be organizationally combined): Review need, tasks, capabilities, structure, harmonization, integration, compatibility, personnel, equipment, performance, etc.
- Organizational non-operational and operational C2 structure: Review goals, tasks, doctrine, requirements lessons learned, documentation, structure, personnel, staffing, equipment, performance etc.

Step Two: Improvement and optimization of organizational efficiency (input-output relation) by

- Alignment of processes and structure: Apply principle “processes follow structure”

- Improvement of processes: Reduce time and complexity, allocate sufficient resources (personnel), assign responsibility to appropriate function and level etc.
- Improvement in the domain of people/human capital: Topics include requirements, recruitment, selection, skills, diversity, training, education, staffing, leadership ...
- Improvement in the domain of culture: Define, communicate and live values and standards, strengthen cohesion etc.
- Improvement in the domain of joint and combined capabilities: Address doctrine, personnel, technology, equipment, standardization, interoperability, compatibility, processes: etc.
- Optimization of technical C4 systems: Topic includes IT
- Optimization in the domain of equipment (including standardization and interoperability): Addresses everything other than C4 and IT
- Ensuring of appropriate funding: Address alignment of tasks and sources including sufficient and projectable budgets and authority to request and spend budgets.

Step Three: Conduct cost-optimization based on an analysis with quantitative measures in order to optimize budget spending.

- Cost-benefit-analysis, or
- Cost-performance-analysis, or
- Value-benefit-analysis

Parallel Activity One: Development of SOCC FN capability based on NATO requirements providing the following:

- SOCC commander
- SOCC key staff personnel
- Base life support functions for the SOCC
- FN is also expected to coordinate the “Combat Service Support (CSS)” functions and
- possibly the “Command and Control Information Systems (C2IS)”

Parallel Activity Two: Identify experiences, best practices, new findings, latest insights etc. from within the global Special Operations community/family.

- Conduct and/or participate in international workshops (bilateral, multinational, NATO)
- Participate in international exchange programs (bilateral, NATO)
- Send students and/or staff to dedicated international SO education programs (international and NATO)
- Participate with troops and/or staff in multinational campaigns (i.e. ISAF)

Concluding Remarks

Special Operations personnel are carefully selected and specially trained in order to enable them to successfully function regardless of the situation, the conditions, the limitations and the risk in order to accomplish what others cannot or will not. This special skill and differentiating individual quality of the “quiet professionals” is very much needed to accomplish a mission and to achieve operational success. However, if and when this skill is used to cope with shortcomings of the environment of one’s own Special Operations Organization, it could easily

lead to establishing a status quo and to a delay of visibility and recognition of sub-optimization, this way also delaying a correction and change in order to achieve organizational optimization.

In the operational reality of Special Operations of extreme non-standard conditions including hostile, denied, or politically sensitive environments, organizational sub-optimization could ultimately lead to increased risk for those members of the organization that deploy into crisis, conflict, and combat during operations, missions, and campaigns that are typically conducted in order to achieve significant strategic political, military, economic or psychological objectives. Therefore, following a path of regular review and adaptation in order to reach an optimized national Special Forces Organization should not only be a constant *task* and *need* but also a prioritized *want* of top senior military and political leadership. That this is not always an automatism, was as already outlined by von Clausewitz in his fundamental work on military theory where he identified the transformation of findings into dedicated actions to be a key limiting factor for military success. Fortunately, history and current times within the global Special Operations family have shown that this task and need for regular review and following adaptation actually have become a *want* which is taken very seriously and has been pursued with dedication and consequence.

ACRONYMS

\$, £, €	-	US Dollar, Euro, British Pound
1 st SFOD-D	-	(US Army) 1 st Special Forces Operational Detachment Delta
AFB	-	Air Force Base
AFSOTC	-	(US) Air Force Special Operations Training Center
AFSOC	-	(US) Air Force Special Operations Command
AJP	-	(NATO) Allied Joint Publication
ASD SOLIC	-	(US) Assistant Secretary of Defense for Special Operations and Low Intensity Conflict
Aufl.	-	Auflage (German for “edition”)
bn	-	billion
Bw	-	(Deutsche) Bundeswehr
C2	-	Command and Control
C4ISR	-	Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance
CA	-	Canada
CANSOFCOM	-	Canadian Special Operations Command
CD	-	Counter Drug (Operations)
CDR/Cdr	-	Commander
CFC	-	Canadian Forces College
CJO	-	(UK) Chief of Joint Operations
CJIRU-CBRN	-	Canadian Joint Incident Response Unit – Chemical, Biological, Radiological and Nuclear
COS/CoS	-	Chief of Staff
COIN	-	Counter Insurgency
CIA	-	(US) Central Intelligence Agency
CP	-	Close Protection (Operations)
CRS	-	Congressional Research Service

CSOR	-	Canadian Special Operations Regiment
CSOTC	-	Canadian Special Operations Training Centre
CT	-	Counter Terrorism (Operations)
DA	-	Direct Action
DC	-	District of Columbia
DDMA	-	Defense, Diplomacy, and Military Assistance
DevGru	-	(United States Naval Special Warfare) Development Group (NAVSPECWARDEVGRU)
Div.	-	Division
DND	-	(CA) Department of National Defence
DoD	-	(US) Department of Defense
DSF	-	(UK) Director/Directorate Special Forces
DSK	-	(GE) Division Schnelle Käfte (German for “Division of Quick Forces”)
Ed./ed.	-	Editor(s), edited, or edition
EGB	-	Erweiterte Grundbefähigung (German for “extended capabilities”)
EU	-	European Union
FID	-	Foreign Internal Defense
FN	-	Framework Nation
GAO	-	(US) General Accounting Office
GE	-	(Federal Republic of) Germany
GmbH	-	Gesellschaft mit beschränkter Haftung (German for „limited liability company“)
GoC	-	Government of Canada
Gov.	-	Government
GROM	-	(POL) Grupa Reagowania Operacyjno Manewrowego (Polish for “operational maneuver response group”)
GSG 9	-	(GE) Grenzschutzgruppe 9 (German CT and HRO unit of the Federal Police)

HFM	-	(NATO) Human Factors and Medicine Panel
HQ	-	Headquarters
HRO	-	Hostage Release Operations
Hrsg.	-	Herausgeber (German for “editor”)
Inc.	-	Incorporated
IRTF	-	Immediate Response Task Force
ISA	-	(US) Intelligence Support Activity
ISAF	-	(NATO) International Security Assistance Forces (in Afghanistan)
ISR	-	Intelligence, Surveillance, and Reconnaissance
IT	-	Information Technology
JCSP (DL)	-	(CA) Joint Command and Staff Programme (Distance Learning)
JFC	-	(UK) Joint Forces Command/Commander
JFQ	-	Joint Forces Quarterly
JSOC	-	(US) Joint Special Operations Command
JSOU	-	(US) Joint Special Operations University
JTF 2	-	(CA) Joint Task Force 2
K-ISOM	-	(GE) Kommando – International Special Operations Magazine
KSM	-	(GE) Kommando Spezialkräfte Marine
KSK	-	(GE) Kommando Spezialkräfte
MA	-	Military Assistance
MARSOC	-	(US) Marine Corps Special Operations Command
MC	-	(NATO) Military Committee
med.	-	medium
MoD	-	Ministry of Defence/Defense
MoI	-	Ministry of Interior
n/a	-	not applicable
NATO	-	North Atlantic Treaty Organization
NAVSPEC-		

WARCOM	-	(US) Naval Special Warfare Command
NEO	-	Non-Combatant Evacuation Operations
NL	-	The Netherlands
No./no.	-	Number
n.p.	-	no place (of publication)
Nr.	-	Nummer (German for “number”)
NRBC	-	Nuclear, Radioactive, Biological, and Chemical
NSCC	-	NATO Special Operations Coordination Center
NSHQ	-	NATO Special Operations Headquarters
OEF	-	Operation Enduring Freedom
OF-4	-	Officer Grade 4 (NATO rank code) - Lieutenant-Colonel / Commander
Op	-	Operation, operational
OPCOM	-	Operational Command
OPSEC	-	Operational Security
OSS	-	(US) Office of Strategic Services
P./p.	-	Page(s)
PfP	-	(NATO) Partnership for Peace
PJHQ	-	(UK) Permanent Joint HQ
POL	-	Poland
POLSOCOM	-	Poland Special Operations Command
PSYOPS	-	Psychological Operations
QRF	-	Quick Reaction Forces
RCMP	-	Royal Canadian Mounted Police
Rgt.	-	Regiment
RTO	-	(NATO) Research and Technology Organization
SACEUR	-	Supreme Allied Commander Europe
SAS	-	(UK) Special Air Service
SBS	-	(UK) Special Boat Service

SEALS	-	(United States Navy's) Sea, Air, Land (Teams)
SF	-	Special Forces
SFU	-	Special Forces Unit
SO	-	Special Operations
SOAR	-	(US Army) Special Operations Aviation Regiment
SOAS	-	(CA) Special Operations Aviation Squadron
SOCC	-	(NATO) Special Operations Component Command
SOCOM	-	Special Operations Command
SOF	-	Special Operations Forces
SOTF	-	Special Operations Task Force
SOTG	-	Special Operations Task Group
SOW	-	(US Air Force) Special Operations Wing
Sqn	-	Squadron
SR	-	Special Reconnaissance
STO	-	(NATO) Science and Technology Organization
SWP	-	(GE) Stiftung Wissenschaft und Politik. Deutsches Institut für Internationale Politik und Sicherheit
TR	-	(NATO) Technical Report
Trg	-	Training
TSOC	-	(US) Theater Special Operations Command
UAV	-	Unmanned Aerial Vehicle
UCAV	-	Unmanned Combat Aerial Vehicle
UK	-	United Kingdom
UKSF	-	UK Special Forces
U.S./US/USA	-	United States (of America)
USAJFKSWCS-	-	(US) John F. Kennedy Special Warfare Center and School
USASOAC	-	US Army Special Operations Aviation Command
USASOC	-	US Army Special Operations Command
USNSWDG	-	United States Naval Special Warfare Development Group
USSOCOM	-	United States Special Operations Command
UW	-	Unconventional Warfare

Vol./vol. - Volume
VIP - Very Important Person
vs - versus
WW - World War

BIBLIOGRAPHY

- Adamowski, Jaroslaw. "Poland's Spending Up as Most of East Europe Cuts Back." *defensenews*, October 24, 2012. Accessed 22 June 2014. <http://www.defensenews.com/article/20121024/DEFREG01/310240002/Poland-8217-s-Spending-Up-Most-E-Europe-Cuts-Back>.
- Bartuševičienė, Ilona, and Evelina Šakalytė. *Organizational Assessment: Effectiveness vs. Efficiency*. Mykolo Romerio Universitetas, Lithuania, 2013.
- Beckwith, Charlie A., and Donald Knox. *Delta Force*. New York, NY: Harper Collins Publishers, 2000.
- Biddle, Stephen. *Special Forces and the Future of Warfare: Will SOF Predominate in 2020?* Discussion Paper, Strategic Studies Institute, US Army War College, Carlisle, PA, 24 May 2004.
- Brister, Bernard J. "Canadian Special Operations Forces: A Blueprint for the Future." Originally published in *Canadian Military Journal*, 2008-07-14. Accessed 16 May 2014. <http://www.journal.forces.gc.ca/vo5/no3/special-02-eng.asp>.
- Brown, Bryan D. "U.S. Special Operations Command Meeting the Challenges of the 21st Century." *Joint Force Quarterly*, Issue 40, 2006, p. 38-43.
- Bundesrepublik Deutschland. Bundesministerium der Verteidigung. *Die Neuausrichtung der Bundeswehr*. Berlin: Bonifatius GmbH, März 2013.
- Bundesrepublik Deutschland. Inspekteur des Heeres der Deutschen Bundeswehr. *Die Neuausrichtung des Heeres. Kämpfen – Schützen – Helfen – Vermitteln*. Straußberg: Zentraldruckerei Bundesamt für Infrastruktur, Umweltschutz und Dienstleistungen der Bundeswehr, Juli 2013.
- Bundesrepublik Deutschland. Kommando Spezialkarte. *Das KSK*. Calw, 2013.
- Canada. Department of National Defence. *Canadian Special Operations Forces Command: An Overview*, Ottawa, ON, 2008.

- Department of National Defence. “Canadian Special Operations Forces Command.” *CANSOFCOM Website*. Accessed 15 May 2014. <http://www.candsofcom.forces.gc.ca>.
- Department of National Defence. *CANSOFCOM. Canadian Special Operations Forces Command: Capstone Concept for Special Operations 2009*, Ottawa, ON, 2009.
- Celeski, Joseph. *Joint Special Operations University SOF-Power Workshop. A Way Forward for Special Operations Theory and Strategic Art*. JSOU Report of Proceedings. MacDill AFB, FL: The JSOU Press, 22-23 August 2011.
- Chuter, Andrew. “Final UK Military Cuts Announced To Meet 2018 Goals.” *defensenews*, June 12, 2014. Accessed 22 June 2014. <http://www.defensenews.com/article/20140612/DEFREG01/306120039/Final-UK-Military-Cuts-Announced-Meet-2018-Goals>.
- Clancy, Tom. *Special Forces. A Guided Tour of U.S. Army Special Forces*, New York, NY: Berkley Books, 2001.
- Clausewitz von, Carl. *Vom Kriege*, völlig neu bearbeitete Ausgabe, Berlin: Vier Falken Verlag, 1940.
- Collins, John M. “1670-1991. From Genesis and Unguided Growth to Second Rejection and Resurrection.” In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carne, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 22-153.
- “U.S. Army Special Operations Command.” In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carne, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 168-197.
- Day, D. Michael, and Bernd Horn. “Canadian Special Operations Forces Command: The Maturation of a National Capability.” *Canadian Military Journal* 10, no. 4 (2010), p. 69-74.
- Driver, William “Dave”, and Bruce E. DeFeyer. *The Theory of Unconventional Warfare: Win, Lose, and Draw*. Master’s Thesis, US Naval Postgraduate School, Monterey, CA, 2008.
- Dunnigan, James F. *How to Make War. A Comprehensive Guide to Modern Warfare for the Post-Cold War Era*, 3rd ed. New York, NY: William Morrow & Co. 1993.

Evancoe, Paul. "A SEAL's Perspective from the 1960s". *Operator. The Special Forces Magazine*. Tampa, FL: FX Group Inc., May 2014, p. 14-16.

Faust, Martin. "SO, SF, and SOF." JCSP DL 2/DS-545/Special Operations Discussion, Discussion Post, Canadian Forces College, Ottawa, ON, posted March 29, 2013 1:57 PM.

..... "Special Operations Case Study. Scud Hunting (Iraq 1991)." JCSP DL 2/DS-545/ CPT/CS-04, Component Capabilities, Case Study, Canadian Forces College, Ottawa, ON, 2013.

Feickert, Andrew. *U.S. Special Operations Forces (SOF): Background and Issues for Congress*, CRS Report for Congress, Washington, DC: Congressional Research Service, February 6, 2013.

Forty, George. *Special Forces*. London: Airlife Publishing Ltd, 2002.

FX Group. *Operator. The Special Forces Magazine*. Tampa, FL, May 2014.

Gargus, John. "U.S. Air Force Special Operations Command." In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carne, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 198-229.

Gerber, Johannes. *Europäische Militärökonomie in einem sich globalisierenden Umfeld*. Osnabrück: Biblio Verlag, 2000.

Gerber, Johannes und Hahn, Oswald. *Betriebswirtschaftslehre und Streitkräfte*. Regensburg: Walhalla und Praetoria Verlag, 1980.

Gollner, Markus. *Das Kommando Spezialkräfte*. EU, 2012.

Gonzalez, Joe. "Delta Force". *Operator. The Special Forces Magazine*. Tampa, FL: FX Group Inc, May 2014, p. 42-44.

Günzel, Reinhard, Wilhelm Walther, and Ulrich K. Wegener. *Geheime Krieger*, Selent: Pour le Merit Verlag, 2006.

Hahn, Oswald. *Militärbetriebslehre. Betriebswirtschaftslehre der Streitkräfte*. Berlin: Berlin Verlag Arno Spitz GmbH, 1997.

Horn, Bernd. "We Will Find a Way: Understanding the Legacy of Canadian Special Operations Forces." JSOU Report 12-2, MacDill Air Force Base, Florida: The JSOU Press, 2012.

Joint Special Operations University (JSOU). *Special Operations Forces Interagency Counterterrorism Reference Manual*. 3rd ed., MacDill AFB, FL: The JSOU Press, September 2013.

..... *The OSS Model and the Future SOF Warrior*. JSOU Report of Proceedings. MacDill AFB, FL: The JSOU Press, November 2011.

..... *USSOCOM Research Topics 2012*. MacDill AFB, FL: The JSOU Press, 2012.

Jones, James E. "A Blueprint for Change. Transforming NATO Special Operations." *Joint Forces Quarterly (JFQ)*, Issue 45, 2nd Quarter 2007, p. 36-40.

Kiras, James D. *Special Operations and Strategy: From World War II to the War on Terrorism*. London and New York, NY, Routledge, 2006.

Kirchhoff, Günter (Hrsg.). *Handbuch zur Ökonomie der Verteidigungspolitik*. Regensburg: Walhalla und Praetoria Verlag, 1986.

Koerdt, Hans. „Das Problem einer Bewertung militärischer Organisationen.“ In *Betriebswirtschaftslehre und Streitkräfte*, edited by Johannes Gerber, and Oswald Hahn., Regensburg: Walhalla und Pretoria Verlag, 1980, p. 167-194.

Kuska, Dale. "The Pen and the Spear." *In Review. US Naval Postgraduate School Magazine*, April 2012, p. 12-17.

Ladd, James D. *SAS Operations. More Than Daring*. London: Robert Hale Ltd, 1999.

MacAskill, Ewen. "MPs say army budget cuts will leave Britain seriously undermanned." *The Guardian*. March 6, 2014. Accessed 22 June 2014. <http://www.theguardian.com/uk-news/2014/mar/06/british-army-budget-cuts-defence-committee>.

Macdonald, Peter. *SAS im Einsatz. Die Geschichte der britischen Spezialeinheit*. Übersetzung aus dem Englischen. Stuttgart: Motorbuch Verlag, 1994.

McCulloh, Timothy, and Richard Johnson. *Hybrid Warfare*. JSOU Report 13-4, MacDill AFB, FL: The JSOU Press, August 2013.

McRaven, William H. "The Theory of Special Operations." In *Spec Ops: Case Studies in Special Operations Warfare: Theory and Practice*, edited by William H. McRaven. New York, NY: Ballantine Books, 1995.

..... *Spec Ops. Case Studies in Special Operations Warfare: Theory and Practice*. New York: Presidio Press, 1996.

McChrystal, Stanley. *My Share of the Task. A Memoir*. New York, NY: Penguin Group, 2013.

Micheletti, Eric. *Special Forces in Iraq*. Paris: Histoire and Collections, 2006.

Muzyka, Konrad. "Cuts hit Polish defence budget." *HIS Jane's Defence Industry*, August 27, 2013. Accessed 15 May 2014. <http://www.janes.com/article/26333/cuts-hit-polish-defence-budget>.

Millet, Allen R., Williamson Murray, and Kenneth H. Watman. *The Effectiveness of Military Organizations*. Mershon Center, Ohio State University, 1988.

Nadel, Joel, and J. R. Wright. *Special Men and Special Missions. Inside American Special Operations Forces 1945 to the Present*, London and Pennsylvania: Greenhill Books, 1994.

Nadel, Joel H. "Specific Military Factors: Command and Control." In *Military Lessons of the Gulf War*, edited by Bruce W. Watson, 2nd revised ed., London: Greenhill Books, 1993, p. 135-145.

No author. "Canadian Special Operations Forces Command". Accessed 22 June 2014. <http://www.cansofcom.forces.gc.ca/index-eng.asp>.

No author. "Canadian Special Operations Forces Command". Accessed 22 June 2014. http://en.wikipedia.org/wiki/Canadian_Special_Operations_Forces_Command.

No author. "Director Special Forces." Accessed 15 May 2014. http://en.wikipedia.org/wiki/Director_Special_Forces.

No author. "Delta Force." Accessed 15 May 2014. http://en.wikipedia.org/wiki/Delta_Force.

No author. "Elite UK Forces. Special Air Service (SAS) - Gulf War I Desert Storm Operations." Accessed 16 May 2014. <http://www.eliteukforces.info/special-air-service/history/desert-storm/>.

No author. "GROM." Accessed 16 May 2014. <http://www.grom.wp.mil.pl/en/index.html>.

No author. "Joint Forces Command." Accessed 22 June 2014. <https://www.gov.uk/government/organisations/joint-forces-command/about>.

No author. "Joint Task Force 2." Accessed 22 June 2014. http://en.wikipedia.org/wiki/Joint_Task_Force_2.

No author. "Joint Task Force 2." Accessed 22 June 2014. <http://www.forces.gc.ca/en/operations-special-forces/jtf2.page>.

No author. "JW GROM." Accessed 15 May 2014. http://en.wikipedia.org/wiki/JW_GROM.

No author. "Kommando Spezialkräfte." Accessed 15 May 2014. http://en.wikipedia.org/wiki/Kommando_Spezialkr%C3%A4fte.

No author. "Kommando Spezialkräfte." Accessed 15 May 2014. http://www.deutschesheer.de/portal/a/heer!/ut/p/c4/DcLBDcMwCADAWbIA_PvrFm1_tCYOwsYR4ETK9I3u8IM3o0MqpQyjh98_-TxPWFjdijCFhkJJRRqEy7s0yro6J2sjNj5EmrpxGsyRPrUnI67Ppc_hCu67w!!/.

No author. "Kommando Spezialkräfte Marine." Accessed 15 May 2014. http://de.wikipedia.org/w/index.php?title=Spezial:Buch&bookcmd=download&collection_id=e3fa183929fb2d90&writer=rl&return_to=Kommando+Spezialkr%C3%A4fte+Marine.

No author. "Kommando Spezialkräfte Marine." Accessed 15 May 2014. http://www.marine.de/portal/a/marine!/ut/p/c4/04_SB8K8xLLM9MSSzPy8xBz9CP3I5EyrpHK93MQivdLUpNSi0rxIECc7JV8vNTOvOC2nJMdQL7s4V78g21ERA07vgdE!/.

No author. "Measuring Military Capability". *RAND Monograph Report MR 1110*, Chapter 7, p. 133-176. Accessed 22 June 2014. http://www.rand.org/content/dam/rand/pubs/monograph_reports/MR1110/MR1110.ch7.pdf.

No author. "NSHQ." Accessed 22 June 2014. <https://www.nshq.nato.int/nshq/about/>.

No author. "Permanent Joint Headquarters." Accessed 16 May 2014. <https://www.gov.uk/the-permanent-joint-headquarters>.

No author. "SEAL Team Six." Accessed 16 May 2014. http://en.wikipedia.org/wiki/SEAL_Team_Six.

No author. "Special Air Service." Accessed 16 May 2014. http://en.wikipedia.org/wiki/Special_Air_Service.

No author. "Special Boat Service." Accessed 16 May 2014. http://en.wikipedia.org/wiki/Special_Boat_Service.

No author. "Special Operations Forces Tier System." Accessed 15 May 2014. http://sgtng.wikia.com/wiki/Special_Operations_Forces_Tier_System.

No author. "Top Ten Special Operations Forces." Accessed 15 May 2014. <http://www.thetoptens.com/special-operations-forces/>.

No author. "United Kingdom Special Forces." Accessed 22 June 2014. http://en.wikipedia.org/wiki/United_Kingdom_Special_Forces.

No author. "United States Navy SEALs". Accessed 22 June 2014. http://en.wikipedia.org/wiki/United_States_Navy_SEALs.

No author. "United States Special Operations Command." Accessed 22 June 2014. http://en.wikipedia.org/wiki/United_States_Special_Operations_Command.

Noetzel, Timo, and Benjamin Schreer. *Spezialkräfte der Bundeswehr. Strukturerefordernisse für den Auslandseinsatz*. SWP-Studie, Berlin, September 2007.

North Atlantic Military Committee (MC). *Special Operations Policy. MC 437/1. NATO Restricted*. Brussels, 14 June 2006.

North Atlantic Treaty Organization (NATO). *AJP 01 (C) NATO/PfP Unclassified*, SHAPE, March 2007.

..... *Allied Joint Doctrine for Special Operations. AJP 3.5. Edition A, Version 1*, SHAPE, December 2013.

..... Research and Technology Organization (RTO). *Improving the Organizational Effectiveness of Coalition Operations. RTO Technical Report TR-HFM-163. NATO Unclassified*, Brussels: STO/NATO, November 2012.

..... Special Operations Headquarters (NSHQ). *Command Structure of Special Forces. NATO Unclassified*. Discussion Paper, SHAPE, September 2013.

..... Special Operations Headquarters (NSHQ). *SOTG Manual. NATO Unclassified. 2nd Study Draft*, SHAPE, July 2013.

..... Special Operations Headquarters (NSHQ). *Special Operations Forces Study*. SHAPE, December 2012.

..... Special Operations Coordination Center (NSCC). *The North Atlantic Treaty Organization Special Operations Forces Study*. SHAPE, 4 December 2008.

..... Special Operations Coordination Center (NSCC). *SOF Terms & Definitions for NSCC Courses, NATO/PFP Unclassified, Version 1*, SHAPE, December 2009.

North, Oliver. *American Heros in Special Operations*, Nashville, TN: Fidelis Books, 2010.

Oliviero, Charles S. "Please Sir, May I have Some More Theory?" *Canadian Military Journal*, Vol. 11, No. 1 (Winter 2010), p. 5-6.

Olson, Eric T. "Special Operations: Context and Capabilities in Irregular Warfare." *JFQ: Joint Force Quarterly* 1, no. 56 (2010), p. 64-70.

- Pommerin, Reiner (editor). *Clausewitz goes global. Carl von Clausewitz in the 21st Century*. Berlin: Miles Verlag, 2011.
- Pugliese, David. "Time To Cut Military Personnel? How Will DND and The Canadian Forces Handle Budget Cuts?" *Defence Watch*, February 10, 2014, last update May 18, 2014. Accessed 22 June 2014. <http://ottawacitizen.com/news/national/defence-watch/time-to-cut-military-personnel-how-will-dnd-and-the-canadian-forces-handle-budget-cuts>.
- Prairie, John S. "*The Organization of the United States Army Special Forces in the Objective Force*." Master's Thesis, US Army Command and General Staff College, Fort Leavenworth, Kansas, 2002.
- Ricks, Chuck. *The Role of the Global SOF Network in a Resource Constrained Environment*. JSOU Report. MacDill AFB, FL: The JSOU Press, November 2013.
- Robinson, Linda. *Master of Chaos: The Secret History of the Special Operations*. New York, NY: Perseus Books Group, 2004.
- *One Hundred Victories. Special Ops and the Future of American Warfare*. n.p.: Public Affairs, 2013.
- Rubright, Richard. "A Strategic Perspective on the Global SOF Network: Little Money, Unclear Ends, and Big Ideas". In *21st Century SOF: Towards an American Theory of Special Operations*, JSOU Report 13-1 edited by Harry R Yager. MacDill AFB, FL: The JSOU Press, April 2013, p. 5-17.
- Rudolph, Christin-Désirée. *Eyes on Target. Die Fernspäher der Bundeswehr*. Stuttgart: Motorbuch Verlag, 2008.
- Ryan, Chris. *Fight to Win*. London: Arrow Books, 2010.
- Sandler, Todd, and Keith Hartley. *The Economics of Defense*. Cambridge: Cambridge University Press, 1995.
- Saunders, Doug. "Canada's military policy doesn't add up." *The Globe and Mail*, March 1, 2014. Accessed 22 June 2014. <http://www.theglobeandmail.com/globe-debate/canadas-military-policy-doesnt-add-up/article17160469/>.

Schemmer, Benjamin F. (editor), and John T. Carney. *U.S.: Special Operations Forces*, Tampa, FL: Special Operations Warrior Foundation, 2003.

..... “Theater Special Operations Command.” In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carney, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 252-271.

..... “U.S: Special Operations Command.” In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carney, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 154-167.

Scholzen, Reinhard. *KSK. Das Kommando Spezialkräfte der Bundeswehr*. 2. Aufl., Stuttgart: Motorbuch Verlag, 2004.

Schoomaker, Peter J. “The Tip of America’s Spear.” In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carney, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 6-21.

Schulze, Carl, and Clemens Niesner. “Anakonda”. *K-ISOM*, Nr. 2/2013 (März/April), p. 16-23.

Simeone, Nick. “Hagel Outlines Budget Reducing Troop Strength, Force Structure.” *United States Department of Defense. American Forces Press Service. Washington, DC*, February 24, 2014. Accessed 22 June 2014. <http://www.defense.gov/news/newsarticle.aspx?id=121703>.

Snyder, Don et al. *Assessment of the Air Force Material Command Reorganization. Report for Congress*. RAND Research Report, Washington, DC et al: RAND Corporation, 2013.

Southworth, Samuel A., and Stephen Tanner. *U.S. Special Forces. A Guide to America’s Special Operations Units*. USA: De Capo Press, 2002.

Spulak, Robert G. Jr. *A Theory of Special Operations. The Origin, Qualities, and Use of SOF*. Joint Special Operations University (JSOU) Report 07-7, Hurlburt Field, FL: The JSOU Press, October 2007.

..... *Innovative or Die: Innovation and Technology for Special Operations*. JSOU Report 10-7, MacDill AFB, FL: The JSOU Press, December 2010.

Stilwell, Alexander. *Special Forces Today. Afghanistan – Africa – Balkans – Iraq - South America*, Washington, DC: Potomac Books Inc., 2007.

Stöbler, Norbert (editor). *Ein ganz besonderer Auftrag. Spezialkräfte und Spezialisierte Kräfte in der Bundeswehr. Y Spezial. Y - Das Magazin der Bundeswehr*, Nr. 09/2013.

Stollberg, Martin. „Schlag auf Schlag: KSK“. *Y Spezial. Y - Das Magazin der Bundeswehr*, September 2013, p. 60-69.

Sünkler, Sören. „Kampfschwimmer: Verwendungsreihe 34 und das neue Kommando Spezialkräfte Marine“. *K-ISOM. International Special Operations Magazine*, Nr. 4/2013 (Juli/August), p. 12-15.

..... „Kampfschwimmer: Die Spezialkräfte der Deutschen Marine“. *K-ISOM. International Special Operations Magazine*, Nr. 1/2014 (Januar/Februar), p. 4-7.

..... „KSK im Einsatz. Aktuelle Ausbildung, Struktur und Einsatzrealität des Kommando Spezialkräfte (KSK)“. *K-ISOM. International Special Operations Magazine*, Nr. 2/2011 (März/April), p. 32-35.

Taillon, J. Paul de B. “Canadian Special Operations Forces: Transforming Paradigms.” *Canadian Military Journal* (Winter 2005-2006), p. 67-76.

..... “Coalition Special Operation Forces: Building Partner Capacity.“ *Canadian Military Journal* (Autumn 2007), p. 45-54.

..... “Hitting the Ground with Coalition SOF.” *Special Warfare* (November-December 2008), volume 21, issue 6, p. 19-30.

..... *The Evolving Requirements of Canadian Special Operations Forces. A Future Concept Paper*. JSOU Pamphlet 05-2. Hurlburt Field, FL: The JSOU Press, September 2005.

Thom, Norbert. „Effizienz militärischer Organisationen.“ *In Handbuch zur Ökonomie der Verteidigungspolitik*, edited by Günter Kirchhoff. Regensburg: Walhalla und Pretoria Verlag, 1986, p. 202-208.

United States of America. *U.S. Special Operations Forces (SOF): Background and Issues for Congress*. Report for Congress. Congressional Research Service: Washington, DC: The Library of Congress, February 6, 2013.

..... Joint Chiefs of Staff. *US Joint Pub 3-05 Special Operations*. Washington, DC: Joint Chiefs of Staff, 18 April 2011.

..... United States General Accounting Office (GAO). *Measuring Military Capabilities. Progress, Problems and Future Direction*. Report to the Chairman, Committee on Armed Services, House of Representatives, Washington, DC, February 1986.

..... U.S. Department of Defense. Joint Chiefs of Staff. *Dictionary of Military Terms*. New revised and expanded ed., London and Pennsylvania: Greenhill Books and Stackpole Books, 1999.

..... USSOCOM History and Research Office. *United States Special Operations Command 1987 - 2007*. McDill AFB, FL, 2007.

Wells, Kevin. "Eight Years of Combat FID. A Retrospective on Special Forces in Iraq." *Special Warfare*, Volume 25, Issue 2 (January-March 2012). Accessed 15 May 2014. <http://www.soc.mil/swcs/SWmag/archive/SW2501/SW2501EightYearsOfCombatFID.html>.

Worthington, George R. "U.S. Naval Special Warfare Command." In *U.S.: Special Operations Forces*, edited by Benjamin F. Schemmer, and John T. Carney, Tampa, FL: Special Operations Warrior Foundation, 2003, p. 230-251.

Wright, James W. *Military Effectiveness in the Long War*. Master's Thesis, School of Advanced Military Studies. United States Army Command and General Staff College. Fort Leavenworth, KS, May 2007.

Yager, Harry R. *21st Century SOF: Towards an American Theory of Special Operations*. JSOU Report 13-1. MacDill AFB, FL: The JSOU Press, April 2013.

Zwilling, Ralph. "US Navy SEALs in Deutschland." *K-ISOM. International Special Operations Magazine*, Nr. 4/2013 (Juli/August), p. 16-21.