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A SELECTION PROCESS FOR SOF AVIATION IN CANADA

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ABSTRACT

In today's environment, Special Operations Forces are the force of choice in dealing with transnational terrorism. Not limited to that role, SOF also provides an economy of force choice to governments and militaries to carry out high risk or politically sensitive tasks and missions. SOF are able to conduct these tasks as they are specifically selected, trained, equipped, and organized to do so. It is a rigorous selection that sets SOF apart from conventional or elite forces. The selection process focuses on identifying individuals with the best suited traits to operate in a mentally and physically stressful environment without supervision. 427 Special Operations Aviation Squadron is the only CANSOFCOM unit that does not have a formally supported selection process for its members. Guided by the commonly known SOF Truths and the historical purpose of selection, this paper will argue that it is imperative that a viable and sustainable SOF aircrew selection model be developed. In conclusion, this thesis presents a potential SOF aircrew selection model that adheres to the SOF truths and acknowledges the manning challenges of the CF today.

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When the hour of crisis comes, remember 40 selected men can shake the world.
-Yasotay *1220 AD* (Mongol Warlord)[1]

INTRODUCTION

The often quoted Mongol Warlord Yasotay, speaks to a truth that is being rediscovered in today's conflict environment. The truth is that a specifically selected, trained, organized, and equipped group of warriors can make a difference beyond the sum of their individual elements. In the modern era this has been demonstrated by the actions of WW II Allied and Axis special operations forces (SOF) but never so clearly as the actions of coalition SOF in Kuwait (1991), Afghanistan (2001), and Iraq (2003). The actions of SOF during these conflicts have raised the level of academic rigour in the development and utility Special Operations (SO) and of SOF.[2]

Typically the analysis of SOF focuses on the achievements of the soldiers that are at the tip of spear, the forces that are conducting the kinetic destruction of the adversary. There are of course supporting elements that enable these forces to accomplish their mission. One such enabler is the contribution of air or aviation forces that participate in a myriad of tasks. These SOF air and aviation forces are also capable of conducting independent operations. To date there have been shelves of fiction and non-fiction books written about SO and SOF. It has only been recently (post Kuwait 1991 and more significantly post Afghanistan 2001) that there has been increased academic and

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[1] Most recently quoted in James, D. Kiras, *Special Operations Strategy: From World War II to the War on Terrorism* (London; New York, NY: Routledge, 2006), xii.

[2] SO is the task or effect that is to be achieved, whilst SOF or Special Forces (SF) are the personnel that conduct the task or achieve the effect. There is no internationally agreed differentiation between the terms SOF and SF. The United States use both terms to describe the activities of different units. For the purpose of this paper, SOF will be used to denote SF or SOF.

scholarly literature about the development and role of SOF. This SOF literary 'boom' has allowed students to examine the birth of modern SOF aviation and air power in the United States (US). There is also now a breadth of academic works that suggest there is a place for SOF in Canada. With the majority of analysis on SOF, each author invariably starts with their definition of SOF and why SOF are considered special. As will be shown in Chapter One, some scholars suggest it is the mission the soldiers perform while some will say it is the selection of the soldiers themselves that is the differentiation between SOF and conventional forces. Not often written about are the selection criteria and roles of SOF aviation.[3] It is even rarer to find literature dealing with SOF aviation in Canada. Even though Canada has a special operations helicopter squadron under Operational Command (OPCOM) of Canadian Special Operations Forces Command (CANSOFCOM), there has been no real rigour as of yet to develop this capability from a formally supported personnel selection viewpoint.

The human component of SOF is often touted as the most important. It is proposed that the personnel who are specifically selected, trained, organized and equipped that make the greatest difference, rather than the technology that is given to them. At the heart of most modern and competent SOF are selection programs that identify the men Yasotay desired. Each country takes a slightly different approach to developing their ground and aviation forces, but what is common to the United States, the United Kingdom, Canada and Australia (ABCA) is that there is a selection program for the ground SOF operators.[4] The United States, the United Kingdom, and Australia also

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[3] Within doctrine aviation commonly refers to rotary wing platforms while air refers to fixed wing platforms. Throughout this thesis, aviation will refer to generic air platforms unless specifically indicated.

have dedicated air and aviation units to support their SOF forces with some of those countries going so far as to have a selection program for those aviation units.

To maximise the effectiveness of aviation support to CANSOFCOM, and therefore options for the government, this paper will argue that it is imperative that a viable and sustainable SOF aircrew selection model be developed by the Air Force for CANSOFCOM operations. As of the summer of 2008, there was no formally supported aircrew selection model within the Air Force that met the needs of developing the best possible aviation resources for CANSOFCOM. Currently, aircrew are posted to 427 Special Operations Aviation Squadron (SOAS) without even having to volunteer. If Canada is going to continue to participate in the current environment, SOF will continue to be used. It is imperative to allow the best suited aviators to support CANSOFCOM missions.

Central to the development of this paper are SOF truths penned by retired United States Army Colonel and defence analyst John M. Collins. His study of US and Soviet Special Forces in 1987 led him to develop several enduring SOF truths that have now been enshrined in almost all modern SOF literature.[5] They have become a self-realizing prophecy and have even been used by the US Assistant Secretary of Defence.[6] The four truths most often referred to are; "humans are more important than hardware," their

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[4] The term "operator" typically refers to the personnel that carry out the primary functions of the SOF unit as compared to a "supporter" which enables the operator. In the case of an aviation unit, operators would typically be the aircrew with technicians being the supporters.

[5] John M. Collins, *United States and Soviet Special Operations: A Study*. (Washington: General Publishing Office, 1987). Also commercially published as *Green Berets, Seals, and Spetsnaz: U.S. and Soviet special military operations. (*Washington: Pergamon-Brassey's, 1987*)*

[6] Thomas W. O'Connel, Assistant Secretary of defence Special Operations / Low-Intensity Conflict, *Testimony Before the House Armed Services Subcommittee on Terrorism, Unconventional Threats and Capabilities*, 8 March 2006.

"quality is more important than quantities," "SOF cannot be mass produced," and "competent SOF cannot be created after emergencies occur."[7] A fifth truth that Collins penned, but has not been carried forward, is that "most Special Operations require non-SOF assistance."[8] The development of SOF aviation in Canada has not consistently applied the SOF truths and is therefore, 427 SOAS is not positioned for success. The greatest deficiency facing SOF aviation development in Canada is not adhering to the SOF truth that "quality is more important than quantity."

The paper is divided into three chapters. The first chapter will conduct a literature review defining ground and aviation SOF, their roles and how SOF is described in Canada. Chapter Two will look at the historical background of special forces selection, examine a historical case study, and then describe selected allied ground and aviation SOF organizational selection processes. Chapter Three will examine current Canadian SOF selection, the role of the Air Force in that process, and will propose a viable selection model for SOF aviators. Throughout the paper the SOF truths will connect the chapters together.

The research of a topic such as SOF presents limitations as to the depth of research of literature that can be studied. Due to the nature of SOF, most operations, detailed unit descriptions, and unit selection processes are classified. It is the intent of this paper to present only unclassified material so that the ideas present herein, will have the broadest dissemination possible. To stay unclassified, there will be on occasion,

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[7] John M. Collins, "U.S. Special Operations – Personal Opinions," (lecture 1st Special Warfare Training Group, Camp Mackall, NC, 11 December 2008); available from http://smallwarsjournal.com/mag/docs-temp/148-collins.pdf ; Internet; accessed 23 February 2008. Collins writes that if he had to start over he would modify the fourth to read "Competent SOF cannot be created RAPIDLY after emergencies occur."

[8] John M. Collins, "U.S. Special Operations – Personal Opinions."

generalities and oversimplifications that will have to be made. To the SOF purist, apologies are hereby given upfront. Nonetheless, the real target audience of this thesis, the Air Force and CANSOFCOM leadership, will have or can be granted appropriate access to the relevant classified material for further use and/or research.

The bravest are surely those who have the clearest vision of what is before them, glory and danger alike, and yet notwithstanding go out and meet it. – Thucydides (471-400 BC) Pericles' Funeral Oration as quoted in *History of the Peloponnesian War*

CHAPTER ONE – WHAT ARE SOF AND THEIR ROLES?

INTRODUCTION

Since the attacks on the World Trade Center in September 2001, there has been an abundance of literature espousing the merits and requirements of SOF. The changing nature of conflict in the world has increasingly looked to SOF as the force of choice for dealing for terrorism, insurgencies, and low intensity conflicts. SOF can operate as an economy of force operation and when supported by key enablers, can achieve results far beyond the scope of their numbers. How can they achieve these seemingly super-warrior results? Ultimately, that is the goal of this paper, to identify a process to allow ground SOF to be supported by the best suited aviators possible. To start the analysis, this chapter will determine what is meant by SO/SOF and how they are viewed today. More acutely, the examination will identify why there is a requirement for SO aviation forces and how they can be employed. This will ultimately lead to, “Why Canada needs a personnel selection model for SOF aviators?”. A selected literature review of SOF writings will be the method for the definition of SOF aviation and its roles.

Three types of literature will be examined; scholarly works, previous academic research, and current doctrine publications. The method of the literature review will be first to examine generic SOF literature to describe SO/SOF theory. Subsequently, US SOF literature will be reviewed. The review will be of SO/SOF literature in Canada. The summary of this chapter will confirm what are SOF and their roles in the Canadian context and the resulting implications for Canadian SOF aviation forces.

To set the stage for the literature review, it is imperative to provide an initial definition of SOF so that the ensuing reviews have a frame of reference to be referred to. There are minor differences in various organizations' or institutions' definitions of SOF, but the most common thread throughout the presented literature is that SOF are specially selected, equipped, and trained forces to conduct high-risk missions that conventional forces are normally unable to perform. A refined definition will be presented at the end of this chapter.

GENERIC SO AND SOF THEORY LITERATURE

The first real modern literature that uses a theory to explain SO was written by the current US Joint Special Operations Command (JSOC) Commander, Vice-Admiral William H. McRaven. Written in 1995, his book *Spec Ops: Case Studies in Special Operations Warfare: Theory and Practice* is viewed as one of the standard and encompassing SO theory books available.[9] McRaven uses eight case studies to present an original theory of SO. His theory states that for special forces operations to succeed, they must achieve and maintain relative superiority. Not based on firepower alone, relative superiority is achieved by reducing the friction of war by executing a simple plan which is "carefully concealed, repeatedly and realistically rehearsed, and executed with surprise, speed, and purpose."[10]

McRaven explains through an examination of six SO principles how relative superiority can be achieved to overcome friction and achieve victory. The principles are

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[9] William H. McRaven, *Spec Ops: Case Studies in Special Operations Warfare: Theory and Practice* (Novato, CA: Presidio, 1995)

[10] *Ibid*, 381-382.

simplicity, security, repetition, surprise, speed, and purpose. Out of the analysis of the eight case studies and through his six principles he derives several conclusions fromt his theory of SO. Appropriately the most important conclusion he draws is that there is a "… need for a standing special operation force that is trained, equipped, and supported at the best possible levels."[11] In addition, he identifies one theme that was consistent throughout the eight case studies, the motivation of the individual soldier. "Every operation was conducted by volunteers, and every volunteer was screened through a rigorous training and selection program."[12] These two conclusions support the SOF truths that "humans are more important than hardware" and "quality is more important than quantity." While McRaven's book does not necessarily define what SOF are or their roles, the book goes a long way to setting the stage for further modern academic endeavours. By his own admission this book presents "an intellectual framework for thinking about special operations."[13]

Military strategy advisor to Britain and the US, Colin S. Gray's 1999 article in *Parameters* "Handfuls of Heroes on Desperate Ventures: When do Special Operations Succeed?" challenges the notions of when SOF can provide strategic utility.[14] Starting with the dictum that SOF allow economy of force operations and an expansion of strategic choice, Gray identifies eleven conditions for the success or failure of SO and SOF: policy demand, politics, feasible objectives, strategy, flexibility of mind, absence of

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[11] *Ibid*, 387.

[12] *Ibid*, 390.

[13] *Ibid*, 2.

[14] Colin S. Gray, "Handfuls of Heroes on Desperate Ventures: When do Special Operations Succeed?," *Parameters* 29, no. 1 (Spring 1999): 2-48.

alternatives, enemy vulnerabilities, technological assistance, tactical competence, reputation, and history.[15] What is significant about Gray's article as it relates to the topic at hand is the requirement for policy demand and favourable politics. Without the willingness of a government to acknowledge, develop and employ SOF, SOF's existence is threatened. It is evident that there is support for SO and SOF within the Canadian Government according to the *Canada First Defence Strategy*.[16] What will be highlighted in Chapter Three is that even though the government has grasped the implications of SOF, the Air Force in particular has not yet fully embraced the requirement for specifically selected and trained SOF aviators. The development of SOF aviation units cannot reach full maturity until there is an acceptance of the requirement for an aircrew selection process by the Air Force.

Noted US military and strategic studies professor James D. Kiras attempts to define a strategy of SOF and SO in *Special Operations and Strategy: From World War II to the War on Terrorism*. Whereas McRaven used tactical and operational principles to guide the planning and execution of SO, Kiras looks at the strategic employment of SO and SOF as it relates to the often misemployment of those forces. Kiras argues that;

> …the root of strategically effective special operations is an appreciation for how special operations forces (SOF) perform in extended campaigns by inflicting moral and material attrition in conjunction with conventional forces.[17]

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[15] *Ibid*, 3.

[16] Department of National Defence, *Canada First Defence Strategy* (Ottawa: DND Canada, June 2008), 15.

[17] James, D. Kiras, *Special Operations Strategy: From World War II to the War on Terrorism*, 2.

Kiras attempts to lay a framework definition of SOF and SO. Kiras explains that defining SO has often rested on what SOF are being asked to do in comparison with conventional or elite forces. Kiras uses the following definition of SO:

> Unconventional actions against enemy vulnerabilities in a sustained campaign, undertaken by specially designated units, to enable conventional operations and/or resolve economically politico-military problems at the operational or strategic level that are difficult or impossible to accomplish with conventional forces alone.[18]

It is conceivable that conventional forces and elite forces may conduct special operations, but that is not their habitual or designated task.[19] As with McRaven, Kiras suggests that the key determinate of SOF status is the selection phase of SOF training.[20] This selection process is based on physical fitness and psychological stability under stress. High scores in these attributes give indications that operators can function independently in the face of adversity.[21] Kiras does not directly relate this selection process to the SOF truth that "quality is more important quantity," but the link is obvious. The other SOF truth that Kiras alludes to is that "competent SOF cannot be created after an emergency occurs." He states that abuse in the employment of SOF is often directly linked to the disbandment of SOF once a mission is completed. The ad hoc generation of SOF when a crisis occurs is not conducive for SOF to achieve strategic effects.

Kiras' *Special Operations and Strategy* serves as an excellent resource to identify a useful strategy for the employment of SOF. Much of what he writes about is beyond the

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[18] *Ibid*, 5.

[19] *Ibid*, 6.

[20] *Ibid*, 6.

[21] *Ibid*, 6.

scope of this paper, but the foundations he lays for his arguments are consistent with McRaven's theory of SO and the SOF truths.

The next literature to be reviewed that supports a generic theory of SO and SOF was written by the accomplished United States Special Operations Command (USSOCOM) analyst Robert G. Spulak. His Joint Special Operations University (JSOU) report titled, *A Theory of Special Operations: The Origin, Qualities, and Use of SOF*, builds upon the theories of McRaven, Kiras, and Gray.[22] Spulak attempts to provide a theory of SO that combines the following thoughts: the enduring nature of war and the resulting limitations of military forces; the relationship between conventional forces and SOF to explain the origin of SOF; means and the origin of SOF; how SOF address the friction in warfare; and a summary of the characteristics of SOF.[23] Spulak contends that having core SOF tasks creates confusion between the nature of SOF and expected mission sets. History has demonstrated that conventional forces may conduct some of the same missions as SOF, but that does not give them an automatic SOF designation. In his section on the relationship of SOF with conventional forces, Spulak argues that it is not the missions that define special operations, but the rather the personnel. Spulak asserts that having the attributes of being an elite warrior, possessing creativity, and flexibility are what set SOF apart from conventional forces.[24] His ideas are essential to developing an effective SOF aircrew selection model.

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

[23] *Ibid*, 5.

[24] *Ibid*, 14-15.

In "Air Power and Special Operations" published in the *Air Power Journal*, Saikat Datta, links the development of SO and air power. The purpose of the article is to examine the relationships between SO and air power, and how in India's case, these capabilities can be combined in a symbiotic manner. Datta's premise is that with the increasingly complex nature of conflict, there will be greater challenges for those that are preparing, planning, and executing the missions in which air power will be a key enabler. Datta states:

> [i]n an era where conflict is dominated by concepts of power projection, the ability to respond quickly to emerging threats and the ability to execute a complex command and control structure in real-time, air power along with special forces will prove to be the critical element.[25]

Datta links the objectives of SO and air power together, "… air power and special operations have emerged as potent symbols of national power to achieve stated and unstated political objectives."[26] The ability to rapidly project SOF power, either covertly or overtly, requires the development of air power capabilities that enable SO. Datta cites two main examples to illustrate how air forces and SOF have worked together to plan and execute SO. The first example he uses is the successful 1973 Israeli hostage rescue raid at Entebbe, Uganda. It was the ability to use four C-130 Hercules and two Boeing 707s that gave the Israeli SOF the ability to achieve surprise and rapidly attain relative superiority over Ugandan ground forces.[27] Operation Eagle Claw is the next example Datta uses to

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[25] Saikat Datta, "Air Power and Special Operations," *Air Power Journal* 2, no 2 (Summer 2005): 91; http://www.aerospaceindia.org/Journals/Summer%202005/Air%20Power%20and%20Special%20Operations.pdf; Internet; accessed 28 January 2009.

[26] *Ibid*, 96.

[27] *Ibid*, 98-99.

examine the integration of SOF and air forces. Operation Eagle Claw was the failed rescue attempt of American hostages from Iran in 1980. The recommendations from the resulting investigations provided the greatest change to modern US military structure and served as a catalyst for dedicated integration between ground and aviation SOF.[28]

Datta also examines the integrated use of SOF and dedicated air forces in Panama and Grenada, Gulf War I (Desert Storm), Afghanistan (Operation Enduring Freedom, OEF), as well as in Iraq (Operation Iraqi Freedom, OIF) . Through his observations, Datta contends that the US Air Force Special Operations Forces (AFSOF) mission areas are precision employment / strike, information operations, AFSOF mobility, shaping the battlespace, and agile combat support.[29]

The final issues that Data develops are how to generate a synergistic effect between SOF and air forces in India. At the time of the writing of his article, India did not have a dedicated SOF air or aviation unit. He provides examples that Indian SOs did not fare well as a result of inappropriate joint planning, the lack of capable airframes, and the deficiency in command and control arrangements (C2). Datta acknowledges that in a resource constrained environment it may not be possible to achieve a standard equal to the US, but a "holistic approach [must take place] to fathom the benefits that special forces and air power offer."[30] It will be shown in later chapters that even though Canada is further along in the development of SOF aviation than India, Datta's observations and

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[28] *Ibid*, 98.

[29] *Ibid*, 105. AFSOF is conducted by the US Air Force Special Operations Command (AFSOC). The US Army also has a SOF aviation unit, the 160 th Special Operations Aviation Regiment (Airborne). The 160th SOAR(A) will be looked at in greater detail in Chapter Two.

[30] *Ibid*, 115.

recommendations remain applicable. The theory that air power can support SOF through integrated and synergistic effects is valid and has been proven in many operations.

The preceding five pieces of literature provide a framework from which to define SO, SOF, and its roles. From the analysis made thus far several key themes emerge for a viable SOF aircrew selection in Canada; a credible SOF force must be a standing force, SOF are highly motivated, specially selected volunteers, and there must be a political acceptance that allows the development and employment of SOF. Furthermore the selection process rather than the tasks performed is what differentiates SOF from conventional or elite forces, there are key personal attributes that are used for selection, and finally air power is a tremendous multiplier for SOF operations, either in support or through independent action. Many of these concepts will be further developed in the following chapters.

UNITED STATES SO AND SOF LITERATURE

The examination of general SO and SOF theory has laid the foundation to discuss in greater detail, ground SOF and aviation SOF roles and tasks. This section will look at specific USSOCOM publications as well as doctrine from the supporting services. A clear USSOCOM definition of SOF tasks and roles will be presented. More acutely, the roles and tasks of SOF Air Force and Army Aviation units will be highlighted. The literature review will look at USSOCOM as it exists today without going into the historical analysis of how USSOCOM was formed. That issue will be briefly examined during the review of Operation Eagle Claw in Chapter Two of this paper. While the UK and Australia have highly developed SOF capabilities and structures, the US has been chosen to highlight the full capabilities that could be achieved with a robust SOF

development and selection plan. Contained within USSOCOM, the US has the most developed and robust SO and SOF structure in the world and by the end of 2009, USSOCOM will have grown to 55,890 military and civilian personnel.[31]

Activated in 1987, USSOCOM's current mission is to "[p]rovide fully capable Special Operations Forces to defend the United States and its interests; [and] [s]ynchronize planning of global operations against terrorist networks."[32] Compiling Joint, Capstone, Navy, Air Force, Army, and Marine SO doctrine, the *USSOCOM Fact Book 2009* delineates the structure and capabilities that reside within USSOCOM. As the structural home for all SOF within the US, USSOCOM has five subordinate commands: US Army Special Operations Command (USASOC), Navy Special Warfare Command (NAVSPECWAR), Air Force Special Operations Command (AFSOC), Marine Corps Special Operations Command (MARSOC), and Joint Special Operations Command (JSOC). USSOCOM has identified the following as their core tasks: direct action, special reconnaissance, unconventional warfare, foreign internal defense, civil affairs operations, counterterrorism, psychological operations, information operations, counter proliferation of weapons of mass destruction, security force assistance, and activities specified by the President or the Secretary of Defense (SECDEF).[33] Applicable definitions of the core tasks will be presented in a Canadian context at the end of this chapter. The *USSOCOM*

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[31] United States, Senate Armed Services Committee "Statement of Admiral Eric T. Olson, U.S. Navy Commander United Sates Special Operations Command before the Senate Armed Service Committee on the Posture of Special Operations Forces, March 4, 2008" (Washington, DC: U.S. Government Printing Office, 2008): 16; http://armed-services.senate.gov/statemnt/2008/March/Olson%2003-04-08.pdf; Internet; accessed 13 February 2009.

[32] USSOCOM Public Affairs, *USSOCOM Fact Book 2009* (MacDill AFB, Fla: USSOCOM Public Affairs, 2009): 4; http://www.socom.mil/Docs/factbook-2009.pdf; Internet; accessed 23 February 2009.

[33] *Ibid*, 7.

Fact Book also identifies the broad capabilities in terms of personnel and equipment that each SOC can bring to the fight. Each command's capabilities are too numerous to list here, therefore only the air and aviation units will merit further attention.

Within the USASOC, the 160th Special Operations Aviation Regiment (Airborne) is defined as an Army Special Operations Aviation (ARSOA) unit. The 160th SOAR(A) is a highly specialized helicopter unit that arguably is the most advanced in the world. It operates specially modified MH-47 Chinook, MH-60 Blackhawk and MH-6 Little Bird helicopters. The US Army Field Manual FM 3-05.60 *Army Special Operations Forces Aviation Operations* provides the guiding doctrine for the operational employment of the SOAR in the support of SO. FM 3-05.60 is a valuable tool for studying the capabilities, logistical support requirements, command relationships, and structure of the 160th SOAR(A). Accordingly, the mission of the 160th SOAR(A) is to

> …conduct and support special air operations by clandestinely penetrating hostile and denied airspace…. the SOAR [also] organizes, equips, trains, validates, sustains, and employs assigned aviation units for USASOC missions.[34]

The SOAR supports all of the core USSOCOM tasks by giving a commander the ability to infiltrate, resupply, and exfiltrate SOF elements in all missions and environments.[35] The ability for the SOAR to conduct these complex and demanding mission sets is related to the "the quality, training and education of its soldiers, as well as the mission profiles those soldiers must execute."[36] Critical to developing and maintaining the skill sets required for demanding missions, competitive selection process

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[34] United States, Department of the Army, *FM 3-05.60 Army Special Operations Forces Aviation Operations* (Washington, DC: Department of the Army, 2007), 1-1.

[35] *Ibid*, 1-1.

[36] *Ibid*, 1-4.

of the 160th SOAR(A) serves as a model for developing a robust SOF aviation capability. In today's current environment, the 160th SOAR(A) is the quintessential SOF aviation unit that enables USSOCOM to conduct strategic and operational level missions. They do this through an uncompromising adherence to the SOF truth that "quality is more important than quantity." The 160th SOAR selection process will be examined in greater detail in Chapter Two of this paper.

As it relates to supporting USSOCOM's tasks that are listed above, the United States Air Force (USAF) *Special Operations Air Force Doctrine Document 2-7*(AFDD 2-7), provides amplification on AFSOC's core mission areas. These core mission areas are air to surface interface (ASI), agile combat support (ACS), combat aviation advisory operations (CAA), information operations (IO), intelligence surveillance reconnaissance (ISR), personnel recovery / recovery operations (PR/RO), precision fires (PF), psychological operations (PSYOP) dissemination, specialized air mobility (SAM), and specialized refuelling (SREF).[37] Like *Army Special Operations Forces Aviation Operations*, AFDD 2-7 identifies that the most critical component of its capabilities "resides in its aircrews, special tactics teams, combat aviation advisory teams, and support personnel specially trained to conduct a wide array of missions across the range of military operations."[38] AFSOC operates several specially modified C-130 Hercules aircraft for gunship duties, clandestine infiltration and exfiltration, SOF resupply, air to air refuelling, and electronic warfare. It also operates the CV-22 Osprey tilt-rotor aircraft for insertion, extraction, and resupply of SOF.

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[37] United States, Department of Defense, AFDD 2-7 *Special Operations* (Washington D.C.: U.S. Government Printing Office, 2005), 10-13.

[38] AFDD 2-7, 3.

The three proceeding documents provide a very brief overview of the mission areas and roles of US SOF. The key conclusions reached are that US SOF are used across the spectrum of conflict and are subject to a SOF chain of command. In all cases the SOF operators and aviators are specially trained, equipped, and organized to perform their duties. Furthermore it is recognized that the SOF personnel are considered more important than the equipment they operate. The specific selection criterion for entry into these forces will be examined in Chapter two.

CANADIAN SO AND SOF LITERATURE

Until recently, the world of SO and SOF in Canada was very much a forbidden subject to talk and write about. Although not a SO unit, the shameful disbandment of the Canadian Airborne Regiment in 1995 created a great furor about elite forces in Canada that has only recently started to fade.[39] Canada's successful SO involvement in Afghanistan and the formation of CANSOFCOM have provided an opportunity for analysis and reflection on the direction of Canadian SOF development. To be fair on the subject, CANSOFCOM was only formed in February of 2006 and with it came a greater propensity to discuss and examine Canadian SO and SOF in an unclassified forum. At the time, there was only one unit dedicated to SO prior to the establishment of CANSOFCOM, Joint Task Force-2 (JTF-2). Anything that dealt with JTF-2 was closely guarded, with the government refusing to comment on the unit. Prior to the formation of CANSOFCOM, the Joint Nuclear Biological Company (JNBC Coy) and 427 Tactical

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[39] Department of National Defence, *Report of the Somalia Commission of Inquiry*, Executive Summary; http://www.dnd.ca/somalia/vol0/v0s1e.htm; Internet, accessed 27 March 2009.

Helicopter Squadron had affiliations of various degrees to JTF-2 but any discussion on these matters was contained in the classified realm. The stand-up of CANSOFOM as a higher headquarters for JTF-2, the Canadian Special Operations Regiment (CSOR), the rerolled 427 Special Operations Aviation Squadron (427 SOAS) and the Canadian Joint Incident response Unit (CJIRU), have allowed a greater public face to be presented by Canadian SO.[40]

Canadian SO and SOF literature will be examined under two areas. The first area to be examined is based upon academic research, scholarly books, and journal articles. The second area to be investigated is current CF doctrine and official publications. The literature review in these areas will identify that academic and scholarly work is rapidly outpacing doctrine publications. There has been a gaining momentum in academic research on SO and SOF in Canada but that has not always been the case. Since 1992, there have been no fewer than six academic papers and two edited books written by CF officers on elite forces, SO, or SOF. In addition there has been at least another six articles about SOF in Canadian Army or Air Force Journals. Of those 14 papers, articles and books there have been only 3 that have directly addressed the use of air power to support SOF. None of this smaller selection of papers analyzes the development of a Canadian SOF air power capability from a personnel selection and training standpoint. Most of the Canadian SO and SOF literature relates to the establishment of SO capabilities in terms of missions and equipment, or identifies methods SOF can be integrated in the current CF command and control structure. The literary works selected for review represent key

[40] The JNBC Coy transformed into CJIRU with the formation of CANSOFCOM in February 2006.

works that represent analysis of SO and SOF in Canada before and after the formation of CANSOFCOM.

Predating the formation of JTF-2, Maj C.T. Russell's "The Precision Instrument: A Canadian Forces Special Operations Unit," was a response to the February 1992 Federal Budget. The Budget announced that the Royal Canadian Mounted Police (RCMP) was transferring the Special Emergency Response Team (SERT) responsibilities for domestic federal counter-terrorism and hostage rescue to the Department of National Defence.[41] JTF-2 was the CF unit formed to take over the SERT role. Russell's paper outlines his vision of a Canadian Forces Special Operations Unit as it relates to continuing and expanding the role the RCMP SERT once held. Russell traces the history of the formation of SERT and addresses legal and capability issues that would permit the CF to take over the role.

Three key observations from Russell's work apply to the thesis at hand. The first is that the new unit would have to adopt stringent selection standards that were comparable to the UK Special Air Service (SAS) and other countries top rated counter-terrorist units. The second observation is that even before JTF-2 was formed, the Canadian Air Force was providing first occasional, and then dedicated helicopter support to the RCMP SERT. The third observation is that Russell proposed the following roles for the new unit: SERT operations anywhere in Canada, hostage rescue operations outside Canada, counter insurgency operations, long range reconnaissance and raid operations. [42] Maj Russell's concluding statement was that the "Canadian Forces Special

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[41] Maj C.T. Russell, "The Precision Instrument: A Canadian Forces Special Operations Unit" (Toronto: Canadian Forces Command and Staff College New Horizons Paper, 1992), 1.

Operations Unit can best provide the precision necessary to counter future threat to Canadian National Security."[43] Russell's paper should be considered the first unclassified academic work related to Canada's modern SOF and is important even if it does not specifically address the development of SOF aviation. His foresight has stood the test of time with the development of SO and SOF in Canada.

Predating the formation of CANSOFCOM, the paper "Time for the Creation of a Canadian Special Operations CC130 Hercules Flight," by LCol Martin Cournoyer, attempts to justify an increase in transport capability for SOF in Canada. Cournoyer examines the degraded capacity for C-130 crews to generate and train for special missions. [44] He contends that fiscal realities and increased resource demands had left the C-130 Advanced Tactical Air Transport (ATAT) capability to be generated only on an ad-hoc basis. The ATAT qualification gives crews the training to fly in a hostile environment against radar, fighter, and ground based air defence threats.[45] Cournoyer describes what potential mission sets could be achieved in a newly developed capability. He also correctly identifies that mission execution proficiency requires integration, training, and rehearsals with the supported units. While Cournoyer acknowledges manpower limitations on the number of crews that could be generated, he does not address how crews would be selected for this role. Through his paper, Cournoyer only indirectly addresses the SOF truths that "competent SOF cannot be created after

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[42] *Ibid*, 8-9,10,15.

[43] *Ibid*, 18.

[44] LCol Martin Cournoyer, "Time for the Creation of a Canadian Special Operations CC130 Hercules Flight" (Toronto: Canadian Forces College Command and Staff College New Horizons Paper, 2002), 2.

[45] *Ibid*, 9.

emergencies occur," and that "most Special Operations require non-SOF assistance". He assesses that until a dedicated SO C-130 flight is formed, ATAT crews will not be able to develop the experience and habitual integration with SOF that will allow a safely executed mission. As a separate current endnote to Cournoyer's paper, as of February of 2008, the Air Force directed the cancellation of all training and generation of ATAT crews.[46]

Maj Bernard Brister picks up Cournoyer's theme in his 2009 *Canadian Military Journal* article "Canadian Special Operations Mobility – Getting the Right Tools." Not limiting himself to just aircraft capabilities, Brister looks at a broad range of capabilities that would enable an enhanced mobility for CANSOFCOM forces. His article was written to address a deficiency in the discussion of how new purchases under the June 2006 "Canada First" Defence Procurement announcement were to be used to support SO in Canada. The announced purchases were the acquisition of three joint-support ships, sixteen medium to heavy lift helicopters, seventeen fixed wing aircraft for tactical airlift, and four fixed winged aircraft for strategic airlift.[47] To date, only one of the acquisitions has been delivered and only one other contract signed. The CF has received its fourth CC-177 Globemaster III in April of 2008.[48] The contract for seventeen C-130J Super Hercules transport aircraft was announced in January of 2008 with an expected delivery

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[46] 1 Canadian Air Division Headquarters A3 Aviation Patrol Transport Readiness E-mail to 1 Canadian Air Division Transport and Rescue Standards and evaluation Team Detachment Trenton, 8 Feb 2008.

[47] Maj Bernard Brister, "Canadian Special Operations Mobility – Getting the Right Tools," *Canadian Military Journal* 9, no. 2 (2009): 51.

[48] Department of Defence, "Canada takes delivery of the final CC-177," http://www.airforce.forces.gc.ca/site/newsroom/news_e.asp?cat=114&id=5802; Internet; accessed 27 February 2009.

date in 2010.[49] Contracts for the sixteen CH-47F Chinook helicopters and the three Joint Supply Ships have not yet been signed.

Brister contends that there has not been the required level of discussion on how the above mobility capabilities can allow Canadian SOF to "project power in pursuit of Canadian interests at home and abroad."[50] His analysis of the situation is logical from his presentation of capabilities that were available at the time of publishing to how future capabilities could enhance CANSOFCOM operations. Brister correctly identifies that for SOF to be effective, it needs to have its own mobility capabilities. Strategic mobility allows SOF to rapidly move from home unit locations to the area of operations. The C-177 is ideal for that role with the exception that there are not nearly enough of them with none dedicated to CANSOFCOM. Once in the theatre of operations, generally there is a requirement to have tactical mobility. The C-130J can provide intra-theatre lift whereas rotary-wing aviation can provide tactical mobility to and from target areas. This ability to move ones own SOF about the battlefield is a true indicator of a SOF enabler. Brister highlights that during Operation Iraqi Freedom, the UK and Australia received influential positions within the coalition because they deployed with integral fixed and rotary wing assets dedicated to their SOF. In Australia's case this nascent capability was achieved even without specially modified airframes.[51]

Cournoyer and Brister both look at establishing SO aerospace capabilities in terms of specially trained, organized and equipped aircrew. If one was to apply that SOF

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[49] Department of Defence, "The C-130J Contract Award Announcement 'A New Chapter for Canada's Workhorse'," http://www.forces.gc.ca/site/news-nouvelles/view-news-afficher-nouvelles-eng.asp?id=2561; Internet; accessed 21 February 2009.

[50] Maj Bernard Brister, "Canadian Special Operations Mobility – Getting the Right Tools", 52.

[51] *Ibid*, 55.

are defined by their roles and tasks, there could be a case made that Cournoyer and Brister have made sufficient arguments for establishing SOF aviation in Canada. As has been the premise of this thesis so far, their examination is insufficient to address the real crux of developing a SOF capability, the specially selected personnel.

The School of Policy Studies at Queen's University presents two edited books by Canadian military officers that offer insight into special operations. The first book edited by LCol David Last, LCol Bernd Horn and LCol J. Paul de B. Taillon, *Force of Choice: Perspectives on Special Operations,* considers the role that special operations play in a contemporary conflict.[52] These roles have been defined by previous literature reviews and therefore will not be repeated. What is important about *Force of* Choice is that it is the first major effort by Canadian military authors to put together a book that deals with special operations.

The companion book edited by LCol David Last, and Col Bernd Horn *Choice of Force: Special Operations for Canada,* was published in 2005. *Choice of Force* is broken into four parts that address the future security environment, the Canadian policy environment, contemporary special operations, and doctrine for special operations. In total eighteen chapters are presented in essay form written by a broad spectrum of academics, historians, military officers, political scientists, and professors.[53] Whereas *Force of Choice* looks at special operations in general, *Choice of Force* applies the study of special operations in a Canadian context. While the two companion books are valuable

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[52] David Last, Bernd Horn, J. Paul de B. Taillon, editors *Force of Choice: Perspectives on Special Operations* (Montreal: Published for the School of Policy Studies, Queen's University by McGill-Queen's University Press, 2004).

[53] David Last, Bernd Horn, editors *Choice of Force: Special Operation for Canada* (Montreal: Published for the School of Policy Studies, Queen's University by McGill-Queen's University Press, 2005)

about how special operations have matured in Canada, they were written prior to the unveiling of CANSOFCOM in 2006.

Canadian military editors Col Bernd Horn and Maj Tony Balasevicius offer *Casting Light on the Shadows: Canadian Perspectives on Special Operations Forces* as the first major literary work written after the formation of CANSOFCOM. Continuing in the tradition of *Choice of Force, Casting Light on the Shadows* looks at special operations from a uniquely Canadian perspective. The book presents thirteen essays divided into three major parts; theoretical foundation to understanding special operations forces, historical context, and the way ahead for Canadian special operations forces. The first part of the book has specific relevance to defining why SOF is different from conventional forces and the importance of a selection process. It will be used to further advance the requirement for a selection process for SOF aircrew. In the afterward of the book, Horn links all the contributing essays to the premise that SOF have so far been sufficiently adaptive to the rapidly changing threat paradigm. By being adaptive, Canadian SOF are able to provide the Canadian government "a potent weapon when dealing with asymmetric threats."[54] Horn rightly points out that there are significant challenges to developing a fully integrated CANSOFCOM into the CF.[55] One such challenge is the recruiting and selection of suitable sailors, soldiers, and airmen. There is a precondition that must be met to achieve the desired recruiting goals. There must be an education plan to inform the rest of the CF why CANSOFCOM may potentially take

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[54] Bernd Horn, and Tony Balasevicius, editors *Casting Light on Shadows: Canadian Perspectives on Special Operations Forces* (Kingston, On: Canadian Defence Academy Press, 2007), 302.

[55] Col Horn is the current Deputy Commander CANSOFCOM.

away their best personnel. The nature of the missions that CANSOFCOM undertake can take place in highly sensitive political or militarily risky environments. To achieve success CANSOFCOM must possess the most suitable leaders and soldiers possible. This focus on quality personnel is more important than any command and control relationship or latest technologically advanced equipment.

The last area to be reviewed is Canadian Forces (CF) doctrine. Not surprisingly, very little of what has been published today is either current or relevant. The highest joint operational level doctrine in the CF is found in B-GJ-005-300/FP-000 *CF Operations.* "Special forces" is only found in two sentences and auspiciously in the chapter heading as "Chapter 29 – SPECIAL FORCES (Under Development)."[56] Last published in 2005, the chapter title really does capture the nascent Canadian doctrinal approach to SOF. Doctrine developments in Canada are slow. Since the beginning of transformation and restructuring of the CF in 2005-2006, joint and service doctrine have not been able to keep up with the functional changes that have occurred. On several open source CF websites, it must be remarked that many publications are under review at this time. Similarly, the current highest level Air Force doctrine manual, *Canadian Forces Aerospace Doctrine,* has negligible mention of SO or SOF. It does however provide a definition of aerospace power, "[t]hat component of military power that is applied within or from the aerospace environment to achieve effects above, on and below the surface of the earth."[57] It would be logical that if SOF aviation is conducting independent or

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[56] Department of National Defence, B-GJ-300-000/FP-000 *CF Operations* Change 2 (Ottawa, DND Canada, 2005), Table of Contents, x.

[57] Department of National Defence, B-GA-400-000/FP-000 *Canadian Forces Aerospace Doctrine* (Ottawa, DND Canada, 2007), 60. Airpower and aerospace power are used interchangeably. The more 'current' term is aerospace power which accounts for orbital and atmospheric capabilities.

supporting operations, its generation and employment should fall under Air Force doctrine. To generalize, there is a current doctrinal deficiency in the CF for SO and SOF in the Joint and Air Force doctrine. Notwithstanding this deficiency, there is ample evidence that an adherence to the SOF truths will provide a valuable roadmap to establish a SOF aviation capability.

Dr. Allan English prepared the 2008 *Command & Control of Canadian Aerospace Forces: Conceptual Foundations* for the CF. Notwithstanding the disclaimer at the front of the book that states the views within the book "do not necessarily reflect the policy of the Department of National Defence," it was published by the Canadian Forces Aerospace Warfare Centre. As the title suggests, this manual examines the command and control arrangements and structures of the Air Force. Of particular note, it highlights the responsibilities of 1 Canadian Air Division; "[a]s the single operational level air force headquarters in the CF, 1 Cdn Air Div has the responsibility for force generation support to Canada COM, CEFCOM, and CANSOFCOM in pursuit of their mandates."[58] As is consistent whenever air force units are placed under command of non-air force C2 structures, the air force always retains four responsibilities. The responsibilities are flight safety, aircrew training and standards, maintenance training and standards, and finally operational and technical airworthiness.[59] Therefore it can be concluded that the development of SOF aviation in Canada is a joint responsibility between the Air Force and CANSOFCOM. This will be further explored in Chapter Three.

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[58] Allan D. English, *Command and Control of Canadian Aerospace Forces: Conceptual Foundations* (Ottawa: DND Canada, 2008), 92.

[59] B-GA-400-000/FP-000 *Canadian Forces Aerospace Doctrine*, 13-14.

The preceding Canadian literature on SO and SOF indicates how far the subject has advanced since Maj Russell's 1992 paper. Special Operations and SOF have gone from being a taboo subject to being published in mainstream academic literature. This reflects the currently favourable operating environment for the development and employment of SOF among allies and in Canada. It has only really been since 2001-2002 that there has been literature dedicated on the subject from a Canadian perspective. Much like the formation of USSOCOM in 1987, the activation of CANSOFCOM has started the long process of integrating SOF into the mainstream CF. The Canadian literature to date does not fundamentally contradict any of the SOF truths or develop startling new theories about SO. From this literature review it is evident that Canadian SO doctrine is lagging significantly behind SOF's current employment. Perhaps because of the relative immature status of SO in Canada, time will allow full-spectrum SO to be proven before it is committed to paper.

The US has taken over 20 years to reach their current stage of joint and integrated SOF doctrine. Canada can not expect to reach the same level of sophistication in just three years. The advantage Canada has in developing their SOF doctrine is the ability to learn from the mistakes, often written in blood, from our allies on how to properly establish capable SOF. JTF-2 is recognized in the international community as having earned its right to be placed in the small group of world-class SO organizations. As an indicator, the US Presidential Unit Citation was awarded to JTF-2 for their contribution to the Joint Special Operations Task Force – SOUTH in Afghanistan in 2002.[60] JTF-2 has

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[60] Department of National Defence, "News Release: U.S. Presidential Unit Citation Presented to Joint Task Force Two." http://www.forces.gc.ca/site/news-nouvelles/view-news-afficher-nouvelles-eng.asp?id=1938; Internet; accessed 15 March 2009.

been successful on the basis of uncompromising standards of excellence and selection. It is time to address the deficiency in the selection and recruiting of SOF aircrew to properly enable JTF-2 and other CANSOFCOM elements.

ROLES AND TASK OF CANADIAN SOF AND AVIATION SOF

The CANSOFCOM *Canadian Special Operations Forces Command: An Overview* glossy, provides the most current and most relevant definition for SO, SOF, and missions in a Canadian context. Although not in the doctrinal family of publications, it reads much like the *USSOCOM Fact Book* as it outlines the mission, key tasks, organization, and operational concepts for CANSOFCOM. Published in 2008, it is the most definitive literature available today that describe the roles and tasks of Canadian SOF. The definition of SOF is consistent with previous concepts outlined so far in this paper. As this paper is being used in a Canadian context the following CANSOFCOM definition of SOF will be applied throughout the remainder of this thesis:

> Special Operation Forces are organizations containing **specially selected personnel** that are **organized**, **equipped** and **trained** to conduct high-risk, high-value special operations to achieve military, political, economic or informational objectives by using special and unique operational methodologies in hostile, denied, or politically sensitive areas to achieve desired tactical, operational and/or strategic effects in times of peace, conflict, or war.[61]

CANSOFCOM's stated mission is to "… provide the Government of Canada with agile, high-readiness Special Operations Forces capable of conducting special operations across the spectrum of conflict at home and abroad."[62] To achieve the above mission

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[61] Department of National Defence, *Canadian Special Operations Forces Command: An Overview* (Ottawa: DND Canada, 2008), 3. Bolded emphasis added.

[62] *Ibid*, 8.

statement, Canadian SOF are organized, equipped, and trained to conduct counter-terrorism (CT) operations, maritime counter-terrorism (MCT) operations, and high value tasks (HVT). Examples of HVT are counter-proliferation (CP), special reconnaissance (SR), direct action (DA), and defence diplomacy and military assistance (DDMA). Within *Canadian Special Operations Forces Command: An Overview*, a brief description of each unit is given with their habitually assigned tasks.[63]

Currently 427 SOAS is the only aviation unit under Operational Command of CANSOFCOM. The 427 SOAS mission statement is to "…provide CANSOFCOM with agile, high-readiness special operations aviation forces capable of conducting special operations across the spectrum of conflict at home and abroad."[64] Specifically 427 SOAS has supporting roles to play in CT, DA, SR, and DDMA.[65] 427 SOAS provides insertion, extraction, and resupply of SOF using specialty methods for which conventional forces are neither trained in nor equipped for.[66] The three common SOF methods of insertion and extraction are by using fast rope, rappelling, and/or low hover techniques. These techniques can be performed day or night in a rural, urban, or maritime environment. 427 SOAS aircraft are also able to provide limited direct fire support from crew-served helicopter mounted machine-guns or support to onboard aerial snipers. An enhanced intelligence, surveillance, and reconnaissance (ISR) capability is also planned for development. The crews are trained to conduct operations at night and in a chemical,

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[63] The glossary at the end of this paper also provides this information.

[64] *Canadian Special Operations Forces Command: An Overview*,11.

[65] *Canadian Special Operations Forces Command: An Overview*, 11.

[66] The author was a Flight Commander and Squadron Operations Officer at 427 SOAS from 2005-2008. The capabilities listed here are described in general terms due to the classified nature of the tactics, techniques, and procedures (TT&P).

biological, radioactive, and nuclear (CBRN) environment. The squadron has an extremely short notice to move (NTM) requirement in which they can be recalled to plan, mount, and execute an operation.

Further definition of 427 SOAS' roles and missions will be explored as applied to developing a selection process later in the thesis. Ideally all members of any SOF aviation unit would undergo a selection process but this thesis will only look in detail at the process for the pilots. Contributing aircrew such as Flight Engineers and Mission Specialists should be subjected to a similar process.

CONCLUSION

The literature review of SO and SOF theory has indicated that there is academic thought being placed on the development and employment of SO and SOF in the modern context. This academic literary effort offsets the shelves of picture books and non-fiction commercial works that flood the common view of SO and SOF. The conclusions that can be drawn from the literature review are that the use and development of SOF is at heart of a country's political and military action policy. SOF gives the government the means to project governmental policy via military means in a high-risk political or military environment. The deployment of a small team of SOF operators to conduct a critical task, can often far outweigh the benefits of sending a large-scale conventional force. SOF by its very nature is designed to be flexible, agile, and responsive to the highest levels of governmental direction. They are equipped with a command structure that is unfettered by conventional military bureaucracy and is directly responsible to the highest levels of the military and therefore the government.

The ability for SOF to conduct high value tasks on behalf of the government is related to how they are specifically selected, trained, equipped, and organized. The literature reviewed offers several viewpoints on what defines SOF from conventional forces, whether is the missions or the people that make the distinction. General consensus state the human component is the most important. Either it is the specially selected soldier that enables the missions, or it is the missions that determine what type of soldier is chosen. Nonetheless, there are chosen men that can shake the world when enabled by technology, training, political will, and freedom of action.

In comparison to the US and the UK, Canada has a fledgling but rapidly growing SOF capability in terms of international operations. The involvement of Canadian SOF in Afghanistan has brought to the forefront the requirement to educate, shape, and integrate SOF with the CF. The formation of CANSOFCOM has begun the long process to generate the understanding within the CF as to why SOF are different and to why a selection process must be instituted. The last domain that needs to "buy-in" to the selection process is the Air Force. The roles and tasks for 427 SOAS are clear and consistent with the application of aerospace power in a SO environment. The changing of beret colours from Air Force Blue to CANSOFCOM Tan was done on a parade in a squadron hangar 1 February 2006. The approximately 250 person strong squadron transitioned in name and visually into a SO unit but arguably it needs to complete the transformation to SOF unit. There had been subunits within the squadron that had been supporting JTF-2 and RCMP SERT since their inceptions, but they had never been subjected to a formally supported selection process. The next chapter will highlight why such a selection process is required.

I don't believe in luck –
Gregory Peck's character in the WWII bomber movie, Twelve O'clock High (1949)

CHAPTER 2 – WHY SOF SELECTION?

INTRODUCTION

The basis of the definition of SOF as compared to conventional forces or elite forces is often debated. As has been highlighted in the previous chapter, some authors define SOF and SO by the types of missions conducted. The other method for making a distinction is the nature of the selection process and the specific attributes that are desired. In either case SOF are specially selected, trained, equipped, and organized to conduct high-risk or politically sensitive military operations. Consistent with the theory that SO are economy of force operations, the cost of failure of SO is higher than the cost of SOF selection. This will be argued as the main premise for conducting SOF selection; the husbandry of scarce resources. To complete missions of political and military sensitivity requires that the most suitable personnel undertake those missions.

The cost of failure can be measured through a myriad of methods and categories. Failure can be measured in terms of resources lost in the preparation for or during the conduct of the SO. Resources can further be identified as financial, material, and/or personnel. Failure can also be measured in political terms. The inability for the government to have an acceptable outcome to a hostage rescue situation domestically or internationally demonstrates the ultimate goal of the government to protect its citizens has failed. The compromise or failure of a covert mission in another country can cause government embarrassment and degradation in international standing. The SOF operators

also have a very personal interest in a robust selection process. Beyond all the military and political overtones, self-survival is a very strong motivator for being surrounded by the most suitable personnel available.

The method that will be used to determine why SOF needs a selection process will be to review the historical basis of selections, a historical case study, and the modern application of selection. The historical basis of selection can be traced back to the WW I selection of aircrew. From those roots, selection continued to be used in WW II for covert operatives from the United States' Office of Strategic Services (OSS) and Britain's Special Operations Executive (SOE) during WW II. Selection for conventional aircrew became even more important in WW II. The next section of the chapter will review the failed 1980 Desert One Iran hostage rescue attempt as aircrew selection for this SO impacted the planning and conduct of the mission. Finally, a review of current US selection processes will be conducted.

HISTORICAL BASIS

Ironically enough to this paper, it was air forces that started what can be called the first selection process in World War I and World War II. There needed to be a process to determine which were the most likely candidates not only to survive operations, but to survive the training as well. World War I and II represented total war and caused great strains on the ability for nations to generate manpower. Efficient methods were required for managing the human resources committed to battle. The requirements for SOF selection, as shall be demonstrated, are not that different from the requirements to develop an aircrew selection process. The historical basis for selection will be looked at from the viewpoint of WW I aircrew, WW II aircrew, and then WW II OSS operators.

The doctoral thesis *The Cream of the Crop: A Study of Selection, Training, and Policies Governing Lack of Moral Fibre in Aircrew of the Royal Canadian Air Force* by Dr Allan English, is a valuable resource for examining the roots of aircrew selection in Canada.[67] As the title suggests, this doctoral thesis covers a broad spectrum of topics with the majority of this literary effort spent on policies dealing with WW II psychological casualties. But it is English's analysis of the situation in WW I that is particularly helpful for identifying the historical roots of selection. It was not until 1916 that the demand for aviators from Canada grew. The Royal Flying Corps (RFC) in Canada based their selection model on the British model. Aircrew selection at that time was developed with only a nascent understanding of aviation physiology.

The medical professionals that directed the selection thought that "… fliers were individuals with special characteristics that could be identified by means of physical selections."[68] English lists the various standards throughout the war but as a summary, the candidates had to have perfect vision, be under 25 years, be physically strong, have good balance, not be colour blind, possess a measure of recklessness, able to have sufficient education to attend university, and be of European descent.[69] The last measure is the only one that would seem significantly at odds with today's view of physical standards. The prevailing thinking at the time was influenced by social Darwinism and the resulting conclusions that Europeans were a superior race.[70] There were rare

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[67]Allan D. English, *The Cream of the Crop: A Study of Selection, Training, and Policies Governing the Lack of Moral Fibre in Aircrew of the Royal Canadian Air Force* (Kingston, ON: Queen's University Doctoral Thesis, 1993).

[68] *Ibid*, 39.

[69] *Ibid*, 41-47.

exceptions to the European descent rule but in retrospect, it is indicative of how unsophisticated aircrew selection was at the time.

Rebecca Hancock Cameron's *Training to Fly: Military Flight Training, 1907-1945* presents a similar analysis of the situation facing the United States aviation development efforts.[71] Cameron provides a 1917 quote from General Squier.

> Athletes who are quick witted, punctual and reliable. Intelligent men accustomed to making quick decisions are highly desirable. Men who ride well, can sail a fast boat or handle a motorcycle usually make good air pilots.[72]

When the US instructors visited the RFC Canada facilities, it was emphasized that military discipline was key to becoming a good airman.[73] The US attempted to standardize their selection and training systems but at one point the standardization was criticised by spending too much effort on rushing pilots through training rather than the quality of instruction.[74]

Diane L. Damos published a 2007 report for the U.S. Army Research Institute for the Behavioural Sciences titled *Foundations of Military Pilot Selection Systems: World War I*. In the report she conducts a literature review to trace the development of the US aircrew selection system. Starting in May 1917, a mental, professional, and oral

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[70] *Ibid*, 46.

[71] Rebecca Hancock Cameron, *Training to Fly: Military Flight Training, 1907-1945* (Washington, DC: United States Government Printing Office, 1999): 71-73. Between 1914 and 1918, the aviation training programs in the United States were operated under the Air Service in the Signal Corps.

[72] Telegram from General Squier to President of Harvard University, 5 Jun, 1917, Robert Lowell Papers; as quoted in Rebecca Hancock Cameron, *Training to Fly: Military Flight Training, 1907-1945* (Washington, DC: United States Government Printing Office, 1999), 114.

[73] *Ibid*, 116.

[74] *Ibid*, 127.

examination was used to gauge potential indicators of success in training.[75] Damos looked at a 1919 study by V.A.C. Henmon that indicated that 50-60 per cent of applicants were washed out during medical and examination boards. A further 15 per cent were reduced at ground schools and an additional 6 percent that failed because of flying ability.[76] Henmon went on to measure candidates against suggested tests. The tests that had the highest correlation to flying success measured emotional stability, perception of tilt, and mental alertness.[77]

The early forays of developing a selection process for specialist soldiers was conceived in the implementation for aircrew selection in WW I. Selection was instituted as a cost saving measure in terms of finances and human lives. This foreshadowing was to rear its head for both the Commonwealth and the US during the early stages of WW II. Still in its infancy, the selection process focussed on physical fitness and social station. You had to be fit and you had to be able to learn quickly. It is interesting that the SOF truth "quality is more important than quantity" could even be applied to aircrew selection from WW I.

The interwar years did little to advance the field of aviation selection. It was not until 1939 when war with Germany was on the horizon that aircrew selection was modified significantly. The large influx of volunteers as aircrew created a demand for a

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[75] Diane L Damos, *Foundations of Military Pilot Selection Systems: World War I* Technical Report 1210, prepared for the U.S. Army Research Institute for the Behavioral and Social Sciences (Arlington, VA: U.S. Army Research Institute, 2007): 9; http://www.hqda.army.mil/ari/pdf/TR1210.pdf; Internet; accessed 4 April 2009.

[76] V.A.C. Henmon, "Air Service Tests of Aptitude for Flying," *The Journal of Applied Psychology* 3, no.2 (June 1919): 104; http://web.ebscohost.com/ehost/pdf?vid=8&hid=106&sid=b8a1609d-db7d-4297-a48d-9020a4f7510a%40sessionmgr109; Internet; accessed 4 April 2009.

[77] Henmon, "Air Service Tests of Aptitude for Flying," 107.

highly evolved and effective selection system. In *The Cream of the Crop...*, English traces the most important change to aircrew selection since WW I; it was the change from a predominant medical basis for selection to a combined medical psychological basis. As early as 1939, psychologists started having a greater influence on aircrew selection.[78] As such, the University of Toronto Psychology head of department E.A. Bott, was placed in charge of Canadian aircrew selection. In 1939 his plan was to validate aircrew selection so that it would allow him to "… predict those candidates who would cease training (CT); … divide aircrew into categories (i.e., pilot, observer, wireless air gunner); and … reclassify CTs into new aircrew categories."[79] By 1941, there was still a high failure rate of pilot trainees and the RCAF Directorate of Personnel Selection and Research sought answers to rectify the problem. The Navy and Army also had psychologists to support their selection process, but the RCAF also paid great attention to selection research. As summarized by Douglas Vipond and Ronald A. Richert in "Contributions of Canadian Psychologists to the War Effort: 1939-1945":

> The reason could be that aircrew jobs, in particular, involved quite specialized, distinct types of tasks. A pilot needed abilities different from a gunner, for instance. Therefore it would save money, and even lives, if training was only given to those likely to succeed.[80]

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[78] Allan D. English, *The Cream of the Crop…*, 60.

[79] *Ibid*, 61. For a detailed description of the formation of the Canadian Psychological Association (CPA) as a result of WW II see Mary J. Wright, "CPA: The First Ten Years," *The Canadian Psychologist* 15, no. 2 (April 1974): http://web.ebscohost.com/ehost/pdf?vid=1&hid=105&sid=80963a87-d20f-4513-8151-118a59a407be%40sessionmgr109; Internet; accessed 4 April 2009.

[80] Douglas Vipond, and Ronald A. Richert, "Contributions of Canadian Psychologists to the War Effort: 1939-1945," *Canadian Psychological Review* 19, no. 2 (April 1977): 171; http://web.ebscohost.com/ehost/pdf?vid=4&hid=115&sid=632e0cf1-238f-407c-b104-4949d1d3a7ac%40sessionmgr107; Internet; accessed 4 April 2009.

In an address to the American Psychiatric Association in 1942, the president of the RCAF Medical Reselection Board Wing Commander Mitchell, presented the challenges that were facing the RCAF at the time. Mitchell identifies physical and educational as the most important standards for selection but acknowledges that they are not the only indicators of potential success.[81] The personality make-up of the candidate must also be assessed with a high requisite degree of maturity and discipline. Mitchell identifies that the crewmember may not be acting alone and that,

> …an immature, irresponsible lad might, like the weakest link in the chain, be that cause of the loss of a valuable aircraft and the death not only of himself but also the other members of his crew.[82]

Additional personality traits for analysis include morbid fears; physiological instability, traits of timidity and unagressiveness, other kinds of nervousness, and volitional disorders.[83]

The development of a psychologically based selection process was not limited to WW II aircrew. The US Office of Strategic Services during WW II was responsible for covert and clandestine actions during WW II. It was an intelligence agency, a research organization, a training school for saboteurs and resistance networks, and directed sabotage and destruction behind enemy lines.[84] To carry out this breadth of activities, there were requisite skills required that could not easily be found in civilians or conventional military forces. In 1943, the head of the OSS Gen Donovan, directed that a

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[81] HD. Mitchell, "Aircrew Selection," *The American Journal of Psychiatry* 99: 354, (November 1942); http://ajp.psychiatryonline.org/cgi/pdf_extract/99/3/354; Internet; accessed 26 February 2009.

[82] *Ibid*, 356.

[83] *Ibid*, 356.

[84] O.S.S. Assessment Staff, *Assessment of Men: Selection of Personnel for the Office of Strategic Services* (New York, NY: Rinehart & Company, 1948), 10.

psychological-physiological assessment unit be formed to select agents for OSS duty. Written in 1949 by OSS Assessment Staff, the book *Assessment of Men* describes the history and the method of selection of OSS operatives. The book describes the assessment on men as "…the scientific art of arriving at sufficient conclusions from insufficient data."[85] As with previously mention selection processes, it was designed to weed out the unfit and select those best suited for any number of different jobs.

Constrained by time and resources, one of the key influences in determining the type of selection process the OSS could use was the myriad of jobs and tasks those operatives would be tasked to perform. It was near impossible for an accurate job description to be linked directly to the assessment process. The conventional job-task-analysis approach used to date would not work. Another factor in the selection process was due to the exigencies of war, that there was no time to develop a true in-depth analysis of personality theories and how they would apply to the task to be tested. Instead, the assessment staff made some general assumptions about personalities and rationalized their theories. Rather than an assessment of a specific task, OSS based their selection on a group of general traits. The general variables that were chosen as attributes comprised of the following: motivation for assignment, energy and initiative, effective intelligence, emotional stability, social relations, leadership, security, physical ability, observing and reporting, and propaganda skills.[86] *Assessment of Men* continues to this day to be a fundamental benchmark in the development of clinical psychology and in the selection of

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[85] *Ibid*, 8.

[86] *Ibid*, 31.

SOF. The general traits identified in the mid-forties for covert operatives can be linked to modern day SOF criteria.

Examination of WW I aircrew, WW II aircrew, and WW II OSS selection processes have identified the genesis of the modern selection process. A selection process is designed to predict those candidates that have the greatest chance of success in training and therefore subsequent operations. Failure to select the most suited candidates can lead to financial or personnel training wastage or unnecessary combat losses. As combat systems have evolved technologically and soldiers are given greater responsibility i.e. covert operations in a foreign country, this effect can be compounded. Equally as important are the contributions of a wide range of medical disciplines to structure a valid selection process for the tasks that are being selected.

HISTORICAL CASE STUDY

The following historical case study of SO highlight the importance of SOF selection. The case study to be reviewed will be the failed 1980 US hostage rescue in Iran.

The failure of Operation EAGLE CLAW was pivotal in the reshaping of the SO community in the US. Operation EAGLE CLAW was a joint special forces operation to rescue American hostages in Teheran. In April of 1980, a rescue force of eight RH-54D helicopters, SOF soldiers, and an element of C-130 Hercules landed inside Iran at a secluded desert site known as Desert One. Desert One was a staging area for refuelling of the helicopters and the trans-loading of the SOF rescue team from the fixed wing transports to the helicopters. Due to helicopter serviceability problems at Desert One, there were insufficient helicopters to continue and therefore the mission was aborted. During the refuelling procedures for the return trip, a helicopter accidently hover taxied

into a C-130 tanker due to loss of visibility caused by blowing dust and night time conditions. The resulting crash and subsequent fire required that the rescue force conduct an immediate evacuation of the area and proceed to recovery locations outside of Iran.[87] Five RH-53D helicopters were abandoned, with one RH-53D and one C-130 Hercules left burning. Eight servicemen died with some of the bodies having to be left in the burning wreckage. This incident caused great embarrassment to the US military and the government.[88]

The "Holloway Report" was commissioned by the US Joint Chiefs of Staff to investigate the planning, organization, training, and execution of the mission in order to improve on future performance. Inside the report are conclusions and recommendations that led to the formation of a dedicated counterterrorist joint task force panel and a Special Operations Advisory Panel. As a result of pressures to reform the US military and specifically the special operations community, the Nunn-Cohen Act and the Goldwater-Nichols Act restructured the US military and ultimately led to the formation of combatant commands and USSOCOM. [89]

The "Holloway Report" and other literature related to the failure at Desert One is a classical case study to analyze the SOF truths. Although the report clearly states that not one signal factor caused the mission to fail, it highlights areas where "risk might have

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[87] United States, "The Holloway Report", (Department of Defense, 1980): 9-10; available at http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB63/doc8.pdf; Internet; accessed 28 January 2009.

[88] Orr Kelly, *From a Dark Sky: the Story of U.S. Air Force Special Operations*, (Novato, CA: Presidio Press, 1996), 248-249.

[89] U.S. Special Operations Command, *United States Special Operations Command History*, 20th Anniversary Edition: 1987-2007 (MacDill AFB, Fla: USSOCOM History and Research and History Office, 2007): 5-7.

been better managed."[90] Two issues that were not found to be pivotal to the failure of the mission but were examined for risk mitigation were the selection of the RH-53D helicopters and the crews that flew them.

The helicopters for the mission were going to be launched off of the aircraft carrier USS NIMITZ and required a balanced combination of range, payload, shipboard compatibility, and operational security (OPSEC). The RH-53D helicopter was chosen because it was the best solution of all the available helicopters.[91] The decision in which crews were going to be used was a result of the desire to retain unit integrity and maintain OPSEC. Since the RH-53D were minesweeping helicopters it was initially decided to use Navy crews as the full details of the mission were not provided to subordinate planners.[92] Because the Navy crews were not experienced in over land operations, US Marine Corps H-53 pilots would round out the crews to bring experience. Col James L. Kyle was the Air Force and Desert One on scene commander. In his book *The Guts to Try*, Kyle indicates he tried on several occasions to press forward the idea to get Air Force pilots with H-53 experience and SO background from Vietnam to fly the RH-53Ds.[93] It is suggested that OPSEC played a part in the decision not to grab these experienced pilots as they were spread out and their disappearance would be noticed. Kyle states:

> My concern was that we select the best people for the job, and I suspected that the navy pilots had little, if any, experience operating in

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[90] "The Holloway Report", 12.

[91] *Ibid*, 32.

[92] Col James L. Kyle, *The Guts to Try* (New York, NY: Orion Books, 1990), 59. Col Kyle was the Air Force Commander of the mission and the on-scene commander at Desert One.

[93] *Ibid*, 120.

> the desert, or on night low-level, long range, deep-penetration missions into hostile territory.[94]

The Navy pilots were not accustomed to flying on night vision goggles (NVG) or flying in tight formation. They were also not trained in low-level tactical flying. The Navy pilots in particular found the training challenging as they were used to towing minesweeping equipment in straight lines through the water. To further complicate matters the tactics that the Navy were using were not authorized as they would have been for the Air Force Special Operations crews. At one point in the training, the Delta Force commander Col Beckwith expressed serious concerns over the pilot's ability to fly the mission. He consulted with his psychologist who after examining the Navy pilots remarked:

> You know, we got some guys here who are really shaky. They're beginning to understand what kind of mission you want them to fly. Sure, one or two might make it, but for the rest….[95]

Beckwith remarks on one particular Navy pilot after he quit flying due to fear; "I understood [he was scared]. But quitting. That was something else. He'd lost his motivation, his objectivity, and his desire. He'd also lost his balls."[96] As a result some of the Navy pilots were replaced with more experienced Marine pilots.

The "Holloway Report" identifies that that USAF had approximately 100 H-53 pilots that were current and qualified in long-range missions. It also identifies that approximately another 80 former qualified H-53 pilots that had "… recent [SOF] or

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[94] *Ibid*, 59-60.

[95] Col Charlie A Beckwith and Donald Knox, *Delta Force* (New York, NY: Harcourt Brace Jovanovish, 1983), 224.

[96] Beckwith and Knox, *Delta Force*, 224.

rescue experience."[97] The report addresses the question whether it would have been easier for the USAF H-53 pilots to learn to fly the RH-53Ds from the carrier or if it would have been easier for the Navy and Marine RH-53D crews to learn SOF and rescue operations? The report indicates that based on the experience from USAF advisors training Vietnamese pilots in during the Vietnam war, that "learning new and vastly different complex mission skills is far more difficult to transitioning to an aircraft of similar design and performance characteristics."[98] The report concludes that its evaluation of this issue by indicating "the importance of designating an operational helicopter unit responsible for maintaining mission capability in this area."[99]

The use of the Operation Eagle Claw case study is not meant to be an analysis of why the mission failed. It is used instead to identify that as in the case of OSS selection, the right personnel need to be selected for the right job. The Navy and arguably the Marine pilots did not have the requisite skills or potential attributes that afforded the best chance for risk mitigation. The availability of previous SOF and rescue pilots with H-53 experience should have been exploited. In the SOF community it is imperative that operators and supporters are able to trust each other implicitly with their lives. By not selecting the right individuals that can competently conduct training or operations, operations can be adversely affected when a supported unit refuses to fly with the

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[97] "The Holloway Report", 35.

[98] *Ibid*, 35. USAF training advisors in Vietnam in 1961 was known as the Jungle Jim Project. For more on Jungle Jim see Orr Kelly, *From a Dark Sky: the Story of U.S. Air Force Special Operations*, (Novato, CA: Presidio Press, 1996): Chapter 14 "They Called it Jungle Jim." The pilots for Jungle Jim had to undergo an advanced selection process before going to Vietnam ton including "quitting from the Armed Forces.".

[99] "The Holloway Report", 36.

supporting aviation unit. Lastly it is evident that competent SOF organizations cannot be expected to be created after an emergency occurs. The planning and training for Operation Eagle Claw lasted five and half months. What would have happened if the situation in Tehran had not allowed for that amount of time to prepare? The mission may still have been executed with less skilled crews inviting greater risk or the mission may not have gone at all and thereby putting the hostages at risk. The price of failure was high in terms of aircraft, lives lost, and prestige of the US military and government.

A second hostage rescue team was formed under Operation Honey Badger. This time Air Force and Army aviation units were identified to support the operation. The plan was never put into action as the hostages were released in January of 1981. The already generated aviation task forces expected to be disbanded but they were retained and formed the genesis of TF 160, which was to eventually become the 160th Special Operations Aviation Regiment (A).[100] The 160th would develop demanding selection criteria to become the most capable SO helicopter unit in the world.

MODERN ALLIED APPLICATION

The process of selection has advanced significantly since WW I and WWII. The addition of clinical psychologists has greatly enhanced the ability of selection staff to fit personnel where they are best suited. The aircrew selection process of WW I and WW II is an example of identifying personnel from civilian life in to service of the armed services. Selection for SOF is a process above and beyond the process required to gain entry into a soldier's or airmen's initial trade qualifications. Some critics of the process

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[100] Fred J. Pushies, *Night Stalkers: 160th Special Operations Aviation Regiment* (St Paul, MN: Zenith Press, 1995): 15-16.

for SOF aircrew selection may suggest that due to the high demanding nature of aircrew selection, there is no further requirement for SOF selection. If a pilot has his wings then he is "good to go", but like most SOF, a SOF aviator requires specialized skills, traits, and qualities. To demonstrate, selection processes from the US Green Berets, and the 160th SOAR (A) will be examined. The US Green Beret program has the most extensive literature written on the subject and the selection process for the 160th SOAR (A) is the most applicable to the topic of this thesis.

In general, there are three phases that a SOF candidate must go through to become a "badged" member of a SOF organization.[101] The first phase is screening followed by selection, and then training. The screening phase allows potential candidates to perform the first form of selection; self-selection. Self selection starts with recruiting as modern recruiting is overt and much publicized. SOF organizations actively conduct briefings to inform potential candidates on what are the tasks, missions, and requirements of the SOF unit. This process allows a candidate to understand the personal and professional requirements of applying for a SOF unit. As McRaven, the OSS Assessment Team, and Col Beckwith have identified, a candidate's high degree of motivation is key to becoming an effective member of a specialized team. A high degree of motivation permits the individual to push themselves beyond their mental and physical limits. The culmination of the recruiting is for candidates to volunteer knowing as much as OPSEC will allow about the training and mission requirements. In general terms, as long as candidates are volunteers and have met the screening criteria, they are offered a chance at selection.

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[101] "Badged" means having successfully completed selection and training and signifies acceptance into the organization. There is usually a formal or semi-formal ceremony where SOF are given their distinctive headdress or uniform insignia.

The US Special Forces are more commonly known as the Green Berets and their screening, selection, and training process are the subject of extensive literature. It is for that reason their process will be examined. The Green Berets have a long and proud heritage that was created out of the requirement to conduct unconventional or irregular warfare.[102] Today they fall under USSOCOM and are considered part of the broader SOF community.[103] Many of their tasks fall within the USSOCOM mission sets and as such that have created a robust selection process that has evolved over the years. Borne out of a requirement to save training resources, the original Special Forces Assessment and Selection Course (SFAS) was designed to "assess volunteers motivation, mental and physical condition and ability to work as members of a team."[104]

Candidates do not pass or fail SFAS, but the selection process is a method in which the staff selects which candidates will have the greatest chance of success in completing the Special Forces Qualification Course (SFQC). Previous to the implementation of SFAS, the selection process was embedded into the training program. This practice was costly as there was the potential for extensive resources to be spent on a low probability candidate. In 1990, the first officer in charge of the SFAS program, Maj Velky, writes the program looked for "volunteers [to] demonstrate the following traits: physical fitness, motivation, intelligence, responsibility, stability, trustworthiness,

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[102] USSOCOM Public Affairs, *USSOCOM Fact Book 2009*, 12.

[103] The Green Berets have been traditionally known as Special Forces (SF) but in the current context the lines have been blurred between SF and SOF. SOF has now become the common description to include SF.

[104] Maj James R. Fricke, "The Special Forces Q-Course", *Special Warfare* 3, no. 1 (Winter 1990): 4; http://www.soc.mil/swcs/swmag/90win.pdf; Internet; accessed 1 April 2009.

sociability, [and] leadership."[105] Velky acknowledges that all "good soldiers" in the Army should have these attributes but that due to the nature of SO, they are neither tested nor observed in ambiguous stressful situations. SFAS was meant to assess a volunteer's personality traits and qualities by using a multitude of personality tests in addition to field assessments.

The US Army Recruiting Command Pamphlet 601-25 "In-Service Special Forces Recruiting Program (Officer and Enlisted)" provides the latest requirements on how to apply and what to expect during SF assessment, training, and assignment. Within the pamphlet the criteria prior to selection to attend SFAS are described in terms of minimum physical fitness, security clearance, time in service, medical standard requirements, and application letters etc. The pamphlet even goes so far as to detail a kit list, a pre-course physical training program, and provides tips to pass the course.

At time of the 2006 publication of Pamphlet 601-25, SFAS has become a four week selection process that "…assesses each candidate for six attributes that are important for all Special Forces Soldiers."[106] The attributes that are assessed have only changed slightly from 1990. Pamphlet 601-25 states them as intelligence, trainability, physical fitness, motivation, influence, and judgement.[107] SFAS is a four week course run at the John F. Kennedy Special Warfare Center and School at Fort Bragg, North Carolina. Week one comprises of the following; in-processing, Army Physical Fitness Test, swim

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[105] Maj James A. Velky, "Special Forces Assessment and Selection," *Special Warfare* 3, no. 1 (Winter 1990): 14; http://www.soc.mil/swcs/swmag/90win.pdf; Internet; accessed 1 April 2009.

[106] US Army Recruiting Command Pamphlet 601-25 "In-Service Special Forces Recruiting Program (Officer and Enlisted)," 14 November 2006: 4; http://www.agd.state.tx.us/RR/documents/SpecialForces-USAREC-Pam-601-25.pdf; Internet; accessed 27 January 2009.

[107] *Ibid*, 4.

assessment, rucksack marches, run assessments, medical briefing, education tests, the Minnesota Multiphasic Personality Inventory (MMPI), and language aptitude testing. Week two involves land navigation, map reading, compass course, land navigation practical exercise, and land navigation exams. Week three assessments include team events, and long range movement. Week four has out-counselling, the selection board, selection ceremony, security interviews, and out-processing. The assessments are designed to place the candidates under mental and physical stress in a neutral environment. No performance feedback is given to the candidates so that they are encouraged to do their best at all times.[108]

Normally all SOF personnel are recruited from existing serving members of the Armed Forces but the US Army SOC has created a unique Special Forces Candidate 18X program.[109] The 18X program allows a recruit to come in off the street and after successful basic and advanced infantry training proceed to SFAS for a guaranteed SF "try-out."[110] It does not guarantee that a new recruit may be selected to become a Green Beret, but with the current high demand for SOF, the program significantly increases the recruiting pool in which to draw from. If normal or 18X candidates are selected from SFAS, they then proceed to the SFQC which comprises of five more phases of training lasting approximately two years including language training. SF candidates are only on temporary duty during SFAS and are not posted from their parent units until they are

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[108] *Ibid*, 4.

[109] In the US, Military Occupational Specialties (MOS) are given alpha numeric codes to describe the basic task of the soldier. The 18 series identifies Green Berets with an alpha character to identify which trade, 18A is SF Detachment Commander, 18B SF Weapons Sergeant etc.

[110] US Army, "Careers & Jobs, Special Forces Candidate 18(X)," http://www.goarmy.com/JobDetail.do?id=344; Internet; accessed 14 April 09.

selected for the SFQC. Once they have completed the SFQC, the Green Berets are then posted to their operational unit for employment.

The selection for the 160th SOAR (A) is similar in many respects to the SFAS program. There is not as much literature published on the detailed nature of the selection process but there is enough to gather a feel for the program.[111] In the early days of the 160th, it was shrouded in secrecy and one could only apply after being recommended by a former or serving member. Partially as a result of secrecy and lack of oversight, a 1983 panel investigated a significant increase in aircraft accident rates with the 160th SOAR (A). In its first three years, the 160th had nine accidents and 21 deaths.[112] Because the 160th SOAR (A) was using cutting edge experimental equipment and tactics in order to "get the job done", the panel found that there was an absence of adequate training and doctrine standards. A dedicated training organization was established called "Green Platoon" that gave extensive training before allowing aircrew to become mission qualified.[113]

Green Platoon has evolved into the Special Operations Aviation Training Company (SOATC) but is still commonly referred to as Green Platoon. The USASOC 160th SOAR (A) fact sheet that now openly states that the 160th SOAR (A) "actively seeks and assesses the best-qualified aviators, crew members, and support personnel in

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[111] In the spring of 2005, the author visited the 160th SOAR (A) at Fort Campbell, KY and was briefed on the selection and training process of the 160th SOAR (A). This included a briefing about Green Platoon.

[112] USASOC, "Without Equal: The Story of Army Special Operations," http://www.soc.mil/sofinfo/story.html#sp08; Internet; accessed 24 February.

[113] Carl R. Brown, "'Green Platoon': The 160th SOAR's training program", *Special Warfare* 14, no. 3 (Summer 2001): 12; http://proquest.umi.com/pqdweb?sid=1&vinst=PROD&fmt=6&startpage=-1&clientid=417&vname=PQD&RQT=309&did=92354679&scaling=FULL&vtype=PQD&rqt=309&TS=1235199112&clientId=417; Internet; accessed 21 February 2009.

the Army."[114] Officer and enlisted candidates can now fill out applications on-line as part of the initial screening process.[115] All commissioned and warrant officers are required to be volunteers. Enlisted support trades maybe posted without volunteering to go to the 160th SOAR (A) but they are not forced to stay if they do not want to.[116]

As with SFAS there are two main phases in assessment and selection. The first is a pre-screening and detailed records review of the candidates. The second stage is an assessment week. The assessment week comprises of no less than a fitness and swim test, a psychological evaluation, a flight evaluation, and a formal board interview.[117] If the candidate is selected, they then commence Green Platoon training. Chief Warrant Officer Michael Durant recounts in his book *In the Company of Heroes*, his experiences when applying for a position at the 160th SOAR (A) in 1988:

> If you didn't have the patience, perseverance, determination, and nerve, the 160th SOAR (A) was not for you. You would be constantly honing your skills, improving, improvising, developing new techniques. You had to fly right and shoot straight, 24/7. You had to be cool under fire, take harsh criticism, and offer it constructively. The unit's motto, "Night Stalkers Don't Quit," and its mission, "Time-on-Target plus or minus thirty seconds," had to seep into every aspect of your life. It was the ultimate team effort, but every member of the team had to have the skills of the quarterback, the grit of a linebacker, and the brains of a coach.[118]

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[114] USSOCOM, "160th Special Operations Aviation Fact Sheet," http://news.soc.mil/factsheets/160th%20fact%20sheet.pdf; Internet; accessed 27 February 2009.

[115] 160th SOAR (A) Recruiting, http://www.campbell.army.mil/newinternet/UnitPages/SpecialForces/160recruiters.htm; Internet; accessed 30 March 2009.

[116] Fred J. Pushies, *Night Stalkers…*, 64.

[117] *Ibid*, 64-65.

[118] Michael J. Durant, Steven Hartov, *In the Company of Heroes* (New York, NY: G.P. Putnam's Sons, 2003), 149. Durant has became famous as a result of being the 160th SOAR(A) pilot in Somali captivity. He was shot down in Mogadishu Somalia in October 1993. Based on the events of the shoot

The assessment phase is consistent with the philosophy of only sending to training the personnel that have the correct personality traits / qualities that will fit the potential mission profiles, and have the aptitude to succeed in training. Once assessment is complete, officer and enlisted personnel are sent on two different streams of training. The enlisted stream is five weeks of training that will teach hand-to-hand combat, advanced first-aid, pistol and rifle qualifications, land navigation, water-survival training, and other combat related tasks.[119] The Green Platoon training for the officers / aviators can be between 3 and 24 weeks. The length of training will depend on previous aircraft qualifications and will bring the aircrew to a Basic Mission Qualification (BMQ) on their assigned aircraft. The training consists of four phases; phase one is Survival Evasion Resistance Escape (SERE) training, phase two is combat skills training similar to the enlisted program, phase three is an intensive Night Vision Goggle (NVG) training program, and finally phase four is aircraft specific training.[120] Candidates are not fully accepted into the unit until they pass this phase of training.

Through the selection process of the US Green Berets and the 160th SOAR(A), they are able to select the best suited individuals that have the greatest chance of passing training and surviving combat. These selection processes like those of WW I and WW II have been a result of unacceptable losses of training resources and well as human life. Both processes embrace the SOF truths that "humans are more important than hardware",

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down and attempted rescue, the Mark Bowden book *Blackhawk Down* was made into a major motion picture.

[119] Walt Sokalski, "Learning to SOAR", *Soldiers* 53, no. 12 (December 1998):28-29; http://proquest.umi.com/pqdweb?did=37651853&Fmt=4&clientId=13664&RQT=309&VName=PQD; Internet; accessed 12 April 2009.

[120] Walt Sokalski, "Learning to SOAR", 29-30. Fred J. Pushies, *Night Stalkers.…*, 70-76.

"quality is more important than quantity", and "competent SOF can not be created after emergencies occur."

CONCLUSION

The previous section highlighted the origins of a selection process as found in the origins in aircrew and OSS selection. Selection was designed to save financial and personnel resources. The measurement of the effectiveness to validate having a selection process can be measured using various methods. Strict financial accounting is probably to easiest and the most tangible. Of course the greater numbers of poor candidates that you remove from the program earlier, the more potential savings are realized. The financial equation can become more complicated when you calculate the potential loss of an aircraft and/or other resources.

The equation elevates to a theoretical construct when the cost of a soldier's life is added. Financial implications can be compounded when an entire crewed aircraft or squad of SOF soldiers is lost due to an individual's mistake or unsuitableness. If the mission is vital to national security and is of a high-political risk, damage to a nation's status in the world is almost incalculable, and could potentially lead to the fall a government. Conversely, it is very hard to measure the successful outcomes of a selection program. How many lives were saved because the most suited soldier or aircrew accomplished their mission? How often has the government been saved embarrassment because competent SOF were able to achieve their mission or had the sense not to attempt the unachievable?

The selection process for the Green Berets and the 160th SOAR (A) are indicative of processes used by modern SOF units. Research is understandably limited by security

classification of the processes but even anecdotal and paperback non-fiction relates that there are screening, assessment/selection, and training phases for other SOF units in other countries. Modern SOF organizations conduct a selection process that focuses on more than just technical skills and minimum physical requirements. At some degree in defining the appropriate selection process there has to be a differentiation in the identification of the technical skills and the non-technical traits or qualities required to do the mission. The technical skills can be defined as being a “good-stick” or an “excellent shot” and the non-technical traits as leadership ability, motivation, intelligence, judgement, sociability etc. By selecting the personnel who have the best fit to conduct high-risk operations, SOF remains an economy of force option. The risk to complete the mission is mitigated as much as possible from a human standpoint.

To become a military aviator there is already a screening, assessment, and training program in place. When a pilot receives his wings it signifies that they have achieved a standard that is acceptable for employment in the air force however that does not automatically grant them the ability to be a SOF aviator. They may possess the desired attributes and aptitudes for SOF employment, but in order to further reduce the risk of failure in training or operations, SOF aviators must be selected just as if they were clearing a house of terrorists or saving a hostage. The measures and means may be different, but the process needs to produce the same outcome; a quality SOF operator capable of conducting sensitive high-risk missions under extreme stress and with little supervision. The Desert One case study amply demonstrates this point as well as indicating this process must take place before those forces are required. Canada can ill-afford to attempt to produce quality SOF aviators at the time of crisis, it would be too late.

The current lack of a formally supported selection process for SOF aviators places potential resources and lives at risk.

Why not the best? – President Jimmy Carter[121]

CHAPTER 3 – THE PROPOSED CANADIAN MODEL FOR SOF AVIATION

INTRODUCTION

This final chapter will take the previous two chapters information and synthesize the material presented into a final recommendation for a SOF aviation selection model in Canada. There are some recorded instances where SOF aviators from the 160th SOAR(A) have demonstrated their ability to attempt or complete extremely difficult missions. It is extremely hard to judge whether conventional aviators would have had similar successes or failures. However the selection process to become a SOF aviator lends itself to identifying those individuals who have the qualities and attributes to do extraordinary things. As earlier suggested by Collin S. Gray, in order for SOF to reach its full potential, there needs to be political and institutional buy-in. There has long been an acceptance for a selection process within the Canadian Forces (CF) for JTF-2, but the Air Force has been remiss in embracing the same acceptance for SOF aviation.

There are several key concepts that are brought forward into this chapter. One concept is that SOF are used to carry out strategically or operationally vital missions and sensitive tasks directed by the highest levels of the military and government. SOF are likely to operate in conditions that are physically demanding and emotionally stressful with little supervision or support. A selection process is designed to identify the

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[121] Jimmy Carter, *Why Not the Best?: The First Fifty Years* (Toronto; New York: Bantam Books, 1976). Chapter Five of the book is titled "Why not the best?" This chapter deals in part with the selection of personnel by Admiral Rickover to join the US Navy Nuclear program. Rickover's selection interviews were legendary but it goes to show the exacting standards that Rickover placed on his men. Under his watch as the head of the nuclear program, it is reputed that the Navy had a perfect safety record with nuclear reactors.

individuals that have the motivation, traits, attributes, and qualities to pass training and survive operations in an unforgiving environment. Ultimately the function of SOF is to conduct economy of force operations by delivering a much bigger bang for their buck. The advanced selection process further mitigates the risk of wasting scarce training, financial, and human resources.

This chapter will start by looking at the current selection process for CANSOFCOM units including the current process at 427 SOAS. The next section of the chapter will identify the challenges the Air Force and CANSOFCOM have in implementing a selection process. Finally, a proposed selection process will be identified for SOF aviation in Canada. The description of the selection process will provide a recommendation for the steps or gates that an individual has to go through to get to 427 SOAS. The recommendation will not however identify the standards to get through the process. Any attempt to define the standards or precise nature of the selection process would rapidly enter into a classified environment. The recommended process will be true to the SOF truths especially that "quality is more important than quantity."

CURRENT CANADIAN SOF SELECTION MODELS

The JTF-2 operations in Afghanistan and the formation of CANSOFCOM have allowed SOF in Canada to enter into the mainstream of the CF. As with USSOCOM, CANSOFCOM has a public domain website that details the recruiting process to gain entry into JTF-2, CSOR, and CJIRU.[122] At this point in time there is no formal recruiting or selection for the fourth unit of CANSOFCOM, 427 SOAS. This section of the paper

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[122] Department of National Defence, "CANSOFCOM Careers / Recruiting," http://www.cansofcom.forces.gc.ca/cr/index-eng.asp; Internet; accessed 15 March 2009.

will look at the recruiting and selection process for recruiting for all of the CANSOFCOM subunits to include the early days of dedicated aviation support to SERT and JTF-2.

Stemming form the selection traditions of the RCMP SERT, JTF-2 has a highly evolved and scientifically based selection process. Best practices have been adopted from other international SOF organizations and have been scientifically validated over the development of the unit.[123] The unclassified portions of the JTF-2 selection process are found openly on the internet including a recruiting brochure, toll free number, and recruiting base visit schedule.[124] The website identifies four phases for selection to be a Special Operations Assaulter.[125] Phase One is completed at home unit level which requires unit permission and a medical review. Phase Two is a fitness and swim test administered by home base Personnel Support Program (PSP) Fitness Staff. Upon successful completion of the fitness test, a cognitive ability and interview process with the Base Personnel Selection Officer (PSO) takes place to assess a candidate's suitability for JTF-2.

Phase three selection is what has been traditionally referred to as the selection or assessment phase. For enlisted members it is a "[v]ery demanding seven-day job specific

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[123] Author interview with former Chief Instructor and Selection Officer of JTF-2, 23 February 2009.

[124] Department of National Defence, "JTF-2 Recruitment and Selection Process," http://www.jtf2.forces.gc.ca/rec/sp-ps/soa-fis/index-eng.asp; Internet; accessed 15 March 2009.

[125] JTF-2 refers to its "operators" as Assaulters whereas CSOR still defines its fighting troops as operators.

assessment process…" with an additional three days of selection for officers.[126] Candidates are assessed on the following:

> …physical fitness (aerobic and anaerobic); performing effectively at heights, in water and in confined spaces; working as a member of a team; problem solving; and interpersonal skills. Assessments are conducted in high stress tactical settings to assess an applicant's ability to recall directions, identify and react to threats, handle weapons safely, and make decisions under physical and mental duress…. Officers [are also assessed on] organizational, analytical, communication, and presentation skills.[127]

There are no detailed open source descriptions of what happens during the enlisted and officer assessment phases but it is acknowledged that there are attribute stands. How and what these stands measure are considered classified with only the Chief Instructor knowing the full scope of assessment procedures.[128] What can be learned from the open source literature of the "JTF-2 Recruiting" brochure is that the unit is looking for individuals who possess, intelligence, sense of duty, self-reliance, leadership, initiative, integrity, maturity, mental agility, dependability, ingenuity, physical robustness, mental robustness, emotional robustness, self-controlled, and high determination. In addition officers are required to be decisive, confident, analytical, creative thinkers, and strong commanders.[129]

If candidates are "selected", they then attend a seven-month Special Operations Assaulter Course (SOAC). The core skills of an Assaulter are "[s]urgical shooting, close-

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[126] Canada, DND, "JTF-2 Recruiting Brochure,"; 16; http://www.jtf2.forces.gc.ca/rec/docs/brochure-eng.pdf ; accessed 15 March 2009.

[127] Canada, DND, "JTF-2 Recruitment and Selection Process", website.

[128] Author interview with former Chief Instructor and Selection Officer of JTF-2, 23 February 2009.

[129] Canada, DND, "JTF-2 Recruiting Brochure," 3, 6, 9.

quarter battle, and physical fitness…" while Assaulter Officer's core skills are "… command, planning, communications, and adaptive thinking…."[130] Not described in detail here, but there are similar yet less stringent selection processes for specialists, supporters, and Coxswains. Everyone at JTF-2 undergoes some form of selection process, including civilian support staff.

The Canadian Special Operations Regiment has a similar process to JTF-2. Also published openly on the internet, the CSOR process consists of five phases. Phase one and two are essentially the same as JTF-2; candidate submission of an application supported by home unit, and successful physical fitness testing. The third step undoubtedly happens at JTF-2 but is not formally mentioned; there is a file review before a CSOR selection board. The fourth phase is an assessment phase that assesses:

> …physical fitness, teamwork and leadership abilities, problem solving and interpersonal skills… Tactical scenarios will gauge your ability to make decisions under physical and mental duress.[131]

The final phase of CSOR selection is the Special Operations Basic Qualification (SOBQ) Course. This six-month course teaches CSOR proficiency with a variety of weapons systems, communications equipment, advanced medical training, field craft, patrolling, navigation, and insertion and extraction methods by land, sea, and air.[132]

The selection process for CJIRU is also published on the internet. The CJIRU website indicates that there are four steps the selection screening procedure. Step one is the completion of a seven part application including applicable PSP and PSO testing.

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[130] *Ibid*, 6, 9.

[131] Department of National Defence, "CSOR, Recruiting and Selection, Special Operator," http://www.csor.forces.gc.ca/rs/so-os-eng.asp; Internet; accessed 15 March 2009.

[132] *Ibid*.

Step two entails the forwarding of the application to CJIRU. The third step is attendance at an assessment center for further testing, interviews, and screening. Very little details are available for this process. The fourth step is a pre-selection board prior to commencement of specialized training.[133]

The process for SOF aviation selection has never been formally established even since the early days of non-dedicated support to RCMP SERT. IN 1990, the first dedicated support to RCMP was created in the form of SERT Assault Helicopter (SAH) Flight at 450 Tactical Helicopter Squadron based in Ottawa with three CH-135 Twin Hueys, thirteen pilots and six Flt Engineers.[134] 450 Squadron also flew CH-147 Chinooks in support of the Army until their retirement. As recalled by one squadron member, Chinook crew members were given a personal choice to join Utility Tactical Transport Helicopter (UTTH) Flight or join SAH Flight.[135] 450 Squadron with its CH-135 Twin Huey only fleet was moved to St-Hubert in 1994 and was eventually disbanded in 1996. The SAH Flt personnel were then transferred to 427 Tactical Helicopter Squadron in 1996 and became B Flt of that 427 Tactical Helicopter Squadron.[136] B Flt provided the sole dedicated support to JTF-2 until the 1 February 2006 stand-up of CANSOFCOM.

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[133] Department of National Defence, "CJIRU, Careers / Recruiting," http://www.cansofcom-comfoscan.forces.gc.ca/cji-uii/cjirucr-uiiccr-eng.asp; Internet; accessed 15 March 2009.

[134] 427 Squadron Association, "ROAR April 2009, Special Operations Aviation in Canada Historical Timeline," http://www.427squadron.com/roar/roar_apr09_page_5.html; Internet; accessed 20 April 2009.

[135] LCol Townsend e-mail to author 20 April 2009. LCol Townsend was a Captain at 450 Squadron when he was given the choice to go to SAH Flt. He does not recall any formal selection criteria to support JTF-2 at that time.

[136] 427 Squadron Association, "ROAR April 2009, Special Operations Aviation in Canada Historical Timeline."

Since the re-role of the Squadron, it is now tasked to deliver SOA effects to CANSOFCOM. While the current composition and sub-unit tasks of the squadron are not all classified, they are sufficiently sensitive in nature and will not be repeated here. What can generally be said is that there are elements of the squadron that are on extremely high readiness to support insertion, extraction and resupply for SOF in Counter-Terrorism, Direct Action, Special Reconnaissance roles.[137] Other elements of the squadron can support the same tasks but are not on the same readiness footing or habitual training standard.[138]There is a natural progression path that can take place for aircrew coming into the squadron that allows them to master conventional tactical flying, Basic Special Operations Aviation (BSOA) manoeuvres, and then Advanced Special Operations Aviation (ASOA) manoeuvres.[139] The main difference between BSOA and ASOA tasks is the precision in which manoeuvres are performed to which platforms they are performed to.

427 SOAS is completely different from its sister units in that there is no formal recruiting, application, assessment and selection process. Pilots, Flt Engineers, technicians, and other support staff are posted to the unit without having to volunteer, go through a pre-screening process, be subjected to a psychological assessment, or attend an assessment phase. Members are posted to 427 SOAS through negotiations with Career Managers and losing units. There are essentially two-streams that aircrew can find

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[137] *Canadian Special Operations Forces Command: An Overview*, 11.

[138] When the author left 427 SOAS as the Squadron Operations Officer in summer 2008, there were ongoing efforts to identify the correct internal structure of the squadron to meet the required balance between Force Generation and Force Employment demands.

[139] Department of National Defence, *B-GA-002-146/FP-001 - 1 Canadian Air Division Standard Manoeuvres Manual, CH146 Griffon Helicopter*, Chapter 2, 400 series tasks (June 2008). The 400 series tasks are classified portions of the SMM that pertain to BSOA and ASOA tasks.

themselves posted to 427 SOAS. The first stream would be structured for new pilot who receives their wings from the Basic Helicopter Course in Portage La Prairie, Manitoba, and is then posted into one of the helicopter squadrons in the Air Force. This may be a Search and Rescue (SAR) Cormorant, Maritime Helicopter Sea King, or a Tactical Helicopter Griffon squadron depending on service requirements.[140] Pilots may have a preference on aircraft type and location but the requirements of the service need to be met first. Former SOF aviators that are now instructors, informally attempt to steer promising SOF candidates to helicopters and 427 SOAS.[141]

The second method for posting to 427 SOAS is by joining the squadron as a second-tour or experienced pilot. In this instance, most pilots are volunteers as they have been exposed to SOF aviation either directly or indirectly. In some cases the Commanding Officer (CO) will attempt to "head hunt" from other units based on recommendations from SOF aviators or other COs. Generally, these pilots are top performers in their current units and the losing CO may be reluctant to let them leave. Yet, no selection of assessment is done to enter the squadron except if entering directly into the high readiness flight that conducts advanced manoeuvres.

If entering into the high readiness flight either from another squadron or from another flight already internal to the squadron, there are assessment flights that are completed for pilots and Flt Engineers. Generally there is a day and a night flight flown with a Standard or Flight Training Officer / Flt Engineer as applicable. The flight consists

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[140] Department of National Defence, "Canadian Forces Recruiting, Pilot Officer," http://www.forces.ca/html/pilotofficer_reg_en.aspx; Internet; accessed 20 April 2009.

[141] As related by a former SOA pilot who then became an instructor in Moose Jaw. An informal network is established with former SOA pilots who are instructors to find out who the promising candidates are.

of basic and advanced SOA manoeuvres being demonstrated and then they are expected to be imitated to the best of the candidate's ability. The assessment flight is geared to assess the candidate's ability to learn new manoeuvres quickly, identify if the candidate knows their own limits, handle stress in the cockpit, and observe general safe flying practices and airmanship. A follow-on interview with the high-readiness Flt Commander probes the candidate's motivation, determination, and expectations. The high readiness Flight Commander will make a recommendation to the CO.[142] The CO has the final authority for internal postings and he will determine how much effort he will spend to attempt to select a pilot from another squadron.

The above process worked to a degree when only one third of the squadron was dedicated to SO. Now that the entire squadron is dedicated to SO there is reduced flexibility to conduct SO across the entire spectrum of missions and tasks if there are unsuitable pilots. If a "dud" pilot was posted to 427 SOAS before 1 February 2006, he was placed in a non-SOF flying position and could be gainfully employed for a normal posting tour conducting conventional aviation tasks. At the end of their tour they were posted onwards to another unit or organization.

The increased demands of SOF in Canada is what led to the formation of CANSOFCOM and the resultant requirement for an entire helicopter squadron to be dedicated to SO.[143] There is no room for aviators at 427 SOAS that do not have the capability to become fully operational and useable through the entire spectrum of SO. In

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[142] As described by the current high readiness Flt Commander, 21 April 2009.

[143] Darcy Knoll and Scott Taylor, "Canada's Commando Commander; Colonel David Barr discusses the creation of the Canadian Special Forces Operations Forces Command," *Esprit de Corps* 14, no. 6 (July 2007): 8-11.

order to mitigate failure of these missions, there must be a selection process that adheres to the SOF truths that "humans are more important than hardware," "quality is more important than quantity," and "competent SOF cannot be created quickly after an emergency."[144]

Common to all the CANSOFCOM units except 427 SOAS, they have a formally supported CF recruiting, application, selection, and assessment process. The process is supported through the CF chain of command even to the extent of giving the units the ability to define their own job-based physical fitness, medical and psychological standards. It has been through this selection process that JTF-2, CSOR, and CJIRU have been able to put "quality before quantity" and identify motivated individuals that are best suited for Canadian SOF. The next section of the paper will outline the joint responsibility of the Air Force and CANSOFCOM to develop a selection process.

AIR FORCE AND CANSOFCOM CHALLENGES

The development of a formally accepted selection process for SOF aviators has its greatest challenges from the perspective of the Air Force. Within this section there are several issues that the Air Force faces that impede the development of a selection process. The first and most important issue is the institutional acceptance that a formal selection process is required for SOA aviators. The second issue to be examined is the unique relationship of 427 SOAS under OPCOM of CANSFOCOM and the resulting division of responsibility for generation of SOA capabilities. Singularly and/or in combination, these

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[144] Full knowledge of 427 SOAS tasks are limited by OPSEC and are compartmentalized. If there is a failing in this paper it is that there is an inability to describe how important these tasks are and why in very specific terms a SOF selection process is so important.

issues must be addressed and overcome if there is to be a sustainable and viable selection process.

The first issue to be examined is the requirement for the Air Force to accept as an institution, the requirement for a SOF selection process. There have been precedents set for the CF and Air Force to accept additional selection criteria for two of its air units. The Air Force has endorsed a selection process for 431 (Air Demonstration) Snowbirds Squadron and the Assistant Deputy Minister Material (ADM(MAT)) Aerospace Engineering Test Establishment (AETE), has developed Test Pilot selection criteria.

The CO of AETE related that the current premise of selection for Test Pilots was to save financial resources as the training program has an approximate cost of $1 million dollars.[145] The CF can ill afford to send a pilot to a foreign test pilot school for that amount of money just for them to fail the program. AETE has an extensive selection process that is thoroughly documented by Internal Project Directives and an AF 9000 Plus quality assurance process.[146] The objective of the AETE selection process is to evaluate the candidate's "potential to succeed at [Test Pilot School],… suitability for flight test work at AETE, and demonstrate … the workload and nature of work to be expected…."[147] Also related by CO AETE was that there is a decreasing experience pool to draw from in the CF. As a result AETE has been challenged to draw sufficient

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[145] Colonel Meiklejohn, CO AETE, telephone conversation with author, 24 February 2009.

[146] Department of Defence, AETE, *Screening and Selection of Candidates for Qualified Test Pilot, Flight Test Engineer, and Flight Test Navigator* (Canadian Forces Base Cold Lake: AETE AF9000 Plus MAP, Part 2, QPM 4.9.11.103,) 27 February 2008.

Department of Defence, AETE, *Internal Project Directive 127/137 Test Pilot, Flight Test Engineer, and Flight Test Navigator Candidate Evaluation* (Canadian Forces Base Cold Lake: IPD 127 (RW2)) 23 September 08.

[147] AETE, *Internal Project Directive 127/137* …, 2.

qualified candidates to meet the growing needs of the ADM (MAT) and the Air Force.[148] Subsequently, there has been a reduction in the initial application criteria but not the end state criteria. The cost of failure in test flying aircraft goes beyond the cost of the course. Test flying by its very nature is hazardous and can put personnel and material at risk. By having a selection process, AETE is able to minimize risk by selecting motivated "quality" candidates.

The process for selection into 431 (AD) Squadron is also accepted by the Air Force. As an Aerial Demonstration squadron, the Snowbirds are not facing the same risks as SOF soldiers in combat, but the physical risk are still quite high. Eight Snowbird pilots have lost their lives since 1972 during training or show accidents.[149] Any failure on the part of the Snowbirds could also damage Canada's national image. The Snowbirds are an iconic image of Canada and serve as ambassadors to the world, flying over 60 air shows a year in North America.[150] The Snowbird selection process is designed to initially assess the candidate's motivation, and the potential of the candidate to work with the team. This assessment is made by current team members that review the candidate's application and home unit CO's recommendation. If accepted at this point, the candidate is invited to a flying tryout to evaluate their piloting ability. The flying assessments are designed to grade a pilot's skill level based on what position in the formation they will occupy. Depending on the position, some skills are weighted more than others and are plotted

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[148] AETE is a unique CF air unit as it works for ADM(MAT) and with the Air Force as its "customer".

[149] Department of National Defence, "In the Memory of Fallen Snowbirds," http://www.snowbirds.forces.gc.ca/v2/tt-le/ts-hs-eng.asp; Internet; accessed 23 April 2009.

[150] Department of National Defence, "Snowbirds 2009 Air Show Schedule," http://www.snowbirds.forces.gc.ca/v2/as-sa/sch-cal-eng.asp; Internet; accessed 23 April 2009.

graphically and statistically. Final selection is made by consensus by the serving team members with the CO having the final decision. If accepted, candidates then continue through a formal training process until show season.[151] Due to the nature of extreme physical risk and the projection of national image, the Snowbirds can accept no less than the best suited candidates available. They too require "quality before quantity."

The selection processes for AETE and the Snowbirds demonstrate that there are institutional examples that the Air Force can draw from in realizing that in order to save resources and mitigate risk, a selection process for 427 SOAS is both logical and required. It is desired that this paper will go some length to educating members of the Air Force that do not understand the under-pinning reasons for a selection process. CANSOFCOM has already grasped the raison d'être for a selection process for their other units but the management of 427 SOAS is not completely under their control. CANSOFCOM has only been given a partial responsibility for the ultimate success or failure of the squadron.

The second major challenge to be examined is the unique relationship 427 SOAS has with the Air Force and CANSOFCOM. Prior to 1 February 2006 and the OPCOM detachment to CANSOFCOM, 427 Squadron was emplaced under the 1 Wing and 1 Canadian Air Division Order Of Battle. To facilitate the transfer of 427 Squadron to CANSOFCOM, a formal Transfer of Control Authority (TOCA) document was jointly developed by Air Force and CANSOFCOM staff as a means to delineate the Air Force and CANSOFCOM responsibilities for the unique relationship:

> The TOCA empowers Comd CANSOFCOM with the necessary authority to shape 427 Sqn to meet his operational objectives while

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[151] Capt Mike "MIGS" French, Snowbird #3, 431 (AD) Squadron Selection and Tryout OPI, email to author, 16 March 2009.

> maintaining the Air Force oversight of key processes required for the safe and effective generation of this specialized capability.[152]

The Air Force retains its traditional residual responsibilities: approval authority for Air Doctrine; Operational Airworthiness including operational procedures and aircrew training standards; Technical Airworthiness; Flight Safety issues; aircraft maintenance policy and technical matters; aircraft specific logistics; and Personnel Management of core Air Force personnel.[153] As related to Operational Airworthiness, CANSOFCOM has the responsibility for staffing authorization requests to 1 Cdn Air Div any SOA specific changes to Standard Manoeuvre Manual, flying orders, SOA tactics, SOA doctrine, SOA Operational Risk Assessments, and SOA flight testing requirements.[154]

Directly related to personnel management, the TOCA specifically acknowledges that "CANSOFCOM and SOA support requires the creation of specific and speciality skill sets, as well as certain mental and physical attributes."[155] The TOCA also recognizes the requirement for a delicate balance that must be struck between the long training period to generate a SOA aviator and the pre-mature turnover of personnel. The priority manning of 427 SOAS is further complicated by the current undermanned pilot trade and the increasing demands for qualified tactical aviators to man overseas deployments of Chinooks and Griffons.[156]

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[152] LGen Lucas, Chief of the Air Staff, *Transfer of Command Authority – 427 Squadron,* (NDHQ Ottawa: file 3010-1(D Air SP), 27 January 2006), 1.

[153] *Ibid*, Annex A, 5-6, 14-17.

[154] *Ibid*, Annex A, 6-8.

[155] *Ibid*, Annex A, 16.

As related to the development of a SOA aviator selection process, the TOCA identifies the following division of responsibilities:

> … the responsibility for producing and maintaining generic CANSOFCOM selection criteria rests with Comd CANSOFCOM, while the responsibility for producing and maintaining SOA-specific selection criteria rests with Comd 1 Cdn Air Div as an extension of standards/pers management policy.[157]

While the TOCA has outlined the responsibilities, it is now incumbent upon both organizations to work together to develop the selection criteria, personnel management policies, and sustainable vision for the future. It is understandable that in the past three years the pace of force development has been frantic at CANSOFCOM, and the Air Force has had other priorities, but the time has come to properly address the selection issue. Luckily so far, SOF aviation has only been measured by its success, and not its failures.

The future is uncertain when and where the government of Canada will require SOF aviation but the December 2008 kidnapping of Canadian U.N. diplomats Robert Fowler and Louis Guay in Africa speaks to having capable forces ready.[158] A hostage rescue mission is the type of mission CANSOFCOM may be directed by the government to plan and execute. Depending on the tactical situation, 427 SOAS may be called upon to provide insertion, extraction, and reconnaissance capabilities to the assigned Special

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[156] Maj Carol Potvin, *Pilot Career Manager Brief*. Updated 16 February 2009. As of February, the CF was under strength by approximately 177 (16%) trained pilots at the Captain/ Lieutenant rank. Department of National Defence, *Canada's Air Force in Afghanistan: A Backgrounder* (Ottawa: DND, 1 April 2009): 4-5; http://www.airforce.forces.gc.ca/site/opdocs/docs/JTF-Afg/bgdr-doc-eng.pdf; Internet; accessed 23 April 2009.

[157] LGen Lucas, Chief of the Air Staff, *Transfer of Command Authority – 427 Squadron*, Annex A, 17.

[158] Bruce Campion-Smith, Richard J. Brennan and Michelle Sheppard, "Al Qaeda 'abused' Canadians," *The Toronto Star*, 23 April 2009; http://www.thestar.com/news/canada/article/622994 ; accessed 24 April 2009.

Operations Task Force (SOTF). It is also logical then that these aviation forces should be the manned by "best suited" aviators possible and be generated before the crisis occurs. Finally there are those who doubt the capability of the Griffon to support such an activity, but they do not take into account the ingenious and creative thinking that will allow a selected SOF aviator to adapt and find some means to exploit every potential capability.

Another recent example is the April 2009 hijacking of a CANWEST jet in Montego Bay, Jamaica. CANWEST is a Canadian company whose jet was full of vacationing Canadian citizens. It is reported that the Jamaican assault forces had been trained by elements of CANSOFCOM's CSOR.[159] Falling under a CANSOFCOM Defence, Diplomacy, and Military Assistance role, it is conceivable that 427 SOAS crews could also be similarly tasked to train Jamaican Defence Force aircrew in SOA techniques. The successful resolution of such a hijacking event brings credit to those that train, plan, and execute it. If such a rescue had failed, Canada would not have wanted the blame assigned to itself for not having provided the best suited and qualified instructors available. Having selected, trained, and equipped SOF, gives the government flexibility of options in dealing with high risk or politically sensitive situations. The Air Force should be eager to positively influence events of such strategic nature.

PROPOSED CANADIAN MODEL FOR SOF AVIATION

The proposed selection model will provide a recommendation on the path an individual needs to take to become an aviator at 427 SOAS. The model is primarily developed for pilots but it could be easily adapted to provide a process for other aircrew

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[159] David Pugliese, "Jamaican assault team trained by Canadians," *The National Post*, 20 April 2009. http://www.nationalpost.com/news/story.html?id=1516241; Internet; accessed 23 April 2009.

such as Flight Engineers and Mission Specialists.[160] The selection model would potentially have to be extensively revised for technicians, and other support trades. This selection model cannot be adopted overnight because 427 SOAS is not starting off as a new unit like the 160th SOAR (A), JTF-2, or CSOR. There are "legacy" personnel that need to be dealt with concurrently with the implementation of the new selection process. Consistent with CANSOFCOM units and previously described US SOF units, the proposed selection model will consist of a recruiting campaign and four phases; Phase 1 – unit level application, Phase 2 – home and base level screening for fitness and suitability, Phase 3 – personality and flying assessment, and Phase 4 – probationary posting and initial SOA training.

Recruiting Campaign

The first issue in creating a selection process at the unit level is establishing the level of determination and motivation that a member has to come to 427 SOAS. JTF-2, CSOR, and CJIRU all conduct recruiting tours that travel to bases around the country to educate as much as possible within OPSEC restraints, the realities of training and operations. High readiness elements of 427 SOAS had conducted recruiting visits to other Tactical Helicopter Squadrons and flying schools in Moose Jaw and Portage La Prairie but they have since been discontinued due to lack of effectiveness.[161] Properly described

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[160] Air Force Flight Engineers and Army Combat Arms Mission Specialist are Non-Commissioned Members that fly as aircrew in the back of aircraft. They provide situational awareness to the crew when flying in a tactical environment, operate the majority of the aircraft mission kits including door guns, supervise troop loading and unloading, other mission essential duties. The Flight Engineers have additional technical and mechanical duties that are a result of their aircraft technician background. SOA Flt Engineers and Mission Specialists have additional duties related to SOA insertion and extraction techniques.

within OPSEC limits, potential members of the squadron can get a sense if the career of a SOF aviator is one that they wish to excel in. Recruiting will allow motivated individuals to make an informed decision on their desired career path. This could be argued as the most important part of selection; self-selection as determined by one's own motivation and determination.

A shortfall of not having a recruiting and selection process is that even if people are motivated to come to 427 SOAS, there is no ability to determine what that motivation may be. Some aircrew may come out of the training system looking for the extra hazard pay, some may wish to move to Petawawa because their service spouse is posted there, and another may desire the challenge because they possess a true warrior ethos. It is the latter individual that most SOF organizations seek, as a warrior ethos is critical to achieving mission success when faced with the stress and rigours of combat. Maj Jerry D. Garrett's monograph "The Problem of Motivation in the Third Dimension of Combat: What's the Solution?" examines the factors that affected American B-52 crews during intense operational periods in Vietnam. He challenges the US Air Force's focus on aircraft technology and suggests more attention should be paid to the moral domain as an indicator of motivation and success in combat.[162] Similarly, there are several articles about the actions of 160th SOAR(A) aircrew that demonstrate the difference a highly

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[161] As related to the author by a former SOA Flight Commander, Fall 2006. Some briefings were attended by non-SOA aircrew wearing ski masks as a joke thereby demonstrating their lack of seriousness. Some Commanding Officers would not allow the briefings to take place, or if they did so, would not allow aircrew to volunteer to leave their units.

[162] Major Jerry D. Garrett, "The Problem of Motivation in the Third Dimension of Combat: What's the Solution?," (student monograph, United States Army Command and General Staff College, 1991): 40; http://cgsc.cdmhost.com/cgi-bin/showfile.exe?CISOROOT=/p4013coll3&CISOPTR=1655&filename=1656.pdf; Internet; accessed 21 February 2009.

motivated and determined warrior can make with regards to mission completion and saving lives.[163] A selection process allows a Commanding Officer an opportunity to have an intimate discussion with one of his potential warriors to see if he has the desired motivation and warrior ethos.

An Air Force blessed and CANSOFCOM supported recruiting campaign must take place in order to generate interest in the roles, mission, and tasks of 427 SOAS. Just as there are advertisements in DND publications for 431 (AD) Squadron Snowbirds, AETE Test Pilots, and other CANSOFCOM units, 427 SOAS needs to be included. A multi-media presentation should be developed that can be played by recruiters during visits to flying training schools, units, and symposiums. The presentation or video should be easily accessible on the Defence Wide Area Network (DWAN). The recruiting campaign should target two audiences; pilots that are coming through training, and second tour or experienced pilots. The issuance of CANAIRGEN or CANFORGEN messages along with distribution in DND publications like the Maple Leaf would ensure wide distribution. The similar process used by other CANSOFCOM units, the US Green Berets, and the 160th SOAR(A) allow a candidates motivational desires to be known as a function of a robust recruiting campaign.

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[163] James A. Schroder, "Ambush at 80 knots: Company B, 3/160th SOAR," *Special Warfare* 15, no. 3 (September 2002): 39-41; http://proquest.umi.com; Internet; accessed 28 January 2009.

James A. Schroder, "Forty-Five Seconds on a Hot LZ: The 2/160th SOAR," *Special Warfare* 15, no.3 (September 2002): 46-49; http://proquest.umi.coml Internet; accessed 29 January 2009.

Christopher K. Ives, "Interview with CW5 Davis Cooper," *Operational Leadership Experiences in the Global War on Terrorism* (Fort Leavenworth, Kansas: Combat Studies Institute, 28 July 2008): http://cgsc.cdmhost.com/cgi-bin/showfile.exe?CISOROOT=/p4013coll13&CISOPTR=1112&filename=1113.pdf; Internet; accessed 21 February 2009.

Phase One and Two – Home Unit and Basel Level Application

Up until Phase Four, there would be two streams of selection; one for undergraduate pilots and a second for experienced aircrew. The application details of Phase One and Two are the same for both undergraduate pilots and experienced aircrew. Phase One would be the submission of a home unit endorsed application to a joint Air Force / CANSOFCOM recruiting office. The application would be very similar to those found on the JTF-2 and CSOR Recruiting websites.[164] Provided the Phase One application was found suitable, the candidate would be invited to complete Phase Two. Phase Two would be a physical fitness test, a swim test, and an assessment completed by a PSP Staff and Base/Wing PSO for 427 SOAS suitability. The standards and measures for the physical fitness tests would have to be jointly developed by the Air Force and CANSOFCOM to represent the minimum operational fitness level required. A potential suitable standard would be the current CF Express test to an Exempt level in conjunction with the current Army Battle Fitness Test. Likewise the PSO cognitive ability test may have to be specifically structured for aircrew in lieu of the standard ab initio recruit aircrew selection test.

Through the recruiting process, undergraduate pilots should be able to indicate their preference as early as possible in their training. This may even be as early as Basic Flying Training before it is determined what type of airframe they will be flying. A program similar to the US Green Beret 18X program could be instituted except the

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[164] Department of National Defence, "Application for Service with JTF-2," http://www.jtf2.forces.gc.ca/rec/docs/asjtf2-defoi2-eng.pdf; Internet; accessed 15 March 2009.
Department of National Defence, "Application for Service with the Canadian Special Operations Regiment;" http://www.csor.forces.gc.ca/rs/ascsor-asrosc-eng.asp; Intenret; accessed 15 March 2009.

candidates would be selected during flying training rather than straight from civilian life. If the 18X model was taken to an extreme measure, pilots could be recruited from other CF Military Occupational Specialties (MOS) through Occupational Transfers (OT). There has been more than one Combat Arms Officer that has successfully transferred to pilot. These OT candidates have to the potential of being a more suitable candidate in regards to maturity and previous experience. The undergraduate or OT candidate would be funnelled through Basic Helicopter Training and be given a guaranteed Phase Three assessment near or at the end of their helicopter course. If the pilots are not selected then they could be still be posted to any rotary wing aircraft type and subsequent Operational Training Unit (OTU).

Phase Three – Personality and Flying Assessment

Phase Three is at the heart of the selection process. Up to this point the candidate has met the initial medical, physical, and career file review. The main difference in the selection process between undergraduate and experienced pilots would be the timing and application of Phase Three. Although potentially hard to manage due to the dual-stream nature of Phase Three, it is now time to determine if under physical and emotional stress the candidate has the right attributes and skills that will predict success in training and operations.

In accordance with division of responsibilities of the TOCA, the development of these attributes would fall under the domain of CANSOFCOM. Support from CANSOFCOM staff would be required to generate the required testing mechanism and standards. The U.S. Army Research Institute for the Behavioral and Social Sciences has

been quite active in this area attempting to capture the personality profiles of US Army helicopter pilots.[165] The deputy commanding general of the US Army John F. Kennedy Special Warfare Center and School, Brigadier General Bennet Sacolick, considers "…maturity, commitment, judgment, courage, initiative, decisiveness, empathy, self-confidence, and adaptability" as essential SOF qualities.[166] These qualities would be a good start to assess in 427 SOAS aircrew.

Due to its technical nature, the flying assessment of Phase Three is also very critical. Some pilots may have all the motivation, warrior ethos, and prerequisite SOF personality traits, but they may not be good hands and feet pilots. Supported units have a very long memory when it comes to one of their members being bounced off a building or inserted into a swamp. The common saying is that "[y]ou are only as good as your last

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[165] John A. Caldwell, Jr., *et al*, "Personality Profiles of U.S Army Helicopter Pilots Screened for Special Operations Duty," *Military Psychology* 5, no. 3 (September 1993): 187-199; http://ejscontent.ebsco.com/ContentServer.aspx?target=http%3A%2F%2Fwww%2Einformaworld%2Ecom%2Fsmpp%2Fftinterface%3Fcontent%3Da785379270%26format%3Dpdf%26magic%3Debscohostejs%7C%7CAA3D3EFB68C36A; Internet; accessed 23 February 2009.

Robert Grice and Lawrence C. Katz, *Personality Profiles of Experienced U.S. Army Aviators Across Mission Platforms*, Technical Report 1185, prepared for the U.S. Army Research Institute for the Behavioral and Social Sciences (Arlington, VA: U.S. Army Research Institute, September 2006); http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA457567&Location=U2&doc=GetTRDoc.pdf; Internet accessed 27 January 2009.

Cheryl Paullin, *et al.*, *Review of Aviator Selection*, Technical Report 1183, prepared for the U.S. Army Research Institute for the Behavioral and Social Sciences (Arlington, VA: U.S. Army Research Institute, July 2006); http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA455302&Location=U2&doc=GetTRDoc.pdf; Internet; accessed 27 January 2009.

Kenneth T. Bruskiewicz, *et al.*, *Predictor Development and Pilot Testing of a Prototype Selection Instrument for Army Flight Training*, Technical Report 1195, prepared for the U.S. Army Research Institute for the Behavioral and Social Sciences (Arlington, VA: U.S. Army Research Institute, February 2007); http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA464020&Location=U2&doc=GetTRDoc.pdf; Internet; accessed 26 February 2009.

[166] BGen Bennet Sacolick, "Character and the Special Forces Soldier," *Special Warfare* 22, no. 1 (January/February 2009): 8-9; http://search.ebscohost.com/login.aspx?direct=true&db=mth&AN=37297200&site=ehost-live; accessed 6 February 2006.

insert." The flying assessment phases could be divided into two streams; one for undergraduate pilots and the other for experienced pilots. The first stream to be described will be for undergraduate pilots.

If an undergraduate volunteer passes through Phase One and Phase Two of selection, a modified pre-Phase Three personality and flying assessment could be carried out. A limited Phase Three flying assessment is possible at the Portage La Prairie Basic Helicopter Course as the new syllabus now includes flying Bell 412CF Outlaw aircraft including Night Vision Goggle flying. The Bell 412 Outlaw has been converted from CH-146 Griffons (militarized Bell 412) and have been updated with glass cockpits and advanced engine controls.[167] It is conceivable that although not trained in tactical flying by this time, a modified test assessment could be developed to measure potential SOA criterion. Alternatively, the candidates flying ability could be assessed by examining the student's Air Lesson Plans and Flying Test results. The Chief Helicopter Instructor or a former SOA pilot could make a recommendation for SOA employment based solely on course results to date.

The flying assessment portion of Phase Three for an experienced pilot would consist of day and night flights at 427 SOAS. If the candidate is tactically qualified Griffon pilots, it is a very simple process. All that would be necessary would be a review of the candidate's log book for currency requirements and then carry out the flight with a detailed mission and crew brief. If the candidate is helicopter wings qualified, but neither current nor qualified on the Griffon, there may have to be allowances for a familiarization

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[167] Department of National Defense, "Canada Wings, Aviation Training Center, Quick Reference: Bell 412 CF," http://www.airtraining.forces.gc.ca/training/fmt/canadawings_bell412cf_e.asp; Internet; accessed 20 April 2009.

flight. Current currency and manning regulations may have to be requested to be modified to allow the flight to take place. If the candidate is a fixed wing pilot with no previous helicopter experience it would be extremely difficult to conduct an accurate assessment of SOA helicopter aptitude. Circumstances may direct that a detailed review of the candidate's past flying file be carried out with emphasis on annual flying and simulator assessments. Essentially, fixed wing pilots would have to join the undergraduate 18X program and complete the Basic Helicopter Course prior to a full assessment being made.

If the candidate is a fighter pilot, there is an added dimension as they are now working with a crew rather than flying by themselves. Further assessment may be required for those pilots as the SOA environment is extremely team oriented between the pilots, the Flt Engineer, and the "customer" in the back. The 1997 United States Air Force Armstrong Laboratory Report *An Assessment Methodology for Team Coordination in Combat Mission Training*, developed a method to assess mission readiness from the viewpoint of crew resource management. The tool was developed to identify individual and team behavioural processes for AFSOC MC-130 SOF aircrew. The results were used to generate an effective simulator Combat Mission Training program.[168] Some similar process may be developed in conjunction with flying assessments to ensure potential crew cooperation and coordination are measured.

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[168] Stephen J Tourville, *et al*, *An Assessment Methodology For Team Coordination In Combat Mission Training*, Report prepared for the United States Air Force Armstrong Laboratory (Mesa, Arizona: July 1997): 1, 16; http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA327932&Location=U2&doc=GetTRDoc.pdf; Internet; accessed 26 February 2009.

Phase Four – Probationary Posting and Initial SOA Training

Only after successful completion of Phase Three would aircrew receive a probationary posting to 427 SOAS. Phase Four would take the candidate through ground training such as Advanced SERE, Resistance to Interrogation (R2I) Level C, and "move, shoot, and communicate" skills.[169] The aircrew could conduct this training while awaiting their Griffon OTU. The end of Phase Four would be dependant on the successful completion of the BSOA course resulting in the removal of their probationary status at 427 SOAS. The SOA aircrew may now be fully employed operationally. At anytime a member fails to meet the prescribed standards in the process, or fails to perform adequately, a 427 SOAS Career Review Board would determine suitability for further training and employment. If found unsuited, the individual would be posted out of the unit regardless if it is the designated posting season or not. By having a selection process up front, it potentially reduces the frequency and cost of unexpected postings and moves due to failures in selection or training. The Career Management system can hardly afford to fund a full-cost move for aircrew if they have only been at the squadron for six months and failed their SERE or BSOA course.

Even if the above selection process was fully supported and adapted by the Air Force and CANSOFCOM, there are significant challenges for implementation. There is the issue of what to do with current "legacy" unprocessed aircrew. For those aircrew that

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[169] "Move, shoot, communicate" skills relate to the ability for a soldier to find cover, accurately fire their weapon, and communicate internal and external to their crew. This concept is covered in the 160th SOAR (A) Green Platoon Phase Two training. If the aircrew are shot down, they are not expected to become assaulters. They are expected however not to be a liability to their own forces on the ground. In terms of ground combat skills, aircrew must be compatible with friendly forces, not comparable. In some cases the crew may have to fight their way to friendly forces or to positions to await extraction.

have already met the flying standard for BSOA or ASOA, only a psychological assessment would need to be administered. This would go on their file for further reference and in extreme cases, may be the lever that the CO may use to post qualified, but no longer gainfully employable, aircrew. For aircrew that have not yet reached BSOA or ASOA status, there should be a psychological and flying assessment completed. If it is deemed that they do not meet any of the standards, the Air Force must give the CO the ability to post those individuals out to conventional units.

Once the selection process has been approved and blessed by the Air Force and CANSOFCOM, it is assessed that the greatest implementation challenge will come from CANSOFCOM. CANSOFCOM must be prepared to lose capability in terms of lines of operation, standby commitments, and Force Generation activities while the squadron changes from legacy status to a true SOF organization. The squadron has never been afforded that opportunity to transform itself. If SOF is continued to be differentiated from conventional forces by a having soldiers and airmen being specifically selected rather than by the missions they conduct, the squadron must be allowed to select its personnel. If during the implementation process it is deemed that one third or a half of the legacy personnel do not meet the SOF aviator standard, will CANSOFCOM reduce 427 SOAS' op tempo by that same amount? If they do not, there is an extreme risk of burnout and fatigue which can lead to errors. Errors cost financial, material, and personnel resources and the selection process becomes self-defeating at this point. It is only through the eventual implementation of a joint Air Force and CANSOFCOM selection process that 427 Special Operation Aviation Squadron will become a SOF unit. Consistent with the

theory that it is the people rather than the mission that defines SOF, 427 SOAS aircrew have yet to make that transition.

More is not better, better is better.
- Former US Army Chief of Staff, General Gordon R. Sullivan[170]

We sleep safe in our beds because rough men stand ready in the night to visit violence on those who would do us harm.
- George Orwell[171]

CONCLUSION

The requirement for Special Operations Forces has grown significantly since the attacks on the World Trade Center in September of 2001. SOF have been considered the force of choice when dealing with transnational non-state terrorism. The literature review of the first chapter sought to identify the scope and breadth of SO/SOF theory and doctrine. Though varied by a function of vocabulary and definition, the literature is consistent that it takes extraordinary men to conduct extraordinary missions. The SOF truths provide a simple common thread through the majority of literature and offer a guide for the development and employment of SOF. Directed by the highest levels of the government and military, SOF provides an economy of force choice for sensitive tasks and missions that conventional forces cannot provide.

The development of a selection process is what has commonly allowed militaries to choose the individuals that will have the greatest chance of succeeding and surviving training and combat. The criteria and mechanisms have evolved significantly since WW I, but the end state has not changed; selection provides a means to save financial, material, and personnel resources that would otherwise be wasted. The operational environment

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[170] General Dennis J. Reimer, "Training: Our army's top priority and don't you forget it," *Military Review* 76, no. 4 (July/August 1996); 55-62.

[171] The Complete Works of George-Orwell, "George Orwell Quotes," http://www.george-orwell.org/l_quotes.html ; accessed 30 January 2009.

that the SOF soldier finds themselves in has led to a focus on an individual's personality profiles, qualities, and attributes. An ideal SOF aviator would possess the CANSOFCOM core values of loyalty, sense of duty, integrity, courage, relentless pursuit of excellence, indomitable spirit, shared responsibility, creativity, and humility.[172]

The selection process must include a measure of a candidate's motivation and desire to excel in the SOF community. With focused determination, the candidate will persevere through the mental and physical rigours that are presented during training and operations. The selection process must appeal to a wide base of applicants so that there can be a sustainable mix of inexperience and experience in the Squadron. The BSOA and ASOA training modules may have to change, but with selected individuals entering the unit, the courses will no longer cater to the "lowest common denominator" as they are now.

If CANSOFCOM truly believes the SOF truths that "humans are more important than hardware," "quality is more important than quantity," "SOF cannot be mass produced," and "SOF cannot be created quickly after an emergency occurs," then they cannot allow the squadron to continue on its current path. Beyond the wording in the 427 SOAS TOCA document, CANSOFCOM needs to champion the cause for SOF aviator selection with the Air Force. The Air Force, being cognizant of the nature CANSOFCOM activities must realize that it takes "…**specially selected personnel** that are **organized**, **equipped** and **trained** to conduct high-risk, high-value special operations…."[173]

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[172] Department of National Defence, "CANSOFCOM Key Tenets," http://www.cansofcom.forces.gc.ca/gi-ig/ckt-dcc-eng.asp; Internet; accessed 26 April 2009.

[173] Department of National Defence, *Canadian Special Operations Forces Command: An Overview*, 3. Bolded emphasis added.

CANSOFCOM must also be prepared to accept a decrease in capability while the process is implemented. 427 SOAS was begrudgingly assigned to CANSOFCOM by the Air Force under a unique command relationship. It has been suggested that some Air Force officers anecdotally would wish for nothing more than CANSOFCOM to fail in managing 427 SOAS so that it could be pulled back into the conventional blue Air Force. Canada has so far been lucky enough not to have had its Desert One or Blue Ribbon panel like the 160th SOAR(A), but if the Air Force and CANSOFCOM fail to properly manage mutual expectations of 427 SOAS' generation and employment, Special Operations Aviation in Canada will be measured by its failures and not its victories.

BIBLIOGRAPHY

427 Squadron Association. "ROAR April 2009, Special Operations Aviation in Canada Historical Timeline." http://www.427squadron.com/roar/roar_apr09_page_5.html; Internet; accessed 20 April 2009.

Beckwith, Col Charlie A., and Donald Knox, *Delta Force*. New York, NY: Harcourt Brace Jovanovish, 1983.

Brister, Maj Bernard. "Canadian Special Operations Mobility – Getting the Right Tools." *Canadian Military Journal* 9, no. 2 (2009): 51-60.

Brown, Carl R. "'Green Platoon': The 160th SOAR's training program." *Special Warfare* 14, no. 3 (Summer 2001): 12-14; http://proquest.umi.com/pqdweb?sid=1&vinst=PROD&fmt=6&startpage=-1&clientid=417&vname=PQD&RQT=309&did=92354679&scaling=FULL&vtype=PQD&rqt=309&TS=1235199112&clientId=417; Internet; accessed 21 February 2009.

Bruskiewicz, Kenneth T., Lawrence C. Katz, Janis Houston, Cheryl Paullin, Gavan O'Shea, Diane Damos. *Predictor Development and Pilot Testing of a Prototype Selection Instrument for Army Flight Training*, Technical Report 1195, prepared for the U.S. Army Research Institute for the Behavioral and Social Sciences. Arlington, VA: U.S. Army Research Institute, February 2007. http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA464020&Location=U2&doc=GetTRDoc.pdf; Internet; accessed 26 February 2009.

Caldwell, Jr John A., Charles O'Hara, J. Lynn Caldwell, Robert L. Stephens, Gerald P. Krueger "Personality Profiles of U.S Army Helicopter Pilots Screened for Special Operations Duty." *Military Psychology* 5, no. 3 (September 1993): 187-199; http://ejscontent.ebsco.com/ContentServer.aspx?target=http%3A%2F%2Fwww%2Einformaworld%2Ecom%2Fsmpp%2Fftinterface%3Fcontent%3Da785379270%26format%3Dpdf%26magic%3Debscohostejs%7C%7CAA3D3EFB68C36A; Internet; accessed 23 February 2009.

Campion-Smith, Bruce, and Richard J. Brennan, and Michelle Sheppard. "Al Qaeda 'abused' Canadians." *The Toronto Star*, 23 April 2009; http://www.thestar.com/news/canada/article/622994; Internet; accessed 24 April 2009.

Canada. Aerospace Engineering Test Establishment. *Internal Project Directive 127/137 Test Pilot, Flight Test Engineer, and Flight Test Navigator Candidate*

Evaluation. Canadian Forces Base Cold Lake: IPD 127 (RW2), 23 September 08.

_____. Aerospace Engineering Test Establishment. *Screening and Selection of Candidates for Qualified Test Pilot, Flight Test Engineer, and Flight Test Navigator*.
Canadian Forces Base Cold Lake: AETE AF9000 Plus MAP, Part 2, QPM 4.9.11.103, 27 February 2008.

_____. Department of National Defence. "Application for Service with JTF-2." http://www.jtf2.forces.gc.ca/rec/docs/asjtf2-defoi2-eng.pdf; Internet; accessed 15 March 2009.

_____. Department of National Defence. "Application for Service with the Canadian Special Operations Regiment." http://www.csor.forces.gc.ca/rs/ascsor-asrosc-eng.asp; Internet; accessed 15 March 2009.

_____. Department of National Defence. B-GA-002-146/FP-001, *1 Canadian Air Division Standard Manoeuvres Manual, CH146 Griffon Helicopter*. Ottawa: DND Canada, 2008.

_____. Department of National Defence, B-GA-400-000/FP-000 *Canadian Forces Aerospace Doctrine*. Ottawa, DND Canada, 2007.

_____. Department of National Defence, *Canada First Defence Strategy*. Ottawa: DND Canada, June 2008.

_____. Department of National Defence. *Canada's Air Force in Afghanistan: A Backgrounder*. Ottawa: DND, 1 April 2009: http://www.airforce.forces.gc.ca/site/opdocs/docs/JTF-Afg/bgdr-doc-eng.pdf; Internet; accessed 23 April 2009.

_____. Department of National Defence. "Canadian Forces Recruiting, Pilot Officer." http://www.forces.ca/html/pilotofficer_reg_en.aspx; Internet; accessed 20 April 2009.

_____. Department of Defence. "Canada takes delivery of the final CC-177." http://www.airforce.forces.gc.ca/site/newsroom/news_e.asp?cat=114&id=5802; Internet; accessed 27 February 2009.

_____. Department of National Defence. "Canada Wings, Aviation Training Center, Quick Reference: Bell 412 CF." http://www.airtraining.forces.gc.ca/training/fmt/canadawings_bell412cf_e.asp; Internet; accessed 20 April 2009.

_____. Department of National Defence, *Canadian Special Operations Forces Command: An Overview*. Ottawa: DND Canada, 2008.

_____. Department of National Defence. "CANSOFCOM Careers / Recruiting." http://www.cansofcom.forces.gc.ca/cr/index-eng.asp; Internet; accessed 15 March 2009.

_____. Department of National Defence, "CANSOFCOM Key Tenets," http://www.cansofcom.forces.gc.ca/gi-ig/ckt-dcc-eng.asp; Internet; accessed 26 April 2009.

_____. Department of National Defence. "CJIRU, Careers / Recruiting." http://www.cansofcom-comfoscan.forces.gc.ca/cji-uii/cjirucr-uiiccr-eng.asp; Internet; accessed 15 March 2009.

_____. Department of National Defence. "CSOR, Recruiting and Selection, Special Operator." http://www.csor.forces.gc.ca/rs/so-os-eng.asp; Internet; accessed 15 March 2009.

_____. Department of National Defence. "In the Memory of Fallen Snowbirds." http://www.snowbirds.forces.gc.ca/v2/tt-le/ts-hs-eng.asp; Internet; accessed 23 April 2009.

_____. Department of National Defence. "JTF-2 Recruitment and Selection Process." http://www.jtf2.forces.gc.ca/rec/sp-ps/soa-fis/index-eng.asp; Internet; accessed 15 March 2009.

_____. Department of National Defence. "JTF-2 Recruiting Brochure." http://www.jtf2.forces.gc.ca/rec/docs/brochure-eng.pdf; Internet; accessed 15 March 2009.

_____. Department of National Defence. "News Release: U.S. Presidential Unit Citation Presented to Joint Task Force Two." http://www.forces.gc.ca/site/news-nouvelles/view-news-afficher-nouvelles-eng.asp?id=1938; Internet; accessed 15 March 2009.

_____. Department of National Defence, *Report of the Somalia Commission of Inquiry*, Executive Summary; http://www.dnd.ca/somalia/vol0/v0s1e.htm; Internet, accessed 27 March 2009.

_____. Department of National Defence. "Snowbirds 2009 Air Show Schedule." http://www.snowbirds.forces.gc.ca/v2/as-sa/sch-cal-eng.asp; Internet; accessed 23 April 2009.

_____. Department of Defence. "The C-130J Contract Award Announcement 'A New Chapter for Canada's Workhorse'." http://www.forces.gc.ca/site/news-

nouvelles/view-news-afficher-nouvelles-eng.asp?id=2561; Internet; accessed 21 February 2009.

Carter, Jimmy. *Why Not the Best?: The First Fifty Years.* Toronto; New York: Bantam Books, 1976.

Collins, John M. "U.S. Special Operations – Personal Opinions." Lecture 1st Special Warfare Training Group, Camp Mackall, NC, 11 December 2008. http://smallwarsjournal.com/mag/docs-temp/148-collins.pdf ; Internet; accessed 23 February 2008.

____. *United States and Soviet Special Operations: A Study*. Washington: General Publishing Office, 1987.

____. *Green Berets, Seals, and Spetsnaz: U.S. and Soviet special military operations.* Washington: Pergamon-Brassey's, 1987.

Cournoyer, LColMartin. "Time for the Creation of a Canadian Special Operations CC130 Hercules Flight." Toronto: Canadian Forces College Command and Staff College New Horizons Paper, 2002.

Damos, Diane L. *Foundations of Military Pilot Selection Systems: World War I*, Technical Report 1210, prepared for the U.S. Army Research Institute for the Behavioral and Social Sciences. Arlington, VA: U.S. Army Research Institute, 2007; http://www.hqda.army.mil/ari/pdf/TR1210.pdf; Internet; accessed 4 April 2009.

Datta, Saikat. "Air Power and Special Operations," *Air Power Journal* 2, no. 2 (Summer 2005): 91-117; http://www.aerospaceindia.org/Journals/Summer%202005/Air%20Power%20and%20Special%20Operations.pdf; Internet; accessed 28 January 2009.

Dececchi, Tom and Bernadette Dececchi. "Selection and Preparation of Team Members for Special Operations." In *Choice of Force: Special Operations for Canada*, edited by. David Last and Bernd Horn, 237-252. Montreal and Kinston: McGill-Queens's University Press, 2005.

Derry, Maj Brian. "Aerospace Power: The Critical Enabler to Special Operations Forces." Toronto: Canadian Forces College Joint Command and Staff Programme Masters Thesis, 2008.

Durant, Michael J., and Steven Hartov, *In the Company of Heroes*. New York, NY: G.P. Putnam's Sons, 2003.

English, Allan D. *Command and Control of Canadian Aerospace Forces: Conceptual Foundations*. Ottawa: DND Canada, 2008.

_____. *The Cream of the Crop: A Study of Selection, Training, and Policies Governing the Lack of Moral Fibre in Aircrew of the Royal Canadian Air Force*. Kingston, ON: Queen's University Doctoral Thesis, 1993.

Fricke, Maj James R. "The Special Forces Q-Course," *Special Warfare* 3, no. 1 (Winter 1990): 4-11; http://www.soc.mil/swcs/swmag/90win.pdf; Internet; accessed 1 April 2009.

Garrett, Maj Jerry D. Garrett. "The Problem of Motivation in the Third Dimension of Combat: What's the Solution?" Student monograph, United States Army Command and General Staff College, 1991.http://cgsc.cdmhost.com/cgi-bin/showfile.exe?CISOROOT=/p4013coll3&CISOPTR=1655&filename=1656.pdf; Internet; accessed 21 February 2009.

The Complete Works of George-Orwell. "George Orwell Quotes." http://www.george-orwell.org/l_quotes.html;Internet; accessed 30 January 2009.

Gray, Colin S. "Handfuls of Heroes on Desperate Ventures: When do Special Operations Succeed?" *Parameters* 29, no. 1 (Spring 1999): 2-48; http://proquest.umi.com/pqdlink?index=8&sid=1&srchmode=3&vinst=PROD&fmt=6&startpage=-1&clientid=13664&vname=PQD&RQT=309&did=39473284&scaling=FULL&ts=1240790692&vtype=PQD&aid=1&rqt=309&TS=1240790706&clientId=13664; Internet; accessed 6 February 2006.

Grice, Robert. and Lawrence C. Katz. *Personality Profiles of Experienced U.S. Army Aviators Across Mission Platforms*, Technical Report 1185, prepared for the U.S. Army Research Institute for the Behavioral and Social Sciences. Arlington, VA: U.S. Army Research Institute, September 2006. http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA457567&Location=U2&doc=GetTRDoc.pdf; Internet; accessed 27 January 2009.

Henmon, V.A.C. "Air Service Tests of Aptitude for Flying," *The Journal of Applied Psychology* 3, no.2 (June 1919): 103-109; http://web.ebscohost.com/ehost/pdf?vid=8&hid=106&sid=b8a1609d-db7d-4297-a48d-9020a4f7510a%40sessionmgr109; Internet; accessed 4 April 2009.

Heuthorst, Maj T.W. Theo. "Deeds and Words: An Integrated Special Operations Doctrine for the Canadian Forces." Toronto, Canadian Forces College Joint Command and Staff Programme Masters Thesis, 2007.

Horn, Bernd and Tony Balasevicius, editors. *Casting Light on Shadows: Canadian Perspectives on Special Operations Forces*. Kingston, On: Canadian Defence Academy Press, 2007.

Ives, Christopher K. “Interview with CW5 Davis Cooper.” *Operational Leadership Experiences in the Global War on Terrorism*. Fort Leavenworth, Kansas: Combat Studies Institute, 28 July 2008. http://cgsc.cdmhost.com/cgi-bin/showfile.exe?CISOROOT=/p4013coll13&CISOPTR=1112&filename=1113.pdf; Internet; accessed 21 February 2009.

Joseph, Catherine, and Biju Thomas, and CG Roopa. “Motivational Work Needs and Personality Factors in Aircrew.” *Indian Journal of Aerospace Medicine* 49, no. 2 (2005): 48-56; http://medind.nic.in/iab/t05/i2/iabt05i2p48.pdf; Internet; accessed 26 February 2009.

Kelly, Orr. *From a Dark Sky: the Story of U.S. Air Force Special Operations*. Novato, CA: Presidio Press, 1996.

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

Knoll, Darcy, and Scott Taylor. “Canada’s Commando Commander; Colonel David Barr discusses the creation of the Canadian Special Forces Operations Forces Command.” *Esprit de Corps* 14, no. 6 (July 2007): 8-11.

Kyle, Col James L. *The Guts to* Try. New York, NY: Orion Books, 1990.

Last, David and Bernd Horn, editors. *Choice of Force: Special Operation for Canada*. Montreal: Published for the School of Policy Studies, Queen’s University by McGill-Queen’s University Press, 2005

_____. and Bernd Horn, and J. Paul de B. Taillon, editors *Force of Choice: Perspectives on Special Operations*. Montreal: Published for the School of Policy Studies, Queen’s University by McGill-Queen’s University Press, 2004.

Lewis, LCol Frederick A. “Is there a place for elite forces in the Canadian Army?” Fort Leavenworth, KS: U.S. Army Command and General Staff College Paper, 2002.

Lucas, LGen Steve, Chief of the Air Staff. *Transfer of Command Authority – 427 Squadron*. NDHQ Ottawa: file 3010-1(D Air SP), 27 January 2006.

McNeil, LCdr L.E. “A Special Forces Capability for the Canadian Forces.” Toronto: Canadian Forces Command and Staff College New Horizons Paper, 1999.

McRaven, William H. *Spec Ops: Case Studies in Special Operations Warfare: Theory and Practice*. Novato, CA: Presidio, 1995.

Mitchell, HD, "Aircrew Selection" in The American Journal of Psychiatry 99: 354-357, (November 1942); http://ajp.psychiatryonline.org/cgi/pdf_extract/99/3/354; Internet; accessed 26 February 2009.

O'Connel, Thomas W., Assistant Secretary of defence Special Operations / Low-Intensity Conflict, *Testimony Before the House Armed Services Subcommittee on Terrorism, Unconventional Threats and Capabilities*, 8 March 2006.

O.S.S. Assessment Staff. *Assessment of Men: Selection of Personnel for the Office of Strategic Services*. New York, NY: Rinehart & Company, 1948.

Paullin, Cheryl, Lawrence Katz, Kenneth T. Bruskiewicz, Janis Houston, Diane Damos. *Review of Aviator Selection*, Technical Report 1183, prepared for the U.S. Army Research Institute for the Behavioral and Social Sciences. Arlington, VA: U.S. Army Research Institute, July 2006. http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA455302&Location=U2&doc=GetTRDoc.pdf; Internet; accessed 27 January 2009.

Potvin, Maj Carol. *Pilot Career Manager Brief*. Updated 16 February 2009.

Postlethwaite, Mark, and Jim Shortland. *Dambusters*. Walton on Thames, Surrey: Red Kite, 2007.

Pugliese, David. "Jamaican assault team trained by Canadians." *The National Post*, 20 April 2009. http://www.nationalpost.com/news/story.html?id=1516241; Internet; accessed 23 April 2009.

Pushies, Fred J. *Night Stalkers: 160th Special Operations Aviation Regiment*. St Paul, MN: Zenith Press, 1995.

Reimer, General Dennis J. "Training: Our army's top priority and don't you forget it." *Military Review* 76, no. 4 (July/August 1996): 55-62; http://web.ebscohost.com/ehost/detail?vid=11&hid=5&sid=ace95353-9a81-4c5b-8876-f3b0e478123b%40sessionmgr102&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=aph&AN=9610222662; Internet, accessed 23 March 2009.

Russell, Maj C.T. "The Precision Instrument: A Canadian Forces Special Operations Unit." Toronto: Canadian Forces Command and Staff College New Horizons Paper, 1992.

Sacolick, BGen Bennet. "Character and the Special Forces Soldier." *Special Warfare* 22, no. 1 (January/February 2009): 8-9; http://search.ebscohost.com/login.aspx?direct=true&db=mth&AN=37297200&site=ehost-live; Internet; accessed 6 February 2006.

Schroder, James A. "Ambush at 80 knots: Company B, 3/160th SOAR." *Special Warfare* 15, no. 3 (September 2002): 39-41; http://proquest.umi.com; Internet; accessed 28 January 2009.

Schroder, James A. "Forty-Five Seconds on a Hot LZ: The 2/160th SOAR." *Special Warfare* 15, no.3 (September 2002): 46-49; http://proquest.umi.com; Internet; accessed 29 January 2009.

Sokalski, Walt. "Learning to SOAR", *Soldiers* 53, no. 12 (December 1998):28-30; http://proquest.umi.com/pqdweb?did=37651853&Fmt=4&clientId=13664&RQT=309&VName=PQD; Internet; accessed 12 April 2009.

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

Squier, General George Owen. Telegram to President of Harvard University, 5 June 1917, Robert Lowell Papers; as quoted in Rebecca Hancock Cameron, *Training to Fly: Military Flight Training, 1907-1945* (Washington, DC: United States Government Printing Office, 1999), 114.

United States, Department of the Army, FM 3-05.60 *Army Special Operations Forces Aviation Operations*. Washington, DC: Department of the Army, 2007.

_____. Department of Defense. *AFDD 2-7 Special Operations*. Washington D.C.: U.S. Government Printing Office, 2005.

_____. Senate Armed Services Committee. "Statement of Admiral Eric T. Olson, U.S. Navy Commander United Sates Special Operations Command before the Senate Armed Service Committee on the Posture of Special Operations Forces, March 4, 2008." Washington, DC: U.S. Government Printing Office, 2008; http://armed-services.senate.gov/statemnt/2008/March/Olson%2003-04-08.pdf; Internet; accessed 13 February 2009.

_____. US Army. "Careers & Jobs, Special Forces Candidate 18(X)." http://www.goarmy.com/JobDetail.do?id=344; Internet; accessed 14 April 09.

_____. US Army Recruiting Command. Pamphlet 601-25 "In-Service Special Forces Recruiting Program (Officer and Enlisted)", 14 November 2006; http://www.agd.state.tx.us/RR/documents/SpecialForces-USAREC-Pam-601-25.pdf; accessed 27 January 2009.

_____. US Army Special Operation Command. "Without Equal: The Story of Army Special Operations." http://www.soc.mil/sofinfo/story.html#sp08; Internet; accessed 24 February.

_____. US Army Special Operation Command. "160th Special Operations Aviation Fact Sheet." http://news.soc.mil/factsheets/160th%20fact%20sheet.pdf; Internet; accessed 27 February 2009.

____. U.S. Special Operations Command, *United States Special Operations Command History*, 20th Anniversary Edition: 1987-2007. MacDill AFB, Fla: USSOCOM History and Research and History Office, 2007.

Velky, Maj James A. "Special Forces Assessment and Selection," *Special Warfare* 3, no. 1 (Winter 1990): 12-15; http://www.soc.mil/swcs/swmag/90win.pdf; Internet; accessed 1 April 2009.

Vipond, Douglas, and Ronald A. Richert. "Contributions of Canadian Psychologists to the War Effort: 1939-1945," *Canadian Psychological Review* 19, no. 2 (April 1977); 169-174: http://web.ebscohost.com/ehost/pdf?vid=4&hid=115&sid=632e0cf1-238f-407c-b104-4949d1d3a7ac%40sessionmgr107; Internet; accessed 4 April 2009.

Wright, Mary J. "CPA: The First Ten Years." The *Canadian Psychologist* 15, no. 2 (April 1974):121-131; http://web.ebscohost.com/ehost/pdf?vid=1&hid=105&sid=80963a87-d20f-4513-8151-118a59a407be%40sessionmgr109; Internet; accessed 4 April 2009.

SELECTED CANSOFCOM GLOSSARY[174]

CANSOFCOM units and personnel are organized, trained and equipped to accomplish the following core tasks.

Counter-Terrorism (CT) Operations. CT refers to the offensive and defensive measures taken to prevent, deter, pre-empt and respond to terrorism. CANSOFCOM performs this mission both domestically and internationally. CT measures are mostly offensive actions such as hostage rescue, recovery of sensitive material or strikes at infrastructure but additionally include mitigation and deterrent activities. In the domestic context SOF are employed exclusively in support of Canadian Law Enforcement Agencies (LEA).

Maritime Counter-Terrorism (MCT) Operations. MCT refers to operations within a maritime environment that are extremely complex requiring a high level of expertise and special equipment to effectively and safely insert, fight and extract from a target area.

High Value Tasks (HVT). HVT refers to other missions, at home or abroad, that may be assigned by the Government of Canada. They may be kinetic or non-kinetic and could include tasks embedded across the entire spectrum of conflict. Some examples include tasks such as (but not limited to):

Counter-proliferation (CP), which refers to actions to limit the possession, use, acquisition or transit of weapons of mass effect (WME). It includes actions to locate, seize, capture and recover WME and in some instances under the Proliferation Security Initiative prevent the improper employment of dual use materials.

Special Reconnaissance (SR), which are missions conducted to collect or verify information of strategic or operational significance. These actions complement and refine other collection methods but are normally directed upon extremely significant areas of interest.

Direct Action (DA), which are short duration strikes and other precise small-scale offensive actions conducted by special operations forces to seize, destroy, capture, exploit, recover or damage designated targets. Direct action differs from conventional offensive actions in the level of physical and political risk, operational techniques, and the degree of discriminate and precise use of force to achieve specific objectives.

Defence, Diplomacy, and Military Assistance (DDMA), which refers to operations that contribute to nation building through assistance to select states through

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[174] Department of National Defence, *Canadian Special Operations Forces Command: An Overview*, 9-12.

the provision of specialized military advice, training and assistance (e.g., CPAT, MTAP). CANSOFCOM contributions are managed within the Command's areas of expertise.

Joint Task Force 2

JTF 2 was formed in 1992 and officially activated on 1 April 1993, when the CF accepted responsibility for federal counter-terrorism operations from the Royal Canadian Mounted Police (RCMP). Since its inception, the unit has continuously developed new capabilities, technologies, and tactics to provide precise kinetic and non-kinetic surgical effects.

Mission: 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 counter-terrorism; however, the unit is employed on other high value tasks.

Roles: CT, CP, DA, SR and DDMA

Canadian Special Operations Regiment

CSOR, located at Canadian Forces Base Petawawa, was officially stood up as a new unit of the CF on 13 August 2006. It is a high-readiness, agile and robust special operations force that was created as a vital enabler for JTF 2 to address a capability gap that existed prior to its creation. The regiment is capable of supporting and conducting a broad range of special operations missions at home and abroad.

Mission: To provide a high readiness, agile and robust force capable of supporting and conducting a broad range of operation missions both at home and abroad.

Roles: DA, SR, DDMA and NEO

427 Special Operations Aviation Squadron

Formed in 1942, 427 (Lion) Squadron was originally an RCAF Bomber Squadron and won an impressive list of Battle Honours during the Second World War. Disbanded after the war, it was reactivated in 1962 as a Fighter Squadron flying F-86 Sabres and then CF-104 Starfighter until disbanded again in 1970. Subsequently, the Lions were reactivated on 1 January 1971, as a Tactical Helicopter Squadron based at Petawawa, Ontario. 427 Squadron has long been a key enabler of JTF 2 activities. On 1 February 2006 the Squadron was renamed 427 Special Operations Aviation Squadron and assigned to CANSOFCOM.

Mission: To provide CANSOFCOM agile, high-readiness special operations aviation forces capable of conducting special operations across the spectrum of conflict at home and abroad.

Roles: CT, DA, SR and DDMA

Canadian Joint Incident Response Unit - CBRN

The events of 11 September 2001, led to the immediate Chemical, Biological, Radiological and Nuclear (CBRN) response capability of the CF to be assigned to a new dedicated high readiness unit, the JNBCD Company. Since 1 February 2006 this unit has been a part of CANSOFCOM. Its name was officially changed to the CJIRU in September 2007. This unit, still in the process of being fully developed, has three key mandates. This first is to respond to CBRN events in conjunction with other elements of the National CBRN Response Team: the RCMP and Health Canada. The second is to provide an agile integral part of the CANSOFCOM Immediate Reaction Task Force (IRTF) and lastly to force generation a planning, and advisory capability to CF expeditionary operations.

Mission: To provide timely and agile broad based CBRN support to the Government of Canada in order to prevent, control and mitigate CBRN threats to Canada, Canadians and Canadian interests.

Roles: Core Member National CBRN Response Team, CT, CP and SR