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THE CANADIAN

# AIR FORCE JOURNAL



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THE AIR FORCE OFFICER  
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AN AMERICAN PERSPECTIVE

**AND MUCH MORE!**



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**THE CANADIAN AIR FORCE JOURNAL** is an official publication of the Chief of the Air Staff and is published quarterly. It is a forum for discussing concepts, issues and ideas that are both crucial and central to aerospace power. The Journal is dedicated to disseminating the ideas and opinions of not only Air Force personnel, but also those civilians who have an interest in issues of aerospace power. Articles may cover the scope of Air Force doctrine, training, leadership, lessons learned and Air Force operations: past, present or future. Submissions on related subjects such as ethics, technology and Air Force history are also invited. This Journal is therefore dedicated to the expression of mature professional thought on the art and science of air warfare and is central to the intellectual health of the Air Force. It serves as a vehicle for the continuing education and professional development of all ranks and personnel in the Air Force as well as members from other environments, employees of government agencies and academia concerned with Air Force affairs. ■

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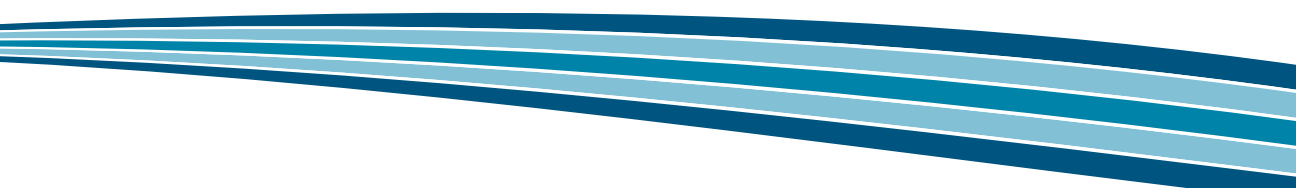
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THE CANADIAN  
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*A CC177 Globemaster III towers over other aircraft at the Inuvik airport.  
Photo: Master Corporal Jean-François Lauzé*

# EDITOR'S MESSAGE

**W**hile this issue of the Canadian Air Force Journal was in production, it was announced that the Canadian Forces would augment its military efforts in Afghanistan with the formation of the Joint Task Force (Afghanistan) Air Wing. The Air Wing will basically bring together airlift, rotary wing and unmanned air vehicle (UAV) resources together under a Canadian air element to support operations in theatre. Undoubtedly, much will be made of the Air Wing as a significant deployment that will pay dividends with respect to prosecuting the current conflict and providing valuable insight into the conduct of expeditionary operations. To be sure, it will provide a focal point for aerospace analysis and debate since units in combat are the grist for military writers and pundits. However, we should not forget the fact that the Air Force has been there from the beginning—providing air mobility support, UAV resources and individual augmentation in a variety of positions in and out of theatre. Therefore, we must be careful to examine the “entire” Air Force experience to ensure that we gain a broad understanding of the application of air power in this conflict. To that end, I look forward to your articles and observations.



**Major William March, CD, MA**  
*Senior Editor*

# LETTER TO THE EDITOR



*Dear Colonel Lewis:*

*At the risk of sounding pedantic, I wish to draw your attention to a misprint in Major Gerry Madigan's stimulating article, Admiral Isoroka Yamamoto: A Case For The Value of Professional Reading in Canadian Air Force Journal 1 (2). The author consistently spells General Giulio Douhet's first name as "Giulio." This is a nonsense name that does not exist in Italian, nor, to my knowledge, in any other language. The correct version, "Giulio," is pronounced "JEW-lee-oh," and is the Italian descendant of the ancient Roman name "Julius." The same mistake occurs in Canadian Military Journal 7 (3), pp. 59-60, so perhaps no one need feel too bad about it.*

*Sincerely,  
Brian Bertosa*



**Mr. Bertosa is quite right - it is indeed "Giulio" Douhet.**

**Mea Culpa - Senior Editor.**

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# LEADERSHIP: THE AIR DIMENSION

By Colonel William Lewis



## Introduction

There are very few disciplines that receive as much attention and study as leadership. However, in spite of the myriad of articles, books, motivational speakers and courses on the subject, there is clearly not a universally accepted understanding of the scope, breadth, competencies and application of leadership. As explained by Bennis and Nanus, “Leadership competencies have remained constant throughout the years, but our understanding of what it is, how it works, and the ways in which people learn to apply it has changed over the past decades.”<sup>1</sup>

There have been many publications on leadership in a military context, but the majority of the writings and empirical research is focused on the United States Army or, more generically, from a land-based construct. Arguably, this focus on army leadership is due to the profession of arms’ preoccupation with the “combat-warrior” image.<sup>2</sup> As such, little anecdotal or empirical research is available regarding leadership in the air force, and the majority of what does exist is from the United States Air Force.<sup>3</sup> Furthermore, most leadership research tends to focus on those employed in traditional operator roles, including combat arms, aircrew as well as maritime surface and subsurface officers, with very little attention to the leadership of the large number of military officers and non-commissioned members that support operations.<sup>4</sup> Therefore, this paper will initially explore the concepts of culture and its contributions to leadership, followed by a brief outline of existing publications on air force leadership. Then, the current Canadian Forces and Air Force leadership courses will be presented with the intent of demonstrating that these courses do not adequately prepare Air Force leaders. A few of the outdated traditions and myths about leadership will be explored, and a few concluding comments and suggestions will be offered.

## Culture

While perhaps not a concept that initially comes to mind when considering leadership,

it has been postulated that every organization has a culture.<sup>5</sup> Culture is an abstract concept, defined by Schein as:

**... a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.**<sup>6</sup>

Schein goes on to describe culture as a concept that is more than just shared beliefs and traditions. The Canadian Forces’ (CF’s) leadership doctrine keystone document *Conceptual Foundations* defines culture similarly:

**A shared and relatively stable pattern of behaviours, values, and assumptions that a group has learned over time as an effective means of maintaining internal social stability and adapting to its environment, and that are transmitted to new members as the correct ways to perceive, think, and act in relation to these issues.**<sup>7</sup>

Regardless of which definition is chosen, there are three different levels or depths against which an organization can be analysed. Using Schein’s taxonomy, the three levels are: artifacts, espoused beliefs and values, and underlying assumptions.

Artifacts are those things that can be visibly observed, such as a culture’s symbols, structure, language, ceremonies and rituals as well as its members’ mannerisms and interactions. Espoused beliefs and values typically originate with the individual who is the founding leader of the group. The basic underlying assumptions are the most fundamental level of a culture. It is the level from which future behaviour can

be most accurately predicted. These shared assumptions have become entrenched and are very difficult to change.<sup>8</sup> But why is culture important to an organization and its leadership?

As explained by Vermillion, there are several reasons that theorists postulate why it is important to understand the culture of an organization.<sup>9</sup> In fact, Schein argues that “the only thing of real importance that leaders do is create and manage culture...the unique talent of leaders is their ability to understand and work with culture...”<sup>10</sup> Therefore, it is essential, and it may be argued to be of primary importance, that leaders of an organization understand the concept of culture. Culture guides the behaviour of the members of the organization by establishing a set of structures, routines, rules and norms. In many ways, culture is the most visible and identifiable aspect of an organization, which influences personnel both internal and external to the organization.<sup>11</sup> Therefore, it is essential that leaders are aware of and work within the culture to bring about successful change and effective performance.<sup>12</sup>

Most of the literature on a military culture centres on what distinguishes the military culture from the rest of society and concentrates on the military as a profession of arms. From a review of literature, Harries-Jenkins offers that there are two distinctive and widely accepted models of military professionalism: the profession of arms and the pragmatic military profession.<sup>13</sup> The profession of arms was introduced in 1957 by Huntington in his work *The Soldier and the State*. Huntington’s concept centres exclusively on the premise that the unique skill of the military profession is the “management of violence” which sets it apart from the rest of society.<sup>14</sup> He further postulates that the military is a profession by its expertise, responsibility and corporateness, and it is these three characteristics that make the military culture unique.

In contrast to this view, Janowitz offers the concept of the “professionalism” of the military. His model acknowledges that the military as a profession is dynamic and the characteristics of the military professional change over time

to align with the transformation of the parent society by adopting civilian norms resulting in reducing the difference in skill between military and civilian counterparts.<sup>15</sup> He offered five basic hypotheses that account for this differing viewpoint: changing organizational authority, narrowing skill differential between military and civilian elites, a shift in officer recruitment, the significance of career patterns and trends in political indoctrination.<sup>16</sup> Janowitz did make comment directly on the Air Force, stating that it was the service with the greater tendency for employing technical specialists compared to the Army. Therefore, Janowitz’s model is more inclusive than Huntington’s and also can be used by the support organizations.

In the United States, especially since the 1960s, a considerable amount of study has taken place regarding military culture and its relationship to society. Perhaps the most controversial is Charles Moskos’ institutional/occupational (I/O) thesis, which was introduced in 1977 as a result of the United States military transitioning from conscription to an all volunteer force. Moskos observed significant changes occurring in the military. He proposed that the military was transforming from an institutional organization (one that is value-driven based on the greater good) to an organization that was more occupational (thus demonstrating civilian characteristics that were more focused on self-interest than that of the larger group).<sup>17</sup> Moskos, and fellow researcher Frank Wood, maintained that the tendency towards occupationalism affects military effectiveness in three key areas: mission performance, member motivation and professional responsibility.<sup>18</sup> This I/O model is frequently cited and is the foundation for ongoing research. This research has concluded that there are I/O differences between not only the services but also between the branches within the services. Furthermore, there are intra-service I/O differences between officers and non-commissioned members (NCMs) as well as technical and non-technical branches.<sup>19</sup> In fact, Wood has focused his research on the United States Air Force (USAF). He concludes that the Air Force’s dependence on technology

results in its officers more likely to specialize and experience a “diffused sense of purpose.” This “diffused sense of purpose” can undermine the strength of a culture thus resulting in a fragmented culture. He further concludes, in line with the occupational concept, that pilots had a greater tendency to identify as specialists and that support officers identified themselves as a part of the institution.<sup>20</sup>

There have been other researchers that have investigated, albeit fairly superficially, the differences between USAF operators and support-ers. Morabito used the Yukl’s Managerial Behaviour Study research instrument (which is based on the behavioural leadership model) to determine the activities that most influence leadership development. He found that the most important activities in developing personal leadership skills were working on the job with NCMs, peers and superior officers. The activities that were the least important were the formal leadership courses.<sup>21</sup>

Phelan conducted a study of USAF majors, with a specific focus on operator and support officers, to determine what behaviours were perceived to be critical to mission accomplishment

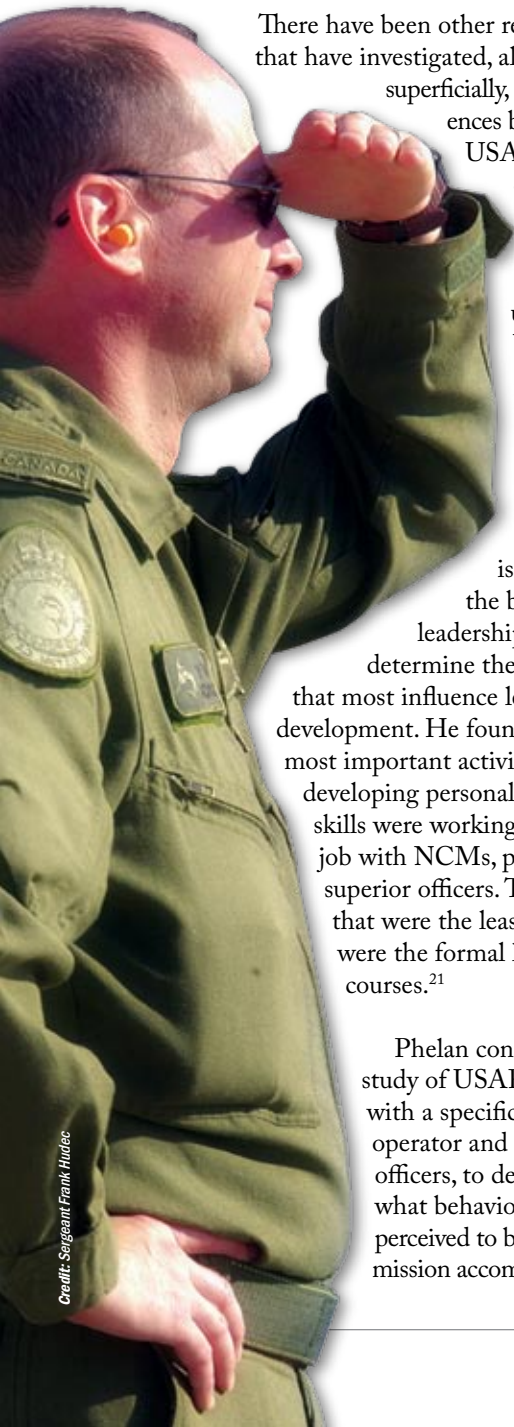
and successful leadership. As a result of this investigation, he concluded that support officers attributed greater importance to interpersonal skills, while operators attributed greater importance to technical skills.<sup>22</sup>

Finally, Shawn Black examined leader behaviours of squadron commanders of three flying and two maintenance squadrons. This doctoral thesis concluded that most squadron commanders, especially pilots, had very little personal leadership experience prior to taking command which resulted in lower score results compared to a 2004 United States normative sample on transformational and transactional leadership behaviours. They were more likely to use management by exception and laissez-faire behaviours with their subordinates. The study also revealed that the attributes that subordinates, the majority of whom were NCMs, valued most in preferred commanders were strong people skills, trust, honesty and fairness.<sup>23</sup>

Investigations into the cultural and leadership differences between the services in the Canadian military have primarily been carried out by Al English. English argues that in order for an officer to assume an operational command, two preconditions must be met: mastery of the profession of arms and earning trust of subordinates “by sharing the risks of those they command.”<sup>24</sup> English submits that the first precondition is achievable for non-aircrew, but he ultimately questions whether the second precondition is achievable for non-aircrew.

## CF Leadership Education

The critical importance of education, both academic and professional, is well documented in a number of studies undertaken over the last thirty years. Guiding documents such as Defence Strategy 2020, Officership 2020 and NCM Corps 2020<sup>25</sup> have all reached the same conclusion: in order to operate effectively in a complex military environment, all members of the CF require crucial intellectual skills and specific competencies. The CF requires officers and non-commissioned members who have outstanding intellectual ability, who are capable



Credit: Sergeant Frank Hudec

of effective command and who possess the leadership and management skills required in an increasingly uncertain world. As well, experience has indicated that differences between officer and non-commissioned member professional development can no longer be defined by rank, as officers and non-commissioned members deal with many of the same issues.

Reporting to the Canadian Defence Academy (CDA), the Non-commissioned Member Professional Development Centre, situated at the Royal Military College, Saint-Jean, was created on 1 April 2003. Their role focuses primarily on developing, implementing and presenting the NCM professional development requirements for developmental periods three through five. This is accomplished through a combination of distance learning and on-site courses and includes the intermediate leadership qualification (ILQ), the advanced leadership qualification (ALQ) and the CPO1/CWO chief qualification (CQ). Also under the authority of CDA, the Air Command Academy, located at 16 Wing Borden, is responsible for the primary leadership qualification (PLQ).

The PLQ course is a modular format, with Performance Objective 201 covering the leadership of subordinates. A total of 720 minutes of lectures, or 70 periods, are devoted to leadership. For many, this is their first introduction within the CF to formal leadership education. Unfortunately, the retention and utilization of this new knowledge is only confirmed with multiple choice tests, which clearly is not the best way to demonstrate leadership competencies. The remainder of these courses (ILQ, ALQ and CQ) have a nine to ten week distance learning portion, followed by a residency portion at Saint Jean. Each successive course includes both written submissions plus case studies and lectures to cover their increased leadership responsibilities. However, without the benefit of knowing the differences between services and the exact competencies required of junior Air Force leaders, the material is very much founded in the traditional combat-warrior paradigm.

Also reporting to the CDA is the Canadian Forces Leadership Institute (CFLI), which was established in September 2001 as a centre of excellence for leadership research and professional concept development in the CF. The mandate of CFLI is to research, develop and disseminate core concepts of leadership and the profession of arms to the CF to stimulate and promote an intellectual base for identifying best practices, encouraging professional development, articulating core leadership and professional concepts as well as providing a focus and unity of thought in these domains.<sup>26</sup>

CFLI has sponsored many investigations and papers on various aspects of leadership. One of their more recent sponsorships was an investigation to create the framework for continued professional development for CF general and flag officers and those chief warrant officers / chief petty officers, first class selected for senior appointments, beyond and after the formal courses delivered to senior leaders at the Canadian Forces College. The result of this research was the framework depicted in Figure 1, which consists of five leader elements (expertise, cognitive capacities, social capacities, change capacities and professional ideology). These elements were derived from an “especially thorough analysis of the suite of 2020 documents, the Profession of Arms Manual (*Duty With Honour: The Profession of Arms in Canada*) and *Leadership in the Canadian Forces: Conceptual Foundations*, plus the substantial generic literature on leadership.”<sup>27</sup> The framework also contains a total of 16 attributes required of all CF leaders contained within the five elements. The work concludes with a very well structured articulation of the competencies required at the four leader levels (junior, intermediate, advanced and senior) for each of the five elements. The leader development framework is depicted in Figure 2, and an example of the details of one of the elements is included as Figure 3. The challenge will be to recognize this framework and to integrate it as a key design component of the CF. The obvious next step would be to further refine this framework, especially at the junior, intermediate and advanced levels, for the uniquenesses of each service and its associated culture.





Figure 1: CF Leader Framework<sup>28</sup>

		LEADER FRAMEWORK ELEMENTS				
		Expertise	Cognitive Capacities	Social Capacities	Change Capacities	Professional Ideology
LEADER LEVELS	Senior	Strategic	Creative Abstract	Inter-Institutional	Paradigm Shifting	Stewardship
	Advanced	↑	↑	↑	↑	↑
	Intermediate	↑	↑	↑	↑	↑
	Junior	Tactical	Analytical	Inter-Personal	Open	Internalize

Figure 2: Leader Development Framework<sup>29</sup>

## Conclusion

In spite of the breadth and depth of writings and research on leadership, the majority of published military leadership work has been about the land element, specifically the United States Army. Most of the leadership research that does exist regarding the air force is primarily focused

on aircrew and pilots. This attention is due in part to Harries-Jenkins “combat-warrior paradigm.” As such, the realm of those who support those directly responsible for the management of violence has largely gone unstudied.

One of the key concepts to include in any study of unique leadership interactions is the

<h1 style="margin: 0;">EXPERTISE</h1> <h2 style="margin: 0;">TACTICAL TO STRATEGIC</h2>	
<b>Junior</b>	
<b>Technical and Tactical Procedures</b>	<ul style="list-style-type: none"> <li>• Learning standard military occupational classification (MOC) and sea/land/air procedures.</li> <li>• For initial leader roles, acquiring an overview of such standards and procedures as well as small group tactics.</li> </ul>
<b>Intermediate</b>	
<b>Military Information</b>	<ul style="list-style-type: none"> <li>• How MOC contributes to larger formation capabilities.</li> <li>• Understanding not only what to do but the context in which this occurs. (data + context = information)</li> <li>• Examples include effects-based operations, context of incremental information on democratic systems, international law and civil control of the military.</li> </ul>
<b>Advanced</b>	
<b>Defence Knowledge</b>	<ul style="list-style-type: none"> <li>• From information to knowledge, incorporating a broad understanding of CF and defence as a key component of security and government functions.</li> <li>• Shift from information to knowledge requires additional perspective of understanding the rationale and purpose of intended actions; the generalized outcomes which are to be achieved. (information + purpose = knowledge)</li> </ul>
<b>Senior</b>	
<b>Security Expertise</b>	<ul style="list-style-type: none"> <li>• Scope and content moves from knowledge to expertise with accompanying expansion to a strategic understanding of the domain of security.</li> <li>• Shift from knowledge to expertise requires ability to apply the philosophy and principles that govern the generation and employment of military capacities (knowledge + philosophy = expertise) and strategic institutional co-existence among peer ministries and foreign defence agencies.</li> <li>• Expertise at this stage clearly is dependent upon the complementary development in professional ideology, a full understanding of the profession of arms.</li> </ul>

Figure 3: Expertise: Tactical to Strategic<sup>30</sup>

concept of culture. Of the three levels of culture postulated by Schein, the third level of the underlying assumptions are key to leading and managing an organization. Culture guides the behaviours of those within and outside the organization, and it is the distinct job of the leadership to understand and work within this culture.

The study of military culture has been primarily shaped by the works of Harries-Jenkins and Janowitz. More recently, the institutional/occupational thesis by Moskos has received considerable attention. Together with Wood, they have characterized the present military occupations as either focused on the occupational (technological aspects) or

on the institutional focus. The most recent investigations have concluded that the Air Force does indeed have a distinct culture (and indeed subcultures) and that aircrew are more concerned with the occupational aspect, while the majority of the supporting occupations have a more institutional focus.

The Canadian Defence Academy has the responsibility for all CF leadership education. Under their direction, the Air Command Academy administers the primary leadership qualification, while the Non-commissioned Member Professional Development Centre administers the intermediate leadership qualification, the advanced leadership qualification and the CPO1/CWO chief qualification. Each of these latter courses includes both a distance learning and a residency portion. However, without the benefit of a clear understanding of the unique

differences required of Air Force leaders, all receive the same combat-warrior education.

Also reporting to the CDA is the Canadian Forces Leadership Institute. One of their recent studies proposed a CF leader framework, which is comprised of five elements (expertise, cognitive capacities, social capacities, change capacities and professional ideology). As well, a leader development framework incorporating four leader levels (junior, intermediate, advanced and senior) across the five elements was suggested. For each of these levels and elements, the work suggested various competencies and strategies to better prepare the leaders of tomorrow. Again, the frameworks are not unique for any Service and, especially for the more junior leadership levels, the Air Force would benefit from some dedicated research so as to ensure our future leaders excel. ■

**Colonel Lewis presented this paper at the 14<sup>th</sup> Annual Air Force Historical Workshop – Maple Leaf Aloft: The Historical Dimension of Canadian Air Power Leadership. He is currently the Director of Coordination in the Strategic Joint Staff.**

List of Abbreviations		I/O	institutional/occupational
ALQ	advanced leadership qualification	ILQ	intermediate leadership qualification
CDA	Canadian Defence Academy	MOC	military occupational classification
CF	Canadian Forces	NCM	non-commissioned member
CFLI	Canadian Forces Leadership Institute	PLQ	primary leadership qualification
CQ	chief qualification	USAF	United States Air Force

## Notes

1. Warren Bennis and Burt Nanus, *Leaders: Strategies For Taking Charge*, 2<sup>nd</sup> ed (New York: Harper Collins, 1997), 6.
2. Gwyn Harries-Jenkins, *Professional Groups and Subgroups in the Contemporary Military: Challenges and Opportunities* (Kingston, ON: Canadian Forces Leadership Institute, 2003), 30. Available online at [http://www.cda-acd.forces.gc.ca/cfli/engraph/research/ocpf\\_e.asp](http://www.cda-acd.forces.gc.ca/cfli/engraph/research/ocpf_e.asp) (accessed October 27, 2008).
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*Captain Mike Allard (R) briefs his crew prior to taking off on a mission aboard a CH146 Griffon helicopter. R to L from Captain Allard are Master Corporal Scott Trudell, flight engineer; Sergeant Dave Zimmer, mission specialist; and Captain Andy Michener, co-pilot.  
Credit: Warrant Officer Serge Peters*

# DIFFERENT SHADES OF BLUE: INTERWAR AIR POWER DOCTRINE DEVELOPMENT

## PART 1

### AIR POWER, DOCTRINE AND THE ANGLO-AMERICAN APPROACH

By Major William March



## “National defense [sic] can be assured only by an Independent Air Force of adequate power.”

Giulio Douhet<sup>1</sup>

### Introduction

Air power was born over the trenches in World War I, went through its adolescence during the relative peace of the interwar period and reached a level of maturity in European skies during World War II. It is arguable that most students of air power theory would accept this statement at face value. Unfortunately, the statement is extremely Western-centric and reflects the domination, at least in air power literature, of the United States (US) and, to a lesser extent, Great Britain. Anglo-American air power would centre on three basic facts: strategic bombing was a war-winning, decisive strategy; the bomber would always get through; and only an independent air force commanded by airmen could implement the strategy. Even Germany, the Anglo-American European foe, is accorded an honoured place in air power discussions not only because the German approach to air power was extremely similar to that followed by the US and Britain, but because the *Luftwaffe's* lack of appreciation of the strategic bombing role resulted in its defeat. Therefore, Germany is the perfect “negative” example of how not to develop air power doctrine. However, the US and Great Britain did face another major challenge with respect to the successful prosecution of an air war in World War II—Japan. Japan’s approach to air power during the interwar period was radically different from that pursued by the other three nations in that it never advocated a strategic bombing doctrine, was totally integrated with a parent service and was not commanded by an airman. That Japan chose this approach to air power should not be seen as “wrong,” but merely reflective of a different developmental process and as worthy of study as the Anglo-American theories of air power.

My analysis and discussion is limited to the primary representatives and developers of air

power doctrine in each of the four nations that will be examined. In the US this position was occupied by the Army Air Corps, in Britain by the Royal Air Force (RAF), in Germany the *Luftwaffe* and in Japan the Imperial Japanese Naval Air Force. These four organizations were pivotal in the development of their respective national approaches to air power during the interwar period. In this first of two parts, this paper will briefly examine the birth of air power, discuss the nature of doctrine and examine the growth of Anglo-American air power doctrine during the interwar period. The second part will address the air power doctrine development of Britain and the US’s primary adversaries during World War II and will offer some conclusions on similarities and differences between the combatants.

### Air Power

Prior to 1914, aviation was in its infancy. Barely eleven years old when war engulfed Europe, heavier-than-air aircraft were slow, fragile and relatively unarmed. Although the first tentative steps had been taken to explore the offensive potential of aircraft, aviation commenced the war as essentially the “eyes” of long-established land and maritime forces. It was the considered opinion of the military experts of the day that this was the most efficient and effective use of this new technology. For the most part, the potential of this new technology to change the face of war and effect national destinies was left to the imagination of fiction writers.<sup>2</sup> Four years later, much of the fiction had become reality and aviation had become a tactical necessity on the battlefield, as well as a strategic concern on the home front. Nearly every major combatant in World War I, whether victor or vanquished, had an air service as part of their fielded military forces on 11 November 1918. However, despite the emergence of aviation as a major factor in modern war, the concept of “air power” as an element of a nation’s military repertoire, as important as land or maritime power, had yet to be developed. Empirical proof from the war aside, nations and militaries would struggle to find a “home” for air power throughout the interwar period.



The various bombing campaigns of World War I planted the seeds for the development of air power doctrine during the interwar period, at least in the West. Beginning in 1916, the Germans began launching attacks against London, at first with airships and then with large bombardment aircraft. Reprisal raids by Britain were the stated purpose of the Independent Force of bombers under the command of a future leader of the RAF, Lord Trenchard. As well, the Italians and Austrians were enthusiastically bombing each other in their theatre of war. All of these campaigns had a profound effect on theorists who either had direct experience in bombing operations, such as Trenchard and Giulio Douhet, or experienced them second hand through discussion and observation, such as William Mitchell.

Douhet wrote that air power was an offensive force that would dominate the modern battlefield. In order to triumph, a nation must be prepared to strike quickly at the beginning of a conflict and launch “massive attacks against the enemy centres of population, government and industry—hit first and hit hard to shatter enemy civilian morale, leaving the enemy government no option but to sue for peace.” He also argued that “an independent air force armed with long-range bombardment aircraft, maintained in a constant state of readiness, [was] the primary requirement” to accomplish this mission.<sup>3</sup> With only slight variations, this would become the focus of Anglo-American air power doctrine between the wars.

Despite its rapid development during World War I, military aviation’s place within the political and military apparatus of nations was far from certain during the interwar period. Without doubt military aviation was here to stay, but what shape this new element of warfare would take had yet to be determined. Although the aircraft had proven itself to be a formidable addition to the combat power of a nation, the life and death struggle of the war meant that air power had been guided by the requirements of day-to-day survival rather than a coherent approach to its long-term utility to national interests. Battle-proven, air power now had to establish itself in the somewhat harsher

arena of peacetime politics and institutional infighting. In other words, air power needed its own doctrine upon which to “hang its hat.”

## Doctrine

What is doctrine and why is it important? Chris Demchak, in *Military Organizations, Complex Machines, and Modernization in the U.S. Armed Services*, defined it as “the military professional’s best guess as to how organizations should respond to the unknowns of wartime in order to be successful...”<sup>4</sup> This simple definition highlights three general perceptions about doctrine: it is the exclusive purview of the military, it is a “guess” and that it is only applicable in wartime. Such a definition ignores the impact of non-military contributors, such as politicians, academics or business people, to a nation’s air power doctrine. These contributions were especially important during a period when air power doctrine was in a permanent state of flux. At the same time, although there may be an element of “guess work” involved in doctrinal development, all factors being equal, it is normally mitigated by experience and practice. It could be argued that, given its rather short history, interwar air power doctrine relied rather heavily on “guess work”; however, this varied from nation to nation and was more likely to occur when other developmental factors dominated the process. Without disputing its wartime utility, doctrine should permit the employment of all the elements of national power, including military aviation, to further the state’s goals be it during peace or war.

Barry Posen’s definition of doctrine is closer to the mark. Posen wrote that military doctrine “is a response to both national and international influences. It represents the state’s response to the constraints and incentives of the external world, yet it encompasses means that are in the custody of military organizations.”<sup>5</sup> In other words, doctrine is “bigger” than just a military organization and is influenced by a number of factors external to that organization. As well, Posen argues that military doctrine has a direct bearing on the well-being of the state in that it has an impact on international political life and the security of the state.<sup>6</sup> Interwar air power



advocates would have found little in Posen's statement to disagree with.

Posen advances two theories to serve as the basis for analysing French, British and German doctrinal development between the wars: organizational theory and balance of power theory. Organizational theory tends to focus on the organization's purpose, people and environment as the principle causal factors that influence its approach to basic doctrinal elements such as adopting an offensive, defensive or deterrent posture; political-military integration; and innovation.<sup>7</sup> On the whole, Posen concludes that military organizations favour offensive doctrine. Offensive doctrine provides a focused purpose that reduces uncertainty by maintaining the initiative in a conflict and encouraging state support during peacetime. At the same time, this type of doctrine may lead to increased size, wealth and autonomy as the organization is perceived to be of increasing importance to the state.<sup>8</sup>

Unfortunately, a military organization's increasing importance and autonomy does not always foreshadow a symbiotic relationship with a nation's goals and means. Noting that militaries have a tendency to minimize "civilian interference" as much as possible, Posen deduces that militaries do not place a priority on reconciling their means with state policy, tend to restrict the flow of information to their civilian masters and, in the absence of strong civilian oversight, will reach a negotiated settlement amongst the different service elements that will, for all practical purposes, permit them to achieve their doctrinal aims.<sup>9</sup>

Finally, with respect to innovation, Posen states that only rarely will militaries initiate innovative military doctrine internally.<sup>10</sup> Although changes to military doctrine can reasonably be expected to stem from technological changes or stimulation provided from outside sources, this is often not the case because innovation brings with it operational and institutional uncertainty. Military organizations may attempt to minimize this uncertainty in a number of ways including making new technology "fit" existing doctrine;

ignoring potential lessons to be learned from other militaries or organizations; and corrupting or suppressing evidence that contradicts their preferred doctrine.<sup>11</sup>

The second theory that Posen advances to explain doctrinal development is the balance of power theory. This theory predicts a "greater heterogeneity in military doctrine" based upon "reasonable appraisals by each state of its political, technological, economic and geographical problems and possibilities in the international system."<sup>12</sup> Accordingly, offensive doctrines will most likely be adopted by states that wish to expand, fear high collateral damage, face multiple opponents, anticipate an erosion of relative power, are geographically dominated by potential opponents or have global security requirements. Defensive doctrines are preferred by nations that have limited resources, opt for security through a coalition, seek to maintain the status quo or feel that they are in no immediate danger. Finally, deterrent doctrines may be employed by states with limited military means as a sort of "default" position. Regardless of the type of defence posture selected, the balance of power theory presupposes a high degree of rational civilian intervention in military doctrinal development. In turn, such a high degree of civil-military integration would lead to a balanced doctrine more capable of adopting innovative approaches to changing imperatives.<sup>13</sup>

Although valid in many areas, Posen's theories do indicate a strong bias against the organizational imperatives of militaries and seem to over-emphasize the "even-handedness" of civilian politicians. Elizabeth Kier in her examination of French and British military doctrine between the wars agrees with Posen's viewpoint that often "military organizations pursue their parochial interests." She goes on to note that military doctrine is also about the allocation of power *within* [emphasis in original] society" which makes it very much a domestic political issue.<sup>14</sup> Domestic politics have a completely different set of paradigms as compared to those that govern international relations. Kier notes that Posen's:

argument about the role of civilians and the international system exaggerates the

power of systemic imperatives and misses what civilian policy makers often care most about. First, as many realists recognized, the structure of the international system is indeterminate of choices between offensive and defensive doctrines. Second, even during periods of international threat, civilians rarely intervene in doctrinal developments, and when they do, their decisions are often damaging to the state's strategic objectives. Third...civilian intervention is often a response to domestic political concerns, not to the distribution of power in the international system.<sup>15</sup>

In certain situations, perceived domestic political requirements may have had a greater effect on doctrinal development than either organizational or international security requirements.

Drew and Snow made the point that doctrine is not just the result of experience. They point out that:

Experience by itself has limited utility. As Frederick the Great pointed out, if experiences were all-important, he had several pack mules who had seen enough of war to be field marshals. The real key is the accurate analysis and interpretation of history (experience) – and therein lies the rub. Each individual looks at history through different lenses, lenses shaped by a variety of factors, lenses that interpret history in very different ways. The results are differing views among nations and among military services within nations about the

lessons of history and their applicability to the present and future.<sup>16</sup>

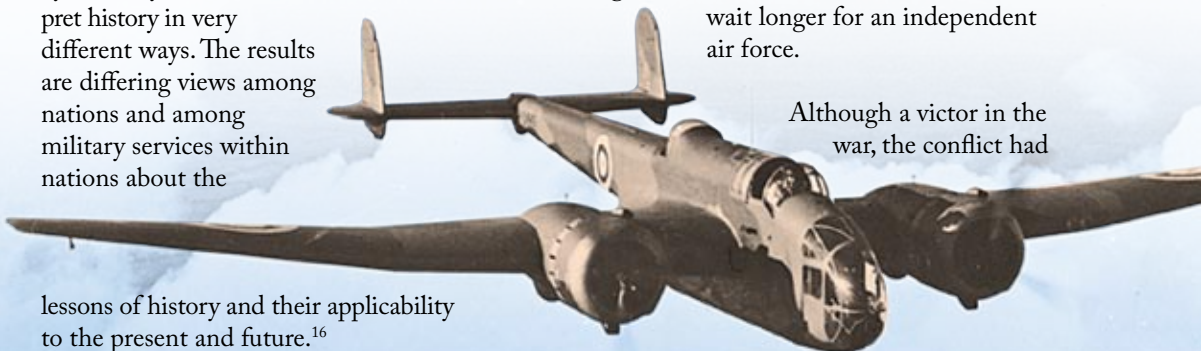
Each nation that was wrestling with the issue of air power during the interwar period approached it from a different perspective based upon its interpretation of not only history,

but of organizational, balance of power and domestic political concerns as well. Depending on which one of these areas dominated the developmental process, the national approach to air power doctrine could be similar (US and Great Britain), slightly different (Germany) or radical (Japan).

## The British Approach

Of all the major combatants in World War I, Great Britain was the only one that came away from the war with an independent air force. However, it was an air force that was very much a creature of the circumstances and personalities that had created it. The RAF came into being on 1 April 1918 primarily in response to German attacks on London and the perceived inability of its predecessor (the Royal Flying Corps) to deal with them. In addition, the newly created third military service of the Empire was to strike back at Germany in kind. Therefore, from its very inception the RAF was assigned strategic bombardment as a founding role.<sup>17</sup> There is no doubt that the creation of the RAF served the organizational desires of air officers for independence from the army and navy, while the strategic bombardment role gave them a mission that only they could carry out. However, without the domestic political requirement to demonstrate something was being done to defend the home front, while at the same time exacting revenge against the “Hun,” it is arguable that Britain would have had to wait longer for an independent air force.

Although a victor in the war, the conflict had



*A Handley-Page Hampden Bomber, manned by Royal Canadian Air Force personnel, speeds across the English countryside for a raid on German territory. Credit: National Defence Photo*

left Britain much weakened economically and retrenchment became the order of the day. In August 1919, the British cabinet agreed

upon broad guidelines that would dominate defence planning and expenditures until the early 1930s. The services were told to plan for no major war for the next five to ten years and to focus their efforts on policing the Empire. To accomplish these policing tasks, manpower would approach pre-1914 levels. Finally, where possible, new weapons and technology would replace manpower.<sup>18</sup> To a certain extent these guidelines were based on the perceived state of international affairs. However, it would be equally true to say that they reflected a true appreciation of economic reality and a profound distaste for the type of conflict that they had just been through. Stephen Cimbala labeled it “belligerent non-belligerence” derived from a firm belief that “World War I had been ‘a war to end all wars’ and it was against accepted canon to argue otherwise.”<sup>19</sup>

Lord Trenchard, as Chief of the Air Staff, proved adept at navigating the political and fiscal waters of the 1920s ensuring not only the survival of the RAF as an independent service, but gaining acceptance of strategic bombardment as the focal point of British air power doctrine as well. Commencing with an expedition to Somaliland in 1919, he gave successive governments what they craved—a cheap method of “policing” recalcitrant colonial tribes via aerial attack with minimal ground support.<sup>20</sup> A role only the RAF could perform, aerial policing, as this policy came to be known, provided the necessary political support to permit Trenchard to establish permanent RAF bases and institutions including the RAF Staff College. Opened in 1922, the RAF Staff College would serve to cultivate an air force spirit and culture very much focused on the efficacy of strategic bombing.<sup>21</sup>

According to Tami Biddle, the RAF Staff College served “more as a disseminating station for the accepted organization viewpoint than it did a centre for critical thinking.”<sup>22</sup> Even after his retirement in 1930, the accepted organizational viewpoint with respect to strategic bombing was Trenchard’s. War was a psychological contest where the morale of a hostile nation could be shattered by targeting enemy workers’ homes and workplaces. The attack

would be conducted incessantly, without regard to losses, forcing the enemy on the defensive until they finally surrendered. Anything that detracted from the aerial offensive was relegated to secondary importance. In general terms, this was the doctrine advocated by the *Royal Air Force War Manual* published in 1928.<sup>23</sup>

Successive British governments were of two minds when it came to strategic bombing. There was a desire to “outlaw” strategic bombing as an acceptable method of war. This grew from concerns about the moral and legal issues surrounding the deliberate targeting of non-combatants and the realization that foreign air power threatened British cities, as evidenced by the 1925 French “scare.” Britain pressed for “aerial disarmament” at the Geneva disarmament talks that took place from 1932 to 1934. Unfortunately, this proposal, as well as the entire talks, collapsed with no resolution.<sup>24</sup> Some British politicians actively supported the RAF’s offensive doctrine because it allowed them to avoid that which they feared the most—an expensive continental commitment similar to that of 1914.<sup>25</sup> As late as 1936, the government’s White Paper on defence placed committing forces to the continent behind defence of the British Isles and garrisoning the Empire in order of priority. That same year the Chancellor of the Exchequer, Neville Chamberlain, confided to his diary that “I cannot believe that the next war, if it ever comes, will be like the last one, and I believe our resources will be more profitably employed in the air, and on the sea, than in building up great armies.”<sup>26</sup> One year later, Chamberlain was the Prime Minister and his outlook on defence had not changed as he remained convinced that “the maintenance of Britain’s economic stability represented an essential element in the maintenance of her defensive strength.”<sup>27</sup>

The desire to avoid a major continental commitment did not mean that British politicians failed to appreciate the potential threat that lay in a resurgent Germany and a militaristic Japan. Commencing in 1935, the government did commit modest funds for rearmament, but these funds were intended to

increase military strength as a deterrent rather than as concrete preparation for war. Therefore, Britain sought numerical parity with Germany, especially with respect to bombers, in the belief that such action would signal Britain's determination to defend itself while not appearing threatening.<sup>28</sup> For the RAF, this meant additional funds for their strategic bombing forces.<sup>29</sup>

By the mid-1930s, the RAF's strategic deterrent lay with Bomber Command. However, it was a hollow force. RAF doctrine called for massive attacks on enemy heartland, but it lacked the aircraft, bomb carrying capacity and ability to locate even the largest cities. Furthermore, the firm belief that "the bomber would always get through" allowed the RAF to conveniently ignore the rapid pace of technological changes occurring through the 1930s.<sup>30</sup> Trenchardian doctrine was large on rhetoric but short on practical details on how to mount a sustained aerial offensive. Nor was the RAF particularly concerned throughout the 1920s and 1930s because their doctrine had served organizational requirements very effectively. Tami Biddle summed up the apparent complacency as follows:

Of the dominant RAF view in the interwar years, Sir John Slessor later wrote, "Our belief in the bomber, in fact, was intuitive—a matter of faith." This faith came partly from prevailing assumptions about societal and economic vulnerability, partly from the need to preserve a lever—in the form of the strategic air offensive—in interservice wars, and partly from cultural norms inside the service. Though formally professionalized, the military services in interwar Britain continued to be pervaded by a spirit of traditional amateurism.<sup>31</sup>

The cost of trying to maintain parity with Germany had grown so great that by 1938 the British government realized that it could not continue with this policy. It, therefore, radically reoriented its air power focus to one stressing defence rather than offense; henceforth Fighter

Command would get significantly more resources which, as it turned out, was fortunate for Great Britain.<sup>32</sup>

When war began in September 1940, the RAF's ability to mount the type of bomber attacks that they had advocated for so long was restricted due to both technology and policy as the government did not want to encourage the Germans to respond in kind. When the RAF finally began to mount their first "raids" they quickly found out that their doctrine of daylight attacks by unescorted bombers was unworkable. Losses mounted to the point where the RAF was forced to switch to night bombing which meant that survivability went up, but accuracy went down.<sup>33</sup>

Royal Air Force doctrine during the interwar period was dominated by organizational concerns. Strategic bombing to shatter an enemy's will, although initially a minor part of Britain's air effort during World War I became, thanks to Trenchard and his disciples, one of the two central tenets of British air power doctrine. The second tenet was that an independent air force was required to carry out the first; however the first was needed to preserve the second. Given British domestic political and international security concerns, the best way to preserve the RAF was to solve both problems cheaply; strategic bombing doctrine fit the bill nicely. After World War I, bombing not only provided an apparently efficient and cost-effective method of policing the Empire, it also seemed to offer the government a means to avoid a manpower-heavy commitment to Continental Europe, an anathema to British voters. Despite efforts to have aerial bombardment declared an illegal form of warfare, Great Britain came to rely upon the RAF's Bomber Command as the only effective deterrent against a resurgent Germany. To this end they were influenced by the "air propaganda" coming from the Air Ministry that offered a cost-effective solution. From an organizational viewpoint, reliance on Bomber Command not only maintained the primacy of strategic bombing doctrine, it permitted the RAF to obtain a privileged position during inter-service discussions.<sup>34</sup> Regardless of



the fact that the RAF had done little to make their strategic bombing doctrine any more than a self-serving theory, the organizational goals of the air force had been met.

## The American Approach

World War I ended before the American air services were fully developed. For the most part, US participation in the air war was limited to direct support of American ground forces using foreign manufactured aircraft. Although some senior air officers gained a certain amount of experience commanding large formations of aircraft, they never had the opportunity to fully explore elements of air power such as strategic bombardment.<sup>35</sup> When hostilities ended, the US Army Air Service remained a small, subordinate part of the overall US Army and so it would remain for approximately the next 15 years.

Eliot Cohen noted that throughout “the 1920s and 1930s, most Americans viewed World War I as a grievous exception to a long-standing policy of non-involvement in European affairs. To most the war represented a terrible mistake. A happy revision to an ante bellum strategic outlook seemed the logical outcome.”<sup>36</sup> Unlike Great Britain, two oceans and harmless neighbours to the north and south secured the heartland of the United States. There was simply no comparable threat of invasion or aerial attack to stimulate defence planning. However, like Great Britain the US had vital interests in the Far-East. United States’ interests in the Philippines and Pacific island possessions, such as Wake and Guam, needed to be garrisoned and protected. Although the army (including land-based aircraft) would provide the garrisons, the responsibility for their defence rested with the United States Navy (USN). To ensure that the strategic environment remained as benign as possible, Congress controlled military expenditures and passed “neutrality legislation” to make sure the US stayed out of foreign wars.<sup>37</sup>

Air power advocates returning from the battlefields of France were “behind the eight ball.” Still subordinate to the army, the Air Service (or Air Corps as it would soon be renamed) had no rationale for the establishment

of an independent service. However, in the RAF they had an example for inspiration, and in Brigadier-General William Mitchell they found a voice. Influenced by both his war-time experience and conversations with Lord Trenchard, Mitchell came to firmly believe that aviation had revolutionized warfare. In effect, air power rendered armies and navies obsolete by being able to fly over them to attack the enemy nation. Like Trenchard, Mitchell believed that strategic bombardment by large numbers of bombers offered an efficient, effective and decisive way to wage war. He argued that the large sums of money now being spent on the army, and especially on the navy, should instead be invested in an independent air force, commanded by airmen who knew better than anyone else how to employ this new technology.<sup>38</sup>

It is difficult to determine Mitchell’s overall effect on doctrine development within the Air Corps. Through a series of well-publicized “stunts,” published works and speaking engagements, there is no doubt he not only managed to irritate the military hierarchy of both the army and navy, he kept air power in the public eye. Court-martialled in 1925 for insubordination, Mitchell gradually faded from public view. Although his call for an independent air force with a strategic bombing mission resonated with the young airmen of the day, I.B. Holley Jr. offers a more balanced assessment:

Although airpower [sic] advocates have found it useful to employ the hero-martyr Mitchell as a symbol, a close study of his writings will quickly reveal the superficiality of this thinking and its lack of solid doctrinal content. It might even be argued that his intemperate style of advocacy did more harm than good to the cause of airpower. . . . Billy Mitchell was a romantic in an era that called for disciplined analysis in an increasingly high-tech field.<sup>39</sup>

Peter Faber in his paper on the Air Corps Tactical School describes a four-part strategy developed ad hoc by early air leaders and thinkers in order to ensure that American air power

developed to its full potential. In general, they sought to “(1) redefine America as an airpower [sic] rather than a maritime nation; (2) demonstrate and publicize the versatility of airpower [sic] in peacetime roles; (3) create both a corporate Air Corps identity through political maneuvering and an independent air force through legislation; and (4)...develop a unique theory of air warfare – unescorted high-altitude precision daylight bombardment against the key nodes of an enemy’s industrial infrastructure.”<sup>40</sup> In other words, airmen were going to work towards the primacy of air power over the objections of the other military organizations and their political masters and without regard to the international policies of the state. This was definitely an example of the triumph of organizational imperatives.

Although efforts to demonstrate and publicize the peacetime utility of air power met with only limited success, the strategy scored some notable achievements in the other areas. For all practical purposes by the late 1930s, America did consider itself *both* an air power and a sea power. A major step in this goal had been reached in 1931 when the heads of the US Army and USN reached an agreement to determine the functional responsibilities of their respective services regarding coastal defence and seaborne operations. Land-based army aircraft were to be employed in defending the coasts both at home and abroad. Depending upon how the mission was defined, and the Air Corps defined it in their favour, coastal defence required long-range aircraft capable of precision attacks against enemy shipping. These capabilities would be “coached” in defensive terms to meet the dictates of national policy, but the seeds were laid for the development of

technology such as the B-17 and the Norden bomb-sight.<sup>41</sup>

Throughout the 1920s and early 1930s, efforts to create an independent air force had resulted in incremental changes, but fallen short of achieving anything substantial. Then in 1934, the government sponsored Howell Commission decided that “the Air Service had now passed beyond its former position as a useful auxiliary and should in the future be considered an important means of exerting directly the will of the Commander-in-Chief.” Recognizing that the agreement between the army and navy described above had effectively given the Air Corps control over all land-based bombardment, pursuit (fighter), attack and observation aircraft, the Commission recommended the formation of a permanent General Headquarters (GHQ) Air Force to serve as “an independent striking unit.” Approved in 1935, GHQ Air Force would be as close to independence as the Air Corps would come prior to World War II.<sup>42</sup>

Underpinning all of the organizational infighting and political maneuvering was the development of a distinct air power doctrine. Like their British counterparts, American airmen were drawn to what they saw as the potential of air power through strategic bombing to bring a new, decisive element to warfare. However, they did not agree with the RAF’s focus on the morale effects of this type of bombing. Instead, they focused on the perceived “frailties and weaknesses in the interlocking structure of a modern industrial society.” Through careful analysis, they reasoned that critical nodes could be identified, the destruction of which would

B-17 Flying Fortress  
Credit: United States Air Force website



critically impair the enemy's ability to wage war and lead to victory. Developed and refined by the so-called "Bomber Mafia" at the Air Corps Tactical School (ACTS) throughout the 1920s and 1930s, the "industrial fabric" theory of bombing dominated air doctrine within the United States during the interwar period.<sup>43</sup> The best way to strike these critical nodes would be via daylight precision bombing. The Air Corps pinned its hopes on the B-17, equipped with the Norden bombsight, as the aircraft that would enable it to field its envisioned strategic bombing capability.

Despite the Air Corps' obvious preference for an offensive strategy, the B-17 was given the nickname the "Flying Fortress" in order to underline its "defensive" orientation.<sup>44</sup> Then the Munich Crisis in September 1938 provided the impetus for a massive growth of American air power. In response to European events, President Roosevelt addressed Congress on 12 January 1939 calling for a three-fold increase in the size of the Air Corps. This would be the first in a number of increases that would see the Air Corps expand from 20 tactical air groups in the spring of 1939 to 84 by the fall of 1941.<sup>45</sup>

Although Air Corps size and importance may have increased due to international security concerns, doctrine still remained firmly focused on the bomber. Furthermore, despite evidence provided by the RAF to the contrary, the Americans remained convinced that daylight precision bombing was the most efficient way to prosecute the war. This doctrine formed the basis for Air War Plans Division – 1 (AWPD-1), developed by four men heavily indoctrinated by the ACTS. AWPD-1 emphasized selective daytime attacks on key targets by unescorted bombers.<sup>46</sup> So intent was senior Air Corps leadership on maintaining the organizational primacy that "bombers would always get through" that they ignored in-house reports to the contrary, "rigged" so-called demonstrations and withheld technology that could have permitted the early fielding of escort fighters.<sup>47</sup> Thousands of American airmen would pay for this myopic adherence to Air Corps doctrine with their lives.

America spent most of the interwar period avoiding international entanglements. Until the late 1930s and early 1940s, US international security concerns were such that they had a minimal influence on the development of air doctrine. Although the technological promise of aviation inspired and interested the American public during this period, the attention paid to the military services including the Air Corps can be described as one of benign neglect. Therefore, organizational requirements were the driving force behind US air power doctrine. In this case, the purpose of the doctrine was to create an independent air force whose primary focus would be strategic bombing. They succeeded in that the US entered World War II with an air force independent in all but name and with an air power doctrine that called for daylight precision attacks on key enemy targets. It would be left to the crucible of war to determine if the doctrine was sound or not.

## Conclusion

Both Great Britain and the United States developed similar air power doctrine based on organizational requirements modified, when required, to address international security and domestic political concerns. The RAF and the Air Corps adopted an offensive strategy based on aerial bombardment as the primary mission of military aviation. They differed only on the issue of targeting with the Americans seeking to destroy key nodes while the British sought to destroy the will of the enemy by striking directly at the civilian work force. Whereas the British could openly refer to such a strategy supported by both domestic policy seeking to avoid a repeat of World War I and the need to build a credible deterrent, until the beginning of World War II, the Air Corps had to insist that such a capability was defensive in nature.

A strategy of aerial bombardment would be administered most efficiently by an independent air force commanded by airmen who best understood this new way of war. For the RAF, this meant keeping the air force in existence despite economic recession and challenges from the other services. To this end the RAF was willing to do whatever was required to

prove itself useful to the nation until such time as air power came to dominate defence considerations. The US Air Corps spent the interwar period striving for independence and, for all practical purposes, achieved it by the start of World War II.

The final major tenet of their doctrine was that the bomber would always be able to reach the target and it came from the experience gained during World War I, as well as during

exercises conducted throughout the 1920s. As defensive technology (primarily fighter and early warning) improved, the possibility that the bomber would always get through came to be called into question. However, if the survivability and effectiveness of bombers was being challenged so too could the veracity of air power doctrine—including the need for independent air forces. Thus it was in the best interest of air power advocates to downplay a nation's ability to defend against aerial bombardment. ■

**Major William March graduated from the Royal Military College in 1982, he underwent basic navigation training in Winnipeg, and then proceeded onto CP140 Auroras, serving on 407 Maritime Patrol and 404 Maritime Patrol and Training Squadrons. Posted to Royal Roads Military College in 1990 as a Squadron Commander, he was promoted the next year and assumed military training and administrative duties for the College. In 1993, he completed his Masters Degree at the University of Victoria and was selected to recreate the position of Air Force Historian at 1 Canadian Air Division Headquarters. After Staff College in 1998, he filled a series of staff appointments at National Defence Headquarters which culminated in working on unmanned air vehicles (UAVs) and intelligence, surveillance and reconnaissance (ISR) for the Air Force. Posted overseas in 2003, he worked as the principal Desk Officer for the North Atlantic Treaty Organization Response Force activities of the Land Component Command Headquarters, Heidelberg, Germany. Returning to Canada in 2006, he spent two years as the Concepts and Doctrine Development desk officer for UAVs and Space at the Canadian Forces Aerospace Warfare Centre in Trenton, Ontario. Although he is still involved with UAVs, his “day job” is that of the Academic Liaison Officer within the Strategic Aerospace Research, Assessment and Liaison Branch. To make the most of his spare time, in September 2006, he commenced studies towards a PhD in War Studies at the Royal Military College. Major March has a long-time interest in aerospace history in general and Canadian Air Force history in particular.**

## List of Abbreviations

ACTS	Air Corps Tactical School	RAF	Royal Air Force
AWPD-1	Air War Plans Division – 1	US	United States
GHQ	General Headquarters	USN	United States Navy

## Notes

1. Giulio Douhet, *Command of the Air*, trans. Dino Ferrari (New York: Coward-McCann, 1942; repr., Washington: GPO, 1983), 32.
2. Edward Warner, “Douhet, Mitchell, Seversky: Theories of Air Warfare,” chap. in *Makers of Modern Strategy* ed. by Edward Mead Earle (Princeton: Princeton University Press, 1941), 486. Authors such as H.G. Wells, predicted that air power would have a devastating effect in future wars rendering traditional means of defence, such as the English channel, irrelevant.
3. David MacIsaac, “Voices from the Central Blue: The Air Power Theorists,” in *Makers of Modern Strategy: From Machiavelli to the Nuclear Age* ed. Peter Paret (Princeton: Princeton University Press, 1986), 630.
4. Chris. C. Demchak, *Military Organizations, Complex Machines, and Modernization in the U.S. Armed Services* (Ithaca: Cornell University Press, 1991), 13.
5. Barry R. Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between The Wars* (Ithaca: Cornell University Press, 1984), 38.
6. *Ibid.*, 15-16.



7. Ibid., 42. Posen provides a comprehensive explanation of the causal factors on pages 42-44.
8. Ibid., 47-49.
9. Ibid., 51-53.
10. Nor is Posen the only author to comment on this phenomenon. Dennis Drew and Don Snow, writing on the linkage between strategy and doctrine, also commented on "the most ubiquitous doctrinal problem is the tendency to let doctrine stagnate." Dennis Drew and Don Snow, *Making Strategy: An Introduction to National Security Processes and Problems* (Maxwell: Air University Press, 1988), 166.
11. Posen., 54-57.
12. Ibid., 59.
13. Ibid., 59-78.
14. Elizabeth Kier, *Imagining War: French and British Military Doctrine Between the Wars* (Princeton: Princeton University Press, 1997), 20.
15. Ibid., 11.
16. Drew and Snow, 164.
17. H.H. Ransom, "Lord Trenchard, Architect of Air Power" *Air University Quarterly Review* VIII, no. 3 (Summer 1956): 60-61. Spurred to a large degree by German raids on London in 1917 and 1918, British politicians examined the role of air power. The result was a committee headed by Lieutenant General Smuts, a South African who had actually fought against the British during the Boer War. One of his conclusions, oft quoted by air historians, is worth noting in its entirety. "Unlike artillery an air fleet can conduct extensive operations far from, and independent of, both Army and Navy. As far as can at present be foreseen, there is absolutely no limit to the scale of its future independent war use. And the day may not be far off when aerial operations with their devastation of enemy lands and destruction of industrial and populous centres on a vast scale may become the principal operations of war, to which the older forms of military and naval operations may become secondary and subordinate."
18. Tami Davis Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas About Strategic Bombing, 1914-1945* (Princeton: Princeton University Press, 2002), 82.
19. Stephen J. Cimbala, *The Politics of Warfare* (University Park, PA: Pennsylvania State University Press, 1997), 28.
20. Peter Meilinger, "Trenchard, Slessor, and Royal Air Force Doctrine before World War II," in *The Paths of Heaven: The Evolution of Airpower Theory*, ed. by Phillip S. Meilinger (Maxwell: Air University Press 1997), 49-50.
21. Allan English, "The RAF Staff College and the Evolution of British Strategic Bombing Policy, 1922-1929," *The Journal of Strategic Studies* 16, no. 3 (September 1993): 409.
22. Biddle, *Rhetoric and Reality in Air Warfare*, 92.
23. Peter Meilinger, *Airwar: Theory and Practice* (Portland: Frank Cass Publishers, 2003), 48-49.
24. Tami Davis Biddle, "British and American Approaches to Strategic Bombing: Their Origins and Implementation in the World War II Combined Bomber Offensive," in *Airpower: Theory and Practice*, ed. John Gooch (London: Frank Cass, 1995), 101.
25. Kier, 98. Kier claims that overall civilian and political support, led by the Chancellor of the Exchequer, Neville Chamberlain, led the successful campaign to designate strategic bombing as the linchpin of British strategy.
26. Ibid., 93.
27. Williamson Murray and Mark Grimsley, "Introduction: On Strategy," in *The Making of Strategy: Rulers, States, and War*, eds. Williamson Murray, MacGregor Knox and Alvin Bernstein (New York: Cambridge University Press, 1994), 402.
28. Malcom Smith, *British Air Strategy Between the Wars* (Oxford: Clarendon Press, 1984), 315.
29. Brian Bond and Williamson Murray, "The British Armed Forces, 1918-1939," in *Military Effectiveness, Volume II: The Interwar Period*, eds. Williamson Murray and Allan R. Millet (Boston: Allen & Urwin, 1988), 99-100.
30. Peter Meilinger, "Trenchard, Slessor, and Royal Air Force Doctrine before World War II," 57.
31. Biddle, *Rhetoric and Reality in Air Warfare*, 87-91.
32. H. Montgomery Hyde, *British Air Policy Between the Wars* (London: Heinemann, 1976), 502.
33. I.B. Holley Jr., *Technology and Military Doctrine: Essays on a Challenging Relationship* (Maxwell: Air University Press, 2004), 101.
34. Smith, 321.
35. For example, William Mitchell, a post-war air power advocate, commanded a force of 1500 aircraft during the American offensive at Saint-Mihiel in September 1918. Although there were some bombardment attacks launched against the German rear area, it could scarcely be called "strategic." Alfred F. Hurley, *Billy Mitchell: Crusader for Air Power* (Bloomington: Indiana University Press, 1975), 34-37.
36. Eliot A. Cohen, "The Strategy of Innocence? The United States, 1920-1945," in *The Making of Strategy: Rulers, States, and War*, eds. Williamson Murray, MacGregor Knox and Alvin Bernstein (New York: Cambridge University Press, 1994), 419.
37. Ibid., 436.
38. For Mitchell's complete story see Hurley, *Billy Mitchell, Crusader for Air Power*, or for a "shorter read" I recommend Mark A. Clodfelter, "Moulding Airpower Convictions: Development and Legacy of William Mitchell's Strategic Thought," in *The Paths of Heaven: The Evolution of Airpower Theory*, ed. Phillip S. Meilinger (Maxwell, Air University Press, 1997), 70-114.
39. Holley Jr., 46.
40. Peter R. Faber, "Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower," in *The Paths of Heaven: The Evolution of Airpower Theory*, ed. Phillip S. Meilinger (Maxwell, Air University Press, 1997), 186.
41. Biddle, *Rhetoric and Reality in Air Warfare*, 144 and 161.
42. Faber, 210.
43. Howard Belote, "Warden and the Air Corps Tactical School," *Airpower Journal* 13 (Fall 1999): 39.
44. Russell Weigley, *The American Way of War* (New York: Macmillan, 1973), 241.
45. Eugene M. Emme, "Air Power and Warfare, 1903-1941: The American Dimension," eds. Alfred Hurley and Robert Ehrhart (Washington: Government Printing Office, 1978), 75.
46. Biddle, "British and American Approaches to Strategic Bombing," 117-118.
47. Holley Jr., 100-104.

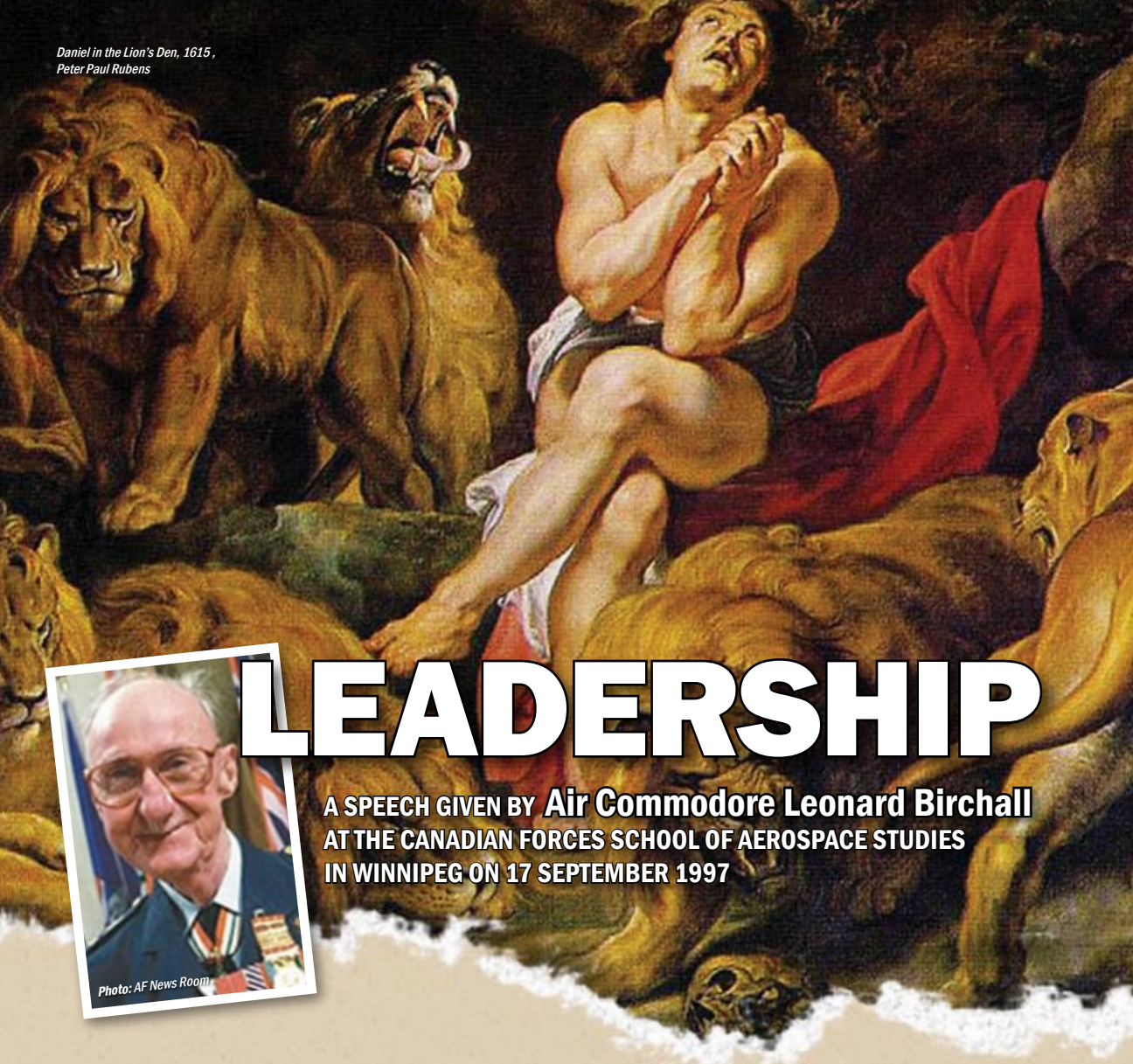


Photo: AF News Room

# LEADERSHIP

A SPEECH GIVEN BY **Air Commodore Leonard Birchall**  
AT THE CANADIAN FORCES SCHOOL OF AEROSPACE STUDIES  
IN WINNIPEG ON 17 SEPTEMBER 1997

## PREFACE BY **Major William March**

Air Commodore Leonard Birchall was the epitome of an officer. During his 62 years of service, in peace and war, he demonstrated what a leader should be through his devotion to duty and willingness to put the safety and comfort of personnel under his command ahead of his well being. Although his story has been told many times, it was a rare treat to hear him in person as he strove to impart practical lessons in leadership to generations of young airmen and airwomen. The article that follows is the transcript of one such speaking engagement. As such it provides a personal glimpse of an airman whose accomplishments were described

by Major-General James R. Davies of the United States Marine Corps thusly: "In circumstances where only too many officers had failed to live up to their responsibilities, the tales of Birchall's leadership carried ... throughout the system of camps, brought renewed faith and strength to many hundreds of men. It is incredible how morale of disheartened men can rise behind the example of a courageous officer, Birchall came to be something of a symbol, to stand in the hearts of men as a true officer."

**Here then, in his own words,  
are the musings of a true officer.**



I apologize for my copious notes, but at my age, and this past July I became 82 years young, there are three serious losses which you encounter in your physical capabilities. First your eyesight grows dim, and you will note the rather strong lenses in my glasses. Second, your hearing is not too good, and I admit that I am in great need of a hearing aid. Third... and I'll be damned if I can ever remember what that one is. Thus, I must stick closely to my text or I shall wander all over the place. Actually there is a fourth serious loss in our physical capabilities which we old chaps encounter but we do our utmost not to even think about that one, let alone discuss it, as whenever we do all we do is sit around and cry.

You will note that it is necessary for me to take frequent sips of water and this is due to the fact that during my indoctrination into Japanese culture, which was administered with severity by clubs of various sizes, all too often I would zig when I should have zagged and the damage to my throat has finally caught up with me resulting in my having to have a series of drastic throat operations and intense radiation treatments, leaving me with a perpetual dry mouth and throat, so I ask you to please bear with me.

After I had accepted the kind invitation of your Commandant to give this lecture on "Leadership", I received a Course Lecture Brief titled "EO 404.10 - Leadership - Retired General Officer's Perspective" which I am certain you have all read. Now this states in part: "Without being restrictive or exhaustive, the presentation should address the following teaching points where possible". It then goes on to list 8 points. I am afraid that my lecture is not that well structured and I can only hope that I will cover the required points. If not, then you can take me to task in the question and answer session.

On 21 April '96 I qualified for the 5th bar to my CD having completed 62 years of undetected crime in the Canadian Services, and hence the greatest part of my life has been spent in the Canadian military. Napoleon once said: "There are no bad men ... only bad officers".

The question then is have I been a good or bad officer, and here there is no set criteria or standard. Some believe that the best measure of success is the rank you attain, but I do not accept this. Some of the finest men I have met, served with, and held in the highest regard were not necessarily those who were the most senior. One thing I do recognize as a measure of success is leadership, as everyone I have held in high esteem has had that quality and this, I believe, to be essential for success in any walk of life. As a member of the Armed Forces and regardless of rank, the opportunities for development and use of leadership are immense, and the satisfaction you will derive is equally so. There is still the old adage, however, that you can lead a horse to water but you cannot make him drink. Or the other version, you can lead a horse to drink but you can't make him water. Thus, while you will have these opportunities, the success you will achieve depends entirely on the amount of effort you put forth. Nothing is ever free in this life or handed to you on a plate; the price you must pay is **HARD WORK, TOTAL EFFORT AND SELF SACRIFICE.**

I would now like to give you my concept of leadership and the reasons for my beliefs. I notice that point number 4 of the teaching points is "Leadership versus Management", which would obviously call for a definition of those terms. The most succinct one I have heard for leadership is being able to tell someone to go to Hell and have them look forward to the trip, whereas the one for management is being able to keep three balls in the air with one hand while protecting your own with the other. If you ever have to lead troops into combat, and I pray this will never happen, you will find that you appear before your men stripped of all insignia and outward signs of authority to command. Your leadership is judged not by your rank, but by whether your men are completely confident that you have the character, knowledge and training that they can trust you with their lives. Now men are shrewd judges of their leaders, especially when their lives are at stake, and hence your character and knowledge must be such that they are prepared to follow you, to trust your judgment and carry out your commands.

Let us now examine these two major things which the men look for in their leaders. The first is “character”, and here I believe that the prime ingredient, the absolute corner-stone, is integrity. Integrity is one of those words which many people keep in the desk drawer labeled “TOO HARD”. It is not a topic for the dinner table or cocktail party. You can’t buy or sell it. When supported with education a person’s integrity can give them something to rely on when their perception seems to blur, when rules and principles seem to waiver, and when they are faced with hard choices of right or wrong. It’s something to keep them afloat when they are drowning; if only for practical reasons it is an attribute that should be kept at the very top of a young person’s consciousness. Without personal integrity, intellectual skills are worthless. As the ancient Roman philosopher Epictetus said in the field manual he produced for the Roman soldiers in approximately the year 50 A.D.:

**“It is better to die in hunger, exempt from guilt and fear, than it is to live in affluence and with perturbation” .**

This means that you must demonstrate the utmost honesty in everything you do in your dealings with superiors and subordinates alike, both on and off duty. It is this that inspires your men to carry out a similar integrity. When they know your word is your bond, then confidence and trust will permeate the entire unit. The men will feel they can come to you, their leader, with the bad news as well as the good news. Never shoot the messenger as this will just discourage others from giving you the honest feedback needed for you to command. You must report the good, the bad, and the ugly up the chain of command to your superiors. There is no substitute for honesty in our profession, what we do is just too important.

Integrity also means having the courage **to take the full responsibility for your actions and those of your subordinates.** Don’t quibble, don’t try to shift the blame, don’t look for scapegoats. If you or your command has fouled up, then fess up, and

press on. In doing so, you will set the right example for your men, and earn the respect of your subordinates and superiors alike. Nothing destroys a unit’s effectiveness and leadership quicker than the leaders not taking the sole responsibility for their actions, and the first sign of this is usually careerism, the C.Y.A. factor, which very often has the tendency to first appear in the higher headquarters. Once started, it rapidly feeds on itself and spreads like wildfire down through the entire organization. At the first indication of this selfish, self-centred, self-serving attitude, you must take every step possible to root it out and replace it with integrity.

The second major thing which the men look for in their leaders is knowledge and training. It is essential that you ensure you have the knowledge, information, and training necessary for you to properly assess and solve the problems which will face you and your men. All this must be done to the very best of your ability regardless of the size or importance of the problem. Never accept the second best or mediocre solution because you think the problem is not worth your time and effort. If you don’t have the necessary knowledge and information, then go get it by asking for assistance, advice, guidance, doing research, until you are satisfied you have everything you need to reach the best solution. Then carry out that solution with your full out effort and determination.

Another point that the men look for in you as their leader is your concern and effort on behalf of the welfare of those who serve under you. You must prove beyond any doubt that you are fair and just in your dealings with them, and that you genuinely like and respect them. In all circumstances you must place their well-being ahead of your own, regardless of the cost to yourself.

And finally, one other and perhaps equally important factor is that once you are accepted as a leader, your men will not only follow you but will also emulate to the best of their ability your character and behaviour. That is why as a leader you must at all times and in all places set and maintain the highest of standards.



Let us now put these bits and pieces into service life and see the results in actual practice. In doing so I would like to use the life as a P-O-W to demonstrate the reasons for my beliefs. The great social historians, the Durants, have said that culture is a thin veneer that superimposes itself on mankind. This is very true, and when men are stripped of this veneer and every other vestige of civilization, are treated and live as animals as we were forced to do as P-O-Ws, then the laws of the jungle soon take over. It is in this environment that the true basics of leadership emerged for me.

When I first arrived in Japan courtesy of the Japanese Navy, I was sent to a special questioning camp under the Japanese Navy at a place named Ofuna, a suburb of Yokohama. This was a special interrogation camp where we were placed in solitary confinement in small cells, no speaking allowed, and we were questioned and beaten every day. We were not considered as P-O-Ws, but rather we were still on the firing line and could be killed at any time. I was moved from this camp after six months, when they brought in a U.S. Catalina crew shot down out of Dutch Harbour, and I was sent to the starting up of the working camps in the Yokohama area.

The first working camp I went to was located in a baseball stadium in the centre of Yokohama which had been built by the Standard Oil Company. We were housed in a large indoor area under one of the grandstands, and I arrived there the same day as the first batch of prisoners from Hong Kong. There were five officers with this group of approximately 300 P-O-Ws. In Hong Kong the Japanese had raped and bayoneted [sic] nurses, women and children; killed doctors and patients in the hospital wards, operating theatres and recovery

rooms; bayoneted, mutilated, shot and beheaded P-O-Ws just to amuse themselves; humiliated and degraded them in every way possible; no medical treatment or supplies for the sick and wounded; the lowest possible living conditions and way below starvation diet. We were joined two months later by 75 P-O-Ws from the Philippines, and these were some of the survivors from the Bataan Death March where over 16,950 P-O-Ws were killed (over 2/3rds of the entire total number of P-O-Ws involved). All these prisoners, both the Hong Kong and the Philippine P-O-Ws, had then to endure the "Hell Ships" where thousands died enroute from Hong Kong and Manila to Japan. In one ship alone, the Arisan-Mar, out of 1800 P-O-Ws, only 8 survived. The Oryoku-Mar started out with 1,619 P-O-Ws and only 200 survived that trip.

The order sent by the Japanese Tokyo Headquarters down to Hong Kong and the Philippines camps was to send their best and healthiest prisoners to work in Japan. Now as you well know, when a Commanding Officer gets an order to send his best men, this is when he unloads all his dead-beats, no-gooders, troublemakers, sick, wounded, incompetents, etc.



Squadron Leader Leonard Birchall aboard the Catalina Flying Boat before being shot down and captured by the Japanese in 1942. Credit: AF News Room

Thus I now found myself to be the senior P-O-W in this brand new working camp and faced with over 375 very hostile, belligerent P-O-Ws. This gave me some concept of how Daniel felt when he walked into that den of lions.

I was the senior P-O-W in all the working camps that I was in, but this was a title in name only, as with no means of physically exerting discipline, you had only the vast inherent responsibilities for the health and well-being of all those in the camp, but no means to enforce your decisions. The nature of military

discipline encompasses two basic forms: the imposed discipline and the discipline which the individual decides is necessary, which is self-discipline. Field Marshal Sir Archibald Wavell, in his book "Soldiers and Soldiering", describes this as follows:

**“Discipline makes a man do something he would not do unless he has learnt that it is the right, the proper and expedient thing to do. At its best it is instilled and maintained by pride in oneself, in one’s unit, in one’s profession and only at its worst by fear and punishment”.**

In our case, punishment was completely out of the question. The conditions and environment in which we existed reduced our health to the very razor edge of complete collapse, and we needed every bit of our health, strength, stamina and reserve to barely keep living from day to day. Having to undergo punishment on top of all this would have been tantamount to issuing a death sentence. Thus,

**Thus I now found myself to be the senior P-O-W in this brand new working camp and faced with over 375 very hostile, belligerent P-O-Ws. This gave me some concept of how Daniel felt when he walked into that den of lions.**

the authority we had was only that which the men wished to give us when and if they felt like it.

As officers, we were singled out by the Japanese for special treatment. Every method possible was used to degrade us in front of the men in order to counter any control or discipline we might try to develop. From the men’s point of view all officers were under great suspicion. They felt they had been let down and that the incompetence of their officers was responsible in large part for their being prisoners. Another sad factor was that after being captured, unfortunately a lot of

the officer’s [sic] prime concern had been for themselves. They had taken the best quarters, furnishings, clothing and supplies available, and only after they had taken what they wanted or considered their share as an officer, did the troops get what was left. This was particularly true in the distribution of food. Since the P-O-Ws were on a starvation diet, food was of the greatest importance as it meant life or death, and when the officers took more than their equal share of the daily ration per prisoner it not only meant that it drastically reduced the food left for the men, but also the men’s chances of survival.

The first night we were in the Yokohama camp, we, the five officers from Hong Kong and myself, decided that we had to share the privations, maltreatment and work at least equally with the men, and that this could only be done by demonstrating that we took on an obviously greater share than the men. We immediately set up a system whereby the food and everything else we received was dished out in full view of the men. If anyone thought he had less than an officer he was free to exchange his share for the officers [sic] and no questions asked. The officers were always the last to take up their share. The men tried us on by eating

some of their food and then changing it for an officer's bowl, but in no time flat the troops themselves sorted this out and woe betide anyone who tried it. In fact, in a way this backfired as when the Japanese reduced an officer's ration because he was sick or as punishment, the men themselves made certain that the officer still received his fair and equal share, and in some cases more than his share.

Cigarettes became the currency of the P-O-Ws, and with the horrible conditions and starvation under which we lived the addiction to tobacco increased beyond belief. It seemed that when you were smoking you could, to a limited degree, blot out reality and ease the continual terrible pangs of hunger. Men who were starving, never without intense hunger 24 hours of the day and every day of the year, knowing that their very lives depended on the small bits of food we got, would still trade away their food for cigarettes. We, the officers, gave up smoking which was no easy task itself, but in this way we removed ourselves from any criticism and were able to put our ration of cigarettes into the ration for the men and also to create a small supply for our doctor to be used in keeping the heavily addicted from trading away their food. Anyone offering to buy or sell food for cigarettes was reported by the men themselves to the doctor who would then talk to those involved and take remedial action. In this way our lives were made much more bearable and many lives were saved.

Another immediate action we took was whenever a Japanese guard started to beat up a prisoner, the closest officer would jump in between them, the prisoner would get lost as quickly as possible and the officer would take the beating. Sometimes the guard would become bewildered to find he was beating the wrong man and would stop, whereas sometimes he would become infuriated and take it out on the officer. We just had to take our chance and hope for the best.

A word about dress and deportment. Clothing was at an absolute premium as we only had what we had with us when captured.

The only clothing issue we were given was what the Japanese had captured and then did not want for themselves or could not use in other ways. Believe me, the pickings were very slim indeed, and we lived in rags and tatters. The clothing issues we were given all went to the men, but again in short order the men made certain that every officer had one good shirt, tie, tunic, trousers and hat to wear whenever we had to parade in front of the Japanese.

We were given one square inch of soap per week with which to do all our laundry and to keep our bodies clean. There was no hot water, and even the cold water was in very limited supply. We were allowed one hot and sometimes only a warm bath once a month. The supply of razors, razor blades, hair clippers, scissors, needles, thread, and all other such normal items were only those which had been brought into the camp by the men after their surrender. It was, therefore, impossible to maintain the normal standards of cleanliness. In addition, we were out of the camp for about 12 hours of the day doing coolie labour on starvation diet. The result was that we were sick, starving, cold, filthy, infested with lice, fleas and bedbugs, but unable to find the time, energy or the means to do very much about it. Despite all this, through the height of ingenuity and improvisation we still managed to keep ourselves as best we could. When we turned out on parade it may have been in rags and tatters, but we were as clean, upright, formidable, proud of our heritage and still as undefeated as we could possibly be.

Here may I quote from Field Marshal Slim in writing about his W.W. II campaign in the jungles of Burma in which he said:

**“At some stage and in some circumstances, armies have let their discipline sag, but they have never won victory until they have made it taut again, nor will they. We have found it a great mistake to belittle the importance**



**of smartness in turn-out, alertness of carriage, cleanliness of person, saluting or precision of movement, and to dismiss them as naive, unintelligent, parade-square stuff.**

**I do not believe that troops can have unshakeable battle discipline without showing these outward signs which mark the pride men take in themselves and their units, and the mutual confidence and respect that exists between them and their officers. It was our experience in a tough school that the best fighting units in the long run were not necessarily those with the advertised reputations, but those who, when they came out of battle, at once resumed a more formal discipline and appearance”.**

How true!! How true!! As an indication of what I am saying, may I draw to your attention that as you tread the streets of Ottawa, unfortunately you will see all too often the many instances of the state of dress, or should I say undress of the military, and this causes me very great concern.

It was a long hard process for us P-O-Ws, but slowly the confidence, faith and self-respect was restored not only in the men but also in ourselves as officers. The first winter in Japan, 1942-43, was the worst as we tried to climatise [sic] ourselves to the living conditions, the cold winter in unheated barracks where we had only one blanket each, the daily coolie labour, the starvation diet, and the total absence of any medical treatment. Approximately 35% of all the P-O-Ws in the working camps in Japan died that winter, and yet in our camp with its average of 375 P-O-Ws, during the first two years we lost only three

men, less than one half of one percent per year, giving ample proof of the success of the efforts made by that entire camp.

Let us now look at the mutual concern for one another, or comradeship which developed and which is such a vital part of leadership. I believe the good book says:

**“ Greater love hath no man than this, that a man lay down his life for his friends ”.**

This to me defines the comradeship we developed, and may I give you one example. Medicines were practically non-existent as we were never given any medical supplies whatsoever by the Japanese. The Red Cross medical supplies sent to Japan for use by the P-O-Ws were taken by the Japanese military, re-packaged, and sent to their combat troops. After the war the allied forces found warehouses all over Japan filled with Red Cross medical, clothing and food supplies which had been sent for use by the P-O-Ws and which had been stored to be used by the Japanese troops in the event of an invasion of their homeland. Our only hope was to pool whatever meagre supplies we had in the camp and use them for the maximum benefit of all. This had to be done in complete secrecy as the Japanese confiscated any medical supplies they found and treatment of P-O-Ws by our own doctor was absolutely forbidden. This presented a very great problem as everyone hoarded whatever medicines they had. While you may not have the right medicine or drug for whatever illness you encountered, at least you had a chance to barter or trade for the one you did need. On our starvation diet we had no resistance whatsoever to any disease or infection. We suffered at all times from the ravages of malnutrition and its medical consequences, Beri-Beri, pellagra, blindness, gangrene, etc. Once our doctor got going on secret sick parades the men soon believed in us and started to turn in their bits and pieces of medical supplies to the doctor. A detailed account was kept of all our camp medical supplies as to where they came from, who



gave them, how much we had, how much was used, and on who. These accounts were available and could be seen at any time by anyone in the camp.

One P-O-W from Hong Kong had smuggled in three morphine pills which he turned in to the doctor, and as these were the only pain killers we had it was agreed that a unanimous vote of the entire camp would be necessary before one could be used. The reason for this was that you never knew when it might be your turn to need such help to get over that last big painful hump, and hence you had better have a say as to how and when they were used. Once they were gone there just wasn't any more. Time and time again the doctor would decide to use a pill in such cases as drastic surgery due to gangrene as all this had to be done without any anaesthetic. He also recommended that they be used in the case of the three men we lost just before they died, when there was nothing more we could do for them. In every instance the unanimous decision was obtained from the camp only to have it vetoed by the man who was to receive the pill. I was separated from that camp after two years, but I understand that those three pills were still unused at the end of the war.

A word about our stealing because this was one of the main ways to our survival. Our camp worked at many various jobs each day and it was possible on a lot of the jobs to steal things which were not only of great benefit to the camp, but also to the Japanese with whom we worked. A good example was an oil factory where they crushed peanuts, coconut, soya beans etc. to make various cooking oils and also lubricant oils from castor beans. This was a gold mine for us as we stole peanuts and coconut for food, and we set up making soap in the boiler plant of the factory by making trays out of old tins, stealing coconut oil and caustic, which we then cooked on top of the boilers. The coolies we worked with knew what we were doing so we marked trays with their name on it. When their tray of soap was done we would cut the slab of soap in half and give them half. We would then smuggle the soap out of the job

and back to camp. We were searched inside the factory by the factory guards before we left the job, and then again outside the job by the Army guards before we got on the trucks or were marched back to the camp. At the camp we were searched once again inside the camp by the camp guards. If at anytime in this entire process we were caught we never implicated the Japanese workers and they knew this, so they trusted us even more than they did their own fellow workers. Other items of great value to the Japanese because of strict rationing in addition to the soap, was sugar, salt and cooking oil. These items we stole not only from the factories, but also when we were unloading or loading railway cars, ships and barges. We were able by stealing at one job and trading with the Japanese coolies with whom we worked on other jobs to get a meagre supply of drugs which were available on the Japanese market to supplement our supplies.

As for the men who did the stealing, we set up a system whereby anything of value to the camp such as food, trade goods, etc., the man doing the stealing would notify the officers and an officer would go out to work on the job with him. If the man got caught then the officer would step in and say that he had ordered the prisoner to steal. In this way the officer took the giant share of the bashing, solitary confinement, and other punishment. If the stealing was successful, then half the goods was turned into the camp supplies and used for the sick or to trade with the coolies for medicines. Here again complete records were kept and anyone could see them at anytime to ensure just how the goods were being used.

A few words on the pride and self-respect of the men no matter what their original background or the results of the degradation and environment in which we existed. I was far from being the ideal prisoner, and when one of the Japanese guards consistently beat up the very sick prisoners, I went after him and beat him into the deck. I shall not go into the aftermath of that affair, suffice to say I was extremely lucky to barely survive the punishment and not be killed. When the beatings of

the sick started up again, the men said I should try something else as I would never live through that punishment again. So we held a sit-down strike, and after I had received a terrible beating, but also the assurance that the sick would not have to go to work, did I give the order for the men to go to work. My hour of glory was very short lived in that I was removed from that camp within an hour and sent to a severe discipline camp at Omori, Tokyo, to show me the error of my ways.

There I was set up as a very bad example and it was the kiss of death for any other prisoner to even look at me in front of the specially selected sadistic guards. For the first two weeks I worked all day sewing bits of fur together and then all night in the cookhouse. Here the punishment was to stand on the hot brick ovens in bare feet and holding two large buckets of water. With our painful beri-beri [sic] feet this was sheer hell. I slept in little short naps whenever I could, out of sight of the guards. About this time the P-O-W camp of Canadians in Yokohama, which had no doctor and whose senior P-O-W was an RSM, ran into a bad session of sickness. A group of the sick were moved to another camp, but enroute they stopped off at the discipline camp for a few days. The day they arrived they heard that I was in camp and the Canadian Sergeant in charge of them came to see me in the shop where the officers were sewing the bits of fur together. He threw the first salute between P-O-Ws that had been seen in that camp and explained that the Canadians had heard about my efforts on behalf of the P-O-Ws, and as I was the first Canadian officer they had met since leaving Hong Kong, they would like to hold a parade for my inspection. I tried to explain what this would mean but to no avail. Reluctantly I agreed, and he said they would be formed up in a few minutes. They formed up in the open dirt area which we used for roll calls, parades, and forming of working parties. They were dirty, sick, ragged, starved, some had to be held up by their comrades, but they were all there. As I expected, no sooner had we got started than the storm broke in all its fury and the guards came charging into us like a bunch of raving maniacs,

swinging fists, clubs, rifle butts and kicking the daylight out of those who fell down. None of us minded, and when it was all over we crawled back into our huts to lick our wounds and to have a damned good laugh at the Japanese.

I guess one interpretation would be that it was an act of defiance and that may be right. Bear in mind that these men were from the reserve units out of Montreal and Winnipeg, and in the majority of cases their military background was practically nil. All had been reduced to the lowest state of civilization possible by their maltreatment and horrible environment, and yet there was a pride in these men such as I had never seen before or expect to see again. It made me proud to be admitted into their ranks. I might add that news of this parade spread like wildfire throughout the working camps in Japan and the rise in morale amongst the P-O-Ws made life hell for the Japanese guards.

The Ormori discipline camp was on a small island out in the Tokyo harbour, made from the silt and sand dredged up from the Tokyo harbour, and was about 50 ft. from the mainland. There was an anti-aircraft battery on one end and a searchlight battery on the other with our camp sandwiched in between. We were housed in the standard prefabbed single story wood buildings used by the Japanese military, and we were right opposite the main fighter base at Haneda Airport which protected the Tokyo-Yokohama area. With no markings whatsoever to show we were P-O-Ws we were extremely vulnerable, and so whenever a single B-29 came over, obviously on a photo recce, we would run out into the open parade area and unbeknownst to the Japanese we would form the letters P-O-W in hopes that this would show up in the photos.

The fire bombings and fire-storms wiped out the entire area around our camp, and the only thing that saved us was the 50 ft. of water separating us from the mainland. The whole area all around us was as flat as a pancake, exactly like our northland after a big forest fire. With no food, water, electricity or places to work, the Japs started to move some of us out

into the outlying areas, and as I was one of the bad actors, I was one of the first to go.

They took a bunch of us from the various camps in the Tokyo area and put us into railway boxcars where we were jammed so that we had to take turns standing and sitting. It was cold, no food, water or sanitation facilities, and we were there for over 48 hours. Many of us had amoebic dysentery or diarrhoea, and life soon became grim to say the least. We were taken up into the mountains northwest of Tokyo and here we ended up on a siding where we were able to get out and lie down on the ground. This was the first opportunity I had to see what prisoners were there, their physical condition, and then the sad realization that once again I was the senior P-O-W. There was a total of 280 P-O-Ws, a real mixed bag, and the physical condition was the worst I had ever seen. Some were blind from lack of vitamin A, some had lost a foot or hand from Beri-Beri followed by gangrene. All were skin and bones from prolonged malnutrition. As we were the first batch out of the Tokyo camps, the Commandants had unloaded all their sick, invalids and misfits. We were now jammed onto flatbed trucks and taken off to our camp up in the mountains at a place named Suwa. As it was high in the mountains it was cold, especially at night when we might even have a thin coating of ice on any open water.

The camp was only half built, some of the buildings had no roof, some had no side walls, there was no kitchen, cooking, or sanitation facilities. The wiring consisted of a single line running through the camp with one or two 40 watt bulbs in each building. It was pouring rain, everyone was soaked, cold, miserable, starving and filthy beyond belief. The barracks were of little protection as there was no straw on the bare boards for us to lie on and the floors were just mud.

The next day we tried to fix up the camp. We found that we were on the side of a mountain which was all terraced with rice and vegetable paddies. Our water supply was a small creek which ran down through the paddies

and then through the camp. Since the fertilizer they used was human excreta we had to set up a system to at least boil all our drinking water. We tried to make our barracks as airtight as possible with mud, straw and grass as we had no heat whatsoever, and we set up the most basic washing and latrine facilities. The work detail started at once. The prisoners left the camp at 7 am each morning, walked down the side of our mountain and up the side of the next one to get to an open face mine where they dug out the ore which was some kind of white metal. The path between the camp and the mine was all rough broken stone, and with no shoes, only wooden clogs, the number of seriously infected feet went completely out of control. Our food ration was the lowest I had encountered, and with no medicines or medical treatment this was indeed a death camp. The first week three men died, and our number of seriously ill doubled. It was our conservative but well considered estimate that we would be extremely lucky if just one of us would survive the coming winter of 1945.

As the war started to go against the Japanese and the Allies began their island hopping advance toward Japan, the orders had gone out from Tokyo Headquarters to all the military that they were never to retreat but rather fight to the last man even with suicidal attacks. The Kami Kazi aircraft was a good example of this philosophy. Also the orders were that at the first sign of a landing and attack on their area, they were to kill all the P-O-Ws, internees, sick, wounded, incompetents, etc. so that every able-bodied Japanese could fight to the death without hindrance. In the P-O-W camps we had to dig trenches, and machine guns were placed at each end. We were then to be marched into the trenches, doused with gasoline, and set on fire. Anyone trying to escape would be killed by the machine guns. Proof of this policy was more than evident in the Japanese occupied islands which were overrun by the Americans where they found all the P-O-Ws, sick and wounded captives, and Japanese, all massacred by the Japanese as they retreated.



With the Japanese surrender we took over our camp to ensure our survival, and concentrated on getting ourselves physically fit enough to get out of there and into the hands of the Allies. We took over all the food we could find and ran the kitchen on a 24-hour basis. We bought a pig, a horse, and a cow which we slaughtered and put into the stew pot. Believe me, everything went in with the possible exception of the skin and hooves. We scoured the countryside for all the medical supplies we could beg, borrow, buy, or just expropriate so that our doctor and his helpers could work day and night to bring the seriously ill back to as good health as possible. We got yellow paint and painted big P-O-W signs on the roofs of our buildings. We made flags out of old bed sheets and coloured them with crayons, we put these up on flagpoles and then we waited. The U.S. Navy planes soon found us and we were showered with bundles from heaven containing clothing, food, medicines, and goodies such as cigarettes and chocolate bars.

When the doctor felt we were as fit as he could get us, we made our move and came out overnight by train to Tokyo. When we couldn't find any Allied forces near the Tokyo railway

station we moved over to the station for the electric train and went to Yokohama. Here we went outside the station, sat down, and flew our flags on some bamboo poles we had liberated.

It was not all that easy. You must remember we had some prisoners who were blind, some minus a foot or hand, some unable to walk on painful feet from Beri-Beri, and all of us at the end of our endurance. Thus, we had to commandeer trucks, wagons, bicycle trailers, anything we could lay our hands on, to carry our sick and invalids. The healthiest P-O-Ws carried the Japanese guard's [sic] rifles just in case we met up with trouble, as once we left the relatively safe confines of our camp we were on our own, and God help us.

We didn't have long to wait outside the Yokohama station before a jeep came by with a U.S. Army officer and a big radio on it. We identified ourselves, the chap got on his radio and we were soon inundated with buses, trucks and ambulances which took us down to a reception centre set up in the Yokohama docks. We were then told to get out and go into the dock area. Next thing I knew our senior P-O-W N.C.O. called the troops to attention, formed them up into marching order, turned the parade over to me, and we marched into the dock area with our home-made flags flying. We were dirty, tired, clothing in rags and tatters, many of the men had to be supported or semi carried, but they were all there, all those who could possibly walk, as defiant, proud, a force that could never be beaten.

The first thing was to strip us of all our clothes and to throw them into an incinerator. Next they removed all our body hair and put us through a de-lousing station. From there into a hot shower with lots of hot water and soap. While stark naked we were confronted by a horde of doctors and nurses



*Air Commodore Leonard Birchall seen two years before his death on September 10, 2004 at the age of 89. Credit: AF News Room*



who segregated us up into groups depending on our medical condition, then into a room with all the clothes in the world where we could take as much of everything as we wanted. Finally we were given a thorough interrogation by a team of intelligence and war crimes officers. All the time this was going on there were Red Cross girls going around dishing out cigarettes and chocolate bars.

I was taken to the hospital ship, USS Marigold, as I was out on my feet and don't even remember going on board. I do recall that I was taken to a cabin which I had all to myself. This was the first time since being captured that I was all on my own except when I was in solitary. I had pajamas, and clean ones too, the first time in 3-1/2 years, I was really clean and clear of lice, fleas and bedbugs, the first time in 3-1/2 years, and finally I had absolutely no responsibilities for anyone other than myself, the first time in 3-1/2 years.

Our camp was unique in having 100% survival from the instant that war ended until we were recovered by the Americans. This was only due to the full out cooperation and self-discipline of all the men in that camp. By way of explanation, the Americans were very cautious and stayed in the Yokohama dock area until they were certain that the Japanese military and civilians would accept the surrender and not kill the P-O-Ws and internees as they had been ordered to do. A large part of the Japanese military would not accept the surrender and vowed to fight to the finish, while a tremendous number of the civilians who had lost members of their families, especially in the fire bombing, were very hostile. For those P-O-Ws who were inland such as ourselves, you either had to wait a long period of time to be recovered or try to beat your way out. I am afraid that in the majority of camps it was every man for himself, and in a lot of cases this was fatal. The civilians retaliated as did the military. Some P-O-Ws ate poisonous food or drank wood alcohol and died. Others started out on journeys far beyond their physical capability and died enroute to freedom. You must remember that it was most difficult, if not impossible, to control men who

had been through 4 years of sheer and utter hell, especially when there was absolutely no way of enforcing any discipline. During the war over 30% of all the P-O-Ws and internees taken by the Japanese were either killed or died in the prison camps, and thus never did make it home. Here I think that the epitaph on the memorial in the Allied War Graves cemetery in Kohima, Burma, where over 1,500 Allied servicemen are buried, sums it up very well:

**“When you go home tell them of us and say,  
For your to-morrow we gave our to-day”.**

Catch phrases are wonderful things, and by way of trying to summarise this whole thing, if I had to use one to define my concept of leadership it would be the 3 “Cs”.

## CHARACTER COMPETENCE COMRADESHIP

**1st CHARACTER:** It is my firm belief that the true and solid foundation is Integrity, or as Shakespeare had Polonius say in Hamlet: “This above all else to thine own self be true and it must follow as the night the day thou canst not then be false to any man”. Say what you mean which is the telling of the truth as against the telling of lies, and mean what you say which is integrity. Having the morale [sic] fibre to face the issues of right and wrong and then the courage to stand up firm and strong regardless of the consequences to yourself.

**2nd COMPETENCE:** Having the necessary knowledge, education, training and judgement, and to make full use of them. No matter how large or small the problem, to ensure that you have given it your fullest consideration. Once you have done this and made your decision then to carry it out to the very best of your ability. Know what you are doing and how to do it.

**3rd COMRADESHIP:** Taking a full out interest in your subordinates. Having true respect and concern for them to the extent that at all times and in all circumstances you put their welfare and well-being ahead of your own, regardless of the cost or inconvenience to yourself.

Once these are firmly in place then those other important aspects such as discipline and self-discipline ... pride in yourself and in your unit ... self respect and respect for both your superiors and subordinates ... proper dress and deportment at all times ... all these will develop and strengthen as they feed on one another until what I call "**TRUE LEADERSHIP**" emerges. Live by these precepts and as a member of the Canadian Forces devoted to the well being of your fellow Canadians and the preservation of our Canadian way of life, you will not only attain true self-respect but also the respect of everyone with whom you associate. You can never have a better goal in life. Canada needs you, you who will [sic] the leaders, the protectors and defenders of our country in the years 2000 A.D. It needs your youth, courage and energy, but there is also a desperate need for your self-discipline, your discipline of

the mind, your character, your integrity, in short your **LEADERSHIP**.

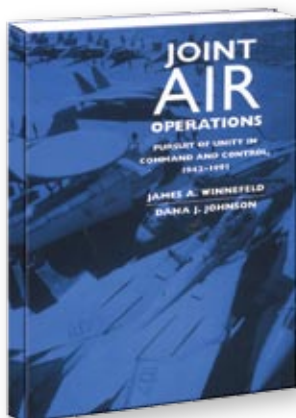
As I look around this room I have absolutely no qualms about the future of our service. Admiral "Bull" Halsey, the famous World War II Admiral of the U.S. Fleet in the Pacific, once said:

**“There are no great men ... there are only great challenges ordinary men are forced by circumstances to meet.”**

As the history of our service shows, there has never ever been nor will there ever be any shortage of ordinary men and women such as are gathered here who are ready, willing and most capable to take up the challenges they will be forced to face. **Per Ardua Ad Astra. Through Adversity to the Stars.** This is the heritage which has been entrusted into your hands, guard it well, as I have every confidence you will. Ladies and gentlemen, it has been an honour and a privilege to have shared these thoughts with you, Bonne Chance et Merci Bien. ■

**Editor's note:** Although this article has been edited, punctuation conventions used at the time of writing have been maintained.

# BOOK REVIEW



## JOINT AIR OPERATIONS:

### PURSUIT OF UNITY IN COMMAND AND CONTROL

**BY JAMES A. WINNEFELD  
AND DANA J. JOHNSON**

ANNAPOLIS, MD:  
NAVAL INSTITUTE PRESS, 1993  
177 PAGES, ISBN: 1-55750-926-3

Review by Major William March

Most students of military and political history would agree that air power is an important element of national power, especially in time of crisis or war. As such, it behoves the employers of air power to ensure that it is used efficiently and effectively in the interests of the nation. Given the intricacies of air power and its reliance on complex technologies and organizational constructs, this task would be difficult at the best of times. However, if the elements of air power are scattered amongst the different military services of a nation, such as they are within the United States (US), then the difficulties associated with applying air power are exacerbated. Joint air operations, or those missions involving the air elements of two or more military services, are perhaps the type of military undertaking most fraught with the potential for failure as different training, equipment and doctrine compete for primacy over the battlefield. As the authors argue in *Joint Air Operations: Pursuit of Unity in Command and Control*, the one critical factor that can make sense out of the joint dynamic is a unity of command and control.

Published in 1993, the origins of this book stem from a RAND study undertaken in the aftermath of the first Gulf War. The Allied victory over Iraqi forces was absolute and, as

the authors argue, for the first time in American history, the United States services approached unity of command and control in joint air operations. However, even as the victors celebrated their military achievement, there were already grumblings from within the various services that seemed to call into question how unified the command and control really was. From within the United States Air Force (USAF), the service whose sole purpose is the application of air power, it came to be understood that their strategic vision was somewhat hampered by the need to support the ground war and the less than optimum cooperation from the air elements of the other services. Conversely, the United States Navy (USN) and Marine Corps (USMC) complained that they were relegated to second-tier status and pressured to ignore their ground-support mission respectively. If true, and the authors go to great lengths to provide corroborating evidence, then unified command and control could be viewed as a necessary evil rather than a preferred construct for modern warfare.

The authors hope to avoid this outcome by undertaking a historical analysis of six joint air campaigns: Midway, 1942; Solomon Islands, 1942-1944; Korea, 1950-1953; Vietnam, 1965-1968, Eldorado Canyon (raid on Libya), 1986;

and the First Gulf War, 1990-1991. In their analysis they purposely chose not to include the United States Army due to its rather limited air power role (although it could be argued that the USMC's role is just as limited). In each of the chosen campaigns they focused on four elements, the first of which is evidence of unity of command or, if lacking, a look at how arrangements were put in place to achieve unity of effort. Secondly, the authors looked at how the capabilities of each service were employed in joint planning and operations. Then the command and control arrangement employed was examined with respect to its ability to deal with uncertainty and adversity. Finally, the degree of each service's readiness and tactical compatibility in meeting mission requirements is assessed. The measure of success was determined by the level of unity of effort achieved through the "exercise of operational command (OPCOM) by adherence to common strategic plans and directives, by sound operational and administrative command organization."<sup>1</sup>

The authors, Winnefeld and Johnson, are experienced defence analysts and Winnefeld brings the added insight of being a retired naval aviator with service in Korea and Vietnam. Very quickly they assign the difficulties encountered in seeking unity in command and control at the feet of each service's respective doctrine and experience. Simply put, each service's unique experiences led to the development of service-specific doctrine that served not only to guide the employment of air power in war, but also to promote the organizational survival and pre-eminence of the USAF, USN and, to a lesser degree, the USMC within the peacetime political "battlefield."

Winnefeld and Johnson do not undertake a comprehensive historical study of the chosen campaigns. Instead, they give a cursory overview of events and jump right to their

analysis. Very quickly the reader gets a sense that the success or failure in achieving unity of command and control was directly proportional to the potential for disaster and the extent to which one service dominated the rest. Thus

at Midway, which was for all practical purpose a USN battle, unity of effort was achieved because the USN was the dominant service and defeat would have had serious consequences for the US services.

Therefore, the various air forces were willing to subordinate themselves to naval direction. The Solomon campaign

had a similar construct and, although there was a larger USAF (then the US Army Air Corps) component, the USN still called the shots. Korea and Vietnam were different. Both conflicts were limited in scope and defeat, while serious, would not have had the same dire consequences. Therefore, each service's organizational imperatives took precedence over joint requirements. Eldorado Canyon in 1986 was seen as a throw back to the campaigns of World War II in that unity of effort was achieved because one service, again the USN, was placed in overall command.

Winnefeld and Johnson point to the Defense Reorganization Act of 1986 (also known as the Goldwater-Nichols Act) as the turning point in joint cooperation. This document empowered the commanders of US Unified Commands (basically joint commands) and the Chairman of the Joint Chiefs of Staff in areas of resource allocation, planning and operations. These new powers came at the expense of the service chiefs. In effect, not only were service chiefs forced to live and operate in a "joint world," but officers seeking to advance had to play the "joint game." The First Gulf War was the first true test of this new joint outlook. Despite the success of joint (and coalition) air operations, there was friction within what could be categorized as a USAF dominated

**... unified command and control could be viewed as a necessary evil rather than a preferred construct for modern warfare.**



campaign. USAF procedures and controls, such as use of an air tasking order, were imposed on the battlespace and the USN and USMC had to conform if they wished to participate. The authors conclude that “what was achieved... was unity of control of air operations, not unity of command.”<sup>2</sup>

The final chapter is entitled “Lessons Learned, Relearned, and Unlearned” and provides a synopsis of the authors’ analysis as well as some suggestions for improving unity of command and control in joint operations. One of the main points that they make in this chapter is that despite improvements brought about during the crucible of the Gulf War, post-war budget cuts and downsizing appeared to be making institutional survival more important than learning joint lessons. Still, the authors provided a list of nine “guidelines” born in the experience of the Gulf War that may improve unity of command and control. Many of these guidelines, such as an increase in joint doctrine, less rigid application of service doctrine and more opportunities to conduct joint exercises, have been implemented.

Although this book was published 15 years ago the information contained therein is still relevant. Certainly it should come as no surprise that within joint air operations the move towards unity of command and control has been evolutionary rather than revolutionary. What is more surprising is how quickly lessons and procedures learned in war are forgotten during long periods of relative peace—especially when institutional survival is threatened by budget pressures. As well, it is interesting to note that service-specific doctrine needed to be balanced with not only joint doctrine, but cemented with increased opportunities to exercise the joint doctrine as well. Finally, despite the fact that this book dealt with US air power practitioners, the need to conform to the requirements of their respective service made it difficult to work together.

The points brought forward by Winnefeld and Johnson are applicable to the Canadian Air Force albeit from a slightly different perspective. As we strive to create our own air power

doctrine, we need to ensure that it is done so in conjunction with that of the Army and Navy as well as Canadian joint doctrine. However, we also need to ensure that our air power doctrine incorporates the requirements, while at the same time guiding the development, of the various air communities. It could be argued that the Air Force faces a “joint” demand from both within and without. The Air Force must ensure that budget and political pressures do not allow the perceived need for institutional and organizational self preservation to take precedence over joint operational effectiveness. Last but not least, the Air Force needs to understand the factors that influenced, and continue to influence, US air and joint power doctrine. Not only will this permit us to operate more effectively with our major ally, a better understanding of these factors will allow us, in an age where we seem to be adopting US doctrine as a default setting, to bring home doctrine appropriate for us today and in the future. *Joint Air Operations: Pursuit of Unity in Command and Control, 1942 - 1991* is a good start in increasing our understanding of joint air power from an American point of view. ■

**Major William March, a maritime Air Navigator working on unmanned air vehicle concepts and doctrine, has taught Canadian defence and air power history at the undergraduate level. He is currently pursuing his doctorate in War Studies at the Royal Military College.**

## List of Abbreviations

OPCOM	Operational Command
US	United States
USAF	United States Air Force
USMC	United States Marine Corps
USN	United States Navy

## Notes

1. James A. Winnefeld and Dana J. Johnson, *Joint Air Operations: Pursuit of Unity in Command and Control, 1942-1991* (Annapolis, MD: Naval Institute Press, 1993), 4.

2. *Ibid.*, 140.

points of interest

# HONORARY COLONEL CHARLEY FOX: AN AMERICAN PERSPECTIVE

By Major William W. Beatty (USAF),  
Captain Glenn Dean and Captain Peter Yip



*Above: Honorary Colonel Charley Fox during World War II; Canadian WWII Spitfire CF photo*

*Below: Honorary Colonel Charley Fox replicates a pose by a Supermarine Spitfire from a favourite Second World War photograph.  
Photo: Warrant Officer Serge Peters*

**W**ho was Charley Fox? Frankly, it was not that long ago that I did not know who he was, what he did and how he changed the course of history. However, one beautiful September day I met him, we chatted and, in an instant, he changed my life. After that short meeting I looked forward to meeting him again and buying him a drink of his choice; but I'll get to that later.

I am a United States Air Force exchange officer and am currently assigned to the Canadian Forces Aerospace Warfare Centre, Ottawa Detachment. Capt Glenn Dean and Capt Peter Yip are two outstanding Canadian officers assigned to my team. This past August Capt Dean mentioned that he was going to volunteer in this year's Battle of Britain ceremony. Recently stationed in Canada, I inquired about volunteering. Soon, Capt Dean, Capt Yip and I had volunteered to assist with the 2008 Battle of Britain ceremony. Our team was tasked to man the greeters' table and to direct the distinguished visitors, registered guests, veterans and general public to their assigned seats. A man and name unknown to me, Honorary Colonel (HCol) Charley Fox, was one of the registered guests.

An older gentleman, his chest heavy with medals, approached the table. Capt Dean pointed out who this gentleman was. He mentioned that the gentleman had been awarded the Distinguished Flying Cross and was credited with injuring German Field Marshal Erwin Rommel during WWII, an event that changed the direction of the war. Duties of the position kept us busy throughout the ceremony. As a result I was not able to speak with HCol Fox, which was a strong aspiration of mine after hearing the quick summary of his history.

It was not until after the Battle of Britain ceremony had concluded that Captains Dean and Yip saw HCol Fox being photographed across the ramp. We immediately went over and introduced ourselves.

My first impression was that of a young man in an old man's body, and I immediately sensed that this man was a very proud Canadian. On that beautiful, sunny, blue-sky-filled September day I had a true gem of a moment. I was about to speak with a Canadian legend! When I introduced myself to him, he made it a point to spell his name, "C-H-A-R-L-E-Y" and again he emphasized that it ended in "L-E-Y." I proceeded to ask Charley, "How are you doing today?" Charley replied, "Well, I got up today, and at my age that is quite an accomplishment!" At that point we were all chuckling. Charley then gave each of us what appeared to be a business card. The card had his signature, contact information and on the reverse a picture of his "Last Patrol"; the flight of four Spitfires on May 5, 1945—considered the last sortie of the European War. Charley went into detail discussing each aircraft and who was piloting each one. We also spoke about Pilot Officer John Gillespie Magee Jr. and his poem "High Flight." Charley asked us if we would show him where the Battle of Britain reception was being held and if we would show him the way. We were honoured to escort him and walked with him into the Canadian Aviation museum. During our short walk to the post ceremony function Charley looked at my shoes and said, "You have those shoes that you don't have to shine?" I said, "Yes." Charley said, "I let you know I still shine my shoes with Lincoln shoe polish." I looked down at Charley's shoes and thought, "Wow his shoes are just as shiny as mine."



Major William Beatty,  
Honorary Colonel Charley Fox  
and Captain Peter Yip  
Credit: Captain Glenn Dean



Inside the Aviation Museum, Charley met up with some old friends and we went our separate ways after polite thank yous and goodbyes. We reveled in the knowledge and stories that Charley had passed on to us as we mingled at the reception. Later we decided to go outside and check out the Spitfires and Hurricanes that performed the flyby during the ceremony. Exiting the Aviation Museum we heard a voice from the balcony. It was Charley Fox! Charley saw that we were leaving and got our attention. Charley said, "I wanted to thank you for helping me!" We responded to him by expressing that it was our pleasure to help out and waved goodbye. Little did I know those would be the last words that Charley and I would exchange.

That evening when I made it home I emailed my second cousin, Bill Jones. Bill was a B-25 engine mechanic, who fought in Africa against General Rommel. I informed Bill that I met the man who was credited with taking Rommel out of the war and asked if he would like me to buy Charley a drink on his behalf. Bill instructed me to tell Charley, "thanks," and to buy Charley whatever he drinks no matter how much it costs. Sadly I won't be able to buy Charley that drink. However, I did learn during Charley's memorial that he liked a fine scotch.

The few moments I spoke with Charley are something that I will never forget. Charley was a kind man, and it is hard to imagine him as the skilled warrior he once was. What I did learn about Charley was that he was always thinking about the service of others. Whether it was talking about who he kept the faith with or who his long ago wingmen were, or was just saying thank you, Charley put others first. This is such a rare trait in today's society that we must ensure that Charley's selflessness continues to shine as an example to others for years to come. My hope is that Charley will be honoured in the Canadian War Museum. His examples of truly selfless acts of courage and bravery under fire would shine as a beacon to future generations. We owe a debt to the men and women who were like Charley; a debt that can never be repaid. We owe our freedom and lifestyle that we so dearly cherish to those silent heroes who never sought recognition for the sacrifices that they made. Charley, I salute you. I hope that I can follow your heroic examples and carry the torch to future generations of Americans. This Remembrance Day I will lift my glass with some scotch in your honour. Godspeed Charley Fox! ■

**Major William W. Beatty was born in the Panama Canal Zone, Panama, raised in Washington state, but calls Alaska home. He was commissioned into the United States Air Force in 1997 from Central Washington University. Maj Beatty has held various positions including Deputy Chief of Wing Training, B-Flight Commander, Chief of Flight Deck Standards and Evaluations, and Squadron life support officer. He is an experienced E-3 (Airborne Warning and Control System) navigator with more than 2600 flight hours. Currently, he is assigned to Canadian Forces Aerospace Warfare Centre, Ottawa Detachment, as the Air Force Experimentation Centre B Team Leader.**

**Captain Glenn P.K. Dean is from Lower Sackville, N.S. In 1989, he enlisted in the Canadian Forces as a Communications Radar Systems technician. He was commissioned in 2001 and entered the Air Traffic Control career field. In 2007, he departed Canadian Forces Base Moose Jaw as the Chief Controller and was posted to his current position as the B1 Experiment Planner. Since 2007 Capt Dean has led various experimentation projects including the Combat Sky Satellite. He is heavily involved with the Vancouver 2010 Air Defence Communications project. Capt Dean, an avid photographer, recently won the 2008 DND "Best in Show Amateur."**

**Captain Peter J. Yip is from Kirkland, Que. He joined the Canadian Forces in 2003 and became a Communications and Electronics Engineering (Air) officer. In 2006, Capt Yip joined Canadian Forces Aerospace Warfare Centre, Ottawa Detachment, as the B2 Experiment Planner. He has orchestrated numerous experiments and projects including the Canadian Joint Precision Aerial Delivery Standoff System and Combat Sky Satellite. He is currently involved with the Vancouver 2010 Air Defence Communications project.**



points of interest

# WOMEN AND THE CANADIAN AIR FORCE

By Second Lieutenant Keven Lachance



*Top: Captain Riel Erickson  
Credit: Warrant Officer Serge Peters*

*Below: Air Force personnel on parade for the  
67<sup>th</sup> Anniversary of the Battle of Britain.  
Credit: Warrant Officer Serge Peters*

**T**oday's Canadian Forces is made up of individuals possessing immense expertise and a shared feeling of pride. These assets enable them to defend the interests and the beliefs of Canadians around the world. The strength of the organization resides in the professionalism of its members and in its great diversity, allowing for a true and fair representation of the society it is defending. The goal of the recruitment campaign currently underway is to make diversity within the Canadian Forces more representative of the diversity among the Canadian population by standardizing enrolment criteria such as age, nationality and gender.

The best example of this relates to the role of women, particularly in the field of aviation. As society in general has changed, women's roles have evolved substantially since World War II, over 50 years ago. At that time, most of the women serving in the Royal Canadian Air Force (RCAF) were hired as non-commissioned members or performed administrative tasks on the ground. Despite the conventional thinking at the time, that men should be the decision-makers and at the helm of power, there were some women who believed in their abilities. These women were the pioneers; they shaped the Air Force as we know it today and became role models for generations to come.

On the eve of World War II, July 2, 1941, a Privy Council order authorized the creation of the Canadian Women's Auxiliary Air Force. A few months later, the name was changed to the Royal Canadian Air Force Women's Division. The responsibility for establishing the RCAF Women's Division fell to Kathleen Oonah Walker. Already familiar with the RCAF's military structure through her husband, Colonel C. C. Walker, who died in May 1941, she immediately began recruiting. For the women who enrolled at that time, duties were fairly limited: administration, secretarial work, nursing, equipment maintenance, meteorological observation, telephone switchboard, photography, radio, sewing, laundry and cooking. In those days, women were still kept away from the dangers of flying. Women rarely participated in flights and when they did, it was mostly as

passengers. In fact, their motto was, "We serve that men may fly." Nevertheless, in the first months following their engagement, many positions opened to them as the war effort expanded. It was now possible for women to consider working as drivers, hairdressers, musicians, pharmacists or lab assistants. They could even choose to enter fields that had previously been reserved solely for men, such as the mechanical or electrical fields. Women were making strides in the right direction.

The perseverance, commitment and devotion of the members of the RCAF Women's Division opened the doors to women who would later serve their country. This attitude in turn helped banish biases and popular beliefs regarding "a woman's place" in society at the time.

## A few interesting dates:

**In 1974, Major Wendy Clay, a doctor, became the first woman to qualify for her pilot's wings, six years before the pilot classification was opened to all women.**

**1974 also marked the first time a woman, the Honourable Flora MacDonald, was authorized to take classes at the National Defence College. It was only in 1980 though, that women were finally allowed into military colleges on an official basis.**

**In 1981, Second Lieutenant Inge Plug became the first female helicopter pilot in the Canadian Forces and Lieutenant Karen McCrimmon became the first female air navigator.**

In 1982, an event took place that would forever change the course of our nation's history: the signing of the Canadian Charter of Rights and Freedoms. The Charter forever changed the future of the nation and, notably, that of minority groups, especially women. The Charter made discriminatory acts or decisions based on race, ethnic or national origin, colour of skin, religion, gender, age or disability illegal in our country. As a result, every military position was opened to women serving in the Canadian Forces, including that of fighter pilot.

More recently (in 1990), Women in Aviation International, a global organization with chapters in Canada, the United States, Europe and Africa was established. Its goals are simple, specific and, above all, legitimate: to encourage women to seize opportunities in the field of aviation. Among other activities, the organization is involved in championing the Pioneer Hall of Fame, founded in 1992. Its objectives include honouring influential and innovative women and celebrating their many contributions to society. Of those serving in the Air Force today, we cannot ignore Major Dee Brasseur who was one of the first women to pilot a fighter jet, the CF18 Hornet, for the Canadian Forces in 1989. She was also the first woman to investigate accidents involving military aircraft in Canada. Major Brasseur was inducted into the Women in Aviation International's Pioneer Hall of Fame on February 17, 2007, in Orlando, Florida. She enrolled in 1972 and has accumulated over 2,500 flight hours as a fighter pilot in both North America and Europe. Now working for the Directorate of Air Strategic Planning, she has not forgotten about women's issues

in the Canadian Forces: she demonstrates her continuing commitment by acting as co-chair of the Defence Women's Advisory Organization in Ottawa.

About 10 years ago, in 1998, Lieutenant-Colonel Karen McCrimmon, the first female air navigator, became commander of the 429 Transport Squadron in Trenton, Ontario. Two years later, in 2000, Major Micky Colton became the first female pilot to accumulate 10,000 flight hours at the controls of a CC130 Hercules. The following year, Captain Maryse Carmichael's name was listed among 11 acrobatic pilots that would be part of the Snowbird team in 2001. The following year, for the second consecutive year, she was part of the team of pilots, this time holding the rank of major.

These are but a few examples of extraordinary women who have each contributed in their own way to building an Air Force that is strong and proud and in which all the members share the goal of fully and effectively fulfilling their duties, and thus building an organization that is unique and richly diverse. ■

**Second Lieutenant Keven Lachance graduated from the Canadian Forces Recruit School in St. Jean in December 2007. After taking a second language professional development course, he was assigned to the Canadian Forces Aerospace Warfare Centre in CFB Trenton. Second Lieutenant Lachance has been working there ever since, and expects to begin the air navigator course in Winnipeg in February 2009.**

*Captain Lisa Reimer  
Credit: Sergeant Frank Hudec*

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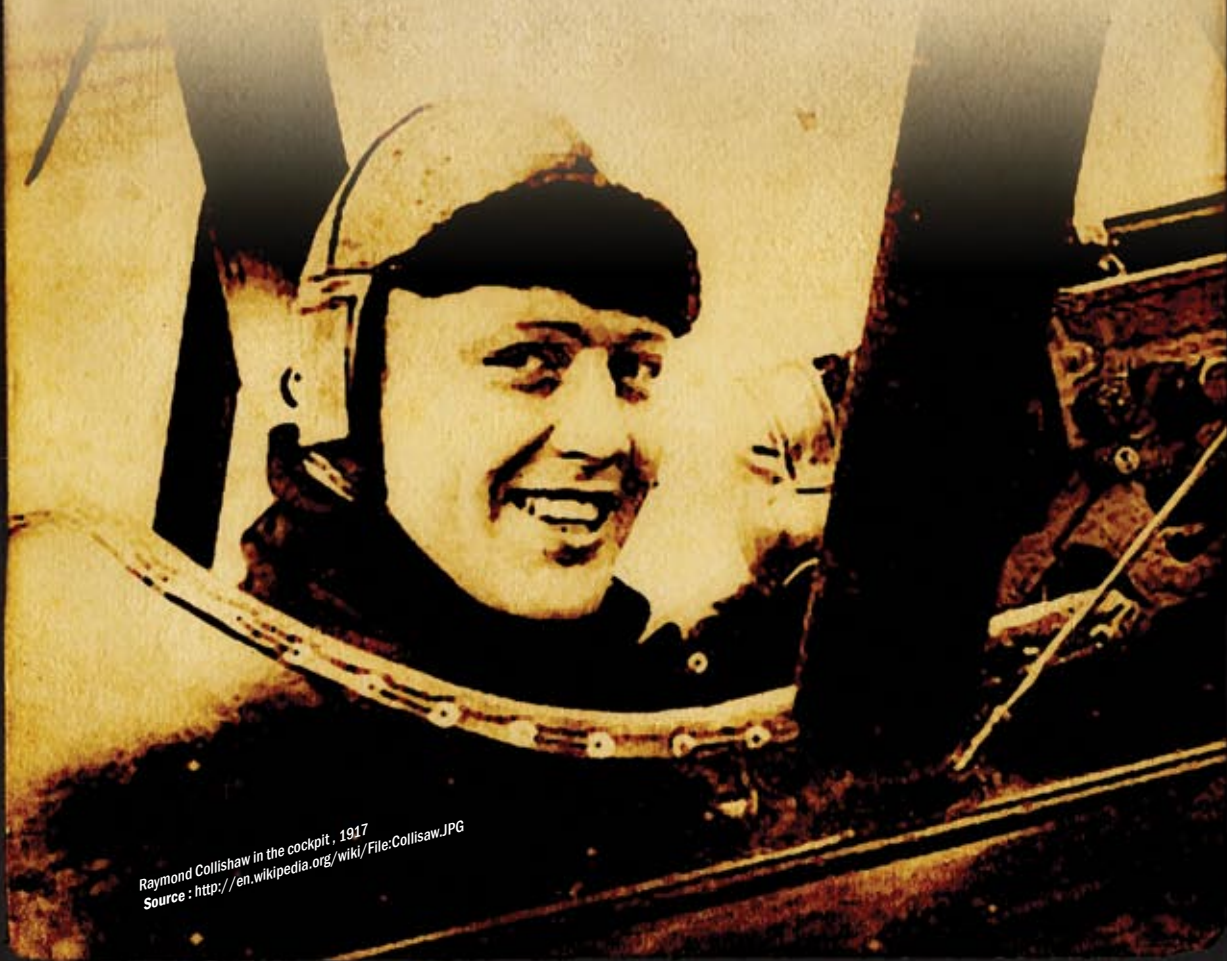


points of interest

# RAYMOND COLLISHAW:

THE ROYAL NAVAL AIR SERVICE'S LEAD ACE

By Second Lieutenant Nicolas Fortin



Raymond Collishaw in the cockpit, 1917  
Source : <http://en.wikipedia.org/wiki/File:Collisaw.JPG>



**R**aymond Collishaw had a magnificent career as a pilot in the Royal Naval Air Service (RNAS) and the Royal Air Force (RAF). He is the leading ace of the RNAS with 60 confirmed victories, second to Canadian Billy Bishop and third overall in Allied aces of WWI.

Collishaw was born in Nanaimo, British Columbia, in 1893. Having grown up next to the sea, he joined the Royal Navy on August 14, 1914. Realizing that he would see more action in the air and once again due to his affinity to the sea, he joined the Royal Naval Air Service in January 1916 instead of the preferred Royal Flying Corps.

With only eight and a half hours of training, Collishaw was cleared to fly solo. After receiving his wings, he was sent to Naval 3 Squadron. As a fighter pilot, he was initially involved in escorting long range bomber runs. One of these runs was the historic Oberndorf Raid<sup>1</sup> on the Mauser Works factory where he had at least one victory.

Collishaw is perhaps best remembered for the famous “Black Flight” when he was leader of B Flight at Naval 10 Squadron in 1917. The squadron was moved to Droglandt, directly across from Baron von Richtofen’s (the infamous Red Baron) “Flying Circus” squadron near the Belgian border. Collishaw and the other members of his flight, made up entirely of Canadians, painted their triplanes black in an open challenge to the Red Baron’s squadron, who adorned a bright red on their biplanes. The Red Baron’s squadron was feared by all, not only because of the leader himself, but also for his wingmen, who were equally as skilled in the air. It was during one of the many confrontations between the two squadrons that Collishaw managed to take down six enemy airplanes in a single day, the first pilot to achieve such a feat. The “Black Flight” had an

excellent leader in Collishaw and it was during this time that he was awarded one of his many decorations; the Distinguished Service Order “For conspicuous bravery and skill in successfully leading attacks against hostile aircraft.”<sup>2</sup> He concluded his time with Naval 10 with a total of 34 confirmed victories in four months.

**... he was awarded one of his many decorations; the Distinguished Service Order “For conspicuous bravery and skill in successfully leading attacks against hostile aircraft.”<sup>2</sup>**

Collishaw clearly had a knack for flying and was an excellent tactician. His duties back at Naval 3 in November 1918 now included training and preparing new recruits for the harsh conditions of aerial combat. He trained them well and ensured that they were not rushed. Collishaw advised the recruits to observe the fight and learn the ways of dog fighting

before jumping in. When the recruits engaged in dog fighting, Collishaw watched over them and frequently gave them sole credit for shared victories. Thus, boosting their morale and further building their confidence. At the end of the war in 1918, he was flying with 203 Squadron and had achieved another 19 victories.

Although he fought many perilous battles in the skies over Europe, Collishaw described his experience during the Russian Revolution as being the more frightening of the two. In 1918, the Allies had opted to send a squadron to support General Denikin and the White Movement in their fight against the Bolsheviks. Collishaw joined the effort in 1919; his aerial combat was limited to an air-to-ground role because the Bolsheviks did not have much of an air force. He was credited with sinking a gunboat that was ferrying soldiers across the River Volga and shooting down one airplane. After recovering from a bout with typhus, Collishaw returned to the air. Missions involved strafing enemy soldiers on the ground, a tactic that was first employed at the end of WWI. Strafing missions were relentless and continued until the airplane ran out of ammunition. On one occasion, a flight of four Camels inflicted 1,600 casualties on the Bolshevik cavalry.



The Allies were not successful in Russia and, pursued by the Bolsheviks, retreated 500 miles by train to return to friendly territory in Crimea.<sup>3</sup> The Allies feared that they would be castrated if they fell into enemy hands. In fact, there were a number of close calls when the Bolsheviks almost caught up with them. Out of his element and unable to defend his squadron, this was Collishaw's most frightful experience. In January 1920, now safe in Crimea, Collishaw assembled some planes for his squadron. They returned to the air and once again inflicted damage on the Bolsheviks. He was credited with derailing a train and damaging another.

During WWII, Collishaw rose to the rank of Air Commodore and was stationed in Egypt where he commanded the RAF in Northern Africa. The first major action his command undertook was the attacks on Italian bases in an attempt to neutralize the Italian Air Force. He developed key tactics such as building mock airplanes (in order to portray a much larger air force from the air) and conducting raids with one airplane. Under constant attack from the one plane raids, the superior Italian Air Force was weakened as a result of being spread thinly across North Africa.

Collishaw's squadrons were flying much outdated biplanes but had one Hawker Hurricane, which often led the attacks. He compensated for the outdated aircraft by teaching his pilots expert tactics and cunning manoeuvres. Eventually, the Italian Air Force fought its last battle in Africa in late October 1941. Collishaw felt that winning air superiority in Africa was the greatest achievement of his career.

During Operation Compass,<sup>4</sup> Collishaw was tasked with harassing the Italians and making sure they were in the dark as to what the Allies were planning. On one occasion, Collishaw had a Bristol Bombay, a large and very noisy bomber, fly back and forth over Allied troops to disguise the sound of tanks that were preparing for an attack the following day.

After some disagreements with Air Marshal Tedder (RAF Middle East Command),

Collishaw was sent to Scotland in July 1942. This posting was used to let airmen wind down because it was out of the way of major action. The disagreements stemmed from Collishaw's experience in WWI. He was accustomed to a war where the pilots were their own boss. The lack of radio and radar in WWI meant that commanders did not have a tether on the planes and could not control them once they were in the air. Collishaw was reluctant to adapt to the new kind of war being fought in WWII, where, according to Air Marshal Tedder, extensive planning and preparations were key to success. Tedder saw Collishaw as an impulsive leader who would overlook the importance of proper administration. For this, he "was retired from the RAF"<sup>5</sup> in 1943 at the rank of Air Vice Marshal. During his command, Collishaw's superior tactics and strategies shot down some 1,100 Italian aircraft and eliminated them as a threat in North Africa.

While Collishaw was nominated twice for a Victoria Cross, he never received the coveted military decoration. He was, however, awarded many others for his actions during WWI, the Russian Revolution and WWII. The list includes the Companionship of the Order of Bath; the Distinguished Service Order with bar; Officer of the British Empire; the Distinguished Service Cross; Distinguished Flying Cross; the Croix de Guerre; the Order of St. Anne, 2nd class; the Order of St. Stanislaus, 2nd class; the Order of St. Vladimir, 4th class; as well as mention in four despatches. He was awarded these decorations for not only his bravery and skill but mostly for his leadership during conflict. It is interesting to note that from the time that Collishaw was posted to Naval 10 Squadron until his retirement, he was continually in a position of leadership at the flight, squadron and command level.

He was inducted into Canada's Aviation Hall of Fame in 1974, two years before his death at the age of 82. He has also been inducted into the British Columbia Aviation Hall of Fame. In his birthplace (Nanaimo, British Columbia), he now has an airport and an Air Cadet Squadron named in his honour. ■



**Second Lieutenant Nicolas Fortin joined the Canadian Forces in December 2007 and is currently completing on-job training at the Canadian Forces Aerospace Warfare Centre. He is awaiting training as an Air Navigator at Canadian Forces Air Navigation School in February 2009.**

## List of Abbreviations

RAF	Royal Air Force	WWI	World War I
RNAS	Royal Naval Air Service	WWII	World War II

## Notes

1. Carried out on 12 October 1916, the Oberndorf Raid was the first large scale multinational strategic bombing run.
2. *The London Gazette*, Supplement no. 30227 (10 August, 1917), page 4 <http://www.gazettes-online.co.uk/ViewPDF.aspx?pdf=30227&geotype=London&gpn=8203&type=ArchivedSupplementPage&call=collishaw> (accessed September 15, 2008).
3. The Allies arrived in Crimea on 4 January, 1920.
4. Operation Compass ran from December 1940 until February 1941 and was a decisive Allied victory. It resulted in the Allies advancing far into Libya and capturing over 100,000 prisoners of war while suffering only minor losses. The entire Italian Tenth Army was defeated.
5. Miles Constable, "Raymond Collishaw: World War I Fighter Ace." Miles Constable, <http://www.constable.ca/caah/collishaw.htm> (accessed September 15, 2008).

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*Collishaw's Sopwith Triplane, 'Black Maria', 1917.*  
 Source : <http://en.wikipedia.org/wiki/File:SopTri.jpg>



# DUTCH AIRCREW PROVIDES EXPERTISE TO ATAC STUDENTS

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By **Captain Rae Joseph**



**T**he world of simulation can extrapolate any capability—in any scenario—onto the computer screen. Anything, that is, except the intricate details only an expert with experience and skill can provide.

That's why 1 Wing's 403 Helicopter Operational Training Squadron solicited the expertise of a Chinook pilot and a loadmaster from the Netherlands for Exercise Winged Warrior, which ran 22-31 October, 2007.

Captain Leo Stolk and Sergeant Major Rob de Graaf from 298 Squadron (Chinook) were the subject matter experts on the Chinook, which was one of the simulated air assets available to the 12 Advance Tactical Aviation Course (ATAC) students.

ATAC is designed to train future aviation mission commanders to plan and execute missions in a complex and dynamic battle space against an asymmetrical threat, with Winged Warrior as the validation exercise. Since the course's performance objectives are to plan and execute a mission, it only makes sense to give the students the best references to achieve their goals.

**“[We are here] to give the students a better understanding of the Chinook—its capabilities and limitations,” said the 12-year veteran Dutch pilot. “We do not tell [the students] what**

**they need to do. We are here for when they need advice in how to implement the Chinook into their mission.”**

The Dutch crew's time, knowledge and skill set has been utilized to the fullest.

“Each student was given a reading package on the Chinook, but even then key information such as loading, unloading and slinging times are not in the package,” said Capt Stolk.

Capt Stolk, who has served three tours in Afghanistan, had a chance to be a part of one of the missions—from planning to execution—as a Dutch Chinook pilot in the simulated Afghanistan training scenario.

“It was interesting. We have a Dutch saying, ‘It's interesting to look into someone else's kitchen,’” he said with a smile. “You see a different approach to the planning process.”

It is these differences, Capt Stolk said, that are important to learn as operations around the globe continue to be joint with other nations. He hoped that his and Sgt Maj de Graaf's advice, guidance and expertise will further benefit the students as they become aviation mission commanders.

“I really enjoyed it and will take what I learned working with 1 Wing to our crews. Truly a good experience,” Capt Stolk said. ■

**Captain Rae Joseph is the 1 Wing Public Affairs Officer working at the Headquarters in Kingston, Ontario.**



*Captain Leo Stolk from 298 Squadron, Netherlands (centre) stands by ready to offer advice on the Chinook capability as the Aviation Mission Commander (left) explains how the convoy escort mission will be executed. Credit: Captain Rae Joseph*

A close-up photograph of a man with a grey mustache, wearing a green and black camouflage military uniform. He is resting his chin on his hand and looking upwards and to the left with a thoughtful expression. A pair of glasses is tucked into his shirt. The background is blurred, showing what appears to be an office or classroom setting.

# THE AIR FORCE OFFICER DEVELOPMENT PROGRAM: WHAT'S IT ALL ABOUT?

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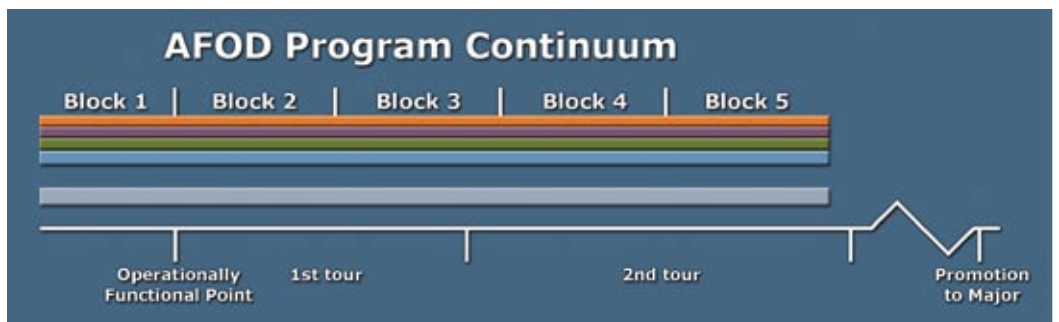
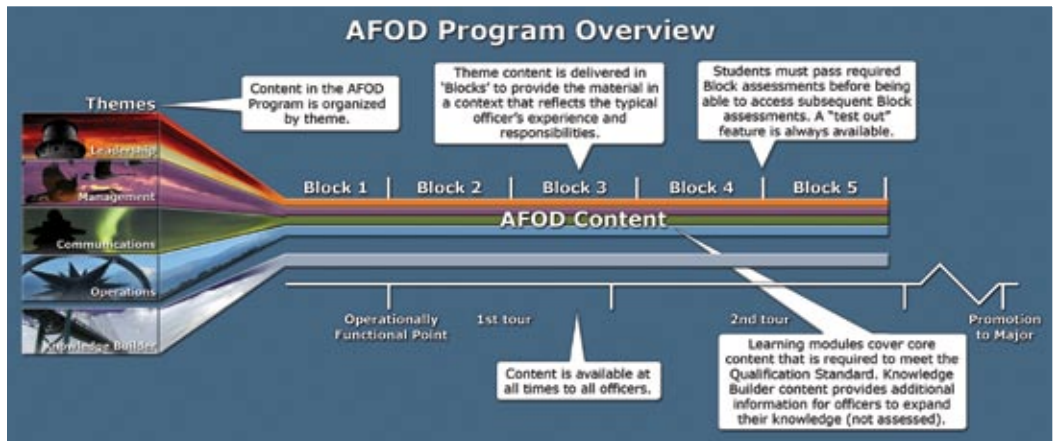
By Major Jamie Davidson and Major Rainer Wosnitza

A program aimed at delivering the professional development education for officers of Canada's Air Force is currently being developed.

The Air Force Officer Development (AFOD) Program replaces the former Air Force Officer Basic Course and Air Force Officer Advanced Course. Unlike its predecessors, AFOD uses the blended learning methods of distance education and traditional in-house residential training. This is a new direction for professional development education for Air Command. Although the program is designed to develop Air Force officers, students quickly note that flexibility underpins the curriculum's structure and application.

Although it may vary from one classification to another, the OFP occurs when a junior officer achieves occupational status during their first operational tour. Block 2, currently available, is optimally completed during the initial two years of an officer's first occupational posting. Block 3 and Block 4 material is tailored to meet the needs of officers approaching the end of their first tour and the beginning of their second tour. Block 5—the one and only residential component—is three-weeks in duration. Here, material learned through Blocks 1 to 4 is synthesized and applied during classroom instruction and practical exercises.

- All AFOD content is organized into one of four themes: leadership, management, communications or operations.



AFOD is organized into five blocks. Block 1 is administered between initial classification training and the point where a junior officer reaches the operationally functional point (OFP).

- Officers may access the program material at any time; however, only registered students will have access to assessment vehicles associated with the content.



- Based on the requirements of a typical junior officer, the block structure was developed to allow a student to progress through the content in a sequential manner. AFOD students, graduates or any other Canadian Forces (CF) member registered with an approved online distance-learning account has access to course content at any time. Learning expectations and any necessary student assessments are managed through the block structure.
- The “Test Out” option allows students possessing the requisite knowledge to progress quickly without having to complete a learning module. This feature recognizes that officers do acquire knowledge through other means and places emphasis on the knowledge, vice how the knowledge is obtained.
- Material stressed in each learning module is always the core information necessary to meet the expected standard. Additional in-depth content also forms part of each module.

AFOD material is developed based on a tailored approach to individual learning requirements. The ongoing learning process and linking professional military education to operational objectives underpins course content.

## Tailored Approach

- Students are provided a recommended “Learning Path,” the preferred sequence to study course material.
- Material access is student-controlled.
- Control of scope: students are able to concentrate effort on any material they wish.
- Control of depth: students can access additional levels of detail, and thus exceed requirements.
- Canadian Forces School of Aerospace Studies (CFSAS) enforces the standard and monitors progress to ensure minimum expectations are met.

## Ongoing Learning Process

- The program consists of ongoing part-time study, spanning years rather than being a discrete training event or course.
- AFOD reinforces the CF Officer Professional Military Education (OPME) Program content, rather than duplicating it.
- Content is accessible at times best suited to meet job requirements.
- Content is delivered in smaller amounts with greater frequency to assist in material retention and personal interest.

## Linking of Professional Military Education to Operational Objectives

- Learning material is provided in context of operational activities, ensuring relevance.
- The program is designed from a “systems” perspective, emphasizing how material is interrelated. Linking AFOD content to the functions, roles and capabilities of the system allows the student to operate within the system more effectively.

Although AFOD is divided into blocks, core content spans the entire program. For example, leadership material—core content common to each block—increases in scope and depth as a student advances through the blocks. The same process exists in the three other core AFOD themes: management, operations and communications. The block structure of the program allows the organization of content within time, and themes allow the organization of the content within topics.

## Student Feedback – AFOD Block 2

Readers may be aware that Block 2 is already well underway. To date, 427 students have enrolled, with 144 graduates. Captain Jodi Jane holds the distinction of being the one-hundredth graduate. Captain Jane completed all requirements on 13 August 2008. She did so while serving as a deployed CC130 navigator to Camp Mirage and Kandahar airfield.



Block 2 serials start every two months with 50 students per serial. Student feedback, such as the following, reflects the quality of the program:

**I am pretty impressed with the courseware so far. As an instructor, I am very pleased to see how interesting and well developed this package is.... I find it so interesting that my wife and kids have to tell me to take breaks.**

AFOD students want to be challenged and are not motivated through material requiring rote learning. In addition to the effort we put into our course material, we spend considerable time and effort developing the “Quizzes and Challenges.” Here is one example of a student’s perspective of the testing material:

**It is about time the pass marks for military courses were raised, the time limits not so generous and the question answers not verbatim quotes from the study material.**

The AFOD Program has been seen to be a model of what language-of-choice training programs should entail. All serials are fully bilingual. AFOD allows students to toggle between English and French at any time, there is no need to enrol in a French serial or an English serial. A comment received from a student stated:

**I have to say that the modules are actually very well translated. Actually, it is the best translation I have seen in a CF document. Everything makes sense and the wording is accurate.**

CFSAS courseware developers appreciate that most AFOD students are familiar with distance learning (DL). CFSAS is committed to presenting the highest quality DL experience possible and was pleased to receive one student’s feedback worded as follows:

**...likely the best example of e-learning that we have in the forces to date.**

## Our Multi-Media Lab

Managed and supervised by experienced Air Force officers, the AFOD multi-media lab is staffed by several enrollees of the Federal Student Work Experience Program. Their graphic-designing skills and technological savvy create curriculum features that truly enhance the AFOD learning experience. As all current AFOD material is offered exclusively online, CFSAS relies on the technical expertise, creativity and artistic panache of these talented students.

## AFOD Block 3

End October 2008 was the launch date for Block 3. This block provides greater depth to the theme material presented earlier in the program. Block 3 is more engaging visually and more technically sophisticated than Block 2. An introductory video explains that, in addition to continuing presentation of the material in themes, Block 3 courseware is divided into a learning path of three broad perspectives: the Environmental Perspective, the Systems Perspective and the Team Perspective. This division was chosen because Canada’s Air Force does not usually operate in isolation, but rather as one element of a broader effort. A second Block 3 improvement is the use of video hosts to guide students through the learning path and courseware. Block 3 hosts explain what to expect and emphasize key material in each module.

The Environmental Perspective presents a brief outline of how our comrades in the land and sea elements operate. This perspective begins with a Quick Look module, based upon the Kosovo Air Campaign. The Quick Look’s goal is a timely review of the main concepts introduced in Block 2. The AFOD development team is particularly pleased with this project and knows students will appreciate the Quick Look as a useful and informative tool. The second module of Block 3 is titled “Operating for Effect,” and introduces new terminology and concepts. The subsequent two modules,

titled “Boots on the Ground” and “Ships at Sea,” focus upon Canada’s Army and Navy. Each examines basic concepts of its respective element and how both the Army and Navy are organized to fight.

The Systems Perspective examines military operations with an emphasis on how the Air Force gets its job done, and how it supports the other two elements. This perspective is presented based on the five doctrinal functions of aerospace power: Sense, Shape, Move, Sustain and Command. When completed, students will fully appreciate how the Environmental and Systems Perspectives emphasize operations.

The final perspective of Block 3 is the Team Perspective. This perspective focuses on people and teamwork and leverages content from the management, communications and leadership themes. This perspective addresses the fact that Air Force personnel generally work in teams, whether as flight crew, ground crew, staff, planning cells and others. The first examination is of “individuals of a team” and consists of a look at teams from their most basic composition—their individual members. Once this

is done, the focus is on the team as an entity through “a team of individuals.” The objective of the Team Perspective may change the way officers perceive teamwork and will increase the chance of ensuring their team is a high-performance team.

## Conclusion

While completing AFOD is now mandated as part of the professional development requisite for advancement to the senior officer level, there are many other good reasons why junior officers are encouraged to register for the AFOD Program. Chief among these reasons is the fact the material is very relevant. The AFOD course development staff is composed of knowledgeable, experienced officers, each with at least two decades (some with three) of pan-Air Force experience. Many of the lessons they learned during their extensive careers are integrated in the syllabus. Simply put, knowing the material in this program will make you a better officer. ■

**Link to the AFOD website:** [http://17wing.winnipeg.mil.ca/cfsas/afod/main\\_e.htm](http://17wing.winnipeg.mil.ca/cfsas/afod/main_e.htm)

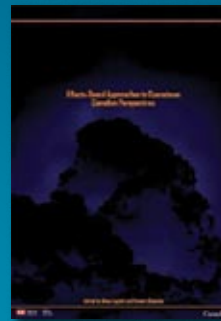
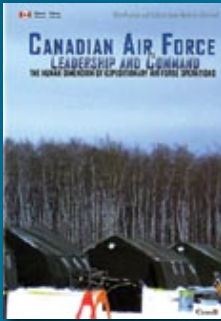
**Major Jamie Davidson is currently serving as a course development officer for the Air Force Officer Development Program at the Canadian Forces School of Aerospace Studies in Winnipeg. He has five operational flying tours as a search and rescue pilot, a staff tour at NDHQ Ottawa, and served at the Joint Rescue Coordination Centre in Esquimalt as an aeronautical coordinator.**

**Major Rainer Wosnitza, a transport air navigator on staff at the Canadian Forces School of Aerospace Studies, is employed developing Air Force Officer Development course content. He has served two previous instructional postings at the Canadian Forces Air Navigator School, one posting to 1 Canadian Air Division Headquarters as a staff officer and two operational tours as a CC130 Hercules tactical air navigator. Prior to earning his wings, he spent eight years as a communications researcher, serving tours of duty twice at CFS Inuvik and CFS Alert, and once each at CFS Bermuda and the Communications Security Establishment in Ottawa. He holds an undergraduate degree from the University of Manitoba, majoring in history.**

## List of Abbreviations

AFOD	Air Force Officer Development	DL	distance learning
CF	Canadian Forces	OFFP	operationally functional point
CFSAS	Canadian Forces School of Aerospace Studies	OPME	Officer Professional Military Education

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