CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES
CSC 30 / CCEM 30

MASTER OF DEFENCE STUDIES (MDS) THESIS

UNIT COHESION
A STUDY OF LIFE IN A NAVAL SHIP

By/par LCdr/capc Russell Stuart

Abstract

Operation Apollo represented the Canadian Navy's single largest deployment since the Korean War. The science of organizational behaviour serves as the means to examine the human factor in naval shipboard life during this deployment and introduces the concepts of needs, motivation and esprit de corps and describes their effects on unit morale, cohesion and ultimately combats effectiveness.

This groundwork establishes the criteria that will be applied to a brief look at the incidents in 1949 in HMC Ships Magnificent*,* Athabaskan *and* Crescent *as a demonstration of the results when unit cohesion breaks down. Finally, in reviewing the essential qualities that are common requirements of unit cohesion, this paper will demonstrate the importance of unit cohesion as it applies to the naval units that deployed on Operation Apollo commencing in October 2001 by measuring the disciplinary and repatriation statistics as a means to determining unit cohesiveness and combat effectiveness.* Unit

Cohesion
A Study of Life in a Naval Ship

> *The Naval Officer should be the soul of tact, patience, justice, firmness, charity and understanding. No meritorious act of a subordinate should escape his attention or be left to pass without reward, even if the reward be only on word of approval. He should not be blind to a single fault in any subordinate; at the same time he should be quick to distinguish error from malice, thoughtlessness from incompetency and well-meant shortcoming from heedless and stupid blunder. As he should be universal and impartial in his rewards and approval of merit, so should he be judicial and unbending in his punishment or reproof of misconduct.*
>
> *John Paul Jones, Scots-American Admiral 1776*[1]

A Canadian CH124(A) Sea King helicopter, code name *Black Horse*, is one hour into its two and a half hour sortie. The crew's mission is to identify merchant vessels in the Gulf of Oman. The rotating blades of the helicopter provides little reprieve from the sweltering 50 degree Celsius heat for the four crew members as they circle a merchant vessel they had previously gained contact with by radar. The Air Navigator, a "back seater"[2] prepares his report for their mother ship, HMCS *St John's*, a Canadian Halifax class frigate, code name *Trapper John*.

"*Trapper John* this is *Black Horse*. Amplification track 2304. Vis ID Bulk Carrier in ballast. Ship's name *El Tolquene*. I spell Echo Lima, new word, Tango Oscar, Lima, Quebec Uniform Echo November Echo, *El Tolquene*. Port of registry Libya, over."

---

[1] *The Report on Certain "Incidents" Which Occurred On Board H.M.C. ships Athabaskan, Crescent and Magnificent and on Other Matters Concerning The Royal Canadian Navy*, Rear Admiral E.R. Mainguy, Chi(i)Tj10.02 0 0 10.02 35901548 131.82001 Tm(O)Tj10.02 0 0 10.01637663953 131.82001 Tment

Back onboard St John's the Shipboard Air Controller (SAC) copies the information and passes it to a team closed up in the operations room. The SAC reports back to the helicopter, "Roger *Black Horse*, copied all, standby, over."

The team in St John's analyzes the information and the order is given to the helicopter to hail the vessel. "*Black Horse*, this is *Trapper John*, hail vessel *El Tolquene*, over."

The team in the helicopter starts the hailing process. "Motor Vessel *El Tolquene*, in position 25° 23'North 057°13'East this is coalition helicopter calling you VHF channel 16, over." After several attempts that include a close pass by the bridge of the merchant ship by the helicopter the El Tolquene responds, "Coalition helicopter, this is *El Tolquene*, over."

The radio communication continues. "Good day sir. We would like to ask you a few question." The *El Tolquene* passes the information that includes their last port of call, their next port of call, their owner's name, the number of crew on board, their cargo and if they have any animals onboard. All this information is passed back to the *St John's*.

Having verified the information passed by merchant vessel, the El Tolquene is cleared. "El Tolquene, this is coalition helicopter, thank you for your cooperation sir, Have a nice journey." Black Horse proceeds to their next contact.

This sequence of events, although not factual, represents a typical day for the men and woman of the Canadian Forces (CF) that were deployed to the Gulf of Oman and Arabian Gulf in support of *Operation Apollo*, Canada's contribution to the war on

terrorism. This relationship relied upon strong leadership in a complex environment, teamwork across distances and effective communication and problem solving. A common thread among these critical factors was the human dimension. This ability for deployed naval units to achieve this level of efficiency was illustrative of the military cohesiveness in a naval context.

Unit cohesion is defined as "the tendency of groups to stick together in pursuit of common goals."[3] This concept probably dates back to prehistoric time when hunting bands had to use teamwork, coordination, mutual aid and small group actions to bring down large game to obtain meat and raw materials for their clan. As society developed so too did its military forces. Warfare became more organized and unit cohesion became more important as a strategic technology for overcoming larger forces. Cohesion was also the basis for various maneuver tactics to overcome or mitigate the threat of naval ships which varied in time from tall ships, to steam driven power plants, to Dreadnaughts, to aircraft carriers and the advent of missile technology. For example, a tall ship, as a mobile fortress with rows of cannons effectively limited the value of a defenseless merchant ship. The tall ship lost its value in turn, like a fixed fortification, due to the advent of steam. Nonetheless, the concept of the cohesive and organized combat unit is still of great value for the development of tactics and the synchronization of individuals and teams.

[3] A.V. Carron, "Cohesiveness in Sports groups: Interpretation and consideration," *Journal of Sport Psychology*, 3 (1988): 124.

There has been a rise of interest in military unit cohesion in the last few decades that can be attributed to four distinct situations. Firstly, improvements in technology including more powerful and accurate weapons capable of continuous area saturation has threatened a drastic increase in stress causalities. Secondly, many militaries faced potential adversaries that outnumbered them in people and weapons thus doctrine development called for combat multipliers. A third situation was the reflection on the war in Vietnam. It was argued, rightly or wrongly, that the policies concerning personnel at the time, especially the individual replacement program, adversely affected unit cohesion and hence military effectiveness. The military in turn sought personnel policies that might enhance effectiveness. Finally, there was a situation concerning organizational design. Cohesion was of interest because it was relevant to the functional organization of ships that were smaller, moderately armed, and had fewer crew that could be trained and deployed to trouble spots around the world in short time and operate with a high degree of teamwork and coordination to offset their limited size and firepower.[4]

Within military units the basic concepts of unit cohesion include "leadership, sense of purpose, pride, mutual trust, skill and fitness, confidence, teamwork, primary group functions, and control of the group over the individual."[5] These components are important because they provide a coherent view of the group and cohesion. The purpose of the group is the cornerstone to its culture and values that form the basis for applicable laws, rules, norms and identities. The leaders give direction, enhance motivation, and

[4] Guy L. Sibbold, "The Evolution of the Measurement of Cohesion," Military *Psychology* Vol 11, Issue 1 (1999). [Article on-line]; available from http://web9.epnet.com / citation.asp; Internet; accessed 16 March 04.

[5] Ibid.

support the purpose, culture, and values of the group. The group members, on the other hand, increase their skills and teamwork, which develops their pride, trust, and support for their leaders. Collectively, all these factors allow for the social control necessary for the integrity of the group. This essay focuses on the human factor in naval shipboard life during deployed operations and argues that there are many measures of operational performance but that unit cohesion is among the most essential requirement for combat effectiveness.

In examining the human factor in naval shipboard life during deployed operations, this paper will introduce the concepts of needs, motivation and esprit de corps and describe their effects on unit morale, cohesion and ultimately combat effectiveness. The first step will be to define the science of organizational behaviour as a means to study unit cohesion within a naval ship. Secondly the work of Janowitz and Maslow on "needs" will be examined as it applies to shipboard life. Building on Janowitz's and Maslow's work, the concept of motivational phenomena and its effects will be presented along with ten tenants for effective unit morale. Having established the development of unit morale, the concept of esprit de corps will be presented with the intent of identifying a means of measuring unit cohesion. Each of these core areas will support the thesis of this paper that posits unit cohesion is among the most essential requirement for combat effectiveness. This groundwork will establish the criteria that will be applied to a brief look at the incidents in 1949 in HMC Ships *Magnificent*, *Athabaskan* and *Crescent* as a demonstration of the results when morale and esprit de corps break down. Finally, in reviewing the essential qualities that are common requirements for unit cohesion this

paper will demonstrate how they apply to the naval units that deployed on Operation Apollo commencing in October 2001. This essay will examine the human factor in naval shipboard life during deployed operations and conclude that there are many measures of unit effectiveness but that unit cohesion is among the most essential requirements for combat effectiveness. The first step of this discussion is to look at the concept of organizational behaviour.

Organizational Behaviour

Organizational behaviour is the science that examines the interaction of the human dimension[6] and forms the foundation for the discussion of the human factor in naval shipboard life during deployed operations. Organizational behaviour is a behavioural approach to management. It comprises of a study of people at work. It views their actions, attitudes skills and culture. It also examines the process of management and the formal structure of the organization. In looking at the formal structure, the organizational context is studied. Specifically, the occupations of the organization, location and demands are examined. Finally, the technology and processes in the execution of work form the basis for the study of organizational behaviour. The science studies the interaction between these factors witc39.aimh todim

ctseicencs. Idtgawizatifaci 2.0ne nin

cultural systems. Organizational behaviour also involves a background in economics, political science and law and has links to other applied sciences that might impact on or deal with people at work such as computing, industrial design or occupational health.[7]

"Needs"

Malcolm Janowitz is credited as being a pioneer in the study of Organizational Behaviour on armed forces and society.[8] As a behavioral and social scientists, Janowitz conducted extensive research into military unit cohesion. Although army focused, his concepts and ideas on organizational behaviour, needs, motivation and unit cohesion are applicable to life onboard a naval vessel. His study in 1948 into unit cohesion examined German Army prisoners of war during the Second World War. The study did not directly define unit cohesion as the objective of the analysis, instead using words such as "degree of stability", "degree of organizational integrality and fighting effectiveness", and ability "to avoid social disintegration".[9] His basic hypothesis was that unit cohesion was based on the integrity of the soldier's primary group (squad or section) and that it met their basic needs for food and supplies, that it provided affection and esteem from both leaders and peers, that it gave the soldiers a sense of power, and that it regulated the soldiers relations with higher authority. Janowitz hypothesis was that by providing for the soldiers' primary needs, then the self-concern of the soldiers would be minimized in

[7] Ibid

[8] , James Burk, "Morris Janowitz and the Origins of Sociological Research on Armed Forces and Society." *Armed Forces and Society* 19, 2 (Winter 1993): 168.

[9] Guy L. Sibbold, "The Evolution of the Measurement of Cohesion," . . ..

battle.[10] This same hypothesis can be applied to the requirement to provide for a sailors' primary needs, thus minimizing the self-concern of the sailor and allowing him or her to remain focused on their primary task at sea. It is this concept of needs that Janowitz discussed in his research that forms the basis of the Canadian Forces (CF) doctrine into organizational behaviour and motivation and which will lead to the discussion on unit cohesion.

Published in 1973, CFP 131(2) *Leadership: The Professional Officer* contains the CF doctrine on needs. Similar to the concepts proposed by Janowitz, CFP 131(2) details Maslow's Hierarchy of Needs. Maslow's hypothesis in his theory on the Hierarchy of Needs proposes that needs are organized in a priority basis. As the basic level of needs become satisfied, the higher needs dominate and become the operative as the motivator. Maslow proposed a five level needs priority. The first level, Basic Psychological Needs include necessities such as hunger, thirst and sleep. The second level in Maslow's hierarchy is Safety Needs. These include security and protection from danger. The third level is Social Needs. Belonging, social activity and love are all part of this third level. Self Esteem Needs are the fourth level of the priorities. Self-respect, status and recognition form this level. The final level is Self-Realization Needs. Growth, personal development, and accomplishment comprise this final level of needs. Maslow's belief was that there was a definite sequence to his needs levels. The second level of belief does not dominate until the first level has been relatively satisfied and the third level does

[10] Morris Janowitz, *Military Conflict, Essays in the Institutional Analysis of War and Peace.* (California: Sage Publications, Inc., 1975), 181.

not dominate until the first two levels have been satisfied.[11] Like Janowitz, Maslow's theory proposes that if you satisfy an individual's needs, then the individual is able to achieve more and be more effective. Applying this theory to the shipboard environment, providing for a sailor's primary needs minimizes the self-concern of the sailor and allows him or her to focus on higher needs. Maslow's theory is not without criticism. Even CFP 318-15/Pt 001 accepts that "Maslow warned that this hierarchy could be upset by circumstances. Furthermore, research has failed to confirm the existence of such a classification or hierarchy."[12] In a more practical sense, individuals on hunger strike have forgone lower levels of needs in pursuit of higher ideals and wants. The same can be said from a military context where individuals have worked on very little sleep and in the discomfort of a ship in rough weather thus their needs at the lower level of Maslow's hierarchy are not satisfied despite higher level wants being realized. Recognizing the deficiencies in both theories, the basic premise of needs as described by both Janowitz and Maslow is sound and forms the basis for the discussion of motivation and unit cohesion.

Motivation and Morale

Building on Janowitz's and Maslow's theory of needs is the concept of motivational phenomena. Within the confines of a ship everyone has needs. These needs are modified by the environment to create wants. Wants, combined with incentives, lead

---

[11] Canada. Department of National Defence, *LeadershipVolume 2 The Professional Officer.* (Ottawa: Chief of the Defence Staff, 1973), 4-2.

[12] J.W. Hammond, "First Things First: Improving Canadian Military Leadership," [article on-line]; available from http://www.dnd.ca / ethics / documents / conf1998 / hammond_e.htm; Internet; accessed 15 March 2004.

to performance.[13] To achieve this there are factors such as rewards, punishment, justice and group dynamics at play influencing the behaviour of individuals. The officers and crew in a ship must be motivated to be successful. The combat effectiveness of a ship can be directly affected by the attitudes of the people that serve on board and their reaction to various situations. Motivation will occur by attending to the needs of the individual. The proper motivation of a ship's company is necessary and will result in good morale. In understanding morale, there are ten tenants that when properly applied, will contribute to high morale. The first requirement is to have a common purpose, a trait that relates directly to the first Principle of War – Selection and Maintenance of the Aim. Common purpose takes on special importance within a ship where the idea of working together in teams to achieve short-range goals will initiate the overall common objective. The second requirement to achieving high morale is strong leadership. Within a ship, leadership needs to be set by example. By not adhering to the established policies the leaders can destroy morale. Discipline is the third tenant necessary for high morale. It is important that discipline is administered equally amongst everyone in the ship and that there is not a perception that preferential treatment is being applied to certain individuals. The fourth tenant for high morale is self-respect. Self-respect means that individuals have a sense of belonging and that their contribution to the group and the leader is appreciated. This applies equally to the new sailor joining a ship for the first time to the seasoned sailor who brings extensive experience. In maintaining the respect of individuals within a unit, praise should be given promptly and publicly while criticism should be made intelligently and in private. The fifth requirement for high morale is

[13] Department of National Defence, *LeadershipVolume 2 The Professional Officer*. . .,5-1.

pride. Pride is closely tied to self-respect. Once self-respect has been achieved, then pride in one's unit is possible. Sports competitions and group activities help build pride. In all instances maximum participation should be encouraged. Comradeship is the sixth tenant for good morale. Although difficult to quantify, comradeship is best described as a sense of loyalty, a sense of family and a sense of humour within the group. Comradeship gives the ship a reserve of strength during difficult times. Mutual confidence is the seventh tenant for good morale. The respect individuals display towards each other with regards to their professional ability encapsulates mutual confidence. Mutual confidence must exist among all ranks. Subordinates must know that their concerns are being properly represented to higher echelons and supervisors must refrain from criticism of seniors if mutual confidence is to be achieved. The eighth requirement for high morale is the ability to provide for individuals spiritual needs. Within the context of a ship, individual personal beliefs need to be secondary and leaders need to encourage and support anything that enables and strengthens the ship's company to perform their tasks with maximum ability. This includes arranging meetings with service chaplains and organizing opportunities for participation in church activities. Dependents well being is the ninth tenant for maintenance of high morale. From the perspective of a ship, individuals must know that there is a support mechanism at home to help with family needs. If left unattended, these problems can escalate and adversely affect morale and efficiency. The final requirement for the maintenance of high morale is the individual's comfort and well being. Work at sea is difficult. It often involves long hours in arduous conditions. It is paramount for the maintenance of morale that individuals know why their work is important and that the people they are working for have a sincere interest in

the work they are doing. Although material comforts are desirable and important, there are occasions when individuals have to do without and they need to understand why. Knowing that their leaders are doing their best for them, individuals will have the confidence and be prepared to endure the hardship and discomfort with no adverse affect on morale.[14] These tenants of morale combine to form esprit de corps.

Esprit de Corps

Morale and esprit de corps are two separate entities and can exist independently of each other. Where we have already discussed morale and the tenants that combine to form group cohesion, esprit de corps is generally used in connection with armed forces and within the military.[15] The relationship between good morale and esprit de corps is that good morale provides the necessary climate for the development of esprit de corps. Esprit de corps is dynamic and thrives on the desire by the unit to excel and on the determination that the particular unit is unmatched in the performance of their duty. Esprit de corps is reflected in the general outward appearance of a unit. The individuals dress, deportment, discipline and pride are all indications of high esprit de corps.[16] As a measure of the effectiveness of a unit, there are two reliable indicators about a unit's morale and esprit de corps. Indications of a decline in morale are an unusually high increase in minor service offences and an increased rate of requests for transfers to another military unit.[17] In each instance work goals may be achieved, but the manner in

[14] Ibid, 8-4.

[15] Ibid, 8-5.

[16] Ibid, 8-5.

[17] Ibid, 8-5.

which they are achieved leaves much to be desired. Deterioration in morale will have a negative impact on the unit's esprit de corps. An examination of the causes for low morale and loss of esprit de corps can be attributed to a lack of confidence in the leadership, conflict among individuals within the unit, the presence of individuals that hamper the unit performance, a rapid turnover of personnel (especially in key leadership positions) or a lack of proper recognition of unit achievement. Within an operational unit morale and esprit de corps need to be developed on three levels. Individually and as a group people need to be motivated thus producing a fighting unit with admirable esprit. To achieve this the needs, feelings and attitudes of individuals need to be recognized.

Operational Performance

It used to be said that a ship was known buy he boats. The tradition stemmed from the days of sail when large ships would anchor in harbour and individuals proceeding ashore would travel by small boat. If the boat's crew were well turned out and the boat was in good repair that usually meant the ship maintained a similar standard. Of more recent times, the saying has been amended to say a ship is known by her correspondence. A well-written letter, properly formatted, reflects the pride the unit takes in their performance but clearly this is not the only means to measure a unit's combat effectiveness. Reports on planned and corrective maintenance, weapons systems and teams accuracy and individual and collective training are but a few of the indicators of a ship's operational performance. Each of these indicators rely on individuals to ensure a high standard is maintained. Maintaining that high standard is difficult if the unit is not cohesive. In order to be cohesive a unit must have strong esprit de corps and high

morale. In order to have high morale, the needs of the individuals on board need to be addressed. Therefore, the human factor in naval shipboard life is critical to operational performance and unit cohesion is among the most essential requirements for combat effectiveness.

THE MAINGUY REPORT

The Mainguy Report was commissioned in 1949 to investigate three incidents that occurred in HMC Ships *Magnificent*, *Athabaskan* and *Crescent*. This study provides historical background and demonstrates that the concepts of needs, motivation and esprit de corps affect unit morale, cohesion and ultimately combat effectiveness. In each instance a series of events led to sailors or airmen refusing to report for duty. In examining the events that resulted in the Report on the Incidents, firstly a review will be conducted to examine the cause of discontent in each ship. Secondly, the causes will be examined against the criteria for needs, motivation, esprit de corps, unit morale and unit cohesion. The analysis will conclude that the needs of the sailors were not being met and that this resulted in low unit cohesion that in turn adversely affected combat effectiveness.

The discontent in the *Magnificent* was attributed to three specific areas of concern. Firstly was the ineffectiveness of the Executive Officer when dealing with the other department heads. The problem was allowed to progress to the point that the criticism and dissention was known throughout the ship. The second complaint was that expected periods of leisure had been cancelled. The ship's program both at sea and in

port had been changed at short notice and resulted in individuals either being called at short notice to report for duty while at sea or for certain individuals to loose shore leave while in port. The reason for these short notice changes was not adequately explained to the crew thus further exacerbated the situation. The third concern in the *Magnificent* was a lack of communication from the Captain and the Executive Officer to explain the object of the cruise and the purpose of the operations with the British fleet. These three concerns resulted in a revolt by the crew while at sea when the flight deck handlers refused to leave their mess deck. The Captain, Executive Officer, Commander (Air) and master at Arms visited the mess deck and the Captain explained that a mass statement of grievance or mass action to overcome grievances would not be accepted. The Captain then informed them of the proper procedures to follow for stating grievances. Flying stations were subsequently ordered and it was obeyed by all ratings.

In the case of the *Athabaskan*, the complaints centered on the strict enforcement of dress standards at a time when other ships were not subject to similar regulations. Ship's routine was also not consistent with the standard being maintained by the fleet. While alongside, some ships were maintaining a tropical routine that meant the work day started earlier but that work stopped at 1300. This was not the case in the *Athabaskan* where the crew was expected to work full days. Due to this diversity in the standard being maintained in the *Athabaskan* and the standard expected of the other ships in the fleet, the sailors felt they could not retain their self-respect and pride and resulted in the revolt. The investigation criticized the officers and in particular the Executive Officer for making unreasonable demands and minor criticisms and refused to listen to any

explanation. These circumstances resulted in a mass revolt by the junior ratings that locked themselves in their mess deck. The situation was only resolved when the Captain and Coxswain were permitted to enter the mess deck and meet with the crew. The crew resumed their duties after their meeting.

In the *Crescent,* discontent resulted in three requests. Firstly the crew requested the First Lieutenant relieve the existing Executive Officer. Secondly, the crew requested the Welfare Committee be allowed to function and not always be vetoed by the Captain, and thirdly, the crew requested a definite routine be established that would not change every few days. This discontent resulted in mass revolt, and again certain members of the crew refused to report for duty. The incident was only resolved after the Commanding Officer met with a spokesperson from the mess deck.[18] Having reviewed the events that ultimately culminated in the sailors and airmen of the respective ships refusing to report for duty, the discontent will be analyzed against the tenants for motivation.

There is a common theme among each of these incidents. In each case the needs of the sailors were not being addressed. In the case of the Magnificent the ineffectiveness of the Executive Officer when dealing with the other department heads was a breakdown of the leadership within the ship. As well the comfort and well being of the sailors was not being met when periods of leisure were cancelled at short notice without a proper

[18] Mainguy Report *The Report on Certain "Incidents" Which Occurred On Board H.M.C. ships Athabaskan, Crescent and Magnificent and on Other Matters Concerning The Royal Canadian Navy*, Rear Admiral E.R. Mainguy, Chair. . ., 16.

explanation. Finally, there was clearly a lack of common purpose with the failure of the Captain and Executive Officer to properly explain the objective of the cruise and the purpose of the operations with the British Fleet.

Lack of self-respect was the primary cause of the concerns in the *Athabaskan*. The disparity between the expectations placed on the crew in the *Athabaskan* as compared to those of other ships for both the standard of dress and the ship's routine while alongside in foreign port resulted in the *Athabaskan's* crew feeling they could not retain their self respect and pride and resulted in the revolt. The other breakdown on board the Athabaskan was the poor leadership. The report directly criticized the Executive Officer for making unreasonable demands and minor criticisms and refusing to listen to any explanation.

On board the *Crescent* the failure to meet the needs of the sailors was attributed to two areas. Firstly, the leadership of the Executive Officer was of sufficient concern that the sailors requested he be relieved. Secondly, the individual comfort and well being of the crew was not being properly administered when the Commanding officer routinely vetoed the recommendations of the Welfare Committee and failed to establish a definite routine that did not change every few days. The caused for the discontent in the three ships varied significantly but the common result was that the senior leadership failed to meet the needs of the sailors. This resulted in poor motivation and affected unit cohesion. The end result was that the unit's combat effectiveness suffered.

In each instance the crew did not follow orders yet no disciplinary action was taken. As detailed in the Mainguy Report, there was some confusion in the minds of the men as to the nature of the acts in which they participated. In the great majority, however, they knew that what they did was at least technically a mutiny.[19] The Report addressed the absence of punishment for acts of insubordination. The Report noted that the ships were all far from their home bases when the incidents occurred. The officers concerned handled the situation with humanity and wisdom. In each instance, the Commanding Officers felt the incidents were in the nature more of a culmination of petty grievances than a deliberate act of mutiny. The report was strong in its recommendation that any recurrence of such incidents be promptly and severely punished.

The incidents contained in the Mainguy Report serve to illustrate the importance unit cohesion and the results when it is not achieved. The discontent amongst the crew was a direct result of a breakdown by the organization to meet the needs of the individuals. This resulted in low morale and clearly unit cohesion was not present. Until the time of the incidents, each ship was capable of achieving its mission, but the manner in which they operated left much to be desired. Sweeping changes[20] have occurred as a result of the incidents in the *Magnificent*, *Athabaskan* and *Crescent and* Operation Apollo serves as a example of the Navy's commitment to meet the challenges.

---

[19] Ibid, 23

[20] In addition to the implementation of the recommendations presented in the Mainguy Report, the Report of the the Ad Hoc Committee on RCN Personnel Structure chaired by Commodore E.P. Tisdall in 1957 and The Report of the Ad Hoc Committee on Naval Objectives chaired by Rear Admiral J.V. Brock in 1961 serve as examples of the measures taken to amend the Navy's organization as a result of the incidents in *Magnificent*, *Athabaskan* and *Crescent*.

In examining the events that resulted in the Report on the Incidents, firstly a review to examine the cause of discontent in each ship was conducted. Secondly, the causes were examined against the criteria for needs, motivation, esprit de corps, unit morale and unit cohesion. The analysis concluded that the needs of the sailors were not being met and that this resulted in low unit cohesion that in turn adversely affected combat effectiveness.

CASE STUDY - OPERATION APOLLO

Having established that unit cohesion is among the most essential requirements for combat effectiveness, these elements will be applied to the naval units that deployed on Operation Apollo, Canada's naval contribution to the campaign against terrorism. The events of September 11, 2001 when hijacked airplanes crashed into the World Trade Center in New York and the Pentagon outside Washington and a fourth hijacked plane crashed into a field in Pennsylvania served as the catalyst to move the Canadian Government to commit naval forces to the War on Terrorism. On October 8, 2001 the Minister of National Defence, Art Eggleton ordered the frigate HMCS *Halifax* to detach from the NATO Standing Naval Force Atlantic where she had been on a four-month assignment and proceed to the Arabian Sea. Not far behind on October 16, 2001 the Canadian Task Group 307.1 consisting of the flagship *Iroquois*, and the frigate *Charlottetown* and the tanker *Preserver* along with their respective Sea King helicopters slipped and proceeded from Halifax harbour to join the *Halifax*. In total sixteen out of a total of 18 major warships deployed on the operation that ended with the return of *Calgary* on December 15, 2003. In excess of 4000 sailors (95% of the Canadian Navy's

sea going personnel) deployed for six months and in some cases individuals deployed more than once. The Canadian units accounted for over 20,000 hailings of merchant vessels that represented 46% of the coalition's total effort and conducted 600 boardings of suspicious vessels that represented 50 % of the coalition's total number. In addition, thee Canadian Naval units were responsible for 500 missions to escort coalition naval vessels through the Straits of Hormuz. This deployment represented the Canadian Navy's single largest deployment since the Korean War.[21]

In examining the effects of unit cohesion on operational effectiveness, firstly the influences that had the potential to adversely affect unit cohesion will be examined. Secondly, the unique conditions of living, working and fighting at sea will be described This will establish the ground work for describing the initiatives that were taken by the navy to foster morale for the naval units that deployed on Operation Apollo. Finally, the overall unit cohesion of the individual ships that participated in Operation Apollo will be measured. The statistics of the number of Summary Trials and the number of individuals repatriated to Canada during the deployment will form the basis of the analysis. The case study will conclude that there were variances in the number of charges and individuals that were repatriated amongst the naval units that participated in Operation Apollo and that this had the potential to affect unit cohesion, which in turn could negatively impact combat effectiveness.

Influences

[21] Department of National Defence. *Operation Apollo Canada's Naval Contribution to the Campaign Against Terrorism* (Ottawa: Department of National Defence, 2004), 1.

The units that participated in this operation were placed under significant stress. The pace of operations far exceeded anything people had previously experienced. Ships deployed not knowing what date they would be returning to Canada. This not only created concern for the sailors onboard, but also created worry for family and friends back in Canada who were trying to organize their lives. Due to the operational tempo of the deployment, records were set that far exceeded previous endurance milestones including the Pacific Ocean cruiser operations during the Second World War, postwar North Atlantic weather ship duties, and NATO exercises and operations that each rarely exceeded one month in duration between port visits.[22] *Vancouver* recorded 79 days (eleven weeks) straight at sea without a break while *Charlottetown* spent 75 days and Iroquois recorded 74 days. Even when ships were in port there was little reprieve from the routine. Due to heightened security precautions, an increased number of sailors were required to remain onboard. The normal rotation for sailors while alongside in a foreign port is to remain onboard approximately once every ten days for a period of 24 hours. While onboard they form the ship's duty watch and attend to safety and security matters as well as operation of on board engineering systems that include power generation, air conditioning and shipboard lighting. Due to heightened security, this rotation was reduced to once every three or four days. This placed increased stress of individuals who had less time to decompress. For those individuals that did proceed ashore there were strict restrictions placed on their conduct. Individuals were limited to two alcoholic beverages during a 24-hour period. A curfew required that everyone return onboard

[22] R.H. Gimblett, *Operation Apollo: The Golden Age of the Canadian Navy in the War Against Terrorism* (Draft Manuscript, 2004), 32/74.

before midnight and dress regulations prevented individuals from wearing shorts ashore despite the extreme heat. The normal routine for ships is to proceed into port in company with other ships. Again due to the heightened security precautions, this was modified and the ships proceeded to port individually. Although not intended to detract from the deployment, this precaution resulted in ship's companies not having an opportunity to interact with sailors from other ships, whether they were Canadian or sailors from other nations participating in the operation. This meant that sailors only interacted with the same people in their ship and the people of the host nation that permitted the ships to visit their country therefore, during a six to seven month deployment, the only close interaction was with the same people you worked, ate, slept and relaxed. The final date when the ships would be returning home after the deployment was never known prior to the departure and the potential existed that ship's companies that had just completed a six to seven month deployment could be called upon again, after having returned to Canada, for a second deployment. This weighed heavily on individuals minds.

The nature of the deployment also introduced stress. The program varied significantly thus precluding effective long range planning. At very short notice the ship could be called upon to perform a boarding of a merchant ship or dhow or a replenishment at sea could be scheduled at all hours of the day, seven days a week. The increased security threat both at sea and alongside meant that one could never fully let down their guard. Maintaining this heightened alert increased the stress level for everyone. Operating in the Arabian Gulf and Gulf of Oman was significantly different than Canada and that introduced numerous challenges. The heat and humidity of the

region was excessive. During the summer months temperatures routinely exceeded 50 degrees Celsius. This was particularly difficult for the boarding teams and for individuals that were required to maintain a heightened focus while operating out side. The winter months brought little reprieve with only a minimal reduction to the heat. All of these challenges, when combined, contributed to the potential of causing a break down in unit cohesion that could have resulted in serious consequences similar to the events discussed in the Mainguy report. In order to better understand how a ship is designed to meet these challenges, a description of the functional organization of a ship is required.

Shipboard Organization

In examining shipboard life, the officers and crew form a social system with specific goals and formal rules to direct their activities. This relationship provides insight into the human dimension of shipboard life and a unique study from an organizational behavioural perspective. A ship requires a special skill set capable of handling the technologically advanced systems on board. A ship is also a self-contained institution capable of providing for the needs of the individuals on board. Steeped in history and tradition, the navy relies on the experiences and lessons learned from the past that help carry it through to the future. The naval environment also presents challenges for the men and woman on board. Due to the mobility of the ship there are disruptions to normal living patterns, extended periods of separation from families and home communities, and confinement and restricted activities while at sea. Life in a ship may involve excessive noise, crowding, heat stress, poor ventilation, unpleasant odors, long and irregular working hours with sleep deprivation, poor ergonomics including mazes of wiring, pipes

and ducting in living spaces and arduous and incessant routine maintenance including cleaning, painting and repair.[23] All of these stresses have an effect on health, work efficiency and job satisfaction. Life on board a ship is unique. An air officer who joined a ship after having spent 20 years with the Army put shipboard life in perspective. He was amazed that he worked, slept, ate, bathed, exercised and relaxed in a space 130 meters long and 15 meters wide. In case he was lonely there were between 250 and 300 people that shared this same space. The work routine was 12-hour shifts broken into two or three shorter parts depending on the trade. Administration, eating, sleeping, showering, exercise and relaxation were all done during the off watch and unannounced special events that required everyone's participation would routinely occur at the most inopportune time, particularly when you had just fallen asleep or were in the shower.[24]

A naval ship is unique in that its organization and defences allow it to operate independently for extended periods of time. The Commanding Officer is supported by the Executive Officer, the second in command, and the Coxswain. In addition there are six departments. The Combat Department is the largest department in the ship and is responsible for the war fighting. Primarily employed on the bridge and in the operations room the officers and sailors in the Combat Department are the operators that use the onboard sensors to control the weapons on board. The second department, the Air Department is responsible for the operation and maintenance of the helicopter. It is important to note that not all ships that participated in Operation Apollo deployed with an

[23] Nancy L. Goldman, and David R. Segal, *The Social Psychology of Military Service*. (California: Sage Publications, Inc., 1976), 68.

[24] Printed with permission from the Officer cited.

Air Department despite having the capability of embarking a helicopter. The remaining departments consist of support trades that enable the Combat and Air Departments to function. The Marine System Engineering Department is the second largest department in a ship and is responsible for the operation and maintenance of all of the machinery onboard. This includes propulsion, power generation, refrigeration, cooling, heating and fire fighting. The Combat Systems Engineering Department is responsible for the maintenance of all of the electronic equipment. This includes acoustic, tactical and communications equipment as well as the maintenance of all of the weapons systems on board. The Logistics Department plays a key role in the operation of the ship. In addition to ensuring there are sufficient stores and replacement parts on board, the Logistics Department is also responsible for the food services, finance and administration. The final Department on board is the Deck Department. In addition to providing the "Watch on Deck"[25], the sailors in the Deck Department are the specialists for seamanship evolutions including replenishments at sea, boat work and anchoring. Each department has their area of expertise in supporting the effective operation of the ship.[26]

A ship operates 24-hours a day, 365 days a year regardless if it is at sea or alongside. There is always work to be done whether it involves having the entire ship's company on board, at sea or having only ten people on board for security and safety

[25] The Watch on Deck only closes up when the ship is at sea and consists of the of the Petty Officer of the Watch, quartermaster, helmsman, throttle man, bosn' mate, lookouts and lifebuoy sentry. Their responsibility is to support the Officer of the Watch.

[26] Department of National Defence. *Ship's Standing Orders, AL5*. (Ottawa: Chief of Maritime Staff, 2001), 2-1.

while alongside in homeport. While at sea, the routine varies depending on the trade and the ship's employment. In the case of the ships deployed on Operation Apollo they remained at the second degree of readiness. This is the highest degree of readiness that can be maintained for prolonged periods of time. This meant that all weapons and sensors were available for immediate use. In the event the threat increased, the ship would be brought to the first degree of readiness, Action Stations, but at the first degree of readiness the entire ship's company are required to be awake. This level of manning cannot be maintained for an extended period of time due to the strain it places on the crew from lack of sleep. Depending on the function individuals have onboard will determine the schedule they maintain at sea. The Combat Department, Combat Systems Engineering and Deck are required to work 12 hours during a 24-hour period. During their off watch they complete any administration, eat, sleep, bathe, wash clothes and relax. The department is divided into two watches, port and starboard. Due to the high tempo of the routine while the Combat, Combat Systems Engineering and Deck Departments are on watch, the day is divided into four sections. Watch turnovers occur at 0800, 1300, 1800 and 0100 therefore operators are on watch for five hours followed by a five hour period off watch and then the schedule is repeated except the operators are on watch for seven hours followed by a seven hour off watch period. This routine is very grueling when it is repeated day after day for periods in excess of thirty days and in the case of some units on Operation Apollo, en excess of seventy days. The Marine Systems Engineering Department as well as the officers on the bridge maintain a one in three rotation. This rotation is required due to the need for the Engineering Department to maintain critical equipment on board during their off watch and in the case of the officers

on the bridge to ensure they have sufficient rest between watches due to the increased responsibility and stress as the Officer responsible for the safety of the ship. Their watches are always four hours in duration with an eight-hour period between watches. This is slightly modified in the evening when watches are reduced to two hours. This results in a total of 7 watches during the day and, due to the break up of the schedule during the two evening watches, the cycle repeats itself every three days thus individuals stand different watches each day. Although the change in watches breaks up the routine of the day, the officers and sailors that stand a one in three watch rotation wake up at a different time every day. This is very disruptive and adds to the level of stress on long deployments. The Air Department is unique in that their schedule is determined by their flying schedule. They are limited to a maximum of twelve hours of flying a day and then they require a 12-hour period of rest. The Logistics Department does not stand watches but, depending on the specific trade whether it is a cook, a steward, a supply technician or an administration clerk, their schedule will be dictated by the requirements of the day. In addition, the Logistic Depart supplement many of the individuals required for special evolutions including replenishments at sea, entering and leaving harbour and engineering rounds man. The Commanding Officer, Executive Officer and Coxswain and select senior individuals in all departments do not stand watches while at sea but are required to be present, regardless of the time of day or night, for activities that require their attention. The manpower demands of a ship at sea are extensive and there is activity, whether it is people on watch, preparing to go on watch or people coming off watch throughout the day and night. This program varies once the ship enters port and there is more opportunity for individuals to attend to personal issues including administration, rest and

relaxation. From an organizational behaviour perspective, this dynamic relationship creates a unique situation that must be closely monitored at all levels to ensure individuals are getting sufficient rest and are not being overworked.

Behavioural scientists acknowledge that this organization is less that ideal but they are at a loss to develop a better solution to the unique conditions of living, working and fighting at sea. It is continually a challenge, in different ways, for all ranks but it works.[27] This relationship generates needs that, when modified by the environment become wants. These wants, when combined with incentives lead to performance. The fighting efficiency of the ship is directly affected by the attitudes of the individuals that serve on board and their reaction to specific situations. In the case of the ships deployed on Operation Apollo, the officers and crew had to be motivated to be successful. This proper motivation of the ship's company was achieved by maintaining the officers' and crew's morale.

Fostering Morale

In order to maintain and foster morale numerous initiatives were undertaken. The first step was to establish a common purpose. This was clearly explained throughout the deployment. Information sessions were held prior to each ship's deployment for not only the sailors but also their family and friends. During these sessions, Canada's role was clearly explained. The Canadian role included the screening of the American Amphibious Readiness Groups (ARG) and Carrier Battle Groups (CVBG); escort of re-

[27] R.H. Gimblett, *Operation Apollo: The Golden Age of the Canadian Navy in the War Against Terrorism*, 32/74.

supply vessels along the Sea Lines of Communication (SLOC) routes in the vicinity of the Arabian Gulf to the Gulf of Oman; Leadership Interdiction Operations against Al-Qaeda and the Taliban; and Maritime Interdiction Operations (MIO) in support of United Nations Sanctions against Iraq. This deployment, as approved by the Canadian government, represented the largest naval commitment by Canada since the Korean War.[28] This clearly defined mission ensured that people understood why they were there and what they would be doing. At the unit level, tasks were assigned that supported the mission and people had a clear understanding that their efforts were contributing to the overall plan. This common purpose took on special importance within the ship where the idea of working together in teams to achieve short-range goals supported the overall common objective.

The second requirement to achieving high morale was strong leadership. Within a ship, leadership starts at the top with a close relationship between the Commanding Officer, Executive Officer and Coxswain. Strict adherence to established policies in not enough, particularly when there are new policies that have not been previously in affect. The leadership must ensure the policy is clearly defined and understood. This was achieved through the publication of Routine Orders and temporary memorandums. As well, tabletop sessions were required to ensure the policies were properly understood. This applied to all aspects of the operation ranging from a thorough understanding of the Rules of Engagement by the members of the Boarding Party or individuals in the Operations Room to a thorough briefing to the duty watch to ensure they understood their

[28] Department of National Defence. *Operation Apollo Canada's Naval Contribution to the Campaign Against Terrorism* . . ., 1.

responsibilities while on watch. It is only after the policies have been published and briefed that they can be enforced. Once the policy has been defined and briefed, it was essential that it be applied equally amongst everyone in the ship and that there is not a perception of bias of preferential treatment towards individuals. This was the third tenant necessary for high morale. This was achieved during Operation Apollo by ensuring established policies were enforced equally amongst everyone on board. This strict adherence to the enforcement of policy precluded the perception of bias and maintained high morale.

Everyone in a ship had a job to perform and their contribution was important otherwise they would not be there. Recognizing this meant that individuals had a sense of belonging and that their contribution to the group and the leadership was appreciated. This recognition generated self-respect, the fourth tenant for high morale. This was achieved through the public recognition for individuals for their accomplishments. The recognition ranged from Commander's Commendations for individuals who exceeded expectations in the performance of their duty to a kind word for a job well done. Self-respect also meant that individuals that were not performing were brought to task. Clearly this was not done publicly, but by identifying shortcomings individuals were aware of their performance and had a proper understanding of the situation in order to correct the deficiency.

Loyalty, a sense of family, and a sense of humour within the group all led to the sixth tenant for good morale, comradeship. Unlike most deployments that last less than

three months and involve interaction with many other sailors from different ships and navies, Operation Apollo was unique. With the average deployment lasting between six to seven months and the interaction between individuals from different ships being minimal due to security reasons, comradeship became essential to the maintenance of good morale. This sense of family gave the ship a reserve of strength during difficult times and effectively contributed to the good morale onboard.

Mutual confidence was the seventh tenant that contributed to good morale throughout Operation Apollo. This was achieved through the respect individuals displayed towards each other with regards to their professional ability. A ship is a dynamic environment with multiple skill sets. Ensuring individuals were assigned tasks that fell within their area of expertise ensured that mutual confidence was maintained. Too often individuals would volunteer to complete tasks when in fact there was others who were better equipped and trained. Ensuring the correct person for the task was assigned fostered mutual confidence and contributed to good morale.

Meeting individual's spiritual needs was the eighth tenant for good morale. A Canadian padre was embarked and visited all of the ships deployed on Operation Apollo. Although attendance at the church service was low, never rising above ten percent of the ships company, this was expected considering the busy program the ship was maintaining and the number of people that were not available because they were either on watch or asleep. It was the informal discussions that the padre had with members of the ship's company that truly benefited the morale on board. Even non-believers welcomed the

opportunity to discuss issues with the padre and this had a positive effect on the ship's morale. When there was a crisis involving a member of the ship's company and family members back in Canada, the padres were depended upon to assess the situation and provide recommendations to assist in resolving the situation. Their vast experience and professional resources were critical in resolving many difficult situations. Knowing the padres were available for a casual discussion or formal intervention greatly enhanced the ship's morale and contributed to the overall effectiveness.

Family and friends played an important role in peoples lives. The advent of email and the availability of regular phone calls home meant that all sailors were well informed of their family situation. This is only a recent innovation but it clearly demonstrated a commitment by the military to ensure families' well being, the ninth tenant of the maintenance of high morale, was achieved. This support extended beyond the ability to effectively communicate with family and friends to a network of support activities. The Military Family Resource Organization was actively involved in the support to families and friends. A committee consisting of family and friends was stood up to organize activities while the ship was away. A phone line was set up to provide families with a number they could call to get pre-recorded updates on the ship's program, arrangements were made to allow families to sent care packages, free of cost, to individuals onboard ship, and a baby sitting service was available at very reasonable rates to provide parents with a break from the responsibility of caring for children when a single parent was left with the sole responsibility. All of these measures combined to ensure the needs of families and friends were being met. Although some families chose not to avail

themselves of the services being offered, just knowing that if they were in need of help that it would be available helped to alleviate some of the tension. This greatly contributed to the maintenance of morale on board and contributed to the overall effectiveness of the unit.

Caring for individuals' comfort and well being was the tenth and final tenant for the maintenance of high morale. Life on board ship was difficult. The living accommodations are less that ideal with as many a 24 people sharing a common sleeping area and fifty or more people using the same washroom. Privacy is at a premium and work is difficult. The weather plays a major role in the well being of the individual. Rough weather at sea makes work more difficult. The long hours and unexpected demands further exacerbate the situation. Being told their work was important and that the people they were working for had a sincere interest in them was important. People were prepared to do without certain comforts if they understand why they are being asked for their sacrifice. This was clearly the case for the units that deployed on Operation Apollo.

Unit Effectiveness

The ability to address the needs of the sailors that deployed on Operational Apollo combined to promote high morale during a situation that had the potential to break down and erode unit cohesion. A breakdown in unit cohesion had the potential to negatively affect combat effectiveness. As a measurement of the effectiveness of the units that participated in Operation Apollo, a number of diff0.0 erstanaredscane b applieds. Fp

the unit's performance in comparison to other units could be measured. An example of this would be a comparison of the number of hails and boardings for each ship and draw conclusions with the units having the highest numbers being recognized as the most efficient and effective. Statistical information including the ship's recorded combat readiness statistics[29], planned maintenance status and individual and collective training status could all be applied. Common among all of these measurements is the human factor. In order to measure the human factor, esprit de corps will be analyzed. As a measure of esprit de corps, a study into the number of people charged and tried by Summary Trail and the number of people returned home early from the deployment will be examined. Each of these indicators provide insight into esprit de corps that in turn indicate the cohesiveness of the people serving in the ship and the ability of the people to accomplish their mission. Firstly, discipline will be used as the criteria for a measure of esprit de corps and unit cohesion.

Discipline

Nations have armed forces to apply force, or the threat of force, in the furtherance of the interests of the state. The need exists to motivate military personnel to perform acts that are heinous, evil and criminal in the civilian world but essential in the military. Within Canada, the law provided for the standard of conduct and morality for all of society including the military society can be found in the *Charter*, the *Criminal Code of*

[29] Combat Readiness is a measure of the ships ability to effect operations. It consists of a series of tasks that are detailed in the publication CFCD 102. These tasks, when completed, are recorded and the total number of tasks completed forms the score for a unit's Combat Readiness. Completed tasks have a validity period, which once expired, requires that the task be performed again. Records of unit combat readiness are maintained on a monthly basis.

Canada, the *Canadian Human Rights Act* and the *National Defence Act* (the *Code of Service Discipline*). This use of force involves violence and the potential destructive power of these forces requires that they be more closely controlled than other segments of society. [30] In order to fulfill the role as an armed force, the military must be able to train and motivate personnel to fight.

Despite the group cohesion, esprit de corps, socialization, training, leadership and ideology, research has determined that identification with being a member of the armed forces or a member of a small and cohesive fighting unit within the armed forces ultimately motivates military people to fight.[31] This is different from the effects of unit cohesion on combat effectiveness but demonstrates the significance of discipline. Unit discipline plays a major role in socializing individuals within the military to the institutional values. These values include liability for 24 hours of service, subjection to military discipline, the inability to strike or negotiate working conditions. Discipline within the forces serves a three-fold purpose. Firstly, it ensures the members of the forces carry out their orders in the face of danger. Secondly, discipline controls the armed forces to ensure it does not abuse its power. Thirdly, discipline assists in the assimilation of recruits into the institutional values of the military.[32] Discipline is not simply about the imposition of punitive sanctions. The purpose of sentencing in a disciplinary proceeding is the protection of society and the promotion of respect for the

[30] Department of National Defence, *Military Justice at the Summary Trial Level* (Ottawa: Office of the Judge Advocate General, 1999), 1-8.

[31] Anthony Kellet, *Combat Motivation: The Behaviour of Soldiers in Battle* (The Hague: Kluwar Nijhoff Publishing, 1982).

[32] Department of National Defence, *Military Justice at the Summary Trial Level*. . ., 1-10.

law through just sanctions. When we look at the application of the law there are four generally accepted goals of sentencing. They are general deterrence; specific deterrence; rehabilitation and reform; and retribution. General deterrence has the goal of discouraging other potential offenders from committing crimes. It is generally applied when offences involve violence, or when there is a prevalence of a specific offence within a community. Specific deterrence is based on the concept that sanctions will dissuade the offender from re-offending. Rehabilitation and reform is intended when it is believed the offender can become a law-abiding member of society. Retribution is emphasized when the conduct is morally reprehensible.[33]

As the CF often deploys into areas of the world where law and order has broken down, the military need look no further than the *Code of Service Discipline* to determine what standard of conduct is expected of them. Being identified as a member of the CF demand an adherence of, and respect for, the laws of Canada, which govern military society by all members of that society.

Within a Canadian naval unit the Commanding Officer has powers of punishment as the presiding officer during Summary trials. The Commanding Officer also has the authority to delegate Powers of Punishment and this is normally given to the Executive Officer. The Tables of Punishments for the Commanding Officer, should he find accused guilty, range from detention up to a maximum of 30 days to a reduction in rank, to a written reprimand or a fine totaling up to a maximum of 60% of the accused monthly basic pay. The Commanding Officer can also confine the individual to the ship for a

[33] *Ibid*, 14-2.

maximum of 21 days or order extra work and drill for 14 days, stoppage of leave for 30 days or issue a caution. The Delegated Officer has fewer powers of punishment and is limited to issuing a reprimand, a fine totaling a maximum of 25% of the monthly basic pay, confinement to ship for a maximum of 14 days, extra work and drill to a maximum of 7 days, stoppage of leave to a maximum of 14 days or a caution. Both the Commanding Officers and the Delegated Officers are not restricted to only issuing one punishment and depending on the offence, multiple punishments may be ordered for the same offence. An example for this would be a situation where a Commanding Officer or Delegated Officer finds an individual guilty of an offense and due to the severity of the crime, orders the individual to pay a fine and confines the individual on board for a period of time. The charging of individuals is a serious matter and sentencing can have a severe impact for an individual, particularly if they are deployed on a 6-month operation, as was the case for the Officers and crews of the ships that participated in Operation Apollo. The following table details the number of people that were charged by unit during Operation Apollo.

Disciplinary Action						
Unit	Dates Deployed	Pre Deployment		Deployment	Post Deployment	Category
		Period* Minus 2	Period* Minus	Period*	Period* Plus	
Halifax	8 Oct 01 – 14 Feb 02	1	7	6	1	Medium
Charlottetown	17 Oct 01 – 4 Mar 02	0	0	0	0	Low
Iroquois	17 Oct 01 - 27 Apr 02	3	1	9	8	Medium
Preserver	17 Oct 01 – 27 Apr 02	1	0	4	1	Low
Vancouver	29 Oct 01 – 28 May 02	2	1	1	1	Low
Toronto	5 Dec 01 – 27 May 02	5	1	5	0	Low
Ottawa	17 Feb 02 – 17 Aug 02	4	3	28	7	Very High
Algonquin	23 Mar 02 – 14 Oct 02	0	1	17	0	High
St John's	1 May 02 – 17 Nov 02	2	1	5	7	Low
Protecteur	22 May 02 – 24 Nov 02	Unk	Unk	Unk	Unk	-
Montreal	9 Sep02 – 25 Apr 03	1	3	16	3	High
Winnipeg	15 Sep 02 - 2 May 03	3	0	5	0	Low
Iroquois	5 Mar03 – 29 Jul 03	4	4	12	4	Medium
Fredericton	5 Mar 03 – 28 Aug 03	4	1	9	1	Medium
Regina	2 Feb 03 – 1 Jul 03	1	1	5	0	Low
Calgary	15 Jun 03 – 15 Dec 03	1	2	19	N/A	High

Note: The column period represents the time in days the unit was deployed on Operation Apollo. The periods prior and post are the proportional periods either prior to the unit deployed or after the unit returned from the operation.

Table 1
Summary Trial Conviction for
Units Deployed on Operation Apollo[34]

The data contained in Table 1 represents the number of minor services charges for each naval unit that deployed on Operation Apollo. It is important to note that the duration of deployments for individual ships varied therefore the data representing the two periods prior to the ships deploying and the period after the ships returned equal the total number of days the individual ships participated in the operation. In looking at the data the units are classified into four categories. Low represents ships that had 5 or fewer charges during the deployment. Medium represents ships that had between 6 and 15 charges. (Overall average: 9.4) High was assigned to ships with 16 to 25 charges during

[34] The data collected was compiled based of records that were maintained within the MARLANT Assistant Judge Advocate Generals organization.

the period the ship was deployed on Operation Apollo and Very High was assigned to ships with greater than 25 charges during the operational deployment. Of the 15 units represented in the table, 7 (47%) fell within the low category. There were 4 units (26%) that fell within the medium category. The High category was assigned to 3 units (20%) and 1 unit (6%) was assigned the category of Very High.

Repatriation

There were a number of people that commenced the deployment for Operation Apollo but returned to Canada prior to their unit. These individuals are separated by three main categories; compassionate, administrative and medical. Compassionate repatriations were clearly unforecasted and often involved both the social worker and padre organizations. Administrative repatriations could result from any number of reasons ranging from individuals returning for career courses to individuals requesting to be posted. The third category, medical, represent individuals returned because they either injured themselves or developed a medical condition that precluded them from serving in a ship. The following table details the number of people, by unit, that were repatriated during Operation Apollo and did not return to their unit.

Repatriation						
Unit	Dates Deployed	Reason for Repatriation			Total	Category
		Compassionate	Administration	Medical		
Halifax	8 Oct 01 – 14 Feb 02	6	18	10	34	Low
Charlottetown	17 Oct 01 – 4 Mar 02	9	15	8	32	Low
Iroquois	17 Oct 01 - 27 Apr 02	11	25	7	43	Medium
Preserver	17 Oct 01 – 27 Apr 02	23	26	8	57	Very High
Vancouver	29 Oct 01 – 28 May 02	10	26	3	39	Medium
Toronto	5 Dec 01 – 27 May 02	13	21	4	38	Medium
Ottawa	17 Feb 02 – 17 Aug 02	3	33	5	41	Medium
Algonquin	23 Mar 02 – 14 Oct 02	8	54	5	67	Very High
St John's	1 May 02 – 17 Nov 02	Unk	Unk	Unk	Unk	-
Protecteur	22 May 02 – 24 Nov 02	2	43	7	52	High
Montreal	9 Sep02 – 25 Apr 03	Unk	Unk	Unk	Unk	-
Winnipeg	15 Sep 02 - 2 May 03	4	8	4	16	Low
Iroquois	5 Mar03 – 29 Jul 03	Unk	Unk	Unk	Unk	-
Fredericton	5 Mar 03 – 28 Aug 03	Unk	Unk	Unk	Unk	-
Regina	2 Feb 03 – 1 Jul 03	4	31	3	38	Medium
Calgary	15 Jun 03 – 15 Dec 03	1	39	5	45	Medium

.

Table 2
Summary of Individuals Repatriated for
Units Deployed on Operation Apollo[35]

The data contained in Table 2 represents the number of people repatriated from their ship during the operational deployment that did not return to their units. In looking at the data the units are classified into four categories. Low represents ships that had 35 or less people repatriated. Medium represents units that had between 36 and 45 corresponding to the average of 41. High was assigned to units with between 46 and 55 people repatriated and Very High was assigned to units with greater than 55 people repatriated. Of the 12 units represented in the table, 3 ships (25%) fell within the low category. There were 6 ships (50%) that fell within the medium category. The High

[35] The data collected was compiled based of records that were maintained within the MARLANT and MARPAC Formations.

category accounted for 1 ship (8%) and 2 ships (16%) were assigned the category of Very High.

The following table represents a comparison of units by both the number of summary trials and the number of people repatriated.

Unit	Dates Deployed	Category	
		Disciplinary Category	Repatriation
Halifax	8 Oct 01 – 14 Feb 02	Medium	Low
Charlottetown	17 Oct 01 – 4 Mar 02	Low	Low
Iroquois	17 Oct 01 - 27 Apr 02	Medium	Medium
Preserver	17 Oct 01 – 27 Apr 02	Low	V. High
Vancouver	29 Oct 01 – 28 May 02	Low	Medium
Toronto	5 Dec 01 – 27 May 02	Low	Medium
Ottawa	17 Feb 02 – 17 Aug 02	Very High	Medium
Algonquin	23 Mar 02 – 14 Oct 02	High	V. High
St John's	1 May 02 – 17 Nov 02	Low	-
Protecteur	22 May 02 – 24 Nov 02	-	High
Montreal	9 Sep02 – 25 Apr 03	High	-
Winnipeg	15 Sep 02 - 2 May 03	Low	Low
Iroquois	5 Mar03 – 29 Jul 03	Medium	-
Fredericton	5 Mar 03 – 28 Aug 03	Medium	-
Regina	2 Feb 03 – 1 Jul 03	Low	Medium
Calgary	15 Jun 03 – 15 Dec 03	High	Medium

Table 3
Disciplinary / Repatriation Comparison

It is important not to draw immediate conclusions from the data that is represented in the two tables. For example, it is as equally interesting to note that *Charlottetown* had zero charges and a low number of individuals repatriated as compared to *Algonquin* with a high number of charges and a very high number of people repatriated. In analyzing the data there were variables that were not common amongst the units that could affect the data. These include a variance in the tasks assigned to the ships which ranged from serving as Flag Ship for the embarked Commodore and his staff

to ships whose primary role was replenishment duties to ships that were primarily focused on escort duties or boarding operations. Also variable were the number of people embarked. A frigate had the fewest number of people with approximately 240 officers and crew as compared to a destroyer with approximately 280 people on board and a logistics ship with in excess of 300 people. What is obvious is there is a discrepancy among the different units for the number of charges and the number of individuals being repatriated and it is this data that will form the basis of the analysis.

The data from the tables does not provide sufficient detail to account for the variances. The differences in the number of charges and repatriations individual ships had while deployed on Operation Apollo varied significantly. For ships that were grouped in the low category this could be interpreted one of two ways. Either the units were being run effectively, the need of the sailors were being met, there was strong esprit de corps within the unit and the units were cohesive, operationally focused and effective in war fighting or, conversely, that the units were not adhering to the policies as laid out in the regulations or were using alternative means other than disciplinary means to deal with infractions. For those units that were in the medium category, clearly some form of disciplinary action was being enforced. The number of people being repatriated in the medium category falls within the average. Again, the effectiveness of the unit may have been at a high state and the discipline that was used was a measured response in order to maintain a standard. The units that ranked within the high category were clearly using the military justice system to correct problems on board but now, due to the increase in the number of charges, the cause for the increased disciplinary measures needs to be

examined. Firstly, did the officers and crew have a common purpose? It is paramount that a ship's company work as a team in achieving their goals and that everyone is not an individual, work to their own goals and objectives. Secondly, was the leadership at all levels effective? Clearly when there is a breakdown in a unit that results in disciplinary action, the potential for the cause of the offence to be partly due to poor leadership exists. Thirdly, was discipline being applied fairly amongst everyone on board or were different standards being applied to different groups within the ship. An example of this would be a different standard being applied among the officers, senior ratings, and junior ranks. Fourthly, were the sailors being given the sense of belonging and knowing that their contribution to the group and the leader are being appreciated? This includes public recognition for achievements and could be a simple as a kind word for a job well done to divisions on the flight deck to issue awards and certificates. This will generate self-respect and will foster the fifth possible cause for the higher number of charges that is a lack of pride. The lack of pride could be a reason for the higher than normal number of charges or a lack of comradeship, loyalty, sense of family and sense of humour could be the cause. A lack of mutual confidence meaning limited respect shared between individuals towards their professional ability at any or all levels within the ship could be to blame. Individuals need to know that their concerns are being properly represented to higher echelons and supervisors must show support for their superiors and the policies that are being ordered for mutual confidence to be achieved. Individuals must be allowed to address their spiritual needs and if this is not permitted because superiors do not feel or see the requirement this can lead to disciplinary problems. The well being of dependants while individuals are deployed on long operations is paramount. If this does not occur or

there is a sense this is not occurring than it cans result in disciplinary problems. Finally, if individual's comfort and well being are not being taken into consideration this can cause a breakdown in discipline. Work at sea is difficult and it does not need to be made worse by unnecessary demands that infringe on their down time. Individuals need to know that their leaders are doing the best for them. This will give them the confidence to be prepared to endure hardship and discomfort without an adverse effect on their morale. Any one or a combination of any of these reasons could account for the lack of morale onboard these ships that have a higher than average number of charges. In addition, if individuals lack motivation they may be inclined to devise means to justify an early repatriation. If this were the case than perhaps these ships that are categorized as having higher than average charges and people repatriated were achieving their mission, but the manner in which they operated would have left much to be desired. The unit that were categorized as very high for discipline could be interpreted as being a unit that had serious disciplinary problems and that the senior leadership were taking drastic means to correct a significant shortcoming or it could be interpreted as a breakdown in unit cohesion due the needs of the sailors not being met. Similarly, a very high rating for the number of people being repatriated could be interpreted as a unique unforecasted situation or again could indicate a breakdown in unit cohesion. Clearly in any of the examples presented in this analysis, the level of detail does not provide the insight necessary to accurately determine the cause for the variance in each unit during the period they were deployed on Operation Apollo, but the data does show that there were varied differences among individual ships and this had the potential to adversely affect combat effectiveness.

In examining the effects of unit cohesion on operational effectiveness, firstly the influences that had the potential to adversely affect unit cohesion for the ships that participated in Operation Apollo were examined. Secondly, the unique conditions of living, working and fighting at sea were described. This established the basis for describing the initiatives that were taken by the navy to foster morale for the naval units that deployed on Operation Apollo. Finally, the overall unit cohesion of the individual ships was measured. The statistics of the number of Summary Trials and the number of individuals repatriated to Canada during the deployment formed the basis of the analysis. The case study concluded that there were variances in the number of charges and individuals that were repatriated amongst the naval units that participated in Operation Apollo and that this had the potential to affect unit cohesion that in turn could negatively impact on combat effectiveness.

CONCLUSION

In examining the human factor in naval shipboard life during deployed operations and its impact on unit cohesion, this paper defined the science of organizational behaviour and applied its principles as a means to study unit cohesion within a naval ship. The work of Janowitz and Maslow on "needs" was examined as it applied to shipboard life. Building on these works, the concept of motivational phenomena was presented along with ten tenants for effective unit morale. Having established the criteria for the development of unit morale, the concept of esprit de corps was presented with the intent of identifying a means of measuring unit effectiveness. Each of these core areas

supported the thesis of this paper that posits that unit cohesion is among the most essential requirements for combat effectiveness. This groundwork established the criteria that were applied to a brief look at the incidents in 1949 in HMC Ships *Magnificent*, *Athabaskan* and *Crescent* as a demonstration of the results when unit cohesion breaks down. Finally, in reviewing the essential qualities that are common requirements of unit cohesion, this paper demonstrated the importance of unit cohesion as it applies to the naval units that deployed on Operation Apollo. This essay examined the human factor in naval shipboard life during deployed operations and concluded that there are many measures of unit performance but that unit cohesion is among the most essential requirements for combat effectiveness.

BIBLIOGRAPHY

Burk, James "Morris Janowitz and the Origins of Sociological Research on Armed Forces and Society." *Armed Forces and Society* 19, 2 (Winter 1993): 167- 185.

Canada. Department of National Defence. *Operation Apollo Canada's Naval Contribution to the Campaign Against Terrorism*. Ottawa: Department of National Defence, 2004.

Canada. Department of National Defence. *LeadershipVolume 2 The Professional Officer.* Ottawa: Chief of the Defence Staff, 1973.

Canada. Department of National Defence. *Ship's Standing Orders AL5*. Ottawa: Chief of Maritime Staff, 2001.

Canada. Department of National Defence. *Military Justice at the Summary Trial Level*. Ottawa: Office of the Judge Advocate General, 1999.

Carron, A.V. "Cohesiveness in Sports groups: Interpretation and considerations*." Journal of Sport Psychology*, 3 (1988): 123-138.

Gimblett, R.H. Operation Apollo: The Golden Age of the Canadian Navy in the War Against Terrorism. Draft Manuscript, 2004.

Goldman, Nancy L. and David R. Segal. *The Social Psychology of Military Service*. California: Sage Publications, Inc., 1976.

Hammond, J.W. "First Things First: Improving Canadian Military Leadership." Article on-line; available from http://www.dnd.ca / ethics / documents / conf1998 / hammond_e.htm; Internet; accessed 15 March 2004.

Janowitz, Morris. *Military Conflict, Essays in the Institutional Analysis of War and Peace*. California: Sage Publications, Inc., 1975.

Kellet, Anthony. *Combat Motivation: The Behaviour of Soldiers in Battle*. The Hague: Kluwar Nijhoff Publishing, 1982.

Lauche, Kristina. "Work Motivation and Satisfaction." (2002). Article on-line; available from http://www.part-time-projects.com / Courses / EG5039/ O&P%20mdistance % 20text % 201.pdf; Internet; accessed 15 March 2004.

Siebold, Guy L. "The Evolution of the Measurement of Cohesion." *Military Psychology*Vol 11, Issue 1 (1999). Article on-line; available from http://web9.epnet.com / citation.asp; Internet; accessed 16 March 04.

The Report of the Ad Hoc Committee on Naval Objectives.
Rear Admiral Jeffery V. Brock, Chair. Ottawa: Royal Canadian Navy, 1961.

The Report of the Ad Hoc Committee on RCN Personnel Structure.
Commodore E. P. Tisdall, Chair. Ottawa: Royal Canadian Navy, 1957.

The Report on Certain "Incidents" Which Occurred On Board H.M.C. ships Athabaskan, Crescent and Magnificent and on Other Matters Concerning The Royal Canadian Navy. Rear Admiral E.R. Mainguy, Chair. Ottawa, Royal Canadian Navy, 1949.

Documents Researched (not cited)

Andreski, Stanislav. *Military Organization and Society*. London: Routledge & Kegan Paul Ltd., 1968.

Canada. Department of National Defence. *Military HR Strategy 2020 Facing the People Challenges of the Future*. Ottawa: Minister of National Defence, 2002.

Canada. Department of National Defence. *Leadmark The Navy's Strategy for 2020.* Ottawa: Chief of Maritime Staff, 2001.

Little, Roger W. *Handbook of Military Institutions*. California: Sage Publications, Inc., 1971.

Janowitz, Morris. *The New Military, Changing Patterns of Organization*. New York: W.W. Norton & Company, Inc., 1964.

Janowitz, Morris and Roger W. Little. *Sociology and the Military Establishment*. California: Sage Publications, Inc., 1969.

Janowitz, Morris and Roger W. Little. *Sociology and the Military Establishment*. California: Sage Publications, Inc., 1974.

Janowitz, Morris. *Military Institutions and Coercion in the Developing Nations*. Chicago: The University of Chicago Press, Ltd., 1977.

Janowitz, Morris. *Civil-Military Relations Regional Perspectives*. California: Sage Publications, Inc., 1981.

Lang, Kurt. *Military Institutions and the Sociology of War*. California: Sage Publications, Inc., 1972.

Lund, Captain(N) Wilfred G. D. (Ret'd). "*The Rise and Fall of the Royal Canadian Navy, 1945-1964: A Critical Study of the Senior Leadership, Policy and Manpower Management*," Doctoral thesis, University of Victoria, 1999.

Sharpe, Brigadier-General G.E. (Ret'd) and Allan D. English. *Principles for Change in the post-Cold War Command and Control of the Canadian Forces*. Winnipeg: Canadian Forces Training material Production Centre, 2002.