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INTELLIGENCE PREPARATION OF THE BATTLEFIELD IN THE CONTEMPORARY OPERATING ENVIRONMENT:

A GROUNDED THEORY OF THE NEW ZEALAND EXPERIENCE

A THESIS PRESENTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS

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Disclaimer

The views expressed in this thesis are those of the author and do not reflect the official policy or position of the New Zealand Defence Force.

Abstract

The past decade has seen the New Zealand Defence Force operate in a diverse range of land-environment missions. From the low-risk efforts bringing support to civil authorities in the Solomon Islands, through peacekeeping operations in Timor Leste, to the contribution to the counterinsurgency war in Afghanistan; New Zealand forces are experiencing the complexities of the irregular nature of the contemporary operating environment (COE). While accolades are forthcoming for New Zealand's contribution, some operational difficulties, particularly in intelligence exist. A key problem that needs to be addressed as a matter of urgency is the utility and understanding of the Intelligence Preparation of the Battlefield (IPB) process in the COE. The reason is clear - Countering Irregular Threats (CIT) will be the main form of activity for at least the next decade with complex missions predicted to be the regular, contemporary form of military operations for New Zealand out to 2020.

This thesis discusses the perception of the IPB by 17 participants from the New Zealand Defence Force. The participants included personnel who deployed on operational missions as well as training staff. By analysing their experiences the grounded theory just getting by emerged as a research-based explanation of the New Zealand approach. Just getting by consists of six categories: ambivalence, short of expectations, recognising the need to adapt, risk, professional optimism and satisficing. The theory concluded that difficulties in applying the traditional IPB in the COE were the result of three key elements. First, most of the training was perceived as still grounded in the Cold War era conventional environment. Second, the small Intelligence Corps was considered overstretched and barely holding on as an effective military force. Third, the doctrine of intelligence-led operations appeared to be ignored, causing much angst and frustration. The overall feeling was the IPB was not operating as however in lieu of any other process it was suffice. Just getting by provides an opportunity for the New Zealand Defence Force to consider modifications to optimise the current process.

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I would especially like to acknowledge the senior Defence Force officers that granted me approval to undertake personnel research interviews with serving military members. Without the approval of Rear Admiral Anthony Parr, Major General Rhys Jones and Air Vice Marshall Peter Stockwell the research would not have been possible. Additionally, I would like to acknowledge the Massey Ethics Committee who endorsed the Low Risk Notification of the research.

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I would like to sincerely thank the 17 participants whom gave freely of their time to share with me their very personal thoughts. Each was forthright, open and extraordinarily frank about their experiences and perspectives of the research topic. In some cases I felt the participants were quite grateful to have an opportunity to tell their story. The result was a rich collection of narratives and insights, of which this thesis presents the analysed material. While the full transcripts are not offered in this thesis I am very appreciative that all of the participants have allowed their interviews to be lodged on public record. This is an extremely generous decision, for I expect future researchers will find

valuable data within the transcripts. I am therefore hopeful that this thesis does justice to the contribution of the participants.

Lastly, I would like to thank my family. To Carmen, Finnley and Bella, your missing husband and dad is finally back - no longer "working on my thesis".

Josh Wineera
Palmerston North, April 2011

Table of Contents

Title Page	i
Disclaimer	iii
Abstract	iv
Acknowledgments	V
Table of Contents	vii
Acronyms and Abbreviations	xi
List of Figures	xiii
List of Tables	xiii
Chapter One: Introduction	1
Personal Motivation: Iraq 2008, a Complex Environment	8
Statement of the Problem	9
Aim and Objective	10
Limitations of the Research	11
Thesis Organisation	12
Summary	14
Chapter Two: Literature Review	15
Preliminary Review	16
Intelligence Preparation of the Battlefield (IPB)	17
Contemporary Operating Environment (COE)	18
Practitioner Perceptions	19
Summary	21

Chapter Three: Research Methodology2	22
Research Design2	22
A Qualitative or Quantitative Methodology? 2	24
Grounded Theory2	<u>'</u> 4
Theoretical Sampling2	25
Data Collection2	25
In-depth Interviews	7
Participant Confidentiality2	9
Codes, Concepts, Categories and Theory2	29
Data Display3	30
Researching Your Own Organisation3	31
Summary3	31
Chapter Four: Intelligence Preparation of the Battlefield	
and the Contemporary Operating Environment3	3
Intelligence Preparation of the Battlefield Data Analysis	34
Concepts3	35
Derision3	6
Capable of being put in to effect3	36
Emerging Category – Ambivalence	37
IPB Literature3	37
Contemporary Operating Environment Data Analysis4	12
Concepts4	16
Difficulty compared to previous situations	16
Expanded battle-space4	17
Conventional approaches have limited effect4	17
Adaptive methods required4	17
Emerging Category — Recognising the need to adapt	18
COE Literature4	18
Summary5	52
Chapter Five: Intelligence Preparation of the Battlefield	
in Action	53
IPB in Training Data Analysis5	;3
Trainers5	5 4

	Trainees56
	Concepts59
	Disillusionment
	The status quo is okay60
	Change is necessary60
	Putting up with it60
	Emerging Categories – Satisficing and Short of Expectations61
	IPB in Training Literature61
I	PB in Training Summary64
I	PB on Operations Data Analysis64
	Concepts69
	Some things work70
	Annoyance70
	A feeling of helplessness70
	Someone needs to step up71
	We can improve71
	Emergent Categories - Risk and Professional Optimism72
	IPB on Operations Literature73
I	IPB on Operations Literature
I	·
	·
Chapte	PB on Operations Summary76
Chapte	PB on Operations Summary
Chapte F	PB on Operations Summary
Chapte T Chapte	PB on Operations Summary
Chapte T Chapte	PB on Operations Summary 76 PB on Operations Summary 78 Part Six: Developing the Theory 78 In all Categories 78 Ambivalence – the core category 79 Short of expectations 80 Recognising the need to adapt 81 Risk 82 Professional optimism 82 Satisficing 83 Just getting by – a theory 84 Prustworthiness of the findings 85 Fer Seven: Conclusion and Theory in Action 87
Chapte Chapte	PB on Operations Summary 76 PB on Operations Summary 78 Part Six: Developing the Theory 78 Inal Categories 78 Ambivalence – the core category 79 Short of expectations 80 Recognising the need to adapt 81 Risk 82 Professional optimism 82 Satisficing 83 Just getting by – a theory 84 Frustworthiness of the findings 85 For Seven: Conclusion and Theory in Action 87 Enduct of the research 87

Further research	91
Concluding remarks	91
Appendices	92
Appendix A: Letter to Commander Joint Forces New Zo	ealand
Requesting Research Interviews	93
Appendix B: Approval from Commander Joint Forces N	lew Zealand 96
Appendix C: Approval from Chief of the New Zealand	Army98
Appendix D: Approval from Chief of the New Zealand	Navy99
Appendix E: Massey Ethics Committee Letter	100
Appendix F: Information Sheet for Participants	101
Appendix G: Research Questionnaire	105
Appendix H: Participant Consent Form	107
Appendix I: Research Questions and In-depth Interview	ew:
Mission Personnel	109
Appendix J: Research Questions and in-depth Intervie	w:
Training Personnel	111
List of Interview Participants	113
- -	
Bibliography	115

Acronyms and Abbreviations

ABCA Armies Programme, America, Britain, Canada,

Australia and New Zealand

CA Chief of Army

CIT Countering Irregular Threats

CN Chief of Navy

COMJFNZ Commander Joint Forces New Zealand

COIN Counterinsurgency

COE Contemporary Operating Environment

CRIB The operational code name for the New Zealand Defence

Force mission comprising the Provincial Reconstruction

Team in Afghanistan

CTC Collective Training Centre

EARLLS Electronic Activity Reporting Lessons Learned System

FM 2-0 US Army Field Manual: Intelligence (2010) FM 3-0 US Army Field Manual: Operations (2008)

FM 3-24 US Army Field Manual: Counterinsurgency (2006)

FM 34-130 US Army Field Manual: Intelligence Preparation of the

Battlefield (1994)

FM 100-5 US Army Field Manual: Operations (1993)

GYRO The operational codename of the New Zealand Defence

Force mission to Timor Leste

HQ NZDF Headquarters New Zealand Defence Force
HQ JFNZ Headquarters Joint Forces New Zealand
IPB Intelligence Preparation of the Battlefield

Joint Personnel BranchJoint Intelligence Branch

JNCO Junior Non-Commissioned Officer
LTDG Land Training and Doctrine Group

MAP Military Appreciation Process

MDMP Military Decision Making Process

MNF-I Multi-National Forces - Iraq

NZ P86 New Zealand Army Publication: Staff Officers Handbook

NZDDP-D New Zealand Defence Force Publication: Foundations

of New Zealand Military Doctrine

NZDDP-3.0 Joint Operations

NZIC New Zealand Intelligence Corps
PRT Provincial Reconstruction Team

RATA The operational code name of the New Zealand Defence

Force mission to the Solomon Islands

SMIS School of Military Intelligence and Security

SNCO Senior Non-Commissioned Officer

TEWT Tactical Exercise Without Troops

List of Figures

Figure 1.	Research Design	23
Figure 2.	MAP/MDMP and the IPB	38
Figure 3.	The Intelligence-led Cyclical Process	39
Figure 4.	Final Categories	78

List of Tables

Table 1.	Open Coding of the IPB	34
Table 2.	Concepts of the IPB	35
Table 3.	Open Coding of the COE	.42
Table 4.	Concepts of the COE	.46
Table 5.	Open Coding of the Trainers Perspectives	54
Table 6.	Open Coding of the Trainees Perspectives	.57
Table 7.	Concepts of the IPB in Training	. 59
Table 8.	Open Coding of the IPB on Operations	65
Table 9.	Concepts of the IPB on Operations	.69

CHAPTER ONE: INTRODUCTION

The first, the supreme, most far-reaching act of judgement that the statesman and the commander have to make is to establish the kind of war on which they are embarking, neither mistaking it for, nor trying to turn it into, something that is alien to its true nature. This is the first of all strategic questions and the most comprehensive.

- Carl Von Clausewitz

This opening chapter sets the scene for the research. It provides an overview of military intelligence and wars of the modern era that have impacted on intelligence. In setting the scene the chapter accounts for the origins and the personal motivations underpinning the study. This establishes the statement of the problem to be addressed and sets the aim, objective and research questions. Finally, the chapter provides an outline of what is to be presented. In explaining the personal connection to the research and presenting an autobiographical account, much of the thesis is written in first person.

Intelligence is a crucial component of warfare, indeed "no war can be successful without early and good intelligence" claimed the Duke of Marlborough (Marlborough, as cited in Keegan, 2004, p. 7). Lending further weight to the importance of intelligence, George Washington stated "the necessity of procuring good intelligence is apparent and need not be further argued" (Washington, as cited in Keegan, 2004, p. 7). With such forceful positions on the subject, few people would care to challenge these great military commanders.

From the earliest times gaining information on one's opponent and the terrain has been an intrinsic part of planning and executing military operations. Chinese philosopher Sun Tzu and Prussian General Carl von Clausewitz are perhaps the most familiar and influential historical military philosophers, whose theories on the enemy and intelligence are constantly examined and interpreted for modern application. In some cases their theories have been interpreted

differently (Kane, 2007, 162; Strachan & Herberg-Rothe, 2007, p. 37), but the role and place of intelligence and its effect on the outcome of war endures.

During the Cold War the East-West intelligence effort ranged from high-level secret agencies seeking to achieve strategic-political goals, through to military sections attempting to predict the intentions of their adversaries across the border. The military effort was best exemplified by the Fulda Gap. The Fulda Gap was the strategically important corridor of lowland near the town of Fulda on the East-West German border. Considered one of the most vivid examples of a potential conventional war (Mahnken, 2008, p. 89; Quester, 2007, p. 105) the anticipated clash of Soviet and American forces in a high-intensity conflict, thankfully did not eventuate.

The Cold War, and the period after, brought forward a topical military debate as to what was considered conventional war and therefore what was considered unconventional war. The 1980s gave rise to operational concepts such as the Air-Land Battle, later integrated into the tactical manual FM 100-5, Operations. These and many other publications emphasised the role of the military and the focus on the defeat of an enemy, to "win the battles and engagements" (United States Army, 1993, p. 1-3). Somewhat ironically David Galula (2006), one of the leading experts in counterinsurgency - a subset of unconventional war, provides a very useful description as to what conventional war 'looks like' and the ease by which it is understood:

When a conventional war starts, the abrupt transition from peace to war and the very nature of war clarify most of the problems for the contending sides, particularly for the defender. The issue, whatever it was, become now a matter for defeating the enemy. The objective, insofar as it is essentially military, is the destruction of his forces and the occupation of his territory; such an objective provides clear-cut criteria to assess gains and stagnation, or losses. The way to reach it is by military action supported by diplomacy and economic blockade. The national organisation for war is simple. The government directs, the military executes, and the nation provides the tools. (p. 58)

In his description Galula referred to 'contending sides', that being two defined and identifiable forces, a focus on terrain, with measurable criteria of success. Certainly the US military held very similar views as to what was considered (conventional) war, being large scale high-intensity operations designed to win (United States Army, 1994, p. 2-1). The linear, hierarchical illustrations in FM 100-5 demonstrated the range of military operations. Conventional war was at the top and below that threshold any other form of conflict was considered military operations other than war (MOOTW) (p. 2-1). MOOTW were further described as low-intensity conflicts (LIC), as if to justify the emphasis on large scale battle (Smith, 2005, p. 44). Not surprisingly "conventional war is taken to mean classical warfare between states" (p. 44). In terms of intelligence, the inter-state conventional setting translated in to an identifiable military adversary, with predictable capabilities and behaviour. This prescription was expressed as a methodology and process in the publication FM 34-130, Intelligence Preparation of the Battlefield (IPB) (1994), a complementary field manual to FM 100-5.

While there is clarity about what conventional warfare means and looks like, unfortunately the same cannot be said of unconventional warfare. The confusion and distortion of meaning, which results from grouping all other forms of warfare under the single term 'unconventional', has been unhelpful. The linear hierarchical illustrations, such as those in FM 100-5, reinforced the belief that the definition and description of the two types of war were simply the opposite of each other. In short, whatever conventional was unconventional was not and vice versa.

Like the mixed interpretation of Sun Tzu and Clausewitz's theories (Kane, 2007; Strachan & Herberg-Rothe, 2007), the meaning and definition of what constitutes unconventional is unclear. Unconventional war is not a monolithic whole, behaving in a consistent manner. In the first instance military doctrine linked conventional war with conventional forces and therefore unconventional

¹ The IPB publication was drafted five years earlier however the 1994 revision is considered the more widely accepted first version.

war became the domain of unconventional, or special, forces (Kelly, 2000, p. 1).²

In the period that FM 100-5 prevailed as the guidance for conventional warfare, the US Joint Publication 3-05 defined unconventional warfare as:

Α broad spectrum military and para-military of operations, predominately normally duration, long conducted indigenous or surrogate forces who are organised, equipped, supported, and directed in varying degrees by an external source. It includes guerrilla warfare and other direct offensive low-visibility, covert, or clandestine operations, well as the indirect activates of subversion, sabotage, intelligence activities, 3-05, as and escape and evasion. (JP cited in Kelly, p. 7)

The 1990s was a period which featured few conventional wars. The end of the Cold War did not deliver the supposed peace dividend in terms of international order. Instead intra-state tensions increased, such as those in Rwanda, Somalia and the former Yugoslavia. These so-called unconventional, low intensity conflicts exposed a deep seeded hatred amongst many of the populations, which manifested in brutal often primordial violence. In reflecting on his time as a United Nations Commander in Bosnia, British General Sir Rupert Smith (2005) summarised the transformation of war as:

war as cognitively known to most non-combatants, war as battle in the field between men and machinery, war as a massive deciding event in a dispute in international affairs; such war no longer exists... It is now time to recognise that the paradigm shift in war has undoubtedly occurred from armies with comparable forces doing battle on a field to strategic confrontation between a range of combatants, not all of which are armies, and using

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² The relationship between unconventional warfare and Special Forces is well documented. The US Special Forces have been the means to engage in unconventional warfare since 1951, with the establishment of the 10th Special Forces Group.

different types of weapons, often improvised. The old paradigm was that of inter-state industrial war. The new one is a paradigm of war amongst the people. (pp. 1 and 3)

In terms of paradigms, another British General, Sir Michael Jackson (2007), drew the same conclusions as Smith. In early September 2001 Jackson was in Canada to observe one of his brigades training in a conventional war fighting setting on the vast prairies of Alberta. Glued to the television on the morning of the 11th, watching the mayhem in New York as the Twin Towers were attacked, Jackson exclaimed to his personal staff: "We've just witnessed a new kind of war... and now [later in the day] we're going out to see training for the old kind of war" (pp. 384-385).

While the attack on the Twin Towers was lambasted as a failure of strategic intelligence (Copeland, 2007, p. 201; Theoharis & Immerman, 2006, p. 152; Loch, 2007, p. 346), the ensuing wars in Iraq and Afghanistan and the manner in which they were being executed raised more questions about the utility and relevance of intelligence. The 'lightning-fast' operations in the early phases of Afghanistan (2001) and Iraq (March 2003), appeared to reinforce the concept of Rapid Decisive Operations (RDO),³ the much vaunted concept to harness US technological superiority. Certainly, the early conventional war fighting phase in Iraq vividly demonstrated the dominance, perhaps invincibility of US state on state, military force on military force operations (Evans, G., 2009, p. 68). Similarly, the smaller but equally formidable forces that swept through Afghanistan in late 2001 set the conditions for regime change. From an intelligence perspective, both operations in their early phases were well served. The conventional focus, in terms of dealing with a distinct enemy (for Iraq the Iraqi Army, for Afghanistan the Taliban), was in the main in line with the existing procedures contained in the original 1994 IPB field manual. Even before the invasion into Iraq however, and certainly the phases after the unwise 'mission accomplished' banner for US President George Bush (Lind & Tamas,

ry or berefied, bornard Rambrelan

³ The full description of RDO is contained in the, US Joint Forces Command, *A Concept for Rapid Decisive Operations*. RDO Whitepaper Version 2.0. (2001). An enthusiastic supporter of the concept was US Secretary of Defence, Donald Rumsfeld.

2007, p. 132; Rutherford, 2004, p. 194),⁴ there was criticism and frustration of RDO and the potential to ignore any shift in the characterisation of the war. Written a year before the invasion in to Iraq, Lieutenant Colonel James Boling's (2002) prescient, perhaps prophetic, critique of RDO summed up the concerns:

for except perhaps the most insignificant states, defeating and replacing regimes is unlikely to be rapid and the forces designed and calibrated to execute Rapid Decisive Operations would likely prove entirely inadequate for the duration, magnitude, character of tasks involved. How does lightweight strike-focussed Decisive Operations force execute "one Rapid massive counter-offensive to occupy an aggressors capital and replace his regime as envisioned by the Secretary of Defence [Rumsfeld]?" (p. 3)

Iraq's descent in to insurgency and civil war is well documented, as are the complexities that evolved from the vicious in-fighting between the population and between the numerous armed threat groups and the US-led coalition force. Many US leaders, both civilian and military, failed to prepare for, to recognise and even ignored the rise of an insurgency (Echevarria, 2010; Fallows, 2004; Hoffman, 2004; Ricks, 2006). This seething cocktail of imploding violence was also felt by the United Nations (UN). The traditional security measures (circa 1980s and 1990s) were found to be hopelessly inadequate for the environment. The terrorist bombing of the UN Baghdad Headquarters in August 2003, resulting in the death of 22 people including the Special Representative (Dobbins, 2005, p. 192), shattered the ideal of openness and access for the population. Secretary General Kofi Annan later confirmed, "[we] may have become in ourselves one of the main targets of political violence" (2004).

By the mid-2000s the calls to transform the war fighting approach in Iraq, as well as the processes for providing good intelligence, were at their loudest. Most vocal were the training institutions at the 'intellectual heart' of the US

⁴ On 1 May 2001, President Bush paid a visit to USS Abraham Lincoln. As he arrived a massive banner was unfurled declaring "Mission Accomplished".

Army, the Combined Arms Centre at Fort Leavenworth, Kansas.⁵ At the core of the transformation was Lieutenant General David Petraeus. A successful veteran of the Iraq war,⁶ Petraeus was instrumental in reviving the forgotten lessons of unconventional warfare.⁷ The culmination of his drive to change the war fighting approach in Iraq was the 2006 publication of the jointly-written, US Army and US Marine Corps field manual, FM 3-24, Counterinsurgency. Even before the release of FM 3-24, numerous articles and monographs from the US Command and General Staff College began to circulate in open forums, attempting to describe the 'contemporary' operating environment and the need to understand it to successfully implement any form of military operation (Conner, 2004; Cox, 2005; Odum, 2002; Ott, 2002).

In early 2007, the now General Petraeus took command of the Multinational Force in Iraq. In addition to his normal military staff, Petraeus gathered a group of highly intellectual military and civilian advisors⁸ to implement the counterinsurgency theories as espoused in FM 3-24 (Davidson, 2010, p. 178). In considering both the Iraqi and Afghani environments, one of Petraeus's key counterinsurgency advisors, former Australian army officer Dr David Kilcullen, later published the aptly titled book, *Accidental Guerrilla: Fighting Small Wars in the Midst of a Big One* (2009). The work of Kilcullen and others encapsulated the operating environment, with the range of global and local conditions and influences and the blurring of the distinction between war and the so called MOOTW. The challenge then was for intelligence specialists and proponents to establish a comprehensive and inclusive understanding of the (contemporary) operating environment, thereby ensuring that processes such as the IPB remained relevant.

⁵ Other institutions such as the US Air Force War College, US Naval War College, US Army War College and the Marine Corps University also contributed to the body of knowledge.

⁶ Petraeus was acclaimed for his counterinsurgency strategies, particularly in the northern Iraqi city of Mosul.

⁷ Lieutenant General James Mattis (USMC) was another proponent of the counterinsurgency approach, and is often cited with Petraeus (Nagl, cited in *Joint Forces Quarterly*, 2010, p. 118).

§ The close knot group of additions included College Matter.

⁸ The close knot group of advisors included Colonel H.R McMasters and former Australian army officer Dr David Kilcullen.

Personal Motivation: Iraq 2008, a Complex Environment

Despite serving on four previous military missions my deployment to Iraq in early 2008 vividly demonstrated to me the changing character of war in the $21^{\rm st}$ Century. During my six months in Iraq I had the opportunity to observe, speak and work with a diverse range of people. From Coalition soldiers, to Iraqi policemen, to US diplomats, to United Nations staff, to local Iraqi's – an assortment of deeply inter-related and inter-dependent actors and entities in the conflict ecosystem (Kilcullen, 2006, p. 10).

In mid-June of that year I received my orders to return back to New Zealand. On my return home I was required to deliver a summary of my mission to staff at the Headquarters Joint Forces New Zealand (HQ JFNZ) and the Headquarters New Zealand Defence Force (HQ NZDF). As the only NZDF representative in Iraq, in fact the only official New Zealand representative of any kind, I considered the relationship between the many different actors crucial to the understanding of the Iraq situation. In search of an appropriate tool to help explain the intricate connections, I firstly sought help from my American hosts at Strategic Effects, a branch of the Multi-National Force in Iraq (MNF-I).¹⁰ Despite the many detailed and comprehensive presentations available, none could be broken down in to a few slides and notes to explain the macro and micro relationships to those unfamiliar with the environment. None seemed able to explain or graphically display 'Iraq in 10 minutes'. I then sought a possible methodology in the NZ Army doctrinal publication NZ P86 (NZ Army, 2000), specifically the IPB process contained within. While some parts of the IPB appeared useful, I found the process limiting and unable to effectively illustrate the complex and dynamic environment. On reflection I considered these limitations to be one of two things, or possibly a combination of both – that was either the IPB process was a suitable tool and I was merely unable or incapable

⁹ Counterinsurgency expert Dr David Kilcullen describes the conflict ecosystem as an environment with multiple competing entities seeking to maximise their survivability and influence.

¹⁰ As a military advisor to the United Nations Assistance Mission for Iraq (UNAMI) I was embedded in the US Embassy, Baghdad. This allowed for more effective planning and coordination of UN missions with the Coalition security forces. Strategic Effects was the host branch for the UN military staff.

of applying it correctly, or perhaps it really was limited in its use in the operating environment of Iraq.

Statement of the Problem

As a staff college graduate, former tactics instructor and (artillery) intelligence officer, a product of the Defence Force's individual training system, the thought of being incapable of applying a supposedly familiar process was both professionally and personally unpalatable. On my return to New Zealand I met my debrief requirements with a rudimentary model to help explain the situation in Iraq (Wineera, 2009, p. 4).

Still somewhat frustrated at presenting an appeasing solution, I decided that a more thorough analysis of the New Zealand experience of the IPB in the COE was warranted. In particular, I wanted to discover and understand four things: whether the IPB process was operating as expected; if not why not; whether people were making adaptations or modifications; and soldiers perception of the training and education of the IPB for operational service.

An initial scan of the HQ JFNZ lessons learned database confirmed that other people were experiencing similar difficulties applying our intelligence procedures and methodologies to adequately define the operating environments.11 Additionally, a review of official Army Headquarters records dating back to 1993 confirmed that no comprehensive analysis or evaluation of the New Zealand experience, perception and validity of the IPB had been undertaken (NZ Army, 1992-2007). While still scoping the initial research topic, support was received from a number of Headquarters in the Defence Force. The chief of staff at HQ JFNZ allowed me to observe the debriefs of Senior National Officers' recently returned from operations. The Land Component Commander at HQ JFNZ persuaded me to delve deeper in to the issues I was wrestling with and he convinced me to develop a theory. Additionally, the Commander Land Training

¹¹ The HQ JFNZ operational lessons learned database is called the Electronic Activity Reporting Lessons Learned System (EARLLS). All operational and relevant training lessons are placed on to this database. It is managed by the J8 Branch and the information is classified as 'Restricted'. Consequently, specific observations and lessons from EARLLS will not be identified in this thesis.

and Doctrine Group (LTDG) encouraged his G7 Training Branch to engage with the research (NZ Army, 2009). Anticipating that the research might have future operational and training benefits for the Army (and quite possibly the NZDF), if only as an analysis of the perceptions of the IPB, I sought to maintain a focus on the currency, relevancy and utility of the data and findings. Indeed, while not a stated outcome, I remained hopeful that the thesis might therefore be considered action-research (Lewin, 1946). Accordingly, the thesis results are to be subjected to further reviews by various NZDF organisations in order that any applicable findings may be incorporated into Army and possibly NZDF doctrine and processes.

Aim and Objective

The aim of the research is to understand and explain the perceptions and views of military personnel who have used the Intelligence Preparation of the Battlefield (IPB) in training, on operations and in the context of the Contemporary Operating Environment (COE). The relationship between these three themes will focus mainly on the New Zealand experience. In particular the study addresses the following broad research questions.

- 1. Is the application of the traditional IPB appropriate for the COE?
- 2. What are the environmental factors in contemporary warfare that differ from the conventional?
- 3. How do New Zealand Defence Force personnel perceive their intelligence training for missions in the COE?
- 4. What adaptations of the traditional IPB do intelligence staff and small team leader's view as important to succeed in the COE?

Limitations of the Research

In any form of research there are limitations and restrictions. These may be imposed by such things as the nature of the subject and access to primary or secondary data. The principal limitations were as follows:

The subject, the IPB process and the COE, are in a constant state of flux and is the focus of much debate arising from the ongoing conflicts such as the war in Afghanistan. For this reason, precise definitions and accepted doctrinal terms have, and will, continue to evolve. Accordingly, the technical literature describing the IPB and COE is considered acceptable for the purposes of this research at the time for writing.

Although the research is principally an academic endeavour, and therefore wanting to subscribe to transparency and the tenants of academic freedom, it is nevertheless bound by the sensitivities and security restrictions that are inherent in a study of a military organisation. These particular restrictions have manifested themselves in two ways. First, any interview information that may compromise operational security cannot be made public. Secondly, some technical literature and internal discussions and material about intelligence and the COE, whilst accessible to the author, are not available to the public. Military experts may be aware of other data that could be useful to the research, but public disclosure caveats would deem these invalid for open admission. Consequently, strenuous efforts have been made to ensure that academic and security integrity is preserved and balanced. Given the potential to unintentionally compromise the operational security of the NZDF, a condition of the research was a preview of the completed thesis by the Joint Intelligence (J2) senior staff officer at HQ JFNZ.

Although the selected research methodology of grounded theory will be detailed in Chapter 3, the method itself has a number of limitations and conventions that influence the research and its presentation. First, unlike other qualitative research, such as descriptive or verificational studies, the physical presentation is written as a theory. Grounded theory assumes that part of the method itself

is the writing of the theory. Secondly, as a methodology of constant comparison to derive a theory, grounded theory "contradicts the myth of a clean separation between data collection and analysis" (Suddaby, 2006, p. 2). Thirdly, the theory does not test an hypothesis. "New data collection is determined by the ongoing interpretations of data and emerging conceptual categories" (Suddaby, 2006, p. 2). Accordingly, the research is focused on theory generation not theory verification (Punch, 2005, p. 16).

The intention to canvass opinion and perspectives across the NZDF, in terms of individuals from the three Services (Navy, Army and Air Force), was not fully realised. As will be explained more fully in the following chapters, what eventuated was principally engagement with Army personnel only.

Thesis Organisation

The thesis is presented in three sections. Section One, consists of Chapters 1, 2 and 3 discusses the background to the study and explains the literature that has been reviewed and applied. This Section also discusses the research methodology. Section Two, consists of Chapters 4, 5 and 6 presents the analysis of data and the theory that has emerged. Section Three, consists of Chapter 7, concludes the research and makes recommendations for optimising the current process as well as future research objectives.

This chapter has introduced the background to the origins and the personal motivations underpinning the study.

Chapter 2 explains the place and use of literature in grounded theory research. It presents a preliminary literature review of the IPB and the COE to orientate the study, in terms of the existing body of knowledge. It also describes how secondary literature reviews are incorporated later in the study, in line with the research method.

Chapter 3 discusses the research methodology. It explains the rationale for a qualitative approach to the research for the thesis and the selection of grounded

theory as the research method. It describes the stages of grounded theory and explains the use of in-depth interviews to gather primary data. The Chapter also explains the position of a researcher studying their own organisation.

Chapter 4 presents the analysis of data related to the understanding of the IPB and the COE. It sets out the codes and main categories that emerged. These categories are further compared to the relevant literature.

Chapter 5 presents the analysis of data related to the IPB in action. The first section accounts for the views of training staff and those under training before they deploy on operations. It describes the perceptions of the relationship between the IPB training environment and the expectations for its utility on operational service. The second section presents the analysis of the data related to the IPB during operational service. It accounts for the views of personnel deployed on operations, including senior commanders, intelligence staff, and small team leaders. This chapter also describes the perceptions of the relationship between the IPB utilised on actual operational service with those expectations formed in the training environment. Finally, the chapter sets out the codes and main categories that emerged and compares these to the relevant literature.

Chapter 6 completes the research process by integrating the data from the previous two chapters to form the core category and sub-categories of the analysis. Finally it presents the grounded theory *just getting* that emerged from the application of the research method.

Chapter 7 concludes the thesis and summarises the research and findings. This chapter also addresses the potential for action-research outcomes and proposes that the theory from this process be reviewed by the NZ Army for possible incorporation in to doctrine and training. Finally, it makes recommendations for further research that may build on the present study.

Summary

This study originated from my experiences in Iraq in 2008. The complex Iraqi environment raised questions about the New Zealand approach to operations, in particular the views and perspectives of those who have trained and deployed on operations amidst the evolving COE.

This chapter described the organisational support from the Defence Force which provided an opportunity to respond to this support by undertaking a thorough examination of a contemporary military issue.

The following chapter presents the literature review.

CHAPTER TWO: LITERATURE REVIEW

"In these troubled uncertain times, we don't need more command and control; we need better means to engage everyone's intelligence in solving challenges and crises as they arise".

- Margret J. Wheatley

Thesis formats, particularly descriptive-validations, generally compel the researcher to present an extensive literature review early in the study in order to identify gaps in the literature prior to the commencement of data collection and analysis (Hutchinson, 1993). The place of literature in qualitative research however, particularly grounded theory, is contentious. Glaser (1998), a founding exponent of grounded theory, describes the use of a literature review in two parts:

- a) do not do a literature review in the substantive area and related areas where the research is to be done, and
- b) when the grounded theory is nearly completed, then the literature search can be accomplished and woven into the theory as more data for constant comparison. (p. 67)

At issue is the potential for the literature review to inadvertently create bias and predispositions of the researcher, thereby invalidating the study. In applying a grounded theory approach the fundamental issue relates to the emergent nature of the research design. To search through literature during the formative part of the process could be prejudicial and prove irrelevant. Once however, a substantive area of analysis has been achieved then assessing this in the context of the emerging theory is feasible.

In contrast to Glaser, Strauss and Corbin (1990) strongly encourage reviewing the literature early in the research. Suddaby (2006) contends that the bigger danger of literature is "not that it will contaminate a researcher's perspective,

but rather it will force a researcher to test hypotheses, either overtly or unconsciously, rather than observe" (p. 636).

This divergence of opinion creates the dilemma of not doing an early literature review in the area of study, thereby risking the presentation of a seemingly incoherent and shapeless argument, or undertaking a review in such a manner that the study stays focused, but does not contravene the principal purpose of a literature review in grounded theory. Taking in to account the views of Glaser et al., this study incorporates the literature review in two forms. A preliminary review is presented in this chapter to provide a general overview of the important bodies of work in order to contextualise this research in the field of existing research. A secondary review is presented later in chapters 4, 5 and 6, as each of the categories emerge from the coding process. The application of the relevant literature in the later review is more precise, in terms of its value as more data for comparative analysis (Glaser, 1998, p. 69).

Preliminary Review

This preliminary literature review presents the existing body of work of the IPB and COE from an NZ Army-NZDF doctrinal¹² perspective as well as views from other authorities. In reviewing the literature it was evident that New Zealand is heavily influenced by works from the American, British, Canadian and Australian militaries. The doctrinal publications are considered technical literature providing broad concepts and principles (Strauss & Corbin, 1990). As formal works, doctrinal publications are void of personal views and emotion. In wanting to discover the perspective of military personnel this literature review therefore a small selection of personal accounts and observations. included Unfortunately, no substantial New Zealand narratives were found during an open-source search. Without accounting for pertinent material held in NZDF databases, this lack of publically available perspectives on the topic demonstrated the paucity of such literature, an important issue this research is designed to address. The accounts of US personnel, in the form of post-

¹² The principal purpose of military doctrine is to provide the armed forces with guidance for the conduct of operations (NZDDP-D, 2008, p. 1-1).

graduate level monographs, were therefore deemed appropriate in terms of focussing but not becoming fixated on the IPB and COE. The authors of the monographs were mainly military practitioners, intimately engaged and focussed on the wars in Iraq and Afghanistan.¹³

Intelligence Preparation of the Battlefield (IPB)

In reviewing the New Zealand approach to the IPB it became apparent that the fundamental process remains aligned with the original steps contained within FM 34-130. Not surprisingly, technical staff responsible for teaching the IPB in New Zealand confirmed that FM 34-130 remains a foundation doctrinal publication and continues to be used and referenced for current training. The IPB process is defined by both New Zealand and the United States Army's as:

A continuous process which consists of four functions which you perform each time you conduct IPB:

- Define the battlefield environment.
- Describe the battlefield's effects.
- Evaluate the threat.
- Determine threat courses of action.
 (NZP86, 2000, p. 1-5-1; FM 34-130, 1994, p. 1-1)

Brown's (2001) description from the US Historical Dictionary further elaborates, "The IPB is a continuous process of gathering and assessing data before and during a battle with a view toward preparing specific products, often graphical in nature, to support the commander's decision making-process" (p. 247).

The 2010 US field manual on intelligence, FM 2-0, describes the IPB as:

¹³ The US Army War College and the Command and General Staff College (CGSG) provided the most relevant material on the IPB in the COE. Army Captains, Majors and Lieutenant Colonels were the most prolific ranks to write on the themes. This is hardly surprising as these ranks appear both at the front-line and the planning headquarters of units fighting in Iraq and Afghanistan.

¹⁴ Confirmed during the interviews with intelligence officers who have taught at the School of Military Intelligence and Security and Tactical School (Acorn 4 and Acorn 5). For non-intelligence personnel the main source of information on the IPB is the NZP86 Staff Officer's Handbook.

a systematic process of analyzing and visualizing the portions of the mission variables of threat, terrain and weather, and civil considerations in a specific area of interest and for a specific mission. By applying intelligence preparation of the battlefield, commanders gain the information necessary to selectively apply and maximize operational effectiveness at critical points in time and space. (United States Army, 2010b, p. 1-10)

This latest iteration from the US brings about the emphasis on mission variables, most notably the civil(ian) considerations. The need to understand the population reflects a fundamental component of FM 3-24, Counterinsurgency.

Contemporary Operating Environment (COE)

In regards to the COE, it is unclear whether official publications first coined the phrase or it was the writings of military practitioners who established the term which subsequently became doctrine. Irrespective, the description by Ott (2002), provides one of the earliest definitions, which he summarised from three official sources:¹⁵

The contemporary operational environment (COE) refers the complex global environment the United States faces today. It is more than just the forces that pose a direct security threat to the United States. The COE is a global system of systems, comprising of numerous variables that interact intertwined national, political, economic, social, spiritual, military interests, challenges, and threats. environment that resulted from rapid advances in technology, the shift in power created by the collapse of the Soviet Union, traditional cultural, religious, and ethnic rivalries, economic

¹⁵ Major Ott sourced his summary of the COE from The United States Commission on National Security/21st Century Phase I Report – *New World Coming: American Security in the 21st Century* (1999); the United States Army Training and Doctrine Command (TRADOC) White Paper: *Capturing the Operational Environment* (2000); and the United States Department of Defence *Quadrennial Defence Review Report* (2001; 2002, p. 24).

interdependence, and the complex dynamics of a single global super-power. (pp. 23-24)

FM 2-0, describes the COE as follow:

The contemporary operational environment (COE) the operational environment that exists in the world today and is expected to exist until a peer competitor arises. There are critical variables, which facilitate understanding threat and define the OE. These variables are inter-related, different variables will be more or less important different relation to each other in situations. Only by variables studying and understanding these and incorporating them into training will the US Army be able both keep adversaries from gaining operational an advantage against the US and to find ways to use them to our own advantage. (p. 1-23)

The recently released NZDF publication, Joint Operations 3-0 (2010), provides a New Zealand view on the COE.

The COE contains a complex web of participants and bystanders that influence operations. It is not always possible to focus on a defined adversary in the conventionally understood military sense, and it is widely accepted that military operations do not conform to a neat spectrum of conditions from combat through to benign humanitarian assistance... risks tend to be global, multi-layered, simultaneous, non-linear and difficult to predict. (p. 6)

Practitioner Perceptions

In concert with the doctrinal, official positions, the views of practitioners such as Brown (2003) and Conner (2005) extend the literature to included deeper personal perspectives and insights. Brown's (2003) monograph," The enemy we

were fighting was not what we had predicted" (p. i) neatly captures the frustrations between conventional and unconventional war. Though the title is attributed to a quote made by Army Corps Commander, Lieutenant General William Wallace, the monograph calls in to question the relevance and utility of the IPB and draws out a number of recommendations to improve the process. Brown's viewpoint is important in appreciating the US approach to an open and transparent critique of its own processes, such as the IPB.

Conner's (2005) monograph 'Understanding First in the Contemporary Operating Environment' focuses on "discovering how the US Army can understand first in the COE so commanders can make effective decisions" (p. 2). His analysis stems from the viewpoint that:

warfare, the challenge In conventional has been in seeing first, detecting, identifying and tracking enemy units on the battlefield. Given an enemy that could be templated, seeing intuitively led to *understanding*. Today, however, the Army faces operational environment whose complexity, dynamism transparency have severed the causal link between seeing and understanding. The Army developed its current approach understand first under this belief that understanding is a natural and inerrant extension of the information gained from seeing first. During operations in Iraq and Afghanistan, the situational understanding needed by commanders to make effective decisions has come only after considerable time and experience on the ground. (pp. 1-2)

The monographs by Brown and Connor are a sample of the many writings that have emerged from the Army Command and General Staff College and other training and educational institutions across the United States that provide considered practitioner perspectives on the traditional IPB and the complexity of the COE (Conner, 2004; Cox, 2005; Odum, 2002; Ott, 2002). Not surprisingly the volumes of these personal perspectives outnumber the more formal published works. Their relevance to this study however, is arguably more important than the formal doctrinal works as they are able to contribute a

richer, social interpretation to the research topic, which align for comparative analysis with the New Zealand perceptions gathered in the present study.

Summary

This preliminary literature review has highlighted some of the complexities of the COE and the tension between the traditional conventional warfare IPB and the type of IPB needed for unconventional wars in places such as Iraq and Afghanistan. Its purpose has not been to provide definitive, authoritative works or theoretical frameworks to direct the research but to introduce a number of publications to help focus and orientate the study. The formal technical literature, such as FM 34-130, FM 2-0 and NZDF Joint 3-0, combine with the personal narratives to establish a body of work that provides a clearer understanding of the topic. This step is crucial because it provides the context for the more precise and focussed literature that is integrated in the later chapters.

Finally, the preliminary literature review revealed the lack of distinctly New Zealand open-source narratives and perspectives on the IPB and COE. Certainly NZDF doctrinal publications reflect the views and thinking of its military partners and allies' however, the absence of practitioner perceptions are in stark contrast to the abundance of publically-accessible US narratives. This gap in the deeper, more personal New Zealand experiences provides the rationale for this study, and adumbrates its possible value as a contribution to the existing body of knowledge.

The next chapter presents the research methodology for the study.

CHAPTER THREE: RESEARCH METHODOLOGY

"Research is creating new knowledge"

- Neil Armstrong

Methodology is defined as "a way of thinking about and studying social reality" (Strauss & Corbin, 1998, p. 4). This chapter explains the rationale for selecting a qualitative research methodology and describes the justification for a grounded theory approach and the in-depth interview technique for collecting primary data. The selection of the participants and the process for the in-depth interviews are also described. Finally, the challenges to the researcher, to remain objective and impartial, particularly when researching one's own organisation, and to recognise and avoid predispositions that may invalidate the findings are considered.

In any form of research the experience and existing perceptions of the researcher must be taken in to account in order for their possible influences to be mitigated. Qualitative researchers recognise that their own background shapes their interpretation and position themselves to acknowledge how their understanding flows from their own personal, cultural and historical experiences (Creswell, 1998, p. 21).

Research Design

Having framed the practical problems of the IPB into research questions, the next stage in the methodology is to establish the appropriate research design. Rice and Ezzy (1999) contend that "the general theoretical framework used fundamentally shapes the sorts of things that the research focuses on and therefore, fundamentally shapes the methods and techniques required for the research" (p. 11). For this reason the design is crucial to achieving the aim and objective of the thesis. Given the exploratory nature of the research questions the researcher is expected to be responsive to emergent design properties.

Changes to the research questions, data sample, and investigative techniques, as well as constant scrutiny of the initial processes must be factored in to the thesis design (Charmaz, 2006; Cresswell, Hanson, Clark, Plano, & Morales Creswell, 2007; Patton, 2002).

The research design for this present study subscribes to Punch's model (2006) of scientific structure of knowledge (pp. 17-18). This provides a description-explanation design which accounts for the exploratory nature of the research, as well as its emergent theory properties. The design starts with data (or discrete facts) at the lowest level then grouping the data in to more generalised codes, grouping the codes in to more abstract conceptual generalisations, and finally establishing theories whose function is to explain the generalisations (p. 17). There is a constant comparison of data at each stage, with relevant secondary literature introduced once the categories have emerged.

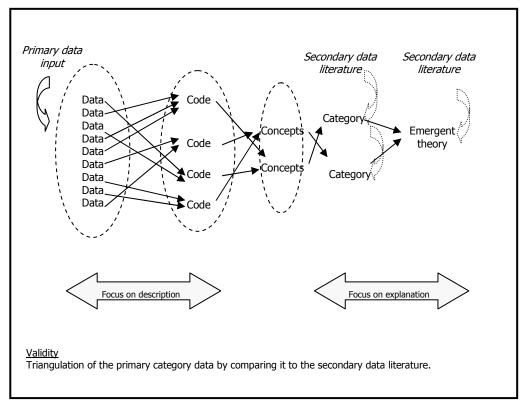


Figure 1. Research Design.

A Qualitative or Quantitative Methodology?

Having defined the research questions and the research design the next consideration is deciding the appropriate methodology. Typically, this is the choice between a qualitative inductive reasoning methodology and a quantitative deductive methodology. By aiming to discover people's perceptions and views of the IPB the choice of methodology was relatively straight forward (Creswell, 1998). This research applies a qualitative methodology in seeking understanding and meaning based on words, holistically and in the context of a person's situation, rather than only through numerical values. Furthermore, I chose this methodology as it endeavours to answer practical issues such as: Did the IPB process operate as expected? Were the key players, both trainers and practitioners, able to carry out their duties? Were there any unintended consequences when the IPB was used in the COE?

Qualitative research allows the researcher to gain insight to which events or activities precede consequences, leading to better understanding and explanation (Miles & Huberman, 1994). These events or activities tend to be collected as narratives, that being the participants sharing their social experiences through interviews or focus groups.

Grounded Theory

In acknowledging emergent design and allowing the research data to 'tell the story', the thesis embraces the principles of grounded theory. As the seminal leaders in grounded theory, Barney Glaser and Anselm Strauss encouraged the discovery of theory from data systematically obtained from social research (Glaser & Strauss, 1967, p. 2). Grounded theorists begin with general research questions rather than tightly framed pre-conceived hypotheses (Charmaz, 1990, p. 1162). As a result the conventional elements of analysis applied to this thesis are: theoretical sampling, data collection, coding, concepts, categories and theory.

Theoretical Sampling

Theoretical sampling is the process of data collection for generating theory whereby the analyst jointly collects, codes and analyses the data and decides what data to collect next and where to find it in order to develop the theory as it develops (Glaser & Strauss, 1967, p. 45). Theoretical sampling directs participant selection according to the needs of the emerging categories and the researcher's emerging understanding of the developing theory (Morse, 2007, pp. 231-232). Theoretical sampling helps towards building the framework for comparative analysis, though this can occur simultaneously, selecting groups or categories on the basis of their relevance to the research (Mason, 1996, p. 93).

Data Collection

Initially, I gathered information by observing senior Defence personnel presenting their compulsory end-of-mission debrief to staff at HQ JFNZ (HQ JFNZ, 2009). This formal debriefing activity ensured the headquarters staff received updates on the latest developments on the mission, as well as the opportunity to discuss the successes or failures - whether from New Zealand forces, Coalition forces, or supporting systems back in New Zealand. I was a silent observer. Ten debrief activities were attended and included the missions to Afghanistan, Timor Leste and the Solomon Islands. Information gained from these debriefs gave promising leads as to the role of the IPB process in the respective missions. It also gave me an insight into the NZDF approach to operations, as well as a view of the New Zealand style and nature of command in the COE. Overall, the debriefs proved to be a valuable forum from which I was able to seek out participants who were available and could provide the more focussed and detailed data required for the research.

The selection of the participants made operational Morse's (2007, p. 240) process of "theoretical sampling", and required personnel who designed, developed or executed the IPB on operations as well as those with teaching and training responsibilities.

With the help of Joint Personnel (J1) staff at HQ JFNZ I was able to access the database of those members who had recently deployed on operations as well as those who were preparing to deploy. An initial selection of 32 potential participants was made. The criteria for selection were:

a range of ranks, from Corporal to Colonel (or Service equivalents);

a range of service members, from the Navy, Army and Air Force;

and, a range of appointments, from senior commanders, patrol leaders, operations and intelligence staff.

The high tempo and constant rotation of NZDF forces for operations impacted the availability of the participants for the research. In one case two returning officers from Afghanistan left for their new postings in the United Kingdom and the United States just weeks after returning to New Zealand. Of the 32 potential participants 12 were actually interviewed and their responses analysed. Unfortunately, the desire for Navy and Air Force participants did not eventuate. In nearly all cases the selected Army member recommended another Army member to participate. Having chosen a grounded theory approach, I was bound to use the sample data as it emerged.

Training staff were selected from the current incumbents, or former trainers, from the School of Military Intelligence and Security (SMIS), Tactical School, the Senior Non-Commissioned Officer (SNCO) Wing of NCO Company and the NZDF Collective Training Centre (NZCTC). These organisations are responsible for the training and doctrine related to the IPB and COE. As with the operational participants, the research was impacted by the availability of suitable staff. 12 trainers were interviewed. This included seven individuals whom had operational experience of the IPB and were able to contribute to both the training and operational perspectives.

The role of SMIS is to train members of the New Zealand Intelligence Corps (NZIC) in intelligence processes and operations. A key component of the training focuses on the IPB.

Tactical School is responsible for training officers and selected warrant officers as staff officers in a battle-group or formation-level headquarters.¹⁶ It is the primary teaching unit that exposes non-NZIC officers to the IPB. Students receive introductory lessons on the IPB (from SMIS staff), and are expected to implement IPB processes as part of their individual and group assignments.

NCO Company is the primary teaching institution for non-commissioned (soldier) leaders. As part of the decision-making and orders process students are expected to integrate IPB considerations in to their individual and group assignments.

NZCTC is responsible for the collective training and final preparation of all landbased NZDF missions. As part of the training, personnel receive presentations that include IPB considerations and products. In the case of the larger groups, such as those deploying to Afghanistan, the intelligence members would themselves conduct the contingent IPB process.¹⁷

In-depth Interviews

While the observation of the senior officer debriefs assisted the research as an initial method of data collection, the key outcome was the identification of individuals that could provide their first-hand, personal perspectives. In seeking personal perspectives in-depth interviews presented a plausible method for further data collection and subsequent analysis. According to Seidman (1998) at the root of in-depth interviewing is an interest in understanding the experience of other people and the meaning they make if it (p. 3). In-depth interviews aligned with the aim of the research, in seeking insight and understanding (Gillham, 2000, p. 11), and for this reason formed the basis of primary data collection.

The sequence for the interviews was:

¹⁶ A battle-group is generally considered to be a battalion size combat unit (anywhere from 500-700 troops). A formation generally refers to a brigade size combat unit (anywhere from 3000-5000 troops).

¹⁷ Large groups in the context of the thesis refers to the three major land-centric NZDF missions, which consist of operations in Afghanistan, Timor Leste and the Solomon Islands.

I contacted the potential participant's commanding officer or formation chief of staff and informed them of the research intentions.

I then contacted the participant via email or phone, outlining the research aim and objective and asked if they were interested in taking part.

If they wished to participate I mailed them a set of documents to read and sign. The documents included an information sheet, questionnaire, consent form and preliminary questions for the interview.

The participants were interviewed in or near their work and I dressed in civilian clothes, not uniform, to reduce the possible power dynamic created by rank in a hierarchical system like the military.

The interviews were conducted using a semi-structured interview method. This method allowed me to initiate the conversation without excessive control over the participant, but more importantly it allowed both parties to explore new leads or themes (Bernard, 2000, p. 191). The interviews were digitally recorded and on average the process took 60 minutes.

The digital recordings were transcribed into paper transcripts.

The participates who elected to have their interviews lodged as a matter of public record were advised when this had occurred.

In total 17 Army personnel were interviewed for the research.¹⁸ In considering the validity of this sample size the key factor was the ability to generate enough data for analysis (Glaser & Strauss, 1967). When the expanding sample size reveals no new data then the research has attained the point of theoretical saturation. This situation occurred at 17 participants. According to Strauss and Corbin (1998, p. 212), theoretical saturation occurs when:

¹⁸ Profiles of the participants are enclosed after the appendices.

No new relevant data seems to emerge regarding the category.

The category is well developed in terms of its properties, and

The relationships among the categories are well established and validated.

Participant Confidentiality

All of the participants agreed to being personally identified in the research, as well as having their recorded transcripts held in an official archive. In order to avoid potential distractions with specific names during the main-body component of the thesis I decided to use a pseudonym for each person. The pseudonyms are based on military radio call-signs, reflecting the most likely term that each individual might be called.

Coding, Concepts, Categories and Theory

Coding starts the cycle of theory development. It is the link between the collected data and developing the emergent theory that comes from the data (Charmaz, 2006). Strauss and Corbin (1990) offer the sequential series of coding stages as open coding, axial coding, and selective coding. In the case of the in-depth interviews the focus was on searching for patterns in the segments of raw data and presenting these in a form and manner that enabled more analysis.

Concepts are established when codes with similar content are grouped together.

A concept is the overall element and includes the categories which are conceptual elements standing by themselves, and properties of categories,

¹⁹ According to Strauss and Corbin open coding refers to a preliminary process of "breaking down, examining, comparing, conceptualising, and categorising data" (1990, p. 61). Axial coding involves a "set of procedures whereby data are put back together in new ways after open coding, by making connections between the categories" (p. 96). Selective coding involves "selecting the core category, systemically relating it to other categories that need further refinement and development" (p. 116).

which are conceptual aspects of categories (Glaser & Strauss, 1967). Furthermore, the categories are linked together and classified in terms of the relationships between each other. This process is further developed to identify the hierarchy of the categories. Consequently the higher-level categories can be advanced into a central category, with the other sub-categories that link to it through the relationships. As a result a theory can be derived and explained.

In designing the research it was originally planned to analyse the perceptions of the IPB and COE, the IPB in training and the IPB on operations into in a single chapter. The intention was to attempt to integrate all three themes quite early in the process thereby allowing preceding chapters to focus on the macro interrelationships. The problem with this method was the real potential to disrupt a logical flow to the research, particularly the risk of only superficially addressing the intra-relationships, and thereby diluting the micro analysis. It made more sense to consider them each individually before considering them together. For that reason the themes are firstly conceptualised internally, then externally, in order that the theme integration in itself can be examined to provide further understanding.

Data Display

The display of data in qualitative research is an important factor to ensure analytical transparency and logic. Often this is in the form of extended text and long narratives. Miles and Hurberman (1994) disagree with extended text, contending that "[extended] text is terribly cumbersome" (p. 11). They further assert the benefit of "matrices, graphs and charts, which are all designed to organise information into immediately accessible, compact forms" (p. 11). Accepting and incorporating Miles and Huberman's assertions, this study physically displays the codes, concepts and category data in tabular form. This format is representative of the model for the structure of scientific knowledge, with discrete facts, leading to empirical generalisation, leading to theory explanation (Punch, 2005, p. 18).

Researching your own organisation

The test for any researcher, particularly one researching their own organisation, is to remain impartial and focussed. Acknowledging one's background and how this may shape the interpretation of the research is crucial to avoid invalidating the findings. The temptation to direct' the data, to seek confirmation of preconceived concepts, rather than allowing the data to drive the process is a very real challenge.

As a researcher charged with potential action-research outcomes, the challenge for me was even more demanding. Coghlan and Brannick (2005) stress that:

a good action research project contains three main elements: a good story; rigorous reflection on the story; and extrapolation of usable knowledge or theory from the refection on the story. These can be put in terms of three questions: What happened? How did you make sense of what happened? So what? (p. 29)

The narratives of the 17 participants certainly provided the first element of a 'good story'. In seeking to discover the participant's perceptions and views, the selection of a grounded theory approach intrinsically provided the means to help me make sense of the stories. With a number of organisations within the NZDF prepared to review the thesis and consider the resultant theory for implementing changes, the issue of Coghlan and Brannick's question 'so what?' was addressed.

Summary

The aim of this study was to discover and understand the perceptions and views of military personnel utilising the IPB in training, on operations and in the context of the COE. This broad aim set the foundation for an interrogative, exploratory analytical process. In formulating the design and research methodology that would achieve the aim, I was cognisant of my own experience and interpretation of the IPB and the COE. In considering the methodology for

the study, a qualitative approach was found to be the most suitable to meet the requirements. Additionally, with a focus on emergent design, grounded theory was deemed the appropriate method to apply both intellectual and academic rigour to address the research questions, as well as recognising the investigative nature of the data and the analysis. Not surprisingly some of the original questions were later modified as the study progressed.

The thesis applied grounded theory through the framework of theoretical sampling, data collection, coding, concepts, categories and theory. In selecting in-depth interviews as the principal means of collecting data, the thesis conformed to accepted procedures. Finally, the subject of researching one's own organisation with potential action-research outcomes was incorporated as an inherent part of the research approach.

The next chapter presents the data and analysis for the IPB and COE.

CHAPTER FOUR: INTELLIGENCE PREPARATION OF THE BATTLEFIELD AND THE CONTEMPORARY OPERATING ENVIRONMENT

Every military force in history that has successfully adapted to the changing character of war and the evolving threats it faced did so by sharply defining the operational problems it had to solve.

- General James Mattis, USMC

This chapter presents the initial analysis of the primary interview data relating to the participants understanding of the IPB and the COE. Each theme is addressed separately to begin with to build the codes and concepts. In formulating the codes, a quote from at least one participant is presented. This quote is the best representative of all others that were sorted.

As the IPB is a process and the COE describes an environment a comparative analysis between the two is of little value to the research in the early stages. The interrelationship between the two however, is of great importance, to give context and situation to the following chapters.

The first section discusses the IPB. Each of the 17 participants provided comment on the intelligence process for this section of the thesis; however eight participants materialised as the representative view of all others for coding purposes (Acorn 1, Acorn 2, Acorn 4, Acorn 5, Acorn 6, Holdfast, Pronto, & Shell Drake 1). The pertinent technical literature that was introduced as the central categories emerged was US and New Zealand publications.

The second section discusses the COE. Again, all participants provided comment however eight participants formed the core group of respondents (Acorn 5, Foxhound, Holdfast, Pronto, Seagull, Shell Drake 2, Shell Drake 3, & Sunray). The technical literature consisted of New Zealand doctrinal

publications.

Intelligence Preparation of the Battlefield Data Analysis

The first three interviews (Acorn 4, Acorn 6, & Pronto) set the early framework for the research. The respondents included an officer with previous operational mission experience and two New Zealand Intelligence Corps (NZIC) members. In the case of Acorn 4, during the interview the respondent identified Acorn 6 as another source of information. Mindful of the grounded theory approach I was applying for the research I accepted this advice. I was however, not accepting it simply on the basis of another lead, but as a result of the initial analysis that identified Acorn 6 as potentially offering data that could provide a new perspective to the IPB – a practice that was followed throughout the study.

An initial set of over 30 codes were formed from the interviews. After further comparing the codes, to ensure that there was no duplication or a repetition of inherently similar codes, there emerged a consistent group of seven.

No	Code	Sample quotes
1	Reliance on others	"looking up to the sergeant"
2	Just getting by	"I'm barely getting past stage 1"
3	A workable process	"the process is none the less robust"
		"I think the current process is fine when it's
		applied by people that understand it and
		know what they are doing. If you don't and
		you are not practiced at it, it just appears like
		an awful lot of work for not much outcome
		which it can often be"
4	Competence	"a skill that if you don't maintain it you'll lose
		it, where it's not second nature"
5	Ridicule	"it's known as the great colouring contest"
		"it's too mandrolic, we are not using enough
		computer systems or software to speed the
		process up and our data management is

		pathetic"
6	Self-motivation	"just crack on and do it"
7	Limited understanding	"we're stuck on the key word 'battlefield'"

Table 1. Open Coding of the IPB

Generally, the participants did not dwell or in some cases did not feel it necessary to engage on the actual functions and steps of the IPB process. I took this as a sign (at face value) that the component parts were not an issue. The effect was that the line of enquiry for this section remained holistic, rather than reductionist, in the approach. What became apparent though was a sense that the IPB was applied more in 'form than in substance', as underscored by Acorn 1, "the IPB process... it would be fair to say, is pretty much given lipservice in reality".

Concepts

Grouping the codes in to concepts starts the path to abstraction. From Goulding, "It is vital, with grounded theory, to lift the analysis away from description to theory development" (Goulding, 2005, p. 77). From the seven codes I derived two concepts; *Derision* and *Capable of being put in to effect.*

Concept	Codes
	Ridicule
	Reliance on others
Derision	Limited understanding
	Just getting by
	Competence
Capable of being put in to effect	A workable process
	Self-motivation

Table 2. Concepts of the IPB

Derision

Derision as a concept, indeed scorn, existed as a term of humorous mockery. Those respondents who held this perception of the IPB tended to joke when discussing the process. In many ways they were comfortable with the actual steps of the IPB but exhibited a degree of frustration at the training and operational use of the IPB. At this point I noted their comments for inclusion later in the research analysis, particularly as I was going to address the views of the IPB in training and on operations as separate themes. A question began to form: Do any future problems and the subsequent consequences of the process potentially have their beginnings in this, the early stage of understanding the IPB?

Capable of being put in to effect

In contrast to *derision*, the second concept *capable of being put in to effect* demonstrated an ability to make the process work. The acknowledgement of skill fade (Shell Drake 1) reinforced the need to remain current with the process and the expectation that as professionals the onus was on everyone to "read [widely] and doing things on your own instead of being taught or waiting for courses" (Acorn 2).

The surprising feature about the two concepts was that they were not mutually exclusive. In a number of cases a respondent would happily deride the IPB and in the same interview speak of it as a process that worked. This contradictory view necessitated a rechecking of the many memos²⁰, and comparative notes I had made from each interview. The co-existence of opposing attitudes, could have led to theorising the concepts in to separate categories. The interplay between the concepts however, evoked a sense of deeper relationship. With consistent patterns in the codes, there came the realisation that the dual perceptions held by the respondents were valid and feasible. In accepting the

²⁰ In Grounded Theory 'memo' is the "theorising write-up of ideas about substantive codes and their theoretically coded relationships as they emerge during coding, collecting and analysing data, and during memoing" (Glaser, 1998, p. 177).

feasibility of such a situation there emerged a higher-order category – ambivalence.

Emerging Category - Ambivalence

By having both positive and negative thoughts about the IPB, with the "co-existence of two opposed and conflicting emotions" (Sinclair, 2001, p. 43) ambivalence categorised the respondents' points of view. More importantly, this emerging category raised the analysis from description to theoretical abstraction (Goulding, 2005), a fundamental component of grounded theory. According to Charmaz (2006), "taking comparisons from data and reaching up to construct abstractions and reaching down to tie these abstractions to data" (p. 181).

IPB Literature

With the emergence of the central category *ambivalence*, the introduction of pertinent literature was now feasible. The principal technical literature for further comparative analysis was the FM 34-130. A number of successive manuals have been published which have their intelligence basis in FM 34-130 (such as FM 2-0) and numerous countries (for example New Zealand and Australia²¹) have subsequently adopted the IPB in to their doctrine. However, the base description of the IPB has remained consistent.

IPB is a systematic, continuous process of analysing the threat and environment in a specific geographic area. It is designed to support staff estimates and military decision making. Applying the IPB process helps the commander selectively apply and maximise his combat power at critical points in time and space on the battlefield by:

- Determining the threat's likely courses of action.
- Describing the environment your unit is operating within and the effects of the environment on your unit. (sec. 1-1)

²¹ As the base publication for the IPB the US security restriction for FM 34-130 is "Approved for public release, distribution is unlimited". Many other countries however, have created their own versions of FM 34-130 and applied their own security classifications.

The IPB does not exist as a separate entity in its own right. It is an intrinsic part of a wider process known as the MAP or Military Appreciation Process in New Zealand and Australia or the MDMP, Military Decision Making Process in the United States. The MAP is the primary tool to aid in military problem-solving and decision-making. At each of the four main stages of the MAP; in fact before, during and after the mission, the IPB constantly collects information, reviews it, analyses' it and disseminates it in the form of intelligence. Timely and accurate information, converted in to good intelligence thus contributes to making good decisions.

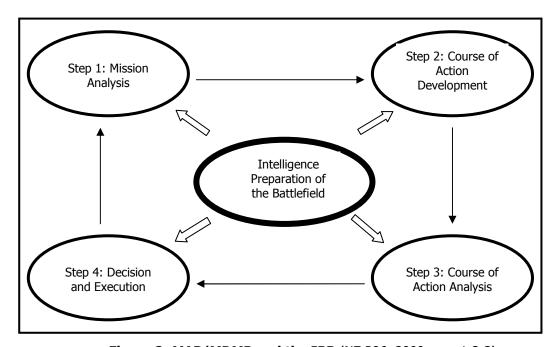


Figure 2: MAP/MDMP and the IPB (NZ P86, 2000, sec. 1-3-3)

The MAP and MDMP compel the commander to set the intelligence requirements and priorities for the intelligence staff. In commencing the IPB the intelligence staff work with the operations staff to prepare tasks for the subordinate units or patrols. On receipt of any information these teams provide feedback back up chain to the intelligence staff that in turn provide and update back up to the commander. This is a continuous, intelligence-led cyclical process.

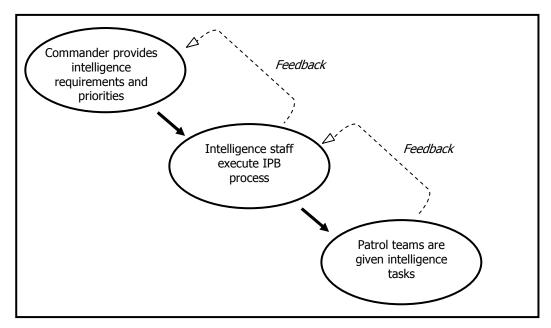


Figure 3: The Intelligence-led Cyclical Process

FM 34-130, and the more current publications such as FM 2-0, derived no inherent perspectives from its users. As doctrinal manuals, the publications provided an organisational template of procedures and processes. In terms of utility for comparative analysis against the category *ambivalence*, the doctrinal manuals proved inadequate. Whilst the practice of attempting to undertake comparative analysis between doctrinal manuals and the emerged category might have seemed a nugatory exercise it uncovered an important circumstance of the formal doctrinal procedures. As procedures they did not provide examples of personal perspectives or opinions of the IPB, appearing therefore to be somewhat clinical and mechanical in nature. This raises the question as to whether adding personal perspectives to the manuals would be of value.

The critiques of the IPB by Steele (1992) and Theberge (2008) were sorted from a range of perspectives, as personal literature to compare with *ambivalence*.

Steele (1992) commented that:

Intelligence Preparation of the Battlefield (IPB) is a term much in vogue (circa 1992). In evaluating the utility of IPB, it is important to distinguish between four distinct elements of the

IPB analysis, decision point and time/space process: terrain phase line methodology, doctrinal templates where established, and the creation of mission area overlays. It is important to understand that IPB is a process, not a substitute for analysis, the IPB process cannot be accomplished without that substantive data of two kinds: terrain data, and doctrinal data. It is essential to understand that the operator, not only the intelligence professional, must play a role in the IPB process; that IPB is labour-intensive; and that automation, while offering some help, is not a cure-all to the fundamental question that haunts every commander: "What is on the other side of the hill?" (p. 28)

While highlighting the valid point of the IPB being a process not a substitute for analysis, Steele's further comment about the need for automation and the evocative question about 'what's over the hill' promised a useful start point for analysis. A review of the early interview codes, in particular *ridicule*, drew a connection to some of the respondent's views on mandrolic systems and the need for more computing solutions. As Steele alluded however, this is not a cure-all for the problems at hand. Though Steel's work extracted a marginal connection to the concept of *derision*, in the final analysis it had limited bearing on the category *ambivalence*.

From Theberge (2008):

Many have written articles that suggest that the IPB process is inherently deficient because of its narrow focused process... the bulk of these articles further suggest wholesale a modification to the process. A closer reading of the doctrine (FM **IPB** 34-130) reveals that the process already accounts changes operating environment and for in the who **IPB** rigid different missions... practitioners view the **IPB** and uncompromising are not using to fullest potential. (p. 9)

Theberge's view was refreshing as he positioned himself in disagreement to the views' of others (including myself in 2008). His contention that some practitioners are not using IPB to its full potential actually reinforces the debate of whether the process is workable or not. In this context, Theberge's stance is more aligned to the contrasting concepts of *derision* and *capable of being put in to effect*; the key elements from which the category *ambivalence* was formed. In substantiating the reliability of the category, the analysis of Theberge's perception gives better triangulation than that of Steel's. ²²

During the period 1992-2007, the New Zealand Army did not document any Headquarters-level evaluation or study of the IPBs validity, nor gathered perspectives and feedback from the users (NZ Army, 1992-2007). 23 24 On balance however, few militaries appeared to have considered validation of the IPB prior to the Coalition invasion of Iraq in 2003. This may have been a result of the successful Desert Storm operation (1991) and the western preference for advantages gained in conventional warfare. Drawing an assumption however, between the possible reasons for inaction, one could relate these to the interview codes *just getting by* and *a workable process*.

In concluding the introduction of the IPB literature, the analysis confirmed that the procedural nature of the formal doctrine was of little worth for comparative purposes. It did raise however, the matter of the absence of personal perceptions and the question as to whether adding such views would be of value. The literature of Theberge, Steele and the NZ Army provided a better basis for analysis. That these literature pieces drew out similar codes and concepts from the interview data gave confidence as to the reliability of the category, *ambivalence*. The conclusion is thus; the comparative analysis between the emergent category and the pertinent literature establishes meaningful understanding of the respondent's perceptions of the IPB.

²² According to O'Donoghue and Punch (2003), "reliability is the extent to which a study can be replicated" (p. 77). Triangulation is a "method of cross-checking data from multiple sources to search for regularities in the research data" (p. 78).

²³ The 1992-2007 files are classified as Restricted. For the purpose of this study the use of this reference is to explain the absence of IPB perspectives and user feedback. It does not provide specific details of the files themselves.

The research acknowledges that subordinate levels of the NZ Army, such as the Land Training and Doctrine Group, gather lessons learned and observations of the IPB. None however, were found to be documented in the principal Army Headquarters file on Intelligence.

The Contemporary Operating Environment Data Analysis

Eight respondents' provided a representative view of the other participants with a wealth of data during the interviews. The need to memo the interview field notes as quickly as possible was self evident. The views and perceptions of the COE had more detail than the IPB, which could be attributed to the respondents being more certain in their opinions. Equally revealing was the respondents' constant comparisons of the contemporary with the conventional operating environment. For some, it did not occur to them to compare the conventional with the unconventional style of warfare as a means of defining the COE. The respondents included training staff, intelligence operators and senior commanders (Acorn 5, Foxhound, Holdfast, Pronto, Seagull, Shell Drake 2, Shell Drake 3, & Sunray). Each was forthright in their replies. In all, 29 codes were formed, but with further comparison and analysis this was reduced to 11.

No	Code	Sample quotes
1	Complexity	"so obviously a COE is in some respects more
		complex than the conventional environment"
2	Emergence of old style	"whilst we talk about [the] contemporary
	warfare	operations what we are really saying is it's an
		environment where some of the old type of
		operations are actually coming more to the
		fore in that [the] conventional war fighting
		phase that we had is diminishing to the rear,
		it's not gone away but it's there"
3	All is in play	"the COE is where there is no front line of
		troops, the entire battles-space is
		contestable"
4	From state to	"COE war-fighting, the way I view it, is very
	individuals	simplistic in that your adversary doesn't need
		to come from one state – it is just one
		adversary. It's a human thinking thing"
5	Organised	"the conventional operating environment is a
		linear battle space, with the systems that are

43

 with a state so you know, state on state Dual responsibilities "a conventional mission – trained as fighter. A contemporary one is probably opposite, less kinetic focus" Traditional conventional, state on state" 	а
fighter. A contemporary one is probably opposite, less kinetic focus"	
opposite, less kinetic focus"	the
7 Traditional conventional, state on state"	
perspectives "conventional war – declared war, fighting	ng as
a formed military, state vs. state, army	VS.
army, defence force vs. defence force	<i>,</i> "
8 Evolving environment "I think the key difference between	
conventional and unconventional [warfai	re] is
in unconventional it is amorphous, growing	ng in
some parts, shrinking in others, and it	ts
evolving"	
"I think conventional is increasingly a da	ated
term because it does create an impres	sion
of fighting sort of Russians in Norther	'n
Europe"	
9 Reality of today "unconventional, it's the reality of what	we
face now in the COE in different theatres	New
Zealand is involved with"	
10 Changing issues to "[it's] non-state actors, insurgents, may	vbe
deal with sponsored by states, but are basically no	ot a
formed body. Basically that's the way I lo	ok at
it"	
11 Harder than previous "[COE] it's far more complex than the	old
situations brigade and division sort of TEWTs"2	.5

Table 3. Open Coding of the COE

In forming the codes it became apparent that some of the respondents saw the COE and the conventional environment as opposing paradigms – supposedly an ideal basis for comparative analysis. A number however, viewed the COE as being an environment simultaneously comprised of both conventional and unconventional warfare. This latter position exemplified the most risky operational mission in the NZDF – Afghanistan.

²⁵ A Tactical Exercise Without Troops (or TEWT) is the framework used to plan and deliver tactical solutions by students undertaking the Grade 2 and Grade 3 courses at the Tactical School.

"in my view, [the] contemporary [operating environment] would be Afghanistan". (Seagull)

Seagull's view is reinforced by Lieutenant Colonel Jeremy Ramsden's assessment after his return from Afghanistan:

"Afghanistan is not a conventional war. Simply 'whacking and schwacking' insurgents — as my previous ISAF Commander liked to say - has its limitations". (Ramsden, 2009)

Three further perspectives illustrated the thinking and consideration the respondents contributed to this particular theme.

Well conventional is in my view, conventional mission would be one where you're going over and you are trained as a fighter. A contemporary [mission] is probably the opposite so more where you're going in with a perhaps, more a less kinetic focus. So from our point of view Afghanistan is contemporary, in my view contemporary would be Afghanistan in a nutshell... Because effectively we're going in there to and I don't like the terms hearts and minds but I think that we need to understand that we are going in with a smile and we should be going in as soon as we can, we are going away from helmets to a soft top so we're talking a cap... with a Kiwi on it which clearly identifies that we are not American to start off with. And it is more well a PRT so its provincial reconstruction team. So its we're going in as a civil aid as opposed to a war fighting focus but we still have to have the ability to switch to protect ourselves or protect civilians if they come under fire - for instance [from] the Taliban. So that's my view or my understanding of what contemporary is. (Seagull)

"Some people call it contemporary warfare; I just like to call it realistic warfare". (Pronto)

An easy way to explain it is we train for 'The War' as in The Great War in all of our courses not for a war which is the here the now. Contemporary war fighting, the way I view it, is very simplistic in that your adversary doesn't need to come from one state it is just an adversary. It's a human, it's a thinking thing. That person will do whatever is required to achieve his or her goals be it in strategic or tactical in effect. They will easily broach across those three realms and you need to be able to engage that individual be it either through stakeholders as meeting systems so that you can actually gain hearts and minds or you go to lethality and you need to be able to use all of those effects. (Holdfast)

It was during this phase of the study that a condition of the research design came in to effect, being a modification of one of the supporting research questions. The question "What are the environmental factors in contemporary warfare that differ from the conventional?" presupposed and led some participants to accept the issue and relationship between contemporary and conventional. Understandably, when posed this very question, whether directly or indirectly, some of the respondents naturally compared the two and replied accordingly. What transpired however was some respondents reframed the question by explaining the differences between conventional and unconventional warfare (Acorn 5 & Shell Drake 2). I accepted the direction that those reframing the initial question were making, for two reasons. Firstly, it reinforced the emergent research design principles of the thesis (Charmaz, 2006; Creswell et al., 2007; Patton, 2002), and secondly it identified more than just environmental factors, it revealed many 'drivers' and 'conditions' that better explained the participants understanding and perspective of the COE. Accordingly, the supporting research question became "What factors shape the contemporary operating environment for modern warfare"?

With a reframed question, the early factors that the participants considered affecting the modern warfare (conventional and unconventional) became more coherent. These consisted of factors such as: diminishing state on state war, the

rise of non-state actors and insurgency, less kinetic focused warfare, civil-military operations, and hearts and minds operations.

Concepts

I developed four concepts from the 11 codes.

Concept	Codes
Difficulty compared to previous	Complexity
situations	Harder than previous situations
Expanded battle-space	Emergence of old style warfare All is in play From state to individuals
Conventional approaches have limited effect	Traditional perspectives Organised
Adaptive methods required	Evolving environment Reality of today Changing issues to deal with Dual responsibilities

Table 4. Concepts of the COE

Difficulty compared to previous situations

Difficulty compared to previous situations, demonstrated the respondent's recognition of the complex nature of the COE in comparison to past conditions and circumstances. All participants, not just the eight core respondents, were aware of the increased complexity in contemporary operations.

Expanded battlespace

The concept of an *expanded battlespace* was clearly understood by all respondents. Early considerations for the term battlespace reflected the change from battle(fields), as confined to static boundaries and specific areas, to the focus on a commander's role and influence to gain three-dimensional awareness (Romjue, 1996, p. 81). It became apparent that the overwhelming view was that the spectrum of warfare had moved beyond the simple battlefield, in to a much broader domain – the battlespace.²⁶ In redefining the space in which modern battles needed to be fought, the 'contestable' areas began to revitalise many previously forgotten factors. These factors were consistent with those identified during the coding phase.

Conventional approaches have limited effect

This concept had its beginnings in the previous two concepts, in so much as the traditional (conventional) approaches having limited effect in the COE. The majority of the respondents accepted the value and importance of conventional thinking and approaches to warfare, however, many questioned the validity of such thinking in an environment that manifestly appeared to be unconventional in nature. A degree of frustration was evident, particularly with training or missions that persisted with the traditional 'text-book' methods, in spite of the NZDF missions being undertaken where there was no state-on-state, army versus army conflicts. Notably, this concept linked to the prime research question of why the application of the traditional IPB was proving so difficult in the contemporary operating environment.

Adaptive methods required

Adaptive methods required, reinforced the effect of the previous three concepts. The respondents tended to follow a natural pathway, being a sense of difficulty

²⁶ Military publications have started to introduce the term *battlespace* in lieu of battlefield. The NZDF has accepted the term as defined by the US Navy, being "[a]II aspects of air, surface, subsurface, land, space, and the electromagnetic spectrum that encompass the area of influence and area of interest" (US Navy cited in NZDDP-D, 2008, p. G-2).

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in the COE, leading to recognising that normal processes were having limited results, and as a consequence the need for adaptive, innovative methods to address the difficulties.

Emerging Category - Recognising the need to adapt

The category *recognising the need to adapt* emerged to typify the respondent's view of the COE. However, *recognising the need to adjust*, and then actually executing the adjustment to the new environment assumed comprehension and understanding of the problem. This could not be guaranteed by virtue of the predominantly (unfamiliar) irregular and unconventional nature of today's conflicts. Nevertheless, this category provided ample theoretical abstraction to drive further analysis, particularly in the preceding chapters.

COE Literature

With the emergence of the category *recognising the need to adapt*, the introduction of pertinent literature was accepted. The technical literature for the COE included the New Zealand doctrinal publications Future Land Operating Concept (FLOC) (NZ Army, 2007), the Foundations of Military Doctrine (NZDF, 2008) and the US FM 3-0 Operations.

Whilst written for circa 2020, many of the features and conditions described in the FLOC exist today, such as: increasing complexity, the diffusion of conflict and the blurring of boundaries, multiple mission environments and the primacy of human interactions (NZ Army, 2007, p. 1-1). These resonated with the views of the respondents, particularly through the concepts of *difficulty compared to previous situations* and *adaptive methods required*.

NZDF Foundations of Military Doctrine, alluded to the 'asymmetric threats' posed in the [contemporary] strategic environment.

New Zealand's current strategic environment is characterised by a growing number of non-conventional security challenges that have

implications for New Zealand's security interests. Defence forces have traditionally trained for conventional military operations and the NZDF must still do so. The NZDF must also have the flexibility and versatility to contribute to international efforts to counter asymmetric threats. Challenges include containing fall-out from increasing intrastate conflict, responding to the breakdown of law and failing states, and support to the countering of trans-national criminal activity, including terrorism. (NZDF 2008, p. 1-3)

In emphasising the dual challenge of conventional and unconventional threats, the NZDF Foundations of Military Doctrine clearly acknowledged the need to adjust current practices. This need parallels the emerged category *recognising* the need to adjust.

A personal perspective by Weatherston identified more NZ-sourced features of the COE:

The contemporary operating environment is more complicated than just 'good guys' versus 'bad guys'. Modern soldiers need to be able to deal with other groups, such as local people or journalists, who might be present in the field of operations. That's why we include interaction with real or simulated media as part of the exercise, to get our soldiers used to working with the media. (2010)

Although Weatherston's comments related to a small training exercise his view echoed the early interview codes of *evolving environment* and the *reality of today*. These codes contributed to the concept of *adaptive methods required*; being an essential component of the category.

Collectively, the New Zealand literature identified a number of threats, conditions and features of the COE. These conditions assist with answering the research question, What are the environmental factors in contemporary warfare that differ from the conventional? More importantly, they confirmed the

concepts formed from the analysis of the in-depth interviews, thereby aligning with the COE category, *recognising the need to adjust*.

Other sources of secondary literature data consisted of the US FM 3-0 Operations (2006) and a personal perspective from an officer in the US Marine Corps.

The US Army field manual, FM 3-0 Operations (United States Army, 2008), provided an insightful comment on the COE by describing the adaptive nature of the adversary. To counter the adversary FM 3-0 makes the point as to the type of soldier required:

Irregular threats are those posed by an opponent employing unconventional, asymmetric methods and means to counter traditional U.S. advantages. Α weaker often enemy uses irregular warfare to exhaust the U.S. collective will through protracted conflict...By combining traditional, disruptive, catastrophic, and irregular capabilities, adversaries will seek to create advantageous conditions by quickly changing the nature of the conflict and moving to employ capabilities for which Their the United States least prepared. operations will is sophisticated, become more combining conventional, unconventional, irregular, and criminal tactics...Soldiers train to perform tasks while operating alone or in groups. Soldiers and leaders develop the ability to exercise mature judgment and initiative under stress. The Army requires agile and adaptive leaders able to handle the challenges of full spectrum operations in an era of persistent conflict. (1-4, 1-5 & 1-9)

By introducing the effect of an adaptive adversary FM 3-0 brought in a new dynamic to the research – the COE personalised in terms of adversary versus (friendly force) soldier. The underlying theme is the necessity for a soldier (and leader) that is able to adapt to conventional and unconventional threats. Generally, FM 3-0 reflects the concepts of the category *recognising the need to*

adapt. In doing so, the comparative analysis between the interview data and FM 3-0 supports an alignment with the developing theory.

Chase (2009) provides a personal US Marine Corps (USMC) perspective, he asserts:

Although the Marine Corps has recognised the need to adapt its operating concepts to an evolving [strategic] environment, the institutional reliance on traditional IPB leaves our understanding of the enemy wanting... War military planners and intelligence analysts operated in black and white where a nation-state and its governing apparatus and military were designated either friendly or foe. Conversely, today commanders must operate in ambiguous shades of where the works gray enemy and operates among the civilian populace and is often supported by external state and non-state agencies. (pp. 20-21)

Chase's view that the USMC 'recognises the need to adapt' is the same descriptor name given to the category for this section of the chapter. Not surprisingly, the comparative analysis between Chase's view and the category recognising the need to adapt bore no new data, with the category appearing well developed in terms of the concept properties. The literature had reached the point of theoretical saturation ending the need for any more analysis (Strauss & Corbin, 1998, p. 212).

In concluding the introduction of the COE literature it was apparent that overall it reflected the category *recognising the need to adapt.* The formal doctrinal literature had a greater effect on the analysis in comparison to that of the IPB doctrinal literature. This could be explained somewhat, by the straight forward task of describing the COE rather than the more difficult IPB process to effectively predict in such an environment. Finally, the analysis of Chase's personal perspective, reaching the point of theoretical saturation, confirmed the alignment of the literature with the category.

Summary

Overall, the validity of *ambivalence* and *recognising the need to adjust* as early categories for the study was confirmed. The theory development of the interview data, in forming the codes and concepts, was substantiated with the introduction of literature as the two categories emerged. Whilst the technical literature for *ambivalence* was not as robust as that for *recognising the need to adjust*, both categories were compared with other personal perspectives to develop their conceptual properties. As expected, the personal perspectives provided a more comparable source of rich data with those of the respondents.

This chapter accounted for a reframed research question and the application of grounded theory procedure demonstrating the emergent nature of the research design. The new question, 'what factors shape the contemporary operating environment for modern warfare' gave better coherence to the responses received during the interviews. The respondents identified factors such as: diminishing state-on-state war, the rise of non-state actors, insurgency, less kinetic focused warfare, civil-military operations, and hearts and minds operations.

Finally, the chapter established the context and understanding of the IPB and COE. These aspects are especially important in situating the next chapter, which presents the analysis of the IPB in training and on actual military operations.

CHAPTER FIVE: INTELLIGENCE PREPARATION OF THE BATTLEFIELD IN ACTION

"The problem for military intelligence in a war like this is determining who the enemy is".

- Mark Ensalaco

This chapter presents the analysis of the primary interview data relating to the IPB in action, both in training and on operations. In terms of training, the perspectives and expectations of the trainers and those who have been trained on courses are examined. In terms of the operational environment, the experience of the participants whilst they were deployed is examined.

IPB in Training Data Analysis

This first section discusses the IPB from the point of view of the trainers. Eleven participants formed the core group of respondents; five intelligence specialists (Acorn 1, Acorn 3, Acorn 4, Acorn 5, & Acorn 6), and six participants with general duties that required intelligence considerations for the training they were responsible for managing or delivering (Foxhound, Seagull, Shell Drake 1, Shell Drake 2, Shell Drake 3, & Watch Dog).

The second section discusses the IPB from the point of view of those who have been trained, and prepared for operations – the trainees. Nine participants formed the core group of respondents, and included most of the intelligence specialists themselves (Acorn 1, Acorn 2, Acorn 4, Acorn 5, Acorn 6, Pronto, Seagull, Shell Drake 1, & Sunray 2).

The literature that was introduced as the categories emerged included a Ministry of Defence Evaluation Report (NZDF, 2009) and a NZ Army (2008) assessment on the type of threats expected to be encountered over the next 10 years. Other literature consisted of US-based monographs and journal articles.

Trainers

With a responsibility to teach the IPB, the first group to be analysed was the intelligence specialists currently with, or previously from SMIS. The mix of officers and non-commissioned officers gave satisfactory coverage across the ranks within the Intelligence community. What transpired from the interviews was a degree of frustration at the lack of urgency to adapting and making changes to the teaching curriculum, particularly to balance the conventional and unconventional practices. The consistent feeling of the respondents was the desire to modify some teaching components of the IPB to address the evolving character of the COE. However, the high rate of staff turnover and increased demands for operational service on such a small group of specialists, in essence slowed any real changes. Somewhat in contrast to the specialists, the generalist trainers (Tactical School, NCO Company and CTC) were fairly comfortable with the current structure and processes for the intelligence components for their training responsibilities.

Not surprisingly, with a large group to focus on over 40 codes were extracted from the eleven respondents. After further comparison, to ensure data consistency and balanced interpretation, there eventually emerged eight principle codes from the training staff.

No	Code	Sample quotes
1	Need to adapt	"So instead of looking at IPB for you know
		terrain and enemy approaches, you need to
		adapt that to a complex human environment,
		attitudes you know that's where I see our
		intelligence guys. You know human
		intelligence type things should be [the] focus,
		anyone can do, you know draw a MCOO' ²⁷
		"The scenario, even though it's in a COE, the
		scenario is very much still concentrated
		towards the key enemy being a conventional

²⁷ The Modified Combined Obstacle Overlay (MCOO) is a product of the IPB that graphically portraits the terrain effects on the battlefield.

		special forces element.
2	Just getting by	"IPB, let me put it this way in the absence
		of anything else in our training system it is
		the best tool we have for intelligence staff as
		a start point"
		"We train on the Mousurians, ²⁸ it tends to fix
		people's minds. A good training model, but
		that's just a start there is no bridging
		doctrine that gets you in to the COE"
		"IPB on course it's done pretty lightly in
		terms of counterinsurgency operations. The
		focus pretty much is on conventional
		operations. The process is none the less
		robust"
		"We get left to crack on. I get very little
		formal in fact since I have been here I've
		had no formal direction on what we are to
		change"
3	Against the popular	"Actually, the students are stronger in the
	view	contemporary, unconventional than they are
		in the conventional"
		"The biggest training gap I see from a
		tactics perspective is actually conventional
		warfare"
4	Easier to assess the	"The problem was looking at the COE, how
	traditional way	the enemy operates and how they actually
		conduct themselves is very difficult to assess"
		"IPB against an organised enemy is easier to
		assess, and it's a good vehicle to get those
		processes working and then we move across
		to contemporary"
		"conventional is a simpler training vehicle"
5	The Senior level don't	"I don't think we have a particularly mature
	get it	view on how the products from the IPB can
		be utilised for course of action analysis"
		"I think one of the big problems is the

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 $^{^{28}}$ The NZ Army trains against a fictitious, conventional enemy Army knows as the Mousurian's. This enemy force has Soviet style equipment and follows Soviet doctrine and practices.

		command don't really know what they want
		they just want some IPB they don't
		understand what the outcomes of that IPB
		should give them"
		-
6	Getting better balance	"When I came here in 2006 there was very
		little in the way of contemporary [operations],
		in 2009, I'm not sure exactly but the ratio
		would be 70% conventional war fighting and
		around 30% towards the COE"
		"I believe we need the training for
		conventional to learn the processes. Once you
		master the process then ah we need to float
		that into an unconventional warfare we
		need to train for both"
7	The traditional	"From my perspective it would be dangerous
	approach is important	to teach, or spend more time in the COE than
		the conventional"
		"During the tactics phase there is a
		[conventional] enemy based around the
		Masurians [straight forward scenario,
		straight forward enemy, straight forward
		mechanics]"
		"We train for the worst case scenario here
		[conventional enemy] harden them up if
		something was to develop [during peace
		keeping] they can call on [conventional war
		fighting]"
		ngnangj

Table 5. Open Coding of the Trainers Perspective

Trainees

During the interviews it became apparent that the majority of intelligence training staff had experienced being IPB trainees themselves during general courses, but in particular for operational service. The segregation of these specialist's responses proved very difficult. I took the decision to amalgamate all of the trainee's codes with the seven trainer codes, the aim being to

conceptualise the codes collectively. Five trainee codes emerged from the initial analysis.

No	Code	Sample quotes
1	Outdated training	"Tactical School TEWTs. I don't think the
		TEWTs are unconventional, none of them are.
		They're all conventional"
		"I think the language training was good
		enough but it didn't cover the subtleties
		between the different ethnic groups, tribal
		groups, religious groups and groups with
		different agendas"
2	Wrong training	We are not focused on fighting or training for
		the enemy we face today"
3	Frustrated at lack of	"Well I think when you look at the length of
	change	time now we've taught people with a focus on
		the Masurian opposition then there isn't, I
		mean there is no reason why some effort
		couldn't be put in to developing a similar role
		or a situation using a contemporary enemy,
		[a] contemporary situation"
4	Tailored training	"I think, [in] my opinion we need to move
	needed	courses that target counterinsurgency. You
		touch on it in power-point, but because you
		are back in the young stages it goes right
		over your head"
		"The command courses need to focus more
		on contemporary, it has been directed, it is
		migrating that way"
5	Irritated	"In the early CRIB ²⁹ days we didn't receive
		any specialist [intelligence] training
		whatsoever for the environment"
		"CRIB 4 the intelligence training we got for
		that particular mission was effectively non-

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 $^{^{29}}$ CRIB, is the operational code name and the designated task group name given to those NZDF personnel that comprise the New Zealand Provincial Reconstruction Team (PRT) in Bamiyan Province, Afghanistan. CRIB 1 deployed in 2003. At the end of 2010 the task group in Afghanistan was designated as CRIB 17. The deployments continue.

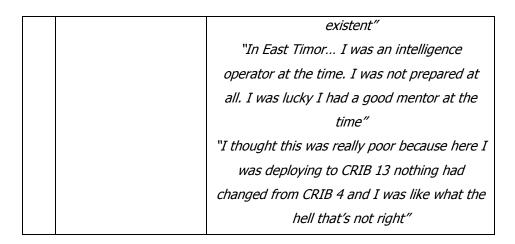


Table 6. Open Coding of the Trainees Perspectives

In amalgamating the 12 codes it became evident that the most of the respondents felt more change to the IPB training was required to account for the COE. A few however, were cautious about making anymore changes, least the positive outcomes of the current training syllabus (from SMIS, Tactical School, NCO Company and CTC) disrupted the training medium of understanding the solely conventional environment, as the basis to advance to the more complex COE.

The investment in training against a conventional adversary was significant. The same investment needed to be made for the COE, being a co-existing conventional and unconventional training environment. A comment from one participant summed up this sentiment.

So I guess it brings it back to the...Mousurians [we need to] develop some sort of contemporary situations to train people on our courses because [you know] if we are going to be doing this for a long time in the future then maybe it's time to develop those skills now. (Seagull)

Such a contemporary scenario would clearly need to comprise a number of irregular themes and factors not found in the traditional (conventional warfare) scenarios, to effectively replicate the COE. Efforts from the Tactical School seemed to be a moving in the direction sought by the majority of the

participants.

We actually take them for a short lesson to refocus their appreciation onto different aspects of contemporary, so you know things that we would include in the IPB or prioritise for like contemporary scenario. Things civil infrastructure, demographics, culture, different ethnic groups, right through you know to [potentially] some social anthropology on how tribes traditionally organise and fight, right to community we are going to operate with. (Shell Drake 3)

Concepts

From the 12 IPB in training codes I derived four concepts.

Concept	Codes
	Irritated
Disillusionment	Wrong training
	Outdated training
	Frustrated at a lack of change
	The traditional approach is still important
The status quo is okay	Against the popular view
	Easy to assess the traditional way
	Get better balance
Change is necessary	Tailored training needed
	Need to adapt
Putting up with it	Just getting by
	The senior level don't get it

Table 7. Concepts of the IPB in Training

Disillusionment

The concept of *disillusionment* represented the underlying annoyance of the majority of the respondents in regards to not only the IPB, but intelligence training in general for the COE. This concept was considered reasonable given the wealth of operational experience by the respondents and commensurately their training level required to deploy. A minor counter view was held by a few respondents but it was not representative of the majority.

The status quo is okay

In contrast to *disillusionment*, the concept *the status quo is okay* generally reflected the belief that the current training system and syllabus was adequate for preparing personnel to deploy on operations. In some cases it appeared that the precept of training for conventional warfare, as the foundation for advancing to unconventional warfare, was a fundamental training imperative.

Change is necessary

As a concept, *change is necessary* illustrates the more pragmatic, less emotive view of the respondents. This concept characterised the positive, practical approaches to bring about the changes that were suggested. Even so, it seemed that emotional and negative perceptions could arise if change was not forthcoming, to a point that *disillusionment* became the dominate concept.

Putting up with it

Putting up with it points towards a fairly passive standpoint by the respondents. This concept indicates tolerance of the situation by the respondents, but not necessarily agreement with it. In putting up with it there came a sense of subjection; not surprising in a hierarchical, somewhat conservative organisation such as the NZDF.

Emerging Categories - Satisficing and Short of Expectations

The category *satisficing*, a blended word combining satisfactory and suffice (Simon, 1997, p. 295), summarises the curious situation of the respondents appearament of adequacy over optimising the IPB in training for maximum operational benefit. The category endorses the general perspective that in lieu of any other procedures, the IPB achieves a tolerable outcome.

The category *short of expectations* brought to light the belief by some respondents that the IPB training was not achieving the necessary results. Logically though, one would assume that the training results could only be proved and validated *after* they were implemented in the deployed operational environment, not before. However, the effect of multiple contingent deployments meant that personnel were often sent on the same mission and consequently attended the next iteration of courses and programmes of preparation training. Their previous training and operational experience subsequently enabled them to critique the training regime for the next mission they deployed on. As if to highlight the high operational tempo, in an extreme case one participant in the research was deployed overseas on operations for various periods of every consecutive year from 2001 – 2010, including deploying to Afghanistan four times on CRIB 1, 4, 9, and 16 (Acorn 2).

IPB in Training Literature

With the emergence of the categories *satisficing* and *short of expectations*, the introduction of pertinent literature to generate further comparative data was accepted. New Zealand literature included a Ministry of Defence Evaluation Report and an Army assessment of the type of threats to be expected over the next 10 years. Other literature consisted of perspectives from Land (2004) as well as Coons and Harned (2009).

In summarising its review of Army Individual Training the Ministry of Defence (2009), recommended the Army:

adopt centralised training for the а approach to contemporary [operating] environment to enable greater synergies of efforts to ensure that any trade off between training within the contemporary [operating] environment and conventional fighting skills is with war consistent Government policies Army's NZDF and the and priorities. (p. vi)

In conjunction with an assessment that Countering Irregular Threats (CIT) will be the main form of activity for the next decade and that complex missions are predicted to be the regular, contemporary form of military operations for New Zealand out to 2020 (NZ Army, 2008), the necessity to deliver effective intelligence training for the COE is obvious. With the emergent categories of *satisficing* and *short of expectations* some concerns could be raised as to the current training. It may be that the requisite training is being delivered appropriately, despite the majority of trainers and trainees in the study indicating a perception that it is less than optimal.

In his monograph on the training for US intelligence analysts, Land's (2004) literature review revealed that:

not much has been written that pertains to the training tactical intelligence analysts. While the [US] Army maintains three doctrinal manuals that explain the analysis process and its techniques, there does not appear to be much research dedicated towards the goal of how to effectively train tactical intelligence analysts... what has been written about analysis deals primarily with the of analysis science the varied models and techniques—verse the art of analysis—the skills required to synthesise, correlate, and integrate information in to relevant meaningful intelligence for commanders. (p. 16, 53)

Land's view highlights the tendency to focus IPB literature on teaching the process rather than on the actual understanding and meaning of the process to

achieve relevant results. His perspective is similar to Steele's (1992) comment that, "[IPB] is a process and is not a substitute for analysis" (p. 28). As more comparative data, Land's monograph resonates with the concepts of disillusionment and change is necessary. In so doing, his work supports both of the IPB in training categories.

In the article 'Irregular Warfare is Regular Warfare', Coons and Harned (2009) discuss the necessary changes in education and training in a persistent irregular warfare environment.

The military departments and Services, Unified Commands and National Defence University need to institutionalise the changes they have made to Joint and Service education and training warfare. The US for irregular military has century-long a history of adopting temporary solutions in response to challenges, only the irregular to scrap them when challenge passes. This current struggle will not pass in the foreseeable future. Our education training and base solutions demands from the field permanent to meet the that will come once the general purpose [conventional] forces adopt a new paradigm for waging irregular warfare. (p. 103)

This assertion aligns with the imperatives of the New Zealand assessments (Ministry of Defence, 2009; NZ Army, 2008), insomuch as a greater emphasis on the COE and the effective (intelligence) training required for conventional forces to operate and win in such an environment. Comparatively, Coons and Harned's views substantiate the categories *satisficing* and *short of expectations*.

In concluding the introduction of the IPB in training literature, the analysis successfully framed the two categories. The official New Zealand policy documents (Ministry of Defence, 2009; NZ Army, 2008) and the two personal perspectives (Coon & Harned, 2009; Land, 2004) triangulated the interview data, with consistent regularities in the data (O'Donoghue & Punch, 2003). Lastly, Land's comment on the lack of written material on the actual training of

analysts, instead focussing on processes was perplexing. However, it indentified the gap in this field of work; something future researchers might choose to address.

IPB in Training Summary

The views of the trainers and trainees of IPB, and intelligence training in general, mainly centred in the argument between training for conventional warfare or unconventional warfare. The majority recognised the need to change, but to what extent and how much remained unknown. A few respondents cautioned the need to change any more than has already occurred but these were in the minority. The theory development to uncover the categories *satisficing* and *short of expectations* fairly represented the codes and concepts. This was substantiated by the comparison with the pertinent literature.

IPB on Operations Data Analysis

This section presents the analysis of the primary interview data relating to the participants experience and understanding of the IPB on operations. Operations are without a doubt the decisive setting for IPB proficiency and excellence. 12 participants formed the core group of respondents (Acorn 1, Acorn 2, Acorn 3, Acorn 4, Acorn 5, Acorn 6, Acorn 7, Holdfast, Pronto, Shell Drake 1, Sunray & Sunray 2). The perspectives and expectations of commanders, intelligence staff and small team leaders were taken in to account. This grouping reflected the organisational process and relationship through which the IPB was used to seek out information and in return provide intelligence (as shown in Figure 2). The literature that was introduced as the categories emerged were personal accounts, in the form of US monographs and journal articles.

Given the large number of respondents I expected this theme to generate the largest number of codes. This partially occurred and in fact over 50 codes were originally formed. A secondary check for duplication and repetition rendered a final group of 17 codes.

No	Code	Sample quote
1	IPB needed for the	"We need an IPB that tells you where the
	COE	ethnicity [groups] are, where the economic
		activities are. Getting away from this mindset
		that intelligence is spotting the lead tank".
		"we're not going to shoot our way to victory
		on this one"
2	Specialists need to	"The intelligence staff have the training, they
	take responsibility	have the expertise, just need the push you
		know, they need to take some responsibility
		to make sure the product they produce is
		relevant"
3	Commander's role	"We did do a full IPB and the commander
	important	insisted on it which was very good, we got a
		lot of support from him to do or work"
4	Caught in a vicious	"Quite often now we pluck them right off the
	cycle	course and send them to Afghanistan. And
		we've already identified from an NZIC
		perspective that our training isn't good
		enough to send them on operations but we're
		not able to change the courses, we don't have
		the time or the manning"
5	It's too hard	"We focus actually often on winning battles
		but not on winning wars because it's a bit
		hard"
6	Easier recognition of	"I think our fore fathers were quite lucky in
	conventional forces	the fact that when they were on the
		battlefields of old everyone was wearing a
		uniform so you knew who the bad guys were"
7	Process not used	"In two years of operations I have not [seen
		a] full IPB done"
8	Underappreciated	"Intelligence is almost like a poor cousin. We
		want it, we all need it, some of us know how
		to use it, but yet it's so under resourced and
		under focused that it's becoming pushed to
		the side and almost ignored. And when we

		get it wrong it's got catastrophic components
		to it that none of us really want to go into"
9	Poor management of	"In terms of our intelligence management
	the information	the system is currently broken. We also have
		no training in information management. We
		do not have a discipline of managing the
		information that we've got"
10	Frustration that	"My view on it is that intelligence should drive
	procedures are not	the operations; it's as simple as that"
	followed	
11	Wider education	"The NZ Army is well trained but poorly
	needed	educated. In the winter nights I instigated a
		programme of officer lectures once a week on
		other counter insurgency campaigns"
		"Language is a window to a culture. I think as
		a military we are remiss in our language
		training"
12	Not structured	"The commander [you know] his expectation
	properly	was used to these Joint Intelligence Cells of
		15 people and expected all of this stuff to
		come from us and we just weren't configured
		for it"
		"Intelligence seems to be something that is
		very short everywhere"
13	How to communicate	"We need more information on the different
	the complex	ethnic break up and religious break up all that
	environment	everyone gets that but then how do we do it,
		how do we depict it in a way that is sensible
		to our planning staff"
		"I think we need to [actually] train our
		soldiers to be able to actually understand
		what they are looking for, understand as part
		of their trainings is the IPB process so they
		get a better understanding"
14	Focus on the wrong	"In the early days the patrol debriefing was
14	things	not about gathering intelligence, seeing what
	uiiigs	not about gathering intelligence, seeing what

		people had seen about patterns, [it was] all
		about the patrol mechanics"
15	Using other forms of	"I was looking at all this information and
	intelligence	thinking this is like Russian organised crime;
		my previous non-military experience that
		really helped me"
16	Kiwi approach to the	"As Kiwi's I think we are quite good, we are
	population	use to going out there and talking to people
		and getting the information for ourselves".
		"Local contact with the communities the way
		they are developed by those patrols is just its
		gold you've got to know how the market
		runs, what is the economy like? What are the
		things that worry them? What are the things
		that they revere? If you don't contact them
		you're screwed".
		"The Kiwi approach to these sorts of
		operations which often I think is a myth but
		actually one thing which was very good is the
		interaction with the local people"
17	The process works,	"I think our processes are actually pretty good
	just needs adapting	and there are adapted versions like our new
		battle group S2 course, all singing all that and
		mainly unconventional. It's the same
		processes, the same cycle but it doesn't
		change its still all there it's just practising it in
		a non conventional sense".
		"We're not looking just for kinetic effects, who
		are the negative influences, or what are the
		negative influences in the AO. You adapt your
		IPB if you like from the conventional into the
		COE".

Table 8. Open Coding of the IPB on Operations

Of all the interview questions, IPB on operations generated the most passionate responses. Though some of the respondents seemed hesitant at times to 'speak

their mind' it was plainly evident that all wanted to make a sincere contribution to improving the IPB. Not all responses were specifically on the IPB, occasionally drifting to issues about the commander, relationships between other staff, and the patrols. This was not unexpected as these elements are inter-related and inter-dependent factors in the IPB processes and products. This reinforced the need to view the IPB holistically, and in the context of its place in prosecuting military operations.

By far the most concerning matter was the place of the IPB, and intelligence in general, to 'lead operations' (Sunray 1, Sunray 2, Holdfast & Acorn 4). At issue was the belief that having carried out the IPB, the planning for the operational tasks would take in to account the environmental effects and considerations about the enemy to achieve the mission. The reality was intelligence was used merely in a supporting role, and often as a reactionary measure (Sunray 2). While not an issue of the IPB process per se, in regards to leading operations it fell short of the expectations. Two comments in particular summed up the collective view:

"Intelligence should drive how we achieve what's happening otherwise we are never going to get inside of that inner loop circle". (Holdfast)

"We were not in an intelligence led mission. We were very much [a] S3 operations driven mission; no we were a patrol decided driven mission, patrols where they wanted go, S2 everything should have been (intelligence) driven". (Acorn 4)

Concepts

From the 17 codes there emerged five concepts:

Concept	Codes
Some things work	Commander's role important The process works, just needs adapting Kiwi approach to the population
Annoyance	Focus on the wrong things Process not used Frustration that procedures are not followed Easier recognition of conventional forces
A feeling of helplessness	Underappreciated Caught in a vicious cycle It's too hard
Someone needs to step up	Not structured properly Poor management of the information Specialists need to take responsibility
We can improve	Using other forms of intelligence How to communicate the complex environment IPB needed for the COE Wider education needed

Table 9. Concepts of IPB on Operations

Some things work

The concept *some things work* demonstrated positive experiences with the IPB in the COE. The role of the commander, to understand the nature of the COE and effect good guidance through the command chain was considered critical (Acorn 3). This presupposed that all commanders were conversant with the COE, which many of the respondents indicated was not the case. The 'Kiwi way', in regards to soldiers relating to and building rapport with the local populations, was seen as an important capability (Sunray & Acorn 5).

Annoyance

Annoyance mirrored the concept disillusionment that arose from the analysis of the IPB in the training environment. That a similar concept emerged from IPB on operations may have been a coincidence, rather than related. Nevertheless, the respondents negative perceptions of both their training and operational experiences should be a concern for the NZDF.

One respondent made a point of the problems with the structure of the intelligence capability to support the mission in the COE. The focus on higher level intelligence, rather than the collection of information relevant at the patrol level was an irritation that required adjustment in the operational theatre – not an ideal situation (Sunray).

A feeling of helplessness

The concept *a feeling of helplessness* illustrated a sense of despondency, principally from the NZIC respondents. The cycle of constant operations for such a small group affected the ability to train and up-skill effectively which in turn affected optimal performance on operations (Acorn 4). The underlying feeling was an inability to personally, and even organisationally change the vicious cycle to a virtuous one. Such a feeling could have an affect on morale, a very undesirable situation. Two viewpoints exemplified the concept:

"I think our biggest problem in the corps (NZIC) is we are at the moment a revolving door for operations and everyone is really tired". (Acorn 5)

"We've got people who are not NZIC filling critical roles because we can't do it ourselves. We try our best but our best at the moment is not enough". (Acorn 6)

Someone needs to step up

Someone needs to step up represented the view that someone or a collective group needed to take responsibility for the perceived difficulties. Not necessarily as a reflection of being the cause of the problems but taking responsibility to fix them. This concept comprised a positive, optimistic position, lest not trying to correct the problems could lead to the unwanted state of feeling helplessness. One respondents comment represented a perceived difficulty:

"I think the intelligence corps has suffered from a lack of direction from both NCOs and officers to actually make sure that we adapt ourselves". (Acorn 3)

We can improve

This concept provided for tangible suggestions to improve the understanding of the COE and better ways to collect and understand information. One respondent made the interesting point of having previous experience in non-military intelligence activities (law enforcement) and recognising these similar activities in his mission area. This broader view of irregular threats, even criminal elements, improved the analytical arsenal. The improvement of understanding the COE extended beyond the typical battlefield. Education in other professional domains was considered important to give comprehension to all of the events, big and small, playing out in the mission. Sunray 2 asserted that:

I think I would have better served the mission if I had some sort of qualification in foreign affairs or international affairs. That would give me a much better understanding of the relationships between the countries, the relationships between [them] at the political level. (Sunray 2)

Acorn 5 highlighted the difficulty of depicting the [human] terrain³⁰. He concluded that, "the basics are there that lead you to the conclusion that we need more information on the different ethnic break up and religious break up [of the population] but then how do we do it, how do we depict it in a way that is sensible to our planning staff." Using two-dimensional representations to map [human] terrain is proving difficult, especially when trying to account for dynamic socio-cultural conditions (Salmoni & Holmes-Eber, 2008, p. 34). The challenge therefore would be to improve understanding and comprehension by building a model or system that could sensibly illustrate the dynamic social inter-relationships.

Emerging Categories - Risk and Professional Optimism

The category *risk,* represented the unsatisfactory issues that had the potential to create low morale and, in the extreme, put operational plans in jeopardy. A key factor was the feeling that the small intelligence corps was overcommitted and stretched beyond its capacity. There also emerged the feeling that the training and operational requirements for the COE were being ignored – still largely grounded in the industrial-aged, conventional warfare scenarios.

Professional optimism brought to light the sense of service to the country; of duty; of being a military professional and aiming to be the best. It recognised the need and willingness to improve not only the IPB, but the relationships between the commander, the staff officers and the patrols. The category reflected a conservative, practical approach to being innovative. Sunray 2 commented that:

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³⁰ Soldiers think in terms of terrain. The metaphor 'human terrain' means that they can talk about culture in a way that sounds familiar to the them: graphically representable, quantifiable, and geographically measurable (Salmoni & Holmes-Eber, 2008, p. 33)

"I think it is important that actually, we heighten the senses of our soldiers. Heighten the senses of our soldiers and make them more effective than what they are at the moment". (Sunray 2)

IPB on Operations Literature

With the emergence of the categories *risk* and *professional optimism* the introduction of appropriate literature was accepted. New Zealand literature included an autobiographical assessment by a former commander in Afghanistan (Hall, 2010) and an Army publication on service and loyalty. Other literature consisted of FM 3-24, Counterinsurgency, a critique by intelligence staff in Afghanistan, as well as personal US perspectives.

As the commander of a New Zealand Provincial Reconstruction Team in Afghanistan, Hall's account of his 2009 mission provided a very good insight to the relationship between the commander, his intelligence and operations staff, and the small team patrols. In a surprise call to meet a local powerbroker, he remarked about his assessments and his principal intelligence officer:

Assessments of past events and predicting what was going to happen in the future was incredibly difficult, like completing a jigsaw when you have no idea what the final picture is going to look like, whether you have all the pieces, or whether the pieces that you have got all come from the same puzzle. To some extent experience, personal judgement and intuition play a significant role. I disagreed with Laura's early intelligence assessments but with time and in hindsight I realised that her judgements were often more accurate that mine. (p. 54)

Hall's admission that his intelligence officer's assessments were often more accurate than his own highlighted two important points. Firstly, it demonstrated a commander taking responsibility to make his own personal assessment, not abrogating this important task solely to the intelligence officer. Secondly, it

showed the accuracy needed by the intelligence officer in order to gain the trust and confidence of the commander. Hall's view supported the category *professional optimism*.

The New Zealand Army publication, The Way of the New Zealand Warrior (2007), provided two perspectives:

Initiative has been shown by New Zealand soldiers since the establishment of the New Zealand Army. Innovative thinking, adapting to the current environment and operating in response to changing situations are the mark of initiative. (p. 11)

Adapting from aggressive warlike actions to friendly interactions with the local people has proved to be one of the New Zealand soldier's greatest skills. (p. 13)

Both of these passages describe some of the characteristics of the modern New Zealand soldier. In being able to adapt to changing situations, soldiers would need good training of the different operating environments in order to act appropriately. This endeavour reflects the category *professional optimism*.

The US field manual FM 3-0 (United States Army, 2008) and Kelly (2000) are implicit as to one of the fundamental roles of intelligence – "it drives operations" (FM 3-0, 2008, p. 35; Kelly, as cited in Acord, 2007, p. 15). This US doctrinal imperative is at odds with the personal experience of the respondents (Sunray 1, Sunray 2, Holdfast, & Acorn 4). Having operations drive intelligence was a source of much frustration. In this context FM 3-0 and Kelly, supported the category *risk*.

In their critical review of the state of intelligence in Afghanistan, Flynn, Pottinger, and Batchelor (2010) lambasted the propensity to misread and failure to understand the unconventional character of the COE. They asserted that:

"Analysts' Cold War habit of sitting back and waiting for

information to fall into their laps does not work in today's environment and must end". (p. 10)

This view was reminiscent of concerns dating back to the period after the US invasion of Iraq in 2003 (Echevarria, 2010; Fallows, 2004; Hoffman, 2004; Ricks, 2006). What was most alarming was the fact that nine years after operations began in Afghanistan, and seven years in Iraq, the conventional warfare type practices were still occurring. Flynn's et al., views aligned with the codes *annoyance* and *IPB needed for the COE*, and in doing so triangulated the category *risk*.

Brown's (2003) assessment supports Flynn et al.:

"The IPB process, as presented in doctrine is in part, deficient. It provides an optimum framework, as designed, for determining certain and limited futures [Cold War]. However, it is a poor framework for uncertain environments [COE]". (p. 44)

Brown further contends that:

Instead of creating a new process that specifically addressed of the vagaries the new [contemporary operating] environment, the intelligence doctrine writers decided modify a doctrine optimised for the Cold War with patches techniques and add-on techniques, tactics, and procedures to meet current intelligence requirements....These IPB add-ons are not frameworks for analysis but checklists for consideration. (p. 33)

His insistence that the add-ons are merely checklists, in lieu of a new framework of analysis, raises questions about accepting a symptomatic solution rather than engaging in the fundamental solution. This situation has *risk*, also reflecting the previous IPB in training category of *satisficing*.

In concluding the introduction of the IPB on operations literature the analysis confirmed the two categories *risk* and *professional optimism*. What was most evident was the inextricable link between the IPB as a process and IPB in the broader sense of intelligence. Hall's experience showed that the relationship between the commander and the intelligence staff was a crucial factor to operationalise IPB – that being the situation where a commander could act on good advice. FM 3-0 and Kelly established 'Intelligence leads operations' as a doctrinal standard. The operational experience by the respondents however, was quite the opposite. This contrast between the doctrine and the reality was a point of frustration, leading to the category of *risk*.

IPB on Operations Summary

This chapter analysed the IPB in the training environment and on operations – IPB in action. Four categories emerged; *satisficing*, *short of expectations*, *risk* and *professional optimism*. The introduction of the secondary literature supported the validation of the categories.

The investigation considered the perceptions of the respondents during training, both from a trainer's and trainee's perspective. The expectation for the IPB training to adequately prepare the respondents to operate effectively on operations was not fully met, as acknowledged by the category *short of expectations*. Logically however, the respondents should not have known whether the training was effective until *after* experiencing the operational environment. The constant flow of personnel for overseas service was such that many respondents had deployed on the same mission multiple times and therefore had prior knowledge of the operational expectations, hence the confidence to make such a critique. The category *satisficing* described the curious situation where the respondents were resigned to accepting sub-optimal training in lieu of any other process or procedure.

IPB on operations generated many passionate responses, which was hardly surprising because no mitigation of the participants concerns was evident. The COE, the decisive setting for the IPB in action, was considered the pinnacle of the process. Exploring the respondents' view points on their expectations formed during training revealed divergent experiences. The capacity of the small NZIC Corps to sustain operations as well as train itself to account for the COE was the cause of significant dissatisfaction. Frustration also arose as to intelligence *not* leading operations despite this being a doctrinal standard. These experiences contributed to the category *risk*. Somewhat in contrast, the willingness to improve the process as well as the important relationships that operationalise the IPB were uncovered. The category *professional optimism* described the sense of innovation and responsibility to improve the process.

This chapter accounted for the research questions pertaining to the difficulties of traditional IPB in the COE, and the perception of the intelligence training for the IPB. It presented a number of adaptations made to improve not just the IPB but also suggestions as how to develop greater understanding of the COE.

This chapter also established the final tranche of categories required to further develop the theory. In accordance with the research design and the grounded theory method, the analysis of this and chapter four have focussed on describing the emerging codes and concepts. Some of the characteristics and properties of the categories have been described. With these prerequisites in place the next chapter will move forward and lift the study from data description to abstraction and explanation (Bryant & Charmaz, 2010, p. 272).

CHAPTER SIX: DEVELOPING THE THEORY

There is nothing more practical than a good theory

- Kurt Lewin

This chapter is presented in two sections. Section one presents the core category and other categories that emerged from the data. It explains the relationship between the core category and the other sub-categories. The second section presents the theoretical interpretation of the research – the theory (Bryant & Charmaz, 2007; Punch, 2006). At this point in the research a focus on explanation rather than description is applied to conform to the conventions of the grounded theory method that "offer a conceptually abstract explanation for the latent pattern of behaviour (an issue or concern) in the social setting under study. It must explain, not merely describe, what is happening in a social setting" (Bryant & Charmaz, p. 272).

Final Categories

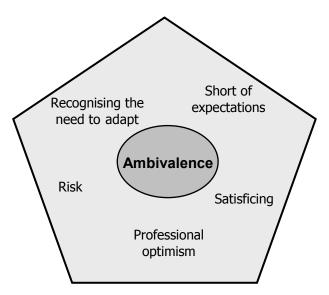


Figure 4. Final Categories

Ambivalence emerged as the core category with the subcategories of short of expectations, recognising the need to adapt, risk, professional optimism, and satisficing.

Ambivalence - the core category

The fundamental element of *ambivalence*, the "co-existence of two opposed and conflicting emotions" (Sinclair, 2001, p. 43) reflected the participant's satisfaction and dissatisfaction with the IPB, and intelligence in general. The feeling of *ambivalence* was experienced by not only the intelligence specialists, but by the groups in the training environment and those who had deployed on operations, giving commonality and consistency across the research. A review of the other categories and the interview notes confirmed that *ambivalence* was either the primary driver or the underlying basis for many of the responses. No other category had such a dominant effect.

As a normal aspect of human nature (Miller & Rollnick, 2002, p. 14; Fineman, Gabriel, & Simes, 2010, p. 358) the thought of an *ambivalent* military force might be considered acceptable. However, given the evolving character of the COE and countering irregular threats being considered the main form of activity for the next decade (NZ Army, 2008) such a position would be untenable. Change must come. Miller and Rollnick (2002), assert:

Passing through ambivalence is a natural phase in the process of change. It is when people get stuck in ambivalence that problems can persist and intensify. Ambivalence is a reasonable place to visit, but you wouldn't want to get stuck living there. (p. 14)

That *ambivalence* reflected the current situation explains the underlying pressure and anxiety felt by the participants, particularly those drawn out directly from the subcategories of *risk*, *short of expectations*, *satisificing* and *recognising the need to adapt*. *Ambivalence* experienced in the training

environment and reinforced in the operational area created a vicious cycle. Acorn 5, explained:

it (the IPB) is a decent tool. But it is applied in many different ways by many different people and sometimes not applied at all and therein lies the danger because you have staff and sometimes commanders and sometimes even intelligence staff applying it differently to the problem at hand, and that I think is where a lot of confusion comes in, and even a lot of despondency dare I say it at different levels.

While the negative aspects of *ambivalence* were more prominent, there did exist a genuine belief in the process and the ability to improve comprehension of the COE. This condition was not surprising given the type of irregular activity expected out to 2020 and explained why *professional optimism* co-existed alongside the other categories. As the core category *ambivalence* was interrelated to all the other sub-categories, and in turn they were inter-dependent on it.

Short of expectations

The subcategory *short of expectations* highlighted the view that the IPB, and intelligence training in general, was not achieving the necessary results to prepare adequately for operations. Knowing the training was not up to the required standard *before* deploying on a mission explained the remarkable situation of the participants 'knowing what they needed to know' and as a result feeling frustrated. Noone's (2003) report of frustration at the highest level in the US government, describes a similar sentiment:

They don't get it [the president said]. How many times do you have to tell them it's going to be a different type of war? And they don't believe it. They're looking for a conventional approach. That's not what they're going to see. (Woodward, as cited in Noone, 2003, p. 241)

It appeared that the short turnaround of the participants to deploy again on the same or similar mission was more rapid than the time to integrate lessons previously learned. Whether the intelligence lessons were actually registered for changes or they were not acted on may be important for the NZDF, but less relevant for this study. Certainly the Government of New Zealand expectation is:

"Applying the lessons of recent operational experience, we will improve the combat effectiveness, protection, and sustainability of land forces, including key supporting capabilities". (Ministry of Defence, 2010, p. 55)

The emergence of the category *short of expectations* may not have been the reality but it was the perception. This accounts for the relationship with the other sub-categories *recognising the need to adapt, satisficing* and *risk* and the core category *ambivalence*.

Recognising the need to adapt

The subcategory *recognising the need to adapt* presupposes the participant's awareness of the COE. It signifies the necessary shift in mindset from a solely conventional environment to a COE that comprises some elements of conventional but predominately unconventional warfare. *Recognising the need to adapt* is a consequence of the category *short of expectations*. To properly adapt would require an understanding of the underlying factors and influences driving the COE. This would be an important precondition before implementing any changes to existing practises. Implementing incorrect practises' or taking too long to implement them would fuel the vicious cycle already experienced in the category *short of expectations*. Taking a positive stance, implementing good practices, could turn the inter-dependent relationship between *short of expectations* and *recognising the need to adapt* in to a desirable virtuous cycle.

How do you design training to get soldiers to now adapt those first principles into a complex [contemporary operating] environment? That takes a little bit of dedication and time to

sit down and write a training programme with a complex enemy. (Acorn 3)

Risk

Risk emerged from the analysis of IPB on operations. The two key issues from the category related to the feeling that the small Intelligence corps was overcommitted and stretched beyond its capacity, and a perception that the training failed to take in to account the COE and was still largely grounded in the industrial-aged conventional warfare scenarios. In both cases the reality may well have been be quite different but the underlying tensions created stress and manifested as *risk*. Risk could be considered an outcome of the core category *ambivalence*, and the subcategories *short of expectations* and failing to *recognise the need to adapt*. Measuring the degree of *risk* is difficult and not the purpose of this research, however as this research presents the current situation any positive actions or initiative taken to address the related categories would logically reduce the *risk*. Hall and Citrenbaum (2009) present the challenge:

Whereas preparation of the battlespace the military effective against Cold War opponents, without considerable adjustments, the same templates and thought processes will not serve well against the connected, mobile, global threat of today and tomorrow. It only follows that our thought processes, mental templates, and supporting machines must learn, adapt, adjust to compete in today's [contemporary] operating environment against insurgent and terrorist threats. (p. 25)

Professional optimism

The subcategory *professional optimism* encompassed the sense of 'service and duty' to improve the IPB and general use of intelligence, particularly while on operations. This included such measures as: enhancing the relationship between the commander, the intelligence and operations staff and the small patrol

teams; up-skilling in education in areas such as foreign affairs and international relations; and seeking better ways to depict the complex and dynamic socio-cultural conditions. *Professional optimism* was as a counter-balance to the sub categories *short of expectations, recognising the need to adapt* and *risk*. It was the positive component of *ambivalences* two opposed and conflicting emotions. That the negative perceptions were quite evident, but kept in check, explains the interdependence of *professional optimism* as a personal reconciliation mechanism. The recently appointed Chief of the New Zealand Army described his expectation for the Force to be professional and ready for operations as:

We must be always capable of deploying, and build on our ability to be ready for the next operation - the one that we don't yet know about. We must be armed, equipped, trained and led by the best that New Zealand has to offer. Everything we do and our entire focus must be on winning - we have to want to win with a passion in our training so that it extends into our operational deployments. (Keating, as cited in NZDF Media Release, 2011)

Satisficing

Satisficing incorporated concession and compromise in to the other categories. It explained the ability of the participants to accept the perceived limitations of the IPB, yet continue on with *professional optimism*. Emerging from the conceptual label *putting up with it, satisficing* accounted for the tolerance of adequacy. A long period of adequacy would be undesirable in the COE and certainly *risk* the ability to constantly win on operations. Flynn et al. (2010) emphasised:

The urgent task before us is to make our intelligence community not only stronger, but in a word – relevant. (p. 10)

In terms of category hierarchy, *satisficing* was second only to the core category *ambivalence*. This reflected its integrating effect on the other subcategories, confirming a sense of 'getting on with it and getting by'.

Just getting by – a theory

The principal purpose of grounded theory is the discovery of theory from data systematically obtained from social research (Glaser & Strauss, 1967, p. 2). This study has concluded that the grounded theory *just getting by* explains the New Zealand experience of the IPB in the COE. In the context of the study the idiom *just getting by* takes its meaning as doing enough to survive, often improvising but operating below the optimal level. *Just getting by* encompasses the perception of IPB trainees, trainers, and those who have deployed on operations and experienced the IPB, and intelligence in general. The functional components of *getting by* consist of six categories: *ambivalence, short of expectations, recognising the need to adapt, risk, professional optimism, and satisficing. Ambivalence* is the core category, inter-related to all of the other categories, who in turn interrelate and in some cases are inter-dependent on each other.

Just getting by is made up of three properties:

- 1. It is considered a holistic concept and involves a range of stakeholders and dimensions.
- It relates to the complex inter-relationships, particularly in the training environment between the trainees and the trainers, and in the COE between the commander, intelligence and operations staff, and small patrol leaders.
- The 'vicious cycles' can be reformed and replaced by 'virtuous cycles', thereby improving and optimising the IPB.

Given the many dynamic environments that NZDF personnel are currently deployed to on operations, and the fact that countering irregular threats for the next 10 years is the firm assessment of the NZ Army, *just getting by* appears to be the absolute minimum, perhaps even below any acceptable level of proficiency. Surely a parlous position to be in?

For many, the thinking could be that *just getting by*, or 'just getting on with it' is a solely New Zealand issue. Two final literature articles provide more data to compare the New Zealand experience. Firstly, the former British Strategy Director in Kabul, Afghanistan describes:

When I went to Afghanistan in 2007 I went to Regional Central East and Regional Centre West and I talked to the planners in both of those two places — the Americans in the East and the Italians and Spanish in the West. I asked them all the same question: what campaign plan are you using; what strategy are you using to design this campaign in your areas? I got the same answer from both of them: 'There's no plan Sir. We're just getting on with it'. (Jeremy, cited in House of Commons, 2010, Ev. 37)

And, lastly from the highest ranking intelligence officer in Afghanistan in 2010:

"Eight years in to the war in Afghanistan, the US intelligence community is only marginally relevant to the overall strategy". (Flynn et al., 2010, p. 7).

This final integration of literature in to the research supports the findings of *just getting by,* demonstrating that New Zealand is experiencing similar issues and problems as those faced by Britain and the United States.

Trustworthiness of the Findings

Uncovering the emergent theory does not end the study. Lincoln and Guba (1985) established trustworthiness as a critical process in determining the soundness of the research (Lincoln & Guba, 1985, p. 289). They asserted, "The basic issue in relation to trustworthiness is simple: How can an inquirer persuade his or her audiences (including self) that the findings of an inquiry are worth paying attention to, worth taking account of?" Furthermore, Steinmetz maintains "A trustworthy study is one that is carried out fairly and ethically and

whose findings represent as closely as possible the experience of the respondents" (Steinmetz, as cited in Padgett, 1998, p. 92).

Two methods were applied to give credibility and trustworthiness to the study: peer debriefing and member check: Peer debriefing, is "the process of exposing one's self to peers for the purpose of exploring aspects of the inquiry that might otherwise remain implicit in the inquirer's mind... the process keeps the inquirer 'honest, exposing him or her to searching questions by an experienced protagonist doing his or her best to play the devil's advocate" (Lincoln & Guba, 1985, p. 308). Given the study's close examination of Army personnel and doctrine, I sought peer debriefing from a different Service. The RNZAF Air Power and Development Centre (APDC) provided peer debriefing, being a credible unit charged with researching, analysing and assessing contemporary military issues. The APDC provided extremely frank and candid feedback, compelling me to re-examine a number of my findings and analysis.

Member check, is "whereby data, analytical categories, interpretations, and conclusions are tested with members of those stake holding groups from whom the data were originally collected is the most crucial technique for establishing credibility" (Lincoln & Guba, 1985, p. 314). All of the participants were mailed out the research findings before it was finalised. It gave them the opportunity to assess the intentionality – being certain the information was contextualised as they intended. It also allowed the respondents to give an assessment of the overall adequacy of the research in addition to confirming individual data points. A small number of points were clarified and general queries addressed, however no comments were received that affected the methodology, analysis and emergent theory. Most significant (and satisfying) to the research was that the participants that responded to the members check either agreed or strongly agreed with the accuracy, context and findings of the study.

The peer debrief and member check indicated that the research and the emergent theory were credible and trustworthy.

The final chapter concludes the research and makes a number of recommendations.

CHAPTER SEVEN: CONCLUSION AND THEORY IN ACTION

"There are but two powers in the world, the sword and the mind.

In the long run the sword is always beaten by the mind".

- Napoleon Bonaparte

This chapter is presented in two sections and concludes the research. The first section summarises the conduct and explains the outcomes of the study. Having developed the grounded theory *just getting by* the second section engages in *theory in action,* making recommendations to optimise the IPB and more broadly the approach to intelligence training in general. Finally, other areas of research are suggested to further develop the body of work relating to the New Zealand approach and experience of the IPB.

Conduct of the Research

The aim of the research was to discover and understand the perceptions and views of military personnel utilising the IPB in training, on operations and in the context of the COE. The enquiry came about from my personal experiences in Iraq and the sense of frustration at being unable to effectively utilise the IPB to explain the dynamic and complex conflict environment. Learning of other people experiencing similar situations, I sought to find out an explanation as to the difficulties. Receiving encouragement to delve deeper in to the issues, to develop a theory, I sought to advance the practical problems in to research questions. The principal research question 'Is the application of the traditional IPB appropriate for the COE?', and my pursuit to understand people's perceptions led to a qualitative research methodology. Grounded theory was selected as the appropriate method to seek research answers and explanations to the practical problems. As such, the physical presentation of the study was written as a theory, assuming that part of the method itself is the writing of the theory.

Primary data was collected through in-depth interviews with 17 Army participants. The participants included personnel with training roles, those under training as well as those who had deployed on operations. Furthermore, the participants included commanders, intelligence staff and small team leaders. The demographic represented the wide range of personnel concerned with the IPB, and intelligence in general. The interview data was analysed in accordance with grounded theory, in order to advance from description to conceptual abstraction and explore the relationships between the categories.

The place and use of literature in developing a grounded theory provided an opportunity to introduce secondary data. A preliminary literature review confirmed the US doctrinal manuals FM 34-130 and FM 2-0 as important works to orientate the study. More importantly, it revealed the lack of New Zealand generated open-source research material on the perceptions of the IPB. As each category emerged from the study a secondary literature review was carried out. Literature at this point in the study was treated as more data to compare to the primary data. It also served as a chance to triangulate the categories. The culmination of the study was the emergence of the theory *just getting by*. Trustworthiness of the theory was established by peer debriefing and member checking.

Outcome of the Research

The research generated the grounded theory *just getting by*, the New Zealand experience of the IPB in the COE. *Just getting by* consisted of the six categories *ambivalence*, *short of expectations*, *recognising the need to adapt*, *risk*, *professional optimism* and *satisficing*.

The theory concluded that the application of the traditional IPB in the COE was not appropriate, rather it was very difficult. This difficulty was the result of three key elements. In effect these elements were inter-related and tended to create a vicious cycle which exacerbated the problems. First, despite some evidence suggesting change in the training, much of it was perceived as being still grounded in the Cold War era of conventional warfare. This perception

extended to the operational environment. Second, the small Intelligence Corps was considered overstretched with continuous operational deployments for its members and as a consequence it was barely holding on as an effective military force. The example of newly trained intelligence operators deploying on operations, so soon after their courses, was a major concern. Lastly, the doctrine of intelligence-led operations appeared to be ignored causing angst and frustration for intelligence specialists and even commanders. This created the circumstance where the IPB was seen as more reactionary in nature rather than providing relevant and timely analysis of the situation. The overall feeling was the IPB was not operating as expected, though in lieu of any other process, it was suffice.

The research revealed a number of environmental factors that shaped the COE for modern warfare. These consisted of: diminishing state on state war; the rise of non-state actors; insurgency; less kinetic focused warfare; civil-military operations; and hearts and minds operations. Though many of these had already been identified through literature, the emergence of these factors through the in-depth interviews confirmed an awareness of the COE by the participants.

The category *ambivalence* summed up the view of the participants, as to their perception of the intelligence training for the COE. The co-existing condition of positive and negative emotions was consistent across the training and operational environment. The general feeling was *satisficing*. In terms of education to better comprehend the COE, a number of participants identified non-military courses or skills, such as international relationships, languages, foreign affairs and criminal intelligence. The opinion was that these skills would be just as important as the traditional conventional warfare skills.

Adaption and innovation is a very desirable trait in any vocation or environment. In acknowledging the traditional IPB and intelligence in general, a number of adaptations were made on operations that increased the level of success. The need to generate intelligence, rather than sitting and waiting for it to come to the operator was considered important to succeed in the COE. Practically, this entailed breaking up the small central pool of analysts and sending some of

them to operate on the ground with the patrols. Additionally, adapting to the complex human terrain was considered vital. Drawing on the ability of the NZDF personnel to engage with the local population, to build trust and rapport, was viewed as vital to succeed in the COE.

The outcome of the study provided a research based explanation of the New Zealand experience of the IPB in the COE – the grounded theory *just getting by*. Furthermore, a series of research answers to the research questions, were presented. Collectively, the explanation and research answers satisfied the aim and objectives of the study. Having done so the findings could be further developed to put the research in to action – theory in action.

Theory in Action

In order to be of use as action research, the study maintained relevancy and utility of the data and the findings. Accordingly, the following recommendations are made to optimise the IPB, and intelligence in general.

- 1. Training to comprise equal conventional and unconventional content.
- Courses and units charged with delivering civil-military training be recognised as equivalent in status, and resourced accordingly, with those other institutions delivering conventional warfare training.
- 3. Non-traditional skills and knowledge, such as languages and cultural studies, be raised as a major capability requirement for the NZDF.
- 4. Analytical tools and models that effectively depict the socio-cultural, ethnic and religious dynamics in the COE be pursued.
- 5. The NZIC, and associated Service equivalents, are confirmed as the priority for personnel increase.

Further Research

To corroborate or contest the grounded theory *just getting by*, in a wider NZDF context, I would recommend further research in the following areas:

- 1. A study of the IPB experience by the Special Forces, Navy and Air Force.
- 2. A study concentrating on the lessons learned process.
- 3. Undertake research with a theory verification focus.

Concluding remarks

This research originated from my experiences in Iraq in 2008. Given the opportunity to delve deeper in to the IPB I sensed an undertaking that would require patience, perseverance and passion. What eventuated however, was not an arduous assignment but rather a rewarding professional journey intimately engaging with fellow servicemen and women. That each of the 17 participants was so candid and frank during the interviews illustrated two things to me. Firstly, the confidence they had in me to tell their story and secondly the open and transparent manner in which each person sought genuine improvement in the IPB – the essential elements of an adaptive and learning organisation. In taking a grounded theory approach to the research I was initially unaware that I needed to understand the methodology of the theory just as much as I needed to understand the data. In this regard I have had the benefit of gaining new knowledge not once, but twice.

Appendices

Appendix A: Letter to Commander Joint Forces Requesting Research

Interviews

Appendix B: Approval from Commander Joint Forces

Appendix C: Approval Chief of Army

Appendix D: Approval Chief of Navy

Appendix E: Massey Ethics Committee Letter

Appendix F: Information Sheet for Participants

Appendix G: Research Questionnaire

Appendix H: Participant Consent Form

Appendix I: Research Questions and In-depth Interview: Mission Personnel

Appendix J: Research Questions and in-depth Interview: Training Personnel

Appendix A

NEW ZEALAND ARMY

Army General Staff **MINUTE**

4500/TRADOC

2 Mar 09

THROUGH LCC

REQUEST TO UNDERTAKE INTERVIEWS AS PART OF DOCTRINE RESEARCH

I am currently engaged in an Army research project. The research is qualitative study of the complex contemporary operating environment (COE), and in the particular the New Zealand experience in the application of the intelligence preparation of the battlefield (IPB) process. The project was initiated late last year as a result of my deployment to TG IRON in Iraq, with the LCC being one of the key sponsors. To assist with my mission debrief to HQ NZDF and HQ JFNZ I designed a 3-D comprehension model, called *Inter-Bella*, to help explain some of the complexity and geo-political relationships in the Iraqi theatre. While *Inter-Bella* began as tool to aid with the explanation of complex relationships, is has since become the basis to widen my examination of the limitation of the traditional IPB in the COE. The limitation is well known, and we do have some evidence through EARLLs, however my study will look deeper in to the factors and causes that are limiting our use of the IPB, in order to suggest a better way of representing the operating environment.

The research now includes a 30,000-word postgraduate dissertation through Massey University. It was considered that this level of academic rigour and analysis would be required to give the study credibility and validity, lest a good idea be immediately countered by the next anecdotal, good idea. A copy of my research questions is enclosed for your interest.

Over the past six months I have become conversant with much of the literature regarding the COE and IPB. As secondary data sources the literature has included books, articles, journals and papers. I have also developed a number of research networks here in New Zealand and in the US, in particular with the US Army/USMC Counterinsurgency Centre. The Counterinsurgency Centre recently accepted an article I wrote about the research for publication is their quarterly magazine, *Colloquium*. I have enclosed a copy of the original work for your interest.

I am now nearing the stage in my research to commence gathering primary data. In terms of NZDF, this is the conduct of in-depth interviews with personnel that are about to or have recently returned from operations. Although my project is sponsored by Army I am still required by the Massey University Ethics committee to seek approval from an appropriate authority to conduct these types of research interviews. I therefore request your written approval, as Commander Joint Forces New Zealand, allowing me to conduct interviews with selected NZDF personnel that are preparing for missions or have recently returned from a mission. While this is an Army sponsored project I am keen to speak with RNZN and RNZAF personal that have deployed in to the land environment missions.

The interviews will be voluntary, and I will attempt to interview around 50 personnel. Each person will be advised of the ethical codes I must follow, in accordance with Massey procedures, to ensure their 'safety' as well as maintain the integrity of the research itself. I would hope to engage your J1 cell to identify a cross-section of personnel. Given the research involves real-time intelligence issues I will be seeking guidance from either your J2 or DDIS, with regards to possible restrictions on the final dissertation, once it is completed. The J2 is aware of my research.

If you require more details or would like further explanation of my research then I can certainly make myself available to speak with you, or perhaps your Chief of Staff.

I look forward to your favourable consideration of my request.

G.G.L WINEERA

MAJ GSO2 ISR CMC DeTelN 347-7963

Appendix B



JOINT FORCES NEW ZEALAND

Te Ope Taua Tuhono o Aotearoa

HEADQUARTERS JOINT FORCES NEW ZEALAND 2 Seddul Bahr Road, Trentham, Upper Hutt, New Zealand Telephone: +64 4 529 6000, Facsimile: +64 4 529 6009

NZDF 4508/1

3/ Oct 09

Major G.G.L. Wineera, RNZA Capability Branch Army General Staff WELLINGTON

REQUEST TO CONDUCT RESEARCH INTERVIEWS

Reference:

- A. DFO 21/2002 Authority to Conduct Personnel Research
- 1. Thank you for your letter of 7 Jul 09 outlining your research project, which inter alia seeks to consider the New Zealand experience in the application of the intelligence preparation of the battlefield (IPB), and your request to conduct indepth interviews with personnel that are about to or who have recently returned from operations. I consider your research project worthy and am aware that, following approval from the Chief of Staff, you have been 'sitting in' on post deployment debriefs and have been in consultation concerning details of your project with my J2.
- 2. While I approve your request to conduct the research interviews as you seek, there are two caveats I place upon that approval; one relates to the application of Reference A, and the other concerning security and the release of potentially classified information. I will deal with each of these separately below.
- 3. Reference A is quite clear around the investigation of attitudes and opinions of NZDF personnel in so far as they may affect the efficiency of the NZDF, and requires that approval be sought from the appropriate single Service Chief for such research. While this is a matter for Chief of Army, I do not necessarily see this as an issue, as your Human Ethics Application to Massey for approval to undertake the research principally conforms to the DFO requirements. Notwithstanding this, approval(s) under Reference A are to be obtained.
- 4. On the second issue, I fully support the desire for unfettered publication of research in the drive for academic transparency. However, concerning

2

intelligence doctrine and the IPB in particular, the NZDF applies Australian Defence Force (ADF) doctrine; in the case of the IPB this is classified "restricted". The ADF's position is quite clear; its process is not to be quoted in an open source paper; and secondary release provisions (i.e. to another nation) do not apply in your case. I understand you are able to 'work around' this limitation.

- 5. The other security issue relates to the disclosure of 'training, techniques and procedures' through your interviews that might compromise operational security. To ensure this does not occur, I require that you furnish any drafts or final products to HQ JFNZ (attention: J2) for vetting prior to release to anyone not holding an appropriate security clearance. To facilitate this it would be appreciated if you would annotate the security classification of every footnote/reference.
- 6. In conclusion, I wish you all the best for your research and look forward to viewing the final product. I have passed a copy of this letter to both my J1 and J2 for their information and liaison with you in the conduct of your research.

P.J. STOCKWELL, AFC

Air Vice-Marshal

Commander Joint Forces New Zealand

Appendix C

NEW ZEALAND ARMY Army General Staff **MINUTE**

16 Nov 09

Major G.G.L. Wineera

REQUEST TO CONDUCT RESEARCH INTERVIEWS

- A. 4508/1 N53142 dated 12 Nov 09
- В.
- HQJFNZ 4508/1 dated 31 Oct 09 DFO 21/2002 Authority to Conduct Personnel Research Ċ.
- 1. Reference A requested approval to conduct research interviews as part of your study into the New Zealand experience of the Intelligence Preparation of the Battlefield (IPB) in today's Contemporary Operating Environment (COE).
- 2. Approval is given for you to conduct research interviews as requested.

R.R. JONES MAJGEN CA

Appendix D

ROYAL NEW ZEALAND NAVY Office of the Chief of Navy MINUTE 72/10

NHQ 4508-0001

19 Jan 10

Major G.G.L. Wineera, RNZA

REQUEST TO CONDUCT RESEARCH INTERVIEWS

References:

A. Maj Wineera letter of 09 Dec 09

B. NZDF 4508/1 of 31 Oct 09

C. DFO 21/2002 – Authority to Conduct Research Interviews

Ref A requested approval to conduct research interviews as part of your study into the New Zealand experience of the Intelligence Preparation of the Battlefield in today's contemporary operating environment. Further to ref B, and iaw the provisions at ref C, approval is given for you to conduct research interviews with navel personnel who are about to deploy or who have recently returned from operations.

A.J. PARR

RA

Appendix E



25 March 2010

Gerald (Josh) Wineers 2 Chestnut Close Kelvin Grove PALMERSTON NORTH 4414

Lessons Learned from Military Operations

Thank you for your Low Risk Notification which was received on 23 March 2010.

Your project has been recorded on the Low Risk Database which is reported in the Annual Report of the Massey University Human Ethics Committees.

The low risk notification for this project is valid for a maximum of three years.

Please notify me if solutions subsequently occur which cause you to reconsider your initial ethical analysis that it is safe to proceed without approval by one of the University's Human Ethics Committees.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accumiance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

A reminder to include the following statement on all public documents:

"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to reize with someone other than the researcher(s), please contact Professor John O'Nelll, Director (Research Ethics), relephone 06.350 5249, e-mail humansthics@massey.ac.nz".

Please note that if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to provide a full application to one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

Inho G O'Neill (Professor)

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Chair, Human Ethics Chairs' Committee and

Director (Research Ethics)

Lily Wisker, Manager, Curriculum Development NZDF Command and Staff College

Treathon Camp Private Bag 905 Upper Hutt

Dr John Moremon Centre for Defence and Security Studies PN243

Prof Glyn Harper, Director Centre for Defence and Security Studies PN243

Massey University Human Ethics Correntee According by the Health Research Council

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Appendix F

INFORMATION SHEET

Research Project by G.G.L (Josh) Wineera Student No. 95060609

Researcher Introduction

My name is Major Josh Wineera, a serving officer in the New Zealand Army. I am undertaking action-research for the NZ Army, specifically a study of the contemporary operating environment. The research will be based on a postgraduate thesis for the qualification of Masters in Defence Studies.

Project Description and Invitation

- My project is a qualitative study of the New Zealand experience using the current military intelligence processes in the contemporary operational environment. As a qualitative study the results will be more in the form of words rather than numbers. The results of my project will be further reviewed by the New Zealand Army, in order to inform future doctrinal practices.
- I invite you to participate in the research given your recent operational (or training) experience. The primary outcome of the research is to optimise the intelligence process. Your participation is an important part of the lessons learned process.
- The use of personal interviews to gather primary data has been approved by the Commander Joint Forces, Chief of Navy and the Chief of Army in accordance with DFO 12.

Participant Identification and Recruitment

- Participants have been identified with the help of the Personnel Branch of Headquarters Joint Forces New Zealand.
- The selection criteria are (1) Senior National Officers (2) Intelligence staff (3)
 Small team leaders (4) Trainers.
- Approximately 30 participants will be involved in the research (in-depth interviews). This will provide at least 7 people from each of the criteria group above.
- There will be no discomforts or risks to participants as a result of participation.

Project Procedures

- The participants will be contacted by phone or email and asked if they wish
 to participate. Those who wish to participate will be mailed an initial
 questionnaire to complete. Mutually agreeable arrangements will be made for
 a follow-up in-depth interview.
- Participants should take approx 15mins to complete the questionnaire; the interview will be approx one hour.

Data Management

- The interview data will be sound recorded. The data will be kept as digital files by the applicant. It will be stored for no more than 5 years and then deleted.
- The project findings will be forwarded to both Massey supervisors for assessment as well as relevant New Zealand Army personnel to review for further military application.
- Participants will be offered the option of their identity remaining anonymous.
 This will be in the written results where they will be referred to as "Respondent #".

Participant's Rights

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- Decline to answer any particular question;
- Withdraw from the study (specify timeframe);
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name will not be used unless you give permission to the researcher;
- Be given access to a summary of the project findings when it is concluded.
- Ask for the recorder to be turned off at any time during the interview.

Project Contacts

- The researchers contact details are:
 Josh Wineera, NZ Army, Trentham Camp, 04 5275 099
 josh.wineera@nzdf.mil.nz
- The research supervisors contact details are: Lily Wisker, NZ Defence College, Trentham Camp, 04 5275 099, lily.wisker@nzdf.mil.nz.
- Participants are invited to contact the researcher and/or supervisor if they have any questions about the project.

1. MUHEC APPLICATIONS

Committee Approval Statement

"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor John O'Neill, Director (Research Ethics), telephone 06 350 5249, email humanethics@massey.ac.nz".

Compensation for Injury

If physical injury results from your participation in this study, you should visit a treatment provider to make a claim to ACC as soon as possible. ACC cover and entitlements are not automatic and your claim will be assessed by ACC in accordance with the Injury Prevention, Rehabilitation and Compensation Act 2001. If your claim is accepted, ACC must inform you of your entitlements, and must help you access those entitlements. Entitlements may include, but not be limited to, treatment costs, travel costs for rehabilitation, loss of earnings, and/or lump sum for permanent impairment. Compensation for mental trauma may also be included, but only if this is incurred as a result of physical injury.

If your ACC claim is not accepted you should immediately contact the researcher. The researcher will initiate processes to ensure you receive compensation equivalent to that to which you would have been entitled had ACC accepted your claim.

Appendix G

RESEARCH QUESTIONNAIRE

Mission Personnel

Please state:

1.	Your rank?					
2.	The mission deployed to or will deploy to?					
3.	The appointment or role you will or did fulfil?					
4.	Courses or qualifications relevant to your appointment or role?					
5.	Courses or qualifications that you consider may have been useful for the appointment or role?					
Planning and Intelligence Trainers Please state:						
1.	Your rank?					
2.	The appointment or role you fulfil?					
3.	The type of course you teach, including the level/rank of students?					
4.	Courses or qualifications relevant to your appointment or role?					
5.	Approximate level (percentage) of conventional-type warfare content taught?					
6.	Approximate level (percentage) of contemporary-type					

(non-conventional or irregular) warfare content taught?

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

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95060609 G. G. L. Wineera

Appendix H

PARTICIPANT CONSENT FORM

RESEARCH/THESIS TOPIC

THE INTELLIGENCE PREPARATION OF THE BATTLEFIELD PROCESS IN THE COMPLEX CONTEMPORARY OPERATIONAL ENVIRONMENT: A QUALITATIVE STUDY OF THE NEW ZEALAND EXPERIENCE

Researcher: G. G. L. Wineera (Josh)

I have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree / do not agree to the interview being sound recorded.

I wish / do not wish to have my recordings returned to me.

I wish / do not wish to have data placed in an official archive.

I agree / do not agree to being personally identified in the research.

(If you do not agree all references to you in the written form of the research will be noted as "Respondent #")

I agree to participate in this study under the conditions explained to me.

Signature:	Date:			
Full Name				
(printed)				

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's

Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor John O'Neill, Director (Research Ethics), telephone 06 350 5249, email humanethics@massey.ac.nz.

95060609 G. G. L. Wineera

Appendix I

RESEARCH QUESTIONS AND IN-DEPTH INTERVIEW: MISSION PERSONNEL

The following Research Questions and themes will form the basis of the indepth interview:

- 1. Can you briefly describe your operational experience/missions/deployments, and the preparations for each?
- 2. How where these types of missions different from the previous mission you deployed to?
- 3. What factors were the same, or common theme(s)?
- 4. Can you describe the intelligence preparations for the operations you were involved in, and how did you perceive the intelligence training?
- 5. What adaptation of the (traditional) intelligence process did the staff, or you as a small team leader/member view as important to succeed in the type of operations you were involved in?
- 6. Are there any factors/techniques/tools that you consider could help optimise, or improve today's intelligence processes and preparations to account for the contemporary operational environment?
- 7. Do you have any other comments or issues you'd like to discuss?

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor John O'Neill, Director (Research Ethics), telephone 06 350 5249, email humanethics@massey.ac.nz".

Appendix J

RESEARCH QUESTIONS AND IN-DEPTH INTERVIEW: TRAINING PERSONNEL

The following Research Questions and themes will form the basis for the indepth interview:

- 1. Can you briefly describe your training experience?
- 2. Can you describe the type of training focus, or content, for current courses (particularly the intelligence or planning components) that may be different from previous courses? Do you feel this is enough, or the depth is enough?
- 3. Can you describe the type of training focus, or content for current courses (particularly the intelligence or planning components) that may be the same from previous courses? Do you feel this is enough, or the depth is enough?
- 4. Can you describe the level of awareness, or formal preparation your students have of the contemporary operating environment before they come to receive training from your unit?
- 5. Do you get any feedback as to whether the training they received from you was/is appropriate or relevant? If yes, by what means, if no how would you like to receive this information, and how would the process for addressing the problems be undertaken? Do you consider the feedback important?
- 6. Are there any factors/techniques/tools that you consider could help optimise, or improve the training of intelligence processes and preparations to account for the contemporary operational environment?

7. Do you have any other comments or issues you'd like to discuss?

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor John O'Neill, Director (Research Ethics), telephone 06 350 5249, email humanethics@massey.ac.nz".

Profiles of Interview Participants

Participant	Pseudonym	Position, Appointment	Other positions of				
			note				
Interviewed for training and operations perspectives							
Captain AB	Acorn 1	Intelligence staff	Intelligence staff officer				
		(HQ JFNZ)	(Afghanistan). Served on				
			1 mission				
Corporal SC	Acorn 2	Intelligence staff	Served on 6 missions				
		(Afghanistan)					
Staff Sergeant MC	Acorn 3	Intelligence staff	Trainer, Intelligence				
		(Afghanistan)	School. Served on 4				
			missions				
Captain LC	Acorn 4	Senior Intelligence Officer	Trainer, Intelligence				
		(Afghanistan)	School. Served on 4				
			missions				
Major DG	Shell Drake 1	Intelligence Staff	Assistant Tactical School				
			trainer. Served on 3				
			missions				
Major JH	Acorn 5	Senior Intelligence Officer	Assistant Tactical School				
		(Afghanistan)	trainer. Served on 3				
			missions				
Staff Sergeant MM	Acorn 6	Intelligence staff	Trainer, Intelligence				
		(Afghanistan)	School. Served on 4				
			missions				
Interviewed for prim	narily training pe	rspectives					
Major BB	Shell Drake 2	Trainer, Tactical School	Served on 2 missions				
Warrant Officer KC	Seagull	Trainer, Collective	Served on 4 missions				
		Training Centre					
Major JH	Foxhound	Trainer, Tactical School	Served on 2 missions				
Staff Sergeant WP	Watchdog	Trainer, Non-	Served on 1 mission				
		Commissioned Officers'					
		Company					
Major MW	Shell Drake 3	Trainer, Tactical School	Served on 1 mission				
Interviewed for primarily operations perspectives							
Major MA	Pronto	Patrol Commander	Served on 3 missions				
		(Afghanistan)					
			l .				

Colonel RH	Sunray 1	Commander and Senior	Served on 7 missions
		National Officer	
		(Afghanistan)	
Major TT	Sunray 2	Deputy Commander and	Served on 5 missions
		Senior National Officer	
		(Solomon's)	
Major RW	Holdfast	Company Commander	Served on 4 missions
		(Timor Leste)	
Captain DY	Acorn 4	Intelligence staff	Served on 1 mission
		(Timor Leste)	

As a collective group the interview participants have deployed on over 50 missions. In terms of time, this represents more than 20 years of operational experience in a wide range of threat environments and locations.

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