

RESTRAINT IN URBAN WARFARE: THE CANADIAN ATTACK ON
GRONINGEN, NETHERLANDS, 13-16 APRIL 1945

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE
Military History

by

JEFFREY D. NOLL, MAJOR, U.S. ARMY
B.S., United States Military Academy, 2000

Fort Leavenworth, Kansas
2013-01

Approved for public release; distribution is unlimited.

REPORT DOCUMENTATION PAGE			<i>Form Approved</i> <i>OMB No. 0704-0188</i>		
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 06-14-2013		2. REPORT TYPE Master's Thesis		3. DATES COVERED (From - To) AUG 2012 – JUN 2013	
4. TITLE AND SUBTITLE Restraint in Urban Warfare: The Canadian Attack on Groningen, Netherlands, 13-16 April 1945			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) Major Jeffrey D. Noll			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301			8. PERFORMING ORG REPORT NUMBER		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release; Distribution is Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT Urban terrain presents significant tactical challenges to attacking armies, limiting weapons effects and mobility while disrupting formations and command and control. The human terrain in cities creates a tactical dilemma, placing large civilian populations in close proximity to the fighting. The issue of restraint in urban warfare has been described as a modern phenomenon, with urban warfare in World War II characterized as unlimited. In April 1945, however, the Canadian Army limited its firepower while attacking the city of Groningen, Netherlands to limit damage and civilian casualties. This thesis examines the reasons for these restraints and the methods used to balance those restraints with accomplishment of the mission. The Canadians limited their use of force for political reasons based on intent from the British. They accomplished their mission due to intelligence gained from the friendly population, local fire superiority gained by tanks and flamethrowers, and the ineffectiveness of the poorly organized and equipped German defense. This thesis provides a historical case study of the reasons for restraint in urban warfare and the tactical challenges associated with such limitations.					
15. SUBJECT TERMS World War II, Canada, Urban Warfare, Netherlands					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. PHONE NUMBER (include area code)
(U)	(U)	(U)	(U)	90	

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std. Z39.18

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: Major Jeffrey D. Noll

Thesis Title: Restraint in Urban Warfare: The Canadian Attack on Groningen,
Netherlands, 13-16 April 1945

Approved by:

_____, Thesis Committee Chair
Mark M. Hull, Ph.D.

_____, Member
LCol J. P. G. MacIntyre, MMAS

_____, Member
John A. Suprin, M.A.

Accepted this 14th day of June 2013 by:

_____, Director, Graduate Degree Programs
Robert F. Baumann, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

RESTRAINT IN URBAN WARFARE: THE CANADIAN ATTACK ON GRONINGEN, NETHERLANDS, 13-16 APRIL 1945, by Major Jeffrey D. Noll, 90 pages.

Urban terrain presents significant tactical challenges to attacking armies, limiting weapons effects and mobility while disrupting formations and command and control. The human terrain in cities creates a tactical dilemma, placing large civilian populations in close proximity to the fighting. The issue of restraint in urban warfare has been described as a modern phenomenon, with urban warfare in World War II characterized as unlimited. In April 1945, however, the Canadian Army limited its firepower while attacking the city of Groningen, Netherlands to limit damage and civilian casualties. This thesis examines the reasons for these restraints and the methods used to balance those restraints with accomplishment of the mission. The Canadians limited their use of force for political reasons based on intent from the British. They accomplished their mission due to intelligence gained from the friendly population, local fire superiority gained by tanks and flamethrowers, and the ineffectiveness of the poorly organized and equipped German defense. This thesis provides a historical case study of the reasons for restraint in urban warfare and the tactical challenges associated with such limitations.

ACKNOWLEDGMENTS

I am extremely grateful to my thesis committee, Dr Mark Hull, LTC Jon MacIntyre, and Mr. Jon Suprin, for their extreme patience and excellent feedback. I greatly appreciate Ms. Ann Chapman's assistance in getting the formatting correct. MAJ Rene Van den Berg provided important insights into the Netherlands, while Mr. Tom Chychota provided excellent feedback on urban warfare.

I am thankful for the authors Gregory Ashworth and Terry Copp, two excellent historians whose books I used in my research who also provided assistance by sending me materials and suggestions. I could not have completed my research without the tremendous assistance I received from numerous people at the Library and Archives Canada. I am grateful for the assistance of Mr. Ken Joyce for helping me find some hidden gems at the archives. I greatly appreciate the assistance of the staff of the Combined Arms Research Library at Fort Leavenworth, especially Mr. John Dubuisson and the always-helpful ladies at the Interlibrary Loan desk.

Above all, I could not have completed this without the love and support of my beautiful wife Katie. Being married to a trained researcher with infinite patience has its benefits.

TABLE OF CONTENTS

	Page
MASTER OF MILITARY ART AND SCIENCE THESIS APPROVAL PAGE	iii
ABSTRACT.....	iv
ACKNOWLEDGMENTS	v
TABLE OF CONTENTS.....	vi
ILLUSTRATIONS	viii
CHAPTER 1 INTRODUCTION	1
Background.....	1
Thesis	5
Research Questions.....	6
Historiography	7
Structure.....	9
CHAPTER 2 EVENTS LEADING UP TO GRONINGEN.....	10
The Situation in the Netherlands	10
The Allied Advance	16
The Canadian Army's Approach	21
Order of Battle	24
CHAPTER 3 THE BATTLE FOR GRONINGEN.....	26
The Urban Terrain	26
13 April: The Advance from the South	33
14 April: The Battle for the Bridges	37
15 April: The Battle for the Inner City	45
16 April: The Surrender.....	52
CHAPTER 4 ANALYSIS	59
The Order for Restraint.....	59
The Use of Artillery	61
Local Fire Superiority	62
The Dutch Population	63
The German Defense	65
Collateral Damage	66

CHAPTER 5 CONCLUSIONS	69
Military History	69
Doctrine	70
Relevance to Current Operations	74
BIBLIOGRAPHY.....	78

ILLUSTRATIONS

	Page
Figure 1. Groningen and Approaches.....	28
Figure 2. Groningen Key Terrain	31
Figure 3. The Battle of Groningen, 13 April 1945	35
Figure 4. Canadian 2nd Division Scheme of Maneuver, 14 April 1945	39
Figure 5. The Battle of Groningen, 14 April 1945	43
Figure 6. The Battle of Groningen, 15 April 1945	49
Figure 7. The Battle of Groningen, 16 April 1945	57

CHAPTER 1

INTRODUCTION

Over the past two decades, the United States Army has frequently faced the dilemma of how to use military force to defeat an enemy in urban terrain while simultaneously minimizing collateral damage and civilian casualties. From the Battle of Mogadishu, Somalia in 1993, through battles in Fallujah and Sadr City during the Iraq war, the United States has contended with determined enemies in urban areas while facing external pressure to restrain their use of force. Many factors have combined to make the dilemma of restraint in urban warfare a current trend, including the exponential increase in urban populations worldwide, increased use of urban areas by terrorist and insurgent groups, the proliferation of global media coverage, and increasing intolerance for civilian casualties by the American public. Long before these modern trends emerged to bring the issue of restraint in urban warfare to the forefront of military conversation, the Canadian Military faced the same dilemma in northern Europe during World War II. In April 1945, the Canadian Army attacked the city of Groningen, the Netherlands under orders to limit civilian casualties and collateral damage. Their reasons for imposing these limitations and their experiences in managing the dilemma of restraint in urban combat are worthy of examination as the United States Army continues to wrestle with similar issues.

Background

Urban warfare presents a series of complex problems for attacking armies. The physical terrain of cities provides a distinct advantage to the defender. The hardened

density of urban terrain provides the defender cover and concealment while canalizing and disrupting attacking formations, making command and control especially challenging. The non-linear and multi-dimensional nature of city structures limits observation, weapons ranges and effects, and mobility. In addition to the challenges of physical terrain, cities include a large human population that affects every aspect of urban warfare. The impact of that large human population on armies sets urban warfare apart from battle on all other types of terrain.

While warfare has taken place in populated areas throughout history, World War II marked a turning point in the history of urban warfare. Prior to the 19th century, urban warfare largely consisted of armies laying siege to fortified cities. Armies utilized isolation, engineers, and artillery to breach the physical outer defenses of walled fortress cities. Beginning in the 19th century, the rapid expansion of city populations, combined with the growing superiority of artillery firepower, made fixed city defensive works such as walls obsolete. This ended the era of fortress cities and siege warfare. Despite this, up through the end of World War I, armies actively sought to avoid cities, instead seeking decisive battle in open areas. World War II saw the birth of modern urban warfare, with armies battling street by street and house by house through dense cities amongst a large local population.¹

The issue of restraint in urban warfare, specifically limitations placed on attacking armies to protect the civilian population and prevent collateral damage, has been described by many as a modern post-World War II phenomenon. Alice Hills, in her 2004

¹Michael Dewar, *War in the Streets: The Story of Urban Combat from Calais to Khaffi* (London: BCA, 1992), 16-18; Louis A. DiMarco, *Concrete Hell: Urban Warfare from Stalingrad to Iraq* (Oxford: Osprey, 2012), 20-25.

book, *Future War in Cities*, describes the “liberal dilemma” of preventing civilian and collateral damage in urban warfare as a modern challenge. It results from the collision of the current trends of increased global urbanization with the increasingly humanitarian, political, and social views of war espoused by liberal democracies.² She argues that current national and international public opinion, combined with modern legal and moral frameworks for war, have made collateral damage considerations an essential part of modern warfare, and arguably a condition for success.³ Sean Edwards makes the same argument in his 2000 book, *Mars Unmasked*, describing World War II urban combat as high intensity with little regard for civilian casualties, and contrasting it with the current political constraints on urban warfare.⁴

In the significantly influential 1987 study of urban warfare, *Modern Experience in City Combat*, R.D. McLaurin characterized urban battles as either unlimited conflicts, with attackers free from political or external constraints, or limited conflicts, with constraints placed upon attackers to limit civilian casualties and damage. Of the 22 cases examined in the study, all of the World War II cases are characterized as unlimited, with the five cases characterized as limited all occurring after 1966.⁵ The study concluded that armies should question the wisdom of attacking cities when facing external constraints,

²Alice Hills, *Future War in Cities: Rethinking an Urban Dilemma* (London: Frank Cass, 2004), 220-239.

³*Ibid.*, 242-260.

⁴Sean J. A. Edwards, *Mars Unmasked: The Changing Face of Urban Operations* (Santa Monica, CA: RAND, 2000), 5, 53.

⁵R. D. McLaurin, Paul A. Jureidini, David S. McDonald, and Kurt J. Sellers, *Modern Experience in City Combat* (Aberdeen, MD: U.S. Army Human Engineering Laboratory, 1987), 93-94.

stating, “It is recommended that unless the attacker has a relatively free hand he should not consider attacking a built up area.”⁶

Well-known World War II urban battles such as Calais, Stalingrad, and the Battle of Berlin reinforce the characterization of unlimited urban warfare during that conflict. Those battles featured mass destruction of cities with large numbers of civilian casualties. The Canadian Army’s experience prior to April 1945 mirrors this. In previous urban battles during World War II, the Canadians made extensive use of heavy artillery and air strikes to reduce enemy defenses before and during assaults on cities. In December 1943, the Canadians fought a bloody urban battle in the Italian town of Ortona. They bombarded the town with artillery and blew holes in buildings with high explosives to move from house to house while avoiding the streets.⁷ In the aftermath of the battle, one of the German defenders wrote, “There is no town left. Only the ruins . . . The enemy gained a destroyed city.”⁸ An estimated 1,314 civilians died during the weeklong battle.⁹ The July 1944 Allied attack on the French city of Caen, in which the Canadians participated, involved massed artillery barrages, bombardment from British naval ships, and the use of heavy bombers in direct support of the ground attack.¹⁰ The resulting

⁶McLaurin et.al., 33, 38.

⁷David Bercuson, *Maple Leaf Against the Axis: Canada’s Second World War* (Toronto, Canada: Stoddart, 1995), 172-177.

⁸Mark Zuehlke, *Ortona: Canada’s Epic World War II Battle* (Toronto, Canada: Stoddart, 1999), 348.

⁹Ibid., 375.

¹⁰Colonel G. W. L. Nicholson, *The Gunners of Canada: The History of the Royal Regiment of the Canadian Artillery Volume II 1919-1967* (Toronto, Canada: McClelland and Stewart, 1972), 288-290.

destruction caused one observer to describe the shattered remnants of Caen as, “a city that has lost the aspect of a city.”¹¹ The battle resulted in approximately 1,150 civilian casualties.¹² In September 1944, the Canadians attacked the French port cities of Boulogne and Calais. These attacks again featured heavy artillery and bombing preparation against the German defenses. In the case of Boulogne, the resulting damage destroyed key harbor facilities, making them unusable by the Allies for another month.¹³

The Battle of Groningen in April 1945 stands in stark contrast to the generally accepted narrative of unlimited urban warfare during World War II. At Groningen, the Canadian Army received orders to limit the use of firepower to preserve the city. These externally imposed constraints on the use of force in a city foreshadowed the dilemma modern armies would face decades later. These restraints represented a major shift in tactics for a Canadian Army used to employing mass firepower in cities. Groningen stands as an outlier to the unlimited warfare of its era and a precursor of the type of urban warfare to come in the following decades.

Thesis

The 2nd Canadian Infantry Division limited their use of force during the Battle of Groningen for political reasons, communicated to them by the British 21st Army group, due to the fact that the Netherlands campaign was not a military necessity, but a mission

¹¹Pierre Berton, *Marching as to War: Canada's Turbulent Years 1899-1953* (Toronto, Canada: Doubleday Canada, 2001), 488.

¹²Anthony Beevor, *D-Day: The Battle of Normandy* (New York: Penguin Books, 2010), 269.

¹³Bercuson, *Maple Leaf Against the Axis*, 244.

with a political and humanitarian purpose. They succeeded in taking the city despite restrictions on airpower and artillery due to local fire superiority provided by tanks and flamethrowers, assistance and intelligence gained from the strongly anti-German local population, and the poorly coordinated and underequipped nature of the German defense of the city. Their efforts resulted in a minimal destruction to the city and civilian casualties when compared with other World War II battles. These results were acceptable and met the intent of the order to minimize collateral damage because of the friendly and sympathetic views of the Dutch population and government in exile towards the Canadian Army.

Research Questions

The primary research question is: What operational and tactical approaches and methods did the Canadian Army use to balance their desire to limit collateral damage with the need to defeat an entrenched enemy in an urban environment during the Battle of Groningen in 1945? Additional research questions are:

1. Why did the Canadian Army limit their use of force and firepower in the Battle of Groningen?
2. What limitations were placed on Canadian operational and tactical commanders during the Battle of Groningen?
3. How did Canadian operational and tactical commanders adapt and change their plans and methods to compensate for the restrictions on the use of force?
4. In terms of the time required, casualties taken, and forces employed, how did the limitations placed on the use of force affect Canadian operations?

5. Did limitations to minimize collateral damage have the desired effects as intended by the Canadian Army?
6. Did the Canadian actions at Groningen influence other nations and militaries?
7. How do the Canadians' actions at Groningen compare or relate to current urban warfare dilemmas?

Historiography

Prior to 2000, very few histories written in English specifically examined the Canadian campaign in Holland and the Netherlands in 1945 and the Battle of Groningen in detail.¹⁴ In 1945, Dr. W. K. J. J. Van Ommen Kloeke of the Netherlands published an account of Groningen in Dutch that would stand as the definitive account of the battle for many years. Several accounts of the battle from Dutch observers were published in the Netherlands in the immediate aftermath of the war. The battle was included in major Dutch histories of World War II as well.

In Canada, regimental histories were written for most of the major units involved in the battle, some more widely published than others. Numerous overall histories of the Canadians in World War II were published, but they provided overviews of events without a great amount of detail or analysis on Groningen itself. Gregory Ashworth provided a short account of the Battle of Groningen in his 1991 book on the geography of defense in urban warfare, *War and the City*. In 2002, Ralph Dykstra wrote a Master's

¹⁴Many primary source documents and books describe the campaign as "The Holland Campaign." Holland is a western province within the country of the Netherlands, and Groningen is not located in Holland. This paper will refer to the area as the Netherlands, though some Allied primary source documents referenced in the paper will refer to it as Holland.

thesis on the occupation and liberation of Groningen during World War II. While only a condensed version in article form was widely published in a Canadian military journal, his full thesis provided the most comprehensive narrative account of the battle written in English to date. In 2006, Canadian historian Terry Copp published the book, *Cinderella Army*, covering the Canadian campaign in the Netherlands to fill the gap in literature on the subject. In 2010, Mark Zuehlke published an additional treatment of the Canadian Netherlands campaign in his book *On to Victory*.

Most of these accounts noted the restrictions on firepower imposed to minimize civilian damage and casualties, but few analyzed it in detail. Only Dykstra and Copp briefly dealt with the subject. In *Cinderella Army*, following a three-page description of the battle, Terry Copp stated, “limitations on the use of heavy firepower were offset by information on enemy locations. The key to success turned out to be the closest possible cooperation between armour and infantry.”¹⁵ In his thesis, Ralph Dykstra described the taking of the city as a military necessity, and argued that the Canadians “took extraordinary precautions to prevent unnecessary loss to civilian life while attempting to ensure that the Canadian soldiers had adequate support.”¹⁶

No accounts or records exist regarding the German defenders of Groningen. This is likely due to the ad hoc nature of the German defenders as well as the fact that the battle occurred so late in World War II.

¹⁵Terry Copp, *Cinderella Army: The Canadians in Northwest Europe 1944-1945* (Toronto, Canada: University of Toronto Press, 2006), 273.

¹⁶Ralph Dykstra, *The Occupation of Groningen, Netherlands, September 1944-April 1945 and the Liberation of the City of Groningen by the Second Canadian Infantry Division April 13th-16th, 1945* (Waterloo, Canada: Wilfrid Laurier University, 2001), 134-135.

This thesis seeks to examine the decision to limit the use of massive firepower at Groningen, its application, and its effects in greater detail. It will examine the effectiveness of these efforts both in achieving the desired effects of limiting civilian casualties and damage, as well as its effect on the tactical units' ability to fight and defeat a determined enemy in urban terrain. This thesis further seeks to place this battle in the context of the continued challenges facing modern armies in balancing force against collateral damage in urban warfare.

Structure

Chapter 2 of this paper will examine the situation leading up to the Battle of Groningen. This will include discussion of the occupation of the Netherlands by Nazi Germany, the actions of the Dutch government in exile, and the Dutch resistance in Holland. Additionally, chapter 2 will discuss the Allied strategic situation prior to Groningen, the Canadian Army's approach to Groningen, and the order of battle. This chapter will seek to put Groningen in its proper context and examine the background of the decision to limit the use of force during the battle. Chapter 3 will describe the battle itself. Chapter 4 will analyze the battle, assessing the Canadians' conduct of the battle as well as their efforts to balance the use of force against collateral damage constraints. Chapter 5 will summarize the findings of the paper and examine the impact, or lack thereof, of the battle on subsequent urban warfare thought and doctrine. Chapter 5 will also compare the Battle of Groningen to the current dilemma over restraint in urban warfare faced by the United States Army.

CHAPTER 2

EVENTS LEADING UP TO GRONINGEN

The Situation in the Netherlands

In May of 1940, Germany invaded the Netherlands, catching the neutral state by surprise. While the German Army captured the majority of the country fairly quickly, they ran into a pocket of resistance in the city of Rotterdam. The Germans responded by using heavy bombers to bomb the city, killing an estimated 900 civilians with thousands more injured or left homeless. This battle served as a preview of the unrestricted urban warfare to come during the war. After Rotterdam surrendered, the Germans threatened to bomb the city of Utrecht in a similar manner. Overwhelmed by the German Army and fearing further civilian casualties, the Dutch Army surrendered.¹⁷

Most of the Dutch government went into exile. The reigning Dutch monarch, Queen Wilhelmina, escaped to England aboard a British warship. Along with those cabinet ministers who had managed to escape, she established a government in exile in Britain. The Queen and her government in exile established themselves immediately as allies of Great Britain and opponents of Nazi Germany. With the help of their host nation, they established radio broadcasts into the occupied Netherlands condemning the Germans and calling for resistance among the Dutch.¹⁸

¹⁷Walter B. Maass, *The Netherlands at War: 1940-1945* (London: Abelard-Schuman, 1970), 40-41.

¹⁸Louis de Jong, *The Netherlands and Nazi Germany* (Cambridge, MA: Harvard University Press, 1990), 60-67.

In order to protect the royal line in case of a German invasion of Britain, the Queen sent her daughter, the Crown Princess Julianna, across the Atlantic to Ottawa, Canada. The Crown Princess became an increasingly sympathetic and popular figure in Canada. When due to give birth to her daughter Margriet, the Canadian government temporarily declared the Canadian hospital to be on Dutch soil, giving Margriet purely Dutch citizenship. Princess Margriet was married to a German, Prince Berhardt. Despite his German heritage, Prince Bernhardt became a staunch member of the Dutch government in exile and was heavily involved in developing resistance movements within the Netherlands.¹⁹ He became a member of the Royal Air Force and flew bombing missions over Germany.²⁰ The Dutch government in exile established strong political connections with the Allies, especially Britain and Canada, and facilitated links between the Allies and the Dutch resistance.

During their initial occupation of the Netherlands following the Dutch capitulation, the Germans treated the Dutch citizens very carefully. The Germans saw the Dutch as kin, close to the Aryan ideal, and believed they could reshape the country into a Nazi state. German soldiers were told the Dutch were their “cousins” and directed to pay for everything they bought and avoid harsh treatment of the population. Adolf Hitler placed Reichkommissar Arthur Seyss-Inquart as the head of state. An uneasy peace ensued between the occupied and the occupiers. Both countries benefitted economically

¹⁹Mark Zuehlke, *On to Victory: The Canadian Liberation of the Netherlands, March 23-May 5, 1945* (Vancouver, Canada: Douglas and McIntyre, 2010), 183-184.

²⁰Charles Whiting, *The Last Battle: Montgomery's Campaign April-May 1945* (Marlborough, UK: Crowood, 1989), 265.

from this early relationship, and 20,000 Dutchmen volunteered for Dutch Waffen-SS units under German control.²¹

The atmosphere changed in early 1941 when the German regime began instituting policies restricting the rights of Dutch Jews. In February 1941, the Dutch Communist Party called for a national strike in response, and Jewish youth in Amsterdam took to the streets. The Germans and their Dutch proxies responded swiftly and decisively. The strike was brutally suppressed, organizers were executed, and 425 Jews were rounded up and sent to concentration camps. Dutch discontent grew and resistance groups began to blossom. The German regime responded with more and more repressive policies. The Germans began forcibly sending male Dutch citizens to work in German factories. Popular opposition gave rise to the *onderduikers*, or under-divers, Dutch workers who illegally fled from Germany back to the Netherlands and went into hiding. As the Germans became more oppressive, the resistance grew, and as the resistance grew, the Germans in turn became more and more oppressive.²²

In Great Britain, the British Special Operations Executive sought to coordinate and assist resistance movements across Europe. In April of 1942, with the approval of the Dutch government in exile, the Special Operations Executive established its “Plan for Holland” to infiltrate agents into the occupied Netherlands for the purposes of sabotage and the buildup of resistance movements. Unbeknownst to the British, the Germans had infiltrated the existing resistance networks in an operation known as “Englandspiel.” The Germans captured the majority of dropped supplies and captured 43 of 56 agents

²¹Dykstra, 1-6; Zuehlke, *On to Victory*, 183-186.

²²Dykstra, 7-10; Zuehlke, *On to Victory*, 187-188.

dispatched into the Netherlands. It took until the fall of 1943 for the British to realize their efforts had been compromised. Following the disaster of Englandspiel, the British had to reestablish their special operations in the Netherlands from scratch. Though it set back resistance in the Netherlands significantly, Englandspiel also forced the British Special Operations Executive to coordinate more closely with the Dutch government in exile for future operations.²³

The Dutch government in exile also established liaison with the British Air Ministry. In January of 1945, the Allied Combined Chiefs of Staff had agreed to undertake a combined strategic bombing offensive designed to destroy the German military, industrial, and economic system and break the morale of the German people.²⁴ In the Netherlands, the Germans made use of industry for aircraft production to support their war effort, and also used Netherlands as a military base for the launch of V-2 rockets. Though bombing of targets in the Netherlands was only a small portion of the overall bombing campaign against Germany, the British Air Ministry and the Dutch government in exile attempted to coordinate with each other. The Air Ministry agreed to work to minimize civilian casualties during their raids while the Dutch government understood and acknowledged that the bombing of targets in the Netherlands, to include Dutch industry supporting the German war effort, was necessary.²⁵ The government in

²³David Stafford, *Britain and European Resistance, 1940-1945* (Toronto, Canada: University of Toronto Press, 1980), 94, 159.

²⁴David MacIsaac, *Strategic Bombing in World War Two: The Story of the United States Strategic Bombing Survey* (New York: Garland Publishing Inc, 1976), 14-15.

²⁵Joris A. C. Van Esch, "Restrained Policy and Careless Execution: Allied Strategic Bombing on the Netherlands in the Second World War" (Monograph, School of Advanced Military Studies, Fort Leavenworth, KS, 2011), <https://server16040>.

exile at times broadcast warnings to the population of impending bombing raids. Despite the coordination between the Air Ministry and the government, significant tension existed regarding the bombing of the Netherlands. Allied bombers did not achieve nearly the level of accuracy necessary to avoid civilian casualties, and frequent mistakes occurred. During Allied bombing raids in Amsterdam in July 1943, Nijmegen in February 1944, and Den Haag in March 1945, limited visibility, poor aiming, and pilot error resulted in the bombing of Dutch population centers with civilian casualties. In such cases, the Dutch government protested to the Air Ministry, eliciting apologies and promises to work to prevent such incidents in the future, while still maintaining their public support for the overall campaign. The controversy and tension between the British and the Dutch governments over civilian casualties grew as the war continued on, with attacks causing harm to Dutch civilians drawing direct criticism from British Prime Minister Winston Churchill.²⁶

Following the successful Allied invasion of Europe in June 1944 and the subsequent breakout, the Netherlands took on military importance as the Allies advanced towards Germany. In preparation for Operation Market Garden in September of 1944, the Dutch government in exile, at the request of the Allies, communicated a directive for a railroad worker strike in the Netherlands to prevent Germany from using rail to reinforce

contentdm.oclc.org/cdm4/item_viewer.php?CISOROOT=/p4013coll3&CISOPTR=2789 (accessed 8 March 2013), 16-20.

²⁶Van Esch, 35-49.

Arnhem. As rumors spread of the success of Market Garden, the Dutch population came to believe that their liberation was imminent.²⁷

The Allied attack on Arnhem failed and the Netherlands remained under German control. The Germans responded by declaring that anyone suspected of aiding the resistance would be executed and stated that for every German soldier killed three Dutch citizens would die.²⁸ In response to the railroad strike, Reichkommissar Seyss-Inquart halted the shipment of food into the Netherlands. Any supplies that did make it in were confiscated by the Germans. The winter of 1944-1945 in the Netherlands became known as the “Hunger Winter,” as supplies of food and fuel dwindled amongst the civilian population. Shortages of coal and gas led to extensive power outages.²⁹ By 1945, the plight of the Dutch people had gained international attention, and the government in exile pressed Allied leadership hard for relief. In January 1945, the exiled Dutch Queen Wilhelmina sent a frantic personal plea to the King of England, Churchill, and American President Franklin Roosevelt asking for the Allied military to liberate the Netherlands.³⁰

The Netherlands ultimately provided little to the Allies in terms of significant resistance to the German occupation. They also provided little military contribution to the alliance, ultimately raising one Dutch brigade, the Princess Irene Brigade, to fight alongside the Allies in Europe. Despite this, the country became increasingly important

²⁷Stafford, 155-156.

²⁸Zuehlke, *On to Victory*, 191-192; Dykstra, 11-12.

²⁹Max Nord, ed., *Thank You Canada* (Amsterdam, Kingdom of the Netherlands: De Arbeiderspers, 1967), 45.

³⁰Zuehlke, *On to Victory*, 195.

politically as the war drew towards its end.³¹ The British especially saw their continued post-war alliance with the Netherlands as a vital national interest. While the Soviet Union advanced across Europe from the east, some amongst the Allies saw the war as a race pitting the United States and Britain against the Soviets over the shape of post-war Europe. Winston Churchill became especially concerned over the political aspects of the liberation of Europe between the west and the Soviets.³² The Netherlands, with their important geographic location in northern Europe, would be an important post-war ally to the British.

The Allied Advance

By March of 1945, the Allied armies had liberated France, crossed the Rhine River, and were prepared for an offensive into Germany itself to attempt to bring World War II to an end. Field Marshal Bernard Montgomery of the British Army commanded the 21st Army Group, which included the 1st Canadian Army under General Harry Crerar. This command now included, for the first time in the war, all Canadian forces in the European theater under one command. Up to this point, a large portion the 1st Canadian Corps had fought in Sicily and Italy, with the remainder of Canadian forces serving under the British in western Europe for the Normandy campaign and the

³¹Maass, 89.

³²Stafford, 159; William Manchester and Paul Reid, *The Last Lion: Winston Spencer Churchill Defender of the Realm, 1940-1965* (New York: Little Brown and Company, 2012), 657-658, 908-911.

subsequent breakout. In March 1945, the Canadians in Italy were shifted to Europe and placed back under the unified Canadian command.³³

Montgomery had hoped to lead the charge into Germany with his 21st Army Group. The British favored a narrow and direct approach into Germany with Montgomery in the lead in the hopes of reaching Berlin before the Soviet Army. Despite pressure from both Montgomery and British Prime Minister Winston Churchill, Supreme Allied Commander General Dwight Eisenhower chose a different approach. On March 29th, Eisenhower issued orders directing an American led attack south of Berlin, towards Leipzig and Dresden, effectively cutting Germany in half and allowing the Soviets to advance on Berlin.³⁴ Eisenhower directed Montgomery to attack across the Elbe to seize Hamburg and Kiel, protecting the northern flank of the main American attack into Germany and cutting off the Danish Peninsula from Germany. He was also tasked to liberate Denmark and the Netherlands.³⁵

Montgomery visited Crerar in his headquarters on 5 April to give him his orders for the campaign. He directed the Canadians to dedicate at least two divisions to clear Western Holland, while the bulk of the Canadian Army cleared northeastern Holland and continued on to clear the coastal belt and all enemy naval establishments.³⁶ Montgomery emphasized that the clearance of western Holland was a second priority in the operation.

³³Zuehlke, *On to Victory*, 141-145; Dykstra, 45.

³⁴Manchester, 908-909.

³⁵Whiting, 53.

³⁶Montgomery appears to use the term Holland in his directives to refer to all of the Netherlands, whereas the Dutch define Holland as the western province of the Netherlands.

The Canadian Army would also assume responsibility for establishing civil control in the areas they liberated. This operation would also open an Allied supply route through Arnhem, which the Allies had failed to capture seven months earlier during Operation Market Garden.³⁷

British 21st Army Group and Canadian Army assessments from February and March of 1945 estimated up to 200,000 German forces in the Netherlands, including administrative personnel and air defense units. These units were expected to be in defensive posture and potentially making preparations for withdrawal. They further assessed that the fighting quality of these German forces had sharply deteriorated, with significant shortages of equipment and training. The Canadians predicted that liberating the country would be difficult largely due to the terrain and the effects of recent flooding.³⁸

The liberation of the Netherlands held little military necessity at that point in the war. The main Allied advance into Germany would cut off the remaining German forces in northern Europe and bring about German capitulation and the end of the war. The Canadian liberation of the Netherlands would not deprive the Germans of any essential capabilities or support, nor would it place any pressure on Germany to capitulate. From a

³⁷Zuehlke, *On to Victory*, 181-182; C. P. Stacey, *Official History of the Canadian Army in the Second World War, Volume III, The Victory Campaign, The Operations in North-West Europe, 1944-1945* (Ottawa, Canada: Department of National Defense, Directorate of History and Heritage, 2008), 546.

³⁸21st Army Group, "21 A Gp/20748/7/8 (Plans)," War Diary, 1st Canadian Army, March 1945, Library and Archives, Ottawa, Canada; 2nd Canadian Corps, "Appreciation: In Regard to Employment of 2nd Canadian Corps in the Immediate Future," War Diary, 2nd Canadian Corps, February 1945, Library and Archives, Ottawa, Canada.

military standpoint, the Canadian advance in the Netherlands was a supporting effort to a supporting effort, protecting the northern flank of Montgomery, whose forces in turn provided a supporting effort protecting the northern flank of the main American advance into Germany. As such, as Montgomery made clear to Crerar, the Canadian operation was not a high priority and they would receive no priority of support in their efforts.

However, the Canadian operation to liberate the Netherlands did have political importance. The liberation of the Netherlands would solidify the post-war alliance between the western democracies of America, Britain, and Canada and the Netherlands in the face of increasing Soviet occupation of the continent. While the Dutch government in exile had remained a staunch ally to Britain and Canada, establishing deep ties with their governments, the Dutch people had suffered abuses from their German occupiers, casualties from Allied bombing raids, the dashed hopes of the failed Market Garden offensive, and the dire conditions of the “Hunger Winter.” The British government faced intense pressure to liberate the Netherlands for humanitarian reasons, while simultaneously dealing with continued tensions with the Dutch government over civilian casualties.

These conditions differed significantly from previous operations in cities such as Caen, a vital military objective to allow the Allied army to establish itself on the continent. The Allies had a military necessity to defeat the Germans at Caen for existential reasons. The loss of Caen would have endangered the Normandy beachhead. Caen belonged to France, a prominent member of the Allies, making it a battle of liberation from the occupying Germans. Despite this, the military necessity of the city, combined with the large-scale German resistance, led the Allies to employ heavy

firepower, resulting in mass destruction to the city. The liberation of the Netherlands in 1945 presented no such existential threat or military necessity. On the contrary, the operation took place as much for political and humanitarian reasons as for military reasons. These different circumstances called for a different approach.

In March 1945, the British 21st Army Group sent General Crerar an “Appreciation” document, an assessment by their staff of potential operations in North-West Holland. Crerar received the document and circulated it to his staff and subordinate headquarters for study. The document discussed civilian considerations in the Netherlands in detail. The document described the difficulties associated with attempting to evacuate locals prior to an attack, recommending, “relief should be taken to the population whenever possible, rather than contemplate large scale evacuation.” The 21st Army Group “Appreciation” shows a full awareness of the plight of the Dutch people, recommending the use of British aircraft to drop humanitarian supplies to the people and the reallocation of food rations meant for prisoners of war to the population. The document also shows an understanding of the political aspects of the campaign, at one point noting, “Cost to the Dutch population in lives and property if operations to evict the enemy west of Utrecht were conducted would be extensive. It is important that the Dutch government should appreciate this.” It recommends operations that could force German withdrawal, “so avoiding destruction of further Dutch towns and villages.” The document also demonstrates the 21st Army Group’s view of the issue of military necessity in the Netherlands, recommending, “before any decision to enter north-west Holland is taken, it must be clearly appreciated whether it would not prove more advantageous to the Dutch in the long run to throw in all resources to accelerate the final collapse of Germany in the

west.” Elsewhere in the “Appreciation,” they make the same point again stating, “concentration of maximum effort on rapid destruction of German forces east of the Rhine may lead to early capitulation of remaining Germans in northwest Holland thus achieving final liberation at minimum cost of lives and property to Dutch themselves.”³⁹

The Allies would in fact commit the majority of their resources to defeating the Germans east of the Rhine, but despite the recommendations of the British, in April 1945 the Canadians ultimately received the mission to liberate the Netherlands. The circulation and staffing of this assessment and its recommendations in the Canadian Army in March of 1945 demonstrates their awareness of the humanitarian and political aspects of the operation, as well as the sensitivity to civilian damage and casualties. It also served to communicate the views of their higher headquarters, Montgomery and his 21st Army Group, with respect to the Netherlands.

The Canadian Army’s Approach

Upon receipt of his orders from Montgomery, Crerar assigned the task of liberating northwestern Holland and Arnhem to the 1st Canadian Corps, under Lieutenant General Charles Foulkes, which had recently arrived from Italy. He tasked the 2nd Canadian Corps, under Lieutenant General Guy Simmonds, to drive to the North Sea, liberating the western provinces and maintaining contact with the British. The 2nd Canadian Corps would drive the Germans, “into the cage, into the grave, or into the North Sea.”⁴⁰ Simmonds advanced using a three division front, with the 3rd Division on

³⁹21st Army Group.

⁴⁰Bercuson, *Maple Leaf Against the Axis*, 268.

the left adjacent to the 1st Canadian Corps, the 4th Canadian Division on the right maintaining contact with the British, and the 2nd Canadian Division in the center tasked with advancing on the largest city in the region, Groningen.⁴¹

The Allied advance into the Netherlands quickly changed the dynamic in the region. The Canadians enjoyed superior numbers, better equipment, and complete air superiority over their German opponents. German units found themselves cut off and isolated. The German administrator, Seyss-Inquart, had received explicit orders from Hitler to institute a “scorched earth” policy, destroying all infrastructures and flooding the country. Seyss-Inquart, however, ignored the order. In early April, as the Canadians approached Groningen, Seyss-Inquart held secret meetings with representatives of the Dutch resistance to discuss a possible cease-fire.⁴²

As the Canadian Army advanced into the Netherlands towards Groningen, they encountered a largely disorganized and fleeing German enemy. The intelligence staff of the 2nd Division reported that they could no longer maintain an enemy Order of Battle, as no less than 15 unit badges had been identified amongst recently captured prisoners of war.⁴³ They also found a joyous Dutch population eager to assist their liberators. At Doet and Assen, the Canadians found pockets of organized German resistance, but upon breaching the defenses and entering both cities, they were met by cheering Dutch

⁴¹Terry Copp, *The Brigade: The 5th Canadian Infantry Brigade in World War II* (Stony Creek, Ontario: Fortress Publications, 1992), 186; David Bercuson, *Battalion of Heroes: The Calgary Highlanders in World War II* (Toronto, Canada: Penguin Books, 1994), 224.

⁴²Zuehlke, *On to Victory*, 196-198.

⁴³2nd Canadian Infantry Division, War Diary, 8 April 1945, Library and Archives, Ottawa, Canada.

crowds.⁴⁴ When the Royal Canadian Dragoons liberated Leeuwarden, the Dutch celebration turned to chaos as locals turned against collaborators and Dutch on Dutch violence swept the area. The unit had to halt their progress and act as temporary administrators, judges, and police to reestablish civil authority.⁴⁵ On their approach to Groningen, the Royal Hamilton Light Infantry came across Dutch women whose heads had been shaved for collaborating with the Germans.⁴⁶

The 2nd Canadian Infantry Division, under the command of Major General Bruce Matthews, drove north toward Groningen, encountering little organized resistance. Any enemy encountered quickly withdrew and they displayed little evidence of cohesion or coordination.⁴⁷ At Groningen, however, the 2nd Division would face significantly stiffer resistance.

They would also face new restraints. At Groningen, the 2nd Division would not employ artillery and air support against the city, with the understanding that damage to the city was to be prevented whenever possible.⁴⁸ This marked a departure from the bombardment tactics the Canadians had used in previous urban attacks such as Ortona

⁴⁴Bercuson, *Battalion of Heroes*, 226-229; Zuehlke, *On to Victory*, 254-255.

⁴⁵*Royal Canadian Dragoons 1939-1945* (Montreal, Canada: Southam Press, 1946), 178.

⁴⁶Brereton Greenhaus, Kingsley Brown Sr., and Kingsley Brown Jr., *Semper Paratus: The History of the Royal Hamilton Light Infantry (Wentworth Regiment), 1862-1977* (Hamilton, Ontario: RHLI Historical Association, 1977), 332.

⁴⁷Stacey, 554; Copp, *Cinderella Army*, 271.

⁴⁸2nd Canadian Infantry Division, War Diary, 16 April 1945, Library and Archives, Ottawa, Canada.

and Caen, and would require the 2nd Division to not only adjust their tactics to account for the loss of firepower, but to also minimize civilian casualties and collateral damage.

Order of Battle

On 5 April 1945, the German 480th Infantry Division, which had been stationed in Groningen, departed the city by train to return to Germany. This left an ad-hoc group of approximately 7,000 defenders to hold the city. This included some Wehrmacht garrison and Schutzstaffel (SS) troops, as well as a mixture of Luftwaffe ground personnel, naval marines, German Security Service personnel, Hitler-Jugend, and German railroad workers. The defenders also included Dutch collaborators, including Dutch SS units, some of whom had been guarding local internment camps for Jews. The Dutch SS knew they would face a firing squad if captured, and the German SS enforced discipline by threatening to kill deserters. The defenders had no artillery or tanks, but were equipped with two very effective weapons for close urban warfare; 20-millimeter anti-aircraft “flak” guns, which they used in a direct fire role, and Panzerfausts, a shoulder fired recoilless anti-tank weapon, which had proven itself in multiple urban engagements.⁴⁹ The absence of German artillery played a significant role in the Canadians’ ability to restrain their use of firepower. In prior urban battles such as Ortona and Caen, the presence of significant German artillery positions had led to high intensity artillery duels that caused widespread damage in the cities.

The 2nd Canadian Infantry Division that attacked Groningen included nine infantry regiments organized into three brigades. The 4th Brigade consisted of the Royal

⁴⁹Zuehlke, 323; Dykstra, 55.

Regiment of Canada, the Royal Hamilton Light Infantry, and the Essex Scottish Regiment. The 5th Brigade consisted of the Black Watch of Canada, Le Regiment de Maisonneuve, and the Calgary Highlanders. The 6th Brigade consisted of the South Saskatchewan Regiment, the Queen's Own Cameron Highlanders of Canada, and Les Fusiliers Mont-Royal. The Division was supported by Sherman and Stuart tanks and armored cars from the Fort Garry Horse. Artillery support was provided by the Royal Canadian Artillery, with one field regiment in support of each Brigade. The Division included the Toronto Scottish Regiment, a machine gun support battalion, which provided machine gun detachments to the rifle battalions. The division was also supported by the 2nd Anti-Tank Regiment, who provided Archer tank destroyers equipped with 17-pounder guns. The Canadian armored support included Wasps; tanks equipped with flamethrowers, and Kangaroos, tracked armored personnel carriers. Additional key weapons systems included the Bren Gun, a light machine gun, and the Projector, Infantry, Anti-Tank (PIAT), a handheld anti tank weapon. While the Division totaled 18,000 troops, only 56 percent were fighting soldiers and the Canadians rotated their troops daily to and from the front during urban warfare, reducing their number of available infantry soldiers at any given time to 6,000-7,000.⁵⁰

⁵⁰G. J. Ashworth, *War and the City* (London: Routledge, 1991), 125; Zuehlke, *On to Victory*, 323; Dykstra, 61.

CHAPTER 3
THE BATTLE FOR GRONINGEN

The Urban Terrain

The city of Groningen is the largest city in the province also called Groningen, the northeastern most province of the Netherlands. The North Sea lies less than 30 kilometers to the north, while the province of Friesland lies to the west, also bordering the North Sea. The small Dutch North Sea port of Delfzijl lies east of Groningen, as does the border with the northern tip of Germany. In the 1940s, the city was the hub of regional transportation systems to include road, rail, and waterways.⁵¹ The surrounding countryside includes multiple crisscrossing canals and agricultural waterways and ditches, all of which frequently flooded. Due to its location near the North Sea and the canalizing nature of the surrounding terrain, the only major roads approached Groningen from the south.

In medieval times, Groningen was a fortress city, surrounded by walls and a moat. In the 1600's the city expanded outwards into a larger and more modern fortress with larger walls. The city endured sieges twice prior to World War II. In 1594, the city, under Hapsburg control, fell to the Dutch Union. In 1672, the city, now part of the Dutch republic, withheld a siege by a German Army. In both cases, the invaders used the high ground south of the city as the base for their siege. In the 1700s, the city established a new line of defenses south of the city encompassing this high ground.⁵² By 1945 the old

⁵¹ Ashowrth, 124.

⁵² Ibid., 39-41, 179.

walls had been incorporated into the expanding city and no longer formed an obstacle, however, the water barrier from the old fortress remained, now used as a canal for transportation. The high ground and defenses south of the city had been overtaken by the subsequent development, becoming the suburb of Helpman.

At the time of the battle, the two major roads approaching Groningen were the Heereweg and the Paterswoldeweg. The Heereweg ran towards the eastern side of the city through Haren and Helpman. The Paterswoldeweg approached the western side of the city, past a large rolling city park with ponds and playing fields called the Stadspark. At the edge of the city the Paterswoldeweg passed by a large train station that dominated the surrounding areas. The avenues into the city included suburban housing developments immediately adjacent to the roads and large dominating building complexes including a sugar beet factory. A railroad ran just south of the city, with a section of the line breaking off and circling around the western edge of the city, crossing two of the western canals. The village of Hoogkerk lay four kilometers west of Groningen.

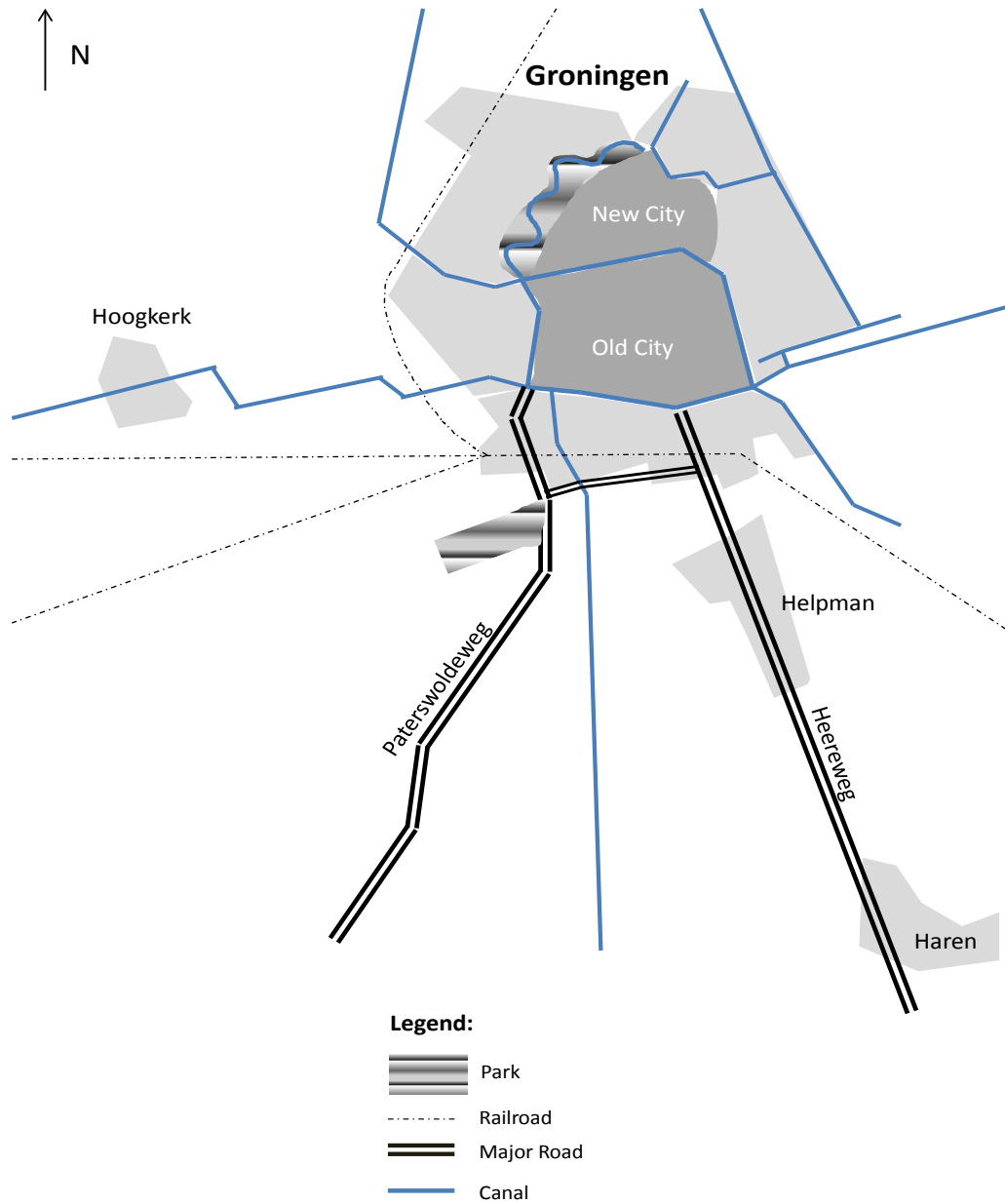


Figure 1. Groningen and Approaches

Source: Created by author based on University of Groningen Library, “Plattegrond van Groningen,” University of Groningen Library, 2007, <http://kaarten.abc.ub.rug.nl/root/grs/krt-1925-grs-pvg/?pLanguage=en> (accessed 12 April 2013); G. J. Ashworth, *War and the City* (London: Routledge, 1991); Ralph Dykstra, *The Occupation of Groningen, Netherlands, September 1944-April 1945 and the Liberation of the City of Groningen by the Second Canadian Infantry Division April 13th-16th, 1945* (Waterloo, Canada: Wilfrid Laurier University, 2001); Terry Copp, *Cinderella Army: The Canadians in Northwest Europe 1944-1945* (Toronto, Canada: University of Toronto Press, 2006).

The most significant tactical problem facing an army in seizing Groningen was crossing the canals to enter the inner city. A ring canal separates the inner city from the outer developments and suburbs. A total of 14 bridges allow access to the inner city across the canal, most of which were equipped as moveable bridges, able to swing in and out of place.⁵³ Bridges that crossed the canal from the south included the Eendrachtsbrug along the Paterswoldeweg, which crossed west of the ring canal; the Eelderbrug just east of the Eendrachtsbrug; the Emmabrug near the Railway station; the Heerebrug, which connected to the Heereweg avenue of approach; and two bridges further west, the Oosterbrug and the Trompbrug, a footbridge.⁵⁴ Only one of the bridges, the Eelderbrug, had been destroyed by the Germans.

On the northwest corner of Groningen a large, hilly city park, the Noorderplantseon, had been built, encompassing the ring canal and the remnants of the medieval city wall. The park included several small ponds, many trees, and an extensive garden of bushes, as well as high ground that dominated the surrounding area.⁵⁵ This terrain, tied into the ring canal, provided a complex natural obstacle.

Several other canals ran in and out of the city, intersecting with the ring canal, two from the south, two from the west, two from the east, and one from the north. The canals that entered from the west, the southern Hoendiep and the northern Reitdiep, were bridged west of the city by railroad viaduct crossings. Another canal, the Hoornsediap,

⁵³W. K. J. J. Van Ommen Kloeke, *The Liberation of Groningen*, trans. Wm. Jeronimus (Assen, Kingdom of the Netherlands: Van Gorkum and Co., 1945), 18.

⁵⁴Dykstra, 85.

⁵⁵*Ibid.*, 113.

separated the Paterswoldeweg approach from the Heereweg approach, with one bridge, the Parkbrug, crossing near the Stadspark. Additionally, another canal ran along the eastern edge of the city, outside of the ring canal. In 1944, low-lying areas east of the city were affected by flooding.⁵⁶ The ring canal made the inner city easily defensible, providing a natural obstacle with bridges the defender could easily retract or destroy. The canal east of the city, combined with the flooding in the same area, made approaches from the east unfeasible.

The inner city area of Groningen is divided into the old medieval city, which lies inside the ring canal, and the new 17th century city, north of the ring canal, surrounded by an outlying canal that included the Noorderplantseon city park. The old city was denser with narrower streets, while the new city featured longer and larger north-south running roads that allowed for greater fields of fire.⁵⁷ Vehicle trafficability was more limited in the old city, especially east to west. The inner city consisted mainly of closely set two- to five-story brick buildings. Many of the houses included backyard gardens and courtyards. The old city had two adjacent, centrally located open city squares, the Grote Markt and the Vismarkt. These represented the most open terrain in the old city portion of the inner city, with the greatest standoff distance and fields of fire. The Grote Markt included an adjacent tower and cathedral. Other major building complexes in the city included a hospital complex on the eastern side, and a university complex and naval barracks on the west side.

⁵⁶Ibid., 56-59.

⁵⁷Ashworth, 130.

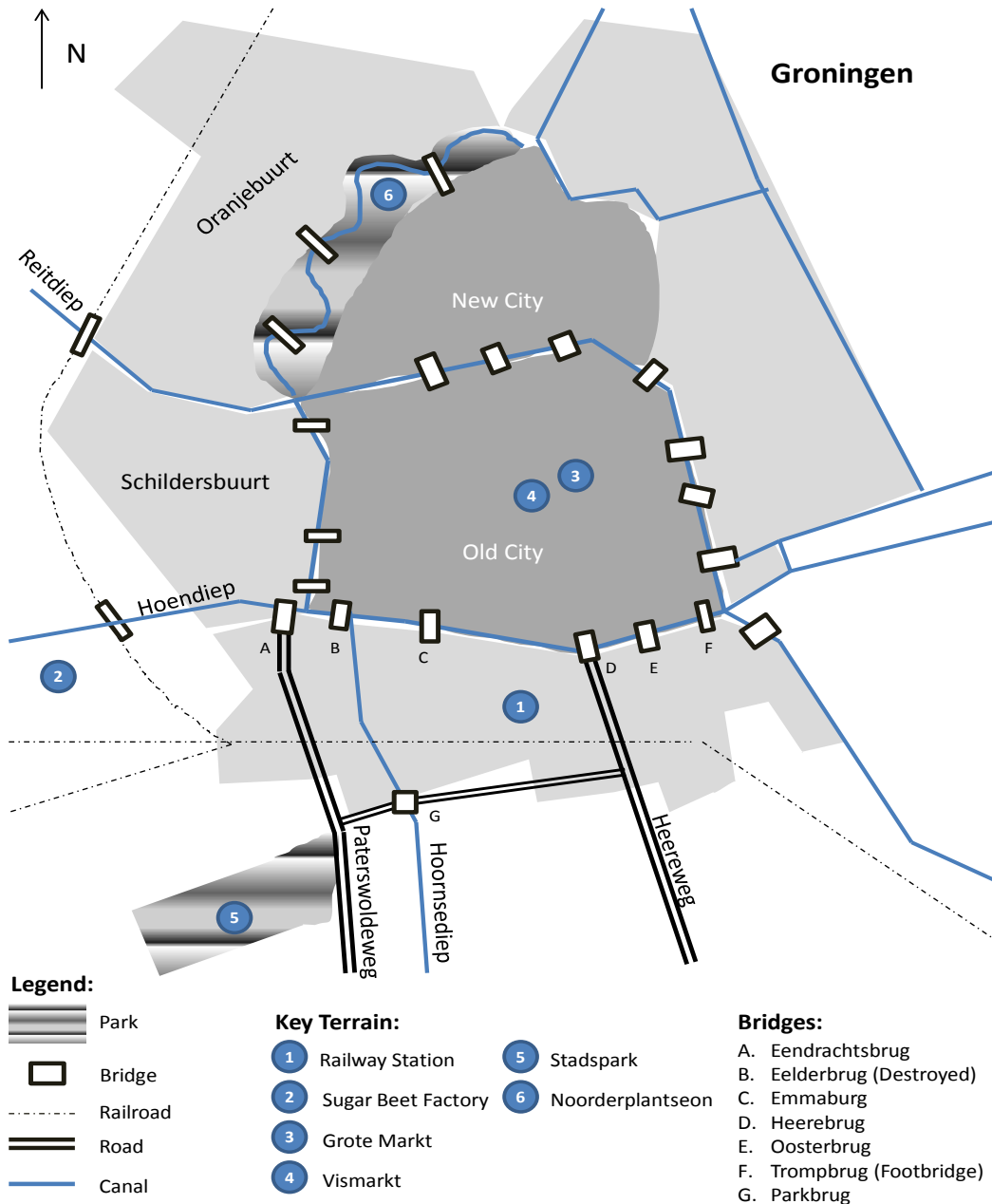


Figure 2. Groningen Key Terrain

Source: Created by author based on University of Groningen Library, “Plattegrond van Groningen,” University of Groningen Library, 2007, <http://kaarten.abc.ub.rug.nl/root/grs/krt-1925-grs-pvg/?pLanguage=en> (accessed 12 April 2013); G. J. Ashworth, *War and the City* (London: Routledge, 1991); Ralph Dykstra, *The Occupation of Groningen, Netherlands, September 1944-April 1945 and the Liberation of the City of Groningen by the Second Canadian Infantry Division April 13th-16th, 1945* (Waterloo, Canada: Wilfrid Laurier University, 2001); Terry Copp, *Cinderella Army: The Canadians in Northwest Europe 1944-1945* (Toronto, Canada: University of Toronto Press, 2006).

The German defenders had made some defensive preparations. They had placed concrete roadblocks on major approaches, dug anti-tank ditches, and dug entrenched fighting positions, some of them aboveground due to the water level.⁵⁸ They also sank many of the boats in the canal to allow for better fields of fire from the inner city across the water. At the Noorderplantseon, the Germans built defensive positions tied into the natural obstacles of the terrain that controlled the northwest approach to the city. The Germans retracted many of the canal bridges, yet the Canadians, to their surprise, would find some key bridges still in place. Along the southern approaches to the inner city, only the Eelderbrug was destroyed by the Germans, though they destroyed all of the ring canal bridges on the western side of the city.⁵⁹ In some areas, such as the Stadspark, the Noorderplantseon, and the Grote Markt, the Germans established very effective local defensive positions. When the German 480th Division departed, it was unclear who was in charge of the German defense, and how much they planned, coordinated, and controlled the defensive battle. The fractured and confused nature of the subsequent battle as well as the events of the eventual German surrender suggest that, despite the determined resistance of many of the defenders, the defense of Groningen was not well planned, synchronized, or controlled. Ultimately, the Canadians attacked a series of uncoordinated but stout strong points in a city well designed for a coordinated, centralized defense.

⁵⁸Dykstra, 60-61; Kloeke, 19-20.

⁵⁹Kloeke, 32; Dykstra, 111.

13 April: The Advance from the South

The lead element of the 2nd Canadian Infantry Division that approached the outskirts of Groningen on 13 April was the Royal Hamilton Light Infantry (RHLI), riding on the tanks of B Squadron of the Fort Garry Horse. They advanced up the Paterswoldeweg from Assen to the south towards the southeastern outskirts of the city. The Canadians expected little resistance. Their advance into the Netherlands up to that point had encountered fleeing and unorganized Germans, with large numbers surrendering. Earlier in the day as the RHLI moved through the town of Vries, local Dutch civilians reported that the occupying Germans had fled that morning.⁶⁰ The locals had then hung flowers on the Canadian vehicles as they passed through.⁶¹

The Division provided no plan or scheme of maneuver to seize Groningen. The 4th Brigade provided a basic scheme of maneuver to the RHLI, directing them to seize the bridges and control the west side of the city in order to pass the Royal Regiment of Canada through to liberate the eastern side of the city. They advanced expecting further surrenders and fleeing Germans. An entry in the 4th Brigade War Diary on 14 April, just prior to the RHLI making significant contact outside of Groningen, stated, “As it looked, the RHLI were going to victory march right through the city.”⁶²

Late on the afternoon of 13 April, the RHLI began to meet significant resistance one mile south of Groningen. They encountered concrete filled roadblocks placed on the

⁶⁰4th Canadian Infantry Brigade, War Diary, 13 April 1945, Library and Archives, Ottawa, Canada.

⁶¹Royal Hamilton Light Infantry, War Diary, 13 April 1945, Library and Archives, Ottawa, Canada.

⁶²4th Canadian Infantry Brigade, 13 April 1945.

Paterswoldeweg, and machine guns and small arms engaged them from houses adjacent to the road. Most significantly, the Germans hit them with 20mm flak guns. The Regimental War Diary noted that the unit had not seen the use of such weapons by the Germans since October 1944 in Belgium.⁶³ The Germans had established highly effective defensive positions established in the Stadspark west of the road. The park's rolling terrain, long standoff distance, and prepared trenches allowed the Germans to mass machine gun and 20mm fire on the approaching road. Despite reports of this resistance, the 4th Brigade remained optimistic that the seizure of Groningen would go quickly and easily, noting in their War Diary, "It was felt that if this outer crust could be crushed quickly that the def (Sic) of the remainder of the city might collapse quickly."⁶⁴

⁶³Royal Hamilton Light Infantry, 13 April 1945.

⁶⁴4th Canadian Infantry Brigade, 13 April 1945.

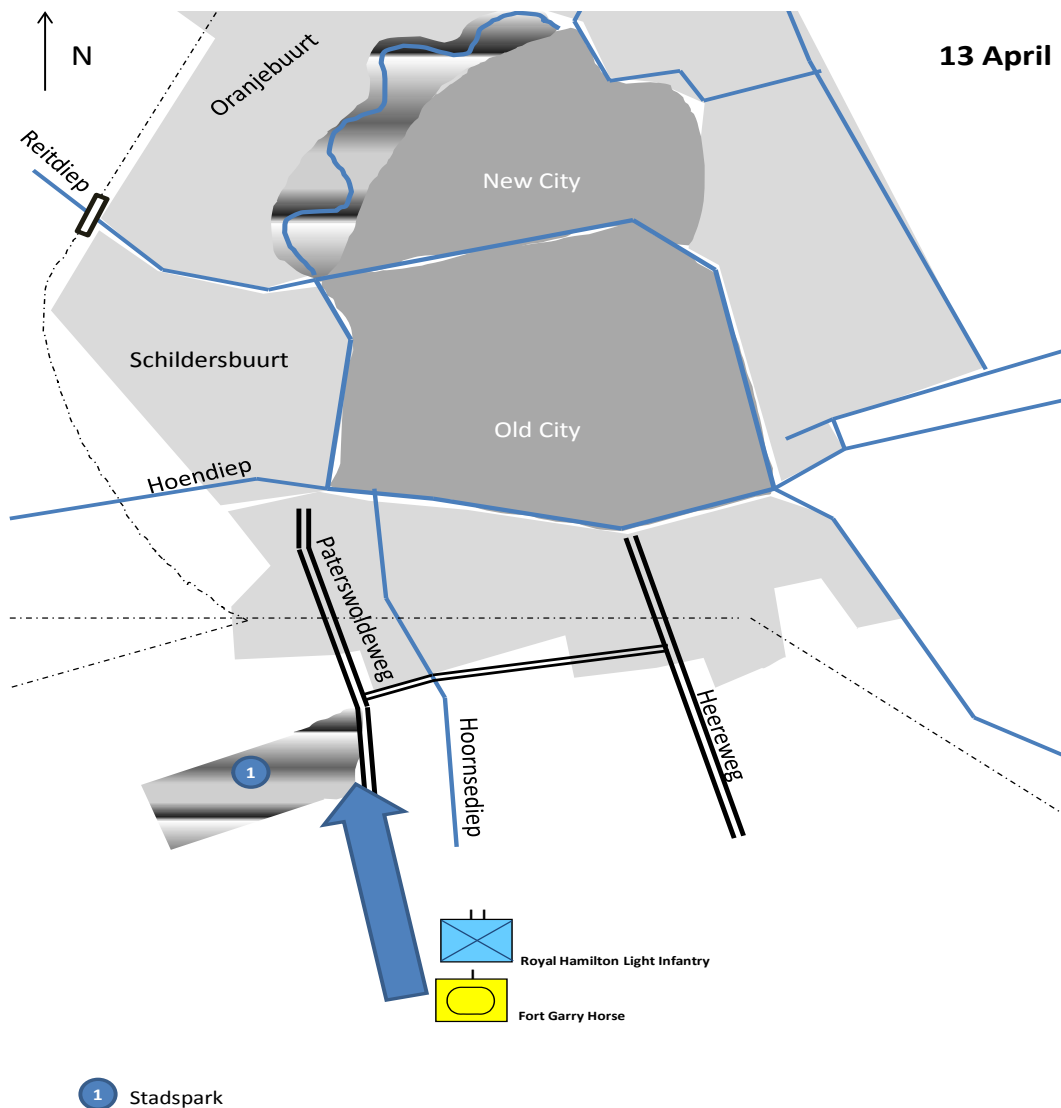


Figure 3. The Battle of Groningen, 13 April 1945

Source: Created by author based on University of Groningen Library, “Plattegrond van Groningen,” University of Groningen Library, 2007, <http://kaarten.abc.ub.rug.nl/root/grs/krt-1925-grs-pvg/?pLanguage=en> (accessed 12 April 2013); G. J. Ashworth, *War and the City* (London: Routledge, 1991); Ralph Dykstra, *The Occupation of Groningen, Netherlands, September 1944-April 1945 and the Liberation of the City of Groningen by the Second Canadian Infantry Division April 13th-16th, 1945* (Waterloo, Canada: Wilfrid Laurier University, 2001); Terry Copp, *Cinderella Army: The Canadians in Northwest Europe 1944-1945* (Toronto, Canada: University of Toronto Press, 2006).

The RHLI attempted to use a company to outflank the German positions to the west, but were unsuccessful.⁶⁵ The Canadians used a 17-pounder gun from an attached Archer tank destroyer from the 2nd Anti-tank Regiment to reduce the barriers on the road. During the ensuing fight, B Squadron of the Fort Garry Horse lost two tanks and an armored ambulance to German Panzerfausts. In addition to the Stadspark, the Germans had established machine gun positions in the sugar beet factory, a well-protected position with excellent fields of fire over the approaching roads.⁶⁶ The 4th Brigade's supporting artillery, the 4th Field Regiment, arrived and began firing their 25-pounder guns in support.⁶⁷

Meanwhile, at eight o'clock on the evening of the 13 April, three Canadian armored cars conducted a reconnaissance north along the Heereweg to Haren. They found no Germans in Haren, and were greeted enthusiastically by the local population, including officials from a local resistance group, who took control of city hall and began rounding up Dutch collaborators. The Canadians however, their reconnaissance complete and having received reports from the locals of nearby enemy flak guns, returned south. German patrols reoccupied the town later that night. The resistance members remained holed up in the City Hall where they spent a tense night, but managed to remain undetected.⁶⁸

⁶⁵Royal Hamilton Light Infantry, 13 April 1945.

⁶⁶Kloeke, 26-27.

⁶⁷Dykstra, 67-70; Copp, *Cinderella Army*, 271.

⁶⁸Kloeke, 28-29.

Late on the night of the 13 April, the RHLI cleared the Stadspark, receiving assistance from a member of the local Dutch underground. The Canadians gave him a weapon and he led their soldiers through the rolling terrain of the park, attacking and capturing groups of German soldiers.⁶⁹ Throughout the night, the 25-pounders of the 4th Field Regiment continued to fire missions, targeting the outskirts of the city and the Sugar Beet Factory. A total of eight Canadian soldiers died during the fighting south of the city on the 13 April, with 20 more wounded.⁷⁰

14 April: The Battle for the Bridges

At this point, it became obvious that Groningen would not fall easily, and would require more troops and a more deliberate plan. General Matthews arrived on the scene and met with his commanders on the morning of 14 April. Groningen had now become a division level fight. The most significant tactical problem facing the 2nd Division at this point was the physical barrier of the ring canal. The Canadians would have to seize defended canal crossings to enter and clear the inner city. It was unclear to the Canadians whether the Germans were prepared to destroy the bridges and isolate the city. Matthews quickly developed a scheme of maneuver and issued new orders. The 4th Brigade would continue their attack north along the Paterswoldeweg, as well as attack east towards the railway station to clear enemy south of the canal and seize bridges across the canal. The 5th Brigade would pass to the left of 4th Brigade and attempt to enter the city from the

⁶⁹Ibid., 27.

⁷⁰Copp, *Cinderella Army*, 271.

west. The 6th Brigade would advance from the south along the Heereweg through Haren and Helpman to link up with 4th Brigade and cross into the city.⁷¹

On the morning of Saturday the 14 April, the 4th Brigade, which had advanced along the Paterswoldeweg and secured the Stadspark, had the mission to clear up to the canal and seize the southern bridges in order to gain access to the inner city. In addition to the bridges, they faced two major obstacles, the Hoornsediep canal, which separated the approaches to Groningen from the south, and the railway station immediately south of the ring canal that dominated the area. The RHLI attacked north along the Paterswoldeweg towards the Eendrachtsbrug, while the Royal Regiment of Canada attacked east across the Hoornsediep towards the railway station, followed by the Essex Scottish Regiment, who would pass through them to seize the Heerebrug.

⁷¹4th Canadian Infantry Brigade, War Diary, 14 April 1945, Library and Archives, Ottawa, Canada.

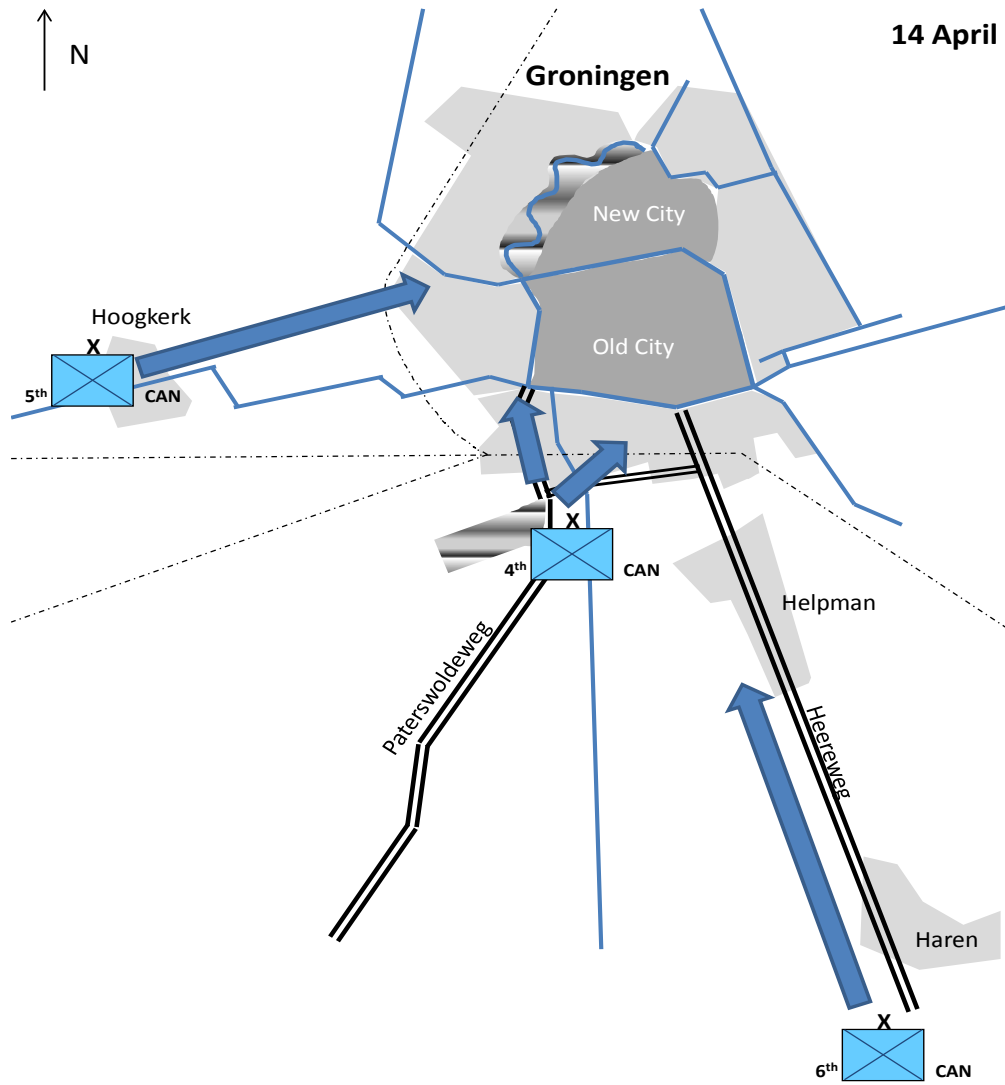


Figure 4. Canadian 2nd Division Scheme of Maneuver, 14 April 1945

Source: Created by author based on University of Groningen Library, “Plattegrond van Groningen,” University of Groningen Library, 2007, <http://kaarten.abc.ub.rug.nl/root/grs/krt-1925-grs-pvg/?pLanguage=en> (accessed 12 April 2013); G. J. Ashworth, *War and the City* (London: Routledge, 1991); Ralph Dykstra, *The Occupation of Groningen, Netherlands, September 1944-April 1945 and the Liberation of the City of Groningen by the Second Canadian Infantry Division April 13th-16th, 1945* (Waterloo, Canada: Wilfrid Laurier University, 2001); Terry Copp, *Cinderella Army: The Canadians in Northwest Europe 1944-1945* (Toronto, Canada: University of Toronto Press, 2006).

The RHLI's advance north along Paterswoldeweg met heavy resistance from enemy 20mm flak guns and well placed machine gun and sniper fire. The battalion engaged a water tower with mortars, 6-pounders, and 17-pounders following a report that enemy were using it as an observation post. C Company was held up by a particularly effective sniper who controlled a key crossroads with accurate fire. After the company first tried engaging with a 6-pounder, they requested assistance from a 17-pound anti tank gun, which engaged the sniper position with several rounds, silencing the sniper. By nightfall, D Company had reached the Eendrachtsbrug. They reported the bridge intact but lifted, and believed it could be swung back into place. The Regiment was directed to hold their position due to 5th Brigade's operations in the area. That evening the Regiment reported that Dutch SS in civilian clothes were engaging Canadian troops.⁷²

The Royal Regiment of Canada crossed the Hoornsediep in small boats, meeting some resistance on the far side from a series of apartment buildings they initially thought were warehouses. The lead companies cleared these buildings systematically before crossing the remainder of the regiment.⁷³ They also advanced across the Hoornsediep on the Parkbrug, which the RHLI had found intact.⁷⁴ German 20mm flak guns outside of the railway station pinned the Regiment down, but by noon, they had successfully seized the railway station. Despite the size and dominant position of the railway station, only six German defenders were found inside the station proper. Once in control of the railway

⁷²Royal Hamilton Light Infantry, War Diary, 14 April 1945, Library and Archives, Ottawa, Canada.

⁷³D. J. Goodspeed. *Battle Royal: A History of the Royal Regiment of Canada 1862-1962* (Brampton, Ontario, Canada: Chapters Publishing, 1962), 557.

⁷⁴4th Canadian Infantry Brigade, 14 April 1945.

station they brought up tanks from the Fort Garry Horse and emplaced machine guns from the Toronto Scottish Regiment on the roof, which allowed them to place effective fires on German positions around the Heerebrug.⁷⁵

Once the railway station had been seized, the Essex Scottish Regiment passed through the Royal Regiment of Canada and began to clear north towards the Heerebrug. They came under heavy machine gun and 20mm fire. On their first attempt to seize the bridge, only two men made it across, and were promptly mowed down by German fire on the far side of the bridge. They discovered that the bridge was not only intact, in place, and capable of crossing military vehicles, but also that it was not rigged with demolition. In the evening, A Company made a strong push across the bridge in Kangaroo armored personnel carriers, seizing buildings on the opposite side and establishing a bridgehead.⁷⁶ They subsequently cleared the houses on the square on the far side of the bridge. The battle for the Heerebrug started house fires that began to spread north into the city.⁷⁷

That same morning the 5th Brigade began their advance on the city from the west. Le Regiment de Maisonneuve would attack from the southwest to seize a railway viaduct over the Hoendiep canal west of the city. The Calgary Highlanders, trailed by the Black Watch of Canada, would advance from the west through the village of Hoogkerk to seize another railway viaduct bridge over the Reitdiep canal northwest of the city and attempt to gain access to the city from the northwest.

⁷⁵Dykstra, 78-83, 87-88; Kloeke, 30-31.

⁷⁶Essex Scottish Regiment, War Diary, 14 April 1945, Library and Archives, Ottawa, Canada.

⁷⁷Kloeke, 34.

Le Regiment de Maisonneuve's advance on the Hoendiep railway bridge southwest of the city ran into resistance from the Sugar Beet factory, which included a 20mm flak gun. A platoon cleared the first floor of the factory and then lit a fire in the cellar, smoking out the remaining Germans, resulting in the capture of 45 prisoners. Further down the road, a German pillbox laid down heavy fire on the Canadians. A PIAT gunner managed a lucky shot through the slit in the pillboxes, taking out the defenders. The Canadians then placed machine guns on the roof of the factory, allowing them to provide cover fire on the bridge.⁷⁸ As the Canadians attacked the bridge German soldiers attempted to run out to place explosive charges, but they were engaged and destroyed. After taking out two 20mm guns defending the bridge, Le Regiment de Maisonneuve captured it intact by 1815 hours.⁷⁹

⁷⁸Dykstra, 94-95.

⁷⁹Le Regiment de Maisonneuve, War Diary, 14 April 1945, Library and Archives, Ottawa, Canada.

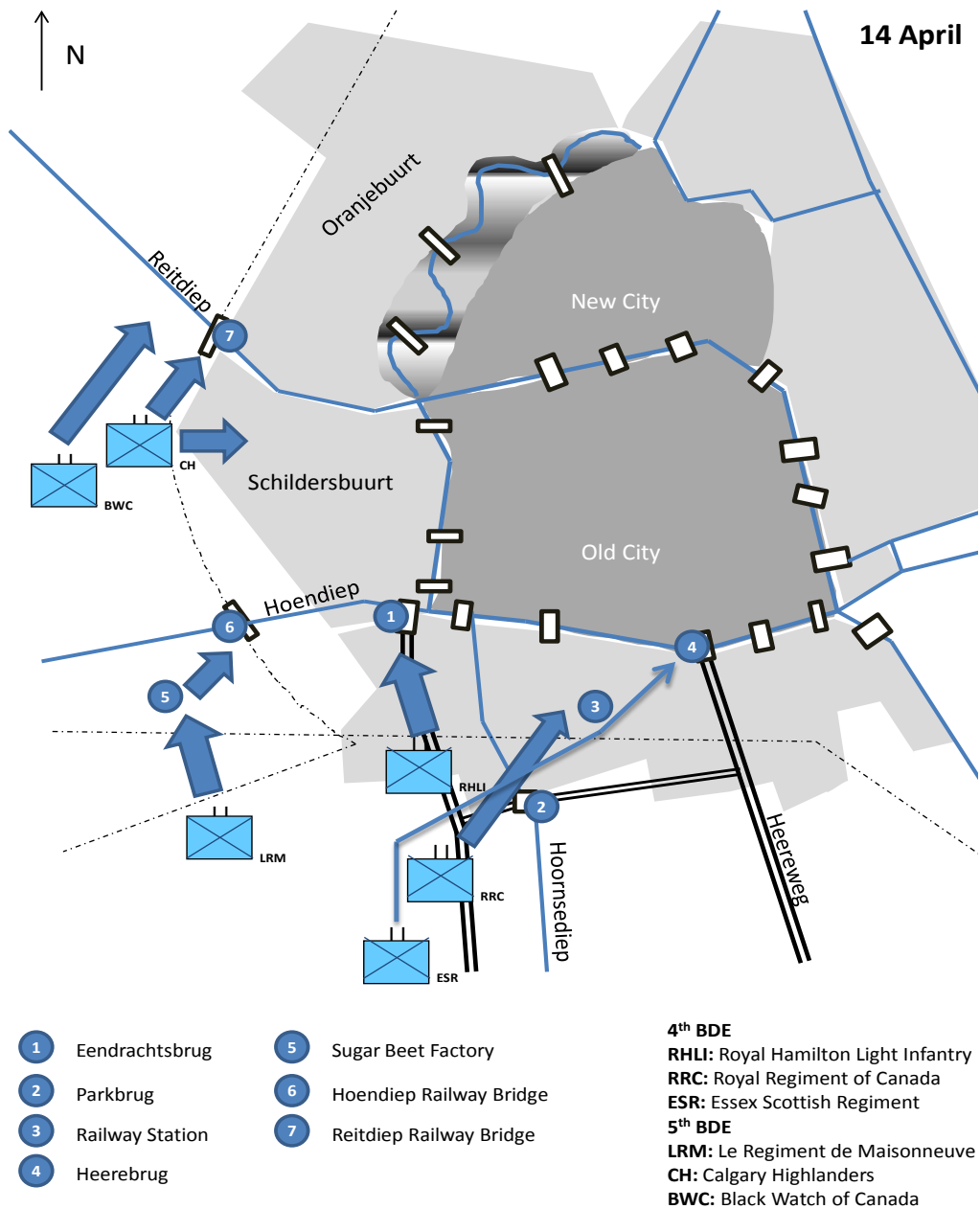


Figure 5. The Battle of Groningen, 14 April 1945

Source: Created by author based on University of Groningen Library, “Plattegrond van Groningen,” University of Groningen Library, 2007, <http://kaarten.abc.ub.rug.nl/root/grs/krt-1925-grs-pvg/?pLanguage=en> (accessed 12 April 2013); G. J. Ashworth, *War and the City* (London: Routledge, 1991); Ralph Dykstra, *The Occupation of Groningen, Netherlands, September 1944-April 1945 and the Liberation of the City of Groningen by the Second Canadian Infantry Division April 13th-16th, 1945* (Waterloo, Canada: Wilfrid Laurier University, 2001); Terry Copp, *Cinderella Army: The Canadians in Northwest Europe 1944-1945* (Toronto, Canada: University of Toronto Press, 2006).

The Calgary Highlanders walked into the village of Hoogkerk west of Groningen and took the area completely unopposed. From a phone in Hoogkerk, a Highlanders intelligence officer made a phone call to a drug store in the western sector of Groningen. The shopkeeper on the other end reported that locals were hiding in cellars, and that a strong force of Germans was defending the city.⁸⁰ From there the Highlanders sent their D Company east towards the outskirts of the eastern suburb of Schildersbuurt, while C Company advanced north towards the Reitdiep railway bridge. C Company found the bridge in the up position, with the mechanism for pulling it into place sabotaged. They crossed the canal across the tops of several tied barges, establishing positions overlooking the bridge from the far side.⁸¹ The Black Watch followed the Highlanders and conducted reconnaissance of the bridge in preparation for an early morning crossing.

The 6th Brigade had begun their advance up the Heereweg on 14 April. The Queen's Own Cameron Highlanders led the advance late in the afternoon, clearing through Haren and Helpman with little resistance. A large number of Germans fled to the Electrical Power Station in eastern Helpman, where they established a strong defensive position. The main forces of the 6th Brigade bypassed this strongpoint and headed north towards the city. The Germans in the Power Plant would endure a heavy artillery and mortar barrage, but would hold out for two more days.⁸² Les Fusiliers Mont Royal and the South Saskatchewan Regiment followed the Cameron Highlanders, preparing to pass

⁸⁰Roy Farran, *The History of the Calgary Highlanders, 1921-54* (Calgary, Canada, Bryant Press, 1954), 208.

⁸¹David Bercuson, *Battalion of Heroes: The Calgary Highlanders in World War II* (Toronto, Canada: Penguin Books, 1994), 234.

⁸²Kloeke, 39; Dykstra, 116.

through the Cameron Highlanders and the 4th Brigade the following day into the inner city.⁸³

The Canadians suffered 18 killed on the 14 April.⁸⁴ By day's end the majority of enemy resistance south of the canal had been cleared and the Canadians had established observation and fire superiority over two southern bridges, the Eendrachtbrug and the Emmabrug, and had seized the Heerebrug, establishing a foothold in the inner city. They also held two key canal crossings in the west, allowing them freedom of movement around the city to the north. The Canadians were poised to break in to the inner city of Groningen. The most significant defensive barrier available to the Germans, the ring canal, had been breached, and the Canadians threatened the city from two directions. The Canadians, with their tanks and artillery, had a clear advantage in both firepower and mobility. Across the canal however, lay the dense urban terrain of the inner city, which provided advantages to the defenders and a new set of tactical challenges for the attackers.

15 April: The Battle for the Inner City

On Sunday 15 April, two separate battles took place in Groningen. In the south, the 6th Brigade took over the bridgehead gained by the 4th Brigade and attacked the inner city from the south. In the northwest, the 5th brigade cleared the western suburbs and fought to gain entrance to the northern part of the city.

⁸³6th Canadian Infantry Brigade, War Diary, 14-15 April 1945, Library and Archives, Ottawa, Canada.

⁸⁴Dykstra, 97.

Two events took place just after midnight on the morning of 15 April. In the west, at 0100, elements of the Black Watch crossed the Reitdiep canal, sending some forces across the barge crossing seized by the Calgary Highlanders, while others conducted a boat crossing of the canal to the east of the bridge.⁸⁵ At 0140 in the south, a Kangaroo drove across the Emmabrug into the inner city to engage a machine gun, but was promptly destroyed by a Panzerfaust.⁸⁶

West of the city, the 5th Brigade sent the Black Watch of Canada to clear the northwestern suburb of Oranjebuurt and secure into the inner city, with Le Regiment De Maisonneuve following in reserve. The Calgary Highlanders, after passing the Black Watch north across the Reitdiep, were tasked to clear the western suburb of Schildersbuurt up to the ring canal.

The Calgary Highlanders' objectives included a series of three-story apartment buildings, a university, and a naval barracks. They faced a series of snipers in the apartment buildings. Though they did not use explosives due to the restrictions, they did employ mortars and flamethrowers. The flamethrowers were especially effective, burning out German positions and causing many to surrender. The Highlanders fought through resistance at the university, using mortar smoke for cover and again employing flamethrowers. By the time they reached the naval barracks the remaining Germans were eager to surrender.⁸⁷ By 1630, Schildersbuurt had been cleared up to the edge of the ring canal.

⁸⁵Dykstra, 112.

⁸⁶*Ibid.*, 104.

⁸⁷Bercuson, *Battalion of Heroes*, 235-237.

The Black Watch had a relatively easy time clearing the Oranjebuurt. With the Dutch civilians so eager to help, the battalion rang doorbells in the neighborhood, asking the occupants if any Germans were inside.⁸⁸ At 0700, as the trail elements of the Black Watch crossed the Reitdiep barge by the railway viaduct, they came under heavy fire. They first received fire from the vicinity of a water tower. A Sherman tank engaged and destroyed the tower, killing or washing out the enemy positions.⁸⁹ The barge crossing then began taking machine gun and 20mm fire from across the canal. This time local Dutch civilians came to the rescue. Dutch bargemen brought a larger barge into position adjacent to those being used for the crossing, providing cover to the crossing forces from the German fire.⁹⁰ Subsequently, the Canadians used barges to send light vehicles across the canal, which, along with vehicles on the near side, used cables borrowed from Dutch bargemen to pull the broken swing bridge back into place, allowing tanks and heavy vehicles to cross.⁹¹

The Black Watch approached the Noorderplantseon, the large hilly park that straddled the canal crossings into the northern, new city. The Germans had established strong defensive positions in the park, with trenches, machine guns, and 20mm flak gun positions tied in to the complex physical terrain. The Canadians occupied the buildings facing the park by going through their backyard gardens. For two hours they exchanged

⁸⁸Black Watch of Canada, War Diary, 15 April 1945, Library and Archives, Ottawa, Canada.

⁸⁹Dykstra, 112.

⁹⁰Black Watch of Canada, 15 April 1945.

⁹¹Black Watch of Canada, 15 April 1945; Dykstra, 111-112.

fire with the defenders, using Bren guns, PIATs, grenades, and mortars. Following a large mortar barrage and accompanied by supporting Wasps employing their flamethrowers, the Black Watch assaulted the park, pushing the German defenders out of their positions until they were forced to surrender or flee.⁹² Though it took over two hours, the Black Watch were able to secure the park using the overwhelming firepower of their mortars and flamethrowers, suffering only one killed and 1 wounded, while taking 247 prisoners.⁹³

Following this successful attack, the 5th Brigade sent their reserve, Le Regiment de Maisonneuve, through the Black Watch to attack into the new city and secure the northern crossings of the ring canal. Le Regiment de Maisonneuve requested the support Le Regiment de Maisonneuve had cleared the western portion of the new city and controlled the three northern bridges into the old city.⁹⁴

⁹²Black Watch of Canada, 15 April 1945.

⁹³Copp, *The Brigade*, 192.

⁹⁴Le Regiment de Maisonneuve, War Diary, 15 April 1945, Library and Archives, Ottawa, Canada; Copp, *The Brigade*, 192.

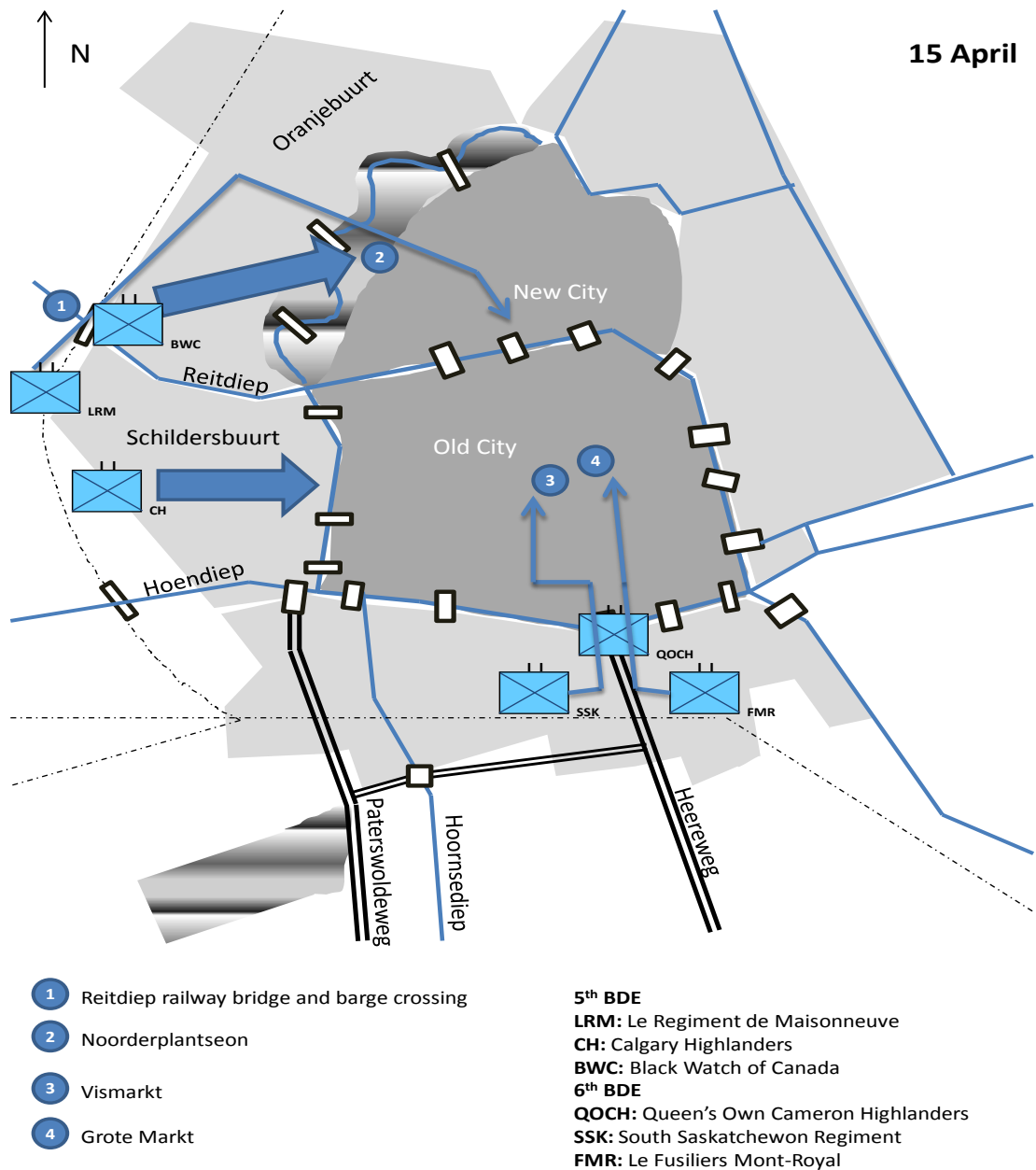


Figure 6. The Battle of Groningen, 15 April 1945

Source: Created by author based on University of Groningen Library, “Plattegrond van Groningen,” University of Groningen Library, 2007, <http://kaarten.abc.ub.rug.nl/root/grs/krt-1925-grs-pvg/?pLanguage=en> (accessed 12 April 2013); G. J. Ashworth, *War and the City* (London: Routledge, 1991); Ralph Dykstra, *The Occupation of Groningen, Netherlands, September 1944-April 1945 and the Liberation of the City of Groningen by the Second Canadian Infantry Division April 13th-16th, 1945* (Waterloo, Canada: Wilfrid Laurier University, 2001); Terry Copp, *Cinderella Army: The Canadians in Northwest Europe 1944-1945* (Toronto, Canada: University of Toronto Press, 2006).

To the south, on the morning of 15 April, the 6th Brigade had relieved the 4th Brigade at the crossing points of the ring canal. The Queen's Own Cameron Highlanders took over the bridgehead at the Heerebrug and the positions south of the ring canal. The 6th Brigade's plan was to pass Le Fusiliers Mont-Royal through the Cameron Highlanders into the old city followed by the South Saskatchewan Regiment. The Brigade would clear the city from south to north with Le Fusiliers Mont-Royal to the east and the South Saskatchewan Regiment to the west. The central road running north-south from the Heereweg would serve as the boundary between the Regiments.⁹⁵

The Germans made effective use of the tight terrain of the old city, establishing a stiff defense that forced the Canadians to fight for every block. Multiple 20mm flak guns covered key roads and intersections. German defenders used roofs, church steeples, and cellar windows to pour fire onto the Canadians. The narrow streets limited the use of tanks in many areas. The South Saskatchewan Regiment slowly made its way north, bypassing a 20mm position and taking it from the rear. By 1500 they had successfully cleared the Vismarkt. Though not as well defended as the Grote Markt, the fighting at the Vismarkt caused significant destruction to the surrounding buildings and streets and started a large fire in the area.⁹⁶

Les Fusiliers Mont-Royal faced similar stiff resistance, encountering 20mm fire as well as machine guns positioned on the eastern banks of the ring canal. Employing tanks where they could, they seized two eastern ring canal bridges and reached the edge

⁹⁵6th Canadian Infantry Brigade, War Diary, 15 April 1945, Library and Archives, Ottawa, Canada.

⁹⁶Dykstra, 107-108.

of the Grote Markt at 1700. The fighting started numerous fires throughout the city, including a fire started by a large explosion that burned down an entire city block.⁹⁷ Throughout their clearance operations the Canadians had to contend with crowds of celebrating Dutchmen on the streets, many of whom were drunk.⁹⁸

The Grote Markt proved especially well defended. The South Saskatchewan Regiment approached the western edge of the Markt from the Vismarkt while Les Fusiliers Mont-Royal advanced on its southern edge. The Germans established positions in the buildings lining the northern and eastern sides of the Grote Markt, overlooking 150 meters of open city square. The heavy volume of German fire thwarted any Canadian attempts to move across the square. The Canadians brought up tanks from the Fort Garry Horse, lined them up along the south side of the Grote Markt, and began blasting the German occupied buildings. The Canadians ceased fire after several heavy barrages and used a loudspeaker in an attempt to convince the Germans to surrender. The German defenders continued to resist. The battle for the Grote Markt raged into the night, destroying buildings and setting fires throughout the area.⁹⁹

South of the city, the Germans holed up in the Helpman Electrical Plant continued to hold out, with the 4th Brigade's Essex Scottish Regiment surrounding them. In the eastern suburbs of the city, outside the ring canal, pockets of Germans attempted to hold

⁹⁷Kloeke, 43-44.

⁹⁸6th Canadian Infantry Brigade, 15 April 1945.

⁹⁹6th Canadian Infantry Brigade, 15 April 1945; Dykstra, 109-110.

canal bridges to prevent a Canadian advance east towards Delfzijl. Throughout the night the Canadian artillery pounded these positions.¹⁰⁰

By the end of the day on 15 April, the western suburbs of Groningen were clear and occupied by the Calgary Highlanders, the northern new city had been breached, the northern crossings of the ring canal seized, and the old city had been cleared up to the Grote Markt. The Germans had put up stiff resistance at two separate strong defensive positions, the Noorderplantseon and the Grote Markt. These positions had significantly slowed the Canadians' advance, but in both cases the Canadians had massed their superior firepower against the German defenders, though the Grote Markt remained in German hands until 16 April. The Germans were almost surrounded, with only a narrow escape corridor to the northeast remaining, but they still held a section of the old city north and east of the Grote Markt, the southeastern portion of the new city, and the suburbs and bridges east of the ring canal. The majority of the city had been liberated and the joyous Dutch population was celebrating. Though pockets of resistance continued to hold out, it was clear that the Battle of Groningen was drawing to a close.

16 April: The Surrender

Just after midnight on the morning of 16 April, the Germans in the old city consolidated their positions. They pulled the majority of their forces out of the Grote Markt and established defensive positions to the east in an attempt to prevent the Canadians from cutting off their only escape route. The German garrison commander, a colonel, established his headquarters in a National Archives building east of the Grote

¹⁰⁰Kloeke, 55.

Markt. Though the entire German army had orders from Adolf Hitler not to give ground and not to surrender, the motley remnants defending Groningen had little ammunition and little remaining motivation. At 0200 in the morning elements of the South Saskatchewan Regiment linked up with elements of Le Regiment de Maisonneuve in the northwest portion of the old city, establishing communication between the northwestern and southern forces and further closing the noose.¹⁰¹

On Monday 16 April, the Canadians were determined to root out the final pockets of resistance in Groningen. Le Regiment de Maisonneuve would move on the remaining Germans in the southeast of the new city. In the old city, Le Fusiliers Mont-Royal would clear the Grote Markt and the eastern side of the city while the South Saskatchewan Regiment would finish clearance of the western portion. The 5th Brigade would send the Black Watch into the eastern suburbs from the north while the 6th Brigade was prepared to send the Cameron Highlanders east across the ring canal once the inner city was secured.

At 0600 in Helpman, the Germans in the Electrical Plant agreed to surrender to the Essex Scottish Regiment. The prisoners taken included 10 officers and 110 soldiers.¹⁰² Le Regiment de Maisonneuve initially met little resistance in their clearance of the southeastern portion of the new city, until they reached the canal's edge, where a

¹⁰¹Dykstra, 120-124.

¹⁰²Essex Scottish Regiment, War Diary, 16 April 1945, Library and Archives, Ottawa, Canada.

German 20mm flak gun engaged them from across the canal, pinning them down. A tank from the Fort Garry Horse eventually came up and destroyed the gun.¹⁰³

At first light Les Fusiliers Mont-Royal, under the covering fire of Sherman tanks of the Fort Garry Horse, crossed the square of the Grote Markt and seized the buildings on the far side, finding few remaining German defenders. Fighting continued east of the Grote Markt, as they advanced on the remaining German defenders and their headquarters. Local residents continued to provide assistance to the Canadians; in one instance a Dutch woman led Canadian soldiers through a series of backyard courtyards to take a German machine gun position from the rear.¹⁰⁴

At 1200 two German officers approached Les Fusiliers Mont-Royal under white flags. They reported that many Germans wished to surrender, but their commander still refused. The Regimental commander went to the German headquarters in the archives building and convinced the German colonel to surrender at 1230.¹⁰⁵ No account exists that recorded the name of that German commander. Most accounts, but not all, refer to him as a colonel and as the garrison commander. The commander himself, at the time of his surrender, showed little awareness of the battles taking place in other areas of the city or the exact nature of his current predicament.¹⁰⁶ When the commander and his men surrendered, the Canadians passed the word on to the remaining German positions in the

¹⁰³Les Fusiliers Mont-Royal, War Diary, 16 April 1945, Library and Archives, Ottawa, Canada; Dykstra, 123.

¹⁰⁴Kloeke, 62.

¹⁰⁵Les Fusiliers Mont-Royal, 16 April 1945.

¹⁰⁶Ashworth, 131; Dykstra, 124-126.

inner city, who subsequently surrendered. It is unclear however, to what degree the German commander exercised effective command and control during the battle. Once the inner city fell all that remained under German occupation were the suburbs east of the ring canal. The Black Watch of Canada advanced towards the eastern suburbs from the north, securing outlying canal crossings, liberating villages, and meeting little resistance.¹⁰⁷ The 6th Brigade passed the Cameron Highlanders through Les Fusiliers Mont-Royal and across the canal, where they faced one final fight for the Oosterhoogbrug, a bridge across the eastern canal on the road to Delfzijl. The Germans had placed the swing bridge in the up position. The mechanism to lower it lay on the far side of the canal, and a remaining German position had the bridge covered by fire. Two Dutch civilians volunteered to assist the Canadians. Together with a group of soldiers they crossed the canal on a ladder, and the civilians operated the mechanism to lower the bridge. One of the civilians was wounded during this action.¹⁰⁸ One soldier from the Cameron Highlanders was killed during the fight for this bridge, the last Canadian soldier killed during the battle of Groningen.¹⁰⁹

Following the liberation of Groningen, the 2nd Division briefly rested and prepared to continue their advance further east. The Dutch residents of Groningen celebrated in the streets, often along with Canadian soldiers. The Groningen fire brigade worked to try to put out the various fires started during the battle. So deep was the local

¹⁰⁷Black Watch of Canada, War Diary, 16 April 1945, Library and Archives, Ottawa, Canada.

¹⁰⁸The Queen's Own Cameron Highlanders, War Diary, 16 April 1945, Library and Archives, Ottawa, Canada.

¹⁰⁹Dykstra, 128.

hatred of the German occupiers that the Canadians had to establish guards at hospitals treating German wounded to protect them.¹¹⁰

During the four day battle for Groningen, the 2nd Canadian Infantry Division suffered 43 killed and 166 wounded.¹¹¹ German casualty figures are unknown, but the Canadians took a total of 2,400 prisoners.¹¹² The city of Groningen reported a total of 110 civilians killed during the battle, the second highest civilian casualty figure for a Dutch city during the war behind Arnhem.¹¹³ A total of 270 buildings in the city were destroyed by either fighting or the resulting fires.¹¹⁴

¹¹⁰Bercuson, *Battalion of Heroes*, 238.

¹¹¹Dykstra, 130.

¹¹²Zuehlke, *On to Victory*, 337.

¹¹³Dykstra, 130.

¹¹⁴Van Ommen Kloeke, 81.

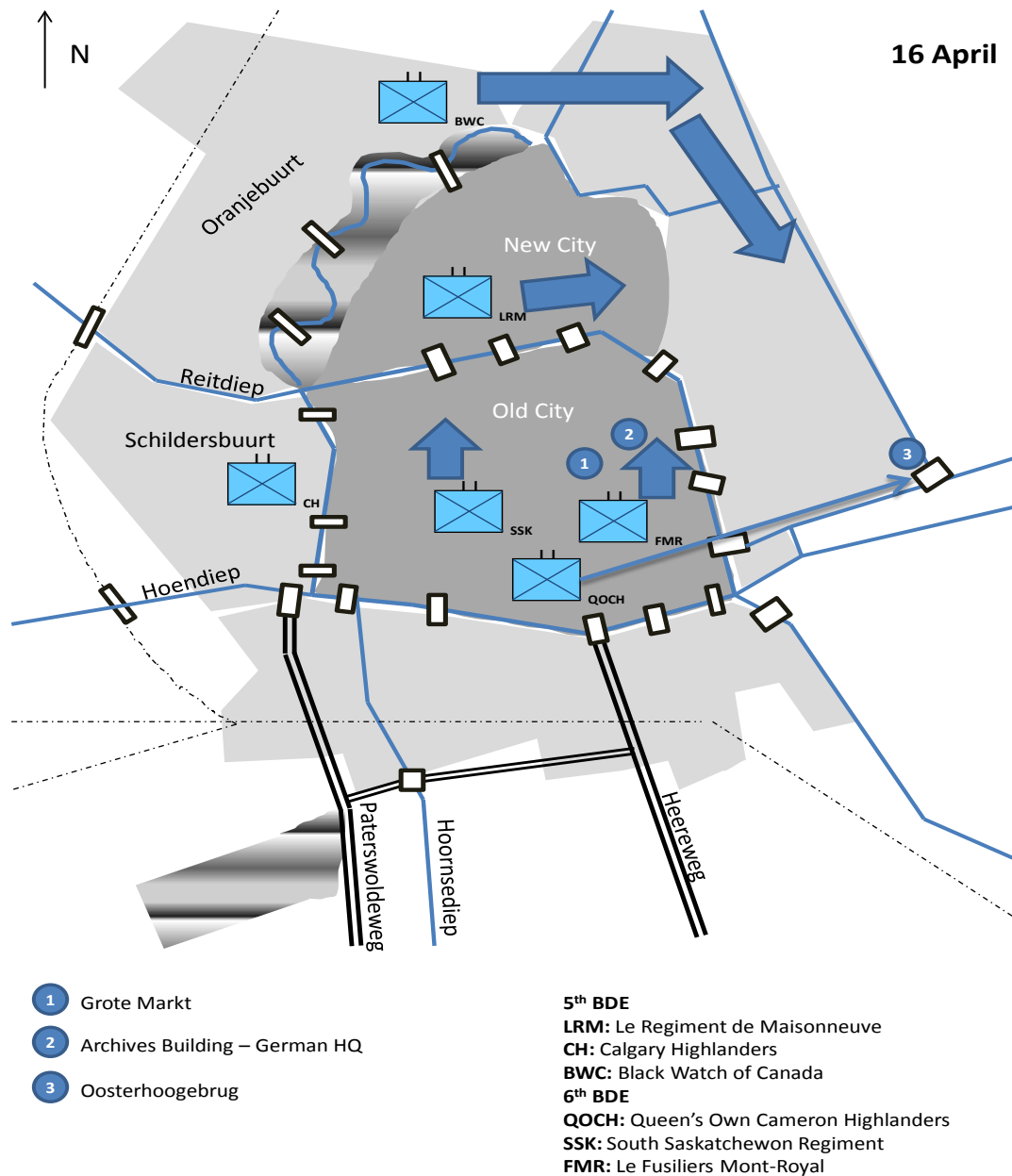


Figure 7. The Battle of Groningen, 16 April 1945

Source: Created by author based on University of Groningen Library, “Plattegrond van Groningen,” University of Groningen Library, 2007, <http://kaarten.abc.ub.rug.nl/root/grs/krt-1925-grs-pvg/?pLanguage=en> (accessed 12 April 2013); G. J. Ashworth, *War and the City* (London: Routledge, 1991); Ralph Dykstra, *The Occupation of Groningen, Netherlands, September 1944-April 1945 and the Liberation of the City of Groningen by the Second Canadian Infantry Division April 13th-16th, 1945* (Waterloo, Canada: Wilfrid Laurier University, 2001); Terry Copp, *Cinderella Army: The Canadians in Northwest Europe 1944-1945* (Toronto, Canada: University of Toronto Press, 2006).

On 5 May 1945, the remaining German forces in the Netherlands surrendered to the 1st Canadian Army. Prince Bernhard of the Netherlands was present with the Allies at the surrender.¹¹⁵ Three days later Germany surrendered and the European campaign of World War II came to an end.

¹¹⁵Zuehlke, *On to Victory*, 422-423.

CHAPTER 4

ANALYSIS

The Order for Restraint

The exact origin of the order prohibiting the use of artillery and airstrikes at Groningen is unclear. Different historians have associated the decision to both Lieutenant General Simmonds, the commander of the 2nd Canadian Corps, and to Major General Matthews, the commander of the 2nd Infantry Division.¹¹⁶ Almost all citations regarding the decision reference the 2nd Division War Diary of 16 April 1945 which states, “As is our policy in Holland, artillery and air support will not be used against cities if at all avoidable.”¹¹⁷ The statement, “our policy” leaves it unclear who exactly gave the order. A specific written order, directive, or policy does not exist in the war diaries of the Canadian units involved. This is further complicated by the fact that the April 1945 war diary for the highest Canadian headquarters involved, the 1st Canadian Army, is missing from the Canadian National Archives.

Whether the order came from Simmonds or Matthews, the Canadians acted within the intent of their higher headquarters, the British 21st Army Group, based on pressure from the British government. The British faced growing political pressure from the Dutch government in exile to liberate the starving Dutch people. They had also dealt with political blowback throughout the war from bombing raids that killed Dutch civilians. Looking to appease a member of the alliance and an important post-war ally, the British

¹¹⁶Dykstra, 71 and Zuehlke, *On to Victory*, 326 give Matthews credit for the decision while Bercuson; *Battalion of Heroes*, 232 gives credit to Simmonds.

¹¹⁷2nd Canadian Infantry Division, 16 April 1945.

communicated their views on operations in the Netherlands through staff documents that highlighted their concern for the Dutch people, the influence of the Dutch government in exile, and the lack of military importance of the Netherlands in ending the war with Germany. The Canadians received these documents and circulated them to their staffs and subordinate units prior to receiving their orders to liberate the Netherlands. When Montgomery directed the Canadians to advance into the Netherlands, they understood the humanitarian nature of the mission, as well as its political implications. These factors provide the reasoning behind the decision, unprecedented in World War II urban warfare in Europe, to limit firepower when attacking an enemy occupied city, regardless of who issued the actual order.

In his thesis on the Battle of Groningen, Ralph Dykstra argued that Groningen was a military necessity for the Allies. He argued that the city was an important link in the German air defense network, as well as the northern defensive belt established by the Germans to prevent invasion from the North Sea. He also argued that the Allies could not afford to bypass the Germans in the region.¹¹⁸

The British 21st Army Group however, did propose bypassing the Netherlands to focus on driving Germany out of the war and forcing the capitulation of their remaining forces. The staff of the 21st Army Group explicitly argued for this course of action in their appreciation of Holland, which they sent to their higher headquarters, the Supreme Headquarters Allied Expeditionary Force (SHAEF) in March of 1945.¹¹⁹ Neither the strategy pursued by Eisenhower, with its American led drive toward Leipzig, nor the

¹¹⁸Dykstra, 52-55, 134.

¹¹⁹21st Army Group.

alternate British drive to Berlin proposed by Montgomery, placed any strategic importance on the Netherlands. The reduction of the German flak batteries near Groningen would have no significant impact on the Allied bombing campaign against Germany.¹²⁰ The German decision to remove their 480th Infantry Division from Groningen prior to the battle demonstrates the lack of importance the region had, even to the enemy. Once directed to liberate the Netherlands, the seizure of Groningen became a military necessity to the Canadians as part of their given mission. At the operational and strategic level however, Groningen and the Netherlands held no military importance in ending World War II. This fact, and its emphasis by the British 21st Army Group, provided further justification and reasoning for the order to limit firepower at Groningen.

The Use of Artillery

Despite the directive that artillery would not be used if at all avoidable, the Canadians did employ their artillery during the battle of Groningen. The 4th, 5th, and 6th Field Regiments of the Royal Canadian Artillery reported firing in support of the attack on Groningen on 13 through 16 April.¹²¹ The artillery fired against German strong points such as the Sugar Beet Factory, the Helpman Electric Plant, and other targets of opportunity such as water towers. The artillery also played a key role engaging targets in the eastern suburbs of the city throughout the battle. Because of their approach and the restrictive terrain, the Canadians were never able to isolate the city of Groningen.

¹²⁰Zuehlke, *On to Victory*, 323.

¹²¹4th Field Regiment, Royal Canadian Artillery, War Diary, April 1945, Library and Archives, Ottawa, Canada; 5th Field Regiment, Royal Canadian Artillery, War Diary, April 1945, Library and Archives, Ottawa, Canada; 6th Field Regiment, Royal Canadian Artillery, War Diary, April 1945, Library and Archives, Ottawa, Canada.

Throughout the battle the eastern approaches and outskirts to the city remained in German hands, allowing them avenues for both reinforcement and escape. To counter this, the Canadians fired a large number of artillery missions against the eastern suburbs and approaches to the city, especially at night.¹²² The Canadians largely used their artillery outside of the inner city, requesting artillery strikes only when faced with stiff resistance. This demonstrates that the Canadians would not follow the directive to limit artillery to the point where it would cause additional friendly casualties. This shows a decentralized execution of the directive to limit firepower, allowing subordinate units the flexibility to interpret the “if at all avoidable” caveat based on their circumstances.

A major reason the Canadians were able to limit their use of artillery against the inner city was the lack of German artillery and tanks. During previous World War II urban battles in cities such as Stalingrad, Ortona, and Caen, artillery barrages targeting enemy artillery and tanks had led to tremendous destruction in the cities. During the 19-day battle for the city of Aachen, American forces fired an average of 9,300 artillery rounds a day, with the German defenders firing an average of 4,500 rounds a day in response.¹²³ Without the threat of German artillery or tanks, the advancing Canadian infantry and tanks did not need the protection of large-scale artillery barrages.

Local Fire Superiority

Despite the lack of German artillery and tanks, the Canadians still faced a difficult fight at Groningen. The Germans took full advantage of the urban terrain to employ their

¹²²Dykstra, 70.

¹²³Dimarco, 82.

20mm flak guns, Panzerfausts, and snipers. Faced with these obstacles, and attempting to follow their guidance to avoid the use of artillery, the Canadians used their Sherman tanks and Wasps with flamethrowers to achieve local fire superiority and defeat German strong points. The Germans had no corresponding capability to match those two weapon systems. These weapons also provided a level of precision that artillery strikes lacked, allowing the Canadians to target specific buildings, windows, and doors. They proved especially decisive during the battle's two most significant firefights at the Noorderplantseon and the Grote Markt. The flamethrowers of the Canadian Wasps played a major role in breaking the German defense of the Noorderplantseon on the northern edge of the city on 15 April. At the Grote Markt, when the Canadians found their infantry unable to advance, they simply lined up their Sherman tanks to pound the German positions. In numerous other cases throughout the battle, when the Canadian infantry found themselves pinned down by snipers, machine guns, or 20mm flak guns, they called up a Wasp or a Sherman, which destroyed the position and allowed the Canadians to advance. Despite their limitations on artillery fire and air strikes, the Canadians were able to achieve local fire superiority against precise German targets with their Sherman tanks and Wasp mounted flamethrowers. These weapon systems, and the fire superiority they provided, played a key role in the resulting Canadian victory.

The Dutch Population

The local Dutch population in Groningen also gave the Canadians a key advantage. After almost five years of occupation, the majority of Dutch citizens had grown to detest their German occupiers. Though it did not begin that way, the escalating harsh treatment by the Germans turned the Dutch against them. The Dutch resistance,

however, had not been able to mount a serious threat to German occupation. In April of 1945, with the Germans on the run and a strong Canadian force approaching, the Dutch finally had their chance to be a part of the war, and exact some revenge against their occupiers. The extreme Dutch hatred for the Germans can be seen in their harsh treatment of collaborators following liberation, as well as the Canadian concerns about German prisoners after the battle, going so far as to place armed guards at hospitals with wounded Germans.¹²⁴

Both before and during the battle, local Dutchmen provided assistance to the Canadian Army. During their approach to Groningen, the 2nd Division received detailed information on the geography, layout, and approaches to the city from locals in outlying areas, allowing them to build detailed maps.¹²⁵ Examples of Dutch assistance include the clearance of the Stadspark, the establishment and protection of barge crossings over the canal, and the seizure of the Oosterhoogbrug, where a Dutch civilian was wounded while assisting the Canadians. The Canadians had such confidence in the loyalty of the locals that at one point in the battle, the Black Watch went house to house ringing doorbells, asking the residents if there were any Germans inside. Numerous accounts of the battle include stories of Dutch civilians pointing out German positions and, in some cases, leading Canadian soldiers through backyards to take them from the rear.

This intelligence and assistance from the Dutch, driven by their extreme hatred of the Germans, gave the Canadians a distinct advantage during the battle. The detailed information on German positions allowed them to target specific buildings, which greatly

¹²⁴Bercuson, *Battalion of Heroes*, 238.

¹²⁵4th Canadian Infantry Brigade, 13 April 1945.

facilitated their ability to adhere to their artillery restrictions and minimize excessive damage. With guidance from Dutch citizens possessing specific knowledge of local terrain and expertise on the mechanics of the canal bridges, the Canadians seized crucial areas and established canal crossings. Without this assistance, the Canadians would have had much more difficulty defeating the Germans at Groningen, and would have been forced to resort to greater use of firepower, causing more collateral damage and civilian casualties.

The German Defense

The city of Groningen was designed for defense. Its numerous canals isolate the inner city and canalize and restrict approaching armies. The German defenders however, failed to take full advantage of the natural defensive terrain of Groningen. Accurate assessment of the German defense is hindered by the lack of German records: we do not even know the name of the German commander who surrendered. The events of the battle however, demonstrate an uncoordinated and unplanned defense. Though the Germans established strong defensive positions in specific areas such as the Stadspark, the Noorderplantseon, and the Grote Markt, these positions were not mutually supportive and were not part of a greater coordinated defensive plan for the city. The most glaring example of the ineptitude of the German defense is the number of key bridges the Canadians found intact. Any deliberate defense of Groningen should have included the destruction of bridges. It is how the city's defense had been designed for centuries. The German failure to destroy key bridges, especially along the most direct approaches to the city from the south, played a major role in the Canadians' success. Had the Germans done a better job of coordinating their defense, destroying key bridges, and linking their

strong points to be mutually supportive, the Canadians would have faced a much longer and more difficult battle, with more casualties and the need to employ more firepower. The Canadians took advantage of the Germans' lack of defensive coordination and planning, as well as their lack of weapons and equipment. This played a major role in the Canadians' ability to adhere to their directives to limit firepower while limiting their own casualties.

Collateral Damage

Following the Battle of Groningen, the War Diary of the 2nd Canadian Infantry Division on 16 April stated, "the city was captured undamaged except for several fires that burned some of the houses."¹²⁶ This seems like an understatement considering the 270 buildings destroyed and the major damage to areas such as the Grote Markt. Despite the guidance to limit destruction of the city, the Canadians frequently employed flamethrowers and tanks against buildings to destroy German positions. As noted in the War Diary of The Black Watch, "it was necessary for the Bde. (sic) to inflict some damage on the centre of the town."¹²⁷ Their firepower also caused several major house fires that spread throughout the city, destroying many more homes. Those 270 buildings destroyed, however, came out of an estimated total of 32,000 at the time of liberation, or 0.8 percent of the city.¹²⁸ This figure needs to be considered in context of other World War II urban battles in Europe. The town of Falaise, France had 950 of its 1,637 homes

¹²⁶2nd Canadian Infantry Division, 16 April 1945.

¹²⁷Black Watch of Canada, 16 April 1945.

¹²⁸Kloeke, 81.

destroyed during the battle for the Falaise Pocket, representing 58 percent of the city.¹²⁹ Following the Battle for Caen, only 8,000 of the city's 30,000 citizens had homes left standing.¹³⁰ Civilian casualty figure comparisons tell the same story. While 110 Dutch civilians died at Groningen, an estimated 1,314 Italian civilians died during the Battle of Ortona.¹³¹ When compared with other urban battles in World War II, Groningen escaped with minimal casualties and damage.

The reaction of the Dutch citizens of Groningen to their liberation demonstrates the local perspective on the collateral damage caused during the battle. The people of Groningen danced in the streets following their liberation, at times even while the battle was still taking place. Following the battle, Le Regiment de Maisonneuve stated, "Most of the troops are billeted with civilians and the hospitality is remarkable."¹³² The 4th Brigade War Diary noted, "The people are very friendly and overjoyed at their liberation. The alacrity with which they scramble for chocolate and cigarettes or bread . . . shows what they have suffered in the past years of German tyranny."¹³³ This warm reception contrasts sharply with the reaction of the French citizens of Caen, who showed little joy following the British and Canadian liberation of their battered city.¹³⁴ To the Dutch, the

¹²⁹William Hitchcock, *The Bitter Road to Freedom: The Human Cost of Allied Victory in World War II Europe* (New York: Free Press, 2008), 38.

¹³⁰*Ibid.*, 44.

¹³¹Zuehlke, *Ortona*, 375.

¹³²Le Regiment de Maisonneuve, War Diary, 16 April 1945, Library and Archives, Ottawa, Canada.

¹³³4th Canadian Infantry Brigade, War Diary, 16 April 1945, Library and Archives, Ottawa, Canada.

destruction caused by the battle was a necessary evil to see their hated German captors driven away.

Dutch commemorations after the war also demonstrate their views of their Canadian liberators and their actions. Numerous Dutch civilians adopted graves of fallen Canadian soldiers following the war. Major General Matthews was given the keys to the city during a visit in 1951. A memorial park was built at Groningen with a maple leaf etched into the pavement, a Canadian flag, and a plaque engraved with the names of all of the regiments of the 2nd Canadian Infantry Division. In 1990, local citizens collected stories of the liberation and published a book entitled simply, *Thank You Canada*.¹³⁵ These demonstrations of gratitude contrast with the mixed post-liberation feelings of France, represented by the multiple public memorials in French cities that draw attention to the controversial deaths of French citizens from Allied bombings.¹³⁶ The conditions of German occupation, including the “Hunger Winter”, had been so harsh on the Dutch that they could not help but view the Canadians as heroic liberators, and forgive as necessary any damage done for the cause of their freedom. This positive view of the Canadians and their mission, caused by the deep-seated hatred of the Germans, allowed the Canadians to achieve their intent in minimizing collateral damage in the view of the Dutch people.

¹³⁴Hitchcock, 35-36.

¹³⁵Dykstra, 135-138.

¹³⁶Stephen Bourque, “Rouen: La Semaine Rouge,” *Journal of Military and Strategic Studies* 14, no. 3-4 (2012): 1-2.

CHAPTER 5

CONCLUSIONS

The Battle of Groningen stands as an outlier to the unconstrained and highly destructive battles that characterized urban warfare in Europe during World War II. The restrictions on firepower, based on external political factors, foreshadowed the limited wars and collateral damage concerns that would come to define urban warfare in the following decades. The dilemma faced by the Canadians in April of 1945, how to limit civilian casualties and collateral damage in a city while protecting their own soldiers and defeating the enemy, became one of the most significant issues facing the United States Army during the wars in Iraq and Afghanistan. Despite this seemingly unique place in history, the Battle of Groningen remained a largely forgotten battle outside of the Netherlands.

Military History

The Battle of Groningen has received significant coverage in Dutch history since the end of World War II. For the Dutch, their liberation from the Germans is an important national narrative, and the Battle of Groningen was a significant milestone in that liberation. In Canada however, the battle received very little coverage in the decades following World War II. The timing of the battle, less than a month from the end of the war, played a role in this. Many histories merely summarize the last month of the war and the ensuing German collapse and surrender. The battle's lack of military significance also played a role. While narratives of Canadian actions in Italy and Normandy emphasize the importance of the country's contribution to the winning of the war, the Netherlands

campaign, in retrospect, appears to be a mopping up action where the end of the war was already a foregone conclusion. The past decade has seen an increase in the publication of books and studies in Canada covering the Netherlands campaign, but Groningen remains overshadowed by more popular and significant battles. The battle has received almost no coverage in military histories in the United States.

Doctrine

Both the Canadian and United States military faced large-scale urban combat for the first time in World War II, and learned many tactical lessons from that experience. Following the war however, the experience of urban combat was overshadowed by the dawn of the nuclear age. The dropping of atomic bombs on Hiroshima and Nagasaki fundamentally changed how the world viewed warfare, launching a nuclear arms race and the Cold War. As strategists and policymakers considered the post-World War II world, many wondered whether large land armies or conventional battles had been overtaken by air power and nuclear weapons.

Despite their experiences fighting in cities during World War II, neither Canada nor the United States placed any emphasis on urban battle in post-war doctrine. The issue of restraint received almost no attention. Canadian doctrine following the Second World War focused on the threat presented by the Soviet Union, considering the possibilities of both nuclear war as well as arctic warfare in defense of northern Canada.¹³⁷ While

¹³⁷Andrew B. Godefroy, "Chasing the Silver Bullet: The Evolution of Capability Development in the Canadian Army," *Canadian Military Journal* (July 2008), <http://www.journal.forces.gc.ca/vo8/no1/godefroy-eng.asp#n20> (accessed 8 May 2013).

Canadian doctrine in the 1960s included specialized manuals on arctic and jungle warfare, it did not include any on urban warfare.¹³⁸

United States Army doctrine following World War II also largely ignored urban warfare, despite the experience gained during urban battles such as Aachen and Metz. It instead focused on the Soviet conventional threat, emphasizing maneuver warfare, mass firepower, and the likely employment of nuclear weapons on the battlefield.¹³⁹

The United States Army finally published an urban warfare manual in 1979, FM 90-10, *Military Operations in Urban Terrain*. This manual focused on high intensity urban conflict against Soviet forces in European cities. It emphasized overwhelming firepower, and gave no consideration to civilian casualties or collateral damage.¹⁴⁰ In the 1980s and 1990s, branch specific manuals in the Canadian Army, such as infantry and armor, began to include small sections on Fighting in Built Up Areas. These sections ranged in length from two paragraphs to 20 pages.¹⁴¹

The 1990s brought a renewed emphasis on urban warfare. The fall of the Soviet Union combined with United States' experiences in Somalia and Russian experiences in Chechnya caused many to question urban doctrine in both Canada and the United States.

¹³⁸Roch Legault, "The Urban Battlefield and the Army: Changes and Doctrine," *Canadian Military Journal* (Autumn 2000): 42.

¹³⁹Walter E. Kretchik, *U.S. Army Doctrine: From the American Revolution to the War on Terror* (Lawrence, KS: University Press of Kansas, 2011), 161-179.

¹⁴⁰Phillip Nethery, "Current MOUT Doctrine and its Adequacy for Today's Army" (Master's thesis, Command and General Staff College, Fort Leavenworth, KS, 1997), https://server16040.contentdm.oclc.org/cdm4/item_viewer.php?CISO_ROOT=/p4013coll3&CISOPTR=874 (accessed 3 May 2013), 14-16.

¹⁴¹Legault, 42.

In the United States Army, numerous papers written by Army officers in the Command and General Staff College and the School for Advanced Military Studies argued that current urban doctrine was inadequate and outdated.¹⁴² Many of these criticisms specifically noted the absence of collateral damage concerns or discussion of restraint. Canadian military journals reflected the same frustration. In a 2001 article, the Commander of the 1st Canadian Mechanized Brigade Group noted the “lack of definitive Canadian doctrine in urban warfare.”¹⁴³ In a 2000 article in the *Canadian Military Journal*, Dr. Roch Legault, a history professor at the Canadian Royal Military College, noted the extensive Canadian urban warfare experience in World War II, stating, “few traces of this Second World War experience seem to remain in present-day Canadian doctrine.”¹⁴⁴ He went on to state that current Canadian urban doctrine “lacks rigour, clarity, and depth.”¹⁴⁵ These criticisms, in both the United States and Canada, reflected

¹⁴²Among others, these include Nethery, cited above, Charles Preysler, “MOUT Art: Operational Planning Considerations for MOUT” (Monograph, School of Advanced Military Studies, Ft. Leavenworth, KS, 1995), https://server16040.contentdm.oclc.org/cdm4/item_viewer.php?CISOROOT=/p4013coll3&CISOPTR=1196 (accessed 30 April 2013); Richard Francey, “Urban Anatomy: The Fundamentals of a City” (Monograph, School of Advanced Military Studies, Ft. Leavenworth, KS, 1995), https://server16040.contentdm.oclc.org/cdm4/item_viewer.php?CISOROOT=/p4013coll3&CISOPTR=1151 (accessed 30 April 2013); Steven Gogligowski, “Future Combat in Urban Terrain: Is FM90-10 Still Relevant?” (Monograph, School of Advanced Military Studies, Ft. Leavenworth, KS, 1994), https://server16040.contentdm.oclc.org/cdm4/item_viewer.php?CISOROOT=/p4013coll3&CISOPTR=1180 (accessed 30 April 2013).

¹⁴³Glenn Nordick, “Fighting in Built-Up Areas: We Can Do This, So Let’s Get On With It,” *The Army Doctrine and Training Bulletin* 4, no 3 (Fall 2001): 28.

¹⁴⁴Legault, 43.

¹⁴⁵*Ibid.*, 42.

recognition of both the growing significance of urban warfare, as well as the need for doctrine to address the growing issue of collateral damage and restraint.

In October 2006 the United States Army published FM 3-06, *Urban Operations*. This manual drew extensively from modern operations such as the Israeli attack on Beirut in 1982 and the American experience in Mogadishu, Somalia. The manual repeatedly emphasized the need for restraint, the significance of collateral damage, and its impacts on world opinion, as well as the attitudes of the civilian population, concluding, “Destroying an urban area to save it is not a viable course of action for Army commanders.”¹⁴⁶

The Canadian Army still does not have a specific manual for urban operations. The Canadian doctrinal manual, *Land Operations*, dated 2008, includes a section on urban operations, stating that operations in urban areas follow the same principles as all other operations, but with certain specific characteristics and limitations. These limitations include, “The presence of a civilian population, which can very seriously limit military actions and whose support may be lost due to collateral damage.”¹⁴⁷ The manual directs that, “Measures must be taken to minimize collateral damage and avoid civilian casualties.”¹⁴⁸

¹⁴⁶Headquarters, Department of the Army, FM 3-06, *Urban Operations* (Washington, DC: Government Printing Office, October 2006), 5-4.

¹⁴⁷Director of Land Doctrine of the Canadian Army, B-GL-300-001/FP-001, *Land Operations*, Chief of Land Staff, Canada National Defence, <http://usacac.army.mil/cac2/coin/repository/Land%20Operations.pdf> (accessed 3 May 2013), 8-19.

¹⁴⁸*Ibid.*, 8-20.

Over 50 years after the Battle of Groningen, both Canadian and American military doctrines emphasize the critical importance of restraint in urban warfare. These changes came about due to experiences in modern urban combat, including Iraq and Afghanistan, where minimizing collateral damage and civilian casualties became an essential aspect of warfare. In retrospect, we can now see that the Battle of Groningen foreshadowed these issues. Following World War II however, neither country perceived urban warfare or restraints on collateral damage as a significant future trend. Groningen did not stand out in the aftermath of World War II. Major decisive battles such as Stalingrad received much greater focus in discussions of urban operations. In the post-war world, neither the United States nor Canada believed restrained urban combat represented the future of warfare. Groningen seemed an obscure anomaly unlikely to be repeated. Assumptions about unlimited conventional battles against the Soviet Union, as well as the prospect of nuclear war, buried urban warfare and the issue of restraint for decades. The urban warfare trends of the past 20 years have made the battle of Groningen seem prophetic in retrospect, despite its perceived lack of importance following World War II.

Relevance to Current Operations

The external political constraints that caused the Canadians to limit their firepower at Groningen are omnipresent in current military operations. Unlike in 1945 however, the media plays a dominant role in these restraints. The current media landscape dwarfs that of World War II in size, speed, reach, and influence. Unlike the 1940s, the media cannot be easily controlled or constrained today. Government politics played a much greater role in the Canadian decision to use restraint at Groningen than the

media. Today, the media is arguably the most important factor driving the necessity of restraint in urban warfare.

The nature of the enemy also provides a key difference between Groningen and urban combat today. While a handful of Dutch SS fighting in civilian clothes were reported at Groningen, the Germans established a conventional defense of the city. In contrast, unconventional and asymmetric warfare practiced by guerrillas, insurgents, and terrorists characterizes much of modern urban warfare.

Many of the urban tactics and weapons used by the Canadians at Groningen bear similarities to urban combat today. The infantry tactics of clearing cities street to street and house to house have not changed significantly since 1945. The tactic of ringing doorbells used by the Black Watch during the battle bears a striking similarity to the United States Army's tactic of "Cordon and Knock" used in more permissive environments in Iraq. The Canadian use of tanks in support of the infantry also mirrors the current tactics used for the employment of armor in urban areas.

In his book on urban warfare, *Mars Unmasked*, Sean Edwards argued that small arms still decide the course of urban warfare, and that the small arms weapons used in urban warfare today have not fundamentally changed since World War II.¹⁴⁹ It is true that the rifles, machine guns, and shoulder fired rockets used by the Canadians at Groningen are remarkably similar to modern infantry weapons. There is however, one significant exception. The Canadians used flamethrowers extensively at Groningen. Flamethrowers proved decisive throughout the battle, allowing the Canadians to destroy German positions in buildings without resorting to the use of artillery. Both the United States and

¹⁴⁹Edwards, 90.

Canada have discontinued the use of flamethrowers, and both countries ratified the international Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons, which bans the use of flamethrowers in warfare.¹⁵⁰

Flamethrowers allowed the Canadians to destroy specific buildings during the Battle of Groningen, avoiding the mass destruction of artillery or air strikes. One of the major reasons the Canadians restricted their use of artillery and air strikes at Groningen was the inaccurate nature of those weapons. Precision weapons today offer modern armies many more options to accomplish the same types of effects. Missiles, precision guided artillery munitions, and advanced targeting systems on fixed and rotary wing aircraft allow for a level of precision targeting unimaginable in World War II. Additionally, modern advances in non-lethal technology offer a much wider array of options to achieve military objectives while minimizing force than those available in 1945. These advances, however, still require precise intelligence on enemy locations to be effective.

The Canadians' reliance on information and assistance from local Dutch citizens echoes the modern emphasis on the importance of Human Intelligence in urban warfare. FM 3-06 emphasizes the importance of credible Human Intelligence from local sources in developing intelligence for urban warfare.¹⁵¹ The assistance provided to the Canadians from the friendly local population, fueled by their mistreatment by their German

¹⁵⁰International Committee of the Red Cross (ICRC), "Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III) Geneva, 10 October 1980," http://www.icrc.org/applic/ihl/ihl.nsf/States.xsp?xp_viewStates=XPages_NORMStatesParties&xp_treatySelected=1E37E38A51A1941DC12563CD002D6DEA (accessed 8 May 2013).

¹⁵¹Headquarters, Department of the Army, FM 3-06, 4-1 to 4-3.

occupiers, reflects many of the fundamental arguments in current counterinsurgency strategy, which emphasizes the importance of gaining the support of the local population and the dangers of alienating them. The specific civilian situation the Canadians encountered however, with the extreme hatred of the Germans and overwhelming gratitude for the Canadians displayed by the Dutch, has few modern parallels, and seems unlikely to occur in conflicts in the near future.

The decentralized manner in which the Canadians conducted operations at Groningen, including their decentralized implementation of the order to reduce collateral damage based on specific enemy conditions, also reflects modern principles of urban combat. FM 3-06 states that urban operations require mission orders and highly decentralized execution, referencing the United States Army concept of Mission Command, which emphasizes decentralized execution of well understood overarching intent.¹⁵²

The similarities between the Battle of Groningen and modern urban warfare doctrine support the idea that many aspects of urban warfare have remained unchanged since 1945. The modern rediscovery of many of the principles of constrained urban warfare employed at Groningen however, suggest that the battle was ahead of its time, providing a preview of modern restrained urban warfare near the end of the last unconstrained, total war in modern history.

¹⁵²Headquarters, Department of the Army, FM 3-06, 4-13.

BIBLIOGRAPHY

Books

- Ashworth, G. J. *War and the City*. London: Routledge, 1991.
- Beevor, Anthony. *D-Day: The Battle of Normandy*. New York: Penguin Books, 2010.
- Bercuson, David. *Battalion of Heroes: The Calgary Highlanders in World War II*. Toronto, Canada: Penguin Books, 1994.
- . *Maple Leaf Against the Axis: Canada's Second World War*. Toronto, Canada: Stoddart, 1995.
- Berton, Pierre. *Marching as to War: Canada's Turbulent Years 1899-1953*. Toronto, Canada: Doubleday Canada, 2001.
- Copp, Terry. *The Brigade: The 5th Canadian Infantry Brigade in World War II*. Stoney Creek, Ontario: Fortress Publications, 1992.
- . *Cinderella Army: The Canadians in Northwest Europe 1944-1945*. Toronto, Canada: University of Toronto Press, 2006.
- Copp, Terry, and Richard Nielsen. *No Price Too High: Canadians in the Second World War*. Toronto, Canada: McGraw Hill Ryerson, 1996.
- Dewar, Michael. *War in the Streets: The Story of Urban Combat from Calais to Khafji*. London UK: BCA, 1992.
- DiMarco, Louis A. *Concrete Hell: Urban Warfare from Stalingrad to Iraq*. Oxford: Osprey, 2012.
- Douglas, W. A. B., and Brereton Greenhous. *Out of the Shadows: Canada in the Second World War*. Toronto, Canada: Oxford University Press, 1977.
- Dykstra, Ralph. *The Occupation of Groningen, Netherlands, September 1944-April 1945 and the Liberation of the City of Groningen by the Second Canadian Infantry Division April 13th-16th, 1945*. Waterloo, Canada: Wilfrid Laurier University, 2001.
- Edwards, Sean J. A. *Mars Unmasked: The Changing Face of Urban Operations*. Santa Monica, CA: RAND, 2000.
- Farran, Roy. *The History of the Calgary Highlanders, 1921-54*. Calgary, Canada: Bryant Press, 1954.

- Goodspeed, D. J. *Battle Royal: A History of the Royal Regiment of Canada, 1862-1962*. Brampton, Ontario, Canada: Chapters Publishing, 1962.
- Granatstein, J. L. *Canada's Army: Waging War and Keeping the Peace*. Toronto, Canada: University of Toronto Press, 2002.
- Greenhaus, Brereton, Kingsley Brown Sr., and Kingsley Brown Jr. *Semper Paratus: The History of the Royal Hamilton Light Infantry (Wentworth Regiment), 1862-1977*. Hamilton, Ontario: RHLI Historical Association, 1977.
- Hills, Alice. *Future War in Cities: Rethinking a Liberal Dilemma*. London: Frank Cass, 2004.
- Hitchcock, William I. *The Bitter Road to Freedom: The Human Cost of Allied Victory in World War II Europe*. New York: Free Press, 2008.
- de Jong, Louis. *The Netherlands and Nazi Germany*. Cambridge, MA: Harvard University Press, 1990.
- Kloeke, W. K., and J. J. Van Ommen. *The Liberation of Groningen*. Translated by William Jeronimus. Assen. Kingdom of the Netherlands: Van Gorkum and Comp, 1945.
- Kretchik, Walter E. *U.S. Army Doctrine: From the American Revolution to the War on Terror*. Lawrence, KS: University Press of Kansas, 2011.
- Maass, Walter B. *The Netherlands at War: 1940-1945*. London: Abelard-Schuman, 1970.
- MacIsaac, David. *Strategic Bombing in World War Two: The Story of the United States Strategic Bombing Survey*. New York: Garland Publishing Inc., 1976.
- Manchester, William, and Paul Reid. *The Last Lion: Winston Spencer Churchill Defender of the Realm, 1940-1965*. New York: Little Brown and Company, 2012.
- McLaurin, R. D., Paul A. Jureidini, David S. McDonald, and Kurt J. Sellers. *Modern Experience in City Combat*. Aberdeen, MD: U.S. Army Human Engineering Laboratory, 1987.
- Morton, Desmond, and J. L. Granatstein. *Victory 1945: Canadians from War to Peace*. Toronto, Canada: Harper Collins, 1995.
- Nicholson, Colonel G. W. L. *The Gunners of Canada: The History of the Royal Regiment of the Canadian Artillery Volume II 1919-1967*. Toronto, Canada: McClelland and Stewart, 1972.
- Nord, Max, ed. *Thank You Canada*. Amsterdam, Kingdom of the Netherlands: De Arbeiderspers, 1967.

- Royal Canadian Dragoons 1939-1945*. Montreal, Canada: Southam Press, 1946.
- Simonds, Peter. *Maple Leaf Up, Maple Leaf Down: The Story of the Canadians in the Second World War*. New York: Island Press Cooperative Inc., 1946.
- Stacey, C. P. *Official History of the Canadian Army in the Second World War: Volume III, The Victory Campaign, The Operations in Northwest Europe, 1944-1945*. Ottawa, Canada: Department of National Defense, Directorate of History and Heritage, 2008.
- Stafford, David. *Britain and European Resistance, 1940-1945*. Toronto, Canada: University of Toronto Press, 1980.
- Whiting, Charles. *The Last Battle: Montgomery's Campaign April-May 1945*. Marlborough, UK: Crowood, 1989.
- Zuehlke, Mark. *On to Victory: The Canadian Liberation of the Netherlands, March 23-May 5, 1945*. Vancouver, Canada: Douglas and McIntyre, 2010.
- . *Ortona: Canada's Epic World War II Battle*. Toronto, Canada: Stoddart, 1999.

Internet Sources

- Director of Land Doctrine of the Canadian Army. B-GL-300-001/FP-001, *Land Operations*. Chief of Land Staff, Canada National Defence. <http://usacac.army.mil/cac2/coin/repository/Land%20Operations.pdf> (accessed 3 May 2013).
- Francey, Richard. "Urban Anatomy: The Fundamentals of a City." Monograph, School of Advanced Military Studies, Ft. Leavenworth, KS, 1995. https://server16040.contentdm.oclc.org/cdm4/item_viewer.php?CISOROOT=/p4013coll3&CISOPTR=1151 (accessed 30 April 2013).
- Godefroy, Andrew B. "Chasing the Silver Bullet: The Evolution of Capability Development in the Canadian Army." *Canadian Military Journal* (July 2008). <http://www.journal.forces.gc.ca/vo8/no1/godefroy-eng.asp#n20> (accessed 8 May 2013).
- Gogligowski, Steven. "Future Combat in Urban Terrain: Is FM90-10 Still Relevant?" Monograph, School of Advanced Military Studies, Ft. Leavenworth, KS, 1994. https://server16040.contentdm.oclc.org/cdm4/item_viewer.php?CISOROOT=/p4013coll3&CISOPTR=1180 (accessed 30 April 2013).
- International Committee of the Red Cross (ICRC). "Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III) Geneva, 10 October 1980." 2012. http://www.icrc.org/applic/ihl/ihl.nsf/States.xsp?xp_viewStates=XPages_NORMStatesParties&xp_treatySelected=1E37E38A51A1941DC12563CD002D6DEA (accessed 8 May 2012).

Nethery, Phillip. "Current MOUT Doctrine and its Adequacy for Today's Army." Master's thesis, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1997. https://server16040.contentdm.oclc.org/cdm4/item_viewer.php?CISOROOT=/p4013coll3&CISOPTR=874 (accessed 3 May 2013).

Preysler, Charles. "MOUT Art: Operational Planning Considerations for MOUT." Monograph, School of Advanced Military Studies, Ft. Leavenworth, KS, 1995. https://server16040.contentdm.oclc.org/cdm4/item_viewer.php?CISOROOT=/p4013coll3&CISOPTR=1196 (accessed 30 April 2013).

University of Groningen Library. "Plattegrond van Groningen." University of Groningen, 2007. <http://kaarten.abc.ub.rug.nl/root/grs/krt-1925-grs-pvg/?pLanguage=en> (accessed 12 April 2013).

Van Esch, Joris A. C. "Restrained Policy and Careless Execution: Allied Strategic Bombing on the Netherlands in the Second World War." Monograph, School of Advanced Military Studies, Fort Leavenworth, KS, 2011. https://server16040.contentdm.oclc.org/cdm4/item_viewer.php?CISOROOT=/p4013coll3&CISOPTR=2789 (accessed 8 March 2013).

Journals/Periodicals

Bourque, Stephen. "Rouen: La Semaine Rouge." *Journal of Military and Strategic Studies* 14, no. 3-4 (2012): 1-34.

Legault, Roch. "The Urban Battlefield and the Army: Changes and Doctrines." *Canadian Military Journal* (Autumn 2000): 39-44.

Nordick, Glenn. "Fighting in Built Up Areas: We Can Do This, So Let's Get On With It." *The Army Doctrine and Training Bulletin* 4, no. 3 (Fall 2001): 28-32.

Other Sources

21st Army Group. "21 A Gp/20748/7/8(Plans)." War Diary, 1st Canadian Army, March 1945, Library and Archives, Ottawa, Canada.

2nd Canadian Corps. "Appreciation: In Regard to Employment of 2nd Canadian Corps in the Immediate Future." War Diary, 2nd Canadian Corps, February 1945, Library and Archives, Ottawa, Canada.

2nd Canadian Infantry Division. War Diary, April 1945. Library and Archives, Ottawa, Canada.

4th Canadian Field Regiment, Royal Canadian Artillery. War Diary, April 1945. Library and Archives, Ottawa, Canada.

4th Canadian Infantry Brigade. War Diary, April 1945. Library and Archives, Ottawa, Canada.

5th Canadian Field Regiment, Royal Canadian Artillery. War Diary, April 1945. Library and Archives, Ottawa, Canada.

6th Canadian Field Regiment, Royal Canadian Artillery. War Diary, April 1945. Library and Archives, Ottawa, Canada.

6th Canadian Infantry Brigade. War Diary, April 1945. Library and Archives, Ottawa, Canada.

The Black Watch of Canada. War Diaries, 15 and 16 April 1945. Library and Archives, Ottawa, Canada.

The Calgary Highlanders. War Diary, April 1945. Library and Archives, Ottawa, Canada.

Dykstra, Ralph. "The Occupation of Groningen, Netherlands, September 1944-April 1945 and the Liberation of the City of Groningen by the Second Canadian Infantry Division April 13th-16th, 1945." Thesis, Wilfrid Laurier University, Waterloo, Canada, 2001.

Essex Scottish Regiment. War Diaries, 14 and 16 April 1945. Library and Archives, Ottawa, Canada.

Fort Garry Horse. War Diary, April 1945. Library and Archives, Ottawa, Canada.

Headquarters, Department of the Army. FM 3-06, *Urban Operations*. Washington, DC: Government Printing Office, October 2006.

Les Fusiliers Mont-Royal. War Diary, 16 April 1945. Library and Archives, Ottawa, Canada.

Le Regiment de Maisonneuve. War Diaries, 14, 15, and 16 April 1945. Library and Archives, Ottawa, Canada.

Royal Hamilton Light Infantry. War Diary, 14 April 1945. Library and Archives, Ottawa, Canada.

The South Saskatchewan Regiment. War Diary, April 1945. Library and Archives, Ottawa, Canada.

The Queen's Own Cameron Highlanders. War Diary, 16 April 1945. Library and Archives, Ottawa, Canada.