

**Generating and Sustaining Combat Effectiveness:
British 6th Airborne Division,
5th November 1942 – 27th August 1944**

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Abstract

Generating and Sustaining Combat Effectiveness: British 6th Airborne Division, 5th November 1942 – 27th August 1944.

The highly effective leadership of General Richard Nelson Gale overcame the haphazard nature of airborne operations 1939-1945, and enabled the unproven British 6th Airborne Division to achieve its objectives during the Normandy Campaign of June – August 1944. Despite its scattered parachute landings 6th Airborne achieved its D-Day goals and held the line for three months, a task for which it was not equipped. The historiography of the Normandy campaign and British Airborne Forces has recorded this achievement, but the reasons have not been explored. This thesis examines the factors that made this possible and analyses Gale's impact on the Division's organisational development, preparation and training which lay behind this success.

To establish the environment within which Gale had to operate, this thesis explores the shaping forces which influenced the creation of 6th Airborne Division: the constraint of inadequate resources and the absence of a clear applied airborne doctrine, inter-service politics and the influence of key war figures such as Field Marshal Sir Alan Brooke. The study pursues the links between war situation, the cost and capability of equipment and manpower, developing technology, and ongoing training through to distinguishable impact on the enemy. Two unique models form the heart of the study. The first shows the process of 1940-1945 airborne assault methods based on British cognisance of 1940-1943 operations. The second exposes the influences needed to create high value military formations based on 6th Airborne's experience – with Gale acting as a critical accelerant.

The leadership provided by Gale in the creation, development and Normandy operations of 6th Airborne Division was critical. The capability of the Division was developed through a tough regime of realistic and relevant training which also forged a robust identity. Aggressive and inventive leadership was selected and employed throughout the order of battle, while intelligent but simple operational planning was used as the base of briefing which was then cascaded throughout. The impact of surprise in the landing operation and a pragmatic approach toward co-opting the firepower of surrounding forces then maximised 6th Airborne's combat effectiveness. It was Gale and his leadership culture which underpinned the development of the capability of the airborne soldier and the cohesion of the fighting force as a whole. A theory of regarding Gale's leadership can therefore be established.

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The final acknowledgement goes to my wife Sarah, whose patience and support has allowed me to finish the project, and to whom this study is devoted.

Abbreviations and Glossary

- I. General abbreviations*
- II. British Unit title abbreviations*
- III. Glossary of codenames – exercises and operations*

I. General abbreviations

2ic - Second-in-command

AA – Air Assault Museum, Duxford

AA - Anti-aircraft

AAEF - Allied Air Expeditionary Force

ACI - Army Council Instructions

ADGB - Air Defence Great Britain

AFV - Armoured Fighting Vehicle

AGRA - Army Group Royal Artillery

AHB - The Royal Air Force Air Historical Branch

AL - Airlanding (glider)

AM - Air Ministry

AOC - Air Officer Commanding

AOER - Army Officers Emergency Reserve

APDS - armour piercing discarding sabot

A.Tk - Anti-tank

BAM – Freiberg (Militärarchiv)

Bde - Brigade

BEF - British Expeditionary Force

Bn – Battalion

Bty - Battery

CAS - Chief, Air Staff

CIGS - Chief, Imperial General Staff

C-in-C - Commander-in-Chief

Cdo – Commando

Cn - Canadian

CO - Commanding Officer

COC - Combined Operations Command

COS - Chiefs of Staff

COSSAC - Chief of Staff to the Allied Supreme Commander. A key D-Day planning post before the actual Supreme Commander was appointed

Coy - Company

CRA - Commander, Royal Artillery

CRS - Commander, Royal Signals

CSM - Company Sergeant Major

CT - Combat temperament

Div - Division

DSO - Distinguished Service Order

DZ - Drop zone (parachute)

Eureka/Rebecca – Two part system was made up of a ground-based transmitter beacon (Eureka) which emitted a radio signal detected by a receiver (Rebecca) mounted in either an aircraft or glider

F.J.R. - Fallschirmjäger Regiment

FOO - Forward Observing Officer

FOsB - Forward Observers Bombardment

Gee - Bomber Command navigational device invented in 1942

GHQ - General Headquarters

GOC - General Officer Commanding

Gp - Group

Gren - Grenadier

GSO - General Staff Officer

HQ - Headquarters

HMS - His Majesty's Ship (RN)

HMSO - Her Majesty's Stationary Office

I.D. – Infantry Division (German)

Ind - Independent

Inf - Infantry

ITC - Infantry Training Centre

IWM - Imperial War Museum

Ju - Junkers

Lt.Col - Lieutenant-Colonel

LZ - Landing zone (glider or parachute)

MC – Military Cross

MMG - Medium Machine Gun (Vickers in the case of 6 Airborne Div)

NCO - Non-commissioned officer

OKW - OberKommando der Wehrmacht, the German Armed Forces Supreme Command

OODA Loop - The phrase OODA loop refers to the decision cycle of observe, orient, decide, and act, developed by military strategist and USAF Colonel John Boyd

ORs - Other Ranks

Para – Parachute

Pdr – Pounder

PIAT - Projector infantry anti-tank

Pl - Platoon

Port. - Portal Papers, held at Christchurch College Oxford

PP - Parliamentary Papers

Pz. - Panzer

Pz. Gren – Panzer grenadier

SS-Pz.Kps - SS Panzer Corps

PTC - Primary Training Centre (GSC assessment centres)

RAF - Royal Air Force

RM - Royal Marine

RN - Royal Navy

RSM - Regimental Sergeant Major

RTU - Returned to Unit

RUSI - The Royal United services Institute

RV - Rendezvous

SHAEF - Supreme Headquarters Allied Expeditionary Force

SMG- Submachine gun

SOE - Special Operations Executive

SPG - Self-propelled gun

SPW - Schützenpanzerwagen (German AFV, usually a half track)

SS (British) - Special Service troops – commandos

SS (German) - Schütz Staffeln-Waffen SS troops

SWWEC - Second World War Experience Centre

TA - Territorial Army

Ultra – Allied signals intelligence gathered through Bletchley Park

VCAS - Vice Chief of Air Staff

VCIGS - Vice Chief, Imperial General Staff

VC – Victoria Cross

WE - War Establishment

WO - Warrant Officer

WO - War Office

II. British Unit title abbreviations

AAC - The Army Air Corps

6 AARR - 6 Airborne Armoured Reconnaissance Regiment

6 AL Bde - 6th Airlanding Brigade

Border - The Border Regiment

Cameron's - The Queen's Own Cameron Highlanders

Coldstream - Coldstream Guards

Devon - The Devonshire Regiment

DCLI - The Duke of Cornwall's Light Infantry

DLI - The Durham Light Infantry

Gren Gds - Grenadier Guards

Green Howards – Green Howards

Gds Armd Div - Guards Armoured Division

GSC - General Service Corps

Hamps - The Hampshire Regiment

HLI - The Highland Light Infantry

13/18 H - (13th/18th) Hussars

Indep Para Coy - Independent Parachute Company (pathfinders)

King's - The King's Regiment (Liverpool)

KOYLI - King's Own Yorkshire Light Infantry

KSLI - The King's Shropshire Light Infantry

KRRC - The King's Royal Rifle Corps

Leicesters - The Leicestershire Regiment

MGC - Machine Gun Corps

Mx -The Middlesex Regiment

Norfolk - The Royal Norfolk Regiment

Northamptons - The Northamptonshire Regiment

Oxf Bucks - The Oxford and Buckinghamshire Light infantry

PWV - The South Lancashire Regiment

RA - The Royal Regiment of Artillery

RAC - Royal Armoured Corps

RASC - Royal Army Service Corps

RE - Corps of Royal Engineers

REME - Royal Electrical and Mechanical Engineers

RM - Royal Marines

RUR - The Royal Ulster Rifles

RWF - The Royal Welch Fusiliers

RWK - The Queen's Own Royal West Kent Regiment

SAS - Special Air Service

SG - Scots Guards

Som LI - The Somerset Light Infantry

S Staffords - The South Staffordshire Regiment

Suffolk - The Suffolk Regiment

TA - The Territorial Army

Warwick - The Royal Warwickshire Regiment

W Yorks - The West Yorkshire Regiment

Worcs R - The Worcestershire Regiment

Worcs Yeo. - Worcestershire Yeomanry (53 Worcs Yeo. was 6 Airborne's organic field artillery regiment, also known as 53rd Regiment Royal Artillery, 53 RA)

III. Exercise and Operation Code Names

Ambassador - Commando raid, Channel Islands (July 1940)

Arena - Proposed operation to use ten airborne and air portable divisions to create an airborne bridgehead near Paderborn (March 1945)

Avalanche - US Fifth Army landings at Salerno, Italy (September 1943)

Band - Possible additional Neptune invasion beach in the Cabourg area

Barratt Two - As part of Eastern Command, 223 Bde acted as 'break-in' attack force (October 1942)

Baytown - British 13 Corps landings, Italy (September 1943)

Biting - C Coy 2 Para Bn captures Bruneval radar station secrets (February 1942)

Bizz II - Exercise in which 6 Airborne landed by either glider or parachute complete (March 1944)

Buster and Buster II - 6 Airborne Div anti-tank gun positioning exercises (August and September 1943)

Chariot - The commando raid on St. Nazaire (March 1942)

Charity - 7 Para Bn Exercise (May 1944)

Check - A coy 10 Som LI exercise practising a river assault with small boats (October 1942)

Cobra – US First Army's breakout operation (July 1944)

Colossus - Airborne raid to destroy the Tragino aqueduct, Italy (February 1941)

Clumsy - 6 Airborne Div staff exercise (November 1943)

Demon - Exercise by 13 Para Bn in Manchester, a propaganda visit to the North-West to boost civilian morale and give training to the Home Guard. (January 1944)

Deadstick - Reinforced D Coy 2 Oxf Bucks operation to capture the Caen Canal and Orne bridges, as part of Tonga (D-Day)

Eclipse - Proposed operation for a two corps airborne assault onto Berlin (March 1945)

Frigate - 6 Airborne Div exercise (July 1943)

Freshman - Glider transported commando raid on the Vemork chemical plant in Norway (November 1942)

Fustian - Airborne operation by 1 Para Bde in support of Husky (July 1943)

Gold - Neptune assault landing beach for 50 Div (D-Day)

Goodwood - Offensive mounted by Second Army involving three armoured divs - Gds, 7 and 11(July 1944)

Husky - The Allied invasion of Sicily (July 1943)

Jubilee - The large scale commando raid on Dieppe (August 1942)

Juno - Neptune assault landing beach for 3 Can Div (D-Day)

Ladbroke - Airborne operation by 1 AL Bde in support of Husky (July 1943)

Longcloth - The first Chindit operation (February 1943)

Lookout - Exercise for 6 Airborne Intelligence Section (May 1944)

Mallard - 6 AL Bde evening glider landings (D-Day)

Market Garden - British Second Army's drive to capture the bridges in Holland culminating in a Rhine bridgehead at Arnhem. Market being the airborne element (British 1, 82 US and 101 US Divs) and Garden being the ground forces with British 30 Corps (September 1944)

Merkur - The German airborne-led invasion of Crete (May 1941)

Mush - 6 Airborne's last exercise before D-Day, with 1 Airborne Div as the enemy (April 1944)

Neptune - The Allied codename for the Normandy landings

Omaha - Neptune assault landing beach for US 1 and 29 Divs (D-Day)

Overlord - The Allied codename for the Battle for Normandy

Paddle – First Canadian Army's pursuit of German forces as they fell back along the Channel coast. This army included British 1 Corps and therefore 6 Airborne Div (August 1944)

Pegasus - Gale's first exercise for his brigadiers to analyse the problems inherent with an airborne landing in support of an amphibious assault on the coast of NW France (June 1943)

Plunder (see Varsity below)

Rob Roy - RAF resupply operations to 6 Airborne post D-Day

Rufus - 6 Airborne Div exercise (October 1943)

Shingle - The Anzio landings operation (January 1944)

Roundup - Planned operation for a rapid Allied invasion of France in the event of either Germany or the USSR suddenly collapsing (1942/1943)

Rutter - The initial plan for the large-scale commando raid on Dieppe, later replaced by Jubilee

Skyscraper - The Allied plan to use large numbers of airborne troops to facilitate an invasion of France in 1943 when landing craft numbers were inadequate

Sledgehammer - Planning for a large scale Allied invasion of NW Europe (1942)

Spartan - A massive Home Forces exercise (March 1943)

Sword - Neptune assault landing beach for 3 Div (D-Day)

Thursday - The second Chindit operation into Burma (March 1944)

Tony - An exercise carried out by 1 Para Bn (April 1944)

Tonga - 6 Airborne Div's night landing (D-Day)

Utah - Neptune assault landing beach for US 4 Div (D-Day)

Varsity - The airborne element of 21 Army Group's Rhine crossing operation, Plunder (March 1945)

Victor - The large British Home Forces anti-invasion exercise (January 1941)

Weserübung - The German invasion of Denmark and Norway (April 1940)

Declaration of originality

I hereby declare that my thesis/dissertation entitled “Generating and Sustaining Combat Effectiveness: British 6th Airborne Division, 5th November 1942 – 27th August 1944” is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the Preface and specified in the text, and is not substantially the same as any that I have submitted, or, is the concurrently submitted for a degree or diploma or other qualification at the University of Buckingham or any other University or similar institution except as declared in the Preface and specified in the text. I further state that no substantial part of my thesis has already been submitted, or is concurrently submitted for any such degree, diploma, or other qualification at the University of Buckingham or any other University or similar institution except as declared in the Preface and specified in the text.

Signature:

Date:

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Chapter 1 - Introduction

The glider and parachute troops that descended on Normandy on 6 June 1944 represented the largest British airborne effort to date, and a considerable investment of role-specific air assets and manpower. The 6 Airborne Division (Div)'s¹ operations formed part of the most crucial offensive operation staged by the western Allies during the Second World War, a 'landmark in history',² and for these democracies the 'most complete manifestation of modern war.'³ This was the formation's first action; the Division had been in existence since 6 May 1943, though it had only achieved establishment strength at the beginning of 1944.

The Division suffered a disaster on the night of 5/6 June. Due to miss-drops its parachute brigades were badly scattered. These strewn landings not only meant a diminution of fighting power but also a reduction in command and control. When 3 Para Bde (3rd Parachute Brigade) and 5 Para Bde moved off to attempt to achieve their objectives, they were at thirty per cent and sixty per cent strength respectively.⁴ Yet the Division's D-Day performance revealed some 'outstanding qualities'⁵ as it strove to achieve all of its objectives. 6 Airborne then maintained a high combat reputation as it adapted to hold the line for nearly three months in 'a long attritional slog' – a task it was ill-equipped to perform.⁶ The Division was certainly well supported by 1 Corps' divisions and other assets, and also Royal Navy (RN) gunfire support and the Royal Air Force (RAF); but lacked the motorised transport and heavy weapons of a standard infantry division. However, as events

¹ British 6th Airborne Division will typically be referred to throughout the study using the 1943/44 nomenclature '6 Airborne Div', sometimes simply as 'the Division.'

² Richard Holmes, *D-Day: The Concise History* (London: Carlton, 2014), p. 7.

³ Hew Strachan's foreword. Paul Winter, *D-Day Documents* (London: Bloomsbury, 2014), p. xv.

⁴ TNA CAB 106/970 'Report on Operations of 6th Airborne Division in Normandy 1944 6 Jun – Aug 27', 1944, pp.6-7.

⁵ Max Hastings, *Overlord: D-Day and the Battle for Normandy* (London: Pan, 1985), p. 148.

⁶ Holmes, *D-Day: The Concise History*, p. 24.

unfolded the Division's lack of vehicles did not hamper the static role it played for the three months it held the front line. On 17 August, 6 Airborne took part in Paddle, the pursuit of German forces by First Canadian Army which included British 1 Corps.⁷ With limited mobility and taking the Belgian Infantry Bde, the Princess Irene Dutch Bde Group and two Special Service Commando Bdes under command, the division advanced.⁸ After fighting difficult river crossing battles at Putot-en-Auge and Pont l'Évêque 6 Airborne concentrated around Honfleur/Pont Audemer on 27 August to be withdrawn to the UK. How did 6 Airborne Div achieve this notable operational performance? This is the thesis question. The elements that acted together to make possible Gale's 6 Airborne Div in generating and sustaining its high combat effectiveness will be shown in this study.

This introductory chapter will now show the organisation of the thesis beginning with the historiographical and primary source survey. Second, the study's phraseology and definitions will be explained. Third the thesis and research questions and themes will be outlined. Finally, the research methodology will be described and chapter sequence explained.

I. Historiographical Survey and Primary Sources

What more is there left to say about 6 Airborne (Div) Division in Normandy?⁹ Much has been written about the story of British airborne forces during the Second World War and of their role in the D-Day operations in particular.¹⁰ This thesis first requires an overview analysis of

⁷ Richard Nelson Gale, *With the 6th Airborne Division in Normandy*. (London: Sampson Low, Marston & Co., 1948), p. 129.

⁸ Gale, pp. 127–29.

⁹ 'Div', the common abbreviations of the British Army will be used throughout this thesis, as will be explained later.

¹⁰ John Buckley's first chapter has reviewed the D-Day/Normandy popular bibliography closely. John Buckley, *Monty's Men: The British Army and the Liberation of Europe, 1944-5* (London: Yale University Press, 2013). For

what has already been written directly about the division regarding its creation and June-August 1944 operations, and where it is referenced in more general works concerning the campaign. 6 Airborne Div's historiography has moved alongside that of the Normandy campaign with three phases of writing focussed on D-Day and the Normandy campaign – an initial populist phase (beginning with Eisenhower and ending with Cornelius Ryan); a critical phase (D'Este and Hastings) and a final revisionist phase (finishing with Buckley). Various monographs that have highlighted the impact of airborne forces are woven into the three stages of study, the revisionist section of this survey ending with an overview of those writers with close ties to British airborne forces who have proven to be strong advocates of their contribution to the Allied victory in the Second World War. In the final group the methodology of three recent theses which addressed British airborne forces will be discussed.¹¹

Eisenhower's report for the Combined Chiefs' of Staff was published in 1946 and represented an early published account of 6 Airborne's actions on 6 June and beyond. Its content and style formed a basis for many following accounts, and therefore it is worth presenting it here:

In the British sector, the very accurate work of the Pathfinder force enabled the RAF groups to overcome the difficulties arising from the use of different types of aircraft, carrying various loads at various speeds, and the 6 Airborne Division troops were dropped precisely in the appointed areas east of the Orne River. Thanks to this good start, all the main military tasks were carried out, and at a lower cost than would have been paid in using any other arm of the service. The party charged with the

a detailed view of the first forty years of the subject's historiography see Christopher R. Gabel, 'Books on OVERLORD: A Select Bibliography and Research Agenda on the Normandy Campaign, 1944', *Military Affairs*, 48.3 (1984), p. 144–48.

¹¹ W.F. Buckingham, 'The Establishment and Initial Development of British Airborne Forces June 1940 - January 1942' (unpublished Ph.D., Glasgow, 2001); John William Greenacre, 'The Development of Britain's Airborne Forces during the Second World War' (Leeds, 2008); Timothy Jenkins, 'The Evolution of British Airborne Warfare: A Technological Perspective' (University of Birmingham, 2013).

mission of securing the Bénouville bridges over the Orne and Caen canal was particularly successful.

Landing exactly as planned, in a compact area of just one square kilometre, the troops went into action immediately and secured the bridges intact, as required, by 0850 hrs. The tactical surprise achieved, coupled with the confusion created by the dropping of explosive dummy parachutists elsewhere, caused the enemy to be slow to react, and it was not until midday that elements of 21st Panzer Division counterattacked. By that time our men had consolidated their positions and the enemy's efforts to dislodge them were in vain. During the day reinforcements safely landed in gliders, against which the German pole obstructions proved ineffective; the operation went off like an exercise, no opposition was encountered, and by nightfall the division had been fully resupplied and was in possession of all its heavy equipment. This formation continued to hold the flank firmly until our lodgement area had been consolidated and the break-out eastward across France relieved it of its responsibility.¹²

Eisenhower chiefly focuses on the action of Major John Howard's reinforced 2 Oxf Bucks company carrying out Operation Deadstick (the capture of the Orne river and Caen canal bridges), and its positive tone perhaps reflects a political attitude by the author to laud the actions of Allied forces. This brief account is also extraordinary, in its statement that the troops were 'dropped precisely in the appointed areas,' is untrue. Similarly, the statement that during the day 'no opposition was encountered' is quite startling considering the heavy combat 7 Para Bn was engaged in with elements of 716 Gren. and 21.Pz. Divs for example. The account then turns to the action of US airborne forces, before examining the near disastrous landing at Omaha, which Omar Bradley later referred to as a 'nightmare.'¹³ Eisenhower's incorrect account of 6 Airborne's initial landings and general success appears to be based on second-hand knowledge and captures a sense of relief that one component of Operations Overlord/Neptune plans has been executed relatively smoothly. Further on in the report, Eisenhower's account applauds 6 Airborne for their successful landings on 6 June 1944 and consequent reliable defence of the Orne bridgehead, and then eliminates them

¹² LHCMA, Alanbrooke: 6/1/8 [1946], 'Report by THE SUPREME COMMANDER TO THE COMBINED CHIEFS OF STAFF ON THE OPERATIONS IN EUROPE of the ALLIED EXPEDITIONARY FORCE, 6 June 1944 to 8 May 1945', pp. 22-23. 'Signed' by Eisenhower and dated 13 July 1945.

¹³ Carlo D'Este, *Eisenhower: A Soldier's Life* (London: Weidenfeld and Nicholson, 2002), p. 534.

from further comment.

The spirit of Eisenhower's 1945/46 account regarding the success of 6 Airborne Division formed an important starting point in many popular narratives devoted to the D-Day landings and/or Normandy campaign. Howard's *coup de main* is highlighted, then Lt.Col T.B. Otway's bloody 9 Para Bn (9th Battalion, Parachute Regiment) assault on the Merville battery, the chaos caused by the night-time scattering on the night of 5/6 June; before the authors focus on the broad sweep of the seaborne landings and the grim bocage fighting. This typically begins with close attention paid to the losses on Omaha, the controversy surrounding the failure to capture Caen, before Operation Cobra breakout and the carnage in the Falaise pocket.¹⁴ An important representation of the action of British airborne forces on D-Day is offered by Daryl L. Zanuck's 1962 Hollywood epic *The Longest Day*, the film adaptation of Cornelius Ryan's 1959 narrative.¹⁵ The execution of Operation Deadstick assault is presented as a dramatic sub-plot unfolding alongside the main seaborne landings of the D-Day narrative. With this cinematic drama the common and accepted 'simplistic' narrative of 6 Airborne appears to have become firmly set.¹⁶

The official histories of the Normandy campaign and of British airborne forces during the Second World War were published in parallel to the early populist monographs that culminated with Ryan's 1959 book. *By Air to Battle* was written by Air Marshal Trafford Leigh Mallory's AAEF (Allied Air Expeditionary Force) Historical Officer, Hilary Saunders in 1945.¹⁷ This volume gives a brief but straightforward summary of the genesis and

¹⁴ Stephen E. Ambrose, *D-Day: June 6, 1944* (London: Pockett Books, 2002). Stephen Badsey, *D-Day: From the Normandy Beaches to the Liberation of France* (Godalming: Colour Library Books Ltd, 1994); Robin Neillands and Roderick De Normann, *D-Day, 1944: Voices from Normandy* (London: Orion, 1994).

¹⁵ Cornelius Ryan, *The Longest Day* (London: Hodder & Stoughton, 1993).

¹⁶ Sebastian Ritchie, *Arnhem: Myth and Reality* (London: Robert Hale, 2011), p. 23.

¹⁷ *By Air to Battle* (London: HMSO, 1945). TNA AIR 37/1057 AAEF Conferences Minutes, 1944.

subsequent actions of airborne forces, its opening passage detailing the encounter between Georges Gondrée and the men of 6 Airborne in the early hours of D-Day. The closing line of chapter one sets the tone for the rest of the book, '... British airborne troops, harbingers of freedom and victory, when they landed by parachute and from gliders on the morning of the Allied invasion of Europe.'¹⁸ Saunders' work outlines the selection and training of airborne troops, but does not explore the conceptual basis of Britain's airborne forces in any way, or contextualise their development within that of the wider army. A more complete study published in 1951, was carried out by Lieutenant-Colonel Terrence Otway (as mentioned above) 'having been given access to official sources of information, and every endeavour has been made to ensure the accuracy of the work as an historical record.'¹⁹ As originally part of a War Office confidential series, 'the object of which is to preserve the experience gained during the Second World War 1939-1945, in selected fields of military staff work and administration.'²⁰ Otway wrote the history between 1946 and 1948, when he resigned his commission 'disillusioned with the post-war Army.'²¹ He delivered a comprehensive survey of the expansion of formations and operations, including the creation of airborne forces in other theatres and administrative and technological developments. Otway's work holds a tight focus on the development and expansion of airborne forces, but does not place their expansion into any kind of wartime context which would give some perspective on the decisions made which affected resource allocation. Otway has also been admonished by a more recent writer for ignoring the contribution made by Polish airborne forces to the early direction of British airborne development, but his book does offer a

¹⁸ *By Air to Battle*, p. 7.

¹⁹ T. B. H. Otway, *Airborne Forces* (London: Imperial War Museum Department of Printed Books, 1990), p. War Office Forward.

²⁰ TNA WO 277/2, *Airborne Forces*, 1951, p. iii.

²¹ www.telegraph.co.uk/news/obituaries/1524734/Lieutenant-Colonel-Terence-Otway.html. Accessed 19 July 2016.

wealth of detail clearly set out.²² Otway's monograph therefore presents the progress of British airborne forces 1940-1945 as a linear development, a common feature of narrative histories of British airborne forces which present their expansion as a measured progression. The paucity of aircraft resources is acknowledged, but in reality their development was more haphazard, swayed by the current demands of the war situation at each stage of its evolution. Otway thoroughly succeeds in capturing the timeline of the creation of airborne forces, but like Saunders has omitted a wider perspective.

The official HMSO history of the D-Day landings and Normandy campaign, written by Major L.F. Ellis was published in 1962. While Ellis considers the build-up and preparation for the amphibious landings, he makes no reference to the creation of airborne forces and their preparations for NEPTUNE; first referring to them in terms of the numbers available.²³ In recording the action undertaken by the Division Ellis held to a similar narrative line to Eisenhower. Ellis ended his detailed summary of 6 Airborne's actions with a review of the situation as the dawn of D-Day approached, 'All their primary tasks had been accomplished. The bridges over the Orne had been captured and bridgeheads on both sides were being held and strengthened.'²⁴ Further mention is made of the division in the link-up battles with 3 Division later on 6 June, and then the breakout battles along the coast on the second half of August, but little analysis is undertaken regarding the nature of the 6 Airborne's Normandy operations.²⁵

The architect of the Allies' final plan stimulated a second school of Normandy campaign

²² *By Air to Battle* similarly omitted the Polish contribution. William F. Buckingham, *Paras: The Birth of British Airborne Forces from Churchill's Raiders to 1st Parachute Brigade* (Stroud: Tempus, 2005), pp. 192–193.

²³ L. F. Ellis, *Victory in the West*. (London: H.M.S.O., 1962), pp. 137–40.

²⁴ L. F. Ellis, p. 155.

²⁵ L. F. Ellis, pp. 200–216 & 448–53.

writing, which has also referred to the airborne effort. Montgomery's²⁶ stand that he had managed the campaign perfectly provoked a succession of attacks on his performance in various memoirs, while he was defended by his old cohorts in other texts.²⁷ This exchange in turn prompted other writers to question the combat effectiveness of British armour and infantry in NW Europe 1944-45, indeed all allied forces, a school of thought which elevated the combat performance of the Wehrmacht and Waffen SS. Chester Wilmot had seemingly begun the process of scrutiny in 1952, highlighting the disappointment with 21 Army Gp (Group) efforts to take Caen and break out in the east:

Was it ever intended, as Eisenhower states in his Report, that the British "should break out towards the Seine"? Did Dempsey fail at Caen? Was Montgomery forced to change his plan?²⁸

Carlo D'Este's magisterial *Decision in Normandy* analysed Montgomery's failure to meet the phase lines, which he maintained Montgomery had agreed with Eisenhower, D'Este moving his argument forward to generally criticise Allied combat performance.²⁹ In these books the effort of Gale's formations has been viewed as daring in attack and stoic in defence. Max Hastings lionised the Wehrmacht in his 1984 book, and used 6 Airborne with its 'outstanding qualities,' to further castigate some British infantry divisions who 'were considered too

²⁶ B.L. Montgomery, the General-Officer-Commanding (GOC) 21 Army Group and Allied ground forces commander during the Normandy campaign.

²⁷ Montgomery's claims were fought over for the next twenty-five years as both British and US generals wrote their memoirs adding further contentious elements to the squabble. Bernard Law Montgomery of Alamein, *The Memoirs of Field-Marshal the Viscount Montgomery of Alamein*, 1st ed. (London: Collins, 1958); Sir Frederick Morgan, *Overture to Overlord* (London: Hodder and Stoughton, 1950); Omar Bradley, *A Soldier's Story* (New York: Holt, 1951); George S. Patton, *War as I knew it* (London: Allen, 1947); D.D. Eisenhower, *Crusade in Europe* (London: Heinemann, 1948); David Belchem, *Victory in Normandy* (London: Chatto and Windus, 1981); David Belchem, *All in a Day's March* (London: Collins, 1978); Omar Bradley and Clay Blair, *A general's life: an autobiography* (London: Sidgwick & Jackson, 1983); P.J. Grigg, *Prejudice and Judgment* (London: Jonathan Cape, 1948); J. Lawton. Collins, *Lightening Joe: An Autobiography* (Baton Rouge: Louisiana State University Press, 1979); Kenneth Strong, *Intelligence at the Top* (London: Cassell, 1968).

²⁸ Chester Wilmot, *The Struggle for Europe* (London: Reprint Society, 1954), p. 369.

²⁹ See forecast of operations maps diagram. Carlo D'Este, *Decision in Normandy* (London: Penguin, 2004), p. 91.

unreliable to be entrusted with a vital role in operations.’³⁰ John Ellis also attacked the fighting qualities of Allied forces in 1990, as he explored the disparity in resources between the Allies and Wehrmacht forces. He stated that this very wealth of materiel had ‘robbed the troops themselves of any sense that they too must make a contribution’ to victory in Normandy.³¹ This phase of writing should be put into its context. It took place at a time when NATO faced an overwhelming Warsaw Pact conventional threat in Western Europe and military thinkers had turned to contemplate the determined defence offered by the Wehrmacht in the west 1944-45 as a possible model to emulate in the event of hostilities.³² Indeed, Hans von Luck, the CO of 125 Pz.Gren.Regt, was invited on ‘staff rides’ to explain to British officers his successful anti-tank defence in the face of the British Operation Goodwood offensive.³³

The British Army’s performance has been re-examined. In the last twenty years several academic authors have reviewed the effectiveness of 21 Army Group, and have used archival sources to shape a new view of the British Army’s performance in Normandy. In part, this has developed from the revisionism that applied to reassessing the army’s capability and leadership during the Great War.³⁴ The link between the Western Front of 1914-1918 is important to the study of the Normandy campaign. This is because so many of the command personalities had fought in the Great War and the high intensity of battle there was reminiscent of the earlier conflict. The first publication of Shelford Bidwell and

³⁰ Hastings, pp. 123–51.

³¹ John Ellis, *Brute Force: Allied Strategy and Tactics in the Second World War* (London: Andre Deutsch, 1990), p. 382.

³² Buckley, *Monty’s Men: The British Army and the Liberation of Europe, 1944-5*, pp. 10–11.

³³ Hans von Luck, *Panzer Commander: The Memoirs of Colonel Hans von Luck* (London: Cassell, 2002), pp. 330–32.

³⁴ Paddy Griffith, *Battle Tactics of the Western Front : The British Army’s Art of Attack, 1916-18* (New Haven: Yale University Press, 1994); Robin Prior and Trevor Wilson, *Command on the Western Front: The Military Career of Sir Henry Rawlinson, 1914-18* (Barnsley: Pen & Sword Books, 2004); Gary Sheffield, *Forgotten Victory: The First World War, Myths and Realities* (London: Headline, 2002).

Dominick Graham's 1982 book *Firepower* began this process,³⁵ as it 'inaugurated a new era of scholarship.'³⁶

A general doctrinal weakness which inhibited the army's effectiveness has been widely discussed by revisionist commentators. Timothy Harrison Place has stated that 21 Army Gp was confronted with 'not merely a matter of bad doctrine; it was also a matter of doctrinal indiscipline.'³⁷, while John Buckley has referred to the 'spotty approach to inculcating doctrine through teaching.'³⁸ At the same time a strong case has been presented that due to Montgomery's 'amalgam of inter-war doctrine, the lessons that the high command drew from operations in the field and in exercises at home since 1939, and his own ruthless personality' a firepower heavy doctrine had been created.³⁹ This was the way conventional forces of 21 Army Group (Gp) were to fight in Normandy, upholding morale and compensating for a manpower crisis with weight of firepower.⁴⁰ This shortage of infantry by 1944 meant that OVERLORD had to be done 'cheaply' in terms of infantry losses.⁴¹ These writers all observed that the British army learned on the job, did well for an essentially citizen war-service army and was capable of great tactical skill later in the North-West Europe campaign.⁴² However all the armies of the Second World War were essentially

³⁵ Shelford Bidwell and Dominick Graham, *Fire-Power: The British Army, Weapons and Theories of War, 1904-1945* (Barnsley: Pen & Sword Military Classics, 2004).

³⁶ Douglas Haig: *War Diaries and Letters 1914-1918*, ed. by Gary Sheffield and John Bourne (London: Phoenix, 2006), p. 1.

³⁷ Timothy Harrison Place, *Military Training in The British Army 1940-1944: From Dunkirk to D-Day* (London, Frank Cass, 2000), p. 164.

³⁸ John Buckley, 'Tackling the Tiger: The Development of British Armoured Doctrine for Normandy 1944', *The Journal of Military History* Vol. 74. No. 4 (Lexington, VA: 2010), p. 1183.

³⁹ David French, *Raising Churchill's Army*. (Oxford: Oxford University Press, 2000), p. 246.

⁴⁰ S.A. Hart, *Colossal Cracks: Montgomery's 21st Army Group in North West Europe 1944-45* (Mechanicsburg PA: Stackpole, 2007).

⁴¹ TNA WO 285/2, correspondence between Dempsey and Montgomery. General Operational Situation and Directive, 11 August 1944.

⁴² John Buckley, *Monty's Men: The British Army and the Liberation of Europe, 1944-5*; Terry Copp, *Fields of Fire: The Canadians in Normandy* (London: University of Toronto Press, 2003); David French, *Raising Churchill's Army: The British Army and the War against Germany, 1919-1945* (Oxford: Oxford University Press, 2001); S. Hart, *Colossal Cracks: Montgomery's 21st Army Group in Northwest Europe, 1944-45* (Mechanicsburg, Pa.:

conscript in nature, and this view does not account for all the organisational challenges the British Army had to deal with during 1944-45. In 2014, this revisionist examination of British fighting power extended to the North African and Italian theatres, with the publication of a collection of chapters by different authors dealing with different aspects of Allied operational ability. A number of new perspectives were created for future debate, including such topics as air power and radio communications.⁴³

The research carried out by Timothy Harrison-Place is important for the purposes of comparison for this thesis. Harrison-Place picked up on Williamson Murray's hypothesis regarding the British Army's problematic 1939-45 operational and tactical doctrine:

The real cause of such a state of affairs lay in the failure of the army leadership to enunciate a clearly thought out doctrine and then to institute a thorough training program to insure its acceptance throughout the army.⁴⁴

Harrison-Place's study pursued this statement by investigating just 'what the British Army at home actually did during the four years between Dunkirk and D-Day.'⁴⁵ Indeed, Harrison-Place states he has focussed on armour and infantry, the artillery having been dealt with capably by Bidwell and Graham. Harrison-Place closely reviews the doctrine and training of infantry and armoured formations. He analysed the War Diaries of 43rd Infantry Division (43 Inf Div), 11th Armoured Division (11 Armoured Div) and the independent 34th Tank Brigade (34 Tank Bde), together with the doctrinal policy documents that were circulated in Home Forces command. He concluded that the army 'failed to establish and enforce a

Stackpole Books, 2007); Russell A. Hart, *Clash of Arms: How the Allies Won in Normandy* (London: Lynne Rienner, 2001).

⁴³ *Allied Fighting Effectiveness in North Africa and Italy, 1942-1945*, ed. by Andrew L. Hargreaves, Patrick J. Rose, and Ford (Leiden: Brill, 2014).

⁴⁴ *Military Effectiveness: Volume III. The Second World War*, ed. by Alan R. Millett and Williamson Murray (London: Allen and Unwin, 1988), p. 125.

⁴⁵ Timothy Harrison-Place, *Military Training in the British Army, 1940-1944: From Dunkirk to D-Day* (London: Frank Cass, 2000), p. 3.

coherent and effective tactical doctrine' bearing out Murray's statement.⁴⁶ Airborne forces however receive only one passing reference, when he uses the example of 12 Devon (12th Bn the Devonshire Regiment) to illustrate the dangers of elite formations' combat training.⁴⁷ Harrison-Place's work will be referred to when the pre-operational effectiveness of 6 Airborne Div's training is assessed. While he has made little use of the airborne forces' experience, his research into the training of conventional role forces is valuable when used as a comparison to that received by glider and parachute troops. These officers and men were recruited from the conventional role infantry, or General Service Corps (GSC) men who had received basic infantry training, so this evaluation is very useful.

Yet some revisionist historians, such as John Peaty, have viewed airborne and commando forces contribution to eventual victory with some reservation, focussing on the cost-effective balance.⁴⁸ These views have been based essentially on the supposition that large numbers of the best soldiers were monopolised by these formations, and/or that the entire airborne concept during the Second World War flawed and an unnecessary distraction.

The allocation of high quality infantry manpower invested in the creation of airborne forces, and consequently their need for considerable replacements following heavy casualties, has been attacked by several authors. Britain's Second World War airborne and commando forces could be seen as 'private armies,'⁴⁹ which diverted the best men into units where they could not benefit from Britain's increasing materiel advantage, or simply

⁴⁶ Harrison-Place, p. 168.

⁴⁷ Harrison-Place, p. 34.

⁴⁸ John R. Peaty, 'British Army Manpower Crisis 1944' (KCL, 2000).

⁴⁹ Peaty, chapter three; John Terraine, *The Right of the Line: The Royal Air Force in the European War, 1939-1945* (Sevenoaks: Sceptre, 1988), pp. 641-43.

performed tasks that any competent infantry battalion could have been trained to do.⁵⁰

John Terraine's comments also diminished the performance of the conventional role infantry divisions, along similar lines as Hastings' views:

Worst of all the "offenders", it must be said, were the Airborne Forces, with their exacting physical and psychological requirements. There is an awful irony in the spectacle of the line infantry divisions in Normandy struggling to perform their ordinary duties, while beside them the 6th Airborne, first into battle when June 6 was only twenty minutes old, and consisting entirely of the type of men that the line infantry so palpably lacked, fought on as *line infantry* [author's own emphasis] for 82 days.⁵¹

However, Terraine downplayed the specialised role that 6 Airborne performed, while dismissing the very fact that the division *did* remain on the line for 82 days, thereby releasing more heavily-armed conventional role infantry for offensive operations.

John Buckley's *Monty's Men* was awarded the Templar Medal for military writing in 2014 and is rightly recognised as a milestone in this revisionist movement. Buckley's book provided a positive analysis of the performance of the British Army in Normandy and beyond, showing that as an organisation it learned tactical craft whilst in the field. Yet his view of airborne operations is negative. He reviewed the weaknesses of Operation Market Garden⁵² plan before declaiming all airborne operations carried out during the war:

⁵⁰ Field-Marshal Sir William Slim, *Defeat into Victory*. (London: Landsborough Publications, 1958), 444–446. See also John R. Peaty, 'British Army Manpower Crisis 1944' (London: KCL, 2000), chapter three. The author was present when this subject was eloquently discussed by Daniel Todman - 'Men, Machines and Memory: The British Army in the Second World War' (presented at the conference 'Revisiting Churchill's Army: New Directions in the Study of the British Army in the Second World War, University of Birmingham, 2012).

⁵¹ Terraine, p. 642.

⁵² Operation Market Garden began on 17 September 1944. 'Market' being the dropping of two US airborne divisions, 82 and 101 onto the Eindhoven and Nijmegen areas to seize bridges of the Maas River and other barriers, while 1 Airborne landed north of the Rhine to capture the two bridges that spanned it. The 'Garden' ground element was formed from British 30 Corps, spearheaded by Gds Armd Div, driving up from the Escaut Canal. The tanks were delayed by a tenacious German defence and the airborne troops attacked from all sides. Nijmegen Bridge was captured, however due to the ferocious attacks of II.SS-Pz.Kps at Arnhem, 1 Airborne had to be withdrawn on 25 September. Only 3,910 men out of 11,920 committed by 1 Airborne Div were evacuated safely. Martin Middlebrook, *Arnhem 1944: The Airborne Battle, 17-26 September* (London: Penguin, 1995), pp. 423 & 439.

The third fundamental conceptual weakness was the estimation of the efficacy of airborne operations. All large-scale airborne operations in the Second World War ended in brawls, though at times the confusion generated proved to be a strategically beneficial by-product, as had been seen with the American drops on D-Day. Crucially, these airborne never came close to achieving all their specified operational objectives. Though much attention has been placed on the bold seizure of Pegasus Bridge on 6 June, most of the other airborne operations in support of D-Day were chaotic, just as most other previous airborne actions had been.⁵³

This summarising quote points to a key area of criticism regarding airborne operations during the Second World War that of a failure to attain 'specified operational objectives.'

This makes no allowance for the experimental nature of air assault warfare during the 1940s. It also gives airborne forces no credit for being part of a successful combined operational approach required to make large-scale amphibious landings possible in the face of entrenched opposition.

The AHB (Royal Air Force Air Historical Branch) historian Sebastian Ritchie carried a close analysis of the failings surrounding Market Garden which extended back to show similar problems paralysing the success of all Second World War airborne operations. Before assessing Market, Ritchie put forward three key weaknesses for all 1940-44 airborne operations: the expense of creating airborne forces, operations characterised by high casualties with only partial success and damaging dispersed landings.⁵⁴ The limited ability of airborne forces to achieve results without the relief or support of conventional ground forces has been cited by John Buckley in his study of the impact of airpower.⁵⁵ He does however note that the confusion caused by airborne landings, however confused, was a 'strategically beneficial by-product'.⁵⁶ Behind these authors' comments regarding airborne

⁵³ Buckley, *Monty's Men: The British Army and the Liberation of Europe, 1944-5*, p. 210.

⁵⁴ Ritchie, pp. 83-84.

⁵⁵ John Buckley, *Air Power in the Age of Total War* (London: UCL Press, 1999), p. 7; Michael Carver, *Britain's Army in the 20th Century* (London: Pan, 1998), p. 298.

⁵⁶ Buckley, *Air Power in the Age of Total War*, p. 298.

forces is a suggestion that the resources could have been better deployed elsewhere.

However the creation of airborne forces was a clear choice taken by the Prime Minister, War Office and Chiefs of Staff during the Second World War.

Within this revisionist school, some British army historians have provided a more anthropological approach to give a different perspective on the army's construction during the war and its organisational characteristics. Reference to these studies has been made in this thesis as and when the organisational behaviour and structures have been explored. Charles Kirke's excellent *Red Coat, Green Machine* is particularly useful for the study of the creation of Special Forces as it shows the personnel building bricks of British army – officers, senior non-commissioned officers (NCOs), junior NCOs and private soldiers.⁵⁷ The social fabric of the army, in terms of the regimental system, officer/other ranks (OR) relations and recruitment has been addressed by both French and Crang in a series of comprehensive volumes that have created a superb base for the study of the British army in the Second World War.⁵⁸ These volumes are all important to this study as they show the army's resource and social framework against which airborne forces were created.

Two other schools of writing must also be acknowledged. Various battlefield guide books have provided detailed and engaging accounts of 6 Airborne, and increasingly have used

⁵⁷ Charles Kirke, *Redcoat, Green Machine* (London: Continuum UK, 2009). See also Dennis Barker, *Soldiering On: An Unofficial Portrait of the British Army* (London: Sphere Books, 1983).

⁵⁸ J.A. Crang, 'The British Soldier on the Home Front: Army Morale Reports, 1940-45', in *Time to Kill: The Soldier's Experience of War in the West 1939-1945* (London: Pimlico, 1997), pp. 60–74; Jeremy A. Crang, 'Square Pegs and Round Holes: Other Rank Selection in the British Army 1939-45', *Journal of the Society for Army Historical Research*, 77 (1999), 293–98; David French, *Military Identities: The Regimental System, the British Army, and the British People, C. 1870-2000* (Oxford: Oxford University Press, 2008); French, *Raising Churchill's Army: The British Army and the War against Germany, 1919-1945*; Jeremy Crang, *The British Army and the People's War 1939-1945* (Manchester: Manchester U.P., 2000). See also - Roger Broad, *The Radical General: Sir Ronald Adam and Britain's New Model Army, 1941-1946* (Stroud: Spellmount, 2013); Roger Broad, *Conscription in Britain 1939-1964: The Militarisation of a Generation* (London: Routledge, 2006).

primary sources to more accurately support their narratives.⁵⁹ Further, the internet has now become a major source for factual information on airborne forces, and Pegasusarchive and paradata deserve special mention here.⁶⁰

The contribution of the Parachute Regiment and the history of airborne warfare in general had been vigorously promoted by several narrators who are often closely personally tied to Britain's airborne forces. For this reason their objectivity should perhaps be questioned. In the case of 6 Airborne Div this began almost the moment it was committed to action, as the BBC war correspondent Chester Wilmot landed with 5 Para Bde.⁶¹ His reports made from the field illuminated the crucial nature of the airborne forces operations on 5/6 June 1944. On 13 June 1944 his broadcast included an account of the storming of the Merville Battery, which ended:

At 4.45am, with only a quarter of an hour to spare, the position was ours ... 150 men had done the job of a battalion. The colonel fired a success signal and dispatched a carrier pigeon off to England with the news. The courage that took that battery is the courage that's held this flank.⁶²

He had only good observations concerning 6 Airborne to make in his later book, calling them the 'torchbearers of liberation.' who he had landed with by glider while reporting as a war correspondent.⁶³

⁵⁹ Lloyd Clark, *Orne Bridgehead* (Stroud: Sutton, 2004); Paul Reed, *Walking D-Day* (Barnsley: Pen & Sword Books, 2012); Carl Shilleto, *Pegasus Bridge & Merville Battery: British 6th Airborne Division Landings in Normandy D-Day 6th June 1944* (Conshohocken, PA: Combined Publishing, c1999).

⁶⁰ <http://www.pegasusarchive.org>; paradata.org.uk; www.6juin1944.com. See also www.feldgrau.com.

⁶¹ SHRIVENHAM CONF. 4073, '5 Parachute Brigade Operations in Normandy. June to September 1944,' p. 7.

⁶² Desmond Hawkins, *War Report: A Record of Dispatches by the BBC's War Correspondents with the Allied Expeditionary Force, 6 June 1944 - 5 May 1945* (London: Oxford University Press, 1946), pp. 78–79.

⁶³ Wilmot, p. 251.

Peter Harclerode⁶⁴ has written a well-illustrated and clearly laid out operational history of 6 Airborne Div in 1990, as well as other authoritative books recording airborne warfare as a whole and the Parachute Regiment.⁶⁵ This volume briefly explains the background of the division (pp. 18-48) before concentrating heavily on operations. From a 250 page book, only thirty-two pages are devoted to formation, order of battle and training.⁶⁶ Harclerode usefully follows the actions of each brigade and the supporting arms through the campaigns in which 6 Airborne was committed, supporting the text with photographs.⁶⁷ Reflection and analysis of the influences which shaped the division through formation and training before being committed to action is lacking. More general volumes have been written regarding the development of airborne warfare during the Second World War by these writers. Maurice Tugwell's 1971 monograph⁶⁸ showed the development of airborne warfare from 1918 to the midst of the Cold War, and included some useful insights.⁶⁹ Napier Crookenden produced an accompanying volume to his Normandy memoir account which covered German and U.S. operations such as Crete and Corregidor.⁷⁰

⁶⁴ Commissioned into the Irish Guards in 1967, as a Territorial officer he later saw service with the Special Air Service (SAS) and the Parachute Regiment. Peter Harclerode, *Wings of War: Airborne Warfare 1918-1945* (London: Cassell, 2005), author's biography.

⁶⁵ Peter Harclerode, *'Go to it!' The Illustrated History of the 6th Airborne Division* (London: Caxton Editions, 1990); Peter Harclerode, *Para!: Fifty Years of the Parachute Regiment* (London: Arms and Armour, c1992).

⁶⁶ Harclerode, *'Go to it!' The Illustrated History of the 6th Airborne Division*, pp. 16-48.

⁶⁷ The Division's campaigns being Normandy (Tonga/Mallard), the Ardennes, the Rhine Crossing (Varsity) and the deployment of the Division to Palestine.

⁶⁸ Maurice Tugwell served in the ranks during the Second World War before receiving an emergency commission into the Parachute Regiment on 17 June 1944, later serving as a platoon commander in 8 Para Bn until the end of the war. 'On his promotion to Lt. Col on 20 September 1965 he was appointed as Commanding Officer of Depot, The Parachute Regiment and Airborne Forces. This was followed by an appointment as Assistant Adjutant General at the Ministry of Defence on 11 April 1968 and Assistant Adjutant and Quarter Master General on 16 December 1970.' <http://www.paradata.org.uk/people/maurice-j-tugwell>. Accessed 19 July 2016.

⁶⁹ Maurice Tugwell, *Airborne to Battle: A History of Airborne Warfare, 1918-1971* (London: Kimber, 1971); Barry Gregory, *British Airborne Troops* (London: Macdonald and Jane's, 1974); Robert J. Kershaw, *Sky Men: The Real Story of the Paras* (London: Hodder & Stoughton, 2010).

⁷⁰ Sir Napier Crookenden, *Airborne at War* (London: Ian Allan Ltd, 1978).

This contribution by ex-Parachute Regiment officers has continued up to the present. Robert Kershaw closely analysed the crucial delay and confusion caused by scattered airborne landings on D-Day to the deployment and response of German forces and therefore their failure to be ready to resist the seaborne invaders.⁷¹ His map on page 110 explains the six-hour detour through Caen forced on 21.Pz. Div and other German units attempting to advance from the east, after Howard's force captured the canal and river bridges at Bénouville inflicted as D-Day began. Later, Kershaw carefully moves through the events surrounding the capture of Bréville using both British and German archival sources to expose the impact on the Wehrmacht units involved in the battle. In his concluding chapter, Kershaw is positive concerning the effectiveness of the Allied landings plan as a whole and the role airborne forces played within it. 'The Allied D-Day plan worked. Deception, surprise and concentration of force resulted in the overrunning of a sizeable lodgement area within the first 24 hours.'⁷² Stuart Tootal's *The Manner of Men* revisited the narrative of 9 Para Bn's assault on Merville and explored the background to the operation, particularly the reasons behind the sacking of Martin Lindsay as CO shortly beforehand.⁷³

The memoirs of individuals who took part on the Normandy landings and campaign are useful for forming an analytical standpoint on the issues under discussion, as the focus on the experience of one individual provides more space for reflection. Seemingly unimportant details within the context of wider events can be of importance when 6 Airborne's development and situation are under consideration. For example, Alan Jefferson, a young

⁷¹ Robert Kershaw joined the Parachute Regiment in 1973 and served in Bosnia, N. Ireland and the First Gulf War. Robert J. Kershaw, *D-Day: Piercing the Atlantic Wall* (Hersham, Surrey, UK: Ian Allan Pub., 2008), pp. 117–40.

⁷² Kershaw, *D-Day: Piercing the Atlantic Wall*, p. 420.

⁷³ Colonel Tootal commanded 3 Para Bn in Afghanistan in 2006 for which he was decorated with the DSO (Distinguished Service Order). Stuart Tootal, *The Manner of Men: 9 Para's Heroic D-Day Mission* (London: John Murray, 2013).

platoon commander in A Coy 9 Para Bn, provides a peerless account of the Merville operation's planning and execution.⁷⁴ Napier Crookenden's wider study of the airborne operations which spearheaded Neptune/Overlord, provides useful insights into the activity of 6 Airborne:

Leslie Hollinghurst was a hard, stocky, red-faced and professional airman with a strong character and considerable powers of leadership. He also had a sense of humour, an affection for his own air and ground crews and the troops of the division, and a low flash point. Airmen or soldiers falling below his standards seldom did so twice. He remained a close friend of General Gale and many airborne soldiers until the end of his life in 1973.⁷⁵

As Brigade Major of 6 AL Bde Crookenden would have been familiar with Hollinghurst, the AOC of 38 Gp RAF, and therefore qualified to furnish such a pencil-sketch.⁷⁶ In common with the commentators who hold strong links with the Parachute Regiment discussed above, the objectivity of such writers must be weighed carefully together with the timings of their writing, often at times when post-1945 British airborne forces as a concept were under threat of disbandment.

For the purposes of this study Richard Gale's career memoir and account of 6 Airborne Division in Normandy form obvious but still extremely useful reference points.⁷⁷ The first book is perhaps more useful for this study as Gale is more candid in his observations and presenting his long-held views, perhaps due to the fact that when it was written his career

⁷⁴ Alan. Jefferson, *Assault on the Guns of Merville: D-Day and after* (London: John Murray, 1987).

⁷⁵ Sir Napier Crookenden, *Drop Zone Normandy*. (London: Ian Allan Ltd, 1976), p. 59. Air Chief Marshal Sir Leslie Hollinghurst, served in the RE and Mx in the Great War and later joined the Royal Flying Corps. He was AOC 38 Gp RAF and co-operated closely with Gale at key points of development for airborne forces as well as planning the D-Day airborne landings. Gale, *6th Airborne*, pp. 22-23; *The D-Day Encyclopedia*, ed. by David G. Chandler and James Lawton Collins (London: Simon and Schuster, 1994), pp. 299-300.

⁷⁶ Daily Telegraph obituary, 2 November 2002. <http://www.telegraph.co.uk/news/obituaries/1411938/Lt-Gen-Sir-Napier-Crookenden.html>.

⁷⁷ Gale was clearly a student of military history beyond his own twentieth century experience. His ideas can be seen in monographs he completed later. His emphasis on the importance of courage, skill at arms, surprise and reconnaissance are reiterated in his biblical military histories. General Sir Richard Gale, *Great Battles of Biblical History* (London: Hutchinson, 1968), pp. 32-33, pp. 36-37 and p.79; General Sir Richard Gale, *Kings at Arms* (London: Hutchinson, 1971). See also his history of the Worcestershire Regiment - Richard Gale, *The Worcestershire Regiment (the 29th and 36th Regiments of Foot)* (London: Leo Cooper, 1970).

had been crowned by a SHAEF appointment and numerous other accolades. The second book is a useful summary of 6 Airborne's preparations and efforts in Normandy, but written in 1948 Gale continues to create a motivational atmosphere for his ex-soldiers; every effort is 'grand' and every unit 'splendid':

The landing in Normandy and the subsequent fighting was to them a testing time. It was a testing time. It was the first full-scale British divisional airborne operation. They intended it to succeed; and thanks to their stalwart qualities, to their élan in attack, their courage in defence and their rugged determination in all and any circumstances, they did succeed.⁷⁸

This warmth is reciprocated by his former subordinates in their writing, though Crookenden provides an interesting description, emphasising Gale's proficiency as a trainer:

Richard Gale had a forceful, robust personality and a deep understanding of soldiers. Steeped in military history, he was a real professional, and these qualities made him an excellent trainer of troops. His success in preparing his division for D-Day and in leading them through the first days and weeks of fighting made a valuable contribution to the campaign by ensuring the security of the Allies' left flank.⁷⁹

Brief pencil sketches of Gale appear in other memoirs, typically emphasising Gale's personal impact and appearance, and skill as a trainer:

I knew Gale well and his red face, with his bushy white moustache, belied his brilliant original brain and exceptional qualities of leadership. Fortunately, he was also a first class trainer. Before D-Day, every man in the Division was briefed personally and knew exactly what to do on landing, even if things went wrong.⁸⁰

This was the opinion of Sir Brian Horrocks, a veteran of the North African campaign and commander of XXX Corps 1944-45, a positive view from an individual who had met the majority of divisional and corps commanders who played significant roles in these two

⁷⁸ Gale, p. 151.

⁷⁹ Napier Crookenden was the author for Gale's entry. *The D-Day Encyclopaedia*, ed. by David G. Chandler and James Lawton Collins (London: Simon and Schuster, 1994), p. 268.

⁸⁰ Sir Brian Horrocks, Eversley Belfield and H. Essame, *Corps Commander* (London: Sidgwick & Jackson, 1977), p. 27.

important campaigns. The confident professional air Gale presented was an important element of his leadership style.

Another approach to the history of airborne forces has been seen recently with the burgeoning number of monographs based on first-hand accounts. Various veteran interviews have been compiled into books, which illuminate the landings' events with eye-witness views. These volumes have become more important as the veterans' numbers sadly diminish with each passing year.⁸¹ These monographs include Stephen E. Ambrose's 1985 *Pegasus Bridge*, and sits alongside a book based on John Howard's own diaries.⁸² This format has been fuelled by the use of transcribed versions of the taped interviews available at the Imperial War Museum (IWM), and has also covered other conflicts.⁸³ This approach was combined with primary sources by Neil Barber into two authoritative and highly detailed books on 9 Para Bn's assault on Merville and the seizure and defence of the entire 6 Airborne Division bridgehead on D-Day.⁸⁴ This memoir approach can also be seen in books which focus on the actions of single battalions,⁸⁵ the personal war diary of Geoffrey Pine-Coffin having been reworked by his son in one case.⁸⁶ All of these books represent a

⁸¹ Jon E. Lewis, *Eye-Witness D-Day: The Story of the Battle by Those Who Were There* (London: Robinson Publishing, 1994); James Owen and Guy Walters, *The Voice of War: The Second World War Told by Those Who Fought It* (London: Viking, 2004); Max Arthur, *Men of the Red Beret: Airborne Forces Today* (Reading: Warner Books, 1992).

⁸² Stephen E. Ambrose, *Pegasus Bridge: D-Day: The Daring British Airborne Raid* (London: Pocket, 2003); John Howard and Penny Howard Bates, *The Pegasus Diaries* (Barnsley: Pen & Sword Books, 2006).

⁸³ Roderick Bailey, *Forgotten Voices of D-Day: A New History of the Normandy Landings* (London: Ebury Press, 2010); Max Arthur, *Forgotten Voices of the Great War* (London: Ebury Press, 2002); Hugh McManners, *Forgotten Voices of the Falklands* (London: Ebury Press, 2008).

⁸⁴ Neil Barber, *The Day the Devils Dropped in: The 9th Parachute Battalion in Normandy D-Day to D + 6* (Barnsley: Leo Cooper, 2004); Barber, Neil, *The Pegasus and Orne Bridges: Their Capture, Defence and Relief on D-Day* (Barnsley: Pen & Sword Books, 2014).

⁸⁵ Examples include - David R. Orr and David Tresdale, *The Rifles Are There: The Story of the 1st and 2nd Battalions, The Royal Ulster Rifles 1939-1945* (Barnsley: Pen & Sword Books, 2005); Dudley Anderson, *Three Cheers for the next Man to Die* (London: Robert Hale, 1983). Julian James, *A Fierce Quality: A Biography of Brigadier Alastair Pearson* (London: Cooper, 1989); Stuart Tootal, *The Manner of Men: 9 Para's Heroic D-Day Mission* (London: John Murray, 2013). Andrew Woolhouse, *13 - Lucky for Some: The History of the 13th (Lancashire) Parachute Battalion* (S.L. :CreateSpace, 2013)

⁸⁶ Barbara Maddox and Peter Pine-Coffin, *The Tale of Two Bridges* (Petworth: Peter Pine-Coffin, 2003).

tremendous amount of work compiling and cross-referencing the accounts of the individuals who were there, and concentrate on the action. This genre perhaps culminated in 2014 with *D-Day: Minute by Minute*, in which Jonathan Mayo compiled a blow-by-blow account of the critical first twenty-four hours of the landings.⁸⁷ While this style of narrative history provides great drama and interest, it unfortunately leaves little space for analysis of context and the wider impact of the division's cost and operations.

This thesis concerns the creation and combat performance of 6 Airborne Div on D-Day and during the following Normandy campaign, therefore the sources drawn upon are of British origin. However, as chapter six focuses on the combat effectiveness of the division once committed to action, the viewpoint of the enemy must be taken into account. Various first-hand accounts and narratives written by those who were present have been examined, for example those written by the Werner Kortenhaus and Hans von Luck being of use for the division's fighting against 21.Pz. Div (21 Panzer Division).⁸⁸ Primary sources were translated to furnish three important sections within the thesis, using the Freiberg military archives, which were visited.⁸⁹ First, Heeresgruppe B correspondence was used to show Rommel's regard for Allied airborne forces in his anti-invasion preparations. This is an important element in establishing the value attributed to these new forces by 1944. The training undertaken by Rauch's 192. Gren. Regt (192 Panzer Grenadier Regiment) is used in chapter five to show a comparison of mission-specific training alongside that of Gale's formations. This regiment was chosen from the Freiburg archives viewed as it contained comprehensive accounts of the preparation and training of an enemy formation that had a similarly

⁸⁷ Jonathan Mayo, *D-Day: Minute by Minute* (London: Short Books, 2014).

⁸⁸ Hans von Luck, *Panzer Commander: The Memoirs of Colonel Hans von Luck* (London: Cassell, 2002); Werner Kortenhaus, *The Combat History of the 21. Panzer Division* (Solihull: Helion, 2014).

⁸⁹ These Bundesarchiv files are detailed later in the thesis as reference is made to them.

aggressive role. Third, an important element of chapter six is the Bréville case study, following the fighting between 10-12 June as 346.Gren. Div attempted to puncture 6 Airborne's defensive line along the Bois de Bavent. This episode was firstly selected as it was critical engagement for 6 Airborne. Second, blow-by-blow primary accounts were available for both sides to create as accurate a timeline of true events as possible. The use of these contemporary documents is important as the view expressed in some the German post-war accounts are influenced by a desire to express anti-Nazi sentiment⁹⁰ or to shift all the culpability for defeat on to Hitler or OKW.⁹¹

Three recent theses have analysed the formation of Britain's airborne forces closely. William Buckingham's work conscientiously reviewed the genesis of British airborne forces 1940-42, while John Greenacre's thesis methodically explored the developing military effectiveness of airborne forces 1940-1945.⁹² Timothy Jenkins' 2013 study assessed the scientific viability of the equipment allocated to airborne forces, and whether the development of such new technology was worth the investment.⁹³

Buckingham's work unearthed important information regarding the very origins of British airborne forces and the decision-making process that dictated its early direction. His work effectively ends with the creation of 1 Para Bde, Biting (the company-sized raid on the German radar station at Bruneval) being footnoted as the successful apogee of airborne forces in his time span. Although his concluding thesis chapter summarises the further

⁹⁰ Hans Speidel, *We Defended Normandy*, trans. by Ian Colvin (London: Herbert Jenkins, 1951).

⁹¹ For example, General Fritz Bayerlein's account of Rommel's anti-invasion preparations and general war situation. *The Rommel Papers*, ed. by B.H. Liddell Hart (London: Hamlyn, 1984). OKW – OberKommando der Wehrmacht, the German Armed Forces Supreme Command, Kershaw, *D-Day: Piercing the Atlantic Wall*, p. 435.

⁹² A former officer and reconnaissance helicopter pilot in the Army Air Corps. J.W. Greenacre, *Churchill's Spearhead: The Development of Britain's Airborne Forces during the Second World War* (Barnsley: Pen & Sword Aviation, 2010).

⁹³ Jenkins.

development and enlargement of British airborne forces 1942-45, the short span of his study is a double-edged sword. His tight focus on approximately the first eighteen months of the subject engenders a meticulous and thorough focus, but finishing where it does leave questions unanswered.

Greenacre's research of the entire development of British airborne forces 1940-1945 is of great value and broke new ground into their study. He searched all primary sources available to create a 'conceptual progression' for airborne forces, as the scale of operations increased from raids (such as Biting) to the culmination of wartime airborne effort with Varsity (6 Airborne and 17 US Airborne Divs operation in support of the March 1945 Rhine crossing by 21 Army Gp).⁹⁴ His stated aim for his thesis was to 'examine the historical process of airborne development, to determine why developmental progress was not consistent and explain the wide variance in military effectiveness across the wartime period.'⁹⁵ Greenacre identified his work with the revisionist school, mentioned above, and eschewed a narrative approach and followed French's structure by focussing his chapters on 'discrete areas of study'.⁹⁶ His chapter structure seemingly emulated the MOD 2008 Doctrine's three pillars of fighting power approach – moral, physical and conceptual.⁹⁷ This approach did much to distinguish Greenacre's work from the essentially chronological style of the vast majority of airborne monographs.

⁹⁴ John William Greenacre, p. 2.

⁹⁵ John William Greenacre, p. 16.

⁹⁶ French, *Raising Churchill's Army: The British Army and the War against Germany, 1919-1945*. Recently, Ben Kite's study has taken a similar vein by analysing the performance of British and Canadian forces in Normandy by arm of service. Ben Kite, *Stout Hearts: The British and Canadians in Normandy 1944* (Solihull: Helion, 2014).

⁹⁷ The Development, Concepts and Doctrine Centre, *JOINT DOCTRINE PUBLICATION 0-01 BRITISH DEFENCE DOCTRINE* (Shrivenham: Forms and Publications Section, DSDA Operations Centre, 2008), chapter 4.

His erudite conclusion identified three clear 'broad levels to the development process', 'the impetus to innovate', 'the impulse to change' and thirdly 'the drive to develop.'⁹⁸ He viewed these trends as vital to the development of the airborne project, and placed them ahead of the need for central 'mavericks' who might provide the drive needed to translate ideas and new technology into doctrine and operational effectiveness. Browning, Down and Gale he viewed as anything but unconventional.⁹⁹ Greenacre concluded a 'range of individuals with a variety of personal characteristics and skills are required during different stages of the development process.'¹⁰⁰ Greenacre began and concluded his thesis with Varsity apart as the 'zenith' of the British airborne project,¹⁰¹ which displayed a 'remarkable level of military effectiveness,' whereby the whole undertaking must be 'considered a success.'¹⁰²

Greenacre's study is well structured and thorough, but his altogether positive conclusions on British airborne forces during the Second World War must place his work in the school of writers who have written in their defence.

In 2013 Timothy Jenkins completed a thesis which explored the technical viability of British glider and parachute forces 1940-1945. His study approached the subject from a novel (when compared to previous work) but important direction that of the enormous amount of scientific development needed to field Britain's nascent airborne forces. Jenkins concluded that the resource and technological requirements had been difficult to justify when compared to operational impact, and that the whole exercise had been essentially politically driven.¹⁰³ This study represents the counter-argument to the whole airborne concept, as advocated by Greenacre, proposing that Britain would have been better served by

⁹⁸ J.W. Greenacre, p. 202.

⁹⁹ John William Greenacre, p. 264.

¹⁰⁰ Ibid.

¹⁰¹ John William Greenacre, p. 11.

¹⁰² John William Greenacre, p. 267.

¹⁰³ Jenkins, p. 288.

developing its existing weapons systems and conventional role forces rather than expend effort and resources in exploring new forms of warfare.

However, Jenkins' hypothesis can be questioned for two reasons. First, the creation of airborne forces was a distinct choice made by the Prime Minister and key army figures and pursued by the Chiefs of Staff until large scale formations were created. Existing equipment was adapted to support the project, through the policy of Bomber Command aircraft being co-opted to tow gliders, while later US air assets were borrowed for the Sicilian operations. This was until 38 and 46 Groups RAF had been established at such a level to allow at least a sixty per cent lift for an airborne division. Second, an inadequacy of vital equipment was by no means limited to airborne forces. While Britain had pioneered the use of tanks in battle during the First World War, Britain had no coherent armoured doctrine in 1939 or effective medium tank.¹⁰⁴ In another example, the submachine-gun (SMG) had been dismissed as a 'gangster guns',¹⁰⁵ 'precious' US made Thompson SMGs having to be hurriedly purchased after Dunkirk when their importance was appreciated.¹⁰⁶ The Second World War was a period of enormous technological invention and innovation and the situation of airborne forces was not novel. The War Office had decided airborne forces were an important element of the army's offensive capability and would be developed in tandem with other forces.¹⁰⁷

The factors which engendered the perceived enhanced combat capability of 6 Airborne Div have not been thoroughly examined in its existing historiography. Most general histories

¹⁰⁴ Brian Bond, 'The Army between the Two World Wars 1918-1939', in *The Oxford History of the British Army* (Oxford: Oxford University Press, 2003), pp. 256–72 (p. 261); David Fraser, *And We Shall Shock Them: The British Army in the Second World War* (London: Cassell, 1999), p. 8.

¹⁰⁵ French, *Raising Churchill's Army: The British Army and the War against Germany, 1919-1945*, p. 85.

¹⁰⁶ Stephen Bull, *Second World War Infantry Tactics* (Barnsley: Pen & Sword Books, 2012), p. 61.

¹⁰⁷ Chapter Two explores the views regarding the value attached to airborne forces by the key figures in Britain's war effort fully.

regarding British airborne forces have proposed that the basis for these troops' suggested outstanding fighting performance lay in an exceptional *esprit de corps* fostered by gruelling training. Summarised in a recent monograph:

There were two major factors that led to Paras developing a particularly strong *esprit de corps*. Firstly, every man was a volunteer; they were there because they chose to be, not because the Army told them to be. Secondly, they had all passed the tough training that had tested them both physically and mentally. The training had not only tested them as individuals, but also their ability to function as a unit. It broke down boundaries, bringing together men from many different backgrounds into a cohesive force.¹⁰⁸

The object of the training airborne forces received appeared to be to create supermen:

The aim of such training was to produce troops of such a high calibre that they would be capable of taking on superior odds and holding their own against them. Each man was to possess a high degree of courage, self-discipline and self-reliance.¹⁰⁹

These statements must be more fully challenged and explored to answer the question as to how such demanding training moulded 6 Airborne Div before D-Day.

In conclusion, the existing historiography of 6 Airborne Div fails to answer why the Division performed as it did in Normandy. The account of the operational activity of British airborne forces during the Second World War has been re-visited many times, much of it being reverential or 'hagiographic'.¹¹⁰ The narrative is therefore research-worn, as two reasons have caused writers to be deflected away from deeper analysis for the causes of Gale's success. First, the very drama of their introduction to battle draws interested parties to focus on 5/6 June events before any analysis of their genesis or battle preparation is attempted. Second, the apparent accomplishment of 6 Airborne in carrying out its D-Day missions and the security of 21 Army Gp's eastern (Orne) flank have pushed analysts on to scrutinise more thorny issues, the failure to capture Caen on D-Day for example. Recent

¹⁰⁸ Rebecca Skinner, *British Paratrooper 1940-45* (Oxford: Osprey, 2015), p. 34.

¹⁰⁹ Harclerode, *Para!: Fifty Years of the Parachute Regiment*, p. 29.

¹¹⁰ John William Greenacre, p. 17.

revisionist historians have raised questions concerning the efficacy of elite formations while other experts on the campaign and airborne forces have explored in close detail the narrative using first-hand accounts. Buckingham and Greenacre's studies have shown the sinuous processes of policy and staff work which brought the airborne forces into existence and explained organizational characteristics, but no work has yet been done focused sharply on the organizational development of 6 Airborne Div, nor to isolate its combat performance in the summer of 1944.

Primary sources has been the careful cross-referencing of archival sources to obtain as clear a contemporary picture of the state of the Division at key points, whether preparing for or during Normandy operations. The main source for primary information has been the National Archive at Kew (TNA), where the Air Ministry, Cabinet and War Office records from the Second World War are kept. To fully balance the cost element of the thesis' investigation the army and RAF order of battle, the Army List, and organisational records were cross-referenced to create an accurate understanding of the equipment and manpower investment made in the creation and transportation of the Division. In-period situation maps have been closely analysed to gain more understanding of the ground fought over during the campaign, and in one case an original Wehrmacht map was studied to gain a fuller appreciation of the 716. Gren. Div defences. This cross-referencing has been most important in attempting to isolate the combat effectiveness of 6 Airborne, especially during the landings phase. The challenge here is to measure the intangible. Once committed, the Division relied heavily on the shock-surprise effect in the hours before dawn and its

consequent effect on the enemy's command response and morale.¹¹¹ More tangibly, when contact was established with the seaborne conventional role formations, 6 Airborne was able to access considerable firepower as it was integrated into 1 Corps' defensive crust.

While primary sources are a critical source of this study's research, they are not infallible bearers of the truth. Paul Winter's recent monograph explained their limitations, being completed by typically only one officer often in difficult operational conditions.¹¹² Unit war diaries focus on the unit and its events, there is no time for the individual or to record the *zeitgeist* of the battalion at a particular key moment.¹¹³ Indeed, on occasion war diaries can be carefully reconstructed away from the action. For example, the diary of 2 Coldstream for the testing months of May and June 1940 was lost, a typed replacement being forwarded to the WO in March 1941.¹¹⁴ This could only have been completed based on the post-battle recollections of the men and officers there, some months after the events. For 1 June the diary demurely remarks 'the Germans now began in earnest to try and prevent our getting away.'¹¹⁵ In contrast, the memoir of one of the battalion's officers recalls a day of ferocious battle during which his company commander was killed and he shot a British officer from an adjacent infantry battalion who left his post.¹¹⁶ Similarly, such memoirs and the recollections of veterans must be cross-referenced, as nothing can be taken as infallible.¹¹⁷ Though referring to the First World War, Richard Holmes is succinct in his summing up:

¹¹¹ The enemy's OODA loop (Observation, Orientation, Decision and Action). Effectively the thinking/action response process of military command. Simon Godfrey, *British Army Communications in the Second World War: Lifting the Fog of Battle* (London: Bloomsbury, 2013), pp. 9–11.

¹¹² Winter, pp. 3–11.

¹¹³ Richard Holmes, *War Walks* (London: BBC Books, 1997), pp. 14–15. Norman Scarfe, *Assault Division: A History of the 3rd Division from the Invasion of Normandy to the Surrender of Germany* (London: Collins, 1947), pp. 18–19.

¹¹⁴ TNA WO 167/699, WD of 2 Coldstream War Diary (abbreviated as WD hereafter), 1940. Reply from Lieutenant-Colonel Edwards to Keeper of Records Kew, 22 March 1941.

¹¹⁵ *Ibid.*, 1 June 1940.

¹¹⁶ James Langley, *Fight Another Day* (London: Collins, 1974), pp. 48–56.

¹¹⁷ Peter Wood, 'A Battle to Win: An Analysis of Combat Effectiveness through the Second World War Experience of the 21st (Auckland) Battalion' (Massey Univ. (NZ), 2012), pp. 48–49.

Up to my neck in muck and bullets; rats as big as footballs; the sergeant major was a right bastard; all my mates got killed.¹¹⁸

Yet by careful checking of all sources available then as close as possible a picture of actual events can be reached.

II. *Phraseology and Definitions*

This introductory chapter will now move on to outline the structure of the thesis. First the phraseology scheme will be outlined and certain key terms to be used will be discussed.¹¹⁹ Secondly, the research questions and themes will be justified before finally the chapter sequence.

Before the organisation of this thesis is explained, the nomenclature of the units and forces involved must be quickly outlined. Various terms regarding airborne warfare will be used, their interpretations drawn directly from the War Office 1943 pamphlet. The most important definition being airborne role troops, which includes all the airlanding troops (AL) which are landed directly into action by either glider or parachute (Para).¹²⁰ Air transported (or air-portable) units are those which were flown into secured airfields or temporary air strips, such as 52 (Lowland) Division.¹²¹ The contemporaneous WO (War Office) scheme of abbreviations as used by Major Jolsen's orders of battle will be used from this point onwards.¹²² Therefore 9th Battalion the Parachute Regiment and 45 Commando Royal Marines will be shortened to 9 Para Bn and No. 45 (RM) Cdo respectively; while 1st

¹¹⁸ Richard Holmes, *Tommy: The British Soldier on the Western Front 1914-1918* (London: Harper Perennial, 2005), p. xxiii.

¹¹⁹ A list of abbreviations is included at the beginning (p.5) of this thesis for convenience.

¹²⁰ The War Office, 'AIRBORNE OPERATIONS PAMPHLET No.1 (1943)' (London, 1943), p. 1.

¹²¹ George Blake, *Mountain and Flood: The History of the 52nd (Lowland) Division 1939-1945* (Glasgow: Jackson, Son and Company, 1950), p. 60.

¹²² Lt. Col H.F. Jolsen, *Orders of Battle Volume I: United Kingdom and Colonial Formations and Units in the Second World War 1939-1945* (London: HMSO, 1960) abbreviations pp. xi-xii. See also *Handbook on the British Army 1943*, ed. by Chris Ellis and Peter Chamberlain (Military Book Society, 1974). This is a reprint of the US Army TM 30-410 *Handbook on the British Army*, issued in 1943 to US army troops arriving in the UK.

Battalion the Gordon Highlanders, 8th Infantry Brigade, 51st (Highland) Division and Crocker's First Corps will become 1 Gordons, 8 Inf Bde, 51 Div and 1 Corps. Britain formed the 'Airborne Division' in November 1941, later titled 1 Airborne Div, for clarity this formation is referred to by the latter from the outset in this study. The standard infantry battalions fighting alongside airborne or commando units (for example the Durham Light Infantry or the Warwickshire Regiment) will be referred to as the 'county' units.¹²³ County battalions, artillery and armoured regiments will be stated as 'conventional' forces at some points, to reflect their more established combat role when compared to airborne units. German units will follow the abbreviation scheme laid out in the war diary of the Wehrmacht LXXXI A.K. (81st Army Corps) which proved to be 6 Airborne's main opponent in the Orne bridgehead.¹²⁴ 1st SS Panzer Corps, 21st Panzer Division and 3rd Battalion 857th Grenadier Regiment, will become I.SS-Pz.Kps, 21.Pz.Div and III/857 G.R.

The terms doctrine,¹²⁵ policy and role¹²⁶ will be widely used throughout the thesis. The last term is straightforward and requires little explanation. Policy can be seen as the interface between government and service leadership¹²⁷ or decisions made by 'a military command on the general way something should be done.'¹²⁸ The policy analysed in this study will be at the highest inter-service level, while the analysis of 6 Airborne in action will

¹²³ The majority of infantry regiments received shire affiliations with Childer's localisation of the Army. TNA WO 32/6091, the Reorganisation of the Army, 11 April 1881.

¹²⁴ (BM) RH24-81/89, LXXXI A.K. Ia, KTB 16.2-2.8.44 (Hereafter LXXXI A.K).

¹²⁵ 'The action of teaching or instructing; instruction; a piece of instruction, a lesson, precept'. Trevor N. Dupuy, Grace P. Hayes and Chris Johnson, *Dictionary of Military Terms: A Guide to the Language of Warfare and Military Institutions* (New York: The H.W..Wilson Company, 1986), p. 75. Current British defence thinking provides an updated definition, succinctly describing it as 'a pragmatic basis for action, decision and reflection, which encourages, amid the uncertainties of crisis and conflict, the decisive contribution of individual initiative, enterprise and imagination in achieving success. It does not provide an algorithm that obviates the need for difficult decisions. It provides the bedrock on which such decisions can be based.' *British Defence Doctrine* JDP 0-01 August 2008 p.iii. www.mod.uk, accessed 25 August 2011.

¹²⁶ 'The function performed by someone or something in a particular situation or process'. The precise definitions to be used in this thesis are all drawn from the Oxford English Dictionary, <http://www.oed.com>, accessed 11/12 May 2011.

¹²⁷ Edward Luttwak and Stuart Koehl, *The Dictionary of Modern War* (New York: Harper Collins, 1991), p. 466.

¹²⁸ Richard Bowyer, *Dictionary of Military Terms* (London: Bloomsbury, 2004), p. 185.

be seen at the level of the division and below in organisational terms.¹²⁹

It cannot be emphasised enough that airborne warfare was in its infancy during the Second World War, and the UK had no inter-war established airborne doctrine or policy to work with. In military terms doctrine can be briefly summed up as the 'fundamental principles and operational concepts by which the military forces or elements thereof guide their action in military operations in support of national objectives.'¹³⁰ A defined doctrine for military operations is an invaluable tool for training units, the planning of operations and their successful execution. Effective doctrine should not stifle the use of initiative, and 'does not necessarily demand uniform conduct, and it may invite flexibility under the broadest guidelines'.¹³¹ Without doctrine 'an organization that was so large would deform any commander's will,'¹³² as a general would have to make allowances in his battle plan for his formations' deficiencies. A force without some common teaching and shared practices would soon become operationally ineffective as unexpected events call for shared solutions. The WO had no collated doctrinal pamphlet until the summer of 1943, and its widespread circulation and absorption by the Airborne Establishment must be questioned.¹³³

Combat effectiveness comes at a cost; therefore the equipoise between manpower and equipment cost and operational effect is a critical consideration of this study. The question must be asked, was the expenditure on creating 6 Airborne Div worth it for what it achieved in Normandy? 'Cost effectiveness' in the military sense has been described as:

¹²⁹ STRATEGIC level refers to the actions of army groups or national commands; OPERATIONAL with the in-theatre of army corps and divisions; TACTICAL is for formations below the division - brigades and battalions. Luttwak and Koehl, p. 442.

¹³⁰ Dupuy, Hayes and Johnson, p. 75.

¹³¹ Luttwak and Koehl, p. 170.

¹³² French, *Raising Churchill's Army: The British Army and the War against Germany, 1919-1945*, p. 12.

¹³³ The War Office.

A comparative evaluation derived from analyses of alternatives (actions, methods, approaches, equipment, weapon systems, support systems, force combinations, etc.) in terms of the interrelated factors of cost and effectiveness in accomplishing a specific mission.¹³⁴

The cost-effectiveness of Special Forces operations has been intensively explored in by Andrew Hargreaves, his proposal being centred on some key variables:

The most central of these variables are: the scale of a formation's establishment; the frequency of its employment; the utility of its actions; and both the operational and non-operational costs of its development and use.¹³⁵

Earlier lightly armed airborne and commando operations had revealed the balance that had to be struck between excessive losses and operational, if not strategic gain (see **Figure 2**). Operation Ambassador (July 1940) an unfocussed attempt to kill or capture members of the enemy garrison on the newly occupied Guernsey was a complete failure and resulted in three captured and one man drowned.¹³⁶ Operation Biting (February 1942) had yielded important information regarding new Wehrmacht radar devices which had begun to increase Bomber Command losses, for the cost of three dead and seven wounded, a low cost but high effect result.¹³⁷ Jubilee (August 1942) had been quite the reverse. 4,260 casualties in a failed landing attempt were a high price to pay to reinforce understanding that opposed landings would require enormous fire support from naval units and close support from tanks.¹³⁸ Chariot (St. Nazaire, March 1942) is a more finely poised example of the cost-effect balance. 541 combined Royal Navy (RN) and commando (Cdo) casualties were incurred, but the Kriegsmarine was effectively prevented from deploying capital ships

¹³⁴ Dupuy, Hayes and Johnson, p. 61.

¹³⁵ Andrew Hargreaves, 'An Analysis of the Rise, Use, Evolution and Value of Anglo-American Commando and Special Forces Formations, 1939-1945' (KCL, 2008), p. 235.

¹³⁶ Charles Messenger, *The Commandos, 1940-1946* (London: Kimber, 1985), pp. 34-35.

¹³⁷ Tugwell, pp. 126-27.

¹³⁸ Stephen Prince, 'Raids on St. Nazaire and Dieppe', in *Amphibious Assault: Manoeuvre from the Sea* (Woodbridge: Seafarer, 2007), pp. 123-44 (pp. 141-143).

on the French Atlantic coast for the rest of the war.¹³⁹ The preparedness of SHAEF to accept severe losses to attacking forces in the early hours of D-Day will be discussed in chapter five, which points to a pragmatic acceptance of losses for wider gain.

Hargreaves' metrics can be applied to 6 Airborne Div at an operational or NW Europe theatre level, while Dupuy's definition, based on analysing different alternatives, will be used to assess tactical choices made by Gale and his subordinates in planning and executing operations during the landings phase and later while holding the Orne bridgehead. Such choices are not the sole province of airborne forces, but with often only sparse and ill-suited resources available, 6 Airborne's alternatives were all the more limited.

The Army's definition of a victory during the Second World War is useful here. Battlefield success during the 1940s meant taking the enemy's position with infantry and holding it.

The 1935 Field Service Regulations (FSR) Vol. II state:

Practically all success in war, which is won by the proper co-operation of all arms, must in the end be confirmed by infantry, which, by closing with the enemy, compels his withdrawal or surrender, and holds the objectives which have been secured or the points of importance which have to be protected, as a base for further action.¹⁴⁰

While in Vol. III, a successful attack would show 'the enemy's gun positions have been overrun or his main reserves defeated.'¹⁴¹ A more modern source provides a broadening of the definition:

Defeat-Failure in combat, including one or a combination of the following conditions: inability to accomplish an assigned mission; *suffering excessive casualties*; loss of important terrain or resources.¹⁴²

¹³⁹ Charles Messenger, *The Commandos, 1940-1946* (London: Kimber, 1985), pp. 128–34.

¹⁴⁰ *Field Service Regulations, Vol. II Operations – General 1935* (London: HMSO, 1935) Chapter I – 'Fighting Troops – their characteristics and armament' p. 7.

¹⁴¹ *Field Service Regulations, Vol. III Operations – Higher Formations 1935* (London: HMSO, 1936) Chapter V – 'The Offensive Battle' p. 44.

¹⁴² Italics author's emphasis. Dupuy, Hayes and Johnson, p. 69.

This quotation raises the issue of the avoidance of Pyrrhic victory – victory at any cost. While the senior commanders of the Second World War were not casualty averse in the way that twenty-first century western commanders can be considered to be so, for 1940-45 airborne forces losses were a tactical balance against success. The airborne forces of 1939-45 could not afford to gain the objective at pyrrhic cost, as that would only end with rapid defeat by enemy reinforcements if there were too few troops to hold the ground.

If these interpretations are accepted as the absolute definition of a complete offensive battlefield victory, the evidence will be the objective secured and all enemy forces (including local reinforcements) eliminated or suppressed. A defensive success will be proven by denying the enemy the above criteria. To be victorious in action relied on being combat effective. This has been defined as '1) a term used to describe the abilities and fighting quality of a unit. 2) the quality of being effective in combat.'¹⁴³ The measure of success for 6 Airborne and its units in this study is whether they achieved their operational tasks. This definition will be further explored at the beginning of chapter six, before 6 Airborne's combat performance is reviewed.

The issue of gauging the Division's contemporaneous 'eliteness' is a challenge for this study, and is tied up with the notion or definition of 'Special Forces' which was emerging in the Second World War. The British Parachute Regiment has been certainly been regarded since 1945 as an elite corps, indeed by the 1990s around forty per cent of SAS recruits were from that regiment.¹⁴⁴ The novelty of entering the battlefield from the air greatly raised the profile of airborne forces and they were certainly used as a key propaganda tool (see chapter three) but in 1943 its elevated combat reputation was still to be truly formed.

¹⁴³ Dupuy, Hayes and Johnson, p. 52.

¹⁴⁴ Tony Geraghty, *Who Dares Wins* (London: Warner Books, 1992), p. 13.

Julian Thompson defined Special Forces during the Second World War by their three functions: 'offensive action; the gathering of intelligence; and operating with indigenous resistance groups.'¹⁴⁵ These would be small groups of men who performed high value operations for little resource investment and at enormous jeopardy. These forces were not expected to fight conventional role enemy forces for a sustained period, and certainly used unconventional techniques. 6 Airborne Div as a force was different. While it entered the battlefield in an unconventional sense was different in that it was expected to prevail against more heavily armed enemy conventional role forces before being withdrawn. While Operation Tonga's initial actions were raids in nature, the destruction of enemy installations and bridges over the River Dives, the Division was not designed for covert operations but for high intensity battle over short periods.

The men who volunteered for airborne forces were certainly physically fine specimens. Every man was subjected to a testing pre-parachute regime at the Airborne Forces Depot to eliminate any unsuitable candidates prior to the challenge of parachute training. Demanding training continued once they arrived at their units as the build-up preparation and training for D-Day developed. At any time a man could be 'RTU-ed' (returned to unit), effectively rejected back to a conventional role unit.¹⁴⁶ This was a tremendous advantage when compared to conventional role units. What the Airborne Establishment and the Division itself did to weld these men into effective units, in terms of role and mission-specific training, and the results seen in the Normandy Campaign is this study's focus.

Also, this thesis will not attempt to rank various formations' combat effectiveness and will concentrate on how 6 Airborne generated and sustained its own fighting capability. Many

¹⁴⁵ Julian Thompson, *The Imperial War Museum Book of War behind Enemy Lines* (London: Sidgwick and Jackson, 1999), pp. 6-9.

¹⁴⁶ 'RTU-ed' – Return to Unit. Any airborne soldier found lacking by his C.O. could be returned to his parent (conventional role) regiment or corps. Gregory, pp. 26–27.

other formations regarded themselves as the finest troops the army possessed; for example the veteran Eighth Army divisions who had joined 21 Army Group and the regiments of Foot Guards. By mid-1944 these formations also had very different roles from 6 Airborne, the bulk of the Guards were concentrated in the Guards Armoured Division while the county infantry were fielded in large conventional role divisions. Therefore any attempt at comparative measurement is difficult.

There is a danger that a study which attempts to isolate 6 Airborne's effectiveness in the Normandy campaign could stray into the realms of counter-factual history; if a D-Day without airborne forces is imagined. This must be avoided. The Prime Minister called for their formation and Field Marshal Sir Alan Brooke, first as C-in-C Home Forces and later as CIGS held a strong conviction regarding their value. As the dominant figure on the COS he defended the maintenance of formation-level airborne forces,¹⁴⁷ when the RAF sought to hamstring them in the autumn of 1942. To create airborne forces was a deliberate choice made by Britain's high level leadership like the night bomber offensive on Germany.

In the case of a quantitative advantage, if airborne forces had been disbanded in May 1944, the army would have only gained one and a half conventional role infantry divisions from airborne ranks. When set in the context of the cautious conceptual environment that the army inhabited in the run-up to D-Day, having these men in conventional role formations would not have led to a renaissance of infantry fighting power, while the advantages of their role-specific capability would have been lost. The D-Day plan would have been completely different without the participation of airborne forces, for example the

¹⁴⁷ Andrew Roberts, *Masters and Commanders: The Military Geniuses Who Led the West to Victory in World War II* (London: Penguin, 2009), pp. 102–15.

Band landing beach might well have been used to seize the ground between the Orne and the Dives.¹⁴⁸

In terms of a qualitative benefit for airborne forces disbandment it might be claimed that these aggressive fighters could have been used as 'stiffeners' to enhance the often plodding performance of the infantry.¹⁴⁹ However much of the 'eliteness' of the division's airborne troops was engendered by its tough training as will be seen in chapters three and five; and may not have surfaced if these men had stayed with their parent conventional role units. This study will therefore not attempt to imagine an Orne scenario without the effort of 6 Airborne, but will focus on the decisions made by the division in its actual battles.

III. Thesis Structure: Thesis Question, Chapter Questions and Themes

Overall it can be argued that 6 Airborne, a 'green' division, performed well in its first campaign. What factors exerted an influence on Gale's division to facilitate the generation of this combat performance? This is the thesis question.

The research methodology of this thesis relies on the construction various models in each chapter to analyse and explore the considerable information gathered from primary sources as discussed below. This can be illustrated by two examples. In chapter three, in which the specific manpower cost of the division is explored, the 13 Warwicks/8 Para Bn case study shows that the dissolution of the first unit did not result in every man volunteering for Airborne Forces. The model shows that the non-volunteers were largely posted to 8 Warwicks in Lincolnshire, some of whom were posted to Tunisia. This shows that the

¹⁴⁸ Charles Messenger, *The D-Day Atlas: Anatomy of the Normandy Campaign* (London: Thames and Hudson, 2014), pp. 70–71.

¹⁴⁹ Timothy Harrison-Place, *Military Training in the British Army, 1940-1944: From Dunkirk to D-Day* (London: Frank Cass, 2000)

conversion of a conventional infantry battalion to the airborne role did not waste any trained infantrymen, the lower establishment of the latter freeing up men for duty elsewhere. Each chapter contains these study models that move the deductions of the thesis forward. The second example of an illustrative model is presented in chapter two in diagrammatical form to show the process of success or failure of airborne operations during the Second World War. This follows an exploration of the impact Merkur (the German airborne invasion of Crete) made on the WO, which powerfully revealed the super in-theatre mobility of airborne forces and the ferocity of an airborne assault. This tool is then used to provide an analytical framework to assess 6 Airborne's performance in chapter six.

The thesis is structured with six chapters and a smaller seventh chapter which forms the thesis conclusion. Chapter two contains three sections, its question being what were the contextual and forming pressures involved in the creation of 6 Airborne Div? It first explains the background to the creation of 6 Airborne Div including the attitudes of Sir Alan Brooke and the reaction to German Airborne Forces success 1940-41. Second, the 1940-43 theoretical basis for British airborne warfare will be reviewed. Third, the development of air transport capability before finally the expectations of senior allied commanders before D-Day. Britain had rejected the concept of airborne forces in the inter-war period and had no suitable modern purpose-built transport aircraft. Only through the stubborn support of Sir Alan Brooke was the project pursued, even when the Prime Minister himself called for the disbandment of 1 Airborne Div. The theoretical base for understanding this new style of warfare was initially pursued by studying German operations before HUSKY (the invasion of Sicily) yielded hard experience.

Chapter three reviews the development of an airborne identity of both individuals and the organisation. How was an airborne identity established? Starting with an assessment of why men joined airborne and commando units, the chapter then examines the total manpower cost of the Division both in terms of quantity and qualitatively. It first examines the role of the Airborne Establishment in supporting the creation of the Division Firstly through role-specific training. This began with the completion of selection through two gruelling weeks of pre-parachute ground training at Hardwick Hall, the Airborne Forces Depot; followed by parachute training at Ringway. This training was a trial of character and physical capability, and will be compared to the infantry training prevalent in the rest of the Army at that time. The second part of the chapter will review the influences that 'moulded' 6 Airborne Div, chiefly the 'corporate' effect of the AAC in assisting in developing a strong sense of identity, as well as being a supportive framework to operate within, and the efforts Gale himself made to mould the Division into his vision of a high quality formation.

Chapter four focuses on leadership. How was leadership interwoven through the most crucial command appointments? Beginning with Gale himself and then turning to the appointment of brigade and battalion commanders. This chapter is important in that it examines Richard Gale who was such an important activist for the development of Airborne Forces and how his influence cascaded down through the Division influencing every nuance. A case study involving a junior officer (Nick Archdale, 9 Para Bn) casts light on the attitudes and confidence in the Division prior to going into action. Finally, a hypothesis regarding Richard Gale's leadership is set down based on the research completed for this thesis. It is positioned here to summarise the conclusions drawn from chapters two and three and

highlight the characteristics of Gale and his officers before the more involved preparation for D-Day began.

Chapter five moves the focus of the thesis on to the task. What was expected of 6 Airborne within the overarching Second Army plan is reviewed first, before the tenets of Gale's planning are shown embedded in the divisional plan. How did the Division prepare its self for D-Day? The adaptation and innovation theme comes to the fore here, as the CRA Lt-Col. Jack Norris developed fire support plans involving 3 Div and the RN. The value placed on the threat posed by Allied airborne forces by Heeresgruppe B will be shown in fixed the anti-airborne defences. The next part of this chapter provides a comparative case study of mission-specific training as 192.Gren.Regt prepared for either all-out attack on D-Day or desperate defence. The third and final part of this chapter will return to a study of training, this time mission-specific, as Gale and his commanders prepared the Division for D-Day. How Gale planned to deal with the challenges thrown up by the dangers of scattered landings and well-armed enemy mechanised forces will be analysed here.

Chapter Six examines the Division once committed to action, beginning with a discussion on the challenge inherent with attempting to isolate formations' combat effectiveness and realistically measuring it. How effective was it? 6 Airborne Div suffered a catastrophe on the night of 5/6 June as 3 and 5 Para Bdes' were badly scattered. How the Division regrouped at the very lowest level and then performed on its Tonga missions will be assessed. The battle of Bréville (10-12 June 1944) will show 6 Airborne's distinctive strengths at work with its weaknesses. By comparing British and German primary sources (LXXXIV Korps) which recorded losses and future intentions, the impact on the enemy in this key engagement will

be shown. The chapter ends with an analysis of 6 Airborne's need to continue to adapt as it held the line for three months before joining the Paddle pursuit as the enemy crumbled.

Chapter Seven will provide the thesis conclusions by reviewing the research questions and thematic pathway. The organisational characteristics of 6 Airborne will be amassed to compare how it was supposed to function through planning and training to how it actually performed in action. A final discussion on the synergy between leadership and training in building unit cohesion as a force multiplier will close the thesis.

The thesis has three themes, which are strongly linked to the research questions. The first is leadership. Leadership has been defined frequently by commentators and established military figures. A recent formal definition aptly sums up, as will be seen, how Gale moulded the division: 'Leadership – The art of influencing and directing people to an assigned goal in such a manner as to command their obedience, confidence, respect and loyalty.'¹⁵⁰ The ability to engender confidence in others in one's own plans and command regime, combined with raising each individuals' personal confidence in their own abilities has been seen as key. Jonathan Fennell has written at length to illustrate the crucial importance of confidence-building in Montgomery's rejuvenation of Eighth Army in the Egypt prior to El Alamein.¹⁵¹ Montgomery stated that 'my own definition of leadership is this: "The capacity and the will to rally men and women to a common purpose, and the character which inspires confidence.'¹⁵²

Tactical Airborne Forces leadership required the same closeness of officers to men as conventional role forces, but the shared risk of a hazardous role-specific entry to the

¹⁵⁰ Dupuy, Hayes and Johnson, p. 135.

¹⁵¹ Jonathan Fennell, 'Eighth Army: Morale and Combat Effectiveness' (Pembroke College, 2007), *passim*.

¹⁵² Montgomery of Alamein, p. 80.

battlefield required perhaps a closer degree of proximity. One of the important leadership figures discussed in this study, Brigadier James Hill, stated 'If you lead with courage, firmness and have compassion for your chaps and their problems, they will do what you tell them'.¹⁵³ It would however be easy to propose that airborne forces leadership was simply a case of leading from the front while under fire. But leadership was displayed in the formation process of the Airborne Establishment and the division, and in the build-up to D-Day. It was also important in the reorganisation after the scattered landings and later marshalling the division's resources.

The second leitmotif is simply training. The preparation and training undertaken by the men who formed 6 Airborne Div was extremely demanding and hazardous but was of the great shaping influence on the combat effectiveness and character of the Division. Here Gale's contributed much through his focus on leader selection and training, but his own vision of what the Division should be was also a distinct influence. Gale had been involved with Airborne Forces from the first point of significant expansion with the creation of 1 Para Bde and soon after the embodiment of the first complete airborne division. He was experienced regular soldier who had been exposed to influential and original leaders throughout his career, and had observed different styles of divisional-level leadership in action. Gale held essentially conventional soldiering views but with a high receptiveness to new ideas and solutions to tactical problems. He also showed urgency, his rapid and ruthless de-selection of unwanted officers revealed his over-riding desire to shape his division's future performance.

¹⁵³ IWM interview - Hill, Stanley James Ledger, no.12347 (recorded 25/11/1991)

The third theme is again straightforward, that of the role of adaptation in the Division's preparation for operations and then later in the field. In the first instance, all of the British-made paratrooper aircraft used were adapted former bombers. Gale adapted a company of 12 Devons and the 6 AARR (Airborne Armoured Reconnaissance Regiment) and other elements to create 'Parkerforce', a mobile semi-mechanized battle group, which he planned would probe beyond the Orne bridgehead perimeter. As mentioned above, the co-opted firepower of other forces by the Division was the greatest adjustment of all.

6 Airborne Div landed in Normandy on 6 June 1944 and although its strength was seriously depleted by scattering was still able to achieve its objectives. It then held the line for three months, operating in a conventional infantry role, a capacity it was inadequately equipped to carry out. From mid-August it found the means to take part in the Paddle pursuit of enemy forces carried out by First Canadian Army of which it was now a part. How did a brand new formation manage to achieve these results? No analysis exists to explain how 6 Airborne secured these accomplishments. This thesis will create a balanced picture of 6 Airborne's resource cost on formation, contemporaneous views of perceived value, and operational impact.

Chapter Two - Cognizance and Experience: 6th Airborne Division within the context of British Airborne Warfare, 1936 – 1943

The creation and working-up of 6 Airborne before Operation Overlord was only one episode in the development of airborne warfare during the Second World War. It is important for this study to establish understanding of the airborne milieu into which Gale's new division was launched. An appreciation of this practical and theoretical landscape is essential to understand how key individuals were influenced when taking planning and training decisions. Without placing 6 Airborne Div into this context, the shaping pressures which influenced planning and training decisions made by Gale and his staff will be difficult to appreciate. This in consequence will make analytical conclusions on how the Division performed in Normandy more difficult to gauge. In four interlinked sections, this chapter will contextualise the formation and training of 6 Airborne Div to support the theses' later analysis. So, what were the shaping influences that framed the formation and development of Gale's Division?

The first chapter section will explain why the WO wished to form a second airborne division in May 1943. The effect of Germany's 1940-41 operations had revealed the potential of airborne forces, and this will be illustrated by showing the impact on the thinking of Alan Brooke and the key qualities of airborne forces as seen in these actions.¹⁵⁴ The characteristics which gave these formations distinct strengths also formed their key weaknesses: high air-transported mobility was bought at the price of a lack of heavy

¹⁵⁴ Sir Alan Brooke became Commander-in-Chief Home Forces from 19 July 1940, three days before Churchill formally called for the creation of airborne forces; and after 25 December 1941 Brooke was appointed Chief of the Imperial Staff (CIGS) – the professional head of the British army. *Churchill's Generals*, ed. by John Keegan (London: Cassell, 2005), pp. 102–103.

equipment, while the absence of lines of communication required rapid reinforcement and replenishment by air or relieving ground forces. The second and largest chapter section will analyse the doctrinal foundation upon which Gale could rely to create and train his division. This will entail a summary of the codification of the experience gained during HUSKY, knowledge which was gained during in the first few months of 6 Airborne's existence. The third part of this chapter will review the capability of the air assets available in May 1943, and continued their ensuing development in the following twelve months. How fit for purpose were the air assets earmarked to carry the airborne forces by May 1944? Without enough air assets to carry them into action in complete unit lifts, airborne units and formations could not be used in role. How suitable the aircraft were for airborne operations will be reviewed here, together with the numbers available. What influences drove their development? The glider-building programme planned in 1940 was substantial, and was later criticised by Churchill's personal scientific adviser, Lord Cherwell.¹⁵⁵ It will be seen that the reduction of the programme still allowed enough gliders to carry out Operations Tonga/Mallard and Market. The chief competitor for the aircraft suitable for airborne operations was RAF Bomber Command. The correspondence of Air Marshal Sir Arthur Harris¹⁵⁶ will show that the largely outdated types donated to 38 Group (Gp) RAF were considered obsolete by Bomber Command, and in no way hindered the exponential growth of the Lancaster force, Harris' preferred aircraft type for the pursuit of strategic night-time bombing campaign. The fourth and final chapter section will sum up the expectations that senior Allied commanders held regarding airborne forces and what they could be achieve in Overlord/Neptune.

¹⁵⁵ Frederick Lindemann, Lord Cherwell ('the Prof'), Churchill's chief scientific adviser. Max Hastings, *Finest Years: Churchill as Warlord 1940-45* (London: Harper Press, 2009), p. 83.

¹⁵⁶ Air Marshal Sir Arthur 'Bomber' Harris, C-in-C Bomber Command, 1942-1945. *Ibid.*, p. 247.

I. *The Reaction to German Airborne Operations 1940-1941*

By 1943 Britain had created and retained airborne forces for three reasons: the highly visible success of the German operations 1940-41; the perceived need for such forces to support anticipated invasion operations, and the attitude of General Sir Alan Brooke.

German airborne forces had dramatically spearheaded the Wehrmacht invasion of both Norway in April 1940, then the Low Countries one month later. These operations had led directly to the Prime Minister issuing his call to the War Office to create '5,000' parachute troops on 22 July 1940.¹⁵⁷ A further strategic shock was inflicted in the Mediterranean with the capture of Crete in May 1941. The strengths and weaknesses of large scale airborne operations were displayed during these actions.

The first great strength of airborne forces was facilitated by its tie to airpower – 'great strategical mobility.'¹⁵⁸ Airborne operations could be launched from any airfield within range of the objective. The first airborne operation of the war was part of Weserübung, the German invasion of Denmark and Norway. On 8 April 1940 over 500 Ju 52s carried separate I/I F.J.R. companies to drop on the airfields at Aalborg (Denmark) Fornebu and Sola (Norway), and also to capture the Vordingborg Bridge in a series of coup de main operations.¹⁵⁹ Despite poor weather all objectives were seized although 100 Ju 52s were lost.¹⁶⁰ The airborne troops were reinforced by conventional role infantry landed by the Kriegsmarine while the Fornebu bridgehead was reinforced by II/I.R. 324 landed by follow-on transport aircraft.¹⁶¹ This proved to be highly significant, as the naval landings intended

¹⁵⁷ TNA CAB 120/262 Memorandum from the Prime Minister to General Ismay, 22 June 1940.

¹⁵⁸ The War Office, 'AIRBORNE OPERATIONS PAMPHLET No.1 (1943)' (London, 1943), p. 2.

¹⁵⁹ This long bridge linked the Danish islands of Falster and Seeland with Copenhagen. Tugwell, pp. 40–44.

¹⁶⁰ Sebastian Ritchie, *Arnhem: Myth and Reality* (London: Robert Hale, 2011), p. 25.

¹⁶¹ Robert J. Kershaw, *Sky Men: The Real Story of the Paras* (London: Hodder & Stoughton, 2010), p. 52.

to seize Oslo foundered with the loss of the heavy cruiser *Blücher* and it was troops from the Fornebu landings that captured the city.¹⁶² All of the aircraft flew from German airfields and their landing was a complete surprise for the defenders, a factor which outweighed their small numbers and light arms.

The 'power to effect surprise' was the second great tactical advantage of airborne forces, which in combination with an accurate landing could achieve considerable operational results.¹⁶³ The Scandinavian *coup de main* was repeated with the capture of Fort Eben-Emael and Maas bridges. Here some 414 airborne troops overcame the fort garrison of 750 Belgian troops and also captured two out of three bridges. In 1914 it had taken 60,000 German troops eleven days to capture the Belgian forts and at the cost of 5,300 casualties,¹⁶⁴ while in 1940 it had been seized as if 'in a fairy tale.'¹⁶⁵ Surprise can be the greatest force modifier in infantry combat, and it is worth briefly reviewing recent analysis of its impact on small unit operations by referring to an authoritative recent study.¹⁶⁶

A 1993/1994 MOD study concluded that the three most powerful factors in the battles reviewed were shock/surprise, aggressive reconnaissance and control of the air, of which

¹⁶² Len Deighton, *Blitzkrieg: From the Rise of Hitler to the Fall of Dunkirk* (London: Pimlico, 1979), pp. 82–83.

¹⁶³ The War Office, 'AIRBORNE OPERATIONS PAMPHLET No.1 (1943)', p. 2.

¹⁶⁴ Kershaw, p. 75. Deighton, p. 204. Max Hastings, *Catastrophe: Europe Goes to War 1914* (London: Collins, 2013), pp. 160–164.

¹⁶⁵ *The Diary of a Staff Officer (Air Intelligence Liaison Officer) at Advanced Headquarters North B.A.F.F. 1940* (London: Methuen, 1941), pp. 14–15.

¹⁶⁶ In 1993/1994 the then Defence Operational Analysis Centre reviewed 158 land campaigns from 1914 onwards to isolate the key battlefield factors which 'dominated the probability of success at the campaign level' (Storr, p.49). Rowland and Storr's monographs develop the resulting arguments thoroughly, while the journal article provides a summary of the study. D. Rowland and M.C. Keys, *The Effects of Shock and Surprise on the Land Battle, Volume 1: Main Text* (Defence Operational Analysis Centre, M.O.D., August 1993); David Rowland, *The Stress of Battle: Quantifying Human Performance in Combat* (London: The Stationary Office, 2006), pp. 169–213; Jim Storr, *The Human Face of War* (London: Continuum UK, 2009), pp. 83–106; David Rowland, Dermot Rooney and Jim Storr, 'Shock and Surprise on the Battlefield', *The British Army Review*, 137 (2005), p. 32–40.

the first was the most significant.¹⁶⁷ This element was divided into two, the effects of shock being seen as an outcome of achieving surprise. Surprise in the attack could be achieved in one or more of four ways: being delivered at an unexpected time, from an unexpected direction, using an unexpected method of attack (novel tactics) and finally through an unexpected means of attack (new weapons).¹⁶⁸ One additional highlighted cause of surprise was poor visibility on the battlefield, shielding the approach of the enemy.¹⁶⁹ At the level of the individual the impact of surprise will be physiological arousal, the cessation of ongoing activity and 'attentional blink' – whereby one is briefly rendered incapable as the brain attempts to process the rush of information and stimuli as the enemy suddenly arrives.¹⁷⁰ Airborne operations' direction of attack, means and method of entering the battlefield was still novel during the Second World War; and so certainly capable of achieving the surprise factor.

In terms of command and control, commanders would lack an understanding of wider events, be concerned about their own personal safety if combat had occurred close by, and will focus on operational details outside the area of the surprise to reduce his uncertainty.¹⁷¹ The analysis revealed that shock was the consequence of surprise, and would be manifested in unit efficiency suddenly dropping as men are paralysed into inaction, panic and even rout. The combination of surprise and shock would increase the number of casualties suffered by the defender and reduce the attackers' losses by as much as 60-65%. The study stated that the impact of this sudden assault, named 'shock action', could have the same effect

¹⁶⁷ These three elements formed the premier group. A second group included the presence of significant operational and tactical reserves, superior C3 (command and control), and superior mobility and logistic superiority. The third group contained terrain aspects, commanders' prior experience, and force ratio - which was 'found to be relatively unimportant.' Rowland, Rooney and Storr, p. 137.

¹⁶⁸ Rowland, Rooney and Storr, pp. 34-35.

¹⁶⁹ Rowland and Keys, p. 6.

¹⁷⁰ Rowland, Rooney and Storr, pp. 33-36.

¹⁷¹ Ibid.

equivalent to a force ratio of ten to one.¹⁷² A mere six companies seized Oslo, the headquarters there having fled.¹⁷³ This surprise/shock aspect was airborne forces' greatest strength.

The threat of German airborne forces to the UK loomed large. The uncertainty regarding their scale is witnessed in the imaginary enemy order of battle for exercise Victor, held four months before, a large anti-invasion exercise organised by Brooke as C-in-C Home Forces in January 1941. Brooke was determined to exercise all his formations, with Wehrmacht 'invasions developing all over the coast from Scotland to Devon', including several amphibious tank battalions and supported by the release of phosgene gas.¹⁷⁴ In this scenario, the amphibious forces were supported by no less than fifteen parachute regiments jumping from hundreds of Ju 52s.¹⁷⁵ Brooke was clearly sensitive to the threat posed by German airborne forces, their novel role allowing them to potentially outflank the English Channel.

The successful use of German airborne forces for the invasion of Crete (Merkur) gravely damaged the fortunes of Britain in the eastern Mediterranean. Student's airborne invasion of Crete in May 1941 was a considerable shock for the War Office, just a month after Churchill had been disappointed by a feeble British airborne demonstration on 26 April 1941.¹⁷⁶ Student's XI. Flieger-Korps had overwhelmed 40,000 defenders including 32,000 Commonwealth troops defending the island, killed or captured 13,800, and forced the

¹⁷² Ibid.

¹⁷³ Tugwell, pp. 43–44.

¹⁷⁴ Alex Danchev and Daniel Todman, *War Diaries, 1939-1945: Field Marshal Lord Alanbrooke* (London: Weidenfeld & Nicolson, 2001), pp. 135–136.

¹⁷⁵ TNA PREM 3/496/1, 'Home Forces Exercise "VICTOR", 21/25 January 1941 (control staff and umpires only), passim.

¹⁷⁶ T. B. H. Otway, *Airborne Forces* (London: Imperial War Museum Department of Printed Books, 1990), p. 27.

evacuation by sea of the remaining 18,000 men.¹⁷⁷ Most shocking of all was the intelligence aspect of the Commonwealth defence of Crete, careful interpretation of Ultra decrypts having exposed the Luftwaffe's intentions beforehand. Around the 7 May Freiberg received an Ultra summary that approximately 12,000 parachute and 13,000 airborne troops would be landed at Maleme/Heraklion/Retimo with a further 10,000 be landed from the sea.¹⁷⁸ Even though the British had known Student's men were coming, they were still defeated.¹⁷⁹

A post-action report described the Fallschirmjäger landings, and gave some indication of the impact they made on spectators. 'For the initial dropping of parachutists waves of 9-12 aircraft (Ju 52) were employed. The aircraft flew in open formation of 3 aircraft and disgorged parachutists in a terrifying cloud while still in formation.'¹⁸⁰ The operation forced the RN from a valuable eastern Mediterranean bases with heavy losses.¹⁸¹ Churchill feared that it could be the beginning of a series of Axis airborne invasions:

When the battle joined we did not know what were the total resources of Germany in parachute troops. The 11th Air Corps might have been only one of half a dozen such units. It was not until many months afterwards that we were sure it was the only one.¹⁸²

¹⁷⁷ On 20 May 1941 7.Flieger.Div. descended on Crete the first wave (Meindl's Luftlande-Sturm Regt and FJR 3 landed at Maleme, while the second wave landed FJR 2 at Retimo while FJR 1 dropped on the airfield and town at Heraklion. Rather than some Commonwealth stragglers and Greek units Student's men faced around 50,000 troops evacuated from Greece, including the fresh British 14 Inf Bde, some 25,000 men of 2 NZ Div and 6 Australian Div. The initial landings incurred enormous casualties as they glider and parachute troops landed almost on top of the defenders who vigorously engaged them. A lack of clarity concerning the overall situation, due in the main to poor wireless communications, caused 5 NZ Inf Bde to abandon Hill 107 which overlooked the airfield at Maleme. Student then flew 5.Gebrigs. Div into Maleme and the tide of battle turned. Overwhelming Luftwaffe close air support was also a crucial factor, and countered the few tanks and Bren carriers that the British possessed. The Germans lost some 4,000 KIA, at least 2,500 wounded, 170 Ju 52s and another forty aircraft. WO 201/2652 'Crete - Extracts from Report by an Inter Services Cmtee on Operations 1940 Nov. – 1941 Apr.' Min. of Information, *The Campaign in Greece and Crete* (H.M.S.O., 1942); Maurice. Tugwell, *Airborne to Battle: A History of Airborne Warfare, 1918-1971* (London: Kimber, 1971), pp. 79–119.

¹⁷⁸ TNA WO 201/2652, 'Extract from Report by an Inter-service Committee,' p. 9.

¹⁷⁹ Callum MacDonald, *The Lost Battle: Crete 1941* (London: Macmillan, 1993), pp. 136–139 & p. 159.

¹⁸⁰ TNA WO 201/2659 Crete Report on Air Operations 1941 April and May, p. 20

¹⁸¹ Winston S. Churchill, *The Second World War: Abridged with an Epilogue on the Years 1945-1957*, Abridged ed. (London: Cassell, 1997), p. 427; J.R.M. Butler, *Grand Strategy*. (London: HMSO, 1957), pp. 510–516.

¹⁸² Churchill, p. 429.

His comment reflects again the strength of airborne forces' strategic mobility, able to strike in a wide area thanks to air transport.

Although the British had been ultimately unsuccessful in defeating Merkur, the operation had shown revealed two further characteristics of airborne warfare, and both were weaknesses. First, airborne forces, due to their light scale of arms, were highly dependent on good intelligence regarding the strength of the waiting enemy. The German intelligence failure regarding British deployment and strength in advance of the Crete invasion was to blame for the first day's appalling losses. While only 4,300 airborne troops could be delivered before an airfield could be seized, the German intelligence estimate of Commonwealth/Greek forces on the island was a daunting 12,000 men. In fact close to 50,000 British and Dominion troops were in position.¹⁸³

A fourth feature, and the second highlighted by Merkur, involved the proximity of landing zones for airborne troops. These were Drop Zones for parachutists (DZ) and landing Zones for gliderborne forces (LZ). Once an operation was under way, reinforcement/ resupply DZ/LZ which were not adjacent to the objective (and therefore in the defensive perimeter) would need to be held against enemy action. During Merkur, Once Maleme airfield had been secured as a LZ, Luftwaffe air superiority was fully exploited as a continuous reinforcement of the German bridgehead with Ringel's fresh troops and supplies. This was the catalyst for German victory. The experience in Scandinavia and Student's reckless landing of reinforcements by effectively crash landing Ju52s on Maleme airfield reinforced the 'red herring' that the early capture of an airfield was important.¹⁸⁴ Yet if Student had failed to capture the airfield the weak survivors of the first drops would almost certainly not

¹⁸³ MacDonald, p. 179. Tugwell, p. 91.

¹⁸⁴ Greenacre, p. 198.

have survived. Yet DZ/LZ too close to objectives might well incur severe casualties. During the invasion of Crete the landings took place in broad daylight and very close to, if not on top of, the objectives. The value of daylight held the clear advantage of assisting the transport pilots to find the DZ/LZ, but inhibited the element of surprise and once alerted the British had brought heavy fire to bear on dense formations of aircraft and descending paratroopers.

The fifth factor surrounded the light scale of airborne forces' arms and equipment. Airborne forces were typically lightly armed and this highlighted two requirements for a successful operation: some redundancy of force and relief by conventional role troops. Simply having enough men once assembled after the landing phase to perform the tasks required was vital. Von Sponeck's 22. Luftlande. Div's attempt to capture installations around The Hague in 1940 had failed essentially because a single reinforced battalion had been allocated the task of seizing three airfields.¹⁸⁵ While the allocation of forces at both Rotterdam and Crete were caused by overconfident planning, the principle of maintaining some redundancy was established. Airborne troops would always be short of ammunition, rations and supplies of all types as every item had to be loaded into either a parachute container or glider or carried by the men themselves. Once landed, airborne troops were essentially immobile due to their lack of vehicles; the limited numbers landed being needed to pull light guns or perhaps reconnaissance. Therefore the necessity for relief by heavily-equipped ground units was the second important consideration of airborne warfare. The units which had captured the Belgian Maas bridges and neutralised Fort Eben-Emael had been landed only twelve miles from the border and were relieved by first an engineer and then an infantry regiment

¹⁸⁵ Tugwell, p. 59.

less than twenty-four hours later.¹⁸⁶ The absence of heavy weapons made airborne troops vulnerable to enemy mechanized forces, as witnessed by the impact of 'half a dozen tanks and sixteen Bren carriers' at Maleme, where II/1.FJ. Regt was slaughtered both in the air and on the ground by 2 Black Watch.¹⁸⁷ The diversion of the remaining seaborne reinforcements to Maleme and funnelling all of Ringel's airlanded mountain troops there lifted the pressure off 7.Flieger.Div. What was clear was that relief by conventional role infantry and armour would be needed rapidly by airborne forces once they were committed. The firepower provided by conventional role forces would also be of great use in the support of airborne operations. Bombardment by field and medium artillery would outstrip the range and weight of the light artillery airborne forces were typically provided with, while the assistance provided by tactical air power added a further dimension to the strategic mobility strength. All of the German 1940-41 airborne operations were well supported by dive bomber and strafing fighters. Ten minutes after Koch had landed on the roof of Eben-Emael the Luftwaffe attacked airfields, communications and troop concentrations across Belgium, France and Holland in support of the airborne missions to capture bridge and canal crossings.¹⁸⁸ While these air operations flew in support of the general offensive of conventional role Wehrmacht troops, the *coup de main* was timetabled into the air plan to its benefit.

In summary, the German operations had therefore exhibited five characteristics of airborne operations, two obvious strengths, and three possible weaknesses. Great strategic mobility and surprise were airborne forces strong suite. Thanks to air power airborne forces could strike anywhere within the effective range of their transport aircraft; while the operations in

¹⁸⁶ Tugwell, pp. 54–57.

¹⁸⁷ Tugwell, pp. 99–100.

¹⁸⁸ Tugwell, pp. 57–58.

the Low Countries had shown that comparatively small forces could achieve startling results and paralyse the response of the enemy. Third, on the other side of the coin, intelligence had to be accurate regarding the number and position of defending troops. Next, DZ/LZ had to be close enough to objectives to maintain surprise and be defended as part of an airborne perimeter if needed. However, a landing zone too close to an objective could result in a slaughter. The fifth and final characteristic concerned solutions to alleviate the issue of airborne forces' light scale of arms and lack of vehicles. Landings had to be concentrated to allow troops to quickly form into cohesive fighting units able to move on foot to the objective and defend themselves; while direct early relief by conventional role troops and/or the indirect firepower support of air or gunfire was needed to offset their lack of heavy weapons. All of these factors had been present in the German operations and remained relevant throughout the war.

At this time a German invasion of the UK was still a distinct possibility. The loss of Crete to an ultimately overwhelming enemy airborne invasion contributed to a highly practical document, Military Training Pamphlet No. 50 Defence against Airborne troops, in August 1941.¹⁸⁹ The speed of production of this pamphlet is significant, and shows the concern that the airborne Crete invasion created. Operations on Crete had ended on 28 May and the pamphlet was issued only three months later. The general infantry pamphlet Part VII (Field craft, Battle Drill, Section and Platoon Tactics) had been begun in April 1942, was not completed until October 1943 and not issued until March 1944. This is a useful brief as it shows WO understanding of airborne operations from the defenders point of view and some cognizance regarding how to deal with their threat. The shock of the enemy airborne

¹⁸⁹ The War Office, 'Military Training Pamphlet No. 50, Part I - Defence Against Airborne Troops' (London, 1941).

attack is captured in the somewhat incredulous introductory note of the pamphlet:

It must be realised that, in the transport of men and equipment by air, what is only a possibility to-day may be the accepted method to-morrow. All ranks must therefore be constantly alert to defeat any new machinations of the enemy.¹⁹⁰

The key weaknesses of airborne troops are identified in its sixteen pages, and the importance of taking risks in crushing airborne landings were worth taking which 'would not be justified once the situation has become firm' is emphasized.¹⁹¹ The loss of Maleme airfield haunts the pamphlet, 'the first area to be attacked has hitherto always been an aerodrome or landing ground, the capture of which will give base in which troop carrying aircraft can land.' It later recommends 'suitable sub-units' to rapidly counter landings – perhaps use of the carrier platoon and a company of lorry-borne infantry, future portent of the Wehrmacht quick reaction mobile 'alarm companies' of 1944. The booklet was swiftly produced and reveals that the British Army is aware of the methods needed to defeat airborne landings, and thereby its own Airborne Establishment would have been able to reverse engineer the pamphlet when making its own plans. The whole Crete episode was carefully studied by all three services and a comprehensive report produced around 28 August 1941.¹⁹² It echoed Pamphlet 50. In 'Army Lessons' the report states that an immediate counter-attack was needed within fifteen minutes of enemy airborne troops landing, while light tanks should be quickly employed before the enemy had time to

¹⁹⁰ The War Office, 'Military Training Pamphlet No. 50, Part I - Defence Against Airborne Troops', p. 1

¹⁹¹ The War Office, 'Military Training Pamphlet No. 50, Part I - Defence Against Airborne Troops', p. 6. In the case of the US, the Crete invasion was 'the greatest single impetus to (United States) airborne development and expansion', according to a US Army Historical Division Report. Tugwell, p. 122. Kershaw, p. 136. Timothy Harrison-Place, *Military Training in the British Army, 1940-1944: From Dunkirk to D-Day* (London: Frank Cass, 2000), pp. 8–9.

¹⁹² TNA WO 201/2652, 'Extract from Report by an Inter-service Committee.' From the notes at the front of the file it can be ascertained that the original was destroyed in 1943, and was originally circulated on 28 August 1941.

emplace his anti-tank weapons.¹⁹³ There were also noted guidelines for Britain's own airborne troops. It was advised that paratroopers be dropped from around 500 ft in waves of close formation aircraft to allow them to form up quickly, while glider troops already enjoyed that advantage.¹⁹⁴

Any defenders being subjected to an airborne attack needed to exploit the five characteristics of glider and parachute troops to obtain a victory. If troops were entrenched and had an understanding of the airborne threat, a set of planned drills could well overturn the shock/surprise effect. Fast moving motorised units were needed to reconnoitre any landings and rapidly counter attack as yet unformed airborne formations. DZ/LZ were to be ideally overrun or at least identified and subjected to bombardment, and at all costs the relief of airborne forces by conventional role troops could not be allowed.

Following Merkur Brooke was keen to update his personal understanding of how airborne forces worked, lunching with Brigadier Lindsay Inglis recently returned from Crete. Brooke appreciated the offensive possibilities of airborne forces, as the meeting 'was useful in providing many details of the German methods of air attack'.¹⁹⁵

Brooke remained firmly convinced that airborne troops could assist greatly in the launching of the Second Front.¹⁹⁶ Once appointed the professional head of the British Army, the CIGS, he was therefore the individual charged with overturning the defeats of 1940-41 through a strenuous overhaul of the army. Both John Greenacre and William Buckingham have

¹⁹³ TNA WO 201/2652, 'Extract from Report by an Inter-service Committee,' p. 28.

¹⁹⁴ TNA WO 201/2652, 'Extract from Report by an Inter-service Committee.' 'Lessons Learned from Germans,' p. 53.

¹⁹⁵ 12 June 1941 diary entry. Inglis had commanded 4 NZ Bde during the campaign; he would give evidence in defence of Kurt Student when he was tried at Luneberg for war crimes committed in Crete. Danchev. p. 164; Peter Thompson, *Anzac Fury: The Bloody Battle of Crete 1941*, 2011 ed. (Sydney: Heinemann), p. 331; Correlli Barnett, *Hitler's Generals* (London: Weidenfeld and Nicolson, c1989), p. 476.

¹⁹⁶ Keegan, pp. 102–103. CIGS – Chief of the Imperial General Staff. David French, *Raising Churchill's Army: The British Army and the War against Germany, 1919-1945* (Oxford: Oxford University Press, 2001), p. x.

discussed the counterfactual alternative of a 'figurehead' personality who could have championed the airborne project. A precedent can be seen in the chiefs appointed to lead Combined Operations Command (COC). First Sir Roger Keyes (a Great War combined operations pioneer) and then Lord Louis Mountbatten, the latter having a clear task set out by Churchill to develop amphibious warfare techniques and a seat at COS meetings.¹⁹⁷ This role had previously been charged with the task of developing the equipment and techniques needed to facilitate amphibious landings, uniting all three services in the effort to secure invasion bridgeheads.¹⁹⁸ As the airborne project was similarly a new field this contention appears to have some merit. Yet airborne warfare was essentially a choice while seaborne warfare was woven into the culture and history of British expeditionary warfare.¹⁹⁹ Also there was no alternative for the massive forces required to invade mainland Europe from their UK island base but sea transport.²⁰⁰ Then in the face of a hostile coast amphibious assault warfare techniques would be needed to overcome any defences.

Buckingham suggested Leo Amery, the Secretary of State for India, while Greenacre believed that a neutral line could perhaps have been followed with the appointment of a senior naval officer.²⁰¹ He went on to suggest that as no one was appointed, perhaps there was actually no suitable candidate available. But was one needed? This study asserts that airborne forces did in actual fact have a champion, in the form of the CIGS himself. Brooke

¹⁹⁷ Bernard Fergusson, *The Watery Maze: The Story of Combined Operations* (London: Collins, 1961), pp. 47-48, pp. 88-90. Butler, pp. 250-251.

¹⁹⁸ Andrew Roberts, *Masters and Commanders: The Military Geniuses Who Led the West to Victory in World War II* (London: Penguin, 2009), p. 103.

¹⁹⁹ *The Oxford History of the British Army*, ed. by David G. Chandler and Ian Beckett (Oxford: Oxford University Press, 2003), pp. xvii-xviii.

²⁰⁰ The shipping used in NEPTUNE was immense – 1,213 naval combat vessel; 4,126 landing ships and craft; 736 ancillary ships and craft and 864 merchant ships. L. F. Ellis, *Victory in the West*. (London: H.M.S.O., 1962), p. 507.

²⁰¹ W.F. Buckingham, 'The Establishment and Initial Development of British Airborne Forces June 1940-January 1942' (unpublished Ph.D., Glasgow, 2001), p. 300; J.W. Greenacre, *Churchill's Spearhead: The Development of Britain's Airborne Forces during the Second World War* (Barnsley: Pen & Sword Aviation, 2010), p. 203.

frequently recorded his commitment to this new force,²⁰² on 31 October 1941 he visited Gale's parachute units and 'left very impressed by the possibilities of airborne forces'.²⁰³ On 8 January 1942 Brooke instructed the Vice CIGS that the Airborne Division 'be pushed to the utmost and given preferential treatment'.²⁰⁴ This led to his defiance of Churchill's decision to disband 1 Airborne Div after 18 November 1942, stating that he would see such a valuable formation used for long range motorized strikes rather than disassemble it.²⁰⁵ When 6 Airborne Div was formed it represented Brooke's successful defence of the concept of airborne forces used *en masse* in the face of determined RAF opposition. Sir Arthur Harris had attempted to eliminate the possibility of Bomber Command aircraft types being diverted to airborne forces, and Sir Charles Portal attempted to have 1 Airborne Div disbanded.

This challenge arose as an air transport capability for airborne formations 'on the cheap.' Here the theme of adaption can be seen but with deleterious effect. From the outset it was decided that aircraft from Bomber Command would carry paratroopers and tow gliders, with front line bomber squadrons being withdrawn and quickly trained in air transport methods.²⁰⁶ This policy confirmed in November 1941 as 1 Para Bde and 1 AL Bdes were created. 'All heavy bombers at home will be modified to allow 'rapid conversion to troop transports'. With enough aircraft to carry 5,000 men, and with enough planes to drop 2,500 paras 'at one time'.²⁰⁷

²⁰² Danchev and Todman, p. 201, pp. 337–338; David Fraser, *Alanbrooke* (London: Harper Collins, 1982), p. 164.

²⁰³ Danchev and Todman, p. 195.

²⁰⁴ Danchev and Todman, p. 218.

²⁰⁵ TNA CAB 79/24, COS Meeting Minutes October-December 1942, 321st Meeting, 19 November, p. 124.

²⁰⁶ TNA WO 32/9778, Airborne Policy. 10 January 1941 – 'AIR-BORNE TROOPS – POLICY FOR' (S.D.4. /196).

²⁰⁷ TNA WO 32/9778, Airborne Policy. 'AIRBORNE FORCES – POLICY' (dated 2nd November 1941)

In addition to the numbers of aircraft that would be required, the RAF was also concerned that in terms of technique and pilot skill it started with a completely blank page. As one senior RAF officer stated in 1940:

There are very real difficulties in this parachute business. We are trying to do what we have never been able to hitherto, namely to introduce a completely new arm into the Service at about five minutes' notice and with totally inadequate resources and personnel. Little-if any- practical experience is possessed in England of any of these problems and it will be necessary to cover in six months the ground that the Germans have covered in six years.²⁰⁸

In terms of doctrine the RAF as a service was committed to the night bomber offensive, and saw the development of airborne transport assets as an unnecessary diversion, the early war concept being that Bomber Command's aircraft would be used in the airborne role when needed.²⁰⁹ At times they showed a 'frankly resentful' attitude.²¹⁰ In February 1942, the company carrying out operation Biting was carried by 51 Squadron of Bomber Command, as the Air Ministry had determined the newly formed 38 Wing²¹¹ would be non-operational.²¹² A proposed airborne element in support of Rutter would have required two squadrons, the first variation of what would become Jubilee, while later exercise featuring both brigades would have needed 360 aircraft. Harris became vehemently opposed to such a diversion of effort, which would have effectively curtailed his command's bombing effort.²¹³ The Air Ministry and RAF saw the pilots required to fly the gliders needed to carry the complete 1st

²⁰⁸ Newnham, p. 7.

²⁰⁹ 'The next 300 Whitleys off production will incorporate this modification, which does not interfere with bombing performance.' TNA WO 32/9778, Suggested Joint memorandum by the General Staff and Air Staff on Airborne Forces, 2 May 1941, p. 1.

²¹⁰ Maurice Newnham, a RAF officer, reflecting on the RAF's releasing resources for the development of airborne forces in the early years of the war. Ibid., p. 6.

²¹¹ 296 and 297 Squadrons formed 38 Wing. TNA NA AIR 8/1386, 38 Group Progress Reports. February Report, 22 March 1942.

²¹² Otway, p. 50 and p. 66.

²¹³ Port. 42 and 42a (1942) – C-in-C to CAS - Effects of operation 'Rutter' on bomb effort - REPLY 13/7/42; 46 and 46a (1942) – C-in-C to CAS - (Paget) Wants Bomber Command help in exercise of airborne forces - FORWARD, 5/8/42. Port. FOLDER 9, Correspondence with C-in-C Bomber Command 1940 – 1942, Portal Papers, Christchurch College, Oxford.

Airborne Division as a huge potential drain on Bomber Command operations²¹⁴, while the creation of a separate RAF transport Group would be ‘fantastic’²¹⁵. The production of the gliders had caused further concern at Air Ministry and Ministry of Aircraft Production. Early construction schedules were ambitious but rapidly fell behind schedule, while Lord Cherwell pointed out the large number produced so far would need the complete diversion of Bomber Command to provide the 850 bombers needed to lift the airborne division.²¹⁶

Meanwhile on the other side of the argument Major-General ‘Boy’ Browning petitioned Brooke that the build-up of air assets to support the airborne forces was ‘disastrously slow.’²¹⁷ The cost of airborne forces was also being discussed in the wider political sphere, Clement Atlee, the Deputy Prime Minister, questioned the Prime Minister by letter why airborne forces were assembled as a division and the vast number of gliders they needed.²¹⁸

By autumn 1942 Brooke and Portal’s views were completely divergent²¹⁹ regarding the future of the airborne division and any further growth in airborne forces,²²⁰ and the matter was set before Churchill. The Prime Minister sided with the Air Ministry, wishing to see a consolidation of airborne forces and a halt on Horsa glider production²²¹, and further air

²¹⁴ TNA CAB 120/262, Development of Airborne Forces, Chief of the Air Staff’s paper to the Prime Minister, 25 September 1942.

²¹⁵ TNA AIR 8/661 Airborne Policy, December 1942 to July 1943. Report by the Air Officer Commanding-in-Chief, Bomber Command, 11 September 1942.

²¹⁶ TNA CAB 120/262, Development of Airborne Forces. Letters between Lord Cherwell and the Prime Minister and General Ismay, 7-9 November 1942.

²¹⁷ TNA CAB 120/262, Development of Airborne Forces. The Present State of the Airborne Division, 16 April 1942, p. 3.

²¹⁸ TNA PREM 3/499/9, Minutes between the PM and Atlee 1942. Letter from the Deputy Prime Minister to the Prime Minister, 10 July 1942.

²¹⁹ Sir Charles Portal, Chief of the Air Staff (CAS). Brooke recorded that in this difficult meeting Portal was ‘convinced that Germany can be defeated by bombing alone’. Alan Brooke, Alex Danchev and Daniel Todman, *War Diaries, 1939-1945* (London: Weidenfeld & Nicolson, 2001), pp. 332–333.

²²⁰ TNA AIR 8/661, Airborne Policy, December 1942 to July 1943. Chiefs of Staff Committee, Airborne Forces Report, 23 October 1942.

²²¹ TNA CAB 120/262, Development of Airborne Forces, undated draft instruction issued through General Ismay by the Prime Minister. NA AIR 8/166, 38 Airborne Policy, December 1942 to July 1943. Letter from the Prime Minister to the Minister of Aircraft Production, 18 November 1942. TNA AIR 8/1386, 38 Group Progress Reports. September Report, 15 October 1942.

asset commitment was halted in October. However Brooke would not countenance 1 Airborne Div being broken up and after the Casablanca conference even called for an additional division for Western European operations. The situation was resolved in April 1943 when the 'misunderstanding' concerning a 23 October discussion paper. This had been produced to assist Churchill in making his decision on airborne forces. It had included an organizational chart which had clearly shown four battalions; therefore an airborne division would have needed 730 rather than 630 gliders to lift it, with the consequent cost of the extra glider pilots needed.²²² Brooke manoeuvred around the difficult glider pilot issue by stating that only two airlanding battalions would be in each brigade.

No other champion could have done more, and possibly no other candidate could have been resilient enough in that situation. Greenacre rightly points out that as the RAF grew in resources airborne forces remained under-resourced,²²³ but at key points of development (1941-2) the aircraft to all intents and purposes did not exist.

Yet Brooke was not a natural proponent of 'special forces', and was no supporter of the Commando concept. On 28 August 1941 he met with Roger Keyes and stated his wish as C-in-C Home Forces to 'dispense with commandos and to carry out raids with my own formations'.²²⁴ Indeed, when the Royal Marine (RM) Division was reorganised Brooke even suggested that the considerable number of Army Special Service Commandos be absorbed into the Royal Marines, an act which would have severed the Army's investment in

²²² TNA AIR 8/661, Airborne Policy, December 1942 to July 1943. Chiefs of Staff Committee, 21 April 1943; Otway, p. 94.

²²³ Greenacre, pp. 200–201.

²²⁴ Danchev and Todman, p. 179. In one of his italicized asides added in 1958, Brooke states that he had always believed that the Special Service Commandos were unnecessary and that each infantry division should have maintained a battle patrol to carry out any commando type tasks as required. p. 185.

Commandos all together.²²⁵ It is unlikely that the Commandos could have survived with Brooke as the CIGS if he had not been content with their role being consolidated as light amphibious assault troops. Yet in the case of airborne forces from his appointment as C-in-C Home Forces Brooke shielded and drove forward their development.

II. The Theoretical Basis for British Airborne Operations and Hard-earned Experience 1940-43: Husky and its Aftermath

This, the largest chapter section will outline the doctrinal development of British airborne forces from early 1941 to late 1943. It will show the learning path from Bruneval's success was as primarily a propaganda coup through to the gaining of hard-won experience of large scale operations with the problems which affected Ladbroke and Fustian, the two operations which supported the invasion of Sicily.

Airborne forces had been dismissed by the British army prior to the Second World War. The then Lieutenant-General Archibald Wavell (GOC 2 Div)²²⁶ had observed the September 1936 Kiev manoeuvres by the Soviet army during which 1,500 paratroopers were dropped.²²⁷ Wavell's final report focussed on Soviet mechanized capability, and judging from his scanty comments he clearly viewed the airborne operation as a side show. He reported 'its tactical value may be doubtful', having noted the length of time it took the parachutists to regroup after the drop and the vulnerability of their close formation low-flying aircraft.²²⁸ The general shortage of aircraft at this time also barred a foray into the field of airborne warfare. On 25 November 1936, J.M. Speight of the Air Ministry wrote a four page letter to

²²⁵ TNA WO 106/4199, COS Cmtee Meeting, 2 July 1943.

²²⁶ Field-Marshal Sir Archibald Wavell enjoyed a long and illustrious active army career that began with service in the Boer with 2 Black Watch in 1901 and ended as in 1948, having been Viceroy of India. During this time, as GOC 2 Div, C-in-C Middle East and C-in-C India, Wavell influenced the British airborne project. John Keegan, *Churchill's Generals* (London: Cassell, 1991), pp. 70-88.

²²⁷ Interestingly, Richard Gale was with 2 DCLI as part of Wavell's 2 Div from January 1936 for twelve months; however his memoirs make no mention of discussing the Soviet troop with his divisional commander. Richard Nelson Gale, *Call to Arms: An Autobiography* (London: Hutchinson, 1968), pp. 85-91.

²²⁸ TNA WO 32/4157, Official Visit to Soviet Army Manoeuvres 1936 (Major-General A.P. Wavell), pp. 4-11.

the Under-Secretary of State for War summarising the conditions the Ministry considered were needed for a successful parachute drop of troops. He closed by stating that the Air Council considered the provision of aircraft to carry paratroopers 'would be difficult to justify' as the aircraft industry was struggling to meet the minimum requirements of the RAF at home.²²⁹ Before 1940 the UK had no interest in the possibilities of airborne forces, no suitable aircraft and therefore no doctrine.

From their earliest creation airborne forces had been viewed as a key element in the eventual invasion of NW Europe that would herald the final defeat of Nazi Germany. As early as January 1941 an airborne component was planned to support each of the 'invasion corps' which would land to secure victory once the economic strategy forced upon the British Empire by the fall of France had taken effect.²³⁰ Later, the policy of November 1941 proposed forces larger than a standard three brigade division.²³¹ This planned for four brigade groups (two parachute and two airlanding/glider) to be used to support a rapier-like mechanized invasion.²³² Their role was perceived as the capture of limited key locations, such as enemy aerodromes, ahead of the advancing conventional role forces.²³³ A second airborne division had been actively in discussion between the AM and WO since July 1942. During this period the VCIGS, General Archibald Nye and the Air Vice-Marshal John Slessor (Head of RAF Policy) had been discussing the possible needs Roundup might require.²³⁴

Brooke's October 1942 statement to the COS made clear the value of an airborne

²²⁹ TNA WO 32/4371. Use of Parachutes in the Army 1935-1938. Letter from J.M. Speight to the Under-secretary of War, 25 November 1936.

²³⁰ TNA WO 32/9778 Airborne Policy. Air-borne Troops – Policy For, 10 January 1941. Butler, pp. 209–217, 260–261.

²³¹ *Handbook on the British Army 1943*, ed. by Chris Ellis and Peter Chamberlain (Military Book Society, 1974), p. 23.

²³² TNA CAB 66/15/42. Memorandum from the Prime Minister, 26 March, 1941.

²³³ TNA WO 32/9778 Airborne Policy. COS (41) 91 (O), 3 November 1941.

²³⁴ Roundup was a planned operation for a rapid invasion of France in the event of either Germany or the USSR suddenly collapsing. Extract of 20 July 1942 C.O.S. AIRBORNE FORCES (C.O.S. (42) 186 (O) and 346), 20 July 1942.

contribution in support of amphibious invasion operations, even as the dispute over the provision of aircraft for airborne forces raged on.²³⁵

During this period Britain's new airborne troops, like the commandos added value as a propaganda tool by carrying out the Biting raid on a German radar station in northern France. This was a useful source of good news at a point when the British Army's fortunes were at their lowest. Between 1 January and 15 July 1942 Commonwealth forces had lost around 180,000 men, almost three times as many as the number lost during the fighting in France and the Low Countries during 1940. Churchill faced considerable personal political pressure during the first six months of 1942 due to the succession of defeats.²³⁶ He invited a Vote of Confidence from the Commons, the debate beginning on 27 January 1942 as General Percival retired onto Singapore Island.²³⁷ When the island fell, even Brooke despaired:

Burma news now bad. Cannot work out why the troops are not fighting better. If the army cannot fight better than it is doing at present we shall deserve to lose our Empire!²³⁸

The depth of concern regarding the performance of the army at the highest level can be seen in two letters written in July 1942. These letters show the esteem the new Special Forces were held in. The Deputy Prime Minister Clement Attlee wrote to Churchill on 10 July privately airing his concerns about various decisions made by the armed forces.²³⁹ Churchill's

²³⁵ David Hall, 'The Birth of the Tactical Air Force: British Theory and Practice of Air Support in the West, 1939-1943' (Linacre College Oxford, 1996).

²³⁶ Winston S. Churchill, *The Second World War: Abridged with an Epilogue on the Years 1945-1957*, Abridged ed. (London: Cassell, 1997), pp. 568-76.

²³⁷ Churchill, pp. 515-18, 524.

²³⁸ Brooke wrote on 18 February 1942, three days after Singapore had fallen. Alex Danchev and Daniel Todman, *War Diaries, 1939-1945: Field Marshal Lord Alanbrooke* (London: Weidenfeld & Nicolson, 2001), p. 231.

²³⁹ TNA PREM 3/499/9, Minutes between the PM and Atlee 1942. Letter from the Deputy Prime Minister to the Prime Minister, 10 July 1942. Clement Attlee served Churchill as Deputy Prime Minister in his War Cabinet, leading the important contingent of Labour politicians and acting as 'a solid bulwark' for the Prime Minister. Max Hastings, *Finest Years: Churchill as Warlord 1940-45* (London: Harper Press, 2009), pp. 10-11.

answer to the question whether commandos are 'still regarded as aberrations from the norm' revealed his annoyance with the 'orthodox school', but cautioned Attlee not to be too hard on the Army:

I agree with you about Commandos, and I have myself rescued them from the orthodox school. Most British authorities hold that it is bad for an Army to differentiate between Storm troops and the rest. Certainly the Germans have profited by it. One must take care, however, not to rot the Army by making out that only Commandos can fight.²⁴⁰

Throughout the first eight months of 1942 Churchill urgently needed good news about the progress of the war, especially situations where the army had confronted the Wehrmacht and gained even the smallest victory. Clement Attlee believed that 'he was always looking around for "finest hours", and if one was not immediately available his impulse was to manufacture one.'²⁴¹ The success of the Bruneval raid was positive news in every newspaper.²⁴² The Times included two articles on 2 March 1942 celebrating the raid. The first stated that the paratroopers had faced 'strong opposition' but excellent planning had won the day; while the second emphasised how Frost's men had stalked and overwhelmed the enemy, included a quote from the Major, and pointed out that the actual attack on the radar station building was led by a former Fleet Street man, Lieutenant Peter Young.²⁴³ Importantly the USA reported it favourably, the New York Times reviewing the importance of the technology seized as well as the daring of the raid.²⁴⁴ Like the commando raids, the value of Biting had shown allies and enemies alike that British soldiers could face the

²⁴⁰ TNA PREM 3/499/9, Minutes between the PM and Attlee 1942. Personal minute from the Prime Minister to the Dominions Secretary 29 July 1942

²⁴¹ Alex Danchev, 'The Central Direction of War, 1940-41', in *Sword and Mace: Twentieth Century Civil-Military Relations in Britain*, ed. by John Sweetman (London: Brassey's, 1986), pp. 57-78 (p. 58).

²⁴² 'The Official Communique', *The Scotsman* (1921-1950); 2 March 1942, pg. 5, 'Para leader tells the Story', *The Daily Mirror*. (London, 2 March 1942), p. 13.

²⁴³ 'Parachutists In Action', *The Times* (London, 2 March 1942), 49173 edition, p.4, 'Taken by Surprise', *The Times* (London, 2 March 1942), 49173 edition, pp. 4-5.

²⁴⁴ 'RAIDERS VS. RADIO', *New York Times* (Mar 15, 1942), p. 8

Wehrmacht and if only on a small scale, secure victory. However, Biting had been a very diminutive operation, just one company had been used to surprise a small objective and then extraction had been by sea. While the success of the operation was lauded, it by no means validated the concept of large-scale, formation-seized British airborne operations against a prepared and numerous enemy.

A comprehensive airborne doctrine pamphlet was not issued by the War Office until May 1943, and until Sicily all British airborne operations had been on a small scale.²⁴⁵ In the wider context the British Army struggled to promulgate consistent doctrine amongst its formations during the War,²⁴⁶ though an accepted battle-winning approach had been adopted by the time 21 Army Group took part in the 1944-45 North-Western European campaign. The nature of airborne warfare made its practice contrary from Montgomery's 'Colossal Cracks' approach.²⁴⁷ The style of battle he had adopted since the battle of Alam Halfa emphasised careful planning, the use of massive artillery and airpower preparation, and the restriction of casualties as a means of preserving morale. With few heavy weapons and landing in close proximity to their objectives, the reality of airborne assault meant this policy could not be applied. Airborne forces were therefore divergent when compared to how the rest of Second Army would fight on D-Day, where the Combined Fire Plan would be substituted for the 'Colossal Cracks' massive RA preparation. Some kind of nascent airborne doctrine was required.

²⁴⁵ These operations were: COLOSSUS (9 February 1941) – thirty-eight commandos; BITING (27 February 1942) – C Coy 2 Para Bn; FRESHMAN (17 November 1942) – thirty engineers. In Tunisia, 1, 2, 3 Para Bns dropped in separate operations on 16, 12 and 29 November respectively. Barry Gregory, *British Airborne Troops* (London: Macdonald and Jane's, 1974), pp. 73–86.

²⁴⁶ Timothy Harrison-Place, *Military Training in the British Army, 1940-1944: From Dunkirk to D-Day* (London: Frank Cass, 2000).

²⁴⁷ S. Hart, *Colossal Cracks: Montgomery's 21st Army Group in Northwest Europe, 1944-45*. (Mechanicsburg, Pa.: Stackpole Books, 2007).

A close reading of this pamphlet reveals that the lessons emphasised are typically the issues more apparent to an opponent, for example the effect of shock and surprise, the importance of beginning an operation with a strong first lift and the value of close air support. Factors invisible to an army that has not yet staged but only witnessed large scale airborne operations them, such as planning and combined training, will be seen later when the digestion of the lessons learned from Operation Husky will be assessed. The pamphlet is workmanlike and speaks for its self, but it is important to review its treatment of the five characteristics highlighted by the German experience. It is important for this study as it provided Gale and 6 Airborne Div with doctrine to plan for D-Day.

The pamphlet highlighted from the outset the strategic mobility of airborne troops, being able to strike up to 500 miles from their bases 'given adequate and suitable airfields.'²⁴⁸ The power to surprise the enemy is also highlighted. 'The use of airborne forces behind enemy forward troops may cause the latter to think some disaster has occurred and thus reduce their powers of resistance. It creates alarm on the lines of communication and may force commanders of reserves into unsound action.'²⁴⁹ The opportunity provided by the hours of darkness for landings, to increase the shock-surprise effect and reduce casualties, is explored. Frost's C Coy of 2 Para Bn successfully seized crucial German radar components in the Bruneval raid (Biting). Apart from capturing German radar technology and boosting home morale, this raid also showed that a successful night drop could be performed if the operation was well planned.²⁵⁰ However, a night drop was fraught with the risk of a scattered landing, which could inflict enormous losses on a parachute unit before even a

²⁴⁸ The War Office, 'AIRBORNE OPERATIONS PAMPHLET No.1 (1943)' (London, 1943), p. 2.

²⁴⁹ The War Office, p. 3.

²⁵⁰ Even the well-executed Biting suffered from some scattering, as half of one of the three groups was dropped two miles from the DZ. Richard Nelson Gale, *With the 6th Airborne Division in Normandy*. (London: Sampson Low, Marston & Co., 1948), p. 21.

shot was fired.²⁵¹ Also the preference for landings from the sea to be carried out at first light effectively dictated airborne forces to develop a night time capability. The 1943 pamphlet discussed the advantages and disadvantages of night landings under three different headings. Notably the section on 'time of attack' advocating seizing objectives by night and later reinforcing in daylight, the method that would be used on D-Day as Mallard doubled the number of men in the bridgehead.²⁵²

On the subject of intelligence, the pamphlet lacks any firm statement as to the importance of accurately gauging the strength of the enemy's defending forces. Pages 33-35 are highlighted in the contents as the section dealing with 'Intelligence', but deal with the issues of maintaining secrecy around planned operations, communications on approach to a landing and once landed, and 'wireless layout'.²⁵³

In terms of the positioning of DZ/LZ, the 1943 pamphlet proposing that one zone be maintained for every brigade in action.²⁵⁴ A second important consideration here was the difference in characteristics between airlanding and parachute troops. Paratroopers could be dropped onto almost any terrain if the force commander was prepared to accept increased landing casualties. Airlanding troops required at least a roughly flat landing area for each glider to make a reasonably controlled landing. While paratroopers offered flexibility in DZ choice, airlanding soldiers could be delivered as readily concentrated sub-units ready to fight – in 1944 typically a platoon in each Horsa glider.²⁵⁵ The 'Choice of

²⁵¹ This issue will be discussed further in the next chapter section regarding the state of doctrine post-Husky.

²⁵² Paragraph 10. – 'Night operations'; 31. 'Time of attack' and 63. 'Reconnaissance and preparation of dropping and landing zones.' The War Office, p. 4, 11–12 & 25.

²⁵³ The War Office, pp. 33–35.

²⁵⁴ The War Office, pp. 30–31.

²⁵⁵ The War Office, pp. 5–6. The Operation Deadstick coup de main party comprised six platoons in six Horsa gliders. SHRIV CONF. 4073 '5 Parachute Brigade operations in Normandy. June to September 1944', p. 4.

dropping zones and landing zones' section details the approximate space needed to land units in a concentrated fashion, and the importance of close consultation with the RAF.²⁵⁶

Much is given over to the issue of alleviating airborne forces' lack of heavy weapons:

Differences between the tactics of airborne and other troops are due to the relatively weak strength of airborne forces, their lack of heavy supporting weapons, shortage of mechanical vehicles and to the fact that airborne troops have to fight the entire battle exposed to enemy attacks from every direction.

It is important that they should be used for tasks where:-

- (a) The enemy defences are weak.
- (b) Heavy air support can be given.
- (c) Motorised mobility is not needed.²⁵⁷

The 1943 pamphlet called for 'an additional 25 per cent' to be added to account for scattered landings, and 'in order to take the fullest advantage of surprise, the first wave should be as strong as possible.'²⁵⁸ Under 'rules for employment' the pamphlet also gave some idea for balancing forces for airborne planners by pointing out that a landed parachute battalion was the equivalent of 'two German rifle companies.'²⁵⁹ Surprise was a great force-multiplier, but a practical number of troops were needed to complete the airborne tasks set. Also, the vulnerability of airborne forces to an armoured attack was outlined, 'airborne forces possess few anti-tank weapons. Except in good tank-hunting country, they should not be ordered to operate near enemy armoured reserves.'²⁶⁰

The pamphlet's passage on 'liaison with the main forces' emphasises the importance of the link-up between airborne and ground forces. 'Nothing which would add to the liaison between the forces must be neglected.'²⁶¹ Assuming that the airborne units have sufficient heavy weapons and uninterrupted air reinforcements and resupply, the pamphlet

²⁵⁶ The War Office, pp. 14–16.

²⁵⁷ The War Office, p. 27.

²⁵⁸ The War Office, pp. 10–11.

²⁵⁹ The War Office, p. 7.

²⁶⁰ The War Office, p. 3.

²⁶¹ The War Office, p. 18.

maintained that landed troops would 'not normally be required' to operate unsupported for up to four-six days.²⁶² Given the probable intensity of enemy resistance to invasion operations this was optimistic, and again perhaps reflected the German success on Crete in which airborne forces had seemingly proved unstoppable.

Other important considerations surrounded the need for effective communications and air power: resupply and close air support. The pamphlet details the organisation of how signals should be organised, linking in conventional role forces and the RAF. The pamphlet clearly explains how the RAF should be 'consulted' at each stage and at one point makes their role clear, paragraph 8. 'Dependence on the RAF:'

Since the RAF carry, protect and support the airborne troops, no airborne operation can be a success unless the soldier and airman plan, prepare and train for every stage together. There must be complete identity of purpose. The two services must not be thought of as two bodies acting in harmony but as a force with one object and one commander.²⁶³

This paragraph has nothing else to say about how one commander should be appointed, nor who will maintain control once the airborne troops have landed. This lack of clarity reflects the tension between the army and the RAF regarding airborne forces and possibly a lack of experience in formation level operations.

The 1943 booklet may have been available to contribute to the planning of Operations Ladbrooke and Fustian,²⁶⁴ but as 1 Airborne Div arrived in N. Africa in early May 1943 it is unlikely that it was issued to all units in time for operations.²⁶⁵ The pamphlet represented the consolidation of British airborne doctrinal thinking at the midpoint in the war and before major offensive operations began. Richard Gale would have played a role in its development

²⁶² The War Office, 'AIRBORNE OPERATIONS PAMPHLET No.1 (1943)', p. 30.

²⁶³ The War Office, p. 3.

²⁶⁴ The War Office.

²⁶⁵ Richard Mead, *General 'Boy': The Life of Lieutenant General Sir Frederick Browning* (Barnsley: Pen & Sword Military, 2010), p. 88.

as Director of Staff Duties for Air at the War Office, which retained 'final decisions and dissemination of tactical doctrine' after consultation with the Airborne Forces Depot.²⁶⁶

It will be of use to compare the May 1943 pamphlet's provisions to some of the aspects of the Ladbroke operation. This operation was imperilled by a lack of combined air-airborne rehearsal preparation, poor intelligence and inexperienced air crews, but saved by the surprise/shock effect and an early relief by conventional role troops advancing from the sea. Brigadier G.F. 'Hoppy' Hopkinson had been an early member of the Airborne Establishment and must have contributed to the ideas that formed the spine of the May 1943 pamphlet.²⁶⁷ Seemingly in his haste for 1 Airborne to win its spurs he chose to discard tenets of the 1943 pamphlet.

Ladbroke and Fustian were both brigade-sized operations and suffered from the same three damaging characteristics. Through poor briefing and pilot training both were effectively paralysed by the wide scattering of the landings; the two bridges were seized through the determination of the few men who landed close to the objectives; later the beleaguered defenders were relieved by conventional seaborne forces in the nick of time. The losses in both operations were very high, as the US 82 Airborne Division also suffered. On its second operation to Gela on the night of 10 -11 July twenty-three aircraft and 410 men were lost to Allied round/naval fire, when they were mistaken for enemy bombers. Churchill got wind of the heavy Husky airborne losses and extracted the information from Portal. As of 11 August the losses amounted to 1,100 officers and men missing from 3,637,

²⁶⁶ 'The Functions of the Airborne Forces Depot and Development Centre', 12 June 1943. T. B. H. Otway, *Airborne Forces* (London: Imperial War Museum Department of Printed Books, 1990), pp. 425–26. Gale, *Call to Arms: An Autobiography*, p. 123.

²⁶⁷ Victor Dover, *The Sky Generals* (London: Cassell, 1981), pp. 68–83. Brigadier George 'Hoppy' Hopkinson was certainly a 'thruster' (see chapter four). He joined the Army in 1915 and after gaining a degree at Caius College Cambridge pursued a successful military career. In 1940 he commanded a special GHQ Reconnaissance unit and one of the early airborne pioneers.

approximately thirty per cent of the total men involved. In case of 1 AL Bde (Ladbroke 9-10 July) many men were drowned when the tug pilots of XII US Troop Carrier Command cast off their gliders over the sea, sixty out of 140 crashing into the water. 1 Para Bde (Fustian 13-14 July) was scattered widely due to poor aircraft routing and navigation errors, twenty-seven C-47s even returned to their African bases with their passengers after becoming completely lost or deterred by Flak. Considering both forces were relieved by ground forces in under twenty-four hours and faced what turned out to be unenthusiastic opposition this was a terrible cost.²⁶⁸

The first factor regarded realistic planning intertwined with the maintenance of a cohesive and common approach shared by the relevant generals. In the case of the Husky operations and 1 Airborne Div this was not so. The influence of personalities was also at work here. Hopkinson was the division's new commander and was an enthusiastic exponent of the use of the glider in airborne operations. This can be seen in his post-action report concerning Ladbroke/Fustian in which he points out the advantages of the glider over the parachute, even to the point of suggesting an alternative divisional structure in an appendix at the end.²⁶⁹ During the build-up to the invasion of Sicily he presented a plan to Montgomery concerning how the 1 AL Bde could help Eighth Army's advance by seizing the Ponte Grande Bridge as it pushed from the beaches at Cassibile to Syracuse. As operations developed later, 2 Para Bde would be dropped to mask off the town of Augusta while 1 Para Bde would capture the Primasole Bridge to allow the advance on the coast road.²⁷⁰ Montgomery

²⁶⁸ Christchurch Portal Papers (Port.) FOLDER 3, Prime Minister's Minutes; Jan.-Dec. 1942. No.20, PM to CAS, Airborne losses in HUSKY, No.20a, CAS to PM, No.20c, PM to CAS, 29 July – 11 August 1943. TNA CAB 106/691, 1st Airborne Division in Sicily Report. 10 August 1943 p. 2. TNA WO 204/4220, Airborne Employment – Operations and Movement of Troops. Report on Airborne Operations pp. 3-4.

²⁶⁹ TNA CAB 106/691, 1st Airborne Division in Sicily Report. 10 August 1943, Conclusions Section.

²⁷⁰ The 2 Para Bde operation was cancelled as Eighth Army advanced to Augusta before the operation could be mounted. Ibid., pp. 1-2

accepted the plan as it provided a solution to an obstacle that would have hindered his advance.²⁷¹

Rivalry at the top of the airborne chain of command damaged the formulation of an effective plan at this point. Hopkinson had managed to avoid Browning, who was now his rank equal, during his discussions with Montgomery to maintain his ownership of the operation. This extended to disappearing from his HQ when Browning visited to discuss future operations.²⁷² Such was the ambitious Hopkinson's determination to get his previous command, 1 AL Bde, into action that he threatened Lieutenant-Colonel Chatterton of the Glider Pilot Regiment with the sack when the latter pointed out that the landing zones were 'pretty stiff', being rock strewn and edged with stone walls.²⁷³ Why would Hopkinson not involve his former divisional commander in the planning process? Hopkinson had won considerable personal acclaim as the commander of a GHQ Recce unit during the disaster in France and won fame as managing to save his unit's transport.²⁷⁴ He had joined 1 Airborne Div in November 1941 with the conversion of 31 Indep Inf Bde as one of Browning's original two brigadiers, Gale being the other with 1 Para Bde. He would have worked closely with Boy on the development of 1 Airborne Div and airborne planning generally. The detachment between the two men points to either Hopkinson being determined to gain personal recognition for a Ladbroke/Fustian success, rather than allow Browning to claim credit, or a break-down in their personal relationship. In either case it does not reflect well on Browning's style of leadership that this situation had been allowed to develop.

²⁷¹ Maurice Tugwell, *Airborne to Battle: A History of Airborne Warfare, 1918-1971* (London: Kimber, 1971), pp. 156-57.

²⁷² Richard Mead, *General 'Boy': The Life of Lieutenant General Sir Frederick Browning* (Barnsley: Pen & Sword Military, 2010), pp. 87-92.

²⁷³ George Chatterton, *The Wings of Pegasus* (London: MacDonald, 1962), pp. 39-40.

²⁷⁴ Dover, pp. 71-72.

In terms of intelligence, Hopkinson had a clear picture of the enemy forces awaiting his units, if not an entirely clear one as to their location. Hopkinson's plan also made considerable assumptions regarding the enemy's likely response, counting on the shock effect of his operation would bowl over considerable nearby enemy forces. Four enemy battalions would oppose 1 Border and 2 S Staffords very quickly, so much depended on a concentrated landing, as scattered glider troops could be easily overwhelmed if these forces reacted vigorously.²⁷⁵ If 5 Div was delayed then the estimate of enemy dispositions stated that three more Italian battalions and a unit of 50 tanks could reinforce the enemy in the area in eight hours.²⁷⁶ With the landings beginning at 2200 hrs this meant the glider troops could be under attack by 0700 hrs with no relief for five hours. Even if the Italian troops were believed to be second rate (over-age men or raw recruits) they would be defending Italian soil, and the planners were also aware that strong elements of the German Hermann Goering Panzer Division were just forty miles away from the Ladbroke area and could be deployed by 1200 hours on D-Day. In short, Hopkinson's plan assumed the landings would go like clockwork, the sea borne landings would be completely unhindered and the enemy would be inert.

The most serious threat to Fustian and Ladbroke, and new learning for British airborne forces, concerned the importance of combined rehearsals and training with air crews and the use of any devices which could improve navigation and identifying the landing zones. If all the men could land on the same DZ/LZ on time this would allow the concentration of force needed to then accomplish their ground mission. The foundations of the air operation for Ladbroke were on shaky ground from the very outset. Due to the shortfall in British

²⁷⁵ TNA WO 169/10299, 2/S. Staffordshire WD. LADBROKE Operational Order, 4 July 1943.

²⁷⁶ TNA WO 169/10299, 2/S. Staffordshire WD. LADBROKE Operational Order, 4 July 1943.

glider production and geography, 1 AL Bde would have to use US Waco gliders that had been delivered to the Mascara base in crates.²⁷⁷ The training of the pilots of XII US Troop Carrier Command had been sketchy; many of the men were simply commercial pilots who had been enlisted. For the 9 July operations the US pilots had been trained to fly in 'V' formations following a lead plane, which was the only one to contain a navigator, and the landing zones would be identified by pilots using aerial photographs, crucially no Pathfinders would be used.²⁷⁸ In his August action report Hopkinson stated that Ladbroke proceeded without the benefit of navigational aids while enemy flak was also able to disconcert the inexperienced air crews.²⁷⁹ A high wind rose during the afternoon of 9 July which affected their navigation, and they were unaccustomed to night operations. Consequently many of the Ladbroke tug aircraft cast off their gliders early, while the Fustian aircraft dropped their troops well wide of the objectives. For Fustian there was an attempt to make use of Pathfinders. 21 Indep Para Coy formed three parties to be dropped ahead of the main landings. But a combination of problems frustrated their efforts: their Eureka wireless sets failed to work,²⁸⁰ the area they were to mark out was a mass of flames, they were dropped late or their aircraft turned back without dropping its troops.²⁸¹ Hopkinson goes on to state that even if they had been laid out they would have been of no use as 'there were too many other lights and fires in the landing area'.²⁸² The result of this confusion scattered the units and would have resulted in their annihilation if the relief had not been so swift. Dropping airborne forces as night offered the obvious advantage of increased surprise and the

²⁷⁷ Chatterton, pp. 42–43.

²⁷⁸ Tugwell, p. 158.

²⁷⁹ TNA WO 106/691, 1st Airborne Division Sicily Report. Conclusions section, 10 August 1943, p. 2.

²⁸⁰ EUREKA/REBECCA transmitting equipment. EUREKA was a homing beacon that could be set up on a landing zone, while REBECCA allowed aircraft to home in on the EUREKA signals. Otway, p. 405.

²⁸¹ TNA WO 169/10357, 21st Independent Parachute Company WD, 13 July 1943.

²⁸² TNA WO 106/691, 1st Airborne Division Sicily Report. Conclusions section, 10 August 1943, p. 2.

minimisation of aircraft casualties while over the objective, but at the risk of confusion resulting in scattering and thereby the loss of concentration of force. Day drops could only be considered if total air superiority was in place, such as in the case of operations Market and Varsity.²⁸³

In the end surprise saved Ladbroke. Tactical surprise had become a vital element in airborne and commando operations, especially when *coup de main* parties are needed to seize key objectives are concerned. Of the six 2/S. Staffordshire Horsas which set off for the bridge, only one landed near enough to go into action. Lieutenant Withers and his No. 15 Platoon surprised and drove off the enemy and removed any demolition charges, and then held the position for nearly five hours before any other assistance arrived.²⁸⁴ The darkness and numerous skirmishes which began with other airborne troops further confused the enemy but the shock effect of even such a small group secured the objective.

Beyond the 1943 Pamphlet another document was created to guide future airborne operations which incorporated the learning gained from Husky. A joint War Office/Air Ministry ten-page memorandum captured the lessons of Husky and set down some basic guidelines for future airborne operations in all theatres. The two-part 'Employment of Airborne Forces' paper was issued on 18 October 1943 and originated in the Air Directorate department of the War Office.²⁸⁵ 'Part A' detailed the actual lessons of the Sicilian operations. The importance of combined planning and rehearsal training between the army and RAF is emphasized; the briefing of friendly naval forces to prevent 'friendly fire'

²⁸³ Tugwell, pp. 273–75.

²⁸⁴ TNA WO 169/10299, 2/S. Staffordshire WD, 9 July 1943.

²⁸⁵ TNA WO 203/87, Organisation of Airborne Forces. 'Employment of Airborne Forces' memorandum, 18 October 1943, from the War Office to all C-in-Cs. Numbered Air 2/0.0./44 (19).

incidents and the value of a concentrated landing is discussed.²⁸⁶ The more instructive 'Part B' provides four pages of guidelines for air and ground commanders alike. Responsibility for launching air operations lies with the Air Force, who can cancel an operation should the weather or other considerations make it hazardous. However, they may be overruled by the 'Supreme Commander' if he might 'consider that the situation justifies abnormal risks'. This important section makes the staging of airborne operations the responsibility of air commanders but allowed for theatre commanders – Alexander and Eisenhower- the final say as to whether they were carried out.²⁸⁷ The great surprise impact of airborne troops was stressed:

Energetic and determined action by airborne troops can cause widespread alarm and confusion among the enemy. Even comparatively small parties, dropped many miles from the main objectives, can achieve a diversionary result out of all proportion to their numbers.²⁸⁸

This aspect had been previously highlighted in the British Army training notes from Sicily specifically highlighted this point:

The moral effect and the confusion caused by the landing of gliders and parachute troops in the enemy's rear areas undoubtedly assisted the ops of our ground troops.²⁸⁹

Indeed, when interviewed General Student maintained that the interference caused by the scattered airborne drops had deflected the Herman Goering Panzer Division from making a critical attack on the landing beaches.²⁹⁰

²⁸⁶ Ibid., pp. 1-3.

²⁸⁷ Ibid., p. 4

²⁸⁸ TNA WO 203/87, Organisation of Airborne Troops. 'Joint War Office/Air Ministry Report on the Employment of Airborne Forces', part A, p. 3, 15 October 1943.

²⁸⁹ TNA WO 231/14, Report on Sicily. Instructional Circular No. 17 - Notes from SICILY, 18 September 1943, p. 4.

²⁹⁰ James M. Gavin, *On to Berlin: Battles of an Airborne Commander 1943-1946* (London: Leo Cooper, 1978), pp. 54-55.

The paper goes on to stress the importance of concentrated landings and that operational planning 'should be done by the appropriate technical experts of all three services'.²⁹¹ The document also requests the expansion of 38 Wing to a 180 aircraft Group, the addition of a third battalion to the airlanding brigades and the wisdom behind concentrating both airborne divisions in one theatre (to ease maintenance issues).²⁹² While the October 1943 memorandum something of a 'what not to do' negative document rather than a positive guide for future airborne operations, as a joint Air Ministry and War Office document it represented sensible collaboration and careful thinking.

From the primary sources discussed in this chapter, the 1951 Pamphlet 50, the inter-service August 1941 Crete Report, the 1943 Airborne Operations Pamphlet and the ten-page memorandum discussed above, it can be clearly seen that a theoretical basis had been established for British airborne operations by the end of 1943, and ideas as to how a waiting enemy could attempt to crush them. This is important for this study as it gave Gale the 'how' to plan his Normandy operations, knowledge available within the Airborne Establishment as his new division was forming.

From these four sources a success/failure process chart can be established as a methodological tool to serve this thesis (see **Figure 1**). This flow chart shows the key criteria needed for the execution of a successful airborne operation during the Second World War, and also the process of how one could be defeated. The chart is self-explanatory when viewed in the light of the Crete and Sicily operations, but three key points need to be highlighted, which appear on the chart in small boxes. During the pre-operation period intelligence is vital (see point **[1]**), the airborne attacker must have as complete a picture of

²⁹¹ Ibid., p. 6.

²⁹² Ibid., pp. 5-6.

the waiting defending forces as possible while the defender must have carried out an appreciation of likely objectives for airborne forces. Then vigorous training and preparation is important for both sides. The local shock-surprise effect of the landing **[2]** must be quickly translated into momentum for the airborne attackers to maintain the defenders' confusion as the vital assault action takes place. Both sides need to be prepared to respond quickly to the new situation. Airborne troops must orientate themselves and rally from scattering and the defenders must assess the threat and draw in mobile reinforcements. Critically, will the airborne forces be promptly relieved by more heavily armed formations? This is absolutely essential. Due to their light scale of weaponry the airborne troops will become more and more vulnerable as the shock-surprise effect dissipates, but if they are joined by conventional role units they will be able to maximise their aggressive stance replenished with ammunition and supported by co-opted firepower. If the original goal has not been obtained, with the additional support of conventional role troops another attack could be made (**point [3], see the dotted line**). This flow diagram may seem reliant on long distance hindsight, but the 1943 pamphlet shows that much of its content was known and understood, and then reinforced by the Husky airborne operations. This chart will be used to review Gale's orders for 6 Airborne for the Normandy assault, to assess the robustness of his plans, and later to follow how successful the division was in pursuing the successful path once in action.

III. The Development of Airborne Air Transport Capability

The third section concerns resources, in this case taking stock of key issues that affected role-specific transport assets - gliders and aircraft. Two questions must be considered. First, how fit for purpose were the air assets earmarked to carry the airborne forces in May 1943

– May 1944, and what influences drove their development? Second what was the cost of those air assets allocated to airborne forces? This must be weighed against their operational effect in the Normandy campaign. The suitability of aircraft and gliders allocated to Britain's airborne forces has recently been studied by Timothy Jenkins. His thesis concluded that Britain was technologically unable to sustain this effort and the military benefit was compromised by the political will which had demanded airborne formations to be created.²⁹³ The practical air transport challenges facing the UK in 1940-1943 are explored below.

For Britain's airborne forces the dominating issue was the lack of viable modern transport aircraft for use either towing gliders or for dropping parachutists. The US-built C-47/DC-3 ('Dakota') was clearly the best solution, even though it lacked any defensive armament or self-sealing fuel tanks, but was unavailable through Lease-Lend until mid-1943.²⁹⁴ A possible alternative to the Dakota would have been the conversion of Lancaster bombers into transports. Portal gained approval from Churchill to convert 200 of these aircraft for transporting RAF personnel, but in his memorandum he states that they could be used to carry thirty paratroopers. These aircraft (named the York transport) would be ready by March 1944, possibly too late for their crews and passengers to be ready for an invasion that was planned for May, but they could have replaced the Dakotas of 46 Group RAF if the USA had not been forthcoming.²⁹⁵ As an aside, a study of the RAF price books shows that if York aircraft had replaced the 150 C-47s of 46 Group, then the Exchequer would have saved

²⁹³ Timothy Jenkins, 'The Evolution of British Airborne Warfare: A Technological Perspective' (University of Birmingham, 2013).

²⁹⁴ TNA CAB 79/24, 321st Meeting, 19 November 1942.

²⁹⁵ PP Folder 3. Nos.27, 27a-d, CAS TO PM, Proposed order of 200 Lancaster transports in place of bombers, 14 September 42. TNA AIR 20/2437, Airborne Forces Policy, Extract from COS (42) 263rd Meeting, 15 September 1942

around thirty-three per cent of the cost, or £2,077,750.²⁹⁶ The cost of the lack of the development of a simple transport aircraft design therefore not only added fuel to the Army/RAF dispute but also in the end was a false economy.²⁹⁷

The number and type of aircraft allocated to the airborne forces left much to be desired, owing much to the flawed decision taken in 1940 to draw on the strength of Bomber Command when the need arose for an operation. Starting with six obsolete Whitley bombers²⁹⁸, the growth of 38 Wing can be seen in three distinct phases. By the January 1942 two Squadrons existed (296 Glider Exercise and 297 Parachute Exercise);²⁹⁹ in May the Air Ministry agreed the Wing could be expanded to four Whitley squadrons by August 1942 (295, 296, 297, 298 squadrons).³⁰⁰

The RAF's development of an air transport capability fell far behind the build-up of the units which they were to carry. To drop a full battalion of five hundred men would have required sixty two Whitley aircraft³⁰¹, far beyond the Central Landing Establishment's allocation of aircraft until October 1942. This remained an inadequate provision, and by the summer of 1943 when 6 Airborne was formed, 38 Wing was still incapable of carrying a complete brigade of British parachute troops into battle. The three existing squadrons of Whitleys³⁰² would only have been able to carry 1,080 men (ninety aircraft each carrying

²⁹⁶ RAF Museum Hendon 'Price Books', X005.

²⁹⁷ Maurice Tugwell presented a complete air transport counterfactual- a simple wooden airframe design could have been harnessed to the engines of obsolete bombers crewed by the men who in reality crewed gliders. Tugwell, p. 138.

²⁹⁸ TNA WO 32/9778. Suggested Joint memorandum by the General Staff and Air Staff on Airborne Forces, 2 May 1941, p. 2.

²⁹⁹ Otway, p. 49.

³⁰⁰ 110 Whitleys and 10 Halifax for Hamilcar towing. The Whitleys could carry only ten men each. TNA AIR 8/1386, 38 Group Progress Reports. April Report, 18 May 1942. Otway, p. 53.

³⁰¹ Each Whitley could carry eight fully equipped paratroopers in the main fuselage with their equipment containers loaded into the bomb racks. Newnham, p. 2.

³⁰² 298 Squadron's formation having been postponed during the dispute between the Air Ministry and War Office in autumn 1942. TNA AIR 8/1386, 38 Group Progress Reports. Airborne Forces Monthly Progress Report - September 1942.

twelve men each) in a maximum effort – barely two battalions. The final period of steady expansion occurred through the latter half of 1943 as 93 Group (Training) Command Stirling squadrons were converted and Albemarle aircraft finished replacing the Whitleys in the four original squadrons.³⁰³ By the end of January 1944 38 Group was complete (**Table 6**), but what was the practical cost of the 248 bombers allocated?

The Second World War was funded by utilising financial institutions and systems to allocate resources from private hands into war production.³⁰⁴ Raw materials and manufacturing labour were funnelled into war production with little regard for the final cost. This renders generating monetary values for the aircraft in question at face value somewhat pointless exercise. However, it does have an effective purpose as a simple methodological tool to show the relative worth of various aircraft, and the Treasury still used Sterling to illustrate its complaints about the scale of the glider programme (see below). The investment in the aircraft allocated to airborne forces can be assessed in comparative financial terms, and also in the value set upon them by Bomber Command, who were competing for the use of this resource. In the first case by June 1944 Bomber Command fielded 1,320 heavy (four engine) bombers in sixty-six squadrons (**Table 8**). These aircraft had cost the Exchequer approximately £25,836,940, the individual cost of each Lancaster was reduced by economies of scale in 1943, which reduced unit price.³⁰⁵ The aircraft of 38 Group cost £6,224,416. This amount is so high due to the anomalous nature of the Albemarle, with only one order for this type existing on file with each aircraft costing £31,470. Meanwhile 46

³⁰³ Otway, pp. 143 & 166.

³⁰⁴ M.M. Postan, *British War Production* (London: HMSO, 1952).

³⁰⁵ Lancaster Contract no. Acft/2221 – Metropolitan Vickers Electrical Company Ltd. for 700 aircraft arranged on 28 January 1944. First 200 aircraft (Mk I) target cost - £19,596, profit - £650, to be delivered January – June 1944. RAF Museum Hendon, X0005. In terms of cost savings, by 1945 the man hours needed to complete a Lancaster airframe had fallen to 20,000 as compared to 51,000 in 1941. Sebastian Ritchie, *Industry and Air Power: The Expansion of British Aircraft Production, 1935-41* (London: Frank Cass, 1997), p. 244

Group's cost is skewed by the considerable cost of lend lease C-47s. The 150 Dakotas purchased in 1943 cost \$25 million, which must then be divided by four to obtain the relative sterling value.³⁰⁶ The eventual unit cost can be calculated as £41,666 which seems high and perhaps represents the USA giving Britain no reduction for mass production. Yet it must be remembered that 46 Group RAF formed part of a wider pool of transport squadrons capable of general supply/transport tasks and was not devoted solely to lifting airborne forces.³⁰⁷ This financial paradigm reveals that the aircraft when bought new were not simply the cast-offs of Bomber Command and were not without value, the aircraft for Britain's airborne effort had just less than half of that for the machines fielded by Bomber Command in 1944 (**Table 5**).

What operational value did the RAF attach to the aircraft passed to 38 Wing/Group when it was expanded in the second half of 1943? Had the Royal Air Force been stripped of its finest aircraft, which could have been used more profitably elsewhere? The aircraft that supported airborne forces between 1940 and 1943 were largely obsolete bomber types. After the disappointing airborne forces demonstration of April 1942, Portal had informed Churchill that no bomber could be correctly described as 'discarded', as they could still be used for Operational Training Units (OTUs).³⁰⁸

The Whitley had been the work horse of parachute training as airborne forces had begun to be built up. The initial RAF resources assembled at Ringway in the summer of June 1940

³⁰⁶ The official exchange rate was set at £1 = \$4.03. Peter Howlett and Central Statistical Office, *Fighting with Figures: A Statistical Digest of the Second World War* (London: HMSO, 1995), pp. 225 & 271.

³⁰⁷ TNA AIR 8/661, Airborne Policy December 1942-July 1943. British Transport Aircraft Position at 1st April 1944. Memorandum from VCAS to COS, Airborne Forces COS (43) 206 (0), 27 April 1943.

³⁰⁸ Portal Papers (Port.), Christchurch College, Oxford. Folder 3, Prime Minister's Minutes; Jan.-Dec. 1942. No.20, From PM to CAS, 27/4/42, Discarded bombers for Airborne Corps.

consisted of six 'decrepit'³⁰⁹ Whitley bombers³¹⁰ which were thought to be the most suitable aircraft for parachute training and later operations. They were crudely adapted, with the men dropping from a hatchway set in the middle of the fuselage floor. These aircraft were considered obsolete as heavy bombers in 1939³¹¹, and were being rapidly phased out by Bomber Command during the winter months of 1941/1942.³¹² A revealing letter from the RAF Director of Operations of 17 September 1943 discussed the problem of finding 180 aircraft to fill out the planned squadrons of 38 Group, including replacing the Whitley aircraft, which were on their 'last legs':³¹³

We have recently recommended to the Chiefs of Staff that the Wing should be increased from 90 to 180 U/E aircraft. It looks like this might be approved, in which case we shall be faced immediately with the problem of finding 90 aircraft (or 130 aircraft if the Whitleys are to be replaced) to fill the new establishment.³¹⁴

He adds the 'possibility of chiselling out yet another 100 Albemarles from the Russian allotment' and finishes by stating he understood that Bomber Command wanted no more Stirlings, and he wonders 'what it is proposed to do with these aircraft and whether they could be earmarked for 38 Wing'. The Albemarle, like the gliders, had been built by a variety of sub-contractors and by the time it left the drawing board did not fit into the RAF's operational requirements. It had been built from mostly steel and wood, in case Britain's alloy supplies were lost or aircraft factories devastated by enemy action, and was underpowered as a bomber³¹⁵. In the Stirling's case, as early as January 1942 Bomber Command had decided that it was so disappointing as a heavy bomber that it would be

³⁰⁹ Newnham, p. 3.

³¹⁰ TNA WO 32/9778, Airborne Policy. Suggested Joint Memorandum by the General Staff and Air Staff on Airborne Forces, 2 May 1941.

³¹¹ Chris Chant, *Aircraft of World War II* (Bristol: Dempsey Parr, 1999), p. 23.

³¹² Max Hastings, *Bomber Command* (London: Pan, 1999), p. 126. Terraine, pp. 510–511.

³¹³ TNA AIR 20/890 Stirling Aircraft Performance. Letter from the RAF Director of Operations of 17 September 1943.

³¹⁴ Ibid.

³¹⁵ Oliver Tapper, *Armstrong Whitworth Aircraft since 1913*. (London: Putnam, 1973), pp. 276–283.

unwise to send any overseas as so many spares would be needed.³¹⁶ By December of that year Harris and his AOC 4 Group RAF were considering taking their complaints direct to the manufacturers – Austins, Shorts and Harland.³¹⁷ Harris had doubts about the Halifax by October 1942, their crews suffering from ‘shaky’ morale, and by December 1943 he is emphatic, ‘I still state categorically that one Lancaster it to be preferred to four Halifaxes. The Halifaxes are an embarrassment now and will be useless for the bomber offensive within 6 months if not before.’³¹⁸ Airborne Forces and 38 Wing/Group were not being allocated Bomber Command’s finest aircraft.

By the end of 1943 the Lancaster was the one aircraft that Harris had settled on to achieve Bomber Command’s aims and dismissed all other types. He stated that with just over forty squadrons of this type he expected to drop 13,850 tons of bombs per month, enough to destroy forty to fifty per cent of the main German towns, and concluded, ‘From this it appears that the Lancaster force alone should be sufficient but only just sufficient to produce in Germany by 1 April 1944 a state of devastation in which surrender is inevitable.’³¹⁹ Indeed, by the end of 1943 Bomber Command was becoming a ‘Lancaster force’. Of the 20,224 sorties flown during the thirty-five raids of the ‘Battle of Berlin’, 14,652 were carried out by Lancasters, over seventy-two per cent of the total.³²⁰ The proportion of Lancaster squadrons continued to increase as Bomber Command continued to expand, and at a faster rate (**Table 8**). Harris’ comments show that the aircraft transferred to 38 Group

³¹⁶ TNA AIR 20/890. Cypher note from the Air Ministry to Bomber Command dated 17 January 1942.

³¹⁷ Port. Folder 9, 79a (1942) – Cochrane to C-in-C - Deficiencies of the Stirling, 3 December 1942, Harris’ reply 79b 6 December 1942.

³¹⁸ Port. Folder 9, 70 (1942) – C-in-C to CAS - Conversion of Halifax squadrons to Lancasters and Stirlings- 30 October 1942; AIR 8/836 Halifax Operational Effectiveness, letter dated 2 December 1943 from C-in-C Bomber Command.

³¹⁹ John Terraine, *The Right of the Line: The Royal Air Force in the European War, 1939-1945* (Sevenoaks: Sceptre, 1988), p. 555.

³²⁰ Ibid.

were no great sacrifice to the core offensive strategy of the RAF, as the Stirlings were considered poor months before and the Halifax a growing 'embarrassment' at the time 38 Group was being expanded. The allocation of these bombers to 38 Wing/Group had no impact on Bomber Command operations and the RAF's war plan aims.

The lack of a bespoke transport aeroplane and the plan to co-opt Bomber Command's aircraft hindered parachute operations, and therefore increased the importance of the glider programme. The theory of the 'airfield capture group' had centred on the concept of a small a parachute force seizing an enemy airfield in advance of air-transported troops being flown in, which in turn would be supported by further troops plus detachments of light tanks and artillery, all brought in by glider.³²¹ Four different types were designed and ordered by 1941. The Hotspur was a seven seat training glider, the Horsa and Hengist the operational gliders carrying twenty-five and fifteen men respectively; while the Hamilcar would be the heavy lift glider capable of carrying 17,500 pounds of equipment, vehicles, or forty troops.³²² The Treasury soon complained about the estimated cost of 400 Hengist, 800 Horsa and eighteen Hamilcar gliders - £8,400,000.³²³ As this was approximately a third of the number of gliders used by 6th Airborne on 6 June, a rough estimation of the D-Day glider cost could be at most £3,500,000.³²⁴ Glider assembly began in earnest in October 1941 but production quickly fell behind schedule. The Ministry anticipated that by February 1942, 390 Hotspurs, twenty-five Horsas and eighteen Hamilcars ('the tank carrying glider')

³²¹ TNA WO 32/9778 Airborne Policy. Memorandum from the War Office to the Air Ministry – Air-borne troops – Policy for, 10 January 1941.

³²² J.E. Mrazek, *Fighting Gliders of World War II* (London: Hale, 1977), pp. 60–83.

³²³ TNA AIR 2/4740, Airborne Forces – Preparation of Papers for Chiefs of Staffs. Letter from R.H. Haining (Lt. Gen. VCIGS to Air Chief Marshal Freeman VCAS), 10 April 1941.

³²⁴ RAF Museum Hendon 'Price Books', X005. The price books show only agreed levels of profit for the Hamilcar and Horsa gliders, but an order of 21 August for 773 Hotspurs shows each glider was priced at £1890 (400 therefore being £1,460,970). £8,400,000 less this some would be £6,939,030 as an estimate for the Horsas and Hamilcars, approximately half of which were used on D-Day.

would have been delivered to the Central Landing Establishment.³²⁵ However, in reality by this point only 225 Hotspurs had been delivered, plus two prototypes of the Horsa, while a first prototype of the Hamilcar was still being assembled.³²⁶ A 1 January 1942 meeting stipulated that by December 1942, 650 Horsas and 28 Hamilcar gliders would be needed; the requirement rising to 1,775 Horsas and 79 Hamilcars by March 1943.³²⁷ Yet by the end of October 1942 only 388 Horsas had been delivered to Bomber Command Maintenance units. The companies building the Horsa were certainly working flat-out to catch up the shortfall, the Production Committee agreeing that the full swing programme could only be halted at 1,100 when the 18 November 1942 Air Ministry stop order was received.³²⁸

The cause of the failure to meet Horsa production targets can be found in the complicated manufacturing arrangements. Of the 3,655 Horsa 'sets' ordered during the war, 695 would be built entirely by Airspeed at their Christchurch factory with 2,960 sub-contracted out.³²⁹ The Air Ministry view of the companies selected to take part in the glider programme was that they were of the 'furniture trade', and not directly critical to existing aircraft manufacturing.³³⁰ However, the companies shown on a schematic which lists main and sub-contractors of 22 October 1941 include Austin and Wolsey Motor and two factories of the London North Eastern Railway (Derby and York). The experience these companies had building railway carriages and civilian vehicles would have been directly transferable to the construction of wooden gliders. The minutes show regular meetings being held by the Committee, but the involvement of twenty-six different contractors and the need to create

³²⁵ TNA AIR 32/3, The Provision of a Glider Force. Letter from the Ministry of Aircraft Production to Sir Nigel Norman, OC, CLE, 16 April 1941.

³²⁶ Even by March 1943, only 563 Horsas had been assembled but only seven Hamilcars. TNA AIR 8/1386, 38 Group Progress Reports. January 1942 Report, 11 February 1942 and February 1943 Report, 21 March 1943.

³²⁷ Ibid. Minutes of a Meeting to discuss the requirements for airborne forces, 1 January 1942.

³²⁸ TNA AVIA 15/1499 Horsa Production Minutes of Main Committee Meetings, 23 November 1942.

³²⁹ H.A. Taylor, *Airspeed Aircraft since 1931*, 2nd ed (London: Putnam Aeronautical, 1991), p. 102.

³³⁰ TNA AIR 2/7470 Airborne Forces – Preparation of Papers for Chiefs of Staffs Handwritten note from the S.6 (W. Mackay) to the ACAS (1) 6 April 1941.

solutions for unexpected problems goes some way to explain how production fell behind plan. Also the sub-contracted Horsas were built in 'sets' of thirty different components and delivered in kit form to the RAF for assembly and testing, any discrepancy or variation at one or more firms would have caused the glider to be rejected.³³¹ The 22 January 1943 meeting agreed a steady monthly production rate that would run until the end of 1944, and fulfil the needs of 6 Airborne Div on 6 June 1944 (see **Tables 6 and 7**).

Even with the creation of 46 Group RAF the aircraft available to Gale were inadequate to transport the Division in a single lift to Normandy. **Table 6** reveals that with a maximum personnel load, and thereby carrying no vehicles or heavy equipment (such as anti-tank guns) of any sort, and using solely Horsa gliders, still only two thirds of 6 Airborne could have been carried into action. But the scope did exist by May 1944 to deliver the bulk of the division in two lifts.

In conclusion, the WO formed a second airborne division as its leading figure and the head of the professional army, Alan Brooke was convinced of their future value in offensive operations. While a doctrinal pamphlet existed in May 1943, many practical lessons concerning this new type of warfare would only be learnt during the operations in support of Husky. In regard to air assets, the total financial cost of 38 Wing/Group was greatly increased by the use of the anomalous Albemarle, and failed to benefit from economies of scale savings made on the massive orders placed for aircraft for Bomber Command. Regardless of the financial cost of the aircraft set aside for air transport, it has been seen that Sir Arthur Harris was dismissive of the capabilities of the Halifax and Stirling as bombers by 1943.

³³¹ TNA AVIA 15/1499 Horsa Production Minutes of Main Committee Meetings, 22 October 1941; Taylor, p. 108.

IV. *The Expectations of Senior Allied Commanders regarding airborne forces before D-Day*

An important reason alongside Brooke's ferocious championing of the airborne cause was the positive view held of such forces by Allied senior commanders. Despite the chaos and serious losses suffered during the airborne landings phase of Husky, senior army figures retained their faith in airborne warfare. Studied in isolation, these operations' losses damned airborne warfare as profligate in both precious air transport assets and high quality manpower. Brooke would have been able to cling onto his airborne division if Eisenhower and the US Army had abandoned the airborne concept, but it would have been difficult for him to stop their de-emphasization in the Operation Overlord plan. Indeed, Eisenhower created an inquiry committee on 24 July 1943 to assess what lessons could be drawn from the disaster.³³² But the key generals on the ground – Alexander, Montgomery, Patton and Bradley all believed that even the dispersed impact of the landings had greatly assisted their progress in advancing through Sicily. A report written by Alexander was circulated by Churchill amongst the COS for their views. The report was glowing in its endorsement of airborne forces:

Personally, I believe that it is the best solution to the invasion of Europe across the Channel – airborne troops in large numbers in conjunction with the attack on the coast from the sea. I look at the problem like this: - Tactics are continually changing with the introduction of new weapons and new equipment. The side which can take advantage of this and develop its tactics accordingly before its enemy, will keep the initiative and produce the surprises – both battle winning factors. The land defences have few, if any open flanks to get around and turn – but there is one flank (if you can term it) – the flank, or open door over the top which is always there. It is there wide open for the side which has the air superiority. What an opportunity for us, if we can only see it and seize it.³³³

³³² TNA WO 204/4220 Airborne Employment - Operation and Movement of troops.

³³³ TNA CAB 120/262, Development of Airborne Forces. Extract from a report by General Alexander, 21 July 1943. LHCMA ALANBROOKE: 6/2/18, 'General Sir Harold Alexander' 1943 Jul 14-1943 Nov 9', letter dated 21 July 1943. James M. Gavin, *On to Berlin: Battles of an Airborne Commander 1943-1946* (London: Leo Cooper, 1978), p. 53.

Ridgeway recalled this enthusiasm amongst generals: 'The drop into Sicily, dispersed as it was, had stirred the imagination of every higher commander, and all up the line corps and army commanders were dreaming up grandiose schemes for our employment.'³³⁴ This enthusiasm was carried forward as planning for the Second Front gathered pace. A paper for a 'Minimum Force for a Bridgehead Operation' written on 8 April 1943, proposed using large numbers of airborne troops to facilitate a landing in Northern France while landing craft numbers were still short.³³⁵ Operation Skyscraper, the last plan considered by the Joint Chiefs of Staff before COSSAC took over the planning process, included the use of two airborne divisions as part of a force of ten divisions to land in the Pas de Calais area of France.³³⁶ With 1 Airborne Div fighting in the Mediterranean, 6 Airborne's creation now appeared to be a necessity.

However, faith in the capability of massed airborne operations had been shaken after the heavy losses incurred in Sicily. This became an issue for the Supreme Allied Commander, and was put to the question. Eisenhower created an inquiry committee on 24 July 1943 to assess what lessons could be drawn from the disaster.³³⁷ The conclusions of this board were signed off by Major-General Beddell-Smith, Eisenhower's Chief of Staff, on 31 July.³³⁸ The report included a draft training memorandum and a report from Browning. Its recommendations focused on ensuring that airborne troops were used for operations for which they were suited; 'realistic and thorough combined training' between air and airborne

³³⁴ General Matthew B. Ridgeway and Harold H. Martin, *Soldier: The Memoirs of Matthew B. Ridgeway* (New York: Harper and Brothers, 1956), p. 80.

³³⁵ TNA WO 106/4225, 'Minimum Force for a Bridgehead Operation', 8 April 1943, p. 2.

³³⁶ TNA AIR 37/233, 'OVERLORD – Pas de Calais Project', 23 June 1943. Fergusson, p. 264. Charles Messenger, *The D-Day Atlas: Anatomy of the Normandy Campaign* (London: Thames and Hudson, 2014), p. 167. www.globalsecurity.org/military/world/war/ww2/ww2-op-skyscraper.htm.

³³⁷ TNA WO 204/4220 Airborne Employment - Operation and Movement of troops.

³³⁸ Major-General Walter Bedell-Smith served as Eisenhower's Chief of Staff. *Carlo D'Este, Decision in Normandy* (London: Penguin, 2004), pp. 42–43.

forces; ensuring that 'operational details' were incorporated into the plan – pathfinders, airborne corridors for aircraft and the briefing of surrounding land and sea units.³³⁹

Browning's report castigated the ability of the US pilots, 'navigation was generally bad' and maintained that both British operations had been well conceived.³⁴⁰

As an aside, while career politics will be seen at the unit CO rank level in chapter three with the Lindsay incident, here can be seen a similar manipulation at the corps level. There is a whiff of political self interest in one of his final points in which he proposes that 'centralised planning and control of all airborne matters' had been 'abundantly proved'.³⁴¹ If this recommendation had been formalized, 1 Airborne and US 82 Airborne Divs would effectively have become a corps; as the existing Airborne Forces Adviser to Eisenhower Browning would be promoted by a *fait accompli*.

Later, Browning would convince Brooke that the large-scale Husky airborne venture had been satisfactorily handled.³⁴² However Eisenhower remained unconvinced. He wrote to General Marshall on 20 September that he 'did not believe in the airborne division' and that airborne troops should be reorganized into self-contained brigade sized formations.³⁴³ He argued:

To employ at any one time and place a whole division would require a dropping over such and extended area that I seriously doubt that a divisional commander could regain control and operate the scattered forces as one unit.³⁴⁴

³³⁹ TNA WO 204/4220, Airborne Employment – Operations and Movement of Troops. Employment of Airborne Forces Training Memorandum 30 July 1943.

³⁴⁰ TNA WO 204/4220, Airborne Employment – Operations and Movement of Troops. Report on Airborne Operations p. 2.

³⁴¹ TNA WO 204/4220, Airborne Employment – Operations and Movement of Troops. Report on Airborne Operations, p. 6.

³⁴² Alex Danchev and Daniel Todman, *War Diaries, 1939-1945: Field Marshal Lord Alanbrooke* (London: Weidenfeld & Nicolson, 2001), p. 435.

³⁴³ Lt.Col Albert N. Garland and H. McGaw Smyth, *The Mediterranean Theatre of Operations: Sicily and the Surrender of Italy* (Washington: Office of the Chief of Military History US Army, 1965), p. 425; James M. Gavin, *On to Berlin: Battles of an Airborne Commander 1943-1946* (London: Leo Cooper, 1978), pp. 52–54.

³⁴⁴ Garland and McGaw Smyth, p. 425.

General Marshall demanded a full test of the airborne division. The US 11 Airborne Division³⁴⁵ demonstrated in December during the Knollwood exercise that it was viable, the manoeuvres observed by General Lesley J. McNair (commanding US Army Ground Forces and responsible for training) and Eisenhower sanctioned their retention.³⁴⁶ This episode shows that while a great investment had been made in the airborne project by the end of 1943, its progress and utility was still under scrutiny.

Yet the man who would lead British forces into France was convinced by that value could be added to his operations by airborne forces. Miles Dempsey³⁴⁷ placed great reliance in the potential of airborne forces to ensure his Army's success in the forthcoming campaign. Indeed, Dempsey was open-minded towards the idea of Special Forces generally.³⁴⁸ He issued a memorandum of 21 March 1944 to all Corps commanders, including Browning, which made clear his view on the use of airborne forces in the coming invasion.³⁴⁹ He pointed out that after the landings at Anzio earlier in the year, the front had 'congealed' rapidly and it took a hard slog to finally breakout of the deadlock. During the Sicily operations the open flank of the enemy had been the sea, and Allied forces had been able to land behind enemy blocking positions, but in Normandy this avenue would not be available; 'in FRANCE there will be no sea flank to help the advance of Second Army. We will use airborne forces instead.'³⁵⁰ To this end the cover note to this memorandum stated that Browning was now working on plans for the use of both airborne divisions and the Polish

³⁴⁵ Later, US 11 Airborne Div would go on to achieve a fine combat record in operations in New Guinea and US 8th Army's assault to retake Manila. Tugwell, pp. 278-284,

³⁴⁶ Robert J. Kershaw, *Sky Men: The Real Story of the Paras* (London: Hodder & Stoughton, 2010), pp. 190–191.

³⁴⁷ General Sir Miles Dempsey had commanded a brigade in the retreat to Dunkirk and later 46 and 42 Armd Divs before taking charge of 13 Corps during the invasions of Sicily and Italy. David Chandler and James Lawton Collins (eds.) *The D-Day Encyclopaedia* (Oxford: Helicon, 1994), p. 178.

³⁴⁸ Peter Caddick-Adams (2005) 'Not a Popular Leader', *The RUSI Journal*, 150:5, 66-73, p. 71.

³⁴⁹ TNA WO 285/1 Planning 2nd Army Attack on Normandy. General Dempsey's memorandum on the use of airborne troops, 21 March 1944, p. 2.

³⁵⁰ *Ibid.*, p. 2

Para Bde to execute further airborne operations once the bridgehead was secure. In addition, this paper also clearly showed Dempsey's wish to see airborne troops used en masse:

'Under no circumstances will a smaller force than one para bde be used at a time and the greatest effect will be got by employing a whole division. Used in this way, the airborne reserve should be of the utmost help in keeping the operation fluid.'³⁵¹

This paper reveals Dempsey understood the tremendous potential of airborne forces to unlock the enemy's defensive schemes. Also, the possibility of using them as a highly mobile defensive reserve, with 5 Para Bde being nominated for 'emergency defensive use' until D +3 (as actual events unfolded, this would have been 9 June), should the enemy achieve a breakthrough.³⁵²

In conclusion, it can be seen that the formation and later combat performance of 6 Airborne Division has to be set within the context of the wider British experience of airborne warfare 1940-1943. 6 Airborne was not created in isolation and certainly not as the result of a carefully created plan for British airborne forces that had been developed in 1940 at their inception. Brooke's relentless championing of the project had saved the project in the face of RAF opposition; running as it did against the RAF's deeply-held commitment to the night bomber offensive which forestalled any diversion of significant two and four-engine aircraft to other efforts.

A doctrinal base had been established by the end of 1943, through observation of German operations and the bitter experience of Husky, which Gale could use as he developed his ideas as to how 6 Airborne would operate on 6 June 1944. Strategic mobility, the surprise/shock effect, intelligence, the location of DZ/LZ and ways of compensating for the

³⁵¹ Ibid., p. 3.

³⁵² Ibid.

light scale of heavy weapons carried by airborne forces were the five vital aspects for any operation. The last factor, probably made worse by scattering, was airborne forces' greatest weakness. Only by an early relief by conventional role forces or the co-opting of their considerable firepower could glider and parachute troops be saved from annihilation once the surprise effect/ initiative had been lost.

By May 1944 the two RAF Groups available (38 and 46) were capable of transporting two brigades into action in a single lift, but a second complete lift would be required to move the entire 6 Airborne Div. As will be seen in chapter five, this was sufficient for Gale's plan. However, apart from the Dakota the aircraft used were mainly Bomber Command rejects and poorly adapted for their new role.

Chapter Three - Identity: 6th Airborne Division – The Development of Individual and Organisational self

Chapter Three will demonstrate the key elements which facilitated the development of 6 Airborne Div's airborne identity. The Airborne Forces Establishment was shaped by Browning, but it was Richard Gale's straightforward style of command that would dominate the formation of 6 Airborne, its planning and execution of operations in Normandy. This chapter will provide the context in which Gale's simple style disguised a deep understanding of the nature of airborne warfare and that of British airborne forces which would ultimately lead to the creation of battle-winning airborne identity. Evidence will be provided that men came from far and wide, for various reasons, and why they came together to serve in 6 Airborne Division. This evidence is a precursor to establishing that, irrespective of from where the men originated, airborne identity would be developed through Gale's leadership and become the bedrock upon which their later victories in battle would be built.

The process of creating airborne identity involved both the development of the men and the organisation. First, the reasons why men volunteered for 'Special Service,' either with the commandos or airborne forces will be explored using an over view created using a sample based on the records held by the Second World War Experience Centre.³⁵³ The mood of the Army at home 1940-43 was characterised by boredom and airborne and commando recruitment offered an outlet for frustrated men. This discussion feeds into the following section which assesses the actual process of sourcing the manpower needed for 6 Airborne Div – through the volunteer and unit conversion methods. Third, the importance of role-specific training is explained as a cohesion building element for the Division. The fourth and final chapter section shows the growth of the Army Air Corps as a distinct military

³⁵³ <http://war-experience.org>

organisation, under the meticulous care of Major-General Frederick Browning. 'Boy' Browning added his Guards attention to appearance and above all ferocious standards of appearance, conduct and skill at arms. The chapter ends with a case study showing the use of Airborne Forces to boost civilian morale on a regional level.

I. 'Browned off' - Personal Value - the Army at Home, 1940-43 – why men Volunteered

Did a frustration at being unable to confront the enemy form a key reason for joining airborne forces, and thereby reveals a monopolisation of aggressive men? For this study all the files lodged at the Second World War Experience Centre (SWWEC) of men with airborne and commando service, together with four Glider Pilot Regiment members were reviewed. As other Special Forces volunteers, the commando files were included to broaden the sample base. Of a sample of forty-seven interviews of transferees to airborne and commando units during the war, twenty-eight offered explanations as to how and why they joined.³⁵⁴ These reasons were categorised as boredom (thirty-two per cent), accepting their posting (twenty-one per cent), a desire for action against the enemy (eighteen per cent), professional (fourteen per cent) and personal reasons (fourteen per cent).³⁵⁵ None of the men stated that they joined these units because they perceived them as being elite, or having a higher attached status. Boredom, being 'browned off' with performing mundane and repetitive duties with conventional role units was the most common reason for volunteering.³⁵⁶ J. Paley, who had wished to join the infantry, served on heavy anti-aircraft guns defending Birmingham:

³⁵⁴ The Second World War Experience Centre (SWWEC), www.war-experience.org.

³⁵⁵ The attraction of the distinctive red beret is only mentioned twice as cause for joining. – Acc. No. LEEWW/2003-2444T.W. Reynolds, SWWEC LEEWW 2005 2939, P. Burkinshaw, 12th Battalion Parachute Regiment.

³⁵⁶ SWWEC 2000 347, b. Holt, Glider Pilot Regiment.

We didn't know even if we hit the damn things as they came over you know and then we thought that was a kind of slow sort of a job for a soldier who wanted to get overseas. So fortunately they came asking for volunteers for the airborne.³⁵⁷

For some men volunteering for almost anything was the route to escape their humdrum surroundings and tasks. This was often combined with frustration when it appeared that their CO was refusing requests for transfer:

But I joined because I was fed up. A lot of them of them was bored, you know, them that had been in Iceland and I'd put in then to do something that were different things that were going up. Rear gunners, gunners on ships. Well, people were volunteering for them in our unit at the time, and I joined anything and I think, well the major said, the major, our senior CO said he was fed up with me putting in these requests he said he was going to let me go.³⁵⁸

His view perhaps summed up that of many volunteers who had suffered 'four years of inactivity'.³⁵⁹ Wally Parr of 2 Oxf Bucks, 'putting up barbed wire, taking it down the next day, moving it ... Never fired a rifle, never did a thing.'³⁶⁰ J. Cramer, a police constable since 1935, was so keen to join the Army at the outbreak of war that he resigned from his reserved occupation and was initially posted to the Guards. After finding he was not compatible with officer training at Sandhurst he was 'dreading a return to boredom in Windsor', and transferred to the Northumberland Fusiliers as a Vickers machine gunner. He was then posted to 59 Div's machine gun battalion based at Warrenpoint in Northern Ireland. He was soon bored again, and when an airborne recruiting mission arrived in 1942 he and 'hundreds volunteered'.³⁶¹ He found the action he craved with 1 RUR and 6 Airborne Div, but only a month sooner than if he had stayed with 59 Div.³⁶²

³⁵⁷ SWWEC Acc. No. 99-75, J. Paley, 1st Airlanding Light Regiment RA.

³⁵⁸ SWWEC Tape 1470, H. Booth, 3 Para Bn. See also SWWEC 2000-450, J.H. Kingdon, Glider Pilot Regiment.

³⁵⁹ TNA WO 169/10355, 13 Para Bn WD, May 1943 summary.

³⁶⁰ Stephen E. Ambrose, *Pegasus Bridge: D-Day: The Daring British Airborne Raid* (London: Pocket, 2003), p. 21.

³⁶¹ IWM (Imperial War Museum) J. Cramer papers, IWM 06/43/1. Set of lecture notes entitled 'Gone for a Soldier'.

³⁶² Ellis, p. 309.

While boredom was common in Home Forces Command, and the wish for a more active role in the war caused men to volunteer for different corps and services, it does not correlate that the best soldiers were necessarily funnelled in the airborne and commando forces. The loss of impatient men due to recruitment drives by airborne/commando forces and the RAF, may have created the impression that the best were being drawn away, but these men's possibly disruptive attitudes would have left with them. Also, many of those sent to Hardwick Hall depot did not pass selection and would have been returned to conventional role units. These 'RTU-ed' men are likely to have returned to their parent units with little fanfare, and could well have been posted to other battalions and though lost to their original unit were returned to the conventional role infantry pool.

II. Selection - Manpower and Leadership Resources – Cost, the Conversion and Volunteer processes

Commentators both past and present have criticised the formation of Britain's Second World War airborne and commando forces as 'private armies',³⁶³ which diverted the best men into units where they could not benefit from Britain's increasing materiel advantage, or simply performed tasks that any competent infantry battalion could have been trained to do.³⁶⁴ John Terraine's comments also diminished the performance of the conventional role infantry divisions, along similar lines as Hastings' views (as discussed in chapter one):

Worst of all the "offenders", it must be said, were the Airborne Forces, with their exacting physical and psychological requirements. There is an awful irony in the spectacle of the line infantry divisions in Normandy struggling to perform their ordinary duties, while beside them the 6th Airborne, first into battle when June 6 was only twenty minutes old, and consisting entirely of the type of men that the line

³⁶³ John R. Peaty, 'British Army Manpower Crisis 1944' (KCL, 2000), chapter three; John Terraine, *The Right of the Line: The Royal Air Force in the European War, 1939-1945* (Sevenoaks: Sceptre, 1988), pp. 641–643.

³⁶⁴ W.J. Slim, *Defeat into Victory*. (London: Landsborough Publications, 1958), p. 444–446. See also John R. Peaty, 'British Army Manpower Crisis 1944' (London: KCL, 2000), chapter three.

infantry so palpably lacked, fought on as *line infantry* [author's own emphasis] for 82 days.³⁶⁵

Terraine down played the specialised role that 6 Airborne performed, while dismissing the very fact that the division *did* remain on the line for 82 days, thereby releasing more heavily-armed conventional role infantry for offensive operations. But the issue of manpower cost must be addressed as part of a balanced evaluation to compare to the contribution these troops made in Normandy, in terms of leaders, extraordinary physical requirements and total head count.

The manpower cost question will be broken down into two halves. First, how many men were diverted into these units from the rest of the army? Second, to what extent did they extract an unreasonable number of the best men? The three War Office systems used to create these units (volunteers, conversion and direct posting); the numbers involved, the quality of the men extracted from the point of view of officers and non-commissioned officers, and finally provide illustration with two case studies, the original battalions of 3 Para Bde and a unit specific focus on 8 Para Bn.³⁶⁶

The volunteer system was the approach first adopted when the Special Service commandos were formed in 1940.³⁶⁷ For parachute units the wave of volunteering following the August 1941 notice for men to complete the 1 Para Bde eventually furnished enough for four battalions (1-4), but the requirement to rapidly build further airborne units called for more structured action. Before the brigade was formed the conversion and volunteer routes had been analysed and the advantages and disadvantages weighed up in a War Office paper

³⁶⁵ Terraine, p. 642.

³⁶⁶ 7, 8 and 9 Para Bns comprised the original 3 Para Bde. 7 Para Bn would be transferred to 5 Para Bde in the summer of 1943 so 3 Para Bde could accommodate 1/Canadian Para Bn. As some statistics are lacking for 7 Para Bn concerning volunteer numbers on conversion, 12 and 13 Para Bns are included on Table 2 to give a broader picture.

³⁶⁷ TNA WO 32/4723, Formation of Special Service Commandos. 'Volunteers for Special Service'. 9 June 1940.

of 17 July 1941.³⁶⁸ The volunteer method was perceived as being the most effective way to obtain good men, but some units might be 'robbed of their best' while others 'will not be allowed to volunteer' by their parent regiments, and overall the method would be time-consuming. To save units being asset stripped of their best soldiers a limit of ten other ranks (ORs) per unit was imposed when 1 Para Bde was formed.³⁶⁹

The same paper of 17 July also weighed the merits of the conversion of complete infantry battalions, the clear possible advantage being the retention of the old unit's 'esprit de corps'. Also no cadre would be needed from 11 SAS (Special Air Service, the existing experimental airborne battalion) and it appeared to be 'the most speedy method of creating new parachute units'. The obvious disadvantages would be the presence of unsuitable men or men who simply did not volunteer. The paper suggested that they could be concentrated into the parts of the conventional role infantry battalion that would not be needed in the new establishment (such as Bren/Universal carrier platoons) and then the whole element posted to another unit as a group. While this particular idea was not used the 'speedy' conversion method won out, supported by the continuing call for volunteers.³⁷⁰

A memorandum generated by a 28 May 1942 meeting finally set down that conversion was the best method for the creation of new parachute battalions. Along with the existing 4 Para Bn, two battalions were converted soon after to create a new 2 Para Bde.³⁷¹ This paper also stated that six further battalions had been 'ear-marked' by Home Forces for conversion should a second division be created. It was also agreed that no 'Regular' battalions would be

³⁶⁸ TNA WO 32/9778, Airborne Policy. A paper on 'Formation of Parachute Battalions', 17 July 1941.

³⁶⁹ TNA WO 32/9778, Airborne Policy. Memorandum regarding the formation of two Additional Air Service battalions, 26 August 1941.

³⁷⁰ TNA WO 32/9778, Airborne Policy. A paper on 'Formation of Parachute Battalions', 17 July 1941.

³⁷¹ 7 Camerons and 10 RWF were converted into 5 and 6 Para Bns respectively on 17 July 1942. Otway, p. 54.

converted.³⁷² The battalions to be converted into 3 Para Bde were concentrated in 223 Bde during September 1942.³⁷³ The performance of the battalions selected for conversion had been closely followed. As part of Eastern Command, 223 Bde had performed well as a 'break-in' attack force during Exercise Barratt Two on 14-15 October; while on 20-22 October A Coy 10 Somerset Light Infantry (10 Som LI) had carried out a river assault using small boats during Exercise Check.³⁷⁴ Coincidentally, during this exercise fifty ORs led by Lt. Taylor mounted in trucks impersonated two Ju 52 loads of German Fallschirmjäger to draw away enemy troops.³⁷⁵

The third method to obtain the manpower needed was direct posting of individuals, as used in the rest of the Army, which was the case with the airlanding battalions. 31 (Ind) Bde Gp which was converted into 1 AL Bde and later formed two thirds of 6 AL Bde, was a regular formation that had returned from India.

The four battalions comprising the brigade were therefore fit and hard, used to soldiering on light scales of equipment and, as regular battalions with a high percentage of long-service officers and men, well disciplined.³⁷⁶

It had trained for mountain warfare and was well suited in its new role as a counter attack reserve for Western Command, defending the upland Gower peninsular. The airlanding units, while being members of the AAC,³⁷⁷ remained tied to their parent county regiments, with officers and other ranks posted in as needed. The change of role came as a great shock

³⁷² TNA WO 32/9781 Formation of the Army Air Corps 1941-1949, memorandum dated 28 May 1942.

³⁷³ On 13 September 1942 13 Warwick had been moved from Cromer to St. Albans to join 223 Bde (and relieved in 213 Bde by 7 Norfolk). TNA WO 166/8922 13 Royal Warwicks, Dec. 1941-Oct. 1942. 10 Som LI had been transferred into 223 Bde as of 5 September 1942, relieving 8 Suffolk. TNA WO 166/8969 10 Som LI WD, October 1942.

³⁷⁴ TNA WO 166/8969 10 Som LI WD, October 1942.

³⁷⁵ Ibid. 'Special German Special Idea and Instructions', 22 October 1942.

³⁷⁶ Michael Hickey, *Out of the Sky: A History of Airborne Warfare* (London: Mills and Boon, 1979), pp. 82-83.

³⁷⁷ The Army Air Corps (AAC) was the umbrella corps for all airborne forces – airlanding battalions, the Glider Pilot Regiment, the Parachute Regiment and later the Special Air Service Regiment.

to some, and peer pressure played a role in at least one case:

All Airborne troops were volunteers, receiving additional pay as danger money, and we three were therefore very surprised to find ourselves drafted! However, a tough-looking sergeant-major made all technically correct at our first parade when he barked out in his most intimidatory manner that he understood that we had all volunteered but that, if anyone had not done so, he only had to take apace forward. He stopped shouting and glared at us. Needless to say, nobody moved. So now we were all volunteers, but that is how it happened that some were more volunteers than others.³⁷⁸

Converted units underwent considerable changes in personnel while undergoing training for their new specialised roles, and all personnel had to voluntarily re-role. However, any who had previously volunteered but then decided to drop out, could have engineered their exit by simply underperforming during parachute training and failing the course.³⁷⁹

The head-count cost of these units, and any disruption caused by their creation, must be set in the context of the army's personnel situation in the summer/autumn of 1942 when a second airborne division was being considered. At this time there was no infantry manpower crisis and the Adjutant-General was dealing with a shortage of men for supporting arms and a glut of formed infantry battalions, and five parachute battalions were created from this milieu:

'During the late summer and autumn of 1942, selection procedure has been applied to 19 Young Soldiers', 26 Home Defence and 6 Field Force Bns which were being disbanded in order to provide more men for such other arms as R.A., R.E., R. Sigs, R.A.S.C. and R.E.M.E. The method used was a modified form of the selection procedure given to General Service Corps recruits, full attention being paid to a man's military record.³⁸⁰

(a) The disbandment of surplus infantry battalions at Home between August and December made available some 33,000 personnel for transfer to other arms,

³⁷⁸ Dudley Anderson, *Three Cheers for the Next Man to Die* (London: Robert Hale, 1983), p. 29.

³⁷⁹ The Second World War Experience Centre (SWWEC) LEEWW 2006 582 Beasant, J. Appendix B of 87th Parachute Course – 'Nominal roll of officers and other ranks who failed to complete the 87th Course of parachute training'.

³⁸⁰ The Liddell Hart Centre for Military Archives (LHCMA) Adam Papers 3/1-3 'Notes for the estimates speeches in 1941 and 1943 by the Secretaries of State for War', Notes for Secretary of State's Estimates Speech – Adjutant-General's Department, February 1943, 3.

according to their age, category and suitability based on selection and aptitude tests.(b) During the year, 15 surplus infantry battalions were converted to R.A.C. regiments, 22 to Royal Artillery regiments and 5 to Parachute battalions. In addition, 2 Yeomanry regiments were converted to R. Signals units and 1 to motorised infantry'.³⁸¹

These surplus infantry units had resulted from the sudden doubling in size of the TA in March 1939 and the sudden addition of war service battalions. In 1939 the army had possessed 140 regular battalions (seventy-nine of which were abroad) while the enlarged TA fielded 232. The crisis of 1940 had brought about the creation of 140 war service battalions, based on cadres of fifteen officers and 150 men drawn from ITCs and holding battalions and then filled with 800 conscripts.³⁸² The result was that the experience base of infantry as a whole had been diluted.³⁸³ The regular battalions had been 'milked' to spread regular soldiers around which left many units 'off balance', with both existing and new units missing key experienced men.³⁸⁴ Another problem was an abundance of young soldiers. In 1939 men aged seventeen to nineteen years had been allowed to volunteer to avoid waiting for their militia (national) service.³⁸⁵ However shortly afterwards it was decided that while the nineteen-year-olds could serve overseas, young soldiers would need to be twenty to be sent to an operational theatre. This resulted in around 40,000 'immature' soldiers being shuffled around when their unit went overseas, often into ADGB (Air Defence Great Britain – anti-

³⁸¹ Ibid., p. 5.

³⁸² F.W. Perry, *The Commonwealth Armies: Manpower and Organisation in Two World Wars* (Manchester: Manchester U.P., 1988), pp. 49–53.

³⁸³ TNA CAB 23/98, War Cabinet and Cabinet Minutes. Conclusions of a meeting of the Cabinet, 29 March 1939.

³⁸⁴ J.R.M. Butler, *Grand Strategy*. (London: HMSO, 1957), p. 28; Richard Nelson Gale, *Call to Arms: An Autobiography* (London: Hutchinson, 1968), 96. John Kennedy, *The Business of War: the War Narrative of Major-General Sir John Kennedy* (London: Hutchinson, 1957), 8. Richard Nelson Gale, *The Worcestershire Regiment (the 29th and 36th Regiments of Foot)* (London: Leo Cooper, 1970), p. 97.

³⁸⁵ Men aged eighteen to forty-one years were registered for national service. Parliamentary Papers (PP) 1938–39 (249), National Service (Armed Forces) Bill. Clause two – registration, 2 September 1939.

aircraft artillery units)³⁸⁶ or into the Young Soldier battalions.³⁸⁷ By mid-1944 the entire airborne and commando establishments represented less than one and a half per cent of the army's total manpower and five and a half per cent of its infantry strength (**See Tables 1 and 2**).³⁸⁸ Of the eighteen assault brigades landed on the 21 Army Gp beaches by nightfall 6 June, the airborne and commando formations comprised over a quarter of them – five brigades. Less than half of the existing airborne and commando formations were used for Neptune, but were twenty-seven per cent of the 'teeth' of the most critical British offensive undertaken by the western allies in the Second World War.³⁸⁹ In short, the Army's manpower position in 1942 (when a second airborne division was under consideration) was in a state of some turmoil, and the extraction of the small number of men for airborne (and commando) forces was therefore not considerable.

The next question to be answered regards quality – to what extent did these units take a significant proportion of the Army's best ORs? A contemporaneous definition of 'best' being summed up by characteristics set out in the calls for the men to form 1 Para Bde, 'volunteers must be first class fighting soldiers and show keenness, intelligence and initiative and must be men of first class character only', with any NCO applicants 'recommended for the next higher rank.'³⁹⁰ Similarly, the first commando officers required in 1940 needed to have 'personality, tactical ability and imagination.'³⁹¹ The physical specification was also demanding. A joining instruction document of December 1943 reinforced clear physical

³⁸⁶ LHCMA Adam Papers 3/1-3, Paper by the Adjutant-General on use of Manpower in the Army dated 21 February 1941, p. 5.

³⁸⁷ The Young Soldier Battalions were all numbered 70, for example 70/Rifle Brigade.

³⁸⁸ TNA WO 73/160 General Strength Return of the British Army 31 March 1944. TNA WO 171/13831/RUR WD, 27/5/44. TNA CAB 106/7 Combined Operations Report, 47, March 1944. TNA WO 204/8397. Commando and Infantry Establishments.

³⁸⁹ L. F. Ellis, *Victory in the West*. (London: H.M.S.O., 1962), p. 521–532.

³⁹⁰ TNA WO 32/9778, Airborne Policy. Memorandum regarding the formation of two Additional Air Service battalions, 26 August 1941.

³⁹¹ TNA WO 32/4723, Formation of Special Service Commandos. 'Volunteers for Special Service. 9 June 1940.

standards for potential parachutists - 'Age 19-40; Height not over 6 ft 2 ins; weight not over 182 pounds', and visual acuity 6/ 12 without glasses and 'Hearing Standard 2.'³⁹²

A large complement of NCOs was crucial for 6 Airborne. Due to the need for more leadership in the case of a dispersed landing, parachute battalions' ten-man sections were led by sergeants rather than the corporals as found in conventional role units.³⁹³ The diversion of much of the army's most able existing and potential NCOs would have badly damaged units' junior leadership in action, training capacity and ability to uphold discipline.³⁹⁴ If the airborne and commando forces had inexorably drawn all the best soldiers from the rest of the army, particularly the infantry, that would have been too high a price to pay for the special battlefield role they could perform.

Three important factors prevented the best men being monopolised by airborne (and also commando forces) – the actual numbers involved, the ten man volunteer limit, and the attitude of other units and the ability of converted battalions to retain many of their NCOs and officers. As shown above, the total numbers of airborne and commando troops were small when compared with the main body of the conventional role units of the Army and the limitation of ten men at a time being allowed to volunteer appears to have been

³⁹² TNA WO 205/751, Parachute training joining instruction, 2 December 1943. For the Special Service requirement see NA WO 32/4723, Formation of Special Service Commandos. 'Volunteers for Special Service'. 9 June 1940.

³⁹³ TNA WO 32/9778, Airborne Policy. Memorandum regarding the formation of two Additional Air Service battalions, 26 August 1941 This document detailed the number of men of each OR rank required - '4WOs, 47 Sergeants, 39 Corporals, 27 Lance-corporals.' See also TNA WO 166/10730 3 Para Bde 1943 WD, '3 Parachute Brigade Standing Orders for Parachuting', 8 June 1943. Martin Middlebrook, *Arnhem 1944: The Airborne Battle, 17-26 September* (London: Penguin, 1995), p. 23; William F. Buckingham, *Paras: The Birth of British Airborne Forces from Churchill's Raiders to 1st Parachute Brigade* (Stroud: Tempus, 2005), p. 178.

³⁹⁴ An indicator to the crucial contribution of NCOs to the British Army can be seen in "Some General Notes on What to Look for When Visiting a Unit", 6 March 1942, a checklist Montgomery created for Crerar while inspecting Canadian formations based in South Eastern Command. Reproduced in full as Appendix A, John A. English, *The Canadian Army and the Normandy Campaign: A Study of Failure in High Command* (New York: Praeger, 1991), p. 314–319.

adhered to.³⁹⁵ When these considerations are set alongside the organisational structure of an infantry battalion in 1944, it can be seen that even in the extraordinary event of all ten soldiers released by a donor unit being at least a corporal this would still only comprise ten per cent of the total number of men at this rank or above.³⁹⁶ Once the new airborne units were formed, the promotion of NCOs from the ranks became the responsibility of the CO and would be sourced from the unit itself.³⁹⁷ The second factor which inhibited the mass migration of the 'best' soldiers to airborne and commando forces was the attitude and behaviour of other units, who sometimes saw these calls for volunteers as the chance to offload undesirables and could always just not circulate the army council instructions.³⁹⁸ One challenge to this proposition was put forward by Nick Archdale, in 1943/44 the Mortar Platoon commander of 7 Para Bn, who did believe that airborne forces had monopolised the best infantry soldiers available.³⁹⁹ He may have formed this impression thanks to the efforts of Major Johnson (as discussed above) who had written to all the other Som LI battalions asking for volunteers. In this case 7 Para Bn may have received a better standard of recruit than the battalions as its 'parent' regiment came to its aid. On 16 April 1942 Browning⁴⁰⁰ complained to the War Office that his recruiting efforts were being stymied across the Home Commands:

³⁹⁵ SWWEC Watson, W.H. LEWW 2005-2881, 2007-371, 5. Victor Gregg and Rick Stroud, *Rifleman: a Front-line Life* (London: Bloomsbury, 2011), p. 103. Some men in the Middle East may also have volunteered for airborne service as a way to return to the UK.

³⁹⁶ There were 102 Warrant Officers, sergeants and Corporals in a conventional role infantry battalion in 1944. The War Office, *Infantry Training Part 1: The Infantry Battalion* (London: The War Office, 1944), p. 2–3; Jean Bouchery, *The British Soldier, Volume 2: Organisation, Armament, Tanks and Vehicles* (Paris: Histoire & Collections, 1998), p. 40–41.

³⁹⁷ English, p. 316.

³⁹⁸ H.A. St. George Saunders, *The Red Beret. The Story of the Parachute Regiment at War, 1940-1945*. (London: Michael Joseph, 1950), p. 34–35; John Frost, *A Drop too Many* (Barnsley: Leo Cooper, 2002), p. 25.

³⁹⁹ Nick Archdale, interview, 31 October 2013.

⁴⁰⁰ Lieutenant-General Sir Frederick 'Boy' Browning. A Grenadier Guardsman who had commanded 24 Gds Bde before becoming GOC 1 Airborne Div in November 1941. Richard Mead, *General 'Boy': The Life of Lieutenant General Sir Frederick Browning* (Barnsley: Pen & Sword Military, 2010), passim.

In spite of Army Council instructions requiring units to forward names of volunteers for the Airborne Division, the response has been extremely disappointing. This is not because volunteers do not exist; it is because the terms of the ACI have not been circulated widely as directed, and it is known for certain there are thousands of volunteers whose names have not been forwarded⁴⁰¹.

In regard to the newly converted units that would form the parachute battalions of 6 Airborne Div, many NCOs were retained from the donor unit on conversion. James Hill⁴⁰² stated that around '150' men stayed on with each of the new battalions when 223 Brigade was converted, including many NCOs.⁴⁰³

In any army the effectiveness of the officer cadre is the key determinant of combat performance, and any experienced regular officers that the new airborne and commando units attracted would be a loss to their donor regiments. It is important therefore to measure this cost. Two years before the war began the Army was already short of officers,⁴⁰⁴ and with the sudden doubling of the Territorial Army in March 1939⁴⁰⁵ the situation became severe. The Army began the war with approximately 15,000 regular officers, but by February 1941 this number had increased to 54,000.⁴⁰⁶ However, this great increase masked the loss of experience that had occurred in the first twelve months of the war. Up to this point 3,354 officers had been lost,⁴⁰⁷ the majority of which would have been trained regular and first line territorial officers. Meanwhile, the many recalled AOER⁴⁰⁸

⁴⁰¹ TNA CAB 120/262, Development of Airborne Forces. 'The Present Situation of the Airborne Division', 16 April 1942, 2.

⁴⁰² Brigadier James Hill. A regular Royal Fusilier who had commanded 1st Battalion in Tunisia and later 3rd Parachute Brigade in Normandy. 'Telegraph Obituary: Brigadier "Speedy" Hill'.

⁴⁰³ Julian James, *A Fierce Quality: a biography of Brigadier Alastair Pearson* (London: Cooper, 1989), 5; Alan. Jefferson, *Assault on the Guns of Merville: D-Day and After* (London: John Murray, 1987), p. 28–29.

⁴⁰⁴ TNA WO 163/456. Draft Report of the Committee of the Supply of Officers, Appendix A, the Officer Situation on 1 March 1937. The Army was 410 officers short of the establishment level, and by 1942 this would be 525.

⁴⁰⁵ TNA CAB 23/98. Meeting of the Cabinet, 29 March, 1939. p. 133.

⁴⁰⁶ LHCMA Adam Papers 3/1-3. Notes for the Secretary of State's Estimates Speech, Adjutant-General's Department, 15 February, 1941.

⁴⁰⁷ Ibid.

⁴⁰⁸ AOER - Army Officer Emergency Reserve, 24,000 of these men were recalled to the colours. Ibid.

officers were older men (including Great War veterans) and therefore not of peak military age, and due to a lack of funds only 'isolated' refresher training could take place.⁴⁰⁹

Therefore by 1944 any experienced regular infantry officers, who had been able to learn their profession in peacetime, were very valuable indeed.

A study of the Officer Field Strength Returns of the original units in 3 Para Bde for 20 and 27 May 1944 on the eve of operation Overlord, when matched with the April 1944 Army List reveals the regular Army officers (**Table 4**).⁴¹⁰ The three 27 May 1944 field strength returns show 109 officers. By assessing the substantive and temporary/war rank status and listed regiment of each individual, and then comparing the information to the Army List, the number of pre-war trained officers can be ascertained - ten officers. These men include Otway and Pine-Coffin, the commanders of 7 and 9 Para Bns respectively; six are Majors (four temporary); the remaining four are three captains (two acting) and one lieutenant. Every war service officer would have been 're-badged' as AAC when he passed his parachute training, but regular officers were listed by their parent infantry regiment as a distinction.⁴¹¹ Therefore the officers with county regiment entries rather than just AAC are not listed amongst the twenty-one pre-1939 commissioned regular, regular supplemental reserve or TA names in the Army List Parachute Regiment pages; but are listed with their parent regiments. Consequently just over nine per cent of 3 Para Bde's officers were regular and

⁴⁰⁹ LHCMA Adam Papers 3/1-3. The use of Manpower in the Army, 21 November 1941.

⁴¹⁰ 7, 8 and 9 Paras comprised the original 3rd Parachute Brigade (3 Para Bde). 7 Para would be transferred to 5 Para Bde in the summer of 1943 so 3 Para Bde could accommodate 1st Canadian Parachute Battalion (1 Can Para Bn). This is the last list before D-Day. *The Quarterly Army List, April 1944, Part I* (London: HMSO, 1944).

⁴¹¹ For example, Richard Todd was commissioned on 5 April 1941 and posted to 2/4 KOYLI. He volunteered for parachute training in the summer of 1943 and was posted to 7 Para on 2 October 1943 having completed his training. He appears in the Army List as a Parachute Regiment Regular Army Emergency commission and a war service (W.S.) Lieutenant as of 1 October 1943; and on 7 Para's officer return as simply a lieutenant. TNA WO 171/1239, 7 Para WD 1944, 27 May 1944 Field Return of Officers; Todd, 111 & 143-144. TNA WO 32/9778 Airborne Policy, 'Formation of Two Additional Air Service Battalions' 26 August 1941.

had pre-war experience.⁴¹² By 1944 the Army contained 167,926 officers;⁴¹³ assuming 10,000 remained of the 15,000 regular serving officers of 1939,⁴¹⁴ they would form only six per cent of the existing officer corps. This shows the regular officer allocation of the new AAC units was well above average, though the time many of these men had to settle into their new battalions was limited, with around forty-eight per cent of the officers of the original 3 Para Bde joining in October 1943 or later. As a comparison, the proportion of pre-war regulars in 9 and 185 Bdes are displayed on the same chart (**Table 4**). These brigades of 3 Div were selected for comparison as they had a key assault role in the landings and were also part of 1 Corps. While these brigades were classed as regular, their regiments had by this point been considerably diluted by experienced officers being posted away due to the Army's wartime expansion.⁴¹⁵ This analysis shows that the airborne units had not taken up a disproportionate share of regular officers. The number of TA officers is significant, showing TA officers who have been attracted to the Army Air Corps challenge.⁴¹⁶ None more so than Alistair Pearson, the CO of 8 Para Bn.

Yet is it possible the airborne and commando forces may have monopolised the most aggressive and capable men? The statement made by Lt.-Col. Lionel Wigram (5 RWK) as part of the review of operations in Sicily points to the qualitative difference of individuals at platoon level. In 'whatever regiment – whether good or bad', he states of a typical under strength platoon of twenty-two men, six will 'go anywhere and do anything', twelve will be

⁴¹² The Army List shows that of 557 officers listed for the Parachute Regiment only twenty-one have commissioning dates before 1939 (3.8%). *The Quarterly Army List, April 1944, Part I*, 1894–1899.

⁴¹³ TNA WO 73/160. General Strength Return of the British Army, 31 March 1944.

⁴¹⁴ 3,354 officers had been lost by early 194, many of which would have been regulars. LHCMA Adam Papers 3/1-3, Notes for the Secretary of State's Estimates Speech, Adjutant-General's Department, 15 February, 1941.

⁴¹⁵ Patrick Delaforce, *Monty's Iron Sides: From the Normandy Beaches to Bremen with the 3rd Division* (Stroud: Alan Sutton, 1995), 6.

⁴¹⁶ Frost, 24.

‘sheep’ and four to six unable to make the grade.⁴¹⁷ It could be argued that many of the men who belonged in the first group were those drawn to the airborne and commando forces, and thereby weakening their old units. However, this assumption dismisses the additional infantry training and hardening practised by their new units as the key to turning them into the ‘super infantrymen’⁴¹⁸ that took to the field in June 1944 and presupposes that these men would have done just as well in their old units.

An attempt to grade aggression, or aptitude for battle, had been made by the time 6 Airborne Div was formed. With the creation of the General Service Corps (GSC) in January 1942, men would now undertake six weeks basic training while their capabilities were assessed before posting to suitable units. Once selected for the infantry, for example, the recruit would then be posted to one of twenty-five infantry training centres (ITCs) for further instruction. The General Service Corps system allowed the rapid creation or re-manning of weak units with appropriate skill sets, but combined with the ceiling imposed on the size of the Army it damaged the regional character of many infantry county battalions. As part of his reforms regarding the appropriate selection of men for each role, the Adjutant-General Sir Ronald Adam classified men by ‘combat temperament’ (CT). Those graded as best suited to a combat role were classed as CT1 formed around 5 per cent of troops, while CT3 – the least suited, 3 per cent.⁴¹⁹ When recruiting volunteers directly from the GSC, airborne forces did take many of the CT1 graded men, along with the commandos, Reconnaissance and Armoured Corps.⁴²⁰

⁴¹⁷ TNA WO 231/14, Reports on Sicily. Lt-Col Wigram’s Report, 16 August 1943, 2.

⁴¹⁸ SWWEC LEEWW 2006 – 118 Leake, R.A. ‘The History of 8th Parachute Battalion in Normandy 6th June to 6th September 1944’.

⁴¹⁹ Roger Broad, *The Radical General: Sir Ronald Adam and Britain’s New Model Army, 1941-1946* (Stroud: Spellmount, 2013), p. 95.

⁴²⁰ Broad, p. 94. LHCMA ADAM 3/1-3 ‘Notes for the estimates speeches in 1941 and 1943 by the Secretaries of State for War’, Notes for Secretary of States’ Estimates Speech, February 1943, p. 3. TNA WO 32/9804.Postings

This section now turns to specific case studies to show the conversion cost and process.

The first case study dealing with the manpower cost issue centres on an overview of the original (7, 8, 9 Bns) of 3 Para Bde, **Table 2** showing their numbers at various stages of the conversion process. 10 Som LI, 13 Warwick and 10 Essex together formed 223 Bde which on 5 November 1942 was converted en masse into 3 Para Bde (becoming 7-9 Battalions respectively). 223 Bde had been under the direct command of 9 Corps⁴²¹ (on the east coast) and contained war service units all formed in 1940. The conversion of this formation meant that no brigade was extracted from an established infantry division based in the UK, all of which by late 1942 were being readied for either imminent overseas operations or still held in case of an enemy invasion. As discussed above in the section regarding the general situation of the army in 1942, the excess of infantry units had to be absorbed by other corps. This was reflected in the letter Adam sent to 10 Som. LI on conversion where he discusses the main reason behind their change in role, 'the needs of modern (war) have necessitated changing your battalion from infantry to parachutists', the alternative being their disbandment.⁴²² This letter does its best to 'sell' the conversion to the battalion with some flattery, but makes it clear that the alternative will certainly be dispersal. There is a clear appeal for the spirit of the existing battalion to be transferred into the new role and 10 Som LI responded well, as seen in column V (**Table 3**). All five of the battalions (including 12 and 13 Bns raised later for 5 Bde) showed roughly the same level of volunteering with between a third and half of the ORs and approximately two thirds of the officers stepping

of officers and other ranks to their national units (Scottish, Welsh and Northern Irish). Letter from the Director of Organisation to Home Commands, 23 June 1941. David French, *Raising Churchill's Army: The British Army and the War against Germany, 1919-1945* (Oxford: Oxford University Press, 2001), p. 145.

⁴²¹ Lieut-Colonel H.F. Jolsen, *Orders of Battle, United Kingdom and Colonial Formations and Units in the Second World War 1939-1945*, 2 vols. (London: HMSO, 1960), I, p. 386 & 411.

⁴²² TNA WO 166/8558, 7 Parachute Battalion WD, letter dated 2 November, 1942.

forward, in the case of 10 Som LI all of the officers volunteered.⁴²³ This number of officers and possibly the bulk of the NCOs meant the leadership spine of the units remained intact.⁴²⁴ It must be remembered that all the men who failed to become parachutists were not lost; they were still trained infantrymen and were posted to another battalion. The final column (Z) shows that while sixty-five per cent of the officers were on the battalions' strength; only thirty-five per cent of ORs were in place, the balance to be made good by volunteers from the rest of the Army.

8 Para Bn provides a good battalion example of role conversion. 13 Warwick was informed by Lt.-Col. Lathbury on 6 November 1942 that they would be converted, and twelve officers and 130 ORs stepped forward respectively for the parachute volunteer group (**Table 3 COLUMN V**).⁴²⁵ The 1942 war establishment strength of an infantry battalion was thirty-three officers and 773 ORs⁴²⁶; therefore if 13 Warwick were at full strength the volunteer group would represent just under thirty-seven per cent of officers and only seventeen per cent of ORs. Once the initial detachments of parachute training candidates had been sent off to the Airborne Forces depot at Hardwick Hall, the posting of all those who had not volunteered began, the three new battalions sending men to other battalions of their regiment or nearby regional neighbours. In 8 Para Bn's case 175 men who had failed the parachute medical or did not wish to volunteer were posted to 8 Warwick (143 Bde, 48 Div) in Lincolnshire where they were formed into a special additional 'E' Company at Chapel St.

⁴²³ TNA WO 166/8558 7 Para 1942 WD, Major Johnson's letter to the other Som LI battalions, 11 November, 1942.

⁴²⁴ Jefferson, p. 28.

⁴²⁵ TNA WO 166/8559, 8 Para WD, 6 November 1942.

⁴²⁶ TNA WO 32/10400, Organisation of the Infantry Battalion. Memorandum from War Office 'The Reorganisation of Infantry Battalion', 10 December 1942.

Leonards.⁴²⁷ All the men who turned down the opportunity to join the AAC were still valuable trained infantrymen and would be needed for ongoing operations. Indeed, after just two months E Company 8 Warwick had sent 'large drafts' to serve overseas, while the 13 Warwick parachute converts would not see action for another sixteen months.⁴²⁸

Like the other units in 3 Para Bde, 8 Para Bn exploited the Young Soldier units as a source of potential volunteers. Many of these soldiers would have been too young for parachute training, needing to be nineteen years old, but this was revised to eighteen and a half in July 1943 as 6th Airborne began to fill its ranks. 136 ORs in two groups from 70 Warwick⁴²⁹ were sent directly to Hardwick to do the initial parachute course on 7 and 14 June 1943 without spending time with 8 Para Bn first; with another sixty-six from 70 Northhamptons on 30 June – a total of 202 potential paratroopers in June 1943 alone.⁴³⁰ In another example, 9 Para accepted ninety-five young soldiers from 70 Norfolks, 70 Hamps, 70 Mx on 3 July 1943.⁴³¹

Much of the leadership spine of the battalion appeared to have been in place by early 1943, as fifteen officers and fifty Warrant Officers (WOs) and NCOs of 8 Para Bn attended the advanced parachute cadre at Netheravon, 29 January 1943.⁴³² Given that the battalion had only 209 ORs seven months later, many of these NCOs must have come from 13 Warwick

(Table 3 Column Y). This situation was shaken up by the appointment as CO of Alistair

⁴²⁷ TNA WO 166/8559 8 Para 1942 WD, 18-22 December, 1942, TNA WO 166/8919 8/Royal Warwicks WD, December 1942.

⁴²⁸ TNA WO 166/12751 8/Royal Warwicks WD, January 1943.

⁴²⁹ When 70 Warwick was disbanded in July 1943, they men were quickly posted to other units, including thirty men to 2 Warwick (3Div, which would land on Sword beach) and 115 men to the Ox and Bucks at Woodhall Spa in Lincolnshire. Fifty-four men were transferred to the AAC at the same time having completed their parachute training. Ken Lord, '70th Bn The Royal Warwickshire Regiment – a Collection of Reports and Talks of Life in a Newly Formed Young Soldiers' Battalion in the Second World War' (Preston, 1999), 157–164, Royal Warwickshire Regiment Museum.

⁴³⁰ TNA WO 166/10350, 8 Para 1943 WD, June 1943; Lord, 159.

⁴³¹ TNA WO 205/751, Parachute training joining instruction, 2 December 1943; T. B. H. Otway, *Airborne Forces* (London: Imperial War Museum Department of Printed Books, 1990), 145. TNA WO 169/10351, 9 Para WD 3 July, 1944.

⁴³² TNA WO 169/10350 8 Para 1943 WD. 29 January 1943.

Pearson to replace Hildersley, who had been sacked by Gale on 2 December 1943. On arrival Pearson overhauled the leadership cadre of the battalion. He apparently questioned each officer about his men, and those unfamiliar with their soldiers were promptly returned to unit ('RTU-ed').⁴³³ With a battalion composed of volunteers who arrived as strangers Pearson clearly believed that the only effective leaders were those that knew and therefore understood their men. By D-Day the number of pre-war regular officers in 8 Para Bn just before Overlord was low, only two.⁴³⁴ However, the Territorial Army was well represented with five officers including the CO, who had joined 6 Highland Light Infantry (HLI) before the war and had fought with the second BEF in 1940.⁴³⁵ These TA officers formed the leadership core of the battalion, with three acting majors commanding the rifle companies – Hewetson, Payne and Terrell. To have been made company commanders under such an exacting CO as Pearson reflects well on their skill and leadership ability.

There is evidence of men with operational experience in the battalion with the presentation of decorations for the recent campaign in N. Africa. The award on 7 December 1943 of the Africa Star to Pearson and two other officers (one being Major Terrell), and then to thirty-two ORs on the 8 December points to these men being either posted from 1 Para Bde as Tunisia veterans or men who had fought with other units in North Africa before volunteering for the Parachute Regiment.⁴³⁶ By 26 February 1944, 8 Para Bn was over establishment strength but short of the additional twenty per cent of personnel required to achieve the replacements level required for Overlord.

⁴³³ James, p. 88.

⁴³⁴ TNA WO 171/1240, 8 Para WD, 27 May 1944. Field Return of Officers.

⁴³⁵ James, p. 15–18.

⁴³⁶ TNA WO 169/10350 8 Para 1943 WD. 7/8 December 1943.

The formation of the division proceeded through the summer and autumn of 1943. By 6 August 1943 the selection and parachute training of all the men who had volunteered from the converted battalions, the five British parachute battalions still required thirty-five per cent of its officer establishment and sixty-five per cent of their ORs (**Table 3 Column Z**).⁴³⁷ Volunteers from across the army would complete the units' war establishments. While the two existing battalions of 6 AL Bde were at full strength, the brigade was not completed until 12 Devon was converted to the airlanding role on 30 July 1943, the WE being completed with men posted in from 14 ITC and other battalions through the autumn.⁴³⁸

The supporting elements of the division were assembled quickly by their parent arm – RE, RAC, Signals or RA. The most matter of fact formation was carried out by the Royal Engineers. On 1 May 1943 three field companies (249, 286 and 591) together with a Headquarters had been assembled at Framlingham under the command of Major Lowman. On 21 May the companies assumed their airborne identities and had moved to Bulford by 6 June.⁴³⁹ 6 Airborne Armoured Reconnaissance Regiment (6 AARR) was the culmination of an idea to provide light tank support for Special Service troops, originating with the creation of C Special Service Squadron on 31 July 1941. By July 1942 it had been attached to 1 Airborne Div as the Airborne Light Tank Squadron, and was passed to 6 Airborne when the former division was sent out to the Mediterranean.⁴⁴⁰ The men for the original squadron had been drafted from tank crews from 1 Armd Div regiments, formerly the regular 'Mobile Division'.⁴⁴¹ The squadron strength growing from a total strength of 138 to 306 officers and

⁴³⁷ TNA WO 205/751 The Training of 6th Airborne Division, 'Formation of 6th Airborne Division', 6 August 1943.

⁴³⁸ TNA WO 166/12516 12 Devon 1943 WD, July-October 1943.

⁴³⁹ TNA WO 166/10505 RE 6 Airborne Div 1943 WD.

⁴⁴⁰ (AA) Gale Folder 3-G1-7.1.2, '6 Airborne Armoured Regiment – Historical Notes', p. 1 & 7.

⁴⁴¹ David Fraser, *And We Shall Shock Them: The British Army in the Second World War* (London: Cassell, 1999), p. 400.

ORs when the unit became a regiment, volunteers being drawn from the RAC Depot and other armoured units.⁴⁴²

The core of the manpower for 6 Airborne Signals was some five officers and 100 ORs left behind by 1 Airborne Div Signals when it departed for the Mediterranean late in April 1943.⁴⁴³ 6 Airborne Signals came into being on 10 May at Bulford, and throughout the late summer and autumn 'all signal units throughout the country were combed to find the type of man who makes the good parachutist.'⁴⁴⁴ Smallman-Tew's command lagged behind in regard to qualified parachutists; on 31 December 1943 only six of officers and 245 of 467 ORs had gained their wings.⁴⁴⁵ The reason behind the conversion of 53 Worcs Yeo. has been discussed above, but once transformed Gale makes use of the most of the gunners' former skill base, with three subalterns posted to 3 and 4 Anti-tank (A.Tk) Btys in exchange for field gunner lieutenants.⁴⁴⁶ As regards to the gunners unwilling to convert to the airlanding role eight-five men are posted to 94 A.Tk Regt RA on 29 November; while '88 specialists' are posted in on 9 November 1943. With considerable manpower available to draw volunteers from, the RA, RAC, RE and Royal Signals were well able to furnish the tradesmen needed for 6 Airborne Div.⁴⁴⁷

Richard Gale's straightforward style of command would dominate the formation of 6 Airborne and its planning and execution of operations in Normandy. His simple style disguised a deep understanding of the nature of airborne warfare and that of British

⁴⁴² 1 Armd Div was a regular formation, the regiments being the Queen's Bays, 9th Queen's Royal Lancers, 10th Royal Hussars, 1st and 2nd RTR. Harclerode, p. 21.

⁴⁴³ (AA) Gale Folder 4H6-2.21.17, '6 Airborne Divisional Signal Regiment – History', p. 1.

⁴⁴⁴ Ibid. TNA WO 166/10506 6 Airborne Signals 1943 WD, 10 May 1943.

⁴⁴⁵ TNA WO 166/10506 6 Airborne Signals 1943 WD, 31 December 1943.

⁴⁴⁶ TNA WO 166/11333 53 Regt RA 1943 WD, December.

⁴⁴⁷ TNA WO 73/160 General Strength Return of the British Army 31 March 1944. Troops based in the UK: RA – 22,755 officers and 379,575 ORs (all types); RAC – 4,663 officers and 69,798 ORs; RE – 9,347 officers and 41,740 ORs; Signals – 3,325 officers and 65,009 ORs.

airborne forces thanks to his involvement at their inception as OC 1 Para Bde and then as Director of Air at the WO. The brutal replacement of unit commanders upon conversion points to his clear-cut approach and requirement for leaders who maintained the standards of regular service and enthusiasm for the airborne challenge.

Airborne numbers were few in comparison to the rest of the army. The War Office 'ten man rule' did not allow an unreasonable number of volunteers to be drawn from any one unit, and the samples analysed showing that excessive numbers of regular officers with peacetime experience were not absorbed in comparison to conventional role brigades. Men unwilling to join airborne forces were posted to conventional role battalions and so trained infantry were not lost to the army.

III. Toughening - Role-specific Training – Pre-role selection/Hardwick Hall, glider, and parachute

After 1942 a wartime recruit would have received six weeks basic infantry training at a Primary Training Centre (PTC) as a member of the General Service Corps after July 1942, where he would also have been assessed by a 'personnel selection board' to determine which arm of service would best suit the candidate's character and skills.⁴⁴⁸ A regular soldier, who had joined the army before the war, or an early war recruit, would have completed his basic training at his regimental depot.⁴⁴⁹ Therefore all the volunteers for airborne forces would have at the very least understood how to drill, understood army structure and have basic weapon handling skills. Harrison-Place has explored the lack of challenge and realism in the training of conventional role infantry, where a 'reality gap' existed, 'troops enjoying the sound of birdsong in the trees might well be asked to believe

⁴⁴⁸ TNA WO 277/36 'Training in the Army', p. 105. George Forty, *British Army Handbook 1939-1945* (Stroud: Chancellor Press, 2000), pp. 12–13.

⁴⁴⁹ Victor. Gregg and Rick. Stroud, *Rifleman: A Front Line Life* (London: Bloomsbury, 2011), pp. 23–26.

that they were under heavy artillery attack. Enemy action was often a matter of umpire fiction-making.⁴⁵⁰ The training a volunteer received from the moment he joined airborne forces was quite different.

On passing the initial medical criteria to volunteer for parachute training, the new recruit would be sent to Hardwick Hall, the Airborne Forces Depot, in Derbyshire, for pre-parachute selection. 'The methods used at Hardwick Hall were harsh by any infantry standards.'⁴⁵¹ The two to three week training focussed on hardening, and included elements such as a seven mile march in full equipment, carrying a man in full equipment one hundred yards in a minute, three rounds of boxing with a man of the same height. Bill Kershaw, later of 4 Para Bn, stated it was 'like a concentration camp – everything was done at the double.'⁴⁵² Guy Radmore, who would command 5 Para Bde Signals recalled 'After two days you were sore everywhere, after two weeks you could knock anything over.'⁴⁵³ This ensured that only the most determined men would progress onto parachute training at Ringway. The troops who belonged to the glider units were not sent to Hardwick Hall, unless they opted to complete parachute training, but their training was equally intensive.⁴⁵⁴ Two of the glider battalions, 2 Oxf Bucks and 1 RUR, had previously belonged to 31 Ind Inf Bde before conversion to 1 AL Bde in October 1941. This early conversion ensured that it was an 'unmilked'⁴⁵⁵ brigade and the battalions contained many 'five to six year regulars' and so was already at a high pitch of ability.⁴⁵⁶ 'To visit the 2nd Battalion Oxfordshire and Buckinghamshire Light Infantry, the old 52nd Foot, as late as 1943 in Bulford was to find oneself transplanted back in the piping

⁴⁵⁰ Harrison-Place, p. 20.

⁴⁵¹ Gregory, p. 26.

⁴⁵² Robert J. Kershaw, *Sky Men: The Real Story of the Paras* (London: Hodder & Stoughton, 2010), p. 139.

⁴⁵³ Radmore, Guy Townsend (interview), IWM no.12609, recorded 29/6/92.

⁴⁵⁴ Gregory, p. 41.

⁴⁵⁵ See Chapter Three.

⁴⁵⁶ Crookenden, Napier (interview), IWM no.16395, recorded 2/1/96.

days of peace. They were a well-disciplined, experienced formation with a wealth of professional skill amongst officers, NCOs and men.’⁴⁵⁷ When 12 Devons joined 6 AL Bde in July 1943, it was swiftly orientated to its new role. The whole unit had been glider trained at Netheravon and Brize Norton within two months, and had been involved in the divisional exercise Frigate.⁴⁵⁸ To qualify as a parachutist, eight drops were required, two from balloon and six from aircraft, the volunteers being processed in two week courses.⁴⁵⁹ To simply gain membership of airborne forces the initial training both on the ground and in the air was extremely tough.

This demanding physical training continued once the soldier had been posted to his unit within 6 Airborne Div. As the division prepared for D-Day, it took part in numerous large-scale exercises (see below) to ready the all the formations for their tasks. The possibility of scattering and the division’s lack of motor transport would mean that troops would have to rapidly cover considerable distances on foot. Terence Otway, the CO of 9 Para Bn recorded how these marches scaled up before June 1944:

It did not take long to evolve standards of physical fitness and before the invasion of North-West Europe airborne troops were regularly carrying out marching tests which stood them in good stead later – five miles in one hour, ten miles in two hours, 15 miles in three hours, 20 miles in four hours, some in battle order and some in games kit but wearing marching boots, and finally 50 miles in 24 hours in full fighting order, carrying all personal and light automatic weapons and ammunition.⁴⁶⁰

James Hill, ‘an outstanding and harsh trainer’,⁴⁶¹ the commander of 3 Para Bde aimed to ‘obtain 250% fitness to build up the capacity to see the Germans off.’⁴⁶² He pushed his men hard, his watch words in training being ‘speed, control, simplicity and fire effect’, spending

⁴⁵⁷ Sir Napier Crookenden, *Drop Zone Normandy*. (London: Ian Allan Ltd, 1976), p. 46.

⁴⁵⁸ TNA WO 166/12516, 12 Devons 1943 WD, July to September.

⁴⁵⁹ Gregory, pp. 26–27; Rebecca Skinner, *British Paratrooper 1940-45* (Oxford: Osprey, 2015), pp. 13–15.

⁴⁶⁰ T. B. H. Otway, *Airborne Forces* (London: Imperial War Museum Department of Printed Books, 1990), p. 44.

⁴⁶¹ E-mail conversation with Robert Kershaw, July 2014.

⁴⁶² Hill, Stanley James Ledger (interview), IWM no.12347, recorded 25/11/91.

weeks at a time exercising his men at night, encamped on Cranbourne Chase on Salisbury Plain.⁴⁶³ This gruelling training based mainly on stretching marching tasks is significant, as recent research has shown that ‘the use of forced marches to test overall toughness and willpower is the most reliable indicator of combat performance hitherto invented, as the selection procedures for Special Forces indicates.’⁴⁶⁴ Indeed, SAS selection during the 1970s included ‘sickeners’, fifteen or twenty mile marches at the end of which the waiting trucks at the RV would drive off.⁴⁶⁵ If this is the case, 6 Airborne was continuously testing its men under stressful conditions as close to battle as possible.

David French’s article on morale in the British army in Normandy explored possible causes of individual soldiers suffering from battle ‘exhaustion,’ the 1944 term for the Great War’s ‘shell-shock.’ He pointed out that the veteran 51 Div and new 6 Airborne were fighting in the same area of the bridgehead but the former suffered more cases than Gale’s formations. While malaria taking a toll of the Highlanders’ ranks and a general war-weariness might be explanations, 6 Airborne’s all-consuming emphasis on physical fitness may have helped stave off a proportion of psychological casualty cases.⁴⁶⁶

The smallest building block of soldiers’ social grouping, and in turn their morale, has been seen to be ‘the primary group.’ A term introduced in 1909 to describe ‘the smallest, most motivated groups in an organization.’⁴⁶⁷ What this meant in more simple terms was that the individual would fight for his closest colleagues in his section or platoon, ‘for the

⁴⁶³ Ibid.

⁴⁶⁴ Rune Henriksen, ‘Warriors in Combat - What Makes People Actively Fight in Combat?’, *Journal of Strategic Studies*, 30.2 (2007), 187–223 (p. 213).

⁴⁶⁵ Tony Geraghty, *Who Dares Wins* (London: Warner Books, 1992), p. 506.

⁴⁶⁶ French, David ‘“Tommy Is No Soldier”: The Morale of the Second British Army in Normandy, June-August 1944’, *Journal of Strategic Studies*, 19, 154–78

⁴⁶⁷ Bruce Newsome, ‘The Myth of Intrinsic Combat Motivation’, *Journal of Strategic Studies*, 26.4 (2010), 24–46 (p. 35).

companionship of staunch mates.’⁴⁶⁸ In 1948 Janowitz and Shils highlighted the strength that the primary group could give to the individual soldier, and demonstrated how units with a ‘high degree of primary group integrity’ suffered less desertions and surrenders.⁴⁶⁹ Simon King has discussed the importance of primary groups in boosting the cohesion of a unit, but has made the point that primary group strength could boost solidarity, but not necessarily combat motivation.⁴⁷⁰ Jonathan Fennell has put forward the case that other factors (such as having to fight with weapons the operator considered poor) have militated against the central position that the primary group has held as the fulcrum of sub unit morale, but also stated that Montgomery’s boost to primary group leadership through training was a major battle winning factor at El Alamein.⁴⁷¹ One widely published former paratrooper has indeed identified this factor, although important for all troops, as particularly key in the performance of airborne forces:

The ability to identify closely with comrades in battle is the essence of small unit combat durability, which means that, if properly led, such men can produce those defining impacts in conflict that enable battles to be won.⁴⁷²

This study proposes that a key element in the cohesion of 6 Airborne Div was this shared experience of ‘hardening’ at Hardwick Hall, the challenge of glider and parachute training and then the continued physical demands imposed by airborne exercises and training once officers and men had been posted to their units.

⁴⁶⁸ Stanley Whitehouse and George B. Bennett, *Fear Is the Foe : A Footslogger from Normandy to the Rhine* (London: Robert Hale, 1997), p. 48; George Macdonald Fraser, *Quartered Safe Out Here* (London: Harper Collins, 1995), p. 11.

⁴⁶⁹ Edward A. Shils and Morris Janowitz, ‘Cohesion and Disintegration in the Wehrmacht in World War II’, *The Public Opinion Quarterly*, 12.2 (1948), 280–315 (p. 285).

⁴⁷⁰ Anthony King, *The Combat Soldier: Infantry Tactics and Cohesion in the Twentieth and Twenty-First Centuries* (Oxford: Oxford University Press, 2013), p. 25.

⁴⁷¹ Jonathan Fennell, *Combat and Morale in the North African Campaign* (Cambridge: Cambridge University Press, 2011), pp. 244 & 278.

⁴⁷² Kershaw, p. 346.

Indeed, Dupuy's definition of cohesion echoes many of the points above:

Cohesion – The quality or characteristic of a unit whereby its members work well together and demonstrate loyalty to each other and to their unit in all circumstances. Cohesion is achieved by training together, living together and strong leadership.⁴⁷³

An extended primary group was created amongst 6 Airborne Div by the shared trials of training. A significant element within airborne training that further boosted airborne cohesion in action was the commonality of this tough training, both officers and ORs endured it, and the former were seen to do so by the latter. This wider identity allowed the division's units to perform with greater synergy together in battle, and more importantly went some way to counter-acting the disruption caused by scattering on the night of 5/6 June 1944. The building of the troops' personal fighting power and physical fitness also had a fortifying effect on their morale, as Hew Strachan has explained 'the value of training is therefore in large part psychological: it is an enabling process, a form of empowerment, which creates self-confidence.'⁴⁷⁴ This extraordinary development of personal prowess was accomplished within the British Airborne Establishment as routine training.

Still within the scope of role-specific training, Gale continued to develop the division's officer cadre. Despite the rush to complete the division during the summer of 1943, Gale was already beginning the preparation for likely operations thereafter. With Exercise Pegasus (8-17 June) he organised a first exercise for his brigadiers to analyse the problems inherent with a landing in support of an amphibious assault on the coast of north-western Europe. Each wrote an appreciation of methods to firstly capture an enemy battery, then operations to deny the enemy ground from where he could overlook a beachhead area, and

⁴⁷³ Trevor N. Dupuy, Grace P. Hayes and Chris Johnson, *Dictionary of Military Terms: A Guide to the Language of Warfare and Military Institutions* (New York: The H.W..Wilson Company, 1986), p. 50.

⁴⁷⁴ Hew Strachan, 'Morale and Modern War', *Journal of Contemporary History*, 41.2 (2006), 211–27 (p. 216).

finally ways of delaying the movement of enemy reserves to the battle front. 'The Appreciation' carefully reviewed factors such as own troops; the nature of the terrain; the operations of surrounding friendly forces; the likely reactions of the enemy before making deductions which could form the basis of plans.⁴⁷⁵ The Pegasus plans were discussed, and then Gale took the group to view the Avon estuary at Christchurch, terrain very similar to that of the Orne.⁴⁷⁶ Gale's activity was perceptive, as he appreciated that his division might well be committed as individual brigades in an invasion. It also established a useful planning frame work that was repeated for each brigadier's actual tasks as part of Tonga/Mallard.⁴⁷⁷ Further examples of Gale's officer development included a post-exercise meeting following exercise Bizz, and culminated in the final divisional co-ordinating conference of all commanding officers on 25 May.⁴⁷⁸ Gale's focus on developing his subordinates was obviously not unique, but it is important to recognise the space he made for it during the critical build-up period before Overlord; a time in which his units were familiarising themselves with aircraft that had not been used before and pursuing task-specific training.

IV. *Organisational Culture - the Army Air Corps - developing distinctiveness*

In addition to the tough role-specific training which his new division was subjected to, five additional moulding influences supported Gale in working up his formations. These were the influence of the Guards as introduced to the Airborne Establishment by 'Boy' Browning; the nature of the British regimental system which allowed the Parachute Regiment to form as

⁴⁷⁵ Gale wrote an Appreciation himself for CLUMSY, an exercise to test the Divisional and Brigade HQ Staffs while in the field. AA 4-H5-2.12.15 Gale Papers. Ex CLUMSY, 23-25 November 1943.

⁴⁷⁶ Richard Nelson Gale, *With the 6th Airborne Division in Normandy*, pp. 24-25.

⁴⁷⁷ TNA WO 171/593, WD 3rd Parachute Brigade, Appreciation of Situation, 14 April 1944. BTC 120 (Shrivenham) Account of operations 6 Airlanding Brigade, Appreciation of the Situation, 16 May 1944.

⁴⁷⁸ TNA WO 171/1239, 7 Para 1944 WD.31 March and 25 May 1944.

readily as it did; the AAC's more corporate nature by 1943-44; the advantage imparted by 'RTU-ing', and finally the leadership focus that was apparent across the Division.

A characteristic of airborne forces during the Second World War were high standards of discipline and turn-out. These principles were sharply focussed on with the appointment of Frederick 'Boy' Browning as the GOC of 1 Airborne Div, a regular Grenadier Guardsman. He had won the DSO during the First World War and had become the adjutant of Sandhurst in 1924. 'He was the personification of what an adjutant should be: a splendid figure on parade, with an immaculate turn-out in dress, and a fierce and hawk-like eye for any shortcomings in dress or drill.'⁴⁷⁹ The original staff group for 1 Airborne created in late 1941 was known as the 'Dungeon Party.' This headquarters started life two floors below ground level at the Air Ministry and had a strong Guards flavour, with Colonels Johnny Gorschen (Logistics) and Gordon Walch (GSO1 Operations), and later Major Richard des Voeux (GSO2 Operations) all being Grenadiers like Browning.⁴⁸⁰ These men were constant throughout 1941-44, while Browning also employed many Guards NCOs, to instil their parent regiments' high standards throughout the airborne establishment.⁴⁸¹ Browning, for whom 'perfection in all things was a fetish',⁴⁸² firmly codified the behavioural atmosphere for British Airborne Forces with a June 1943 pamphlet.⁴⁸³ He clearly listed nine factors which would facilitate victory over 'the best drilled, disciplined and trained armies in the world, the German and

⁴⁷⁹ Victor Dover, *The Sky Generals* (London: Cassell, 1981), p. 41.

⁴⁸⁰ Brian Urquhart, *A Life in Peace and War* (London: Weidenfeld and Nicolson, 1987), pp. 50-51.

⁴⁸¹ Richard Mead, *General 'Boy': The Life of Lieutenant General Sir Frederick Browning* (Barnsley: Pen & Sword Military, 2010), p. 70.

⁴⁸² Dover, p. 41.

⁴⁸³ Major-General Sir Frederick Browning, *Airborne Forces: Discipline – The Only Road to Victory* (War Office, 1943).

Japanese.⁴⁸⁴ First and foremost is drill, which 'does not cramp initiative,' but enabled effective behaviour in action, drill 'allows the soldier to give all his thoughts to dealing with the actual situation he is faced with, without having to worry his head about routine.' Above all, Browning wanted high standards in all things, which he set out with zeal in his 1943 pamphlet:

First, a standard for which to aim. There is only one standard which any man, calling himself a man, can aim for, and that is the highest. For years, inefficiency and low standards have been tolerated in this country. They can be tolerated no longer if we are to be victorious. Every man will be judged by results.⁴⁸⁵

By placing Browning's Guards standards at the heart of Airborne Forces the issues with the louche behaviour of any 'Caffy gangsters' which had niggled the early days of the special service commandos were prevented.⁴⁸⁶ High standards of turn-out as a divisional philosophy had been used elsewhere to ultimately boost morale if not soldiers' fighting power. When the WO called for handing in of kilts, the GCO of 51 (Highland) Div, Douglas Wimberley, had refused and taken his complaint directly to the King. 'Tartan Tam' believed that 'turn-out was very important in the maintenance of unit discipline and morale.'⁴⁸⁷

A figure symbolic of this Guards input running through the Airborne Establishment was RSM J.C. Lord. Who in many ways personified the Guards input which Browning engendered. Lord had joined the Grenadier Guards in 1933, attained the rank of Lance-Sergeant in 1937, but then left to pursue a career with the Brighton Police Force. A recalled

⁴⁸⁴ DRILL, ESPRIT DE CORPS, CLEANLINESS AND SMARTNESS, PHYSICAL FITNESS, CONFIDENCE IN HIS OWN COMRADES' FIGHTING EFFICIENCY, TRUST IN HIS LEADERS, SELF-SACRIFICE, LOYALTY and FAITH IN HIS CAUSE. Browning, pp. 4–7.

⁴⁸⁵ Major-General Sir Frederick Browning, *Airborne Forces: Discipline – The Only Road to Victory* (War Office., 1943), p. 3.

⁴⁸⁶ 'Caffy gangsters' were anathema - men who thought to pass as tough by being big-mouthed, dirty, ill-behaved. The public image of the commandos was, in those days, a little too close to Charles's [Vaughan, the commandant of the Achnacarry Commando Basic Training Centre] caffy gangster for comfort.' J.L. Moulton, *Haste to the Battle: A Marine Commando at War* (London: Cassell, 1963), p. 36.

⁴⁸⁷ Craig F. French, 'The Fashioning of Esprit de Corps in the 51st Highland Division from St. Valery to El Alamein', *Journal of the Society for Army Historical Research*, 77 (1999), 275–92 (p. 280).

reservist on the outbreak of war, after a period as a CSM at the Royal Military College Lord opted to join Airborne Forces when a vacancy for an RSM (3 Para Bn) was posted. His first encounter with his new unit had considerable impact:

There was a lot of banter and chattering going on but suddenly from the back of the hall a voice ordered "Quiet" and then the new RSM of the Third Battalion J.C. Lord walked onto the platform. Very tall and straight with a dark moustache and bristling eyebrows one could suddenly hear a pin drop. He soon handed over to the Commanding Officer but everyone to a man realised how things were going to be...⁴⁸⁸

The next important factor which worked greatly to Gale's advantage in the shaping of the division is linked closely to the above example of Guards standards. This was the transferable nature of roles within the regimental system of the British Army, with its consequent familiarity and understanding. J.C. Lord looked and acted the part of a capable RSM, he had the choice of waiting for RSM vacancy with a Guards battalion or remaining at the Royal Staff College but as described above opted for airborne forces. But he could have equally become the RSM of a conventional role infantry battalion or commando unit.

Charles Kirke has discussed the consistent role shapes within the army in his book *Red Coat, Green Machine*.⁴⁸⁹ He closely analyses and discusses the social structures which exist within the army, and have always existed,⁴⁹⁰ going to the lengths at one point of explaining which cross rank friendships would be acceptable and which would not.⁴⁹¹ In the newly converted parachute battalions filling with volunteers everyone would have known where they stood in terms of military culture, regardless of the very recent creation of the Parachute Regiment,

⁴⁸⁸ Richard Alford, *To Revel in God's Sunshine: the Story of the Army Career of the Late Sergeant-Major J.C. Lord* (Kendal: Westmoreland Gazette, 1981), pp. 1–12.

⁴⁸⁹ Charles Kirke, *Redcoat, Green Machine* (London: Continuum UK, 2009).

⁴⁹⁰ Insights back as far as 1700 have been observed with Kirk's methodology. Charles Kirke, 'A Model for the Analysis of Fighting Spirit in the British Army', in *The British Army, Manpower and Society into the Twenty-First Century* (London, 1999), p. 237.

⁴⁹¹ Kirke, *Redcoat, Green Machine*, p. 38.

because all the rank roles remained the same. When RSM J.C. Lord began to shout, an obvious senior NCO, the men were conditioned by the army to accept his authority.

The Army Air Corps (AAC) had been created in 1942 and as the umbrella organisation for all airborne forces, set them apart from the conventional role elements within the British Army. The AAC provided distinction on a personal level for an airborne soldier in different ways. First, the pay was better, airborne ORs being paid a significantly better day rate for enlisted soldiers over that of others. The pay of soldiers during the war was low when compared to munitions workers, being seventeen shillings and sixpence per week (two shillings and sixpence a day) in 1942, and five or six pounds for the latter.⁴⁹² Pay was a wider morale issue. Professor John Hilton, who compiled statistics for War Office morale reports, collated the complaints contained in soldiers' letters received by the News of the World and the BBC. Between December 1942 and April 1943, thirty-nine per cent of complaints were about pay.⁴⁹³ The creation of 1 Para Bde had brought into being 'parachute pay' of four shillings a day for officers and two shillings for other ranks (increasing daily pay from two shillings and sixpence to four shillings and six pence). Glider troops were paid an extra one shilling a day,⁴⁹⁴ but could at any time volunteer to join the Parachute Regiment as they were still technically county infantrymen.⁴⁹⁵ The precedent of paying more to Special Forces soldiers had been established with the terms of special service offered to volunteers for

⁴⁹² Soldiers received full board and lodging however, and a soldier with a wife and two children would receive a family allowance of forty three shillings. J.A. Crang, 'The British Soldier on the Home Front: Army Morale Reports, 1940-45', in *Time to Kill: The Soldier's Experience of War in the West 1939-1945* (London: Pimlico, 1997), pp. 60-74 (p. 68); Philip Ziegler, *London at War 1939-1945* (London: Sinclair-Stevenson, 1995), p. 277.

⁴⁹³ David Englander and Tony Mason, *The British Soldier in World War II* ((University of Warwick, Coventry): Centre for the Study of Social History, 1984), p. 13.

⁴⁹⁴ Browning called for this allowance for glider troops in his April 1942 paper, and the paragraph has been ticked. Following WO memoranda concerning Browning's claims make no reference to pay so it can perhaps be assumed that the one shilling extra was introduced from April/May 1942 onwards. TNA CAB 120/262, Development of Airborne Forces. The Present State of the Airborne Division, 16 April 1942, p. 2; Martin Middlebrook, *Arnhem 1944: The Airborne Battle, 17-26 September* (London: Penguin, 1995), p. 30.

⁴⁹⁵ The engineers, gunners and other combat support troops of 6 Airborne Division would have to wait until 1944 for their allowance. Otway, p. 145.

commando service in 1940.⁴⁹⁶ WO concerns that 11 SAS battalion's morale would be dented by the loss of commando benefits had prompted the extra pay for airborne troops. The excitement surrounding selection for a new role, extra pay and distinctive head dress is seen in combination motivating one airborne gunner:

I was called up in November 1941 and went to Norwich and got 6 weeks infantry training after that I was sent to Connaught Barracks Dover to a anti tank Bty (204 Oban A/Tk Bty). In 1942 we were in Scotland and then ordered to move down to Bulford near Salisbury where we found we were to join the 1st Airborne Div 4th Para Bde which was being formed at that time. We were told that anyone who did not want to be in this could opt out but I did not know of anyone who did after all we were going to get another 2/- a day and a red beret. After a while we got new equipment new 6 Pounder anti tank guns and jeeps. We did a lot of training which entailed loading Horsa gliders and flying which was all new and exciting⁴⁹⁷.

6 Airborne's soldiers belonged to a distinctive corps, with specialised and striking uniform features, extra pay and possessed growing self-confidence.

Airborne Forces always retained the prerogative to 'Return to Unit' any man who was perceived as not suitable for their new role as the selection and training processes went on. This mechanism was of considerable advantage, and could be used to remove any individual who proved to be less than 'mad keen' or was unable to meet the exacting physical requirements.⁴⁹⁸ Only one in three of all volunteers 1941-45 would be finally accepted into the Parachute Regiment.⁴⁹⁹ Any reject would in turn be replaced by another volunteer, while the unfortunate soldier would be returned to a conventional role unit. This gave

⁴⁹⁶ The conditions of commando special service as detailed on 26 June 1940 provided a daily allowance of 6s 8d to cover 'all expenses', when added to the basic rate this was more than three times the wages of a private soldier. Such as the upkeep of civilian clothes, ration allowance, accommodation, etc. On conversion the Royal Marines also received the 'subsistence allowance' TNA WO 32/4723, Formation of Special Service Commandos. Formation of Commandos instruction from the War Office to General Officers commanding the regional Commands, 26 June, 1940, Appendix 'A' Conditions of Service. TNA WO 218/43, 1943 WD of 41 RM Cdo, 12 October 1943.

⁴⁹⁷ SWWEC Acc. No. LEEWW/2003-2444 T.W. Reynolds, 1st Airlanding Light Regiment RA.

⁴⁹⁸ Crookenden, Napier (interview), IWM no.16395, recorded 2/1/96.

⁴⁹⁹ Otway, p. 44.

Airborne Forces a considerable advantage over conventional role formations, which while they could post unwanted men away, would have them almost immediately replaced with good quality substitutes.

As D-Day approached, 6 Airborne benefitted from different styles of leadership. At the operational planning level, as has been seen Gale and the brigade commanders were planning to make the best use of their resources through simple plans built around the advantages of airborne warfare. The GSO 1, 'Bobby' Bray and the three Brigade Majors, were responsible for overseeing the division's training.⁵⁰⁰ These men worked to bring the division up to the pitch required to achieve the D-Day goals. 'Working out the training, working out the techniques, tactics, physical fitness, shooting, all the ways you build up a fighting formation into a high degree of efficiency.' As the vast majority of junior officers and NCOs had no combat experience, the constants demands of realistic training created situations for ORs to gain confidence in their leaders, who in turn would gain self-assurance. Gale spent a lot of time training the NCOs,⁵⁰¹ and it will be remembered from chapter three that the airborne division WE allowed for a sergeant per section, in addition to a corporal. This additional leadership at the lowest level, when combined with cohesion-building training, would have alleviated the contentious 'Marshall effect' once in combat.⁵⁰²

⁵⁰⁰ 3 Para Bde – Bill Collingwood , 5 Para Bde – Major R.M. Barker, 6 AL Bde – Napier Crookenden. *Handbook on the British Army 1943*, ed. by Chris Ellis and Peter Chamberlain (Military Book Society, 1974), pp. 13 & 17; Carl Rijmen, *Gale's Eyes: 6th Airborne Division - Who Was Who during the Battle of Normandy*, 2008, pp. 18, 42, 68 , 96.

⁵⁰¹ IWM interview - Pearson, Alistair, no.21033 (recorded 1989)

⁵⁰² S.L.A. Marshall's analysis based on hundreds of interviews carried out with US servicemen in the European and Pacific theatres, and came to the conclusion that only one man in four actually fired his weapon in action. Men acting as members of weapon teams had a higher rate of participation thanks to proximity to comrades and having practical task to perform. Roger J. Spiller, 'S.L.A. Marshall and the Ratio of Fire', *Royal United Service Institute*, 133, 63–71.

Britain's new Airborne Forces' distinct identity was of considerable use as a domestic propaganda tool, and after 6 June 1944 an evocative representative of the success of D-Day. The following case study shows 13 Para Bn's presentation in the Manchester Guardian (MG), combining with an increased emphasis on the army in the months before OVERLORD.⁵⁰³ The Manchester Guardian printed an evocative picture of an Operation Biting rehearsal which featured both paratroopers and landing craft, not knowing that the North-West would have its very own parachute battalion in time for D-Day.⁵⁰⁴ Even on the eve of D-Day for one civilian the idea of airborne forces was highly novel:

Of greater national importance is that we are presently under the shadow of the so-called 'Second Front' ... and how the invasion will be preceded both by a massive air-bombardment and an attack by air-borne *gliders*. I find this incredible, even though gliders have been employed by the Germans. Much of it is rumour but at least it has given the office old soldiers a great deal to talk about.⁵⁰⁵

A scrutiny of the paper's editions between 1 January 1944 and 1 July also reveals the presentation of the army in the print press and how its profile was boosted in the build up to the Second Front. The Battalion began 1944 with a high profile visit to Manchester. On the front pages the MG year began with both the promotion of Montgomery as the Commander of 21 AG and Eisenhower's arrival at SHAEF, both appointments heralding the Second Front to come.⁵⁰⁶ On 27 January a photograph was featured of US Airborne troops on exercise in Britain,⁵⁰⁷ clearly building up to Battalion's visit to Manchester the following weekend. For 13 Para Bn this was Exercise Demon, and moved by train from Amesbury to

⁵⁰³ 13 Para Bn – 13th (Lancashire) Battalion, the Parachute Regiment.

⁵⁰⁴ 'RAIDERS IN TRAINING', *The Manchester Guardian* (1901-1959) (Mar 3, 1942) p. 6.

⁵⁰⁵ The italics are the author's emphasis. 29 May 1944 journal entry. George Beardmore, *Civilians at War: Journals 1938-46*. (London: John Murray, 1984), p. 159.

⁵⁰⁶ 'Montgomery home to take up new Appointment: His Farewell to the Eighth Army/The coming knock-out blow against Germany.' *The Manchester Guardian* (MG) (4 January 1944) p. 5; 'Eisenhower takes over at Supreme H.Q. visit to Churchill and Roosevelt' MG (17 January 1944) p. 5.

⁵⁰⁷ 'Winged Commandos' MG (27 January 1944) p. 5.

Manchester on Friday 28 January.⁵⁰⁸ Their War Diary contains photographs (with the MG stamp on the reverse) of their parade the following day watched by Lord Derby, the Lord Mayor of Manchester, the Borders District Commander and a large crowd. During the morning of Sunday 30 January they gave weapon demonstrations to the Home Guard, a company visiting their centres at Preston, Manchester, Liverpool and Warrington respectively⁵⁰⁹.

The visit coincided with newspaper's steady build-up towards the National Savings Week in May, which began with an advert and poem which lionized soldiers on 2 February 1944.⁵¹⁰ This campaign was entitled 'Salute to the Soldier', the 1943 push being 'Wings for Victory' and focused on the RAF.⁵¹¹ The campaign built up through February and March with an advert at least once a week, latterly including a message from General Montgomery. The frequency of adverts shifted to one every two days at the beginning of April, and the event opened with a march past of troops in Piccadilly, Manchester, as 'Salute the Soldier' Week opened with a target of £12,000,000 for the city.⁵¹² The campaign was extended up to 6 June including on the 5 and 8 May an advert with a drawing of paratroopers leaping from an aircraft. The campaign was a success as Manchester exceeded its target of £12,000,000 by £2,500, 000.⁵¹³ 'Salute the Soldier Week' for Manchester had been a six month campaign, 13 Para Bn's parade on 29 January having been used to spectacularly begin the effort. The campaign also achieved the steady elevation of the Army through poetic adverts and articles, while an effort was made to build confidence in the forthcoming landings:

⁵⁰⁸ TNA WO 171/1246 13th Parachute Battalion WD. Ex DEMON, general Instruction No.1, 24 January 1944.

⁵⁰⁹ Ibid. 'Paratroopers Parade' MG (31 January 1944) p. 3.

⁵¹⁰ 'Salute the Soldier', MG (2 February 1944) p. 2.

⁵¹¹ 'Wings for Victory', *St. Ives Times* (26 March 1943).

⁵¹² 'Salute the Soldier', MG (17 April 1944) p. 6.

⁵¹³ 'Salute the Soldier', MG (5 May 1944) p. 7.

General Montgomery, Commander-in-Chief of the British Invasion Forces, told troops at a south-east town yesterday: "I want you men to know that I never put an army into battle until I am quite certain it is going to be a good show. Never. We won't have any question of any failure. If there is any question we won't start. It is a great thing for you to know this."⁵¹⁴

From 6 June onwards the newspaper is dominated by events in Normandy, and slowly the role of the 13 Para Bn was revealed. The multitude of articles on 7 June included 'AIRBORNE UNITS. The last days of Preparation'⁵¹⁵ showing a picture of paratroopers pulling on their parachutes. Three other articles regarding airborne forces were included by 9 June with 6 Airborne Division being named on 12 June. On 9 June war correspondent Leonard Mosley wrote from France and revealed he had spent time with paratroopers who were Northumbrians, Yorkshiremen and Lancastrians⁵¹⁶; 13 Para Bn was finally named on 14 June— 'LANCASHIRE PARATROOPERS IN ACTION Splendid Job Well Done'.⁵¹⁷

5 Para Bde had been accompanied into action by four war correspondents:

The Brigade was lucky to have with it Guy Byam of the BBC, Leonard Mosley of Allied Newspapers who came by parachute and Chester Wilmot of the BBC and David Woodward of the Manchester Guardian who travelled by glider. These four correspondents were most generous in the recognition they gave to the work of the Brigade through their dispatches. The news of personal interest they were able to bring to the families of all ranks was much appreciated.⁵¹⁸

Since the January parade airborne forces had been steadily woven into the propaganda campaign building the army's profile as Overlord approached, the local link with 13 Para Bn being fully exploited.

On a national and indeed global level British airborne forces, led by 6 Airborne in Normandy, were used as a propaganda tool. Chester Wilmot broadcast for the BBC while he

⁵¹⁴ 'General Montgomery and the Invasion: Failure ruled out' MG (3 February 1944) p. 6.

⁵¹⁵ 'Airborne Units: the last days of Preparation', MG (7 June 1944) p. 6.

⁵¹⁶ 'With the Parachutists. Early Morning Adventures Behind the Atlantic Wall.' MG (9 June 1944) p. 8.

⁵¹⁷ 'Lancashire Paratroopers in Action. Splendid Job Well Done' MG (14 June 1944).

⁵¹⁸ (Shrivenham) CONF.4073, '5 Parachute Brigade Operations in Normandy, June to September 1944', p. 7.

accompanied 6 Airborne into France. On 13 June 1944 he reported on the assault on the Merville battery. Obviously no unit titles or locations were mentioned by name, but his account of one of Otway's *coup de main* gliders is quite accurate:

As it landed the Germans turned their machine guns on to it ...Some men were wounded, the glider caught on fire ...but the rest, rallied by a warrant officer, went straight into action to deal with the German reinforcements. For over an hour they held them off, while the main party mopped up the Germans in the battery its self. At 4.45am, with only a quarter of an hour to spare, the position was ours ... 150 men had done the job of a battalion. The colonel fired a success signal and dispatched a carrier pigeon off to England with the news. The courage that took that battery is the courage that held this flank.⁵¹⁹

This use of 6 Airborne as a propaganda tool at the time of the campaign began the interpretation of its exploits which the Historiographical survey discussed in chapter one. When combined with articles concerning the Second Front, the presentation of airborne forces restored the Army's image after the bad news of 1940-42 and boosted public confidence going forward. The consolidation of home morale in is important in any conflict and the examples of the MG and the BBC show the added value gifted by 6 Airborne to the wartime government to this end.

In conclusion, it be seen that Gale benefitted greatly from the creation of a strong airborne identity. 6th Airborne Division's own character would be part and parcel of this as they prepared for D-Day. While the selection of good manpower for the AAC was important, the role-specific training and culture of the wider establishment exploited the enthusiasm of the men who wished to find action. Glider and parachute training, often carried out en bloc as complete units, provided a shared rite of passage that assisted in the forging of unit cohesion. This bond also crossed rank boundaries and supported the credibility of new

⁵¹⁹ Desmond Hawkins, *War Report: A Record of Dispatches by the BBC's War Correspondents with the Allied Expeditionary Force, 6 June 1944 - 5 May 1945* (London: Oxford University Press, 1946), pp. 78–79.

officers before their men. In its final state the Airborne identity was used to boost civilian home morale as a symbol of the Army's new found capability and confidence while retaining regional links.

Chapter Four - Leadership: 6th Airborne Division - How the Division worked

Leadership, as with any organisation, was critical to 6 Airborne Div, it was how it worked. How was leadership interwoven through the most crucial command appointments? This will be examined through the personal command characteristics of Gale and how his formation and unit leaders were selected. First, the career and leadership qualities of the General Officer Commanding, Major-General Richard Nelson Gale, will be examined. The influence of his experience of senior officers during the First World War and inter-war period will be shown. Second, the underlying criteria by which Airborne Forces and Gale selected brigade and battalion commanders will be established. The third chapter section will illustrate the impact and style of Gale's leadership culture through a case study based on the experience of Lieutenant Nick Archdale, the twenty-year-old mortar platoon commander of 7 Para Bn. The fourth and final section will establish a theory of Gale's leadership, supported by a diagram which will exemplify its accelerating impact on good military practice (the conceptual, moral and physical components).

1. Gale

This first chapter section addresses the attitudes of the central figure within the study, whose direction forms one of the themes of this thesis - leadership. He exhibited three characteristics which remained present throughout the process of the creation of the division (the course of which involved leader selection process, planning, training), and his command in the field. These were first his power as a communicator at all levels; second his value-added authority gained as a leading authority of airborne forces due to his familiarity with the background of UK airborne forces; and thirdly his focus on simplicity in planning.

To understand Gale's command style it is important to begin with a brief overview of his career prior to his appointment as commander of the new 1 Para Bde in the autumn of 1941. Gale received a regular commission and joined the Worcestershire Regiment (Worcs R) on 22 December 1915, and then fought on the Western Front until the armistice of November 1918. Like many of the 1940-45 airborne volunteers, Gale became bored with his role as a junior officer with the regimental holding battalion and volunteered for something new. A machine gun course led to his transfer to the Machine Gun Corps (MGC), a recently created force charged with exploiting the use of machine guns in the challenging conditions of trench warfare on the Western Front.⁵²⁰ Gale was awarded the Military Cross (MC) for distinguishing himself in action during the German Spring 1918 offensive battles:

For conspicuous gallantry and devotion to duty in covering the retirement of the infantry with his section of machine guns, holding up the attack and causing the enemy heavy casualties. Later, when a shell landed in the centre of the gun limbers, he went out under heavy fire and unhitched the killed and wounded horses, so enabling the transport to move to cover.⁵²¹

From his Great War experience Gale drew some conclusions regarding the need for well-trained infantry in the attack:

If the Allies can be criticised for their strategy, what of the generals' tactical concepts? The only answer that seemed to exist to barbed wire, continuous deep trenches and unlocated machine guns was an overwhelming weight of artillery fire. The gun became the dominant weapon and the gun decided tactics. Ludendorff exploded this thesis in 1918. Whilst not ignoring the role of artillery in the softening-up process, he appreciated the vital part that well-trained infantry could play if properly taught and led.⁵²²

Writing in 1968, Gale obviously had the benefit of great hindsight when looking back with the experience of both world wars, and his subsequent observation of the development of

⁵²⁰ Major R.M. Barnes, *A History of the Regiments and Uniforms of the British Army* (London: Sphere Books, 1972), p. 167. Paddy Griffith, *Battle Tactics of the Western Front : The British Army's Art of Attack, 1916-18* (New Haven: Yale University Press, 1994), pp. 120–134.

⁵²¹ *Supplement to the London Gazette*, 26 July 1918, p. 88. 'Lt. Richard Nelson Gale, Worcs. R., sec'd. M.G.C.'

⁵²² Richard Nelson Gale, *Call to Arms: An Autobiography* (London: Hutchinson, 1968), p. 55.

the post-war individual infantryman's personal fire power. Yet his reference to the initial success of Ludendorff's storm trooper tactics in 1918 must have formed his view regarding the power of vigorous attacks launched by highly motivated and well-armed infantry. As an officer of the MGC fighting in the defensive battles of spring 1918 he had been well-placed to gauge their value.

Gale's time in India in the inter-war period clearly had an impact on his views on training and also the use of infantry to achieve greater tactical offensive mobility on the battle field. At the end of the Great War he volunteered to go with 12 MGC and sailed in September 1919.⁵²³ In the spring of 1920 he was moved up to the frontier 'where war with Afghanistan was in progress.'⁵²⁴ Gale suffered as the Army contracted due to financial constraints. First In 1921 the MGC was disbanded, and he was posted to 3 Worc R; then with the disbandment of this regiment's third and fourth battalions after a year he had to move on again. Gale's close involvement with delivering training began at this point when he joined the Machine Gun School in India at Ahmednagar in the Deccan.⁵²⁵ After six years he was posted to 1 Worcs R where he 'attended two good tactical studies which were carried out under the imaginative direction of Brigadier John Kennedy, later Major-General Sir John Kennedy.'⁵²⁶ Gale attended the Staff College 1928-1929, where he was 'appalled to find that artillery plans still ruled the field and that the unlocated machine gun was still the queen of the battle.' His views on the power of the infantry as 'the key to mobility' on the battlefield were further confirmed.⁵²⁷ After a few weeks with the DCLI at Bareilly he was posted as a staff officer to the Military Training Directorate at the Indian Army HQ at Simla. His

⁵²³ General Sir Richard Nelson Gale, *Call to Arms: An Autobiography* (London: Hutchinson, 1968), pp. 61-65

⁵²⁴ *Ibid.*, p. 67

⁵²⁵ *Ibid.*, p. 70

⁵²⁶ *Ibid.*, p. 71. General Sir John Kennedy, later the War Office Director of Military Operations, 1940-1944.

⁵²⁷ *Ibid.*, p. 75

responsibilities included 'all the army schools' which he defended from more drives for economy and their consequent cut-backs. He also encountered 'Tiny' Ironside, then the commander of the Meerut District, who presented his ideas of vigorous infantry assaults with reserves ready to throw in to exploit breakthroughs and press forward attacks.⁵²⁸ From 1934-36 he was Brigade Major for the Ferozapore Bde in the Punjab. In this role he would have been responsible for the organisation of brigade training for a formation spread over a large geographical area with the assistance of only one staff captain and another 'young officer' attached for part of the year.⁵²⁹ In January 1936 Gale left India after fifteen years and viewed his time there as critical to his development as a commander:

I have called this period the formative years and so they were. The grim experience of the Great War had left their mark and while in India I had learned to equate that experience to the military problems of the day. My two years at Staff College had given me an insight into the higher aspects of the art of war; I had also learned to respect the brains of others and to make use of their co-operative effort.

During his time in India Gale had encountered more senior officers who would be influential army figures in the future – Ironside and Kennedy, and also briefly Gort who took over as India C-in-C just as Gale was leaving for the UK. He had run training schools and as Brigade Major of a field formation and been exposed to innovative thinking.

On his return to the UK Gale was posted to the 2 DCLI in 1936 in Archibald Wavell's 2 Div, and would have been aware of Wavell's visit to observe the Soviet Kiev airborne demonstration in September 1936.⁵³⁰ Wavell would later serve as both the General-Officer-Commanding (GOC) Middle and East and Commander-in-Chief India.

⁵²⁸ Field-Marshal Sir Edmund 'Tiny' Ironside. A regular officer of the RA, like Wavell he began his active service in the Boer War. After ending the Great War as brigadier and later appointed as the Commandant of the Staff College Camberley, and after time in India would become CIGS 3 September 1939 to 27 May 1940, and then C-in-C Home Forces until replaced by Brooke in July 1940. John Keegan (ed.), *Churchill's Generals* (London: Cassell, 2005), pp. 17-33.

⁵²⁹ Ibid., pp. 79-80

⁵³⁰ TNA WO 32/4157 Official Visit to Soviet Army Manoeuvres 1936 (Major-General A.P. Wavell).

Gale then moved into a staff role at the War Office (WO) responsible for the production of WO training pamphlets 1937-1938.⁵³¹ During this time he worked alongside Brooke, while the latter was Director of Military Training, who was challenged by Gale over the absence of an infantryman on the committee charged with the re-writing of artillery training. Gale convinced Brooke to include Ironside (then OC 1 Guards Bde) as 'guns did not exist just for themselves.' Based on the views of others regarding Brooke's brusque and no-nonsense manner If Gale had not made a good impression on the future commander of Home Forces and CIGS with his arguments then he would not have been persuaded.⁵³²

On the outbreak of the Second World War Gale remained in a staff position at the WO. In 1938 he moved to the planning section of the Imperial General Staff and worked on the War Plan, where he remained when the war began in September 1939. Again, Gale encountered and made a positive impression on important figures, including the CIGS at the time, Sir Edmund Ironside and Churchill's Chief of Staff as Minister of Defence, Lieutenant-General Sir Hastings 'Pug' Ismay 'I had first met him when he was a Staff Captain in India, and incidentally Master of the Delhi Fox Hounds. In the early days of the war he used to attend occasional meetings of the Chiefs of Staff as one of the advisers of the CIGS ...'⁵³³ He was made the CO of 2/5 Leicesters in January 1941, a TA battalion which was then part of 46 Div, which had been evacuated from Dunkirk in 1940.⁵³⁴ Richard Gale was appointed the first Brigadier of 1 Para Bde in September 1941. Gale had been one of at least three candidates, including another county regiment soldier and a guardsman.⁵³⁵ He was apparently given the

⁵³¹ Richard Nelson Gale, *Call to Arms: An Autobiography* (London: Hutchinson, 1968), pp. 91 & 97.

⁵³² Gale, *Call to Arms: An Autobiography*, pp. 93–94.

⁵³³ Hastings Ismay, *The Memoirs of General the Lord Ismay* (London: Heinemann, 1960), p. 357; Max Hastings, *Finest Years: Churchill as Warlord 1940-45* (London: Harper Press, 2009), p. 15; John Keegan (ed.), *Churchill's Generals* (London: Cassell, 1991), p. 32.

⁵³⁴ www.royalleicestershireregiment.org.uk/history-of-the-regiment/?p=4. Accessed 30 January 2015.

⁵³⁵ K.P. Smith, *Adventures of an Ancient Warrior* (Milford-on-Sea: Stones Printers, 1984), p. 73.

choice of accepting or declining the role, but accepted; 'as those who had suggested him had known he would'. His great interest in airborne warfare had not gone unnoticed while serving with the Directorate of Plans at the War Office.⁵³⁶ Gale remained in command of the brigade until he reluctantly handed over command to E.W.C. 'Ted' Flavell to return to the WO.⁵³⁷ As the first commander of 1 Para Bde and an early standard-bearer for airborne forces, Gale had a considerable personal influence over the new airborne division in addition to the authority associated with his rank and his personal leadership skill.

In spring 1942 Gale was made Deputy Director, and later the Director, of Staff Duties for Air at the War Office; working closely with Hollinghurst, his opposite number at the Air Ministry.⁵³⁸ On 3 May 1943, in the same month the first airborne doctrinal pamphlet received its issue date, Gale was made GOC of the new 6 Airborne Div.⁵³⁹ Gale was intimately involved with the decisions and planning surrounding the creation of a second airborne division; and after having successfully led 1 Para Bde and solved inter-service issues regarding the development of airborne forces, he was an obvious choice.⁵⁴⁰

Gale's leadership style was first and fundamentally that of an assured and energising communicator. In one of the first copies of Divisional Routine Orders he introduced the Divisional motto:

GO TO IT.

This motto will be adopted by the 6th Airborne Division and as such should be remembered by all ranks in action against the enemy, in training, and during the day to day routine duties.⁵⁴¹

⁵³⁶ Victor Dover, *The Sky Generals* (London: Cassell, 1981), p. 27.

⁵³⁷ Barry Gregory, *British Airborne Troops* (London: Macdonald and Jane's, 1974), p. 154.

⁵³⁸ Gale, *Call to Arms: An Autobiography*, pp. 122–130.

⁵³⁹ The War Office, 'AIRBORNE OPERATIONS PAMPHLET No.1 (1943)' (London, 1943).

⁵⁴⁰ Richard Nelson Gale, *With the 6th Airborne Division in Normandy*. (London: Sampson Low, Marston & Co., 1948), pp. 8–9.

⁵⁴¹ *Ibid.*, p. 11.

This call for enthusiastic and vigorous action characterised his approach to every facet of 6 Airborne's activity and character.⁵⁴² He made decisions and created plans quickly, and then communicated them exhaustively. He demanded high levels of initiative and self-reliance from all of his commanders, and engendered a strong sense of task focus and vigour. He used what John Keegan has described as a 'prescriptive' approach by creating an idea of his background and ideals in the minds of his men which allowed him to build a bond with them through sharing the risks they took.⁵⁴³ Gale's ideas regarding what made an effective senior commander had been influenced by his experience on the Western Front. Gale had 'disliked' aloof 'red tabs'; but had similarly been impressed by the way his two divisional commanders, Major-Generals Solly-Flood of 42 Div and Jeudwine of 55 Div had not been 'far removed' from junior officers like himself.⁵⁴⁴ His account of first encounter with Solly-Flood, just before the German 1918 March offensive, appears to have created a template for Gale:

I did not think we looked all that smart, and said as much to another subaltern. We both thought we would get the usual strafing. Solly-Flood rode round our ranks and at the conclusion, mounted on his charger with his orderly, his pennant and his staff officer behind, he addressed us. 'Never have I seen a better body of men,' he said. He congratulated us on our steadiness on parade and our bearing. One could have heard a pin drop; here was no slanging and no gibe for being Territorials, which I later heard they were used to; here in place of criticism was simple praise. From that moment every man put his back into it.⁵⁴⁵

⁵⁴² It is possible that Gale borrowed this motto from Herbert Morrison, the Minister of Supply. Morrison broadcast to the nation on 22 May 1940 calling for a great drive in war production, the speech ended with 'Work is the call. Work at WAR SPEED. Good night – and go to it.' The slogan being pasted on '150,000 hoardings' in the following days. William J. Brittain, *Go to it! Here is how we shall win the War* (London: Hutchinson, 1941); Rt. Hon. Herbert Morrison, *Looking Ahead: Wartime Speeches*, (London: Hodder and Stoughton, 1943).

⁵⁴³ John Keegan, *The Mask of Command: A Study of Generalship* (London: Pimlico, 2004), pp. 318–319.

⁵⁴⁴ Paddy Griffith noted both Jeudwine and Solly Flood as two of the 'truly effective leaders' who emerged after the 1916 Somme Offensive. Solly-Flood had been appointed to develop tactical training of senior officers in October 1916. Gale, *Call to Arms: An Autobiography*, pp. 11–12 ;Paddy Griffith, *Battle Tactics of the Western Front : The British Army's Art of Attack, 1916-18* (New Haven: Yale University Press, 1994), p. 83 & p. 184.

⁵⁴⁵ Gale, *Call to Arms: An Autobiography*, pp. 38–39. The division had suffered heavy casualties during the Gallipoli expedition and had then served on the Western Front since February 1917.

He ends this recollection, 'nevertheless, his staff officer was taking notes and these reached the commanding officers later; if heads were to fall they were to be the right ones.'⁵⁴⁶ While Solly-Flood motivated the ORs and junior officers, the 'right ones' heads' would roll - those of the officers' responsible. 42 Div had been suffering from a morale problem and the lesson was not lost on him that a change of commander could provide the impetus to refresh a unit, demonstrated by the sacking of Hildesley from 8 Para Bn in December 1943.

Although he later played down the need for high standards of turn-out, 'spit and polish had its uses, but I believe it could be and often was overdone', Gale pursued high standards at all times. He personally maintained 'a soldierly figure in riding breeches and polished field boots of the lace up kind.'⁵⁴⁷ He placed great importance on 'physical robustness, stamina'; with reference to a post-war visit to the French army his view on the relationship between athleticism and task focus was described:

Here was a sight to gladden the heart; everywhere I saw keenness, physical fitness of a very high order and a determination coupled with objective and purposeful training.⁵⁴⁸

Indeed, Gale applied his demand for physical fitness no more vigorously than with the new 6 Airborne staff.⁵⁴⁹ Gale wielded a close control over the appointments within his division, and was only interested in 'thrusting' officers; as ready as he to drive their men hard and act on their own initiative, at all levels. Victor Dover was a regular Royal West Kent (RWK) soldier who served with 2 Para Bn in Sicily, Italy and Arnhem:

He also insisted on approving those officers who were to command the companies within the battalions. He believed that the most important characteristic which an airborne soldier would expect and look for in his officers was 'initiative' – the ability to make decisions, the confidence to act upon them and a firm resistance to

⁵⁴⁶ Gale, p. 39.

⁵⁴⁷ Gale, p. 30. Dover, p. 34.

⁵⁴⁸ Gale, p. 192 & 181.

⁵⁴⁹ Gale, *With the 6th Airborne Division in Normandy*, p. 29.

anything that looked like 'passing the buck.' He would often ask an officer, "What would you do if your right flank came under heavy attack and your defence line was broken?" if the answer were not something similar to "Counter-attack with my reserve," he would probably fail the interview and be returned to his unit. Richard Gale had no time for a commander, at whatever level, who could only think to ask his next senior formation what he should do when things got a little tough.⁵⁵⁰

When he introduced himself to his first brigade he began immediately build the image his men held of him:

My name is Richard Nelson Gale. I have been a soldier (note the use of the word 'soldier' and not 'officer') for twenty-eight years and I am master of my profession.⁵⁵¹

Alan Jefferson, a young platoon commander in 9 Para Bn, described the impression Gale made on him:

A real 'soldier's general', he was well able to converse with and be easily understood by all ranks. His bluff, slightly 'blimpish' appearance concealed a quick mind, a clear brain and an immediate grasp of a military problem or a man's character. He inspired trust and confidence in a moment, and had no difficulty in establishing himself as a tough, though compassionate father-figure of the Division. He could be sharp, very earthy, aggressive and stubborn. His flashes of anger were frightening, but they did not occur very often, thanks to the tactful and accomplished handling which he enjoyed from his ADC, Captain Tommy Houghton.⁵⁵²

This image was crowned by his early arrival into the Normandy battle, landing at 0320hrs as part of Operation Tonga.⁵⁵³ Gale could have landed far more safely as part of Operation Mallard later on D-Day, but chose to land in the early hours of 6 June to take charge of his formations and deal with any unexpected challenges. As Keegan stated 'the first and greatest imperative of command is to be present in person.'⁵⁵⁴ Gale's clear and simple plans were explained by Gale directly or more usually cascaded down by his officers. The close bond he formed with RAF officers indicated his collaborative manner and ability to find

⁵⁵⁰ Dover, p. 33.

⁵⁵¹ The author Victor Dover's bracket insert.

⁵⁵² Alan. Jefferson, *Assault on the Guns of Merville: D-Day and after* (London: John Murray, 1987), p. 180.

⁵⁵³ Shrivenham, BTC 273, 'Report on the Operations carried out by 6 Airborne Division 5 Jun- 3 Sep 1944', p. 4; (AA) Gale Papers, H-2.21-4. 6 Airborne Operational Order No.1, 17 May 1944.

⁵⁵⁴ Keegan, p. 329.

mutual solutions. His creation of a divisional daily news sheet, '*Pegasus Goes to It*', while his men endured the monotony and strain of holding the Orne bridgehead, points to his high awareness of the need to further fortify the divisional identity and spirit.⁵⁵⁵ He needed to emphasise formation cohesion as the division was spread out along a disjointed line, interspersed with Special Service units and later Belgian/Dutch formations, as well as absorbing replacements direct from ITCs.

Gale's second leadership characteristic was his key authority status within the corps and his familiarity with its background and officer personnel. Gale's leading light influence within Airborne Forces can be seen in his visit 1 Para Bn during April 1944. At the beginning of the year, the battalion had returned from operations in the Mediterranean and was based in Lincolnshire. On 3 April its CO, Lt.-Col. P. Cleasby-Thompson was replaced by Major K.T. Darling, who delivered a 'straight from the shoulder' talk on how he expected the battalion to approach discipline and training matters. A vigorous programme of company training was then pursued until Exercise Tony on 11 April. The entry for this day shows the timetable for the exercise, then a line that reads 'the above timings were put back nearly an hour', before three blacked out lines of text. Tony went well, but on 13 April 'Coy Cmds speak to the men.' On 15 April 'Gen. Gale, ex Brig of this Bde, visits Bn HQ, and speaks to older members of the Bn.' By 19 April Darling had left the battalion (Major Stark taking temporary command) and Lt.-Col. D.T. Dobie assumed command on 26 April.⁵⁵⁶ In a similar vein to Hildesley's sacking, Darling was moved on to ensure a battalion being worked up for operations had no

⁵⁵⁵ Gale, *With the 6th Airborne Division in Normandy*, p. 119.

⁵⁵⁶ TNA WO 171/1236 1 Para Bn WD, 1944. These April 1944 diary pages are formed from a War Office standard two-page paper signed by Lt. Col. D.T. Dobie. My thanks go to Bob Hilton at Air Assault Duxford for highlighting this incident.

challenges to its morale.⁵⁵⁷ Gale had made the visit rather than 1 Airborne Div's own commander, Major-General R. E. 'Roy' Urquhart, as the latter suffered a three-week attack of malaria from mid-April.⁵⁵⁸ Gale was clearly still held in great esteem by 1 Para Bn, even though he had not been their brigade commander for two years.

By 1943 Gale had gathered considerable authority within the British airborne establishment when he was appointed GOC of 6 Airborne, both as the key authority status discussed above and through familiarity. This was a consequence of being the first senior airborne officer, and thereby having the advantage of either knowing each officer, if not directly, then through his superior. He had appointed all the original 1 Para Bde battalion commanders (Down, Flavell and Lathbury) and by mid-1943 they were all brigadiers. While at 1 Para Bde he had also laid the tactical training focus of Airborne Forces for the remainder of the war with his first exercise, focussing on the exploitation of the element of surprise, communications and flexibility.⁵⁵⁹ He had also guided a large part of the logistical and technical development of Airborne Forces while he had been Director of Air at the WO, and would have been a highly visible figure to COs in both 1 Airborne Div and the Airborne Establishment.⁵⁶⁰

This familiarity gave Gale a considerable head-start for the purposes of imposing his ideas, standards and patronage on the new division before he had even arrived. This factor extended to the appointment of replacement leaders when losses were incurred in Normandy. 'Ted' Flavell had been known to Gale since 1916 when the former had been his

⁵⁵⁷ Darling would later command 12 Para Bn for Operation Varsity. Peter Harclerode, *'Go to It!' The Illustrated History of the 6th Airborne Division* (London: Caxton Editions, 1990), p. 129.

⁵⁵⁸ William F. Buckingham, *Arnhem 1944* (Stroud: Tempus, 2004), p. 34.

⁵⁵⁹ TNA WO 166/1151 1 Para Bde WD, 1941. 'First Exercise, 29/30 October 1941.

⁵⁶⁰ 1 Para Bde original October 1941 COs, Ernest Down (1 Bn), W.C. Flavell (2 Bn) and Gerald Lathbury (3 Bn) were by May 1943, respectively commanders of 2 Para Bde, Commander Airborne Establishment and 1 Para Bde. Gregory, pp. 154–158. Edwin Flavell obituary, paradata.org, accessed 1 February 2015.

company commander in the Machine Gun Corps.⁵⁶¹ Flavell had been Gale's OC of 3 Para Bn in 1941, and later commanded 1 Para Bde in Tunisia. When Kindersley was badly wounded during the Bréville episode, Flavell (who at that time commanded Airborne Establishments) was selected by Gale to take charge of his most numerous and well-equipped brigade, 6 AL Bde.⁵⁶²

On 5 April 1945 Gale (as OC 1 British Airborne Corps) wrote to 'Boy' Browning who was by then Mountbatten's Chief-of-Staff (COS). The four page letter runs through UK/SHAEF airborne affairs from Montgomery's role of Colonel Commandant of the Parachute Regiment to routine training news. It also reveals Gale's authority and skill in the defence of 1 Airborne Div's existence after Operation Market Garden:

The idea, of course, was to get the 6th Division into the line and to wipe out the first by making the 6th a four brigade division and putting the Airlanding elements of the 1st back into the Army Group pool. That failed. The next attack came rather subtly, by a request for the Airlanding Field Regiment of the 1st Division to be sent over to 21 Army Group. That failed.⁵⁶³

The letter reflected the complete authority Gale held over Airborne Forces by the end of the war, demonstrating the political skill which would serve him so well as his post-war career moved on to greater things.

The third leadership characteristic of his command style was simplicity. Gale always approached each task by forming straightforward plans which had the minimum of moving parts.

The lesson I deduced from this exercise was that the average man and unit can do one thing in one night. If they are asked to do one thing and that one thing only is a straightforward thing they will do it. If you ask them to do two things in a

⁵⁶¹ Gale, *Call to Arms: An Autobiography*, p. 39.

⁵⁶² Gale, *With the 6th Airborne Division in Normandy*, p. 129.

⁵⁶³ (AA) 4H4-2.21.2, Gale Papers, 2 21 15 Gale's correspondence and staff lists.

roundabout way they will probably fail in both. We must have simple plans and we must have one task.⁵⁶⁴

Yet his uncomplicated, bluff personal style should not be interpreted as simplistic. His decisions were based on having obtained a thorough understanding of the challenges which affected airborne operations and the limitations of the equipment to hand. This had been formed during his time with 1 Para Bde and at the Director of Air at the WO.⁵⁶⁵

However Gale's command style can be criticised as some weaknesses are apparent at various phases of 6 Airborne Div's activity during the period under scrutiny. Gale did have gaps in his understanding regarding the capabilities of elements of this command which operated outside the archetypal airborne and infantry fields. His plans for 'Parkerforce', once landed, were optimistic in the extreme and expose a lack of understanding of the state of the armoured warfare art.⁵⁶⁶ His involvement in the appointment of every company commander, as described by Victor Dover, could be seen as micro-management. Also, as will be described below, it was surely within his gift as a major airborne figure to have intervened in the removal of Lindsay from the command of 9 Para Bn. The loss of this accomplished and experienced CO shortly before D-Day must have caused disruption and weakened 3 Para Bde at the time.

However the result of his leadership style was that Gale established a strong sense of trust in his judgement amongst his officers and men. The three elements (energetic communication, a key authority status and familiarity with the airborne establishment and a

⁵⁶⁴ (AA) 4H4-2.21.2, Gale Papers, Exercise Rufus, 12-13 October 1943 (hereafter abv. Rufus), pp. 1-2.

⁵⁶⁵ (AA) 4-H5-2.12.15 Gale Papers, 24 July 1942 – Letter from Military Secretary WO to Director of Staff Duties WO. Approval given for (Temp) Brigadier R.N. Gale of Iniskilling Fusiliers and DDSD [Deputy Director Staff Duties] Air to be appointed as Director of Air with effect from 16 June 1942

⁵⁶⁶ See chapter five below.

simple and straightforward approach) combined to facilitate in building what Montgomery referred to as the right 'atmosphere,' for his subordinates to work and fight:

His army must know what he wants; it must know the basic fundamentals of his policy; it must be given form guidance and a clear "lead." Inspiration and guidance must come from above and must permeate throughout the army.⁵⁶⁷

This trust is the basis of effective leadership of any kind, and in return his men engendered an effective reciprocal followership.⁵⁶⁸ He placed trust in the capabilities of his carefully selected leaders and men, allowing the imagination and initiative of his formation commanders to be the key elements in the creation and execution of 6 Airborne's D-Day operational plans. This empowered his leaders, though divergent from the set-piece battle 'master plan' approach adopted by the conventional role forces of 21 Army Gp, and acted as a force multiplier.⁵⁶⁹ Yet Gale retained control of his division with the authority he had generated through his highly-respected airborne credentials, strong communication skills and familiar knowledge of his subordinates. This positive environment formed the basis of the success of the division in Normandy, combined with a clear focus on the task in hand and not inconsiderable skill at arms.

II. Leadership - The selection of Brigade and Battalion Commanders

The appointment of 6 Airborne Div's HQ staff and its brigade commanders was central to the later success of the division in Normandy. The core of Gale's divisional staff was formed from officers he was familiar with from his time at the WO. Lt-Col. Robert 'Bobby' Bray, Gale's GSO 1 (Chief of Staff), had been in the WO Military Operations Branch at the

⁵⁶⁷ LHCMA ALANBROOKE: 6/2/22, 'Eighth Army: Some Notes on High Command in War', Tripoli, January 1943, p. 3. Montgomery had the command guidelines he had issued to his Eighth Army generals later produced as a pamphlet. The LHCMA archive contains an autographed copy for Brooke's attention.

⁵⁶⁸ Micha Popper, 'Why Do People Follow?' in *Followership: What Is It and Why Do People Follow?* (Bingley: Emerald Group, 2014), pp. 110–19.

⁵⁶⁹ Martin Creveld, *Command in War* (London: Harvard University Press, 1985), pp. 268–270. S. Hart, *Colossal Cracks: Montgomery's 21st Army Group in Northwest Europe, 1944-45*. (Mechanicsburg, Pa.: Stackpole Books, 2007), pp. 74–79.

outbreak of war and later fought in the Norwegian campaign.⁵⁷⁰ He had been a GSO 1 at the Air Ministry where Gale had worked with him. Major Bobby Lacoste was selected as GSO 2 (Intelligence) while Colonel Bill Bradish, an early parachutist, became GSO 2 (Air), who had worked closely with Gale at the Air Directorate as one of his staff officers.⁵⁷¹ Lt-Col.

Smallman-Tew was appointed Commander Divisional Signals (CRS), having been one of Browning's original 'Dungeon Party', and second in command of 1 Div Airborne Signals.⁵⁷²

The Commander Royal Artillery (CRA) was Lt.-Col. Jack Norris, while Lt.-Col. Frank Lowmen took the post of Commander Royal Engineers (CRE). All of these officers were well-known to Gale and their familiarity with each other would have provided considerable command stability at the top of the division.

Brigadier James Hill, a Royal Fusiliers regular soldier, joined Airborne Forces in 1941 and led 1 Para Bn in Tunisia, winning both the Legion de Honeur and DSO. After commanding 7 Para Bn in the new 3 Para Bde, he was promoted by Gale when Lathbury was dispatched to command 1 Para Bde in the Mediterranean.⁵⁷³ Hill was a young brigadier and quickly became highly knowledgeable in the airborne field; his nickname 'Speedy' reflected his energy and

⁵⁷⁰ Gale, *With the 6th Airborne Division in Normandy*, pp. 27–28.

⁵⁷¹ Gale, pp. 28–29. Sir Napier Crookenden, *Drop Zone Normandy*. (London: Ian Allan Ltd, 1976), p. 39. Graeme Deeley, *Worst Fears Confirmed: The History of Intelligence Corps Airborne Units and the Intelligence Gathering and Security Measures Employed by British Airborne Operations* (Gateshead: Athenaeum Press Ltd), pp. 118–119.

⁵⁷² The 'Dungeon Party' was 'Boy' Browning's original 1 Airborne Div staff. The HQ of the division had first been given accommodation in the Storey's Gate on King Charles St, Whitehall in the autumn of 1941, two floors below ground level – hence the nick-name. It consisted of twelve officers and two other ranks, of which three would not survive the war – Nigel Norman was killed in an air crash in 1943, Smallman-Tew killed as CO 6 Airborne Signals in Normandy and Des Voeux killed as CO 156 Para Bn at Arnhem. Despite the view that it was dominated by Browning's Guards peers, of the officers only three were Guardsmen – Browning, Goschen and Des Voeux. (AA) Gale Folder I 1 2 Composition of Airborne Forces, letters between Major Geoffrey Norton and Brigadier Sir Mark Henniker, 17 March 1987. (AA) Gale Folder 4H6-2.21.17, '6 Airborne Divisional Signal Regiment – History', p. 1.

⁵⁷³ Crookenden, p. 52.

determination which drove his men on.⁵⁷⁴ A hard and ruthless trainer, and with current operational experience, Hill was an obvious choice for 3 Para Bde.

The division's junior parachute brigade was commanded by Nigel Poett, who on appointment appeared a curious choice, but in fact in many ways mirrored the appointment of Gale in 1941. Poett had secured a regular commission in the DLI in 1927, and gained operational experience on the North-West Frontier and in the Sudan. At the outbreak of war he was a GSO in Staff Duties 2 at the WO before holding a staff role with 2 Div on its return from Dunkirk. Recalled by Archibald Nye (the Vice CIGS) to his old War Office department, Poett made a positive impression on Churchill when called upon to explain the length of Middle East Command's 'administrative tail', as he later accompanied the latter to Washington in December 1941.⁵⁷⁵ After a year of commanding 11 DLI in 49 Div, Poett was appointed to command a parachute brigade, Poett's battalion having exhibited the same high standards present in Gale's 5 Leicester.⁵⁷⁶ Hugh Kindersley, the commander of 6 AL Bde, was of a similar age to Gale and had also won the MC in France in 1918. Renowned for an immaculate personal turn-out, he had won the respect of the airborne soldiers by qualifying as both a glider pilot and parachutist. Not a regular officer, having pursued a commercial career in the inter-war period, Kindersley had come to airborne forces having commanded 3 Scots Guards (SG).⁵⁷⁷ His brigade benefitted from his ability to command and his wide experience of handling people at all levels.' Like Gale, he was also a versatile

⁵⁷⁴ Jefferson, p. 181.

⁵⁷⁵ Sir Nigel Poett, *Pure Poett: The Memoirs of Sir Nigel Poett* (London: Leo Cooper, 1991), pp. 44–52.

⁵⁷⁶ Richard Mead, *Churchill's Lions: A Biographical Guide to the Key British Generals of World War II* (Stroud: Spellmount, 2007), p. 155.

⁵⁷⁷ TNA WO 199/283 'Visit of the C-in-C to the Guards Armd Division', 2 February 1942.

communicator.⁵⁷⁸ Both Poett and Kindersley were noted 'thrusters', with enhanced profiles thanks to War Office staff service and practical experience of command.⁵⁷⁹

The appointment of infantry battalion commanders was simple and systematic. The first stage was a merciless weeding out of the COs of the converted battalions. From the creation of 1 Para Bde onwards, an airborne brigade commander was able to 'RTU' (Return to Unit) any officer which he felt was not performing adequately: 'Personal of air service units may be returned to former units if found to be unsuitable under authority of the Brigade Commander.'⁵⁸⁰ Nigel Poett summed the situation up:

It was extremely difficult for any officer or man to get into a parachute unit. An officer would have an extensive interview with the Brigadier, and a soldier would have other equivalent tests. At any time an officer or man could be returned to regimental duty if not up to the mark.⁵⁸¹

At the time of 10 Som LI's conversion its CO was in hospital after injuring his arm in an accident, but by the end of December had been posted to No. 3 Infantry Training Depot, Southend-on-Sea.⁵⁸² This fate, being posted to an ITC (Infantry Training Centre) to await another appointment, also befell the commanding officers of 13 Warwick, 10 Essex, 2/4 PWV and 12 Devon.⁵⁸³ Their replacements were posted into the new airborne battalion after two to three months, the previous CO having assisted in the interviewing of possible airborne volunteers and overseeing the posting of those who had decided to remain conventional infantrymen. Only one CO was immediately posted to command another

⁵⁷⁸ Crookenden, p. 55.

⁵⁷⁹ 'Thruster.' A term which appeared in 1915 to indicate an often young, ambitious and energetic commander. Paddy Griffin, *Battle Tactics of the Western Front: The British Army's Art of Attack 1916-18* (London: Yale University Press, 1994), p 13 & p.29; Tony Ashworth, *Trench Warfare 1914-1918: The Live and Let Live System* (London: Pan, 1980), p. 86.

⁵⁸⁰ TNA WO 32/9778 Airborne Policy, 'Formation of Two Additional Air Service Battalions,' 26 August 1941.

⁵⁸¹ Poett, p. 54.

⁵⁸² TNA WO 166/8559 7 Para 1942 WD Nov - Dec 1942.

⁵⁸³ TNA WO 166/8559 8 Para 1942 WD, Nov-Dec 1942. TNA WO 169/10351 9 Para Bn 1943 WD, 25 February 1943. TNA WO 166/12516 12 Devon 1943 WD, 1 & 22 November 1943.

infantry battalion: on 10 September 1943, Luard assumed command of 13 Para Bn and Lt.-

Col. G.A.B. Russell posted to command 5 W Yorks.⁵⁸⁴ It is important to note that these officers were sent to ITCs and not the Hardwick Depot – they had been rejected by Airborne Forces and would not be recycled back into the AAC.

The second stage was an influx of AAC officers, typically pre-war regular infantrymen who could give airborne experience and knowledge to the new battalions.⁵⁸⁵ With the foundation of the AAC in February 1942 a large enough pool of airborne officers to transfer into the new division was created.⁵⁸⁶ The organisational foundation of airborne forces continued to be expanded culminating in the creation of Airborne Forces Depot (Hardwick) and Development Centre (Amesbury) as a distinct command 11 May 1943.⁵⁸⁷ Brigadier 'Ted' Flavell was appointed its commandant, one of the men closest to Gale, just as 6 Airborne was created and therefore beholden on the Depot for recruits and training. Browning's own evolving HQ, Headquarters Airborne Forces /Airborne Troops, also provided a further layer of potential talent for operational leaders in the two airborne divisions.⁵⁸⁸ This pool of officer manpower and the mobility provided by the AAC/Airborne Base allowed cross-posting to make the best use of officers' talents. One important example of can be seen with the appointment of second in commands (2ic) for the airlanding brigades. Lt.-Col. R.G. Parker had been transferred into airborne forces together with his battalion, 10 Green Howards.⁵⁸⁹

⁵⁸⁴ TNA WO 169/10355 13 Para Bn WD, 10 September 1943.

⁵⁸⁵ As regular and recalled retired officers were not transferred into the AAC, but added to their 'posted strength', regular officers can therefore be easily identified on war diary strength returns. TNA WO 32/9781 Formation of the Army Air Corps 1941-1949. TNA WO 32/9781 Formation of the Army Air Corps 1941-1949. Document 4A, 'Parachute Battalions - Absorption into the Army Air Corps', 27 August 1942.

⁵⁸⁶ TNA WO 32/9781 Formation of the Army Air Corps 1941-1949. Royal Warrant, 24 February 1942.

⁵⁸⁷ T.B.H. Otway, *Airborne Forces* (London: Imperial War Museum Department of Printed Books, 1990), p. 135.

⁵⁸⁸ By March 1944, ninety-four AAC officers were present at the Airborne Forces Depot, thirty-four at No.1 Forces Holding Unit and a total of 460 throughout 21 Army Group. TNA WO 73/160 General Return of the Strength of the British Army 31st March 1944, p. 56.

⁵⁸⁹ TNA WO 166/12558 10 Green Howards 1943 WD January to May 1943, 13 May 1943.

On 6 February 1944 he was promoted to full Colonel and became 2ic of 6 AL Bde, being succeeded by Major A.P. Johnson as CO of 12 Para Bn.⁵⁹⁰ Likewise, Lt.-Col. H.N. Barlow, who been made CO of 7 Para Bn was given the same role in 1 AL Bde three weeks later.⁵⁹¹ This made good use of two experienced mature regular infantrymen while A.P. Johnson and Geoffrey Pine-Coffin were capable replacements at hand. The COs of 13 Para Bn and 12 Devon were similarly replaced with available airborne officers, in the first case with Lt.-Col. Peter Luard (2ic 4 Para Bn) and Lt.Col. G.R. Stevens (from divisional HQ) for the latter.⁵⁹²

The most direct and immediate benefit of this mobility for 6 Airborne of this 'Corps' pool of leadership was a transfusion of experienced airborne commanders, and therefore latent airborne doctrine. By 1944 these experienced leaders were spread between the two divisions, and Gale carefully balanced knowledge between his parachute brigades. James Hill (who had commanded 1 Para Bn during its Tunisian landing) commanded 3 Para Bde while 8 Para Bn⁵⁹³ was led by Alistair Pearson who had led the same unit in the latter stages of the Tunisian campaign and Sicily.⁵⁹⁴ 1 Cdn Para Bn had been accommodated in Hill's Brigade, which facilitated 7 Para Bn's move to the later formed 5 Para Bde, the Canadian battalion came with its own CO, Lt-Col. George Bradbrooke.⁵⁹⁵ 9 Para Bn was commanded by Lt.-Col. M.A. 'Polar Joe' Lindsay, a polar explorer and a 1940 airborne pioneer.⁵⁹⁶ Lindsay had commanded 151 (later 156) Para Bn in India, formed from British volunteers from the

⁵⁹⁰ TNA WO 171/1245 12 Para 1944 WD, 6 February 1944.

⁵⁹¹ TNA WO 166/8558 7 Para War WD November and December 1942; TNA WO 171/1239 7 Para 1944 WD, 25 February 1944; www.paradata.org.uk/articles/biographical-article-colonel-hilaro-barlow.

⁵⁹² TNA WO 169/10355 13 Para Bn WD, 10 September 1943; TNA WO 166/12516 12 Devon 1943 WD, 1 & 22 November 1943.

⁵⁹³ SWWEC 2001/1191, S.J. Hill, curriculum vitae; 'Telegraph Obituary: Brigadier "Speedy" Hill', *The Daily Telegraph*, 18 March 2006.

⁵⁹⁴ James, passim, TNA WO 169/10350, 8th Parachute Battalion WD, 2 December 1943.

⁵⁹⁵ The Canadian Battalion had been raised from volunteers the bulk of which based in Canada and then trained at the US Army Parachute School at Fort Benning. On 1 August was numerically strong when compared to the British battalions with 450 men and thirty-two officers. TNA WO 205/751. The Training of 6th Airborne Division. Strength of whole Div, Appdx A., 1 August 1943. Harclerode, p. 19. Crookenden, pp. 53–54.

⁵⁹⁶ Crookenden, p. 53.

twenty-three battalions stationed in India.⁵⁹⁷ 5 Para Bde's senior battalion was 7 Para Bn was commanded by Lt-Col. Pine-Coffin, who had won the MC (Military Cross) leading 3 Para Bn in Tunisia, and had been transferred to the Parachute Regiment from the Devonshire Regiment in 1941. This gave Colin Poett one parachute battalion commander with combat experience of known ability. Peter Luard was appointed CO of 13 Para Bn, having been 2ic of 4 Para Bn. Therefore 6 Airborne Div was fortified with men who had been landed in action and were able to facilitate the transfer of first-hand knowledge of airborne warfare.⁵⁹⁸

Some stability appeared to be offered by the settled leadership of established units transferred from 1 Airborne to the new division. 2 Oxf Bucks and 1 RUR had been part of 31 Ind Inf Bde which had been converted into 1 AL Bde in October 1941 when Browning's division had been created.⁵⁹⁹ However the CO of the latter unit had changed as recently as March 1943 when Lt.-Col. 'Hank' Carson had superseded Lt.-Col. Campbell who had commanded the battalion since 1941.⁶⁰⁰ Another March command change concerned the Airborne Light Tank Squadron RAC Commanded by Major Godfrey Stewart (13/18 H) now attached to the new division. Once built into the four squadrons of 6 AARR, it contained a considerable complement of officers and NCOs due to the dispersed nature of its role. From a total establishment of 309 it included twenty-nine officers, seven warrant officers and twenty-one sergeants.⁶⁰¹

⁵⁹⁷ Otway, p. 335.

⁵⁹⁸ Gale, *With the 6th Airborne Division in Normandy.*, pp. 14–15. J.W. Greenacre, *Churchill's Spearhead: The Development of Britain's Airborne Forces during the Second World War* (Barnsley: Pen & Sword Aviation, 2010), p. 150.

⁵⁹⁹ TNA AIR 32/3 Provision of a Glider force Doc 35B, Memorandum, WO to Home Forces C-in-C, 10 October, 1941.

⁶⁰⁰ Carson had previously commanded 70 RUR, the Young Soldiers' Bn. David R. Orr and David Tresdale, *The Rifles Are There: The Story of the 1st and 2nd Battalions, The Royal Ulster Rifles 1939-1945* (Barnsley: Pen & Sword Books, 2005), pp. 111–114.

⁶⁰¹ (AA) Gale Folder 3-G1-7.1.2, '6 Airborne Armoured Regiment – Historical Notes', p.1& p.7. Harclerode, p. 21.

The selection of the division's artillery regiment owed much to the 'thruster' who commanded it. 53 Worcs Yeo. had become available with the disbandment of 42 Armd Div in September 1943.⁶⁰² Lt.-Col. Tony Teacher remained in command of the regiment on its transfer to the airborne role, the instigator of a spectacular success during Ex Spartan. This was a massive Home Forces' manoeuvre involving ten divisions and four independent brigades, although viewed by some participants as too 'heavily umpired' and of 'limited tactical value'.⁶⁰³ 42 Armd Div was fighting on the 'German' side and Teacher faced the might of the Guards Armd Div commanding an A.Tk screen of ninety A.Tk guns, twenty-four field and eighteen Bofors anti-aircraft (AA) guns. Under the scrutiny of the umpires, Teacher co-ordinated this effort and was adjudged to have knocked out sixty per cent of the Guards' tanks for the loss of four guns.⁶⁰⁴

(c) An attack by the armoured brigade of Guards Armoured Division (its infantry brigade was detached) on 11 March on a narrow front through a minefield against an infantry brigade in position supported by the bulk of an anti-tank regiment and a divisional artillery. This ended in the virtual destruction of the armoured brigade.⁶⁰⁵

Teacher's success was further elevated by Home Forces as it contrasted with the C-in-C's general criticisms of artillery during the exercise. While the principles regarding the centralisation of artillery had been well observed, no orders to support operations had been given and the information acted on was often 'stale'; also A.Tk Regt fire had been poorly co-ordinated with that of infantry A.Tk guns.⁶⁰⁶

⁶⁰² D.R. Guttery, *The Queen's Own Worcestershire Hussars 1922-1956* (Stourbridge: Mark and Moody Ltd, 1958), pp. 49–50.

⁶⁰³ Timothy Harrison-Place, *Military Training in the British Army, 1940-1944: From Dunkirk to D-Day* (London: Frank Cass, 2000), pp. 19 & 33.

⁶⁰⁴ TNA WO 166/11333 53 Regt RA 1943 WD, 1-15 March.

⁶⁰⁵ TNA WO 199/232 'GHQ Exercise "SPARTAN", Comments by Commander-in-Chief Home Forces', March 1943, p. 12. Guttery, p. 48.

⁶⁰⁶ TNA WO 199/232 'GHQ Exercise "SPARTAN", Comments by Commander-in-Chief Home Forces', March 1943, pp.21-22.

Two extraordinary changes occurred to the CO cadre of the division before it went into action in Normandy. On 2 December 1943 the 8 Para Bn war diary states that Hildesley had been posted to the Hardwick Depot and Alistair Pearson had assumed command.⁶⁰⁷ Julian James, Pearson's military biographer, states that the battalion was 'in poor shape', citing the inexperience of its young soldiers who had been shaken by a serious training accident.⁶⁰⁸ The incident in question concerned the drowning of two officers and five ORs who had parachuted into the river Tay on 13 June, while a different stick saw another fatality and six injuries.⁶⁰⁹ These accidents had however taken place nearly six months before Hildesley's replacement. Closer to that date Gale had reviewed the battalion's church parade on 19 September while Hill had inspected 1 October.⁶¹⁰ At that time Pearson was a GSO 1 (Air) at Divisional HQ, having had to relinquish command of 1 Para Bn in Sicily due to malaria. This experienced officer was now fit and available and 'Brigadier Hill asked General Gale if he could have Pearson.'⁶¹¹ Although a common sense replacement within the divisional framework, this example shows the AAC corps pool of manpower and organisational/personal familiarity (Hill's service with Pearson in Tunisia) at work as key influences. As with Darling at 1 Para Bn, it also reveals Gale's ruthlessness regarding COs careers should the morale of a battalion be jeopardised.

A second sudden change occurred in 9 Para Bn. Martin 'Polar Joe' Lindsay was appointed CO on 2 June 1943, having been James Hill's 2ic until the latter assumed command of 3 Para Bde.⁶¹² The Battalion's war diary baldly states that Lindsay 'relinquished' the command of

⁶⁰⁷ TNA WO 169/10350 8 Para Bn 1943 WD, 2 December 1943.

⁶⁰⁸ Julian James, *A Fierce Quality: A Biography of Brigadier Alastair Pearson* (London: Cooper, 1989), pp. 87–88.

⁶⁰⁹ TNA WO 169/10350 8 Para Bn 1943 WD, 13 June 1943.

⁶¹⁰ *Ibid.*, 19 September and 1 October 1943.

⁶¹¹ James, pp. 84–88.

⁶¹² TNA WO 169/10351 9 Para Bn 1943 WD, 20 May 1943.

the battalion 2 April 1944, as the battalion went on leave for three days.⁶¹³ Stuart Tootal has probed the accounts and memories of 9 Para Bn veterans, Lindsay apparently being removed after a lapse of D-Day security. Tootal points to the ambition of Otway manipulating the situation to gain command of the battalion, Gale and Hill having no choice but to sack Lindsay once the breach had been formally presented to them by Otway.⁶¹⁴ It is possible that Lindsay's unconventional style had caused tension with Hill before this incident:

The battalion was kept lively by many ideas, one of which was his order that any man who completed 15 jumps could wear parachute wings on both shoulders. At this, a balloon soon appeared on the barrack square at Tidworth and the soldiers of the 9th Battalion began to go up and down like Yo-Yos. However, Brigadier Hill got to hear of it and the order was cancelled.⁶¹⁵

Later evidence shows Lindsay's credentials as a highly capable soldier cannot be doubted. He joined 1 Gordons as replacement 2ic in July and fought in Normandy/NW Europe with distinction; winning the DSO and frequently acting as the CO of 1 Gordons.⁶¹⁶ Horrocks recalled Lindsay's later contribution to the Rhine crossing with some admiration:

....the 1st Gordons, who were under the command of a very famous character, Lieut.-Col. Martin Lindsay, DSO, who had already distinguished himself in the Reichswald and usually made a habit of leading all attacks in person.⁶¹⁷

The late replacement of both Hildesley and Lindsay should be viewed in the context of the 1944 situation. In the first case Gale could not afford to have a new battalion's morale be a problem and a pragmatic solution was required. The second sacking appears hard-nosed, but in the context of the security surrounding the build-up to D-Day the change was

⁶¹³ TNA WO 171/1242 9 Para Bn 1944WD, 2 April 1944.

⁶¹⁴ Stuart Tootal, *The Manner of Men : 9 Para's Heroic D-Day Mission* (London: John Murray, 2013), pp. 100–103.

⁶¹⁵ Crookenden, p. 53.

⁶¹⁶ Martin Lindsay made no mention of his service with airborne forces in his 1946 memoir.

⁶¹⁷ Sir Brian Horrocks, Eversley Belfield and H. Essame, *Corps Commander* (London: Sidgwick & Jackson, 1977), p. 210.

unavoidable. Otway carefully planned for the attack on the Merville battery and then carried it out in the most difficult of circumstances, but certainly was the beneficiary of Lindsay's downfall.⁶¹⁸

The Lindsay incident throws up the question of politics within the Division. The Airborne Establishment and 6 Airborne, like the rest of the Army, was packed with ambitious career-minded officers. A fascinating insight into the Lindsay incident is provided by an Imperial War Museum (IWM) interview recorded with Alistair Pearson in 1989, which perhaps reveals some of the friction between personalities within the Division. The former CO of 8 Para Bn was in discussion with Julian Thompson, the former commander of 3 Cdo Bde during the 1982 Falklands Conflict. Pearson spoke frankly in a wide ranging discussion regarding airborne forces and his involvement in operations, and Thompson challenged him about the Lindsay sacking. Pearson felt there had been no breach of security, it was that quite simply 'he and James Hill did not get along.' 'The politics in Bulford was unbelievable ... and went over Joe's head.' Further, Pearson maintained that while Gale had supported Hill's decision to sack Lindsay, he offered no additional support to Hill in the court martial, in which Hill was 'hammered.' Pearson had been a rival with Hill for the command of 1 Para Bn when the latter had returned to the unit after having been wounded, so the account he gave to Thompson could reflect some residual animosity there. Alternatively, Gale's failure to assist Hill in the court could point to his annoyance at being obliged support the sacking of a valuable CO on a point of absolute security.⁶¹⁹ Interestingly, as just before he moves the discussion onto another topic, Thompson makes an interesting comment. He states that when he had previously spoken to Hill, the latter had explained that he had got along well

⁶¹⁸ Otway's plan will be examined in chapter five.

⁶¹⁹ IWM Interview - Pearson, Alistair, no.21033 (recorded 1989).

with Eric Bols (Gale's successor as GOC of 6 Airborne) but 'Gale had been very difficult.'

However the IWM interview with Hill of 1991 reveals nothing of any such friction.⁶²⁰ Politics amongst the commissioned ranks of the Division was obviously at work before D-Day, but if Pearson's account is taken at face value Gale had little time for it.

From reviewing the schedule of events regarding the appointment of airborne commanders, a simple selection process can be seen. After a ruthless weeding out of the converted battalions' commanding officers took place, at least two out of four criteria had to be met. First, was the officer familiar to Gale and/or was an existing airborne officer? This was an obvious requirement to fill a role on the divisional staff. Also, six out of seven replaced battalion COs were already in the AAC if not the division - Stevens, Hildesley, Hill/Lindsay, Luard, Pine-Coffin and Pearson. Next, was the candidate a regular infantryman? Six of the seven were - Pearson was TA but with extraordinary combat experience.

Obvious indications of 'keenness' toward the idea of airborne warfare when the individual outside of the airborne community was the third point. Only R.G. Parker of 10 Som LI was retained of the donor battalion COs, and was noted for enthusiastically engaging with his parachute training. The Ringway course instructor's notes stated he was - 'Exceptionally keen. Sets a fine example.'⁶²¹ Parker's replacement when he was posted as 2ic of 6 AL Bde was Major A.P. Johnson, another regular infantryman who had converted with 10 Som LI and had displayed his zeal from the outset. On the announcement of conversion Johnson had just returned from 'course No.9 at the school of infantry, Barnard castle' to find Lt.-Col. Dennys, his CO, in hospital with a broken arm.⁶²² Just three days later, Johnson wrote to the

⁶²⁰ IWM Interview - Hill, James, no.12347 (recorded 1991).

⁶²¹ www.paradata.org.uk/people/robert-g-parker. Accessed 17 July 2016.

⁶²² TNA WO 166/8558 7 Para WD November and December 1942.

COs of the other Som LI battalions asking for volunteers to maintain light infantry standards and traditions.⁶²³ This use of a light infantry back channel to obtain more quality airborne volunteers must have made a positive impression on his new brigade commander, Lathbury.⁶²⁴

The fourth and final important qualification was another key determinant for men being drafted in from outside the airborne fraternity. This was to be seen as a 'thruster' who had made a good impression in the right quarters either in Home Forces or the War Office. Such as Nigel Poett who had pursued a similar career path as Gale and had an enhanced profile within the WO, while Hugh Kindersley was an up-to-date armoured Guards commander with experience gained since the Great War. Teacher had impressed during Exercise Spartan, with his massacre of Guards armour, achieved importantly by co-ordinating the firepower of several interlinked artillery units. Otway, made a battalion CO only two months before D-Day, makes an interesting example of all four criteria at work. A regular RUR infantryman, he had briefly commanded 31 (later 1) Airborne Reconnaissance Squadron in October 1941 when 31 Ind Inf Bde was converted into 1 AL Bde therefore having some acquaintance with airborne forces. After Staff College he served as a GSO 2 Military Operations at the WO, Otway was posted to 9 Para Bn as 2ic on 12 June 1943; ten days after Lindsay had assumed command.⁶²⁵ Otway was certainly a determined 'thruster' as his command of 9 Para Bn revealed, and his plan and its execution for the attack on the Merville battery will be reviewed in the next two chapters.

⁶²³ Ibid.

⁶²⁴ Brigadier Gerald Lathbury. A regular Oxford and Buckinghamshire Light Infantryman, he had commanded the 3rd battalion in 1941 and later led 1st Parachute Brigade in Sicily and Arnhem. J.W. Greenacre, *Churchill's Spearhead: The Development of Britain's Airborne Forces During the Second World War* (Barnsley: Pen & Sword Aviation, 2010), p. 150–151.

⁶²⁵ TNA WO 169/10351 9 Para Bn WD, 1943. 12 June 1943; Jefferson, p. 181.

Gale carefully selected his commanders at brigade and battalion level as they would be the critical conduits of his dogma regarding aggression, initiative and standards. He relied on existing airborne officers, regular infantry officers and noted energetic outsiders, but all were bound by an enthusiasm for the concept and possibilities of Airborne Forces.

III. Case Study – Lieutenant Nick Archdale, 7 Para Bn

It is worth reviewing the nature and experience of commissioned leadership at the opposite end of the organisational chart – the platoon. Lieutenant Nick Archdale would be engaged heavily in the fighting for Le Port on D-Day, and would stay with his parachute battalion until the end of the war. Archdale was only nineteen years old in 1943 when Pine-Coffin and Captain Blood visited his UK barracks recruiting for the Parachute Regiment. Archdale was serving with the KRRC and was annoyed that a draft of officers had just been sent to Italy to join the Regiment's twelfth battalion and he had not been included.⁶²⁶ His CO gave him his blessing to volunteer, which was surprising as the KRRC 'didn't like its officers going off to do other things.' Archdale took command of the twenty-eight man mortar platoon within 7 Para Bn, including no less than ten NCOs. His 'life as a young officer was made incredibly easy' by his NCOs, three of his sergeants having been warrant officers who had dropped a rank to join Airborne Forces. Archdale believed that while Airborne Forces was not a large organisation in relation to the rest of the Army, it did lure many NCOs.

His encounters and impressions of senior officers bear out the importance attached to standards and enthusiasm. Hilario Barlow, the first CO of 7 Para Bn, 'set the pattern for 7 Para, you didn't make mistakes ... standards were very high.' Meanwhile Archdale felt as if he was one of the Brigade commander's 'blue-eyed boys', Colin Poett was 'always about ...

⁶²⁶ Max Arthur, *Men of the Red Beret: Airborne Forces from 1940 to Today* (London: Warner, 1990) pp. 242-246; interview with the author 3 October 2013, *passim*.

very confident , very full of good humour and enthusiasm.’ Archdale clearly admired Pine-coffin’s personal courage during Operation Varsity, the drop in support of the Rhine crossing, witnessing his CO being hit in the mouth. ‘He spat out the blood and bits and just carried on.’ Archdale formed a very positive view of Gale. ‘I think he was a very good general. Always around and about, we saw a lot of him. On the first day [D-Day] he appeared at Bénouville, ‘quite unconcerned about everything, or putting on a show about being unconcerned.’ 6 Airborne was ‘happy, good, very well-run,’ Archdale and his colleagues believing it was better than the 1 Airborne Div. He did believe that the constant raiding required in the Bois de Bavent was ‘futile’ however, ‘all done to show we were being aggressive’, achieving nothing but adding further casualties. All of these observations point to the aggressive and ever-present nature of senior officers in Gale’s formations, positively reinforcing junior officers. This of course is as it should be in any military organisation, but the nature of airborne warfare, with no front line, pushed HQs into the line and Gale fostered it.

Training was the element which separated airborne infantry from conventional role troops. He recalled a ferocious training regime beginning at 0600 hrs every day, summer or winter:

‘Very violent’ PT [physical training], and thirty-six miles in twelve hours rouser marches once a month. My colonel, Pine-Coffin, quite rightly was hell-bent on everybody being a good shot. [A] Lot of weapon training. Didn’t go into assault courses very much, you were kept busy all the time, and then you had days when you had to run everywhere, - a very good idea. If you were caught not running you were in trouble.’

From his experience confidence flowed through the Division: ‘Oh you never had doubts at all that we wouldn’t win. Never came across anyone who didn’t think we would succeed.’

Even on the afternoon of D-Day when events were turning against 7 Para Bn he still felt personally invulnerable, ‘[he had] an overriding sense of superiority and confidence. Never had any doubts.’ Archdale believed that it was this training that allowed ‘little groups of

soldiers fight on their own' when scattered. The conventional role troops he encountered on D-Day were different.

That was so noticeable about the soldiers that took over from us [Royal Warwicks], I felt sorry for them, they stood around in groups and didn't know what to do. No fault of their own, just didn't have the training our boys had had.'

Archdale's experience on D-Day showed all the themes of this thesis at work. He adapted to the situation of his platoon having lost all its mortars during the parachute descent and immediately accepted an infantry command role. He displayed considerable leadership gathering all available personnel from 7 Para Bn HQ and forming them into a scratch force to reinforce the position at Le Port. The fighting was so ferocious there that his group prepared for a last stand, until the advancing infantry were identified as Warwicks from 3 Div. All this was possible due to the challenging training he had received in 6 Airborne Div and the leadership culture that Gale espoused.

IV. An Analysis of Gale's Leadership

The case study above and the discussion in the first two sections of this chapter allow this study to pause and establish a prescription or theory of Gale's leadership practice. This section will show the impact of Gale's leadership style through the thesis chapters to show how it impacted on 6 Airborne's eventual combat effectiveness in each key area. His leadership characteristics will be detailed here and further illustrated in **Figure 3**, and as each aspect is posited the chapter reference will be detailed. Some of the proofs for the theory have already been established in previous chapters, and some in the following chapters five and six will be indicated.

Richard Gale was selected by the WO in October 1941 to command 1 Para Bde, whose officers and men formed the foundation of the two divisions which followed.⁶²⁷ Gale was a fervent but practical ambassador for Airborne Forces. His time as Director of Air at the War Office saw him build relations between the army and RAF and resolved many logistical and technical issues that had held back airborne forces. By the time Operation Paddle began, the breakout from the bridgehead, he commanded not only his division but four others: the two SS Bdes, the Belgian Infantry Bde and the Royal Netherlands Bde.⁶²⁸

Gale was a highly capable planner, of both training and operations. Chapter two explained the advantages that the use of airborne forces could give to the commander in the field – high mobility through air transport and the shock-surprise effect; and also the challenges – few heavy weapons, dispersed landings, the reliance on early support by conventional role forces and DZ/LZ close to the objectives. Gale demanded that his brigadiers and battalion commanders thoroughly prepare for their operations. The characteristics of his planning framework were always consistent: proximity of landing, redundancy of force; surprise; close command and control, and always simplicity (see chapter five).

Gale carefully chose his commanders. His own command style was orientated around high standards and clear and energetic communication and he looked for these qualities in others. Regular infantrymen, airborne veterans and noted ‘thrusters’ were understandably sought after. Gale also trained his immediate subordinates. He added considerable value to the operational effectiveness of the division with the development of his subordinates,

⁶²⁷ Of its battalion commanders, Eric Down would later command 44th Indian (Airborne) Division while Edwin Flavell and Lathbury would both command brigades. Richard Nelson Gale, *Call to Arms: An Autobiography* (London: Hutchinson, 1968), pp. 112–113.

⁶²⁸ Richard Nelson Gale, *With the 6th Airborne Division in Normandy*. (London: Sampson Low, Marston & Co., 1948), pp. 126–127.

which began almost immediately when the division was formed, and straightforward unit training (chapter three).

Gale was an imaginative and tough trainer. This was in contrast to the unimaginative training much of the field force divisions received before D-Day (chapter five).⁶²⁹ The role-specific training which began at Hardwick House was stretching and tough; only one in four volunteers were accepted. But its physical challenge engendered unit cohesion as did the presence of officers mixed in with the ORs at both Hardwick and Ringway. This dissimilarity also poses a further question over the allegation that the best men were siphoned off for Special Forces, as to whether their higher combat effectiveness was due to nurture rather than nature (chapter three). It must be acknowledged that airborne forces were always able to discard any man who didn't fit their bill. However the rapid 'tidying up'⁶³⁰, and later retention, of many of the non-parachute trained replacements received in Normandy (Chapter Six) showed that 6 Airborne was able to maximise the capability of many of the men posted to it. 6 Airborne was an all-volunteer formation, but the vast majority of its men had no combat experience. It was Gale's focussed vision of how the division should be led and trained which enabled its extraordinary performance on D-Day in the face of the scattering disaster which should have paralysed its cohesion. Martin van Creveld stated that 'Command may be defined as a function that has to be exercised more or less continuously,' and Gale's presence in and around 6 Airborne as it trained was a constant.⁶³¹ Gale was fortunate that his Great War experience, personal charisma and architect status with the Airborne Establishment gave him a great deal of authority before he gave an order with his

⁶²⁹ Timothy Harrison-Place, *Military Training in the British Army, 1940-1944: From Dunkirk to D-Day* (London: Frank Cass, 2000).

⁶³⁰ Interview with Tony Lycett, 7 Para Bn Veteran, 19 September 2013.

⁶³¹ Martin Creveld, *Command in War* (London: Harvard University Press, 1985), p. 6.

newly formed division. But his obvious skill as a trainer allowed him to mould a largely brand new division into a highly effective formation which performed well in Normandy.

Gale was a clever and decisive battlefield commander. It will be shown in the next chapter that the defensive scheme he wove the entire Division into once it had accomplished all its D-Day tasks was formidable, and 346.Gren.Div broke upon it when they attempted to seize DZ N from 5 Para Bde. With the most slender of resources he held the threatened front line between Le Mesnil and Sallanelles from 8 – 12 June, before launching a well-conceived and ferocious assault with his last reserves. But this battlefield success was due to his leadership before 6 Airborne got to the battlefield. '6 Airborne was the best trained division in the British army ... trained by Richard Gale.'⁶³² His leadership had directed thorough preparation and training, which had led to highly cohesive units and formations and intelligent plans. These factors created and sustained 6 Airborne's high combat effectiveness during the Normandy landings and campaign (chapter six).

Interestingly Gale summed himself up quite succinctly as a battlefield general in a RUSI lecture he gave in 1956, having just completed a four-year appointment as C-in-C British Army of the Rhine.⁶³³ His paper was entitled 'Generalship and the Art of Command in this Nuclear Age,'⁶³⁴ and intended to update the themes discussed by Wavell in his three 1941 lectures.⁶³⁵ Gale discusses the impact of the mechanization of warfare which came of age during the Second World War; the massive impact of air power and the possible impact of

⁶³² IWM interview - Pearson, Alistair, no.21033 (recorded 1989).

⁶³³ Gale, *Call to Arms*, p. 188 and p.202

⁶³⁴ General Sir R.N. Gale, '*Generalship and the Art of Command in this Nuclear Age*', Royal United Service Institute, 101 (1956), p. 377

⁶³⁵ General Sir Archibald Wavell, *Generals and Generalship*. Reprinted from The Times, 17, 18, and 19 February 1941 (London: The Times Publishing Company, 1941).

nuclear weapons. But as he concludes his talk he returns to more established themes when he describes an effective general in the new age:

It is always best when command is direct and personal. It requires of a man great robustness, but it also requires great tactical ability and a full and detailed understanding of those scientific and engineering developments which are so much the hallmark of our time. It requires a broad-minded and understanding approach to air warfare today, and presupposes a complete understanding, not only of air strategy, but of all the facts of air/land warfare. It requires an understanding of the staff machine and ability to use it to the hilt, whilst never letting it get control. It demands confidence in all levels which postulates the encouragement of initiative. It calls for the determination to control events and not to be controlled by them. It calls for political sagacity and tact, understanding and a reasonable humility. It calls for patriotic fervour but also an international outlook.⁶³⁶

Gale combined an up-to-date understanding of air power and its application to air assault warfare, with the experience he had gained in the MGC and in conventional infantry appointments. In the 'Discussion' part of the lecture the Chairman, Sir Brian Horrocks, adds his own description of Gale's frontline leadership:

General Sir Richard Gale was a general who commanded from in front. He was always up in the battle area, and he was the type of man who really 'smelt' the battle and had the feel of it the whole time. That is why he was such a very successful divisional commander.⁶³⁷

In conclusion, Gale's leadership acted as an accelerator to the best practice of preparing military forces for combat, which can be shown in a short hand through the three elements which make up 'Fighting Power' as shown in the Army Doctrine Publication – Operations 2010.⁶³⁸ These are the Conceptual, Moral and Physical foundations, which encompass the crucial components of training, cohesion, equipment and doctrine (**shown on diagram 3**).⁶³⁹

His application of all-encompassing communication to all ranks in the Division and careful

⁶³⁶ Gale, *Generalship*, p. 383

⁶³⁷ Ibid., p. 386

⁶³⁸ *Army Doctrine Publication – Operations*. Crown Copyright, 2010. Accessed 22 February 2017.

⁶³⁹ General Slim sat in his office in summer 1943 'tabulated these foundations of morale,' but rather than Conceptual, Moral and Physical described them as 'Spiritual, Intellectual and Material.' W.J. Slim, *Defeat into Victory* (London: Landsborough Publications, 1958) pp. 149-151.

leader selection was supported by his familiarity with Airborne Forces which was enhanced in turn by the architect of airborne forces status he enjoyed. With these elements he built upon the inculcation of identity which had taken place when the men had joined Airborne Forces. His powers of communication allowed him to support Airborne Forces aims in the WO and in inter-service debate with the RAF, and later facilitated his command of three additional brigades, two Commando and the Belgian Infantry Brigade (chapter six). His projected mask of command was that of a traditional infantry soldier, but concealed a clear understanding of the challenges which faced 6 Airborne Div in Normandy. Proximity of landing zones to objectives and redundancy of force were all conveyed to his formations and units as simple plans. Gale was also able to adapt and innovate with his own formations to generate the maximum combat power and with those of conventional role forces around them (see the Bréville episode in chapter six). Above all, Gale aimed to achieve a synthesis of his own command persona with that of his division, as explained by another airborne soldier, Sir John Hackett:

A man only really gets the best out of the men he commands by something approaching a complete fusion of his own identity with the corporate whole they form. He is the Eighth Army, or No. 2 troop of C Squadron, or whatever it is. He is the living personification for so long as he remains its leader.⁶⁴⁰

Gale achieved that, and his energy and desire for success was transferred into 6 Airborne Div.

⁶⁴⁰ General Sir John Hackett, *The Profession of Arms* (Letchworth: Garden City Press, 1983), p. 228.

Chapter Five – Focus: The 6th Airborne Divisional Plan

The looming Second Front, 6 Airborne's *raison d'être*, added urgency to the division's formation and shaped its training. Chapter five explores the value attached to airborne forces by both sides in anticipation of spring/summer 1944 operations, and then the tasks that 6 Airborne would be set to accomplish. The chapter question being how did Gale's Division prepare for D-Day? Again, Gale provided key input with five tenets for the operation – ensuring proximity of the DZ/LZ to the objectives; making the maximum use of the element of surprise; simple plans; redundancy of force and finally close command and control. The first chapter section moves beyond the airborne establishment to assess wider expectations. 21 Army Group and Dempsey's British Second Army placed considerable value on the potential capability of airborne forces. The landings at Salerno (Operation Avalanche) and Anzio (Operation Shingle) had both been less than satisfactory. The first had almost been overwhelmed by the local German response, while Shingle had been effectively sealed off by the enemy, and building attacks had nearly annihilated the lodgement. Only superior Allied air and naval firepower support had secured the beachheads. General Sir Miles Dempsey anticipated that airborne forces would not only shield his vulnerable eastern (Orne) flank from enemy counter-attack, but would provide a vital outflanking option should offensive operations become bogged down. By framing the role of 6 Airborne in the wider Neptune landing plan at this point of the study, the effectiveness of the division in action will later be easier to examine.

No other Allied offensive operation during the war was as meticulously planned as Neptune/Overlord, but in turn no other action had so many variables and vulnerabilities. The second section will discuss the robustness of Gale's divisional outline plan, with

particular attention paid to its scope for adaption if faced by unexpected adversity. The plans' flexibility was highlighted by the solutions developed when 5 Para Bde was switched into the Tonga plan with the appearance of the 'rommelspargen' on RAF reconnaissance photographs, which precluded the use of 6 AL Bde's gliders to consolidate Operation Deadstick. Gale fully utilised the existing 'Appreciation' scheme for planning operations and delegated much of the detailed planning to his brigade commanders, his work developing their personal thinking paid a dividend here.⁶⁴¹

This chapter then turns to review the capability of the waiting enemy. The Wehrmacht's anti-airborne capability is interpreted to give an indication of how the enemy valued airborne forces. An assessment of the deployment and preparedness of the defenders will show Rommel's determination to destroy the seaborne invasion on the beaches and any accompanying airborne forces as quickly as possible. A review of the training undertaken by 192.Pz.Gren. Regt will show the Wehrmacht expectation of Allied air superiority and the intense training focus of mechanised forces, the troops which Rommel hoped would defeat the invasion. The deployment of German units in the invasion area will illustrate that great reliance was placed on fixed defences to brace the largely immobile and second-class infantry of 711 and 716. Gren. Divs. This policy played into the hands of 6 Airborne, as little remained to form 'gegenstoss' - local infantry counter-attack forces capable of mounting swift counter-attacks to eliminate the lightly armed airborne troops.⁶⁴² In the second half of this section the quality of intelligence will be explored. How accurate were the 6 Airborne Div's intelligence estimates regarding the forces awaiting them in the area which would

⁶⁴¹ George Forty, *British Army Handbook 1939-1945* (Stroud: Chancellor Press, 2000), pp. 341–343.

⁶⁴² Matthias Strohn, 'The German Army and the Conduct of the Defensive Battle 1918-1938.' (Unpublished DPhil, Hertford College, 2006).

form the Orne bridgehead? These sections review the rival plans from the standpoints both of the reality of the balance of forces, and, in 'the circumstances then prevailing,'⁶⁴³ The fourth and final chapter section will show the relevance of the mission-specific training Gale third arranged for his units, and the special care taken to plan for a solution to scattered drops and the menace of German armoured forces.

I. *The Divisional Plan - the wider D-Day Plan and the Expectations of British Second Army*

In the final plan for Overlord/Neptune, SHAEF anticipated the use of three airborne divisions to secure the flanks of the seaborne landing. As discussed in Chapter Two, Operations Ladbrooke and Fustian had been near-disasters operationally, but the British Army was prepared to disdain the potential of catastrophic airborne forces losses landings for the advantages perceived in disrupting the enemy's response to a seaborne invasion. Yet the issue of limited RAF aircraft lift capability remained, and the therefore the Inter-allied and inter-service tensions which had surrounded the Mediterranean airborne operations in 1943 were still in place. This is the atmosphere in which 6 Airborne's plans were formulated, and why the hasty formation of 46 Group RAF was required.

Again, as shown in Chapter Two, the commander of the British landings placed great store in the potential of airborne forces. Lieutenant General Miles Dempsey was appointed the commander of British Second Army, and it was he who would decide how British airborne forces would be used in the forthcoming invasion.⁶⁴⁴ On 26 January the Second Army and assault corps planning staff, together with those of 83 Group RAF and that of the Eastern

⁶⁴³ Max Hastings, *Nemesis: The Battle for Japan, 1944-45* (London: Harper Press, 2007), p. 339.

⁶⁴⁴ Peter Rostron, *The Life and Times of General Sir Miles Dempsey* (Barnsley: Pen & Sword Military, 2010), p. 80.

Naval Task Force, were established by Dempsey at Ashley Gardens in London.⁶⁴⁵ Dempsey was a good fit for the Second Army command having experience of combined operations as commander of 13 Corps during Operations Husky and Baytown, and it had been conventional role troops under his command which had relieved 1 Airborne Div during operations Ladbroke and Fustian.⁶⁴⁶ This experience would be crucial as the success of Neptune/Overlord depended on one combined service plan to support the seaborne assault, including the unique impact on operations offered by airborne forces. It is unlikely he would have been appointed to the command of Second Army if his view of airborne forces had been negative, and therefore in contrast to Brooke's and Montgomery's view.

The reasons why the Calvados/western Cotentin coast was selected for the site for the Neptune landings must now be reviewed before a study of the involvement of 6 Airborne Div begins. The key personalities in the decision-making process are shown, and also the key geographical challenges facing Second Army's eastern flank are identified.

The decision to choose the Normandy beaches between the Vire and Orne rivers had been made by the Combined Planning Staff in February 1943. This group had produced a clear and concise paper for the Combined Commanders which worked through the advantages and disadvantages of all the possible landing areas for an invasion of north-western Europe.⁶⁴⁷ In summary the coast above Bayeux and Caen offered the decision makers

⁶⁴⁵ TNA CAB 44/261, An Account of the Operations of 2nd Army in Europe, p. 2.

⁶⁴⁶ TNA WO 204/4220 Airborne Employment Operation and Movement of Troops (Proceedings of Board of Officers considering Airborne Operations) November 1943. Report on Airborne Operations, 'HUSKY', between nights 9/19th July 1943 and 16th/17th July 1943. p.2 & p.4. David Fraser, *And We Shall Shock Them: The British Army in the Second World War* (London: Cassell, 1999), pp. 262 & 274.

⁶⁴⁷ The Combined Commanders consisted of General Sir Bernard Paget – C-in-C Home Forces, Air Marshal William Sholto Douglas and later Air Marshal Sir Trafford Leigh-Mallory of Fighter Command, and Admiral Sir Bertram Ramsey, who had been appointed as naval C-in-C for SLEDGEHAMMER, the 1942 emergency invasion plan for France. General Eisenhower and Lord Louis Mountbatten were associated with them when required. L. F. Ellis, *Victory in the West*. (London: H.M.S.O., 1962), pp. 11–18.

beaches sheltered from the full fury of the Atlantic; within the range of Allied fighter cover; not vulnerable to massive flooding by the enemy (which eliminated the Dutch/Flanders coastline); and, in early 1943 at least, poorly developed German defences.⁶⁴⁸ Major-General Frederick Morgan as COSSAC created a plan for a three division attack which was approved in August 1943 by the Combined Chiefs of Staff.⁶⁴⁹ The scale of the proposed operation was limited by the landing craft resources known to be available by 1 May 1944, the provisional date of the invasion.⁶⁵⁰ His plan was drastically altered in January 1944 after the appointment of General Eisenhower as Supreme Commander and General Montgomery as his nominated ground forces commander in the invasion phase of Overlord.⁶⁵¹ The frontage of the assault was widened to include a beach on the western Cotentin and the whole operation consequently put back a month to allow the building of the additional landing craft required.⁶⁵² Montgomery's appointment as Eisenhower's field commander energised the detailed planning process as his experienced former Eighth Army subordinates flooded the key staff roles in 21 Army Group,⁶⁵³ with early planning conferences setting the intensive "atmosphere" for his general officers.⁶⁵⁴ Montgomery's experience in 1942/1943 offensive operations and his close eye for detail made him a good choice for the assault on the Atlantic Wall, reflected in his former desert and Mediterranean cohorts which

⁶⁴⁸ TNA WO 166/4222. The Selection of Assault Areas in a Major Operation in North West Europe CC (42) 108, 5 February 1943.

⁶⁴⁹ Morgan moved from commanding British I Corps to become the Chief of Staff for the Supreme Commander (COSSAC), as yet to be appointed. His mixed Allied planning department (which would adopt his acronym as their name) began to work through much of the detailed planning which would eventually facilitate OVERLORD. General Sir Frederick Morgan, *Overture to Overlord* (London: Hodder & Stoughton, 1950), p. 33.

⁶⁵⁰ L. F. Ellis, p. 17.

⁶⁵¹ D'Este, p. 41.

⁶⁵² Bernard Law Montgomery *Montgomery of Alamein, The Memoirs of Field-Marshal the Viscount Montgomery of Alamein*, 1st Ed. (London: Collins, 1958), pp. 210–212.

⁶⁵³ Major-General Sir David Belchem, *All in a Day's March* (London: Collins, 1978), pp. 176–180; Montgomery of Alamein, pp. 216–217.

⁶⁵⁴ TNA CAB 106/1037, Notes taken at Montgomery Staff Conference of General Montgomery, 13 January 1944; TNA WO 179/2579, WD of the Canadian Planning Staff. Notes from Headley Court Conference, 31 January 1944; Montgomery of Alamein, p. 217.

surrounded him. The outline for 6 Airborne Div's operations, when viewed within the context of the overall Second Army plan showed imagination, making the most of their air transport mobility to seize vital objectives; then off-setting their lack of battlefield mobility by giving them a defensive task that would make the most of the high quality of their infantry. It was now up to Gale and his subordinates to create brigade and battalion plans to achieve the tasks which made up the divisional objective.

Dempsey faced both enemy and topographical challenges on the eastern side of his potential bridgehead for which airborne forces seemed an effective solution. British Second Army would land on the east side of the bridgehead, between the Orne estuary and Port-en-Bessin.⁶⁵⁵ The landscape of this area posed questions for both attack and defence, and Dempsey and his staff now contemplated these issues and in turn assessed the opportunities to employ airborne forces. While the western side of the British landings were shielded by the proximity of the US descent on what would be Omaha beach, crucially the eastern flank of the British area was open to attack from massed enemy reinforcements from the interior of France. The River Orne/Caen Canal⁶⁵⁶ potentially formed a 'complete' anti-tank barrier against such attacks, although a riverine assault from either east or west across River Orne/Caen Canal might well incur heavy casualties.⁶⁵⁷ The wooded high ground of the Bois de Bavent between the Orne and the more westerly River Dives offered any

⁶⁵⁵ This was due simply to the fact that British and Canadian forces had been massed on the eastern side of England since 1940 to resist a possible enemy invasion; while US forces had been stationed in the west where there was more space as their numbers increased. D'Este, p. 72.

⁶⁵⁶ From this point on the area of the two bridges will be abbreviated to 'the Orne barrier'.

⁶⁵⁷ The Allies had experienced terrible losses attempting to cross the Garigliano, Rapido and Gari river barriers in Italy in January and May 1944. C.J.C. Maloney, *The Mediterranean and Middle East, Vol V. The Campaign in Sicily 1943, The Campaign in Italy 3rd September 1943 to 31st March 1944* (London: H.M.S.O., 1973), pp. 616–620; C.J.C. Maloney, *The Mediterranean and Middle East, Vol. VI: Victory in the Mediterranean, Part I, 1st April to 4th June 1944* (London: H.M.S.O., 1984), pp. 104–107; *Report by the Supreme Allied Commander Mediterranean to the Combined Chiefs of Staff on the Italian Campaign, 8 January 1944 to 10 May 1944* (London: H.M.S.O., 1946), pp. 20–21.

incumbent a commanding view directly into the Sword landing area, and would be an excellent defensive position facing either east or west.⁶⁵⁸ This area offered an attractive buffer zone to defend the 1 Corps landings. The city of Caen to the south east of the landing area offered the key rail and road hub needed by the enemy to quickly transfer reinforcements to the battlefield, while it would also be needed by Dempsey to break out of his lodgement.⁶⁵⁹ The areas to the south-east and south-west of Caen offered good going for mechanized forces of either side, with the space for German attacks driving either side of the Orne barrier. Enough space had to be captured within the first twenty-four hours to allow Second Army to begin landing its follow-up divisions and assets rapidly, to both continue offensive operations and ensure the beachhead had enough depth to withstand enemy counter-attacks. Dempsey summarised his problem at the final St. Paul's School planning conference on 15 May:

To get ashore on a broad enough front to give a sufficient base for the development and build-up of the force; and in sufficient strength to carry out immediate tasks.⁶⁶⁰

The airborne forces available to Dempsey gave Second Army the capability to seize objectives beyond the beaches swiftly, and also insert additional infantry formations into the line to stiffen the defensive screen.

Dempsey's proposed plan involved landings by two corps on three beaches with each developing their own operations. It was hoped that this approach would avoid the congestion that could result from one corps carrying out all the initial landings, and then reinforcing corps landing and attempting to move through its formations. Dempsey planned

⁶⁵⁸ TNA WO 171/593, 3 Para Bde WD, Appreciation of Situation, 14 April 1944, p. 2; TNA WO 223/21 The First Canadian Parachute Battalion in France, Report No.139, p. 3.

⁶⁵⁹ At the final planning conference on 15 May, Dempsey stated "I must have Caen". TNA WO 285/1, OVERLORD Planning. General Dempsey's personal notes, 15 May 1944, p. 2.

⁶⁶⁰ TNA WO 285/1, Planning 2nd Army Attack on Normandy. General Dempsey's personal notes, 15 May 1944, p. 1

to land two corps on three beaches: 30 Corps led by 50 Div on what would be Gold beach, and Crocker's 1 Corps on Juno and Sword beaches, with 3 Infantry and 3 Cn Divs leading the way. Once firm lodgements had been established, 30 Corps would push on to capture Bayeux while 1 Corps would take Caen.⁶⁶¹

Dempsey saw his airborne divisions as the solution to a possible stagnation of offensive action due to determined German opposition utilising the defensive terrain available. His counter-part on the western flank, General Omar Bradley, the commander of the US First Army, also regarded their employment as vital.⁶⁶² By June 1944 the value of airborne forces was established in the mind of Allied senior commanders.

HQ Airborne Troops had begun to work in earnest on an invasion plan in December 1943, having been placed under the command of 21 Army Group since the previous July,⁶⁶³ and 6 Airborne would add the detail from February 1944 onwards. The core of this first planning group was Browning's 'Dungeon Party' created with the formation of 1 Airborne Div,⁶⁶⁴ with the additional input of Major-General Richard Gale and Air Vice-Marshal L.N. Hollinghurst (38 Group RAF).⁶⁶⁵ As discussed in Chapter three, Gale and Hollinghurst had enjoyed a productive working relationship resolving many of airborne forces' problems while the former was War Office Staff Duties Director of Air, and Hollinghurst his opposite number at

⁶⁶¹ TNA CAB 44/261, An Account of the Operations of 2nd Army in Europe in Normandy, pp.26-27.

⁶⁶² In the planning stage for D-Day disagreed with Leigh-Mallory's wish to cancel the US airborne landings behind Utah beach, Bradley stated the landing would be impossible without their help and the landing site cancelled. Omar N. Bradley, *A Soldier's Story of the Allied Campaigns from Tunis to the Elbe* (London: Eyre and Spottiswoode, 1951), pp. 232–235.

⁶⁶³ TNA WO 106/4315, Employment of 6th Airborne Division in NEPTUNE, p. 1. TNA WO 171/1 WD of 21st Army Group. June to December 1943. Duties of Major-General Airborne Forces, 12 July 1943.

⁶⁶⁴ Headquarters Major-General, Airborne Forces (MGAFF) started in two underground floors below the Air Ministry in 1941, hence its nickname. The HQ staff had a strong Guards element reflecting Browning's background. Brian Urquhart, *A Life in Peace and War* (London: Weidenfeld and Nicolson, 1987), p. 51.

⁶⁶⁵ Browning and Gale had already attended a planning conference with Air Marshal Trafford Leigh-Mallory in August 1943 to discuss the issues that would affect airborne forces in an invasion scenario. Richard Mead, *General 'Boy': The Life of Lieutenant General Sir Frederick Browning* (Barnsley: Pen & Sword Military, 2010), p. 93.

the Air Ministry.⁶⁶⁶ Dempsey's plans for the use of 6 Airborne developed steadily. A paper dated 14 February entitled 'CAPTURE OF THE AREA EAST OF RIVER ORNE' analysed the key objective and possible approaches that could be taken.⁶⁶⁷ These were identified as the seizure of the Caen Canal and Orne river bridges at Bénouville/Ranville to frustrate the enemy's attempts to attack the bridgehead as he advanced over the Dives and Orne bridges. The airborne forces which could be landed were limited by the air transport assets available - one parachute brigade, one parachute battalion and a SAS regiment; with the later reinforcement of a Special Service brigade. Two options were discussed.

The first alternative proposed that the parachute troops available would be dropped behind Franceville to clear the enemy defences to then allow the commando brigade to land unmolested on the beach. This formation would then advance swiftly inland to capture the two critical bridges. This option was quickly discounted essentially due to time constraints. The paratroopers would need to be dropped a distance from the objective to allow time to form up and then at least six hours allotted to entirely clear the fortifications of the enemy. Working back this would mean the airborne contingent would have to be landed at dusk on D -1 (the day before D-Day) to carry out the task. The paper concludes that the combined airborne/commando force would then have a long distance (in reality just under ten kilometres as the crow flies⁶⁶⁸) to cover to get to the bridges, and with limited fire support. This plan was wisely discarded. It would have required an extra invasion beach within range of the guns of Le Havre,⁶⁶⁹ and the forces suggested would have found light infantry

⁶⁶⁶ Richard Nelson Gale, *Call to Arms: An Autobiography* (London: Hutchinson, 1968), pp. 122–130.

⁶⁶⁷ TNA WO 285/1 Planning 2nd Army Attack on Normandy. Memorandum: 'CAPTURE OF THE AREA EAST OF THE RIVER ORNE', 14 February 1944.

⁶⁶⁸ L. F. Ellis, p. Map facing 197.

⁶⁶⁹ Le Havre had been classed as 'fortress area' by Hitler in July 1942. Alan F. Wilt, *The Atlantic Wall: Hitler's Defenses in the West, 1941-1944* (Iowa: The Iowa State University Press, 1975), p. 45.

advancing towards fully alerted defences at the bridges and in some isolation from 1 Corps advance to the west of the Orne barrier.⁶⁷⁰

The second option was to be adopted. The parachute brigade preceded by a *coup de main* force would be dropped to capture the Orne barrier, while the SAS Regiment landed in depth on the Vimont and Troarn roads to Caen to delay the enemy. The commando brigade would advance from the 1 Corps beach before Ouistreham to reinforce the Bénouville/Ranville position bridges from the beaches, and then columns would be sent out to 'overrun as much of the country NORTH of TROARN and WEST of the floods'.⁶⁷¹ A key element of the 14 February plan was the assumption must that the bridges would have been destroyed by the enemy, and that all plans must reflect this situation.

This plan was considerably revised following a meeting that took place the following day with the I Corps commander and the two key Special Forces leaders in the British Army. 'I had General CROCKER, General BROWNING and General STURGESS in at 1000 Hours today'.⁶⁷² The tasks of all the formations remained the same with two important revisions. First the timing of the airborne operation had clearly been discussed, as now the parachute brigade would land 'as late as possible in darkness on D-Day to capture and hold the BÉNOUVILLE-RANVILLE bridges'. Second, the offensive columns of the 14 February now had some clear direction; the commandos would press on from Ranville to attack the defences

⁶⁷⁰ Gale pointed out in a RUSI presentation after the war that without 6 Airborne this extra/subsidiary beach would have been needed to secure the ground between the Orne and Dives. Lieut-General R.N. Gale, 'Aircraft for Army Uses', *Royal United Service Institute*, 95 (1950), 424–35 (p. 425).

⁶⁷¹ TNA WO 285/1 Planning 2nd Army Attack on Normandy. Memorandum: 'CAPTURE OF THE AREA EAST OF THE RIVER ORNE', 14 February 1944.

⁶⁷² TNA WO 285/1 Planning 2nd Army Attack on Normandy. Untitled memorandum, 15 February 1944. Lieutenant-General John Crocker, the commander of I Corps was a leading exponent of armoured warfare and had commanded by XI and IX Corps before being wounded in Tunisia. Major-General Sturges had been the commander of the Special Services Group, which combined all Army Special Service and Royal Marine Commandos. TNA ADM 1/13185 Army and Royal Marine Commandos, Organisation into one Group "Special Services Group" under Major-General R.G. Sturges, R.M. Memorandum from the Secretary of the Admiralty to all RN Commanders-in-Chief, 10 December 1943.

between Cabourg and Franceville, which would have to include the Merville battery.

However with only two brigades available the operations east of the River Orne appeared to be gravely under-resourced. Indeed, James Hill recalled his divisional commander's annoyance when two days later Browning informed him of the single brigade plan, 'and Richard Gayle [sic] was so upset about no aeroplanes.'⁶⁷³

This factor, the perennial scarcity of air assets, now inhibited the airborne element of Dempsey's plan. Yet just six days later a two brigade lift was possible, allowing a divisional operation as the necessary aircraft had been found. Gale had been the War Office Director of Air between April 1942 – April 1943⁶⁷⁴ and Hollinghurst had then been his opposite number at the Air Ministry as RAF Director of Organisation. Together they addressed the various resource challenges which affected the development of airborne warfare with general issues of army-air cooperation.⁶⁷⁵ Gale attempted to integrate RAF personnel where possible - in the very first 'syndicate' exercise held by 6 Airborne, Exercise Pegasus, three RAF staff officers were made available by telephone to assist each discussion group.⁶⁷⁶ The success of their interaction now bore fruit with the inclusion of the rapidly formed 46 Group RAF to increase the first lift available to 6 Airborne Div. The fortnightly progress report for this formation dated 25 February revealed that Squadrons 512, 575 and 271 each now had forty complete crews, with Coastal Command personnel expected to arrive at Brize Norton

⁶⁷³ TNA CAB 106/970, Report on Operations of 6 Airborne Division in Normandy 6 June-August 27 1944, BTC 273 (Shrivenham) Report on the Operations carried out by 6 Airborne Division 5 June-3 September 1944' p. 1; 2WWEC 2001/1191, S.J. Hill, tape 963, p. 7; Richard Nelson Gale, *With the 6th Airborne Division in Normandy*. (London: Sampson Low, Marston & Co., 1948), pp. 32–33; Richard Nelson Gale, *Call to Arms: An Autobiography*, p. 136.

⁶⁷⁴ AA 4-H5-2.12.15, Gale Papers, 1942-1943 Correspondence. 24 July 1942 letter from WO Military Secretary to Director Staff Duties confirming (Temp) Brigadier Gale's appointment as Director of Air, effective 16 June 1942.

⁶⁷⁵ Richard Nelson Gale, *Call to Arms: An Autobiography*, pp. 122–126.

⁶⁷⁶ AA 4-H4-2.21.1, Gale Papers. '6 Airborne Div Exercise "PEGASUS", General Instructions, 8 June 1943, p. 2.

to complete all the crewing needs.⁶⁷⁷ This evidence shows that the moment it was able, the RAF was prepared to facilitate HQ Airborne Force's plan by pledging half-trained aircrews. As 6 Airborne Div created its plans at the 'Mad House', a small 38 Group team was in attendance which completed the air plan, liaising continually with the Division.⁶⁷⁸ The full interaction now enjoyed by both services was a far cry from the high-level dispute of late 1942, and created the environment needed for airborne operations to flourish.

Therefore by 24 February the air resources needed for a two brigade lift operation had been made available. At this point a small planning staff from 6 Airborne Div now joined 1 Corps HQ, which included Gale's GSO 1 Operations Col. Bobby Bray, his intelligence officer Major Gerald Lacoste and his divisional artillery and engineer commanders, Norris and Lowman.⁶⁷⁹ The expanded plan was now centred on 6 AL Bde, flown in to reinforce the Bénouville/Ranville *Coup de Main* party which would seize the two bridges as the operation began. The more heavily armed airlanding brigade, able to make a concentrated landing thanks to its gliders, was seen as the best formation for the defence of the Orne barrier area.⁶⁸⁰ 3 Para Bde would 'dominate the area' from Cabourg to Troarn to Caen.⁶⁸¹ This two brigade plan remained in place through March; however 6 Airborne's scheme would undergo one major revision before D-Day, when a proliferation of obstacles precluded the

⁶⁷⁷ TNA AIR 38/110 46 Group Formation and Fortnightly Progress Reports. 25 February 1944.

⁶⁷⁸ BTC 119 (Shrivenham) Part II The Air Plan, p. 1. The 'Mad House' was the nickname for 6th Airborne Planning Division, codenamed Broadmoor. Each brigade had a room in which to plan in, with reconnaissance photographs produced daily by the RAF based in the village of Milston. John Howard and Penny Howard Bates, *The Pegasus Diaries* (Barnsley: Pen and Sword, 2006).

⁶⁷⁹ TNA CAB 106/970, Report on Operations of 6 Airborne Division in Normandy 6 June-August 27 1944, BTC 273 (Shrivenham) Report on the Operations carried out by 6 Airborne Division 5 June-3 September 1944' p.1. Peter Harclerode, *'Go to It!' The Illustrated History of the 6th Airborne Division* (London: Caxton Editions, 1990), p. 49.

⁶⁸⁰ TNA CAB 106/970, Report on Operations of 6 Airborne Division in Normandy 6 June-August 27 1944, p. 2.

⁶⁸¹ TNA CAB 44/261, An account of the Operations of Second Army in Europe. 15th April 1944 – Dempsey's Operational Order No.1, p. 27.

early use of 6 AL Bde.⁶⁸²

The 6 Airborne plans underwent one major revision in the run up to Neptune as a result of enemy action. Gale had originally intended that 6 AL Bde would be the spearhead brigade on D-Day, as it could land in a concentrated fashion and had considerably more heavy weapons than the parachute brigades. However, the plan was to be drastically altered after low level reconnaissance photographs taken on 13 April revealed that the enemy had planted numerous poles in the proposed landing zone between Ranville and Amfreville.⁶⁸³ When the pictures were reviewed in the Napier Crookenden, the Brigade Major of 6 AL Bde, was horrified to see 'white dots' (the tops of the poles) had appeared all over the planned LZs for his brigade. For a while Crookenden feared the security of the operation had been compromised, but then the same dots appeared all along the coast.⁶⁸⁴ The poles were specifically intended to cause landing gliders to break up or tip over, and scrutiny of the pictures showed they were being wired together. 'With their customary skill and their usual thoroughness these things were going up at an astounding rate'.⁶⁸⁵ This measure was being adopted throughout the area the landings would take place so 6 AL Bde's landing zone could not simply be moved. Gale's flexible planning scheme allowed the Staff to substitute 5 Para Bde at short notice into the holding role at the bridges. 591 Parachute Squadron RE and a detachment of 286 Field Park Company RE were added to the brigade and drilled by

⁶⁸² TNA WO 285/1, Planning 2nd Army Attack on Normandy. Memorandum to Corps Commanders concerning the use of Airborne Forces, 21 March 1944 p. 2. 6 Airborne Div, less 5 Para Bde, officially came under command of Second Army for continental operations with effect from 1 April. TNA WO 205/751, Training of 6th Airborne Division. Memo 21 A Gp/1745/3/G (SD).

⁶⁸³ BTC 119 (Shrivenham), Staff College Course 1947, 'The Air Plan', p.2. TNA WO 106/4315, Employment of 6th Airborne Division in NEPTUNE, 1 June -31 October 1944. Notes on the Employment of 6th Airborne Division in Operation Neptune, p. 2.

⁶⁸⁴ IWM Interview - Crookenden, Napier, no.16395 (recorded 2/1/1996).

⁶⁸⁵ Richard Nelson Gale, *With the 6th Airborne Division in Normandy*, p. 53.

Lieutenant-Colonel Loman to fell the poles.⁶⁸⁶ The altered plan was presented to the Supreme Command at the final conference held at St. Paul's School on 15 May and approved.⁶⁸⁷

Brigadier Hugh Kindersley now wrote a late Appreciation for his formation's revised role, and had to formulate a plan in which his 6 AL Bde would now form the second lift reinforcement charged with expanding the bridgehead to the south. His Appreciation of 16 May shows a clear methodical approach, making simple deductions upon which to build his proposed actions. In fourteen sections the paper addresses the issues of objective, own strength, the ground, communications, air operations, time and space, the operations of the two parachute brigades nearby before assessing likely enemy reactions. This document can be compared to Hill's appraisal of 14 April, which points to a common approach adopted across the Division.⁶⁸⁸ The paper concludes with his own simple outline plans to be communicated to his battalions. The Appreciation was developed into the No.1 Operational order for the Brigade on 19 May which included the most up-to-date intelligence on the enemy forces in the area of operations. The plan consolidated all the key elements of the appreciation mentioned above together with the firepower support that could be expected from conventional role and naval forces once the seaborne phase had begun.⁶⁸⁹

Gale's final plan for 6 Airborne's Normandy operations is built around key characteristics common to his planning style, one which he inculcated amongst his subordinates. It is useful to analyse the Normandy plan alongside these key elements, as it shows the value that

⁶⁸⁶ BTC 273 (Shrivenham) Report on the Operations carried out by 6 Airborne Division 5 June-3 September 1944' p. 3. Richard Nelson Gale, *With the 6th Airborne Division in Normandy*, pp. 53–54.

⁶⁸⁷ TNA WO 285/1 Planning 2nd Army Attack on Normandy. NOTES ON CONFERENCE 15 MAY, p. 7; BTC 120 (Shrivenham), Account of Operations 6 Airlanding Brigade, Appdx B.

⁶⁸⁸ TNA WO 171/593, 3 Para Brigade WD 1944. Appreciation 14 April 1944.

⁶⁸⁹ BTC 120 (Shrivenham) Account of operations 6 Airlanding Brigade, OPERATION OVERLORD, 6 Airltdg Bde O.O. No.1, 19 May 1944.

Gale's direction and thorough training added to the Division's effectiveness once in the field. These key factors present in Gale's airborne warfare planning mantra were: the maximum use of the element of surprise; the importance of proximity of dropping zones and landing zones (DZ/LZ) to the objective; ensuring all plans are essentially simple and easy to understand; the need for a degree of redundancy to be built into the forces allocated to each task; and finally the need for close command and control by the divisional and brigade HQs. These elements are all set down in his 'Remarks' following Exercise Rufus. This action was a key milestone being the culmination of six other exercises and five months of 'damn good solid work' by the Division.⁶⁹⁰ This exercise, which took place in October 1943, pitched 6 AL Bde against 5 Para Bde in typical attack/defence operations involving prepared positions. Gale communicated his observations and thoughts concerning the exercise back to his officers in a four page paper. It is useful to compare his comments on Rufus with the Normandy plan.⁶⁹¹

'Our long suit is surprise and assault from a comparatively unexpected direction' Gale explained with reference to 12 Para Bn's attempt to storm a heavily fortified battery position during Rufus.⁶⁹² He had explained that the heavy firepower and equipment required was not available to airborne troops, and that shock and surprise would be needed. All the tasks carried out by the division on the night of 5-6 June would benefit from the element of surprise augmented by darkness. In particular, Operation Deadstick, the *Coup de main* operation spearheading the whole divisional assault, provided this element to seize the two most critical objectives in the entire operation – the Caen Canal and Orne

⁶⁹⁰ The other exercises being – PEGASUS, NEEDLE, BUSTER, BUSTER II, FIRGATE and OVERTURE. Ibid., p. 5.

⁶⁹¹ AA H-2.21.4, Gale Papers, 6 Airborne Division Operation Instruction No.1, 17 May 1944. See also Richard Nelson Gale, *With the 6th Airborne Division in Normandy.*, p. 49. See Chart A for details of the plan.

⁶⁹² RUFUS, p. 2.

River bridges. It was assumed that the bridges were wired for demolition and defended by a garrison of at least fifty men supported by an assortment of Anti-aircraft MGs and at least one anti-tank (A.Tk) gun. Similarly, the destruction of the Merville Battery by 9 Para Bn depended on a double surprise – an assault by the whole battalion on the position's perimeter while three gliders carrying a special assault force would land directly on top of the gun casements.

The second key element was proximity of DZ/LZ to objectives. In his Rufus notes Gale acknowledged that the RAF would always favour DZ/LZ that were easy to find, but 'I would go so far as to say that unless they agree to drop us in an area which is suitable from the point of view of our assault the show is not on.'⁶⁹³ DZ/LZ N, the key landing area, was only 1000m from the most important objectives – the bridges, and the defensive positions to be located at Ranville and the Bas de Ranville.⁶⁹⁴ Likewise DZ/LZ K and V were both close enough for 1 Cdn and 8 Para Bns to find their way to their objectives being only 1000m and 5000m away from the bridges at Troarn and Varaville respectively.⁶⁹⁵

The one element concerning operational planning that was continually reiterated in his Exercise Rufus notes was the need for straightforward plans. His point on page two needs no further clarification:

Just a few words about a simple plan. This applies right down to private soldiers. For a plan to be simple it must be understood by the private soldier. The individual man working in the dark and carrying a heavy load must know exactly what he has to do and why, and must know this the whole way from the DZ to the assault. Now I am a man of average intelligence but when I got to the position I don't mind telling you I was facing in the wrong direction, and I had not had to carry anything but myself. If you set a soldier off and tell him that he has got to go in a certain direction and if you have a set drill for your assault and each man, according to what he is carrying,

⁶⁹³ RUFUS, p. 3.

⁶⁹⁴ Lloyd Clark, *Orne Bridgehead* (Stroud: Sutton, 2004), p. Map 30–31.

⁶⁹⁵ Ibid.

knows what to do, he will go ahead and do it. But if you ask him to change direction several times in the dark how can he go into the assault with intelligence.’⁶⁹⁶

All the companies landed during Deadstick/Tonga had typically one task to complete before falling back to locations in the Division’s overall defensive scheme. The demolition of the Dives bridges required 1 Cdn and 8 Par Bns to break down into companies to destroy each crossing, but would then fall back and regroup on the Bois de Bavent together with 9 Para Bn.⁶⁹⁷

The two final key elements present in Gale’s planning style can be dealt with together: redundancy and close command and control. Gale allocated a strongly reinforced company to perform the coup de main, 180 men, outnumbering the expected enemy garrison almost four to one. They would then be further strengthened by a whole parachute battalion and then a brigade. During Rufus Gale had made a habit of removing one company from a battalion about to embark on a task, reasoning ‘We plan on the assumption that something like 20 per cent will not be put down on the right spot.’⁶⁹⁸ He went on to affirm his belief that ‘100 per cent will be dropped in the right spot and I believe casualties will not be very high’; but Gale’s plan allowed for considerable losses on landing and enough men to hold the key positions if heavily attacked. The location of both the 5 Para Bde and Divisional HQs in Le Bas de Ranville allowed Gale to exert his influence closely over the critical battlefield area, while James Hill was able to do likewise from his command post at the Le Mesnil cross-roads.⁶⁹⁹ The concentrated daylight landings of Operation Mallard would bring in the well-armed 6 AL Bde directly into the heart of the airborne bridgehead and add much needed

⁶⁹⁶ RUFUS, p. 2.

⁶⁹⁷ TNA CAB 106/970, ‘Report on Operations of carried out by 6 Airborne Division, 5 Jun-3 Sep 1944’. Appendix C, ‘Instructions issued to Commander 3rd Para Bde’.

⁶⁹⁸ RUFUS, p. 4.

⁶⁹⁹ TNA WO 171/593, 3 Para Bde WD, 6 June 1944.

heavy equipment and bayonet strength. 5 Para Bde would hold the villages Bénouville/Ranville/ Bas de Ranville while to the south 6 AL Bde would hold a southern screen comprising Longueval/Escoville/St. Honorine back to Le Bas de Ranville, while 3 Para Bde would defend the difficult ground of the Bois de Bavent down to Troarn. Six battalions would all be within 4000m of the Caen Canal Bridge, while Hill's HQ would be no more than 4000m from that point.⁷⁰⁰ In summary, Gale endeavoured to magnify the potential combat value of the 6 Airborne Div by creating a simple and robust plan. While scattered landings threatened the success of operations as part of Neptune, Gale's planned deployment overlapped the brigades and battalions and knitted together the strongest defensive screen for the Bénouville/Ranville area.

How does Gale's plan stand when measured against the Airborne Operations success/failure process? When Gale's plan is compared to **Figure 1** it can be seen that the preparation being undertaken was robust. Accurate intelligence was being amassed about the possible enemy forces which waited in the Orne bridgehead area, while the RAF aerial photographs and detailed maps were furnishing the detail needed regarding the terrain and foxed defences. Close contact was in place with the RAF to assist in planning. Gale's planning and his Staff's information gathering had already established a firm base for the operations to be undertaken in Normandy. Once the destruction of the battery and Dives bridges had taken place, Gale's plan to defend the crucial bridges in depth was robust. He had assumed a worst case scenario that of a German mechanised attack being swiftly mounted in the first twenty-four hours of the invasion, but his preparations would allow his units to mutually support each other and await the relief by 3 Div.

⁷⁰⁰ AA H-2.21.4, Gale Papers. 6 Airborne Division Operation Order No.1, 17 May 1944, pp.2-4. Clark, pp. 30-31.

However, a key element of his plan had diverted precious glider space which could have allowed the lift of additional A.Tk guns or 75mm Pack howitzers (see below). Gale had planned to send out 'a small battle group', from troops landed in the 0320 hours wave, to capture one of the villages beyond the bridgehead near the Caen-Troarn road and to 'sally out' raiding the enemy. This force would have comprised A company 12 Devon, the one battery (211th) of 53rd Airlanding Light Regiment RA (53 RA) landed, an A.Tk gun troop and the 6 Airborne Armoured Reconnaissance Regiment (6 Armd Recce).⁷⁰¹ In the event, Gale wisely decided not to send out 'Parker Force', which though had considerable mobility, would probably been badly mauled by the encroaching 21 Pz.Div, and the unit was able to harbour in the 8 Para Bn position.⁷⁰² Indeed, Gale himself had stated earlier in 1944 that the armament of the Tetrarch light tank was 'certainly not of sufficient weight to have any offensive value except against the most flimsy resistance.'⁷⁰³

But far from being a 'small group' in terms of space in the precious heavy-lift Hamilcar gliders, it was a massive load. The Reconnaissance Regiment's eleven Tetrarch light tanks took a Hamilcar glider each, while the regiment's thirty Bren/Lloyd carriers could only be carried (in pairs) by the larger glider.⁷⁰⁴ All in all, thirty Hamilcars and nineteen Horsas would be needed to carry the 6 Armd Recce.⁷⁰⁵ If this unit had been transported by sea the space freed up in the Hamilcar gliders could have flown in the complete 3 A.Tk Bty (which

⁷⁰¹ TNA CAB 106/970, 'Report on Operations of 6 Airborne Division in Normandy, 6 Jun- Aug 27', Appdx G. Richard Nelson Gale, *With the 6th Airborne Division in Normandy*, pp. 91–92.

⁷⁰² TNA WO 171/1240 8 Para Bn WD, 7 June 1944. Colonel R.G. Parker was the second-in-command of 6 Airdg Bde. http://www.pegasusarchive.org/normandy/reginald_parker.htm accessed 1 September 2013, Richard Nelson Gale, *With the 6th Airborne Division in Normandy*, p. 91.

⁷⁰³ AA 4H6-2.21.17 Gale Papers. 'Directive for the training and employment of the Airborne Armoured Reconnaissance Regiment', 17 February 1944, p. 1.

⁷⁰⁴ Lieut-Colonel H.F. Joslen, *Orders of Battle, United Kingdom and Colonial Formations and Units in the Second World War 1939-1945*, 2 vols. (London: HMSO, 1960), Vol. 1.

⁷⁰⁵ BTC 120 (Shrivenham), Account of Operations, 6 Airlanding Brigade, 'Appreciation of the Situation', 16 May 1944, p. 5.

later had to go by sea) and another battery of the Light Airlanding Regiment. In his memoir Gale stated that the Recce regiment performed well gathering intelligence operating from 8 Para Bn's positions in the Bois de Bavent, and he was sure that they would have 'paid a handsome dividend' if used in the planned role.⁷⁰⁶ However once their roving role had been cancelled, the carriers and light tanks would have contributed only weak firepower to the defence of the perimeter in the face of enemy attacks. Gale can be accused of a degree of over-optimism in the formulation of this scheme, the consequences of which detracted from his division's defensive artillery potential. The additional twelve guns of 3 A.Tk Bty (including four 17 pdrs) would have made his position much stronger, especially in covering the 'best tank killing ground' between St.Honorine and Escoville.⁷⁰⁷ Ironically, before 53 RA was converted into 6 Airborne's airlanding light regiment, it had been the AT regiment of 42 Armd Div. If Gale had wanted extra anti-tank guns his gunners were already trained.⁷⁰⁸

What must be balanced against this argument in Gale's defence was his clear desire to retain the initiative, a stipulation of the 1943 airborne doctrine. These light vehicles did give the division a mobile reserve that could be moved quickly in the event of a breakthrough by fast moving Wehrmacht elements, such as armoured cars.⁷⁰⁹ Indeed, Gale's plan also echoed Montgomery's call on both Bradley and Dempsey to show 'offensive eagerness'⁷¹⁰ by throwing armoured units forwards to confuse the enemy and blunt his counterattacks:

Armoured units and Bdes must be concentrated quickly as soon as ever the situation allows after the initial landing on D day; this may not be easy, but plans to affect such concentrations must be made and every effort made to carry them out; speed

⁷⁰⁶ Richard Nelson Gale, *With the 6th Airborne Division in Normandy*, pp. 91–92.

⁷⁰⁷ BTC 120 (Shrivenham), Account of Operations, 6 Airlanding Brigade, 'Appreciation of the Situation', 16 May 1944, p. 3.

⁷⁰⁸ D.R. Guttery, *The Queen's Own Worcestershire Hussars 1922-1956* (Stourbridge: Mark and Moody Ltd, 1958), pp. 48–49.

⁷⁰⁹ The War Office, 'AIRBORNE OPERATIONS PAMPHLET No.1 (1943)' (London, 1943), p. 28.

⁷¹⁰ TNA WO 285/2, Correspondence between Montgomery and Dempsey. 'NOTES FOR MY ADDRESS TO SENIOR OFFICERS BEFORE "OVERLORD"', General B.L. Montgomery. p. 5

and boldness are then required, and the armoured thrusts must force their way inland.⁷¹¹

Montgomery was prepared to 'risk even the total loss' of these armoured units, although he believed this was unlikely that they would be annihilated as they would be closely supported by the mass of forces consolidating the bridgeheads behind them.⁷¹² It might also be that Gale felt he had to find a role for the airlanding tanks, which the Hamilcar glider had been specifically designed to carry in 1941, and had been enshrined in War office airborne policy from then on.⁷¹³ The decision to withhold 'Parker Force' ultimately reflects well on Gale's judgement, but its prioritisation as far as air transport was concerned perhaps showed too much faith in 'élan',⁷¹⁴ and too little realism when considering the Wehrmacht response to a thrust by thin-skinned armoured vehicles. Evidence of Gale putting greater store in the motivated individual rather than equipment can be seen in his notes from

Exercise Needle:

Remember that battles are not won or lost on War Establishments; they are won or lost as a result of the skill and determination of commanders and the troops whom they lead.⁷¹⁵

This comment reveals Gale's personal belief in the value of dynamic leadership, over and above the possibility of augmenting firepower. For airborne troops, aggressive attack directed by vigorous leadership and taking the maximum advantage of the shock-surprise effect made best use of their lightly armed shock troop character. The seemingly indulgent inclusion of the 'Parker Force' element to his plan has been explored above, and can be

⁷¹¹ TNA WO 285/2, Correspondence between Montgomery and Dempsey. Memorandum to Commanders 1st US Army and 2nd British Army, 14 April 1944 p. 5

⁷¹² Ibid.

⁷¹³ TNA AIR 2/7470, Airborne Forces – Preparation of Papers for Chiefs of Staffs 'AIRBORNE FORCES-POLICY FOR'; Memorandum from the War Office to the Air Ministry, 10 January 1941, Letter from C.G. Caines of the Air Ministry to the Under Secretary of State for War, 21 May 1941, pp. 1-2; TNA WO 32/9778, Airborne Policy. AIRBORNE FORCES-POLICY, 2 November 1941.

⁷¹⁴ Richard Nelson Gale, *With the 6th Airborne Division in Normandy*, p. 151.

⁷¹⁵ AA 4H4-2.21.1, Gale Papers. 'Lessons from ex NEEDLE', 4-7 July 1943.

mitigated by what was essentially a conservative and sensible defensive plan once the division had landed.

II. The Divisional Plan – The Waiting Enemy: fixed defences, mobile forces and the veracity of 6 Airborne's Intelligence

This chapter will now turn to assess the value that the waiting Wehrmacht placed in the potential of Allied airborne troops, by assessing the preparations made to confront them. This section will first give a brief overview of the background influences which shaped the enemy situation, before moving on to more closely analyse the defences which faced 6 Airborne Div in the landing area. The basis of this examination will be two case studies, focused on 716 I.D. and 21.Pz.Div. These contrasting formations were in position in the Ouistreham-Caen area and would do battle with Gale's men first. Again, the thesis themes of adaptation/innovation, leadership and training can be seen in the preparations of the forces 6 Airborne would have to face.

From July 1941 until the end of 1943, the Wehrmacht's main focus was set on the Russian Front, as the key theatre. As part of extending the U-boat campaign against Britain a programme began in the autumn of 1941 to fortify all the main harbours along the entire coast.⁷¹⁶ The remaining divisions left in France were steadily drained of first-class men to replace the losses in Russia, while the formations moved there were often being rebuilt after severe losses in the east.⁷¹⁷ With his Directive No.40 of 23 March 1942, Hitler acknowledged that the invasion potential of the western Allies was steadily increasing.

⁷¹⁶ General Max Pemsel (B-234), 'The Seventh Army, June 1942 - 6 June 1944: Report of the Chief of Staff', in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), pp. 51–71 (pp. 51–52).

⁷¹⁷ Wilt, p. 48.

While seaborne attacks on the coast could be expected so must 'the possibility of parachute and airborne attacks on a large scale must also be envisaged.'⁷¹⁸ The failure of Operation Jubilee that summer in the face of Wehrmacht defensive positions reinforced the notion that the key battle areas - '*den küstenverteidigung*' - against a cross-Channel invasion had to be the seafront.⁷¹⁹ Hitler had then prognosticated that without the capture of a major port the chances of the Allies being able to establish a successful bridgehead were slim and the fortification programme along the Atlantic coast was stepped up.⁷²⁰ Over the next two years 17,300,000 cubic yards of concrete were consumed as all major ports were fortified and ringed with pill-boxes. However, on 30 October 1943 Hitler was presented with a large report from the Commander-in-Chief in the West, Field Marshal von Rundstedt, which stated that the present condition of the Atlantic Wall would not prevent an Allied invasion on the scale seen in Sicily and Italy. Field Marshal Erwin Rommel, his tremendous fighting reputation undimmed by his defeat in North Africa, was instructed to inspect the defences and to generate recommendations for their improvement.⁷²¹

The impact of new leadership for the invasion coast area would completely overhaul the Wehrmacht defences in the first five months of 1944. His appointment had been preceded by another Führer Directive (No.51) of 3 November 1943, which had recognised the threat of a massive Allied landing on the coast of north-western Europe in the following year. Hitler had promised the forces in France a mass of extra equipment, including that all panzer and panzer grenadier divisions be equipped with ninety-three Mark IV tanks or self-

⁷¹⁸ Hugh Trevor-Roper, *Hitler's War Directives: 1939-1945* (Edinburgh: Birklin, 2004), pp. 171–172.

⁷¹⁹ '*Küstenverteidigung*' – the coastal defence area. (BAM) RH 26-716, Summary of 716. Infanterie-Division [From RH 26 Infanterie-divisionen Band: RH 26 26-600-999].

⁷²⁰ Albert Speer, *Inside the Third Reich* (London: Phoenix, 1995), p. 476; *Hitler's Table Talk: Hitler's Conversations Recorded by Martin Bormann* (Oxford: Oxford University Press, 1988), pp. 662–664.

⁷²¹ L. F. Ellis, pp. 54–56.

propelled guns by the end of December 1943, and a monthly allocation of a hundred heavy A.Tk guns in both November and December.⁷²² Rommel's experience in North Africa had exposed him to the full might of Anglo-American air power, and he believed that a central reserve of mechanized formations located in the interior of France would be pointless – they would simply be shattered by Allied fighter-bombers while attempting to drive to the beachhead. Therefore the invasion had to be crushed at the water's edge, and he demanded that the mechanised panzer and panzer grenadier divisions be positioned close to the potential invasion beaches. This brought Rommel into dispute with Geyr von Schweppenberg and Guderian, who wished to maintain a central panzer reserve that could be swiftly moved to the landing area and launch an overwhelming armoured attack.⁷²³ This argument has been recorded elsewhere, and while it was of key importance for Second Army and the success of Overlord, it is not pertinent to this study.⁷²⁴ Thanks to Rommel's resolve 6 Airborne would have a panzer division in its landing area, 21, and so the armoured threat was immediate.

The value that Rommel placed on Allied airborne forces was now revealed in what happened next. In line with his determination to crush the landings on the beaches, his main effort to the defence of Normandy was a large-scale programme of minefield, fortification

⁷²² Trevor-Roper, pp. 218–224.

⁷²³ General der Panzertruppen Leo Freiherr Geyr von Schweppenburg (B-466), 'Preparations by Panzer Gruppe West Against Invasion (mid-1943 - 5 June 1944)', in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), pp. 72–80 (pp. 74–76).

⁷²⁴ Geyr von Schweppenburg was the commander of Panzer Gruppe West, a concentration of mechanized divisions for service in Rundstedt's theatre, while Heinz Guderian was Hitler's Inspector of Panzer Forces. Both had considerable Eastern Front experience and perhaps did not appreciate the massive threat posed by the western Allies' air forces. Robert J. Kershaw, *D-Day: Piercing the Atlantic Wall* (Hersham, Surrey, UK: Ian Allan Pub., 2008), p. 32; Max Hastings, *Overlord: D-Day and the Battle for Normandy* (London: Pan, 1985), p. 64.

and beach obstacle construction.⁷²⁵ He called for the laying of up to 20,000,000 land mines, and up to the 20 May 1944 an extra 4,193,167 had been laid under his direction. Rommel envisaged that airborne forces would either be scattered in small groups across all of France to motivate and mobilise French resistance forces, or more likely be employed in divisional-sized operations to compromise the seaward facing defences ahead of an amphibious landing.⁷²⁶

While this programme made the fortifications more formidable, Rommel's personal drive in boosting the fortification program had its negative aspects. One negative aspect was that for the infantry 'general training was now almost completely neglected' as all the men 'became construction troops.'⁷²⁷ The diversion of activity exhausted troops, stalled field training and was often carried out inadequately.⁷²⁸ Rommel's reputation and micro-management also delayed effort:

The inspection process which started in Denmark on 5 November 1943, did not conclude until March 1944. German commanders who did not wait for Rommel to evaluate ongoing programs risked being told to make significant changes while those who deferred major improvements until the Field Marshal arrived also risked incurring his wrath. As a result, commanders implemented improvements of German coastal defences in the West in a sequential fashion, rather than in a centralized and coordinated program.⁷²⁹

As discussed above, Allied air reconnaissance discovered that anti-gliders were being installed in mid-April which caused a radical change to Gale's divisional plan. It was intended

⁷²⁵ The beaches were to be covered by 'locking bars with T-mine and steel blades', mined steel or wooden obstacles which could either tear the bottom out of landing craft or explode on contact. (BAM) RH 19 IX/1, Heeresgruppe B, slide 33.

⁷²⁶ Liddell Hart, pp. 457–460.

⁷²⁷ Generalleutnant Joseph Reichert (B-403), 'Employment of the 711th Infantry Division on the Invasion Front: Preparation', in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), pp. 145–50 (p. 147).

⁷²⁸ Mark J. Reardon (ed.) *Defending Fortress Europe: The War Diary of the German 7th Army in Normandy, 6 June to 26 July 1944* (Bedford, Penn: The Aberjona Press, 2015) Kindle ed., location 729.

⁷²⁹ Ibid., location 274.

that these poles would be wired together, and shortly before the invasion Rommel had also gained the release of a million captured shells to arm these poles.⁷³⁰ In the area defended by 346 Gren Div and 17 Luftwaffe Field Div, some 250,000 of these poles were raised in fields considered possible airborne landing zones.⁷³¹ Again, construction work demotivated some troops. Werner Kortenhaus, a 21. Pz Div tank driver saw the focus on building yet more defences as a waste of time:

The troops, which were already fully occupied with constructing positions, digging in all heavy weapons and exhausting guard duty were now additionally burdened with such work, despite the employment of French civilians, who were well paid. Training, especially combat training, of the troops was severely neglected as the result of this work.⁷³²

Indeed, Lieutenant Rudolf Schaaf (1716 Artillery Regiment) was simply happy to be in France:

Twice wounded in the leg in Russia, Schaaf was one of many officers and men posted to France because they were unfit for further duty in the east – he walked with a pronounced limp. He and most of his comrades were enjoying their time in France, with plenty to eat and drink, all of it cheap. Above all, they were thankful to be out of the east. "The soldiers did as little work as possible," he said, "and we were too busy putting up wire and planting 'Rommel asparagus' to have much time for training."⁷³³

However, the war diary of Heeresgruppe B recorded Rommel's satisfaction with this news and the construction of anti-glider obstacles on 16 May:

The O.B. explains the confident mood of leadership and troops, pointing out that a corps alone has positioned 900,000 traps for enemy gliders, while 1 million grenades are to be used to sharpen the airborne obstacles in the next weeks.⁷³⁴

The failure to wire and mine the posts before D-Day would allow 5 Para Bde and its attached RE to cut them down quickly. In addition to fixed defences being developed, the fields

⁷³⁰ Liddell Hart, p. 460.

⁷³¹ Kevin C. Ruffner, *Luftwaffe Field Divisions 1941-45* (Oxford: Osprey, 1990), p. 20.

⁷³² Werner Kortenhaus, *The Combat History of the 21. Panzer Division* (Solihull: Helion, 2014), p. 48.

⁷³³ Hastings, *Overlord: D-Day and the Battle for Normandy*, pp. 65–66.

⁷³⁴ (BAM) Heeresgruppe B RH 19 IX83, AG B KTB 1944, Mai 1944.

surrounding the rivers Douve, Dives and Merderet were flooded to hinder any airborne landing.⁷³⁵ Rommel's application of his frenetic innovation to create plans to destroy gliders and kill paratroops, and the allotment of an enormous quantity of munitions, reflected the value he attached to Allied airborne forces. His driving leadership rapidly developed the fixed defences of the Atlantic Wall adapting old and captured munitions for his purpose.

The first troops that 6 Airborne would encounter would belong to 716 I.D.⁷³⁶ This was a Bodenständige (static) infantry division formed in May 1941 in Wehrkreis (military district) VI at Bielefeld specifically for garrisoning the threatened Atlantic/Channel coast.⁷³⁷ It had been posted to 15 AOK (Army) in Belgium in June 1941, and later moved to Normandy coming under the control of 84 AK (Army Corps) in June 1942 where it remained until D-Day.⁷³⁸ The division was weak, with only two Grenadier Regiments (726 and 736, of three battalions each), some obsolete French tanks, while its organic artillery regiment (1716) was largely employed in manning fixed batteries.⁷³⁹ In April 1944 the Division received two 'Ost' infantry battalions, 439 and 642.⁷⁴⁰ Seventy-two of these battalions had arrived in France in early 1944, composed of non-Russian Red Army POWs or Russian prisoners who had previously served in the German Labour Service, all officers and NCOs were German.⁷⁴¹ They were integrated into existing German Army infantry regiments as third and fourth battalions

⁷³⁵ John Keegan, *Six Armies in Normandy* (London: Pimlico, 2004), pp. 88–89; Chester Wilmot, *The Struggle for Europe* (London: Reprint Society, 1954), pp. 258–259.

⁷³⁶ Nearby, 352 I.D. was a mobile infantry division with Eastern Front combat experience and would face 30 Corps and US V Corps. 711 I.D. was positioned beyond the Dives while 346 I.D. held the Le Havre area. Both were static divisions with no combat experience. Kershaw, *D-Day: Piercing the Atlantic Wall*, p. 56. (BAM) Bestand RH 26-346, 346. Infanterie-Division, summary; Bestand RH 26-716, 711. Infanterie-Division, summary.

⁷³⁷ (BAM) RH 26-716, 716. Infanterie-Division, summary.

⁷³⁸ Ibid., Unterstellung.

⁷³⁹ 1716 Regiment manned five batteries, including Merville. Karl-Heinz Schmeelke and Michael Schmeelke, *German Defensive Batteries and Gun Emplacements on the Normandy Beaches. Invasion: D-Day June 6, 1944* (Atglen, PA: Schiffer, 1995), p. 48.

⁷⁴⁰ (BAM) RH 26-716, 716. Infanterie-Division, summary.

⁷⁴¹ Helmut Heiber, *Hitler and His Generals*, ed. by David M. Glantz (New York: Enigma Books, 2004), p. 970. Generalleutnant Karl Wilhelm von Schlieben (B-845), 'Background: 709th Infantry Division', in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), pp. 98–108 (p. 98).

to boost bayonet strength. A set of minutes generated after a meeting of the senior commanders of 7 AOK gives recorded some key principles to be followed in preparing for the forthcoming battle. It gave a mixed message regarding Ost battalions:

2) Eastern troops

For a certain given reason Eastern battalions must be shifted out of key coastal positions. Care of the East. Regimental commanders must keep the Eastern battalions close to their hearts.⁷⁴²

The presence of the Ost battalions augmented the Wehrmacht forces but was evidence of the exhausted state the German Army found itself in by mid-1944.

An analysis of the final defensive scheme adopted by the Division merits close study as it reveals critical weaknesses that 6 Airborne was to exploit. This was communicated to its personnel in a tagesbefehl of 13 April 1944.⁷⁴³ The fighting front of 716 I.D. was split between two large battle groups (kampfgruppe), Kommander Courselles and Kommander Riva Bella. Each group was led by the respective commander of the 726 and 736G.R, their organic battalions being augmented by 'Ost' battalions and the division's artillery. This defence was conceived to crush a landing from the sea and guard key locations, and kept little in reserve that might be used to defeat Allied airborne troops. The limited mobility of the division would force it to fight from the positions it had prepared. The anti-tank troops (panzerjäger) and heavily armed pioneer infantry (Pionere) were carefully placed at key points, the plan detailing down to platoon level in the latter's case.⁷⁴⁴ A German version of a French map of the Calvados coast provides further illustration of the 13 April instruction.

⁷⁴² (BAM) RH 20-7/134, AOK 7 (7th Army) Papers, 2 May 1944 Meeting with GOC and all Corps commanders, p.3.

⁷⁴³ 'Tagesbefehl' – daily order. (BAM) RH 26-716/11, 716 Division. Divisionsbefehle 24.2. und 19.3.1944.

⁷⁴⁴ The Panzerjäger were equipped with 14 SP and 12 towed guns and were the 716 I.D.'s best chance to halt a British armoured drive from the beaches. While Pioneers in the British Army at this time performed a supporting construction role, their Wehrmacht namesakes were heavily armed combat engineers who frequently spearheaded infantry attacks with flamethrowers and demolition charges. John Ellis, *The World War II Databook: The Essential Facts and Figures for All the Combatants* (London: Aurum, 1993), p. 204.

716 I.D. is positioned in layered defence lines facing the sea, 6 Airborne Division's objectives being surrounded by a plethora of company sized outposts.⁷⁴⁵ While this deployment meant that a local commander could quickly call on mutually-supporting forces close to a DZ/LZ to begin to counter-attack, unit cohesion had been dissipated with a knock-on effect in terms of generating sufficient weight for an attack to succeed. German doctrine maintained that defending infantry forces should mount 'gegenstoss', counter-blows, but 716 I.D. had little or no reserves to do so.⁷⁴⁶ Not everyone held Rommel's view:

The grouping of the reserves was a hobby of Field Marshal Rommel. It was his opinion that he could destroy the enemy with an attack in front of the MLR – consequently, in the water. All heavy weapons of the infantry were incorporated in the defensive installations, or had joined new combat installations (field strength). On the occasion I visited in May, I was reproached because I did not bring the reserves (Rifle Company without heavy weapons) close enough to the coast. He wished every soldier to be able to concentrate his fire on the water.⁷⁴⁷

Von Schlieben the commander of 709 I.D. concurred, 'Rommel didn't want any local reserves, and crammed all and everything into the coastal main line of resistance.'⁷⁴⁸ 'Hier steh ich- ich kann nicht anders'.⁷⁴⁹ The counter-attack role was effectively handed to 21. Pz.Div, whose deployment in part overlaid that of 716 I.D.

21.Pz.Div was the reincarnation of a one of Rommel's Afrika Korps panzer divisions lost with the surrender of Axis forces in Tunisia in May 1943. The Division had subsequently been rebuilt from a mechanized brigade located in France in July 1943, while it had been completed with recruits it still retained around 2,000 veteran troops who had fought either in the desert or Russia. These were mixed in with good quality conscripts and

⁷⁴⁵ RH 26-716/16K, 716 Division. Karten vom kustenverteidigungsabschnitt Caen.

⁷⁴⁶ Strohn, p. 126.

⁷⁴⁷ Oberstleutnant Fritz Ziegelmann (B-432), 'The 352nd Infantry Division', in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), pp. 122–28 (p. 125).

⁷⁴⁸ von Schlieben (B-845), p. 103.

⁷⁴⁹ 'Here I stand. I can do no other'. Blumentritt quoting Martin Luther. *The German Army at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill, 2004), p. 50.

Volksdeutschen recruits.⁷⁵⁰ The Division's commander, Major-General Edgar Feuchtinger, stood out when compared with the commanders of the other Normandy panzer divisions as lacking current combat experience. He had commanded the Artillerie-Brigade West, the formation the Division had been built upon, and appeared to use Nazi Party connections to retain his position when it was transformed into 21.Pz.Div.⁷⁵¹ The division had been equipped on the cheap – captured French Somua and R35 tanks had been gathered from across France, together with armoured carriers and commandeered Lorries. Major Becker, the commander of the Division's self-propelled (SP) battalion, had however used his family's engineering plant in the Ruhr to upgrade this assorted collection of vehicles.⁷⁵² Panzer Regiment 100 (renumbered 22 in June) never received the battalion of Panther tanks which equipped most Panzer divisions, and went into action with a battalion of mixed obsolete French tanks and elderly Panzer Kampfwagen (Pz Kpw) IV together with a battalion of the latest 'H/J' version. The view of the commander of Panzer group West, Geyr von Schweppenberg, was unfavourable as far as 21. Pz. Div. was concerned:

21st Panzer Division: The division was reorganized after the African campaign with undesirable personnel from a large number of divisions. Even very thorough and experienced training could never overcome this basic fault. Part of its materiel was manufactured in French factories.⁷⁵³

Yet 21.Pz. Div. was heavily equipped with AFVs and its experienced officers trained its recruits to create a force that had the potential to eliminate any lightly equipped airborne formation. The waiting mechanized German forces expected a massive commitment of Allied airborne forces, and trained hard to be able to crush them:

⁷⁵⁰ The Volksdeutschen troops were men drawn from populations that the regime viewed as ethnically German in origin. Jean-Claude Perigault, *21 Panzer Division* (Bayeux: Heimdal, 2002), pp. 493–495.

⁷⁵¹ Hans von Luck, *Panzer Commander: The Memoirs of Colonel Hans von Luck* (London: Cassell, 2002), p. 167.

⁷⁵² Luck, pp. 167–169.

⁷⁵³ General der Panzertruppen Leo Freiherr Geyr von Schweppenburg, (B-466), 'Panzer-Type Divisions (Western Front)', in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), pp. 95–97

The theoretical aspect of the training consisted of a large-scale wargame in Paris in September 1943 involving the commitment of eight enemy airborne divisions. The bulk of these divisions were represented on a strategical scale, not tactically. All the leading figures of the Panzer forces in the West were summoned to attend. In a practical sense, individual Panzer divisions were engaged in manoeuvres involving both day and night fighting against airborne troops. The Fallschirm (paratroop) school at Dreux furnished the cadre for these manoeuvres. The objective was to “drill” these tactics.⁷⁵⁴

2. Pz .Div received orders in mid-February to be ready ‘for a swift march, aimed either against an airborne enemy, or a counter-attack against such enemy forces that succeeded in piercing the “Atlantic Wall.” II-SS.Pz AK, and 9-SS.Pz.Div in particular, were especially practiced in anti-airborne drills.⁷⁵⁵ Ewald Klapdor, serving with 10.SS.Pz.Div ‘Fruindsberg’, recorded in his Normandy history how comprehensive the anti-airborne training was in II.SS.Pz.Kps. The locations over which manoeuvres and map wargames were played out were prescient:

The troops were introduced to the structure of Anglo- American formations, parachute and airborne troops into divisions, each with one parachute brigade and two airborne brigades each of three battalions. An understanding that the jump of a battalion of about five minutes would cover an area of approximately 720m X 1,080m. Enemy landings south of the Seine estuary between Trouville and Tracey sur Mer (during map exercises on 9.1.1944 and 23.1. 1944) and in the area Evreux (simulations carried out on 2.2.1944) were envisaged. In an exercise of 23.3.1944, 10.SS Panzer Division was inserted between Honfleur and Deauville which was pretty realistic, as events were to show a few weeks later. The written evaluations of these simulations, the emphasis of enemy air superiority, and how the troops would conduct themselves in this situation, troops was always in mind.⁷⁵⁶

As seen in the above Schweppenberg quote, Luftwaffe Fallschirmjäger expertise to anticipate and counter Allied airborne forces was spun throughout the German defence

⁷⁵⁴ Geyr von Schweppenberg, ‘Preparations by Panzer Gruppe West Against Invasion (mid-1943-5 June 1944)’, in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), p. 74.

⁷⁵⁵ Oberst Paul Frank (B-008), ‘The 346th Infantry Division to 4 June 1944’, pp. 151–52 (p. 151). General der Panzertruppen Leo Freiherr Geyr von Schweppenburg (B-466), ‘Panzer-Type Divisions (Western Front)’, in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), pp. 95–97 (p. 97); Robert J. Kershaw, *It Never Snows in September : The German View of Market-Garden and the Battle of Arnhem, September, 1944* (Shepperton: Ian Allan, 1994), p. 41.

⁷⁵⁶ Ewald Klapdor, *Die Entscheidung Invasion 1944* (Siek, 1984), p. 18.

plans. II. Fallschirm. Korps (3. FJ Div and 5. FJ. Div) was placed in Brittany to stop an early seizure of Brest while 91. Luftlande Div was stationed in the Cotentin to shield Cherbourg.⁷⁵⁷ 6 Fallschirmjager Regiment (6/F.G.R.), airborne troops themselves, were charged by LXXXIV AK 'to assume responsibility for defence measures against parachute and airlanding troops' in the southern part of the Cotentin peninsular.⁷⁵⁸

Infantry formations also engaged in specific training to deal with Allied airborne force as D-Day approached. 346 I.D., 6 Airborne's future opponent in the Orne bridgehead, was charged with anti-airborne measures behind the Le Havre fortress. James Gavin stated in his personal war memoir that the US 82 Div captured a handbook issued by OB West entitled 'What Every Soldier Should Know About Airborne Troops', while 243 I.D. produced their own anti-airborne forces memorandum.⁷⁵⁹ Divisional intelligence estimates assumed Allied invasion plans were entirely in place by April 1944, the number of divisions in place double the actual number and including '7 airborne divisions and 8 paratrooper battalions.'⁷⁶⁰

Returning to the crucial mechanized forces, whether the enemy came by air or sea determination and vigour can be seen in the training programme undertaken by 192 P.G.R. The Regiment would practice to maximise the effect of its role capability to achieve its mission of defeating the enemy – overwhelming mechanized attack. With two battalions, one of which was carried in armoured personnel carriers (schützen panzerwägen - SPWs).

⁷⁵⁷ Mark J. Reardon, (ed.) *Defending Fortress Europe: The War Diary of the German 7th Army in Normandy, 6 June to 26 July 1944* (Bedford, Penn: The Aberjona Press, 2015) Kindle ed., location 679.

⁷⁵⁸ General der Panzertruppen Heinrich Freiherr von Luttwitz (B-257), 'The 2nd Panzer Division: Preparation', in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), pp. 159–60 (p. 160); Oberstleutnant Friedrich von der Heydte (B-839), 'Organisation of the 6th Fallschirm Regiment', in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), pp. 153–58 (p. 156).

⁷⁵⁹ Gavin, pp. 96–97.

⁷⁶⁰ 12-SS.Pz.Div situation report, 25/4/44. Eisenhower had 37 divisions (including 1 and 6 British Airborne and 82 and 101 US Airborne) while the German were calculating 71-73 divisions with eight airborne. Hubert Meyer, *The 12th SS: The History of the Hitler Youth Panzer Division: Volume One* (Mechanicsburg, 2005 ed.)

Each battalion had had four companies (Kompanie – Kp), three rifle and one heavy (nos. 4 and 8), the latter fielding SP 75mm A.Tk guns. Kp 9 and 10 were SP Howitzers and Nebelwerfer (multiple rocket launcher) units.⁷⁶¹ Its commander, Oberstleutnant Josef Rauch had seen action in the east and was determined to turn it into a first class regiment. In four memoranda the development of the Regiment can be seen over January and March 1944. The first set of notes dated 21 January concentrated on developing driving skills and anti-aircraft drills.⁷⁶² Both of these areas were clear priorities; around fifty per cent of the division's drivers were unable to drive on joining, and the Allied air threat would be a dominating influence in the forth-coming battle.⁷⁶³ The inexperience of many of the junior leaders is revealed when disciplinary action was threatened if some initiative was not shown should a vehicle break down, 'if a vehicle has failed, there is no reason for the crew to stand close to the vehicle or sit down. The leader should set a direction and the group should start walking.'⁷⁶⁴ The second set of notes, an addendum issued by Rauch to the first dated 16 February, pursued the importance of leadership. The responsibility of the company commanders in all aspects of training is addressed:

For the generation of power and knowledge amongst his soldiers, the company commander is responsible for training even in the smallest tasks. It is particularly important that ferocity and spirit, discipline and confidence are kept high. It is mandatory to ensure that all orders are carried out. In this way the mutual trust which creates the fighting spirit needed under the rubble is made.⁷⁶⁵

The note goes on to order training in night operations, adopting hedgehog ('igel'n') positions if surprised by enemy attacks, and ensuring that all reinforcements were brought up-to-date

⁷⁶¹ Perigault, pp. 218–219.

⁷⁶² (BAM) RH 37/5052-5053, 192 Panzer Grenadier Regiment. Divisional Ongoing Training Notice No.1/44, 21 January 1944.

⁷⁶³ Generalleutnant Edgar Feuchtinger (B-441), 'History of the 21st Panzer Division from the Time of Its Formation until the Beginning of the Invasion', in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), pp. 114–21 (pp. 119–121).

⁷⁶⁴ (BAM) RH 37/5052-5053, 192 Panzer Grenadier Regiment. Ongoing Training Notice No.1/44, 21 January 1944.

⁷⁶⁵ Ibid. 16 February 1944, p. 2.

in all training areas.⁷⁶⁶ These subjects echo the battalion specific training that 2 Oxf Bucks pursued as they prepared for operations.⁷⁶⁷ Commanders on both sides appreciated that the landing battles would begin with surprise action and probably at night.

The third document is a general memorandum issued to every unit in the division and again supported by additional notes from Rauch. Training in March must now embrace 'individual training, unit training and leadership training,' with all of the divisions units called upon to perform combat group (kampfgruppe) training by no later than 15 March.

'Shooting, driving and radios' are all to be concentrated on while all tank gun practice at less than 1000m range is prohibited. Night training is to be carried out by all panzer grenadier battalions on 15 March, while 100 Pz.R is to organise an exercise to focus on tank versus tank combat.⁷⁶⁸ This training would be disrupted when 21.Pz. Div was suddenly ordered to transfer to Hungary in March 1944, when a pro-Soviet coup was suspected. It had travelled half the distance when it was recalled to Normandy.⁷⁶⁹ This incident reflected the German Army High Command's (OKW) habit of pilfering France for forces should an emergency arise in the east. Considering the Wehrmacht believed that the invasion would take place probably in the early summer this was a desperate act.⁷⁷⁰

This assessment of 192 G.R.'s training regime is important, as 21.Pz.Div's two motorised infantry regiments were in position close to the Calvados coast, heavily armed and mobile enough to smash the British airborne landings. It should be noted that Rauch's training was as similarly relevant and task-focussed as Gale's, although the former was training his men

⁷⁶⁶ Ibid., p.3.

⁷⁶⁷ Ibid., p.19.

⁷⁶⁸ (BAM) RH 37/5052-5053, 29 February and 1 March 1944.

⁷⁶⁹ Feuchtinger (B-441), p. 117.

⁷⁷⁰ (BAM) RH 20-7/134, AOK 7 (7th Army) Papers, 2 May 1944 Meeting with GOC and all Corps commanders, p.1.

to perform either a stubborn defence or participate in an overwhelming mechanised attack. However, like 716 I.D. their companies were scattered around individual locations.⁷⁷¹ Rommel visited the division frequently, and once suggested that in the counter-attack role against Allied airborne troops 21.Pz.Div was too dispersed, 'O.B. has the impression that the 21.Pz.Div has moved too far apart to secure the area against airborne troops.'⁷⁷² 'The way that the 21. Panzer Division was positioned in the Caen area ran risk that an airborne landing in the division's billeting area would preclude its employment as a coherent formation.'⁷⁷³ Yet the policy of company positions remained in place, an important exception being 642 Ost Battalion which was concentrated bar one company at Hauger.⁷⁷⁴

The enemy that awaited 6 Airborne was therefore of a mixed quality but still quite capable of eliminating airborne troops. The reliability of Gale's divisional intelligence was crucial. The report of 28 April 1944 furnished a wealth of detail. The information available to Gale for 716 I.D. was meticulous, even down to the address of the divisional H.Q. in Caen – 83 Rue de Geole. It was accurately stated that 716 I.D. had two Grenadier Regiments, and was 'only capable of 40% of the performance of a first class division in defence, and 15% in the attacking role.'⁷⁷⁵ It stated the 'Russian bns' were strong in numbers with five or six companies with around 200 men each, but short of heavy weapons.⁷⁷⁶ The tank strength of 21 Pz. Div was overestimated, with two tank regiments of tanks of two battalions each

⁷⁷¹ Of 125 Regiment, its 5 Kp was based at Troarn, 8 at Colombelles just outside Caen and most threateningly the 7 at Heroutvillette. The latter was in an ideal location to push up against the Orne barrier position or attack 6 Airlbg Bde as it attempted to capture Escoville/Heroutvillette. 192 Regiment was to the east of the Orne, it's HQ between Amsey and Mathieu and companies at Le Londel (5), Buron (6) and the 8 Heavy Kp at Cairon. Part of 21.Pz.Div's artillery had been pushed forward with two batteries behind the Perriers ridge and one to the east of Basly. The rest of the division was located to the south east and south west of Caen. (BAM) RH 26-716/16K, 716 Division. Karten vom kustenverteidigungsabschnitt Caen.

⁷⁷² (BAM) RH 19 IX83, Heeresgruppe B AG B KTB 1944, 11 May 1944.

⁷⁷³ Kortenhaus, p. 67.

⁷⁷⁴ (BAM) RH 26-716/16K, 716 Division. Karten vom kustenverteidigungsabschnitt Caen.

⁷⁷⁵ (AA) 4H4-21-4, Gale Papers. 6th Airborne Division Summary of Information, 28 April 1944.

⁷⁷⁶ Ibid.

supported by heavy Tiger and ex-French tanks. The 'Tps reported as elite and smart in appearance aged 18-30.'⁷⁷⁷ It was known that the fields in the Dives area had been flooded, 'artificial flooding of the river valley commenced in May 42 and caused principally through the closing of sluice gates at the mouth of the R.DIVETTE.'⁷⁷⁸

Apart from strengths, 6 Airborne also had some understanding of how the enemy would behave if attacked by airborne troops:

In the case of coastal divs it is believed that the res bn would have an alarm pl or even coy kept ready to move off at any moment, possibly by MT [motor transport]. Reports have also been received of anti paratp Kommandos probably of pl str with the task of holding up air tps until rfts arrived. The alert would be given by bugle.⁷⁷⁹

The final map issued to 6 Airborne before D-Day detailed the area of forthcoming operations in microscopic detail, the final version of a series of maps which had been issued to allied units for planning and training.⁷⁸⁰ Every type of artillery piece and mortar is shown, down to light machine guns. Lines of barbed wire and anti-tank ditches, trenches, strong points, areas of 'inundation' were all shown. Anti-glider poles were highlighted with distinctive blue and brown 'X's.

For the men of 6 Airborne the waiting enemy had adopted a policy which potentially heightened personal risk. British airborne and commando forces had captured the close attention of the enemy at the highest level by late 1942. Hitler had received a continuous flow of reports concerning British special operations since August 1942, and on 18 October issued the 'sharp' order. This stated that all enemy soldiers captured in uniform while

⁷⁷⁷ Ibid.

⁷⁷⁸ Ibid., p. 3.

⁷⁷⁹ Ibid., p. 5.

⁷⁸⁰ BIGOT map, stop press edition, 20 May 1944, information as at 19 May 1944. (Bodleian Library, c.21 (198).

fighting like 'bandits' could be summarily executed.⁷⁸¹ It did not apply to soldiers might 'surrender in the course of normal battle operations (offensives, large-scale landing operations and large-scale air-landing operations)', but would effectively allow the execution of any airborne or commando soldier captured either alone or in a small group. At the lower end of the Wehrmacht chain of command British airborne troops had also made an impact. 1 Para Bde had gained notoriety amongst their opponents in Tunisia, and earned a nickname for British airborne forces: *rote teufel* - Red Devils.⁷⁸²

To summarise this section, Rommel had recognised that the invasion would have to be defeated at the water's edge and therefore began a massive scheme of obstacle building along the threatened beaches. The value he attached to Allied airborne forces can be seen in the extension of the programme to include specifically anti-glider measures inland, indeed the one million shells to arm every post was a considerable investment at a time when Germany was scraping the bottom of every resource barrel. The negative aspect of his plan to fortify and hold the coastal crust was the resultant lack of strong local reserves capable of mounting counter-attacks with the necessary weight. This is apparent in the deployment of 716 I.D. If large mobile formations could arrive unmolested by Allied air power and naval gunfire to destroy the landings, then holding the coastal crust with a screen of infantry would be effective. But by deciding to fight the decisive action this zone required ready formed *kampfgruppe* to strike at landings (both by air and sea) according to a pre-arranged plan and without delay. Such a situation would have had dire consequences for scattered airborne forces, which could have been hit hard very quickly after landing and

⁷⁸¹ TNA WO 208/4294 The Scotland Papers. Translation of photostat copy of F.H.Q. 18.10.42 order; Philip W. Blood, *Hitler's Bandit Hunters* (Dulles, VA: Potomac Books, 2006), p. 82.

⁷⁸² As a train passed caged POWs taking Pearson's 1 Para Bn back to Algiers, the Germans shouted the name on spotting the maroon berets. Julian James, *A Fierce Quality: A Biography of Brigadier Alastair Pearson* (London: Cooper, 1989), p. 70.

not allowed to regroup or manoeuvre into more easily defended positions. As it was, the German defenders began the battle scattered themselves. This issue was counter-balanced somewhat by the increasingly heavy armament of German infantry at the lowest level,⁷⁸³ but in the first instance of an airborne landing counter-attacks would be limited to company size.

The thesis themes can be seen at work in Rommel's command as he envisioned defeating the invasion at the water's edge or on the airborne landing zones. He had catapulted Heeresgruppe B into a frenzy of adaptation and innovation with fortification building and laying of mines, while he exhibited a strong leadership presence to push this work on. At the formation level, Josef Rauch similarly focussed doggedly to develop 192. Gren. Regt's ability to initiate either a swift mechanised counter-attack to any invaders or enduring defence.

Gale's divisional plan was straightforward and built on the his own planning principles of surprise, simplicity, proximity of DZ/LZ to objectives, some redundancy of force and close command and control once landed. Once his division was ensconced on its objectives it would defend the Orne bridgehead in depth, drawing enemy counter-attacks to their destruction.⁷⁸⁴ Returning to **Figure 1** introduced in chapter two, the pre-operation preparations of both sides can be seen. The waiting defenders had invested much in fixed defences and some anti-airborne training, while 6 Airborne had been given extraordinarily detailed intelligence on the enemy and terrain and had developed their plans relying on this knowledge. The division's training to achieve its D-Day objectives is where this study turns to next.

⁷⁸³ Stephen Bull, *Second World War Infantry Tactics* (Barnsley: Pen & Sword Books), pp. 46–52.

⁷⁸⁴ Gale's scheme is reminiscent of the 'Bite and Hold' tactic of the First World War. Robin Prior and Trevor Wilson, *Command on the Western Front: The Military Career of Sir Henry Rawlinson, 1914-18* (Barnsley, South Yorkshire: Pen & Sword Books, 2004), pp. 77–80; Paddy Griffith, *Battle Tactics of the Western Front: The British Army's Art of Attack, 1916-18* (New Haven: Yale University Press, 1994), p. 32.

III. Mission-Specific Training – dealing with enemy armour and scattered drops

It could be said that all the training the man received once he had been allocated to a unit in 6 Airborne was mission-specific, as the prospect of the Second Front loomed large. This section will view the unit level training through the example of 7 Para Bn's preparation, and later review the training completed to deal with two of the most serious threats to the division on D-Day, that of scattered drops and enemy mechanised forces.

At the battalion level, the planning and task-specific training undertaken by Pine-Coffin's 7 Para Bn again reveals the building in of redundancy to the overall plan, indeed an expectation of a worst case scenario. Aside from Bizz II⁷⁸⁵ where the Division was landed by either glider or parachute complete, 7 Para Bn jumped as a unit during Exercise Charity. They also parachuted as companies from C-47s, Stirlings, and also at night.⁷⁸⁶ Moving by company marches and A.Tk training reflected the concern that scattering could afflict the battalion and the possibility of an enemy armoured attack.⁷⁸⁷ However, for the battalion the most crucial period of preparation began on 11 May when a forward party was sent to Exeter to prepare for 'boat training', around the Countess Wear bridges. On the 13 May the second-in-command and intelligence officer were briefed on the battalion's role during Operation Tonga before the whole unit undertook boat/dingy training on 15-16 May. 7 Para Bn was to act as the immediate reinforcement for D Company 2 Oxf Bucks, the coup de main party at the Caen Canal and Orne River bridges. The parachute battalion would be prepared to capture the area and complete the mission even if Major John Howard's force had been annihilated and the bridges blown.

⁷⁸⁵ TNA WO 171/1239, 7 Para 1944 WD.25-26 March 1944.

⁷⁸⁶ TNA WO 171/1239, 7 Para 1944 WD.18 March 1944, 9-10, 30 March and 8-9 May 1944.

⁷⁸⁷ Ibid. 15-18 February, 5-8 April and 2 May 1944.

The Coup de main operation was successful and as a result of this success it was not necessary for the bn to cross the water obstacles by dinghies as had been expected. These dinghies were carried in kit bags, together with the necessary ropes for making the ferries, either on the legs of men or attached to bicycle chutes and thrown out by number ones of certain sticks. 30 dinghies and 12 recce boats together with a large number of ropes (falls) were carried in all.⁷⁸⁸

Once 7 Par Bn had landed, the 2 Oxf Bucks *coup de main* force under Major John Howard would come under Pine-Coffin's command. Due to security constraints Howard was unable to inform his platoon commanders what their Normandy objective would be, but pursued Gale's appreciation approach by holding 'very lively discussion' with them all concerning D Company's bridge capturing mission in Ex Mush. This outline would become the basis of Howard's final plan for Operation Deadstick.⁷⁸⁹ Howard's force followed 7 Para Bn down to Exeter to practise their task around the Countess Wear bridges and would later rehearse the operation over and over again in an area with the canal and river marked out with white tape.⁷⁹⁰

Other examples of task-specific battalion training can be observed. 2 Oxf Bucks had rehearsed tactics which would have a direct benefit for their role as they advanced southwards to expand the airborne bridgehead. They practised day and night fighting patrols, 'freezing into A.Tk hedgehog' and street fighting.⁷⁹¹ Similarly, the summary completed by 1 Para Bn's CO at the start of their April war diary showed skills that would be needed in the forthcoming campaign being boosted; field firing, swimming, street-fighting:

Tempo of training during this month was speeded up in preparation for the operation that everyone felt was not far away. Special Courses were given to various Companies including a street-fighting course in Southampton, and a swimming course in the Yeovil Baths. The entire Battalion spent three days at Brighton under

⁷⁸⁸ TNA WO 171/1239, 7 Para WD 1 Jan. – 1 June 1944. Lt. Colonel Pine-Coffin's Account of D-Day Operations, 29 June 1944.

⁷⁸⁹ John Howard and Penny Howard Bates, *The Pegasus Diaries* (Barnsley: Pen & Sword Books, 2006), p. 90.

⁷⁹⁰ Howard and Howard Bates, pp. 98–102.

⁷⁹¹ TNA WO 171/1357, 2 Oxf Bucks 1944 WD. Training Instruction No.17, 9 February 1944, 21–22 March 1944.

adverse weather conditions on Field Firing. A Corps Scheme “MUSH” was held on the 21st April. 1944, in which the 6th Airborne Division was pitted against the 1st Airborne Division. The Battalion performed very creditably on this Exercise. The Battalion received a large number of reinforcements from Camp Shilo, Manitoba, Canada, and they were turned over to the Training Company. The Battalion started to bring its self up to full War Establishment.⁷⁹²

The war diary pages for the rest of the month then show that each of the specialist elements within the unit (Signals, MMG, Mortar platoons and the Intelligence section) also received additional training. May began in a similar vein, with the Exercise Lookout being held in the first week for the Intelligence Section to practice observation post work and to give them all the latest intelligence on the enemy in France. The Section’s weekly planner does however end with ‘TEN MILE FORCED MARCH’.⁷⁹³

Anthony King has identified training as a crucial basis for combat effectiveness, by developing strong cohesion through shared knowledge and rehearsal:

In this way training generates solidarity in and of itself because it unites technical competences with a moral imperative to utilize them, even at personal risk. By uniting competence and morality (skill and morale), training is critical to combat performance and to the generation of cohesion.⁷⁹⁴

This process can be further enhanced by soldiers being led into battle by the men who had trained them.⁷⁹⁵ 6 Airborne’s training at all levels for the task it was to perform in Normandy was extremely thorough. Crookenden recalled how every platoon was carefully briefed using photographs and sand models, at the end of which each soldier had to stand up and repeat to his platoon commander what his own specific tasks in the operation. 6 Airborne’s continuous training created a virtuous circle of increased personal skill combined with personal pride and synergy with each mans’ closest comrades.

⁷⁹² TNA WO 179/2950 1 Cdn Para Bn WD 1944. April Summary, 1944.

⁷⁹³ Ibid.

⁷⁹⁴ King, p. 337.

⁷⁹⁵ Strachan, p. 216.

This chapter will now analyse Gale's plans and the innovation of new equipment to deal with two key issues that had the potential to turn 6 Airborne Div's Normandy operations into a catastrophe. First, how did 6 Airborne plan to deal with the problem of scattered glider landings and parachute drops? Second, the threat of a Wehrmacht armoured riposte to the airborne landings east of the Orne barrier. While 3 Div would be shielded by these two water barriers, Gale's men on the eastern bank would be vulnerable to mobile armoured forces, lightly equipped as they were.

If Gale's units were sufficiently dispersed by miss-drops and scattered glider landings then not only would it be unlikely that sufficient combat power be generated to achieve their objectives, but there was every chance that the division would be annihilated piecemeal by the Wehrmacht reinforcements advancing on the seaborne lodgement.⁷⁹⁶ Also command and control would be greatly diminished as those men disorientated and lost through scattering would inevitably include commissioned and non-commissioned officers.

Operation Deadstick would rely on the exceptional skill of the selected tug and glider pilots detailed to the mission, while Mallard would benefit from landing zones cleared and marked out in daylight. The mass drops of 3 and 5 Para Bdes were the most vulnerable, occurring over three separate dropping/landing zones (N, V, and K) at night, under fire and while other significant air operations were taking place around them. The navigational skill of the pilots, the effectiveness of the lead pathfinder paratroops, and the reliability of the Eureka/Rebecca system were the key interlinked factors here.

The first cause of scattering was navigational error. If the tug aircraft pilots were unable to

⁷⁹⁶ The experience of Operations Ladbroke and Fustian had highlighted the threat that scattering posed to 6 Airborne Division's operations in Normandy. In the case of the former, 1 AL Bde's dispersed landing meant only one platoon of 2 S Staffords had been in the right place to capture the objective. See chapter two

navigate their way to the DZ/LZ all else would be in vain. Hopkinson's report into the 1 Airborne Div's severe scattering issues encountered during operations in Sicily laid much of the blame at the door of the aircrews that 'were insufficiently trained for the tasks they were called on to do and that they lacked experience of anti-aircraft fire.'⁷⁹⁷ So how well trained were the air crews of 38 and 46 Groups RAF for the Normandy operations?

The well-established 38 Group RAF had built up its flying hours steadily in the months which preceded D-Day. In the period January to May 1944, the Group's aircraft had amassed 30,710 flying hours (peaking with an average of thirty-one flying hours per aircraft in May), carrying out on average at least nine glider towing missions and nearly ten live parachute drops per aircraft.⁷⁹⁸ 46 Group RAF had been formed hurriedly with a group equipment of C-47s in early 1944,⁷⁹⁹ but by the end of April had a trained crew for every frontline aircraft for parachute operations. Night training had been difficult to expand due to the close proximity of other RAF bases in the area, but had been the focus of 'maximum concentration' in April.⁸⁰⁰ The 20 April report also notes that while some progress had been made with Gee system training,⁸⁰¹ Rebecca equipment training had been difficult due to a lack of trained ground staff able to maintain it.⁸⁰² The intense preparation for Tonga/Mallard also included extensive use of scale models and photographs: oblique and vertical pictures were issued to the crews; a special night target map of the area of airborne operations was created, while a film was produced by moving cameras at the appropriate height over the scale models built

⁷⁹⁷ TNA CAB 106/691, 1st Airborne Division Sicily Report. Part Five: Lessons and Conclusions, p. 2.

⁷⁹⁸ Calculated from TNA AIR 8/1386 38 Group Monthly Progress Reports, January-May 1944 and TNA AIR 37/111 38 Group Organisation and Formation. Loose Minute 20 February 1944, '38 Group Squadrons'.

⁷⁹⁹ See chapter two – air assets.

⁸⁰⁰ TNA AIR 38/110 46 Group Formation and Progress Reports. 27 March 1944, p. 2, and 20 April 1944, p. 2.

⁸⁰¹ GEE was a Bomber Command navigational device invented in 1942. A navigator could work out his position by observing the time taken to receive pulse signals from three separate ground stations. John Terraine, *The Right of the Line: The Royal Air Force in the European War, 1939-1945* (Sevenoaks: Sceptre, 1988), p. 473.

⁸⁰² TNA AIR 38/110 46 Group Formation and Progress Reports, 20 April, p. 3.

by 6 Airborne at Tileshead camp.⁸⁰³ All air training involving troops ceased at the end of the first week of May to allow the RAF three weeks of concerted effort to bring its crews and aircraft 'up to concert pitch.'⁸⁰⁴ The pilots of the gliders and tug-aircraft for Deadstick had the most demanding mission of all in terms of navigation. The mission was a *coup de main* working under the assumption that both of the bridges were prepared for sudden demolition, so complete surprise was vital. The use of gliders would allow for a near silent approach giving the men the best chance to land in concentrated platoon groups to complete the task. Eight of the best glider crews were selected from the Glider Pilot squadrons and sent to Brize Norton for specialized training. Two sodium flare-lit fields were set up which were approximately the same sizes as LZ Y and X, and landings practiced, with the pilots wearing dark glasses. The number of flares was gradually reduced until the pilots could land the gliders in near complete darkness.⁸⁰⁵

The air plan extracted the best value from the experience of the crews and matched the right tasks with the aircraft available. The C-47s would drop the bulk of the lightly equipped 3 Para Bde on its three DZ/LZs; while the more experienced 38 Group pilots would drop the pathfinders, advanced parties and the coup de main force, the larger Halifax aircraft would tow the gliders carrying the A.Tk guns and other heavy equipment.⁸⁰⁶

6 Airborne's part in guiding aircraft to the DZs and LZs was the duty of the pathfinder company, 22 Indep Para Coy. The pathfinder plan for Tonga relied on eighty men split into six sticks of ten men (two sticks per DZ/LZ K, N and V) to mark out the three landing zones with a reinforcement group of twenty men. It was planned that they would land at 0020

⁸⁰³ Interview with William Bray, Intelligence Section 7 Para Bn, 25 August 2013. BTC 119 (Shrivenham), Staff College Course 1947, 'The Air Plan', pp. 8-9.

⁸⁰⁴ TNA WO 106/4315, Employment of 6th Airborne Division in NEPTUNE. Section B – Preparation, p. 3.

⁸⁰⁵ Claude Smith, *The History of the Glider Pilot Regiment* (London: Leo Cooper, 1992).

⁸⁰⁶ BTC 119 (Shrivenham), Staff College Course 1947, 'The Air Plan', pp. 10-16.

hours, four minutes after Deadstick had commenced, aiming to have their Eureka beacons and holophane lights in place and working five minutes before the main Tonga landings (0050 hours).⁸⁰⁷ This allowed twenty-five minutes from the pathfinders leaving the Albemarle to completing their set up.⁸⁰⁸ Major Lennox-Boyd's company had practiced extensively for the mission. From 1 January to 27 May they had carried out twenty-five named exercises which included four division sized, each of ninety or more gliders, LZ marking missions.⁸⁰⁹ Fifteen exercises (not all overlapping the named schemes) had included night activity. Two exercises, Heathen and Heathen II had focused specifically on setting up the EUREKA II equipment. 22 Company had rehearsed both 3 and 5 Para Bdes, as well as 1 Para Bde, the Polish Para Bde and US forces.⁸¹⁰ In addition the Company had run two pathfinder courses for the men who would form the advance parties from the six parachute battalions before the main bodies arrived. While all this had been achieved the company had completed 560 jumps in addition to those as part of the exercises.⁸¹¹ 6 Airborne's path-finding parachute force was well prepared; the success of Operation Tonga thus depended on the navigational technology that they would set up for the approaching pilots.

The Rebecca/Eureka two part system was made up of a ground-based transmitter beacon (Eureka) which emitted a radio signal detected by a receiver (Rebecca) mounted in either an aircraft or glider:

The aircraft transmits a R.F. pulse; when this is received by the beacon, the latter immediately emits an answering pulse on another radio frequency. The time

⁸⁰⁷ Seven holophane prismatic lights were laid out in a 'T' pattern, the tail panel being set to blink in Morse code the letter designation of the DZ/LZ. Jonathan Falconer, *D-Day: 'Neptune', 'Overlord' and the Battle of Normandy Operations Manual* (Yeovil: Haynes, 2013), pp. 142–143.

⁸⁰⁸ TNA WO 171/1249, 22 Indep Para Coy WD 1944 6 June 1944. Airborne Assault (AA), 3-F5-4.22.1, '22 (Indep.) Parachute Company – Historical Notes', Brief prepared by John Vischer in 1994, pp1-4.

⁸⁰⁹ TNA WO 171/1249, 22 Indep Para Coy WD, 1 January – 27 May 1944. SAILOR, BIZZ II, DINGO, DINGO II.

⁸¹⁰ Ibid.

⁸¹¹ Pathfinder courses, 4 and 13 March. The 560 jumps were comprised of descents from all the parachute aircraft types available to 38 and 46 Groups – Albemarle, Stirlings and C-47s. Ibid.

between the initial transmission and the reception of the answering pulse in the aircraft is measured by the observation of a time base on the screen of the cathode ray tube, and from this the range can be determined. Bearing is obtained with the aid of directive receiving aerials mounted on the wings to port and starboard of the aircraft fuselage. The amplitudes of the signals received on the aerials are compared, thus giving the desired information.⁸¹²

The system had been developed in 1941 to facilitate the blind dropping of equipment and weapons to the resistance groups organised by SOE, but by the summer of 1942 trials had been ordered to explore the possibility of using it in conjunction with airborne forces.⁸¹³ The first use of the device on British airborne operations had not been auspicious. On 19 November 1942 a detachment of airborne RE had crash landed two gliders in an attempted sabotage raid on the Vemork hydro electric plant in Norway. In the view of the RAF senior air staff officer of Army Co-operation Command, Operation Freshman had failed for four reasons. These were the poor briefing of the air crews, the unserviceability of the Halifax tug aircraft, the poor Norwegian winter weather, but primarily because the Eureka/Rebecca system failed completely.⁸¹⁴

The system was vulnerable in several key areas. The battery life of the Rebecca apparatus was very limited, the advice being that it not be turned on until within around five miles of the estimated position of the beacon, its battery life only lasting between thirty and sixty minutes.⁸¹⁵ The height of the aircraft carrying Rebecca could also inhibit the system's performance, whether high or low, a variable of up to 500 yards being possible from a signal

⁸¹² TNA AIR 10/4053 REBECCA and EUREKA Equipment, chapter 3. REBECCA MARK III, A.R.I. 5161, July 1943 p. 1.

⁸¹³ G.E. Rawlings, 'A Brief History of Rebecca and Eureka', *Duxford Radio Society*, Duxfordradiosociety.org, 20 (2013).

⁸¹⁴ TNA AIR 39/45 Operation 'FRESHMAN'. Memorandum from S.A.S.O (Senior Air Staff Officer), 19 December 1942. REPORT ON 38 WING OPERATION ORDER NO. 5. OPERATION "FRESHMAN", 8 December 1942, p. 6.

⁸¹⁵ TNA AIR 10/4053 REBECCA and EUREKA Equipment, chapter 3. REBECCA MARK III, A.R.I. 5161, July 1943 p. 8. G.E. Rawlings, 'A Brief History of Rebecca and Eureka', *passim*.

detected at 5,000 feet.⁸¹⁶ Further, if the beacons were positioned closer than five miles they would interfere with each other's signals.⁸¹⁷ Next both the beacon and the receiver-transmitter were physically vulnerable. The airdrops for Rebecca covered much of the airframe of a Horsa, in addition to wiring connecting them to the battery and the control dials in the cockpit, all of which would be vulnerable to enemy flak from the ground. Moreover the Rebecca cathode tube indicator that the pilot of the glider read while approaching the landing zone was difficult to interpret, its short battery life then only gave the pilot thirty minutes to find the DZ/LZ at night and almost certainly under enemy ground fire.⁸¹⁸ The Eureka beacon was packed into a kit bag for dropping while its batteries were strapped across the body of a paratrooper in a webbed harness and was therefore vulnerable to damage when landing.⁸¹⁹ These shortcomings came together to make the system vulnerable to damage by either accident or enemy design.

In summary, 6 Airborne's air plan had both strengths and weaknesses. The rapid build-up of 46 Group meant that it would inevitably be less experienced once committed to action when compared to 38 Group, but the pivotal Deadstick mission would be performed by 38 Group RAF crews. The Eureka/Rebecca system had been used in action, and two sets had been provided to each stick of paratroops to provide some redundancy in the case of one of the sets being smashed on landing. The pathfinders had practiced vigorously for months leading up to the operations and had been thoroughly briefed on the vital task they would perform. Apart from allowing 46 Group RAF more flying hours to practice, with the

⁸¹⁶ TNA WO 291/347, Report on Trials of Rebecca and Eureka carried out at Netheravon during January 1943. (Report dated on last page as 19th February 1943) p. 8.

⁸¹⁷ Ibid., page 2 of abstract.

⁸¹⁸ TNA AIR 10/4053. See diagrams at the back of the report. The updated REBECCA III and EUREKA II sets were delivered in time for D-Day, but battery life still limited operation to thirty minutes. G.E. Rawlings, 'A Brief History of Rebecca and Eureka', *passim*.

⁸¹⁹ EUREKA had been used by pathfinders in FUSTIAN, but the set had been smashed on landing. TNA WO 169/10357, 21st Indep Para Coy WD 1943, 13 July 1943.

technology available in June 1944 the plans put in place were the best that could be conceived.

The second key threat concerned enemy armoured forces, for which a well-coordinated anti-tank plan was needed. The Wehrmacht forces waiting in Normandy fielded numerous armoured fighting vehicles (AFVs) all capable of inflicting severe casualties on the lightly armed parachute troops that would seize the Orne bridgehead objectives.⁸²⁰ Gale had identified that a Wehrmacht armoured northerly push from the Caen area to the two crucial bridges represented the most critical threat to the 6 Airborne's bridgehead, and organised two successive exercises which concentrated on the 'siting and positioning' of anti-tank (A.Tk) guns, Buster and Buster II.⁸²¹ This was in addition to the airlanding A.Tk gun platoons being sent on routine 'shoots'.⁸²² The reduced strength 21.Pz.Div had been clearly identified to the southwest of Caen, air reconnaissance reports had indicated that the bulk of this division was harboured around Mezidon.⁸²³ This was some 30km from DZ 'N', near enough to allow warning of the capture of the bridges to be passed to the alerted division quickly, yet far enough away to allow it breathing space to organise its self to attack the Ranville/Le Bas de Ranville position. Additionally the full-strength 12-SS.Pz.Div was located to the west of the landing area near Hernay-Dreux, which could develop operations along the same

⁸²⁰ While the individual allocation of manpower and tanks varied considerably between the panzer divisions, they all possessed a plethora of armoured cars, personnel carriers, self-propelled guns which provided mobile machine gun fire which could provide vital support in any infantry battle. 6 Airborne intelligence forecast 21.Pz.Div would field four battalions of Pz Kw III and Pz Kw IV as well as some Tiger tanks and French Somuas. AA H6-2.21.4 Gale Papers. '6th Airborne Division Summary of Information No.1', Intelligence Report 28 April 1944; Michael Frank Reynolds, *Steel Inferno: I SS Panzer Corps in Normandy: The Story of the 1st and 12th SS Panzer Divisions in the 1944 Normandy Campaign* (Staplehurst: Spellmount, 1997), pp. 24–29.

⁸²¹ AA 4H4-2.21.1, Gale Papers. Ex BUSTER 13 August 1943 and Ex BUSTER II 20-21 September 1943; Gale, pp. 26–26, 40–41.

⁸²² TNA WO 171/1279, 12 Devon WD. 1-5 February 1944; TNA WO 171/1383, 1 RUR WD. 29 January 1944.

⁸²³ TNA WO 285/3, 2nd Army Intelligence Reports. SECOND ARMY INTELLIGENCE SUMMARY No.2, UP TO 1200 hours 29th May 1944.

channel.⁸²⁴ The predictions for the appearance of the various components of 12 SS Panzer were hair-raising. The Recce battalion could be in action against the Ranville position by 1000hrs, both panzer grenadier regiments by midday and the complete division by 1800hrs.⁸²⁵ 6 Airborne would be shielded by the canal and river if the panzers attacked from the west but if 3 Div was unable to relieve the lightly armed parachute brigades on the eastern side they would suffer heavily, if not be overwhelmed. It was anticipated that if 3 Div ran to timetable it would be at the bridges by 1100 hrs, but Gale had to plan for a worst case scenario.⁸²⁶

Gale planned to deal with this threat making full use of all A.Tk guns within the division, and by closely co-opting the supporting elements available to him within the 1 Corps/Sword area. By the summer of 1944 the British army had effective A.Tk weapons to deal with all but the most heavily armoured Wehrmacht AFVs. The PIAT ('projector infantry anti-tank') was issued on a generous scale to the parachute units within the Division,⁸²⁷ but was only effective at short range (30m) from a well-concealed ambush position.⁸²⁸ The effective deployment of the division's A.Tk guns was needed to secure the bridgehead against a more concentrated mechanised attack. Each of the airlanding battalions sported eight six-pounders,⁸²⁹ while 3 and 4 AL A.Tk Btys held twenty-four six-pounders (6 pdr) and eight of the powerful seventeen-pounder (17 pdr) gun between them (the latter being in A and B

⁸²⁴ BTC 120 (Shrivenham), Account of Operations, 6 Airlanding Brigade, '6 Airlanding Brigade Operational Order No.1', 19 May 1944, p. 1.

⁸²⁵ BTC 120 (Shrivenham), Account of Operations, 6 Airlanding Brigade, 'Appreciation of the Situation', 16 May 1944, p.1.

⁸²⁶ Ibid., p.6.

⁸²⁷ Each parachute battalion included an AT platoon in its HQ company equipped with 10 PIATs. Forty, pp. 168–169.

⁸²⁸ The PIAT could throw its shaped charge 750 yards, but its effective AT range was only 100 yards. Ian V. Hogg, *The Encyclopedia of Infantry Weapons of World War II* (London: Arms and Armour Press, 1977), pp. 148–149.

⁸²⁹ The War Office, 'AIRBORNE OPERATIONS PAMPHLET No.1 (1943)' (London, 1943), pp.38-41; Peter Harclerode, *'Go to It!' The Illustrated History of the 6th Airborne Division* (London: Caxton Editions, 1990), p. 22.

Troops, 3 AL A.Tk Bty). While the 6 pdr had the advantage of being small enough to load into a Horsa glider with its jeep tow, it was incapable of disabling the most up-to-date panzers deployed in France until the widespread issue of armour piercing discarding sabot (APDS) ammunition later in the summer.⁸³⁰ However the 17 pdr had been identified as a battle-winning weapon prior to the landings and had been in use since early 1943.⁸³¹ Indeed, in a letter to the GOC 8 Corps regarding the number of enemy Panther tanks that might be encountered, Dempsey wrote:

17-prs in all forms, and sabot ammunition, are absolutely first in our priority of equipment. The QMG and all those concerned are quite clear on this.⁸³²

The only drawback to the seven 17 pdr was its large size, which required a Hamilcar glider for both it and its tractor tow. Gale planned to make the best use of the A.Tk guns within the division to form as formidable a barrier as possible around the key Bas de Ranville/Ranville position that was vulnerable to an enemy armoured push. The shortage of aircraft dictated that the six-pounders of 12 Devon and 3 AL A.Tk Bty would have to be delivered to the bridgehead on D+1.⁸³³ This removed twenty six-pounders from Gale's calculations which dictated he could only allocate one section of two 6 pdrs (4 AL A.Tk Bty) to 3 Para Bde for the pre-assault shoot against the Merville Battery, and to later consolidate the Bois de Bavent-Troarn line.⁸³⁴ Gale weighted the loading of his fourth lift (0320 hours onto DZ 'N') towards his A.Tk guns in addition to RE assets and his divisional HQ. The four seventeen-pounders of A Troop 3 AL A.Tk Bty and the remainder of 4 AL A.Tk Bty were

⁸³⁰ Ian V. Hogg, *British and American Artillery of World War II* (London: Greenhill, 2002), pp. 75–81.

⁸³¹ TNA WO 231/10 Lessons from the Tunisian Campaign, p. 13; L. F. Ellis, p. 546.

⁸³² TNA WO 285/1 Planning 2nd Army Attack on Normandy. Letter to Lieutenant-General O'Connor, 29 May 1944.

⁸³³ TNA WO 171/1279, 12 Devon WD. 7 June 1944.

⁸³⁴ TNA WO 171/1242, 9 Para Bn WD June 1944, Appx 'Immediate Report', dated 27 June 1944; BTC 245 (Shrivenham), 6 Airborne Division, Operation Overlord – Booklets, 'Extracts from 6 AB Div Op Instr No 1 dated 17 May 44', pp. 5-6; TNA WO 171/593 3 Para Bde WD, Appreciation of Situation 14 April 1944.

flown in to cement the 5 Para Bde position around the bridges.⁸³⁵ The detailed instructions for Kindersley and Poett emphasised the importance of maintaining A.Tk and machine gun defences. To 6 AL Bde:

The framework of your defence plan must rest on the anti-tank and medium machine gun layout. This layout must cover the open southern flank and must further include alternative positions to cover the open ground north of Ranville.⁸³⁶

Each of the airlanding battalions were eminently suited to a vigorous defence of the main LZ and the bridges. Not only did they contain the 6 pdr A.Tk guns, but also four Vickers medium machine guns, eight three-inch mortars and twelve 20mm anti-aircraft (AA) guns which could also be used to deadly effect against ground targets.⁸³⁷ Even with the absence of 12 Devon, Gale planned that the Brigade would potentially land 1,600 fresh men directly into the bridgehead adjacent to the key divisional objectives.

The defence of the two bridges was the most important objective that 6 Airborne Div had been set, and Gale's simple plan made the best use of the light parachute and heavy glider troops he had at his disposal.⁸³⁸ The presence of the anti- glider poles forced Gale into switching 5 Para Bde for 6 AL Bde to seize the bridges, a task they were well suited for, landing at night with a strong short-range A.Tk (PIAT) potential, well capable of dealing with enemy probes by single or small numbers of AFVs. The fly-in of 4 AL A.Tk Bty towards dawn and later 6 AL Brigade would give the long-range A.Tk capability needed against organised

⁸³⁵ The four 17 pdrs and their tractors would have been accommodated by the four Hamilcars listed in the Air Plan, while the eight 6 pdrs and their associated jeeps would have been carried in eight of the 68 Horsas allocated to this lift. BTC 119 (Shrivenham), Staff College Course 1947, 'The Air Plan', p. 15; Harclerode, pp. 75, 77 & 79.

⁸³⁶ TNA CAB 106/970, 'Report on Operations of 6th Airborne Division in Normandy, 6 Jun- Aug 27', Appdx F.

⁸³⁷ Forty, pp. 168–169.

⁸³⁸ John Greenacre writing in 2010, viewed the failure to adopt a more flexible approach to mixing the airlanding and parachute troops in ground operations as a minor but significant failure of Market Garden. J.W. Greenacre, *Churchill's Spearhead: The Development of Britain's Airborne Forces during the Second World War* (Barnsley: Pen & Sword Aviation, 2010), pp. 195–196.

Wehrmacht attacks. The concentration of the two brigades would allow Gale and the divisional staff to exert close personal control on operations, being able to visit any area under pressure and organise a response immediately.

The second solution utilised by Gale to the threat of a concentrated enemy forces was the planned co-option of the firepower of nearby conventional role forces. For a division with a light scale of heavy weapons due to its specialist role, 6 Airborne would be heavily reliant on its airlanding artillery once landed and engaged in combat. General Sir Bernard Paget had made it clear to Gale in June 1943 that his division would almost certainly be included in the invasion operations it was anticipated First Canadian and Second Armies would be carrying out on the Continent, beginning a race to recruit and train his division.⁸³⁹ The inclusion of still forming elements in the airborne plan extended to organic units of the 6 Airborne Division itself, particularly its artillery and signals units. The war establishment of the Signals detachment for each airborne division was still being altered only two months before D-Day, with additional personnel being drafted in from London District and Southern Command.⁸⁴⁰ The 53rd Regiment Royal Artillery, the Worcestershire Yeomanry (53 RA), joined the Division on 27 October 1943 but was only fully mobilised by the end of January 1944; its three batteries fired together for the first time on 19 January. It would only take to the air for the first time in gliders on 19 March as part of Exercise Bizz II, just ten weeks before D-Day.⁸⁴¹

⁸³⁹ TNA WO 205/751, Training of 6th Airborne Division. 21st Army Group to HQ 6th Airborne Division, 25 June 1943.

⁸⁴⁰ TNA WO 205/751, Training of 6th Airborne Division. Memo from HQ 21st Army Group to War Office, 26 March 1944.

⁸⁴¹ D.R. Guttery, *The Queen's Own Worcestershire Hussars 1922-1956* (Stourbridge: Mark and Moody Ltd, 1958), pp. 50–51.

As has been seen, only one battery of 53 RA was landed by air on 6 June, the other two batteries (210 and 212) and supporting elements being landed on 13 June by sea.⁸⁴² However the 6 Airborne's CRA, Lieutenant-Colonel Jack Norris, formed an improvised unit later called the 'Forward Observer Unit'. This placed the two battery commanders of the seaborne batteries with the two parachute brigades and used other Forward Observing Officers (FOOs) of 3 Div and Forward Observers Bombardment (FOsBs) who directed RN gunfire support. The two Parachute Brigades received the bulk of the FOOs, while 6 AL Bde and 1 SS Bde had just one FOO and some RN support.⁸⁴³ The system was set up before D-Day by Norris who co-ordinated all the nominated officers and ORs who reported to him at Bulford to be briefed. Once established in the bridgehead the artillery support 6 Airborne could call on was considerable, enjoying the pooled assets of 1 Corps.⁸⁴⁴ By skilfully combining his own RA resources in this way Norris planned to completely alleviate 6 Airborne's shortage of artillery assets and enormously increase the Division's firepower.

One area which could have been improved was 6 Airborne's capability to call in RAF support. Sebastian Ritchie identified this as a major weakness in Operation Market, and he makes the point that nothing was done until the last minute before the Arnhem operation to rectify the problems 6 Airborne encountered in Normandy.⁸⁴⁵ Shelford Bidwell states that a Colonel Carrington visited Browning to discuss the Woodall ground-air system before Market, but nothing was done about developing an airborne version, laying the blame at

⁸⁴² Guttery, p. 57.

⁸⁴³ Guttery, p. 56.

⁸⁴⁴ This included the three field regiments of 3 Div, the heavy and medium regiments of 4th Army Group Royal Artillery (AGRA), two cruisers and several RN destroyers. AA 4H4-2.21.1, Gale Papers. '6 AIRBORNE DIVISION OPERATION INSTRUCTION No.1, 17 May 1944, p. 5. BTC 120 (Shrivenham), Account of Operations, 6 Airlanding Brigade, '6 Airlanding Brigade Operational Order No.1', 19 May 1944, p. 6; Guttery, p. 61 facing diagram; L. F. Ellis, pp. 523 & 526.

⁸⁴⁵ Sebastian Ritchie, *Arnhem: Myth and Reality* (London: Robert Hale, 2011), pp. 75–76.

Browning's door.⁸⁴⁶ The post action report which he refers to, states that prior to Overlord it had been agreed that some signallers would be trained to call in air support but that 'with all the other training commitments in an airborne unit' there had not been time. Also, the WS 76 wireless set had been found to underpowered, and the British truck which had the radio 'tentacle' attached could not be carried by air.⁸⁴⁷ The utilisation of the massive Allied air component would certainly have made up for 6 Airborne's shortage of heavy weapons and it is strange that another vehicle, most obviously a jeep, could not have been adapted. During Operation Thursday, the second Chindit operation into Burma (March 1944), Wingate's air-transported Chindits had been ably supported by the Air Commando's Mustang fighter-bombers.⁸⁴⁸ So the precedent was there.

The assault on the battery at Merville throws up some difficult questions regarding the plan formulated by Terence Otway. His task was daunting enough – 9 Para Bn was to assault a heavily fortified battery position garrisoned by an estimated 200 men. Otway formulated an intricate plan to break into and destroy the Merville battery which had been reliant on heavy weapons which were lost in the scattered glider and parachute landings. While the rest of the battalion established a 'firm base', the attack would be supported by a separate mortar position, two sniping groups armed with A.Tk rifles and Brens, a diversion group with PIATs and German speakers to confuse the defenders with misleading shouted orders and two 6 pdr A.Tk guns positioned to the west of the battery to add further fire. The actual assault would be carried out by a breaching company followed by an assault company while a glider assault party landed simultaneously on the casements, guided in by star shells fired

⁸⁴⁶ Shelford Bidwell and Dominick Graham, *Fire-Power: The British Army, Weapons and Theories of War, 1904-1945* (Barnsley: Pen & Sword Military Classics, 2004), p. 273.

⁸⁴⁷ TNA AIR 37/1214 Allied Airborne Operations in Holland, pp. 13-14.

⁸⁴⁸ David Rooney, *Wingate and the Chindits: Redressing the Balance* (London: Cassell, 1994), p. 120.

into the compound by the mortar group.⁸⁴⁹ Otway's plan was complicated, but he had trained his men exhaustively to ensure its execution and both he and Hill believed the task could be done.⁸⁵⁰ However, on D-Day the force Otway was able to muster on the ground made the enactment of this plan impossible – just 150 men from an original strength of 613.⁸⁵¹

Could Merville have been dealt with differently? Alistair Pearson's view was set down in Alan Jefferson's book, as he is recorded viewing one of the rehearsals to storm the battery, 'It's all far too complicated for me.'⁸⁵² In his IWM interview with Julian Thompson, Alistair Pearson, was frank in his views of Otway's plan. 'For an airborne operation it was out of this world', 'going through a minefield – madness', but 'Hill agreed the plan.' When asked how he would have tackled Merville, Pearson stated it needn't have been that complicated – a diversion and then the main gate blown.⁸⁵³ In the light of the St. Nazaire raid (see **Figure 2**), a high effect/value result but at high cost, it could be construed that as long as 9 Para Bn's attack foiled the battery's activity a pyrrhic victory would be acceptable. In such a scenario, allowing Otway the extra weapons and the three gliders for his small *coup de main* would seem reasonable to give the battalion the best chance of success.

By 5 June 1944, Gale had created a high quality infantry division trained in a specialist role and ready to spearhead the British Army's most important offensive operation in Europe during the Second World War. Only a small percentage of its men had seen actual combat, the division would be brand new to battle, and executing Britain's first divisional sized

⁸⁴⁹ TNA WO 171/1242 9 Para Bn WD, Appendix A 'Immediate Report', 27 June 1944.

⁸⁵⁰ Neil Barber, *The Day the Devils Dropped In*, James Hill's Forward.

⁸⁵¹ TNA WO 171/1242 9 Para Bn WD, 6 June 1944; Alan. Jefferson, *Assault on the Guns of Merville: D-Day and after* (London: John Murray, 1987), p. 193.

⁸⁵² Jefferson, p. 21.

⁸⁵³ IWM interview - Pearson, Alistair, no.21033 (recorded 1989)

airborne operation at night.⁸⁵⁴ The division was lightly armed, but would be well-supported by the firepower of surrounding conventional role forces once they had landed. 6 Airborne was highly motivated and cohesive thanks to the development of a strong esprit de corps brought about a shared hardship which was the result of tough, realistic and relevant training.

⁸⁵⁴ When interviewed, Hill had stated that virtually the only men who had a 'heard a shot fired' in 3 Para Bde were Alistair Pearson, Major Roseveare RE and himself. IWM interview - Hill, Stanley James Ledger, no.12347 (recorded 25/11/1991)

Chapter Six - Combat Effectiveness: 6 Airborne Division in Action, 6 June – 27 August 1944

By 5 June 1944 Gale's 6 Airborne Div was highly trained and well-motivated, but it was still untried in battle. Despite its lack of combat experience its very first action would see it tasked to perform vitally important tasks in support of the D-Day landings. The purpose of this chapter is to isolate the combat effectiveness of 6 Airborne both during the landings phase of the campaign and later while holding the Orne bridgehead. The first chapter section will show how combat effectiveness has been defined by commentators, and how 6 Airborne's performance can be gauged. In part two, how successful was 6 Airborne in achieving its own objectives and supporting the seaborne landings? How can the investment in moulding be seen benefitting the division, and how did airborne leadership elevate its performance? The truest measure of the combat effectiveness of military forces, apart from the achievement of finite objectives, has to be their effect on the enemy. The third part of this chapter explores the Bréville episode (10-12 June 1944), the decisive action fought in the Orne bridgehead. The opposition was formed from the strong 346 Gren. Div supported by elements of 711 Gren. Div and 21.Pz.Div. The battle is isolated as a case study to show the impact of 6 Airborne on the enemy by viewing the war diary of LXXXI A.K. The confidence of the German Corps command can be seen to erode as events unfold and 6 Airborne dominates the Bréville battlefield inflicting severe losses on 346 Div. A final fourth section reviews how the Division held the line for three months, and how it adapted to the challenge of an inadequate scale of equipment for a static role.

I. *The Measurement of Second World War Airborne Forces Combat Effectiveness*

The creation of 6 Airborne Div must balance cost against operational benefit, and the 6 Airborne's impact on D-Day operations can be viewed as a summation of their 'combat effectiveness.' A survey of how combat effectiveness has been defined and calculated is required at this point to set 6 Airborne's contribution to D-Day into the theoretical discussion.

Combat Effectiveness can be defined as '1) A term used to describe the abilities and fighting quality of a unit. 2) The quality of being effective in combat.'⁸⁵⁵ This meaning defines proven ability, distinct from 'combat power', which is the summation of the potential destructive power, the means, that can be targeted against the enemy,⁸⁵⁶ or 'broadly speaking, resources multiplied by effectiveness.'⁸⁵⁷ The human element of combat power could also be called 'Fighting Power', for which a more expansive definition was provided by Martin van Creveld:

Within the limits set by its size, an army's worth as a military instrument equals the quality and quantity of its equipment multiplied by what, in the present study, will be called "Fighting Power." The latter rests on mental, intellectual, and organizational foundations; its manifestations, in one combination or another, are discipline and cohesion, morale and initiative, courage and toughness, the willingness to fight and the readiness, if necessary, to die. "Fighting Power", in brief is defined as the sum total of mental qualities that make armies fight.⁸⁵⁸

Put simply, combat effectiveness represents the ability/prowess of the unit, while combat power is the total destructive power it can level against the enemy. Therefore 6 Airborne

⁸⁵⁵ Trevor N. Dupuy, Grace P. Hayes and Chris Johnson, *Dictionary of Military Terms: A Guide to the Language of Warfare and Military Institutions* (New York: The H.W. Wilson Company, 1986), p. 52.

⁸⁵⁶ 'Combat Power – The total means of destructive or disruptive force that a military unit or formation can apply against an opponent at a given time.' Dupuy, Hayes and Johnson, p. 53.

⁸⁵⁷ S. Hart, *Colossal Cracks: Montgomery's 21st Army Group in Northwest Europe, 1944-45*. (Mechanicsburg, Pa.: Stackpole Books, 2007), p. 87.

⁸⁵⁸ Martin Creveld, *Fighting Power: German and U.S. Army Performance, 1939-1945* (London: Arms and Armour Press, 1983), p. 3.

was lightly armed and in possession of limited munitions and supplies, its combat effectiveness must be the key focus.

The subject of military effectiveness, of which combat effectiveness forms an element (along with political, strategic and operational effectiveness) has been explored closely by the writers who have contributed to the three recent volumes which have been edited by Alan R. Millett and Williamson Murray.⁸⁵⁹ These volumes wrap combat effectiveness up in tactical effectiveness, which factors in the quality of equipment and vehicles.⁸⁶⁰ Williamson Murray's chapter in the Second World War volume which explores Britain's military effectiveness applauds the UK's strategic effectiveness, citing the use of intelligence and the allocation of resources as war-winning elements, but questions the British Army's operational and tactical capability. Improvements could have been made, but:

But it must be stressed that those improvements in effectiveness at best could only have been incremental in nature and would have required a *substantial* rethinking of tactical and operational approaches, a continuity of leadership that was not often present, and a willingness to train long and hard at making small improvements.⁸⁶¹

His words chime with the conclusions of Timothy Harrison-Place regarding the training and doctrinal clarity of conventional role forces as discussed in chapter five.⁸⁶²

Earlier analysis had attempted to calculate finitely a unit or formation's combat effectiveness or fighting power. An actual empiric measurement of a unit's combat effectiveness can be used in two ways – as a method of retrospectively assessing its impact in a historical action, or as a way of gauging its possible contribution in a future encounter.

This obviously moves the measurement of combat effectiveness from being a historical

⁸⁵⁹ Williamson Murray and Allan Millett (eds.) *Military Effectiveness*, Vols I-III,

⁸⁶⁰ *Military Effectiveness: Volume III. The Second World War*, ed. by Alan R. Millett and Williamson Murray (London: Allen and Unwin, 1988), pp. 307–314.

⁸⁶¹ Millett and Murray, p. 129.

⁸⁶² Timothy Harrison-Place, *Military Training in the British Army, 1940-1944: From Dunkirk to D-Day* (London: Frank Cass, 2000).

analytical exercise into the realms of current military affairs and defence policy. In either situation judgements have to be made in the allocation of numeric values to be set against variables, for example as to the extent the battlefield's terrain will augment the defence, or perhaps the impact of a higher standard of training invested in one of the combatants.

Colonel Trevor N. Dupuy has gone to the greatest lengths to use a grading or mathematical approach to calculate combat effectiveness.⁸⁶³ The first method used a complicated calculation based on a large number of variables⁸⁶⁴, while a second system was based more simply on a ratio of casualties inflicted to own personnel involved moderated by a factor defined by the previous calculation.⁸⁶⁵ Dupuy's approach fails in situations in which own losses are of no concern to one side, and cannot measure an improvement in an army's performance which routinely suffers heavy casualties. The allocation of grades/numeric values can be subject to debate. For example, Lt. General John H. Cushman discussed the auditing of the armed forces of the fighting powers in the two world wars by the historians who had contributed to the Millett and Murray edited military effectiveness series, grading them for operational and tactical performance.⁸⁶⁶ He states in his footnotes that 'ratings are highly subjective,'⁸⁶⁷ but the grades given to the British Empire can be questioned, especially when he states in the same footnote that the scores encompass the skill levels of all the nations' armed forces, air land and sea. Few would argue that the British Army had doctrinal learning challenges during the Second World War, but scoring it lower than the Russian

⁸⁶³ Trevor N. Dupuy and Gay M. Hammerman, *Soldier Capability-Army Combat Effectiveness (SCACE)* (Dunn Loring, Virginia: T.N. Dupuy Associates inc., 1980); Colonel Trevor N. Dupuy, *Numbers, Predictions and War: Using History to Evaluate Combat Factors and Predict the Outcome of Battles*. (London: MacDonald and Janes, 1979).

⁸⁶⁴ Dupuy lists seventy-three different variables. Dupuy, p. 32.

⁸⁶⁵ Crevel, *Fighting Power: German and U.S. Army Performance, 1939-1945*, pp. 5–9. See also - Niklas Zetterling, *Normandy 1944: German Military Organisation, Combat Power and Organisational Effectiveness* (Winnipeg: J.J. Fedorowicz Publishing Inc, 2000), pp. 96–99.

⁸⁶⁶ Millett and Murray, p. 321.

⁸⁶⁷ Millett and Murray, p. 338.

army in the First World War seems questionable, and including the 1939-45 Royal Navy on the same grade is extraordinary.

Stephen Biddle's 2004 monograph stimulated a lively response amongst established military analysts, as he sought to develop a new way of calculating combat power by shifting the focus away from calculations based on 'gross numerical strength' and towards a theory based more on doctrine as the reason why battles are won or lost:

I argue that a particular nonmaterial variable – force employment, or the doctrine and tactics by which forces are actually used in combat – is centrally important, shaping the role of material factors and often predetermining winners and losers.⁸⁶⁸

Biddle was criticised for the operational examples he used, the calculating system/statistical analysis presented and his focus on high-intensity battle at a time when asymmetric warfare seemed certain to dominate future conflicts.⁸⁶⁹ Rupert Smith set forward his own formula to calculate 'capability', based on three factors that he identified as the vital elements in winning battles, viewing the action as a 'trial of strength', means, will and way:

And so, having analysed and understood the necessary components, we can finally attempt to assess the overall capability of a force as a product of the trial of strength and a clash of wills: the means multiplied by the way multiplied by the way multiplied by the will times three. For those of a mathematical bent I express it as a formula:

Capability = Means x Way² x 3Will⁸⁷⁰

Smith then gives no list of suggested factors for any combatants' means, will or way factors for past wars. He does however illustrate his thinking with a brief discussion of the Vietnam

⁸⁶⁸ Stephen Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Woodstock: Princeton University Press, 2004).

⁸⁶⁹ Stephen Biddle, 'Military Power: A Reply', *Journal of Strategic Studies*, 28 (2005), 453–69; Eliot A. Cohen, 'Stephen Biddle on Military Power', *Journal of Strategic Studies*, 28 (2005), 413–24; Martin Creveld, 'Less than Meets Ther Eye', *Journal of Strategic Studies*, 28 (2005), 449–52; Lawrence. Freedman, 'A Theory of Battle or a Theory of War?', *Journal of Strategic Studies*, 28 (2005), 425–35; Michael Horowitz and Stephen Rosen, 'Evolution or Revolution?', *Journal of Strategic Studies*, 28 (2005), 437–48.

⁸⁷⁰ Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (London: Allen Lane, 2005), pp. 242–243.

War, to show the importance of will, and the British in Malaya to show how limited means can be managed to produce victory.⁸⁷¹ Two recent theses have also explored combat effectiveness. Andrew Hargreaves, in his exploration of Allied Special Forces identified two simple metrics for these raiding units:

The value and cost-effectiveness of specialist formations varied widely, and turned on many calculations. Yet it is both proportionality (in the number of formations raised and the scale of each) and utility (the frequency, duration and significance of their use) that are perhaps the most significant considerations.⁸⁷²

Peter Wood exhaustively explored different systems for explaining combat effectiveness, creating his own flow diagram to show the influences which he determined affected the performance of 21 NZ Bn.⁸⁷³ Succinctly, he clearly stated that attaining operational goals was an absolute measure of success in battle; 'A determinant of 21 Battalion's combat effectiveness, irrespective of casualty ratios or tactical effectiveness, will be whether it successfully completed its assigned mission or not.'⁸⁷⁴

Reviewing the high stakes nature of 6 Airborne's objectives and combat performance on D-Day through the criteria set down above, it becomes apparent that Wood's absolute measure of success/failure on objectives has to be a cornerstone measure. Achieving Hargreaves' 'disproportionately favourable results' in casualties inflicted on the enemy to satisfy Dupuy's formula is irrelevant, as the objectives are critical to Second Army and stretching enough.⁸⁷⁵ Therefore of perhaps more use as a measure of airborne forces, operating in role, would be 'mission effectiveness – the ability of a unit or formation to

⁸⁷¹ Smith, p. 243.

⁸⁷² Andrew Hargreaves, 'An Analysis of the Rise, Use, Evolution and Value of Anglo-American Commando and Special Forces Formations, 1939-1945' (KCL, 2008), p. 260.

⁸⁷³ Peter Wood, 'A Battle to Win: An Analysis of Combat Effectiveness through the Second World War Experience of the 21st (Auckland) Battalion' (Massey Univ. (NZ), 2012), p. 39.

⁸⁷⁴ Wood, p. 27.

⁸⁷⁵ Hargreaves, p. 235.

accomplish an assigned mission,⁸⁷⁶ although Smith's 'way' could represent the shock-surprise element. The 'means' being the light scale of arms airborne forces carried and obviously the emphasis on 'will' represents the effect of the hardening-type training these units receive. As airborne forces during the Second World War were used, once landed, to conduct the final stage of close infantry assaults, with little chance of a safe withdraw in case of failure, achieving operational success as planned was paramount.

What must temper this focus on success or failure is the issue of Pyrrhic victory.⁸⁷⁷ As Smith observed there is no point in a commander using his men in such a way as to 'lose the force.'⁸⁷⁸ In the early hours of 6 June 1944, the attainment of the operational goal would be pointless if 3 and 5 Para Bdes were so reduced by casualties they were incapable of holding the bridges/Ranville area and Bois de Bavent high ground. The German pre-disposition to launch vigorous local counter-attacks would be challenging to a lightly armed airborne force; especially one which had suffered serious losses of weapon-bearing head count and perhaps more significantly, junior leaders. Also in the longer term, the context of the 1944 UK's diminishing manpower pool would mean that a rebuild of the division would be prolonged, or simply not viable. In short, a success formula for airborne forces during the Second World War must see the objective(s) achieved, but not at a cost which leaves the units in question too weak to defend them until relieved.

The conclusion of this study is that the combat effectiveness of 6 Airborne must be measured by the simple metric of whether it achieved its set objectives.

⁸⁷⁶ Dupuy, Hayes and Johnson, p. 151.

⁸⁷⁷ 'A victory in which one side that attains its immediate objective in battle suffers such heavy losses that the victory is virtually worthless.' Dupuy, Hayes and Johnson, p. 177.

⁸⁷⁸ Rupert Smith, *The Utility of Force: The Art of War in The Modern World* (London: Allen Lane), p. 17 and p. 295.

II. *In Role Effectiveness - The Landings Phase – 6 June 1944*

The impact of the superb success of the critical *coup de main* operation on the two Orne barrier bridges must first be considered. The six Horsa gliders carrying Howard's reinforced company were released at 0020 hrs, four landing with great accuracy close to objectives which were quickly captured with only three casualties. The garrison was completely surprised by the near silent arrival of the gliders, in what Leigh-Mallory would later call the 'greatest feat of flying during the whole war'.⁸⁷⁹ If Operation Deadstick had failed the entire divisional plan would have begun to unravel. If Howard's force had been destroyed by mishap or enemy AA fire, or badly scattered, 7 Para Bn would have been required to capture the bridges. This unit, reduced by scattering, would have had to attack an alerted garrison and the battle could have become costly and drawn out if more enemy troops had been drawn to the firing.⁸⁸⁰ The success of Deadstick allowed 5 Para Bde to concentrate on the consolidation of the Ranville/Bas de Ranville position and to prepare for the glider landings due at 0230 hrs. This company-sized operation provided the key element of surprise for the whole of Gale's plan. While it has been revisited time and again by historians, the importance of its success cannot be underestimated as the entire divisional plan revolved around its success.

⁸⁷⁹ In the case of the former, five of the tug pilots reported release from their tugs between 4,500 and 5,500 feet. The three gliders intended to land on LZ X for the Caen Canal Bridge all landed on target, while the two for DZ Y (Orne River Bridge) landed 150 and 400 yards away respectively. The third glider for DZ Y was forced to release blindly on the orders of the tug pilot one mile east of Houlgate. This glider carried Captain Priday Howard's second-in-command and another platoon and landed close to two bridges crossing the Dives at Périers-en-Auge eight miles away. BTC 119 (Shrivenham), 'The Air Plan', 1947 Staff College, Camberley, 1947 Course, pp. 10-11.

⁸⁸⁰ The troops at the bridges were estimated as well armed all though not numerous. As far as the intelligence available to 3rd Para Bde was concerned, the two bridges were guarded by approximately 24 men with 13 MGs, 2 other infantry guns and an AA gun. (AA) 4-H4-2.21.4, Gale Papers, '6 Airborne Division, Summary of Information No.1', 28 April 1944, 'Details of Inf String Pts and Areas believed to occupied by Tps, B- Inland Areas', p. 2.

From 0100 hrs the mass of the two parachute brigades began their descent. All of the battalions were scattered in a varying degrees, due to problems the Pathfinder Company had encountered, which included the untimely death of their CO, but where mainly centred around faulty and incorrectly positioned Eureka beacons.⁸⁸¹

This large company was the path-finding unit for the Division, and was charged with marking out the night DZ/LZ for the subsequent landings by 3 and 5 Para Bdes.⁸⁸² Six sticks of 22 Indep Para Coy together with advance parties of the parachute battalions were landed at 0020 hrs on DZ/LZ K, N and V. The divisional operational plan allowed 30 minutes for 22 Coy to mark out these areas before the six battalions of the main body plus seventeen gliders carrying heavy equipment would be landed.⁸⁸³ Two Albemarle aircraft dropped a stick each on the DZ/LZ, however delays began to impact on the timetable for the operation, even before the men were on the ground:

Exit difficulties were reported by four of the six aircraft, and in three cases, two or more runs were required, but all troops were dropped, with an average time error of about 2 minutes except for one aircraft which completed the drop on the third run, 14 minutes late.⁸⁸⁴

The causes of these 'exit difficulties' were reported as firstly the 'heavy loads' the men were carrying, and secondly the 'cramped spacing' in the aircraft.⁸⁸⁵ These two issues require closer analysis.⁸⁸⁶

⁸⁸¹ (AA) 3-F5-4.22.1, '22 (Indep.) Parachute Company - Historical Notes', Account by John Vischer, 1994, p. 6; TNA WO 171/1249 22 Indep Para Coy WD 1944, 6 June.

⁸⁸² 22 Indep Para Coy was also responsible for guiding in 6 AL Bde at 2100 hrs, but this task represented a lesser challenge as LZ 'N' should by then be secured and the operation would have the advantage of daylight.

⁸⁸³ (AA) H-2-21-4, '6 Airborne Division Operation Instruction No.1', 17 May 1944, p. 2; BTC 119 (Shrivenham) BTC 273 'Report on the Operations carried out by 6 Airborne Division 5 JUN to 3 SEP 1944, p. 4.

⁸⁸⁴ A stick – 'the number of parachutists dropped by one aircraft in one run.' The War Office, AIRBORNE OPERATIONS PAMPHLET No.1 (1943), p.1; BTC 119 (Shrivenham), 'The Air Plan', 1947 Staff College, Camberley, 1947 Course, p. 10.

⁸⁸⁵ Ibid.

⁸⁸⁶ Additionally in one case the flooding at the edge of the DZ and the confusion caused by the RAF raid on Sallanelles disrupted the pathfinders attempting to mark out V. TNA WO 171/1249 22nd Parachute Company WD 1944, 6 June.

The load carried by the pathfinders was considerable. Each ten man section/stick was accompanied by three kitbags containing two Eureka sets and two holophane light kits,⁸⁸⁷ which were thrown from the aircraft with the jumping paratroopers. In addition each section was equipped with 'a Bren gun and supply of ammunition, 1 snipers' rifle, 5 Lee Enfield MK IV rifles and ammunition, 5 Sten guns with spare magazines, Mills grenades, Gammon bombs, Phosphorous smoke bombs, Commando knives'.⁸⁸⁸ The addition of two extra weapons (the sniper rifle and Bren gun) unnecessarily encumbered the pathfinder stick.⁸⁸⁹ If enemy troops were on or close to the DZ/LZ these extra weapons would not have saved the pathfinders, and they would have been better served by fewer weapons allowing more freedom of action. Also each pathfinder group was dropped simultaneously with battalion advanced parties, who carried standard infantry weapons sufficient to protect them. Obviously followed within thirty minutes by hundreds of men would land as the main force arrived.⁸⁹⁰

As outlined in chapter two the Albemarle aircraft was not built for this task. While faster than the C-47 and more nimble than the Stirling, it had restricted accommodation for the men and all the equipment needed:⁸⁹¹

Space inside the aircraft was cramped. Crouching positions had to be adopted. Each pathfinder was festooned with gear under his smock and had a kitbag strapped to one leg fitted with a quick-release and attached to him by a 20 ft. Cord. Travelling

⁸⁸⁷ (AA) 3-F5-4.22.1, '22 (Indep.) Parachute Company - Historical Notes', Account by John Vischer, p. 4.

⁸⁸⁸ Ibid.

⁸⁸⁹ A typical infantry section ammunition supply for a Bren gun would have been twenty five 30 round magazines, the load shared out amongst all men bar the section leader. Bouchery, *The British Soldier, Volume 2: Organisation, Armament, Tanks and Vehicles*, pp. 42–43, 70.

⁸⁹⁰ 50 men from 5 Para Bde, 7 and 13 Para Bn dropped on N; 20 8 Para Bn men on K; while on V 'C' Coy 1 Cdn Para Bn landed, charged with immediately attacking an enemy strongpoint close to the DZ/LZ. BTC 119 (Shrivenham), 'The Air Plan', 1947 Staff College, Camberley, 1947 Course., pp. 11-12; TNA WO 223/21, 1/CDN Parachute Battalion in France, 6 June-6 September 1944, Staff College Camberley 1947 Course, p. 4; WO 179/2950 1 Cdn Para Bn WD, 6 June 1944.

⁸⁹¹ Gregory, pp. 69–72.

positions were bum-on-floor, legs crooked, each man tucked into the next, No.1 (stick commander) at the rear next to the exit-hatch, No.10 nearest the aircrew.⁸⁹²

The 'legs dangling' situation of the stick commander was probably responsible for a tragedy which befell the company at the very moment it was about to go into action for the first time. The DZ N pathfinder party leader, the company CO Major Lennox-Boyd, 'made a premature and accidental exit' from one of the aircraft and was later found to have been killed.⁸⁹³ Trying to compensate for the lack of a role-specific transport aircraft by utilising Bomber Command's cast-offs, had directly inhibited the airborne spearhead of the most important offensive operation Britain would undertake in Europe during the Second World War.

Once landed the pathfinders problems continued. As they hurried to gather the Eureka sets, they were further delayed by the presence of 'young standing corn 2-3 feet high' which the reconnaissance photographs had failed to reveal.⁸⁹⁴ One DZ K stick had been dropped in error on the corner of N and quickly set up its holophane lights and Eureka beacons. By the time the error was realised and the equipment deactivated, several 8 Para Bn sticks had been dropped onto N.⁸⁹⁵ The other DZ K stick was even more unfortunate, 'coming under fire almost immediately after landing' half of its men were found to be missing on regrouping after landing, although one beacon was set up.⁸⁹⁶ On DZ V, both Eureka beacons of the first stick were smashed in the drop and by the time that the second stick had

⁸⁹² (AA) 3-F5-4.22.1, '22 (Indep.) Parachute Company - Historical Notes', Account by John Vischer, p. 3.

⁸⁹³ TNA WO 171/1249 22 Indep Para Coy WD 6 June 1944.

<http://www.chch.ox.ac.uk/cathedral/memorials/WW2/francis-lennoxboyd>, accessed 20 January 2014.

⁸⁹⁴ (AA) 3-F5-4.22.1, '22 (Indep.) Parachute Company - Historical Notes', Account by John Vischer, 1994, p. 6.

⁸⁹⁵ BTC 119 (Shrivenham), 'The Air Plan', 1947 Staff College, Camberley, 1947 Course, p. 10.

⁸⁹⁶ TNA WO 171/1249 22 Indep Para Coy WD 1944, 6 June. It was later discovered that four had been captured and one killed.

organised its self the main drop had commenced.⁸⁹⁷ Therefore as the aircraft carrying the main bodies approached the DZ/LZ, 'Lights were reported to be on all three D.Z./L.Z.'s, and Eureka to be operating on 'K' and 'N'. Although it is confirmed that both sticks were correctly dropped on D.Z. 'V', both Eureka beacons were damaged and unserviceable'.⁸⁹⁸ The thirty minutes allowed for the pathfinders to set up their beacons and lay out their 'T' light panels was simply not long enough, the level of confusion and equipment failure on each DZ/LZ then reflected and magnified as the main bodies began to land.

As a means of entering the battle the parachute drop phase must be viewed as a disaster. Although over the following twenty-four hours many of the misplaced parachutists managed to regroup with their units, the true loss in this situation was time. The men who spent the early hours of D-Day blundering around in the dark were not contributing to the Neptune/Overlord plan by achieving their objectives, as the countdown clock ran down to 0730 hrs when the Sword landings would begin. The DZ/LZ were reasonably close to the objectives but in terms of **Figure 1** a considerable barrier now existed in terms of translating the shock-surprise effect of the landing into energy for the close assault on the objectives. 7 Para Bn moved off to relieve Howard at fifty per cent strength at 0100 hrs, while 12 and 13 Para Bns could muster around sixty per cent of their pre-jump strength.⁸⁹⁹ 5 Para Bde was tasked with securing the Orne barrier/Bénouville positions located only 3000m from the furthest edge of DZ/LZ N at Bréville, the area least affected by pathfinder problems.⁹⁰⁰ Hill's 3 Para Bde bore the brunt of the miss-drops, and this formation's battalions faced the

⁸⁹⁷ (AA) 3-F5-4.22.1, '22 (Indep.) Parachute Company - Historical Notes', Account by John Vischer, 1994, App. H.

⁸⁹⁸ BTC 119 (Shrivenham), 'The Air Plan', 1947 Staff College, Camberley, 1947 Course, p. 10.

⁸⁹⁹ 7 Para WD, 'Lt-Col. Pine-Coffin's Account of D-Day, 0100 hrs 6 June to 0100 Hrs 7 June', 29 June 1944; TNA CAB 106/970 'Report on Operations of 6th Airborne Division in Normandy 1944 6 Jun – Aug 27', 1944, p. 7

⁹⁰⁰ BIGOT Map, 'Sheet No. 40/16 N.W. Information as at 19 May 44.'

additional challenge of needing to march some distance to various objectives once landed. As described above DZ/LZ K and V had seen the most serious disruption to the Pathfinders set-up of EUREKA. The experience of 8 and 9 Para Bns form a useful case study, showing how strong leadership overcame the impact of scattering. The brigade's initial numbers on landing were feeble; approximately thirty per cent of its WE manpower was available.⁹⁰¹ For example, at 0120 hrs 8 Para Bn's main body was represented by 30 men plus the CO, the advanced party reporting that the 'Bn appeared to be very widely dispersed and that no container A/C had dropped on D.Z.'⁹⁰² 1 Cdn Para Bn estimated that their actual DZ had been approximately 'ten times the size of that originally projected' due to 'apparently faulty air navigation', but regardless the battalion went into action immediately.⁹⁰³ By 0250 hrs 9 Para Bn had amassed '150 all ranks', while by 0330 hrs 8 Para Bn had gathered '11 officers and about 180 ORs'.⁹⁰⁴ The final number of men lost by scattering for the two brigades would be thirty officers and 628 ORs.⁹⁰⁵ This represented just under eighteen per cent of WE for the six units, effectively one and a quarter battalions.⁹⁰⁶ A 711 I.D. account later stated that around 300 British airborne troops had been captured in its divisional area east of the Orne by the evening of 6 June.⁹⁰⁷ Losses of forty to seventy per cent would be seen as crippling in a single engagement, the missing men weakened the Division's parachute brigades and

⁹⁰¹ TNA CAB 106/970 'Report on Operations of 6 Airborne Division in Normandy 1944 6 Jun-Aug 27', 1944, p. 6.

⁹⁰² TNA WO 171/1240 8 Para WD, 6 June 1944.

⁹⁰³ TNA WO 223/21, 1 Cdn Parachute Battalion in France, 6 June-6 September 1944, Staff College Camberley 1947 Course, p. 4

⁹⁰⁴ TNA WO 171/1240 8 Para WD, TNA WO 171/1242 9 Para WD 6 June 1944.

⁹⁰⁵ TNA CAB 106/970 'Report on Operations of 6 Airborne Division in Normandy 1944 6 Jun-Aug 27', 1944, p. 7.

⁹⁰⁶ War Establishment (WE) for a 1944 parachute battalion being 584 ORs and 29 officers. TNA WO 171/1245, 12 Para WD, Field Strength Return 27 May 1944. 13 Para Bn suffered the least from scattering and recorded only fifty-six men missing by the end of D-Day; TNA WO 171/1246 13 Para Bn WD, 6 June 1944.

⁹⁰⁷ Generalleutnant Joseph Reichert (B-403), 'The 711th Infantry Division Prepares for a Counterattack, 6 June 1944', in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), p. 247.

limited the further tasks they could undertake until replacements could be posted or the units augmented by supporting assets from elsewhere.⁹⁰⁸

Gale's efforts put into battalion commander selection, thorough briefing and tough training now began to pay a dividend. With only approximately a third of their strength the chances of success appeared low, but both Otway and Pearson re-thought their plans and improvised to proceed with their missions. Key evidence of this improvisation is seen in 8 Para Bn's war diary and echoes Gale's mission planning ethos. Pearson made a simple appreciation of the resources he had available to complete his tasks, estimated the enemy opposition based on local intelligence, and then created a simple plan:

0300 – C.O. appreciated situation as follows:-

1) From reports from recce party it appeared that remainder of Bn had dropped to the north of the D.Z. in area Ranville and Le Mesnil. 2) That Bn was not strong enough to capture Troarn and that we had no R.E. assistance to destroy the bridge. 3) That we had sufficient strength and explosives to destroy the bridges at Bures which was of single span type and could be destroyed without much technical assistance. 4) That if a position was taken up in area x rds 146695 and track running east to Bures sufficient force could be collected to attack Troarn later in the day from the north.

Therefore the plan was as follows:-

1) Strong fighting patrol of 1 pl from 'c 'coy would move to Troarn to make a recce and report on defences at west end of town. 2) remainder of Bn would move to area x rds 153700 leaving two dets P.I.A.T.s and covering force in area x rds 146695 to cover any movement of enemy north; and to guide any stragglers to Bn posn. 3) 1 offr and 2 ors to remain at R.V. till first light to guide any stragglers who may have arrived at R.V. after Bn had left.

0400 – Bn moved off.⁹⁰⁹

In this description of Pearson's plan Gale's planning style can be seen. Pearson had taken full responsibility for the situation with no need to confer with his brigade HQ and acted on his own initiative. His plan was aggressive and made best use of the diminished resources to

⁹⁰⁸ For example, elements of 6 Armd Recce, or the tanks of 13/18 H and company of 12 Devon that enabled 12 Para Bn to carry out the attack on Bréville on 12 June.

⁹⁰⁹ TNA WO 171/1240 8 Para WD, 6 June 1944.

hand, and its successful outcome reveals that it was clearly communicated to his subordinates. By daylight all of 8 Para Bn's objectives had been achieved. As Pearson had done three hours before, Otway made the most of his reduced numbers and carried the position with a ferocious assault. At the end of the action only seventy-five men were left on their feet and Otway's battalion was too weak to hold the position. His unit had been decimated by the scattering and combat losses but he had achieved the goal of disabling the battery for the critical hours of the seaborne landings.⁹¹⁰ Otway neutralised the Merville battery a quarter of an hour before schedule.⁹¹¹ The speed of recovery of the two battalions shows great drive and initiative on the part of Otway and Pearson, and strong unit cohesion within the depleted bands of paratroopers available.

Another indicator of 6 Airborne's combat power were the small groups of scattered troops who were motivated to fight their way back to the bridgehead. Indeed, one of the key lessons garnered from the operations in Sicily had been this positive effect of scattered drops causing confusion to the enemy.⁹¹² An example of this can be seen in the one misplaced glider load of Deadstick. Captain Priday and Lt. Hooper's platoon secured the bridge at Varaville where they had landed, eliminating its small garrison. He then realized they were in the wrong place and they moved quickly 10km across country and arrived at the bridge at 0230 hrs.⁹¹³ Another group which fought its way back to the Orne bridgehead came from 13 Para Bn, crossing into the airborne bridgehead at 2030 hrs on 7 June. 'CSM McParlan, 'A' Coy, reported. This WO was dropped off the DZ and established a fighting

⁹¹⁰ TNA WO 171/1242 9 Para Bn WD, Appendix A 'Immediate Report, 27 June 1944.

⁹¹¹ Chester Wilmot, *The Struggle for Europe* (London: Reprint Society, 1954), p. 261.

⁹¹² TNA WO 203/87 Organisation of Airborne Forces. Extract from Joint War Office/Air Ministry Report on the Employment of Airborne Forces, 15 October 1943. Part A, p. 3.

⁹¹³ TNA WO 171/1357, 2/Ox & Bucks WD 1944, 7 June 1944. (Shrivenham) BTC 120, 'Account of Operations 6 Airlanding Brigade', 'Report by Major R.J. Howard, DSO, Capture of Pegasus Bridge 5/6/ June 1944' p. 6.

base at ST SAMSON with 10 men of his stick and some Fighting French.⁹¹⁴ These small actions occurred across the entire Anglo-American landing area, and caused 'a strong feeling of insecurity' behind the front amongst the Wehrmacht defenders, and 'only large-scale mopping-up operations of the infantry restored order'.⁹¹⁵ Certainly many airborne troops would have simply given themselves up, but these small actions distracted the defenders from forming a clearer interpretation of what was unfolding.

The final reckoning for the scattered drops reveals the cohesion that Gale had built in the preceding twelve months. In the final tally the division lost approximately eighteen per cent of the WE of its six parachute battalions, effectively one and a quarter battalions, due to scattering.⁹¹⁶ However it should be noted that when 3 and 5 Para Bdes moved off their DZ on the night of 5/6 June, the formations' strengths stood at approximately thirty and sixty per cent respectively – 1,655 men.⁹¹⁷ The missing 2,023 would have equated to fifty five per cent losses due to dispersed landings if that had been the final number. However the determination of roughly 1,365 men, who as individuals and in small groups were determined to rejoin their units, reflects well on the esprit de corps that Gale had developed in less than a year. The return of stragglers can be seen in Hill's recollection that by the 10 June at St.Côme, 9 Para Bn had grown from the ninety survivors of the Merville attack to 270 men.⁹¹⁸

⁹¹⁴ TNA WO 171/1246, 13 Para WD, 7 June, 1944.

⁹¹⁵ Generalmajor Gerhard Triepel (B-260), '9-13 June: Cotentin Coastal Artillery', in *Fighting in Normandy: The German Army from D-Day to Villers-Bocage*, ed. by David C. Isby (London: Greenhill Books, 2001), p. 82.

⁹¹⁶ WE for a 1944 parachute battalion being 584 ORs and 29 officers. TNA WO 171/1245, 12 Para WD, Field Strength Return 27 May 1944. 13 Para suffered the least from scattering and recorded only fifty-six men missing by the end of D-Day; TNA WO 171/1246 13 Para WD, 6 June 1944.

⁹¹⁷ TNA CAB 106/970 'Report on Operations of 6th Airborne Division in Normandy 1944 6 Jun-Aug 27', 1944, p. 6-7.

⁹¹⁸ Hill, Stanley James Ledger (interview), IWM no.12347, recorded 25/11/91.

The parachute brigades both achieved the tasks set for them. 5 Para Bde's mission was simple; to seize and hold the Caen Canal and Orne River bridges and the area of open farmland which would form the division's main landing and resupply DZ/LZ between Ranville and Bréville (N).⁹¹⁹ 12 and 13 Para Bns successfully beat off strong probing attacks from 125.Pz.G.R. throughout D-Day which culminated in a very heavy attack on 12 Para Bn on 7 June which included '9 MkIV Tanks and 50 lorried inf.' This ended when the enemy was driven off after three of the tanks were destroyed with an estimated one hundred plus casualties.⁹²⁰ 3 Para Bde had the most stretching tasks to perform on D-Day, employed in a destructive raiding role to demolish the Dives bridges and the Merville battery, and then obliged to fall back to vulnerable positions along the Bois de Bavent ('the LE PLEIN feature'), distant from any supporting conventional role firepower.⁹²¹ The Merville battery while not completely destroyed by Otway's improvised attack, was certainly removed as a critical threat to Sword beach, and its limited firepower remained suppressed by the RN for the remainder of D-Day.⁹²² The position remained an important objective for some time mainly due to its value as a forming up point for enemy efforts towards the Franceville-Plage/Sallanelles area. As has been discussed 3 Para Bde suffered the worst effects of scattering which became a challenge as it engaged in operations along its front. Hill recalled his limited numbers, 'that 300 Canadians that night turned up near my headquarters on the ridge in the centre position. At a cross roads, there were 280 8th Battalion holding the bottom end of the ridge and there were 90 very precarious 9th Battalion on the sea end of the ridge.'⁹²³

⁹¹⁹ TNA CAB 106/970. 'Report of the Operations carried out by 6 Airborne Division, 5 Jun to 3 Sep 44', p. 7.

⁹²⁰ TNA WO 171/1245, 12th Bn WD, 6-7 June 1944.

⁹²¹ TNA CAB 106/970. 'Report of the Operations carried out by 6 Airborne Division, 5 Jun to 3 Sep 44', p. 7.

⁹²² TNA CAB 106/970. 'Report of the Operations carried out by 6 Airborne Division, 5 Jun to 3 Sep 44', p. 19.

⁹²³ (2WWEC) 2001-1191, Hill, S.J., Tape 964, p. 3.

The massed Operation Mallard landing at 2100 hrs was also effectively trouble free. On LZ N 142 of 146 launched gliders landed successfully in around 32 minutes, landing 6 AARR, 1 RUR and the HQ of 6 AL Bde. On LZ W, 106 out of 110 gliders landed successfully, delivering 2 Ox Bucks, A Coy 12 Devon and the heavy weapons of 7 Para Bn in 28 minutes.⁹²⁴ The crowded nature of the landings was not without confusion, the gliders on W landed facing in the wrong direction.⁹²⁵ Although the LZs were still under enemy fire, 6 AL Bde suffered few casualties, the worst incident being a 2 Ox Bucks glider which broke up under flak.⁹²⁶ The glider landings had benefitted from a cleared and marked LZ, and above all a daylight landing.

Before assessing the impact of Gale's division, it is worth briefly reviewing the wider support the airborne operation yielded in assisting the seaborne forces. The capture of the eastern flank high ground (Le Mesnil/Bois de Bavent) prevented a strong German defensive line forming, based on the close terrain of the Bois de Bavent and features such as the Chateau St.Côme. This had begun to take place around Caen on D-Day itself, and the in-depth positions the Germans manned would trouble 21 Army Group for many weeks. The Division's landing greatly expanded the bridgehead to the east without the need for a further amphibious landing in the area around Cabourg-Deauville. If such landings had been required, the beaches would have been perilously close to the heavy German batteries located around the mouth of the Seine at Le Havre. The area dominated by the airborne forces greatly increased the area available for the build-up of 1 Corps and Second Army as

⁹²⁴ (Shrivenham) BTC 119 Staff College Camberley 1947 Course, 'Part II, The Air Plan', p. 16.

⁹²⁵ Ibid.

⁹²⁶ (Shrivenham) BTC 120, 'Account of Operations 6 Airlanding Brigade', p. 7. Gale had originally planned for 6 AL Bde to be tasked with the seizure of the Orne barrier, effectively massively scaling up the action carried out in reality by Howard. It is a distinct possibility that if Mallard had been carried out in the confusion brought about by darkness and struggling pathfinders it could have ended in disaster. Although on the other hand, Deadstick shows that Gale's original plan may well have been a considerable success.

enemy interference was pushed away to the east and south by the advanced positions seized on D-Day.

By occupying the ground they did, 6 Airborne contributed to the destruction of many German units. Many prisoners were taken in the first twenty-four hours of the invasion by 6 Airborne. In one example, 5 Para Bde's war diary shows two entries made on 7 June which indicate the ruinous toll Hill's men had taken on 642 Ost-Battalion. At 0400 hrs 'Considerable number of PW taken from BREVILLE area together with approx 40 rifles of varying types, 1 MG 34 and amn'; then at 0900 hrs 'Total PWs [prisoners of war] number 152, chiefly Poles and RUSSIANS; sent to Div.'⁹²⁷ Indeed, a report from the battalion dated 14 June 1944 cast light onto the fortunes of this unit. As 3 Para Bde landed around it, 642 Ost-Battalion's headquarters had been in Amfreville with companies and platoons positions on either side of the Orne. The report is up-beat and records the unit's success in extracting forces to mount local counter attacks and the ability of one corporal of its 4th company in shooting down a glider and a transport aircraft with a 20mm cannon. The intensity of the fighting is also recorded. By the end of D-Day the battalion can only count on around one hundred men from a possible original strength of between six and eight hundred as its headquarters relocated to Bavent.⁹²⁸

While the bulk of 716 I.D. was shattered by Dempsey's landings between Arromanches and Ouistreham, 6 Airborne Div ensured that it had no safe area to fall back into. Richter's report of 23 June 1944 states that enemy airborne troops were captured or quickly

⁹²⁷ TNA WO 171/593 5 Para Bde WD, 7 June 1944.

⁹²⁸ IWM, Document 21 in AL 1697/3, 'Rommel documents on Normandy, 16 March-24 September 1944.' Dated 14 June 1944).

eliminated on landing, but equally troops sent to investigate the airborne landings

frequently did not return:

In the meantime the II./G.R. 736 had already deployed the 8./G.R. 736 and one platoon of the 2./Ost-Btl.444 against the enemy who had landed by air south of Bernieres. Therefore the 5./G.R. 726 and one platoon of the 7./G.R. 726 were ordered to return to their reserve positions in order to avoid a dispersal of forces. The attack of the 8./G.R. 736 and of the one platoon of the 2./Ost-Btl.444 could not advance because of the intense ships' artillery fire and was defeated. Further reports are not available, since all communications were disrupted and no one of the troops deployed returned. It cannot be ascertained either to what extent operations by enemy parachutists contributed to the loss of the local coast defence installations, since there were no connections with the W.N. and officers who were sent to investigate as well as messengers did not return.⁹²⁹

By 15 June it was decided that the division would be withdrawn to southern France to regroup. By this time only around 1,300 men, from an original strength of 7,771, were fighting in various KG and sub-units attached to either 352.I.D. and 21.Pz.Div.⁹³⁰

Further, 6 Airborne and its associated commando bdes rapidly established a self-supporting A.Tk screen and outpost line able to stall any concentrated German mechanized assault and thereby allow Second Army conventional role forces to be assembled for a more continuous defence or rapid counter-attack. This effectively freed up a mobile conventional role infantry division to participate in offensive operations to the south around Caen, rather than be stuck in defence in the Orne bridgehead.

The panicking effect of enemy airborne forces close by had already affected some men who had before the landings been some distance from likely seaborne landings. According to a signal intercepted by Bletchley Park on 9 June 1944:

⁹²⁹ IWM, MS B-621 Richter, Wilhelm, Gen.Lt., 'Kampf der 716 Div in der Normandie 6.6 – 23.6.44.', p. 58.

⁹³⁰ Niklas Zetterling, *Normandy 1944: German Military Organization, Combat Power and Organizational Effectiveness* (Winnipeg: J.J. Fedorowicz, 2000) pp. 297-299. 346.I.D. would become 6 Airborne's main opponent from 10 June onwards, to be assessed in the next chapter.

At Carpiquet at 7.20pm/6/6 everyone lost their heads badly, the regional commander being present; the more so since numerous enemy parachute landings were reported only 5 km to the N.⁹³¹

The massed landing of 6 AL Bde and other elements in operation Mallard at 2100 hrs on D-Day also caused local commanders to reconsider their position. Richter recorded that the operation forced KG Rauch to fall back from the coast, having penetrated between the Juno and Sword landings areas at Lion-sur-Mer:

The attack proceeded successfully until the Church of Lion, however by 2000 hours the enemy dropped strong airborne units in the area south of Lion. The shock troops were therefore forced to avoid a threatening encirclement and had to pull back to its base.⁹³²

The Mallard landings therefore had a material effect in themselves by inhibiting what could be considered the most promising German countermove of the day, Rauch's strong battle group having offered the opportunity of blocking an early link-up between British and Canadian forces.

By the early evening of 6 June, KG Rauch (21.Pz.Div) had managed to push between Juno and Sword beaches as far as Luc-sur-Mer, linking up with defenders from 716.I.D. The sight of 6 AL Bde's glider landing sweeping into DZ/LZ N caused their hasty withdrawal; the intimidating magnitude of the landings giving the impression that another airborne division had been employed either in response to their thrust. Reports to LXXXI AK stated 'about 540 aircraft, towing toward the fortress of Le Havre had been released over the Orne', confirmed at 2140 hrs that 'enemy had been reinforced by several hundred gliders' in the Orne estuary.⁹³³ The air operation involved 700 aircraft. 250 gliders had landed as part of Mallard, all obviously accompanied by tow aircraft, with a close escort of 15 fighter

⁹³¹ TNA HW 1/2927, Government Code and Cypher School, Signals passed to the Prime Minister.

⁹³² IWM MS B-621 Richter, Wilhelm, Gen.Lt., 'Kampf der 716 Div in der Normandie 6.6 – 23.6.44.', p. 65.

⁹³³ LXXXI A.K., p. 3.

squadrons of 11 Group RAF (approximately 200 aircraft).⁹³⁴ Over the following days to large-scale false alarms were fed back to Kuntzen's HQ. On the night of 9/10 and 10/11 June false alarms were received of more paratroopers and containers being dropped in the Orne area, possibly triggered by the Rob Roy supply missions; while on 11 June concerns were raised by Marine-gruppe West about a possible amphibious landing near Fecamp.⁹³⁵ While darkness was useful to cover surprise airborne operations, this incident reveals the considerable morale effect daylight airborne reinforcement could have on the enemy.

III. Fighting as a Division – 7-9 June 1944

The Division now fought a series of ferocious battles as the enemy attempted to dislodge the airborne bridgehead. 6 AL Bde's arrival at 2100 hrs on D-Day radically improved the division's situation, adding over 1,500 fresh infantrymen who were considerably more heavily armed than their parachute counterparts.⁹³⁶ The introduction of Kindersley's brigade to the battle allowed 5 Para Bde to withdraw into divisional reserve around Ranville-Le Marquet.⁹³⁷ Even allowing for the casualties suffered by his division Gale's hold on the Orne barrier area was now robust as his formations concentrated into a compact area. From north to south, 1 SS (Special Service – Commandos) Bde was ensconced around Merville/Hauger; 3 Para Bde loosely held the Bois de Bavent; 6 AL Bde held the southern flank with 5 Para Bde in reserve. During the night of 6/7 June the brigade prepared to attack out of the bridgehead and by 0900 hrs of 7 June 1 RUR and 2 Ox Bucks had occupied

⁹³⁴ TNA CAB 106/970, 'Report on Operations of 6 Airborne Division in Normandy 1944, 6 Jun - Aug 27', dated 1944, Appdx A, (Shrivenham) BTC 119, Staff College Camberley 1947 Course, 'The Air Plan', p. 7 & p. 16.

⁹³⁵ LXXXI A.K., p. 9, p. 12 & p. 13.

⁹³⁶ BTC 245 (Shrivenham), '6th Airborne Division, Operation OVERLORD – Booklets', 'Battlefield Tour – 6 AB Div', p. 21.

⁹³⁷ 4 AL A Tk Bty and 12 Para Bn was attached to 6 Airdg Bde. The latter to fill in for 12 Devon, still in sea transit, who would arrive in the divisional area between 1700-2200 hrs. TNA WO 171/595, 5 Para Bde WD; WO 171/1245, 12 Para Bn WD; TNA WO 171/1279, 12 Devon WD 7 June 1944.

Longueval and Herouvillette respectively. The two battalions pushed on in the afternoon but St. Honorine and Escoville could not be secured due to the 'stiff opposition from enemy SP [self-propelled] guns and armour', forcing the units back to their previous gains.⁹³⁸ The airlanding troops had encountered KG Von Luck as it attempted to advance on the bridges through Herouvillette and Ranville with elements of II/125 Pz.G.R., 21 Recce Bn and some of Becker's assault guns. This mechanised counterattack should have crushed 1 RUR and 2 Ox Bucks, if it were not for the massive fire support available:

The reconnaissance battalion went straight into the attack from its march and, supported by the panzer company, penetrated to Escoville against their surprised opponents. Then all hell broke loose. The heaviest naval guns, up to 38cm in calibre, artillery, and fight-bombers plastered us without pause. Radio contacts were lost, wounded came back, and the men of the reconnaissance battalion were forced to take cover. I had gone up with the attack and saw the disaster.⁹³⁹

Indeed, the fire support plan created by Norris proved to be invaluable in this period:

During the attacks of the 8 and 9 Jun, arty sup was most readily given by the Div Arty of 3 Br Div. whenever it was called for it came down the required place accurately and rapidly. The volume was far in excess of any fire that could be produced from 6 Airborne Div's resources and was annihilating in its effect. Although on occasions the enemy penetrated slightly into our posns the weight had been taken out of his attack by arty fire and local counter attacks restored the situation.⁹⁴⁰

Similarly the anti-tank defence provided by 3 and 4 AL A.Tk Btys and the 6 pdr guns furnished by the airlanding battalions achieved good results. The two batteries supported 5 Para and 1 SS Bdes between 6-10 June, and knocked out at least six enemy AFVs, four being attributed to 4 AL A.Tk Bty on 6 June.⁹⁴¹ Sixty-five per cent of enemy tanks destroyed in Normandy up until 7 August were knocked out by armoured piercing projectiles fired by either anti-tank guns or tanks, so the careful deployment and skill of 3 and 4 AL A.Tk Btys'

⁹³⁸ TNA CAB 106/970, 'Report on Operations of 6 Airborne Division in Normandy 1944, 6 Jun - Aug 27', dated 1944, p. 9.

⁹³⁹ Luck, p. 179.

⁹⁴⁰ TNA CAB 106/970, p. 9. The cruiser HMS Arethusa, the monitor HMS Mauritius and several destroyers were also supporting 6th Airborne. Guttery, p. 60.

⁹⁴¹ TNA WO 171/959 3 Airlg ATk Bty WD, 7 June 1944; TNA WO 171/960 4 AL ATk Bty WD, 6 June 1944.

gunners was critical.⁹⁴² Even though the 7 June foiled attack was a setback for 6 AL Bde, this action to the south revealed the confidence Gale had in his formations' situation and his resolution in adhering to his divisional plan. However in terms of self-generated offensive power, 6 Airborne was beginning to run out of steam due to its lack of mobility and integral heavy weapons.⁹⁴³

The fighting all along the Division's front now became intense as elements of 21. Pz.Div surged forward, together with the remnants of 716 .I.D. and reinforced by the newly arrived 346 .I.D.⁹⁴⁴ This division had trained to combat airborne forces landing behind Le Havre and was prepared to defend the coast under command of 17 Luftwaffe Feld-Div between le Havre and Fecamp.⁹⁴⁵ It was now moved from the area it was familiar with and was steadily fed piecemeal into the Orne bridgehead battle, as fortress troops from Le Havre and 17 LW-Feld Div redeployed to cover 346 .I.D.'s coastal defences.⁹⁴⁶ This process began with KG Hartmann, identified by 6th Airborne on 7 June:

A message received too late for inclusion in Int Summary No.2 reported 1,000 enemy inf moving WEST through VARAVILLE 1875 during the afternoon of 7 June. These tps were later identified as II Bn and III Bn of 857 Regt of 346.I.D. These Bns left LE HAVRE at 2100 hrs on D Day travelling on bicycles.⁹⁴⁷

⁹⁴² TNA WO 279/200, 'The Development of Artillery tactics and Equipment', War Office, 1951, pp.222-223.

⁹⁴³ TNA CAB 106/970, 'Report on Operations of 6th Airborne Division in Normandy 1944, 6 Jun - Aug 27', dated 1944, p. 9.

⁹⁴⁴ 346 I.D. had originally been formed as a static formation, but later restructured to increase its mobility. It fielded six battalions (one of which was 630 Ost) in its 857 and 858 Regts, a 'fusilier' reconnaissance battalion, ten assault guns and three artillery battalions largely equipped with captured guns. All the infantry battalions could be transported by buses or trucks and only the heavy artillery battalion was horse drawn. The division had been based around Le Havre, but moved through the weak 711 I.D. to attack the Orne bridgehead. Germans at D-Day, Oberst Paul Frank (B-008), 'The 346th Infantry Division to 4 June 1944', in *The Germans at D-Day: Fighting the Invasion*, ed. by David C. Isby (London: Greenhill Books, 2004), pp. 151–52. Niklas Zetterling, *Normandy 1944: German Military Organisation, Combat Power and Organisational Effectiveness* (Winnipeg: J.J. Fedorowicz Publishing Inc, 2000), pp. 273–274, 295–296.

⁹⁴⁵ Frank (B-008), 'The 346th Infantry Division to 4 June 1944'.

⁹⁴⁶ LXXXI AK, p. 9.

⁹⁴⁷ On the evening of D-Day 346 I.D. had created KG Hartmann from two Fahhradbewegliches (composite) battalions, a battalion of light artillery and a company of engineers. TNA WO 171/425, 6th Airborne Division HQ WD, Int. Summary No.3, 7-8 June 1944. Oberst Paul Frank (B-008), 'Committment of Kampfgruppe

KG Hartmann attacked 1 Cdn Para Bn at Varaville supported by SPGs but was beaten back.⁹⁴⁸

This process continued with six concentrated enemy attacks launched against the bridgehead between 8-10 June, all supported by heavy artillery and mortar fire and often by SPGs and tanks.⁹⁴⁹ By the morning of 10 June the whole of 346.I.D. had been identified along the Bréville ridge.⁹⁵⁰ It now made its largest attack out of the village, pushing battalion-sized assaults south-west towards Le Mariquet/Ranville and north-west towards Le Plein.⁹⁵¹ The first attack swept across DZ N at around 1100 hrs, troops of I /G.R. 858 using the gliders for cover, put becoming pinned down.⁹⁵² 13 Para Bn opened fire and inflicted massive losses as the enemy crossed the open fields. The attack launched to the north-west on 1 SS Bde suffered similar heavy losses and was beaten back. An infiltration against No. 4 Cdo supported by SPGs developed into a two battalion attack on the whole brigade but 'the lines everywhere held firm', with prisoners taken from 857 Regt.⁹⁵³ At the same time 3 Para Bde was attacked by another battalion in the St. Côme area:

0730 – '2-Bn attack on 9 Para Bn and 1 Cdn Bn posns. Enemy infiltrate between Cdns and 9 Bn with Inf Guns and armour. Driven out by fire.'
1330 – 'Situation in hand.'⁹⁵⁴

Hartmann: 346th Infantry Division', in *The Germans at D-Day: Fighting the Invasion* (London: Greenhill Books, 2004), pp. 40–41.

⁹⁴⁸ TNA WO 171/2950, 1 Cdn Para Bn WD, 7 June 1944.

⁹⁴⁹ TNA CAB 106/970, p. 9.

⁹⁵⁰ TNA WO 171/425, 6 Airborne Div HQ WD, Int. Summary No.5, 9-10 June 1944.

⁹⁵¹ TNA CAB 106/970, pp. 9-10.

⁹⁵² LXXXI AK, p. 10.

⁹⁵³ TNA DEFE 2/53, 1 SS Bde WD, 10 June 1944.

⁹⁵⁴ TNA WO 171/593 3 Para Bde HQ WD, 10 June 1944.

This attack was supported by SPGs but had no answer to the 6-inch guns of HMS *Arethusa*; a badly wounded officer captured in the attack 'remarked that his battalion had been virtually wiped out in the last twelve hours.'⁹⁵⁵

This was followed up by a counter-attack by 7 Para Bn supported by a squadron of the 13/18 H which had entered the bridgehead at 1400 hrs having been requested by Gale. During the whole action at least 200 enemy bodies were counted and over 100 prisoners taken from 858 G.R., while 7 Para Bn suffered ten casualties with four Sherman and one Stuart tank knocked out.⁹⁵⁶ Again, massive co-opted artillery and naval gunfire support took a hand in driving 346.I.D. back. 'Considerable losses were suffered from incessant heavy naval artillery fire which covered the whole attack area', with artillery spotter aircraft directing naval gunfire support.⁹⁵⁷ The bulk of the Wehrmacht attackers fell back into the village Bréville, of the six infantry battalions belonging to 346.I.D. possibly five had been roughly handled by 6 Airborne. The division's battle report for 10 June reported its casualties up to midnight as 102 dead, 405 wounded and 450 missing, many of the latter presumably captured.⁹⁵⁸ As the fighting of 10 June drew to a close LXXXI AK took stock. 346 .I.D. reported that 'the enemy is tough and fights doggedly. There have therefore been heavy losses, particularly amongst officers.'⁹⁵⁹ While the enemy infantry was 'not necessarily superior to our own infantry', the Corps commander advised on the best way to eliminate the Orne bridgehead, he:

⁹⁵⁵ L. F. Ellis, p. 248.

⁹⁵⁶ TNA WO 171/595, 5th Parachute Bde HQ WD, 10 June 1944; CONF 4073 (Shrivenham) '5th Parachute Brigade Operations in Normandy, June to September 1944', p. 19; TNA WO 171/845, 13/18 h Wd, 10 June 1944.

⁹⁵⁷ LXXXI AK, p.10. Oberst Paul Frank (B-008), '10 June: 346th Infantry Division Attacks', in *The Germans at D-Day: Fighting the Invasion* (London: Greenhill Books, 2004), pp. 118–20.

⁹⁵⁸ Zetterling, pp. 273–274.

⁹⁵⁹ LXXXI AK, p. 12.

Points out that the pockets of enemy resistance need to be smashed bit by bit if one does not want to experience setbacks which are caused by wasting one's own resources/power. This was the reason why today's attack did not produce any bigger results.⁹⁶⁰

Due to the compact nature of Gale's defensive scheme, which allowed for mutual support between units and the access to powerful indirect fire from 1 Corps and the RN, 6 Airborne had beaten off the multiple and sustained attacks of a fresh enemy infantry division.

6 Airborne's results for D-Day are favourable when set against the simple metric generated by this chapter's discussion on the measurement of combat effectiveness in the Second World War. The parachute brigades achieved their goals and held a defence line against enemy counter attacks. The airlanding brigade would have a difficult time securing its D +1 objectives to the south of the bridges, but its offensive action was intended to expand the area held by the Division for added security. Of more importance was the fact that it had brought much needed manpower into the airborne bridgehead, along with anti-tank guns and further vehicles and equipment.

IV. *Adaptation and Concentration - The St. Côme – Bréville Episode – 12 June 1944*

The action at Bréville confronted the Division with an extremely difficult challenge which demonstrated its combat effectiveness. A close study of the events at Bréville indicates that there was careful resource management and decisive leadership at work. The Bréville episode is recognised as significant by many historians who have written about 6 Airborne in Normandy. For example, Robert Kershaw and Lloyd Clark have written important none-unit specific accounts of the action.⁹⁶¹ Gale's succinct summary of the importance of the episode

⁹⁶⁰ LXXXI AK, p. 12.

⁹⁶¹ Robert J. Kershaw, *D-Day: Piercing the Atlantic Wall* (Hersham, Surrey, UK: Ian Allan Pub., 2008), pp. 384–394; Lloyd Clark, *Orne Bridgehead* (Stroud: Sutton, 2004), pp. 80–91, 168–183.

is set down in his memoir:

There is a turning point in all battles. In the fight for the Orne bridgehead the Battle of Bréville and the 346th German Infantry Division was beaten. It never put in another single attack, and was from that moment until the advance to the Seine in August content just to hold its positions in front of us and mortar the line which we so thinly held.⁹⁶²

A close analysis of the Bréville action will serve to determine the how 6 Airborne generated combat effectiveness and the value of Gale as a commander. This chapter section will now review the battle of Bréville using the KTB of Wehrmacht LXXXI A.O.K. and British war diaries; adopting a narrative style to allow a methodical progression through the battle's events and the intelligence available to Gale and Kuntzen at each point.

By the 10 June 6 Airborne Div together with 1 SS Bde had ensconced itself along the Bréville ridge, with Sallanelles in the north held by the commandos down to the Bois de Bavent which was patrolled by 3 Para Bde and 6 AARR. However, the village of Bréville remained in enemy hands; the elevated position of this village allowed an almost unhindered view across DZ/LZ N and of Ranville less than 3000m away.⁹⁶³ Composed of sturdy stone buildings, this position was now a useful start-point for attacks by 346. I.D. as it attempted to attack the Orne bridgehead. Any reinforcements introduced to the battle could go through this gap then sweep across the DZ/LZ N and seize the bridges. While this formation had been contained and appeared to be positioned to halt any British push to the Dives, the threat remained.⁹⁶⁴

It was part of Crocker's 1 Corps plan that the bridgehead was to be extended and further reinforced to the south by 51 Div, the next goal being to isolate and capture Caen from the

⁹⁶² Richard Nelson Gale, *With the 6th Airborne Division in Normandy*. (London: Sampson Low, Marston & Co., 1948), pp. 101–102.

⁹⁶³ (Bodleian Library) BIGOT Map sheet 16/46 N.W. dated 20 May, 1944.

⁹⁶⁴ TNA WO 171/425, 6 Airborne Division WD, 'INT SUMMARY No.6, for period 2200 hrs to 2200 hrs 11 June.'

east.⁹⁶⁵ At 1300 hrs on 10 June the Highland Div's 153 Inf Bde's commander and his COs conferred with Gale at his Ranville HQ.⁹⁶⁶ Nearby 13 Para Bn was busy shooting down the attack across DZ/LZ N, before the 7 Para Bn and 13/18 H⁹⁶⁷ counterattack crushed it, witnessed by Brigadier H. Murray of 153 Inf Bde:

Whilst there it became apparent that a partial breakthrough had been effected through a gap at BREVILLE and that a severe engagement was taking place on the northern approaches to RANVILLE.⁹⁶⁸

Murray pointed out that no expansion to the south could be considered as long as Bréville remained in enemy hands; therefore 5 Black Watch would come under command of 3 Para Bde and seize the village as soon as possible. Further, Murray's brigade was ordered to take over the southern half of the Bois De Bavent sector from Hill's troops while 154 Inf Bde would relieve 6 AL Bde.⁹⁶⁹ As 153 Inf Bde crossed into the bridgehead on the night of the 10/11 June, it appeared the load of 6 Airborne would be greatly eased and the line along the Bréville ridge finally secured. 1 Gordons and 5/7 Gordons moved into the woods to relieve 8 Para Bn while 5 Black Watch prepared to attack Bréville at first light.⁹⁷⁰ The significance of the arrival of Bullen-Smith's division was enormous, stemming from the fact that 6 Airborne Division had taken significant casualties since landing and had lost many of its heavy weapons. Now it was being joined in the bridgehead by an almost completely fresh infantry division. It contained over 18,000 men in nine battalions, 182 field and A.Tk guns, fully motorised, and many Eighth Army veterans, which further added to the significance of

⁹⁶⁵ TNA CAB 106/970, "Report on the Operations carried out by 6 Airborne Division 5 Jun – Aug 27", p. 10; Peter Rostron, *The Life and Times of General Sir Miles Dempsey* (Barnsley: Pen & Sword Military, 2010), p. 100.

⁹⁶⁶ 153 Bde was comprised of 1 Gordons, 5/7 Gordons and 5 Black Watch (BW); TNA WO 171/678, 153 Bde WD, 10 June 1944.

⁹⁶⁷ 13/18 H – 13/18 Hussars, of 27 Armd Bde, equipped with Sherman tanks. L. F. Ellis, *Victory in the West*. (London: H.M.S.O., 1962), p. 522.

⁹⁶⁸ TNA WO 171/678, 153 Bde WD, 10 June 1944.

⁹⁶⁹ TNA CAB 106/970, "Report on the Operations carried out by 6 Airborne Division 5 Jun – Aug 27", p. 10.

⁹⁷⁰ TNA WO 171/593, 3 Parachute Bde WD, 10 June 1944.

Bullen-Smith's division's arrival.⁹⁷¹

5 Black Watch attacked at 0430 hrs on 11 June and was flung back with heavy casualties having met concentrated machine-gun and mortar fire.⁹⁷² Hill saw the Black Watch who had been placed temporarily under his command as 'a lot of young fellows and they had more than they could take, and they had, quite frankly were falling back'.⁹⁷³ The battalion fell back into 9 Para Bn's area around the Chateau St. Côme to regroup, where its losses forced it to re-organise into only three companies.⁹⁷⁴ 5 Black Watch's performance was later repeated on the southern flank. In the 6 AL Bde area, 1 RUR holding Longueval was to be relieved by 5 Camerons on 13 June when they pushed past the Ulstermen to capture St.Honorine. The attack launched at 0500 hrs and by 0615 hrs the success signal was seen over the village. The situation then became 'vague', and soon Camerons were seen falling back on the 1 RUR positions. At 0925 hrs the CO presented himself at 1 RUR battalion HQ and stated that he had been forced out of the village by enemy armour and SPGs – he had one company under his control which he then placed at Lt.Col. Carson's disposal. Carson called 1 RUR to stand-to by sending a 'message sent to all Coys to allow personnel of 5 Cameron to pass through our lines and to remain fast in our present dispositions'.⁹⁷⁵

The disaster which had befallen 5 Camerons was no less alarming to those whom witnessed it at first hand:

On Monday 12th June, we were told to pack up and fall in on the lower road as we were being relieved by a battalion of the Cameronians (51st Highland Division). When they arrived they told us they were going to attack Ste Honorine and show us how to capture the place. We were told to wait the outcome before we could leave

⁹⁷¹ Lieut-Colonel H.F. Joslen, *Orders of Battle, United Kingdom and Colonial Formations and Units in the Second World War 1939-1945*, 2 vols. (London: HMSO, 1960), Vol. 1, pp. 164–165.

⁹⁷² 5 Black Watch suffered at least 200 casualties. TNA WO 171/678, 153 Inf Bde WD, 11 June 1944.

⁹⁷³ (2WWEC), 2. Hill, S.J.L. 2001. 1191, p. 8.

⁹⁷⁴ TNA WO 171/1266, 5 Black Watch WD, 10-11 June 1944.

⁹⁷⁵ TNA WO 171/1383, 1RUR WD, 13 June 1944.

for Ranville. It wasn't long before the Cameronians came running back and legged it past us heading for the beaches. We were then told to get back into our slit trenches to defend Longueval and we also had to go out and pick up the Cameronian wounded. This reversal of orders had a devastating effect on me, I had a feeling of sheer terror and fright, I was in a complete funk I immediately climbed over the wall at the side of the road and knelt down in the field to get a grip of myself. I did not want the lads to see the state I was in, I remained like that for several minutes and then I had a warm feeling flushing through my body and I became calm and relaxed.⁹⁷⁶

During the early stages of the Normandy campaign 51 Division did not live up to its hard-won reputation from the desert, and the reasons for their shortcomings have been assessed elsewhere.⁹⁷⁷ 51 Div's initial costly attacks led to there being no relief available because 6 Airborne troops were needed in support. Gale had been at 3 Para Bde's Le Mesnil HQ and witnessed the ferocity of the fighting culminating in Hill's desperate counterattack with the Canadian company, and he must have been aware of 5 Black Watch's shortcomings.⁹⁷⁸

Having withstood this attack, 346.I.D. was determined to secure its position on the Bréville ridge with a view to further expanded operations. During the night of 10/11 June the General der Panzertruppen Kuntzen, commander of LXXXI A.K., was alerted to 51 Div crossing into the Orne bridgehead in strength. There were indications of further British offensive action. A captured 6 Airborne lieutenant had stated that his division would soon be pushing on Caen while an intercepted radio message had inferred that three British divisions would soon be massed in the bridgehead ahead of an attack.⁹⁷⁹ In the face of this feared build-up 346.I.D. was ordered to attack with its five remaining battalions and take the Chateau St. Côte 'in a shock attack' after a short artillery preparation. KG Luck was

⁹⁷⁶ IWM 89/13/1 P.R. Devlin 1 RUR, p. 6.

⁹⁷⁷ John Buckley, *Monty's Men: The British Army and the Liberation of Europe, 1944-5* (London: Yale University Press, 2013), pp. 138–142; Hart, p. 29; David French, "Tommy Is No Soldier": The Morale of the Second British Army in Normandy, June-August 1944', in *Journal of Strategic Studies*, 19, 154–78.

⁹⁷⁸ Gale, p. 99.

⁹⁷⁹ (BM) RH24-81/89, LXXXI A.K. Ia, KTB 16.2-2.8.44, (hereafter LXXXI AK) pp. 12-13.

recalled from 1.SS-Pz. Korps and moved back into its old positions facing Ranville with a view to support the drive.⁹⁸⁰ If the Chateau St. Côme could be taken and the ridge more firmly controlled, a combined 21.Pz.Div./346.I.D. attack was anticipated for 13 June, supported by 7 Werfer Bde and possibly a Fallschirmjäger Regt, which had been requested.⁹⁸¹ The airborne bridgehead had to be reduced if not eliminated to frustrate further British offensive action.

The following day at 1500 hrs the position came under heavy attack from at least a battalion of enemy infantry supported by SPGs and tanks⁹⁸²:

Hy bombardment heard from BLACK WATCH area. Kept up for 1 ½ hours with strong mortar and SA fire. Message from BLACK WATCH said they had drawn in one coy but had left A.Tk gunners with PIAT at CHATEAU. LO from 9 Para Bn said that though situation was severe posn could and was being held. Bde Cmd ordered up "C" Coy 1 Cdn Para Bn and he with Bde IO went up to put them in posn. FOO and FOB for[ward]ed on wood near BREVILLE. Numbers of BLACK WATCH found in Bde HQ area.⁹⁸³

5 Black Watch just held, but only after the decisive action of Hill leading forward a scratch company of Canadians. He had been at the HQ of 1 Cdn Para Bn and had demanded that the CO give him 'whatever dogs' bodies' he had. With sixty or seventy men he launched 'not very spectacular counter-attack but an effective one' which drove the enemy out of the area.⁹⁸⁴

At 1745 hours details regarding the progress were still vague, but promising. '346.I.D. has taken the Chateau St.Côme with heavy losses despite strong air and naval gunfire strikes.'⁹⁸⁵

At 2215 hrs, Major Becker, the commander of 21.Pz.Div. SPG battalion, had returned from

⁹⁸⁰ LXXXI AK, p. 14 & p. 17.

⁹⁸¹ While the fighting raged around St.Côme and Bréville, discussions were ongoing to shuffle 84 and 711 I.D. to free up more of 21.Pz.Div for the push on the suggested push on Ranville. LXXXI AK, pp. 16-19.

⁹⁸² TNA WO 171/1266, 5 Black Watch WD, 12 June 1944.

⁹⁸³ TNA WO 171/593, 3 Para Bde WD, 12 June 1944.

⁹⁸⁴ (2WWEC), 2. Hill, S.J.L. 2001. 1191, p. 7.

⁹⁸⁵ LXXXI AK, p. 17.

where the fighting raged to report on the unsuitability of the ground for his division's tanks.

'The Englishman is a tough fighter. 346.I.D. losses are high and the fighting force is weakened accordingly.'⁹⁸⁶ 346.I.D.'s own account for the attack, presented later at 2347 hrs: 'The Chateau St. Côme was taken after a very hard fight. 13 enemy tanks were destroyed.'⁹⁸⁷ Oberleutnant Ludwig of the Pz.Jg.Kp is accredited with this success, although a British account allows for only '4 Shermans K.O.' as two troops of 13/18 H and two sections of 3 Para Sqn RE were sent up to reinforce Hill at the Chateau at 1915 hrs.⁹⁸⁸

Gale now decided that the Bréville gap had to be eliminated as soon as possible to prevent any further enemy attacks.⁹⁸⁹ This was the most important and perilous decision he made during the campaign, but was entirely correct considering the interpretation of intelligence regarding enemy intentions and his own resource situation. The full weight of 346.I.D. was pressing against 3 Para Bde through the Bréville gap supported by elements of 711.I.D., but it appeared that something bigger might be brewing.⁹⁹⁰ 6 Airborne's intelligence picture revealed that new enemy formations were closing up along 21 Army Group line. The divisional intelligence report dated 13 June completed by Captain Freddie Scholes for 12 June reveals the information available to Gale and explains his desire to close the gap on the evening of 12 June:⁹⁹¹

(c) Enemy Sit. – Flanks

The line up of enemy fmns from ISIGNY to CAEN is now 12 SS Pz Div, TK Trg Div [Panzer Lehr], 352 Inf Div and 30 Mob Bde with a possibility of 17 SS Pz Gren Div possibly approaching from the SW.

⁹⁸⁶ LXXXI AK, p. 18.

⁹⁸⁷ LXXXI AK, p. 19.

⁹⁸⁸ TNA WO 171/593, 3 Para Bde WD, 1915 hrs 12 June 1944.

⁹⁸⁹ Gale, p. 99.

⁹⁹⁰ Zetterling, p. 274.

⁹⁹¹ 6 Airborne's GSO 2(intelligence), Gerry Lacoste had been wounded on D-Day and his place taken by Captain Freddie Scholes of the Intelligence Corps. Harclerode, 'Go to it!', p. 80.

(d) The enemy has not stopped bringing new units into our area. 711 Inf Div may send further rfts to 346 instead of sitting back on the EAST bank of the DIVES AND 21 Pz Div may be withdrawing units from WEST of CAEN for use EAST of the ORNE. We should soon have further details about this. The enemy may be on the defensive but it will be a def conducted along typical offensive lines with many counter-attacks.⁹⁹²

Wireless intercepts since 11 June had indicated that this attack would soon take place.

Dempsey instructed Crocker to concentrate his armour around Colomby-sur-Thaon, telling him that 'this bit of ground was the heart of the British Empire, and that he wasn't to move his armour from it except on orders from me.'⁹⁹³ Indeed, the war diary of 13/18 H sets down the perceived threat from armoured forces on the eastern flank of the bridgehead:

Regt ordered to move complete to east side of the ORNE. Rommel is now said to be in charge of this sector and to be mounting a counter-attack on 3 Br Inf Div or directed between them and 3 Can Div. Co went off on recce with Brig Prier-Palmer to choose positions for Sqdns to take up.⁹⁹⁴

Later at 1400 hrs:

51 (H) Div and 4 Armd Bde were to have put in an attack swinging onto the S.W. of Caen, but this has been delayed owing to armoured threat on 3 Div front.⁹⁹⁵

The indications were that a major armoured attack possibly led by Rommel himself was to be aimed at 3 Division. It would have been understandable for Gale to assume that a supporting flank attack would be mounted through the Bréville gap.

Gale's verdict to mount an attack was a bold but considered choice. His confidence in his troops' ability revealed the close knowledge he had of the division he had trained since its creation. He relied on the aggression and skill of his men to take the village, and the supposition that the enemy would not expect a night attack mounted so quickly after their

⁹⁹² TNA WO 171/425, 6Airborne Division WD, 'INT SUMMARY No.7, for period 2200 hrs 11June to 2200 hrs 12 June, dated 13 June.

⁹⁹³ Rostron, p. 101.

⁹⁹⁴ TNA WO 171/278, 13/18 H WD, 1000 hrs 12 June 1944.

⁹⁹⁵ TNA WO 171/278, 13/18 H WD, 1400 hrs, 12 June 1944.

own effort. His resources to mount the attack were limited. 3 Para Bde was effectively exhausted; the other brigades had been weakened by losses and were barely holding the line. 51 Div's first action in the bridgehead had been inauspicious, 153 Bde now being in no position to mount a night attack. The only unit available was 12 Para Bn which was resting having just been relieved by No. 47 (RM) Cdo as 4 SS Bde moved into the bridgehead, Gale added D company of 12 Devon and A Sqdn of the 13/18 H.⁹⁹⁶ The operation was quickly put together in three hours and would be supported by massed artillery support - five field and one medium regiments.⁹⁹⁷ Gale both anticipated a swift enemy counter-attack and wished to prevent the garrison from escaping, and so the artillery plan included belts of fire falling across the exits from the village.⁹⁹⁸

The attack was successful despite 51 Div dropping some of its rounds short on the Amfreville-Le Plein forming-up area killing Lt.Col. Johnson, 12 Para Bn's CO, and several of his men, injuring two observing brigadiers, Hugh Kindersley and Lord Lovat.⁹⁹⁹ At this point the importance of effective leadership was again evident as Colonel R.P. Parker, a former CO of 12 Para Bn, went forward and took control of the battle pushing the airborne troops forward until the village was taken. 'For about two hours Bréville was just a night hell.'¹⁰⁰⁰ However the artillery preparation which deluged the village set the buildings on fire and isolated the enemy positions from further reinforcement. The war diary of the supporting Shermans provided an eyewitness to the infantry combat:

⁹⁹⁶ TNA WO 171/278, 12 Para Bn WD; TNA WO 171/278, 13/18 H WD; TNA WO 171/1279, 12 Devon WD, 12 June 1944.

⁹⁹⁷ Gale, p. 99. (Shrivenham) CONF.4073 '5 Parachute Brigade Operations in Normandy. June to September 1944', p. 20; TNA CAB 106/970, "Report on the Operations carried out by 6 Airborne Division 5 Jun – Aug 27", p. 10.

⁹⁹⁸ (Shrivenham) CONF.4073 p. 20.

⁹⁹⁹ Ibid., p. 21.

¹⁰⁰⁰ Gale, p. 101.

'A' Sqn attacked with paratps from the North onto Bréville and shot the infantry into the village led by the Div Comd with the Ass Coy. Enemy Cas considerable, one SP gun (75mm) knocked out and five captured intact. One tp 'A' Sqn left in support of infantry at Bréville, remainder rallied in harbour West of Ranville.¹⁰⁰¹

Further friendly-fire casualties were incurred when protective artillery fire was dropped on the village in anticipation of an enemy counter-attack. This was due to the loss of two FOOs who had gone forward with the attack, both were killed, and then a mix up at the gun end of a 51 Division battery.¹⁰⁰² Fifty men of 22 Coy were rushed up to cement the position.¹⁰⁰³ Some 50 Germans were buried' at the cost of 167 12 Para Bn and 12 Devon casualties.¹⁰⁰⁴

346.I.D.'s early reports on Gale's sudden attack on Bréville were dour but positive, 'the fighting is hard and grim, but the division is master of the situation'.¹⁰⁰⁵ By 2312 hrs the reality of the situation had begun to sink in although the supposed objective of the attack was misguided due to previous optimism:

The enemy drives a major attack against the Chateau St.Côme from the west and southwest after a strong preparatory barrage. The enemy has broken through the line. It now seems questionable whether the planned main attack on 13 June can take place at all.¹⁰⁰⁶

By 0130 hrs the British breakthrough between Le bas de Bréville and Bréville had been noted, followed at 0655 hrs by news of 51 Div's attacks to the south around St.Honorine as 5 Black Watch attacked out of the Chateau area supported by 13/18 H.¹⁰⁰⁷ By 0900 hrs Kuntzen had decided 346.I.D. had to now hold in place while KG Luck should revert to 1.SS-

¹⁰⁰¹ TNA WO 171/278, 13/18 H WD, 1000 hrs 12 June 1944.

¹⁰⁰² The two officers lost were Captain Bannerman of 126 Field Regt, 51 Division and Captain Hugh Ward of 211 Bty, 53 (WY) Lt Regt. D.R. Guttery, *The Queen's Own Worcestershire Hussars 1922-1956* (Stourbridge: Mark and Moody Ltd, 1958), pp. 68–69.

¹⁰⁰³ (Shrivenham) CONF.4073 p.21; TNA CAB 106/970, p.10; WO 171/1249, 22 Coy WD, 12 June 1944.

¹⁰⁰⁴ (Shrivenham) CONF.4073 p.22; TNA WO 171/1279, 12/Devons WD, 12 June 1944; Gale, 6th, p. 101.

¹⁰⁰⁵ LXXXI AK, p. 19.

¹⁰⁰⁶ LXXXI AK, p. 19.

¹⁰⁰⁷ LXXXI AK, p. 20; TNA WO 171/278, 13/18 H WD, 13 June 1944.

Pz. Korps to hold the line beyond Troarn. In a mid-morning discussion both he and Rommel agreed that the best course of action would now be for 346.I.D. to fall back behind the Dives, but this could not be authorised without OKW assent.¹⁰⁰⁸ This shared intention shows that 346.I.D. was by 13 June exhausted as an offensive force. The Corps and Army Group commanders both were now more concerned with holding a strong defensive line rather than attempting to eliminate the airborne bridgehead. 346.I.D. now consolidated a new main line of resistance to the west of the Dive lowland and abandoned its forward positions on the Bréville ridge. Its positions could still support the coastal defences to the north and could have been used as the basis for further attacks, but no longer threatened the Orne barrier as before.¹⁰⁰⁹

Gale's dogma of intense training, skill at adapting the resources available and perceptive leadership had secured an important success for the Division. Bréville was the turning point of the campaign for 6 Airborne. The Bréville ridge position was made safe and therefore the Orne bridgehead secure. Further, 51 Div now occupied the southern portion of the bridgehead, while 4 SS Bde under Brigadier 'Jumbo' Leicester came under Gale's command adding four more commando units.¹⁰¹⁰ The Bréville fighting which had raged on 11 and 12 June had shown the importance of decisive leadership in close attendance to the airborne forces' performance. Hill had recovered the St. Côme situation with a spontaneous counter-attack while Colonel Parker had seized control of the Bréville attack when 12 Para Bn's CO had been killed in the friendly-fire incident. Gale had carefully assembled an assault force

¹⁰⁰⁸ LXXXI AK, pp. 20-21.

¹⁰⁰⁹ Oberst Paul Frank (B-008), 'The 346th Infantry Division to 4 June 1944', in *The Germans at D-Day: Fighting the Invasion* (London: Greenhill Books, 2004), pp. 151-52 (p. 152).

¹⁰¹⁰ No. 47 and (48) RM Cdos arrived in the bridgehead on 12 June, while No. 41 and 46 RM Cdos would be added once their operations against the Douvres radar station and in the Mue Valley respectively were complete. Julian Thompson, *The Royal Marines: From Sea Soldiers to a Special Force* (London: Pan, 2001), p. 338.

from his dwindling resources, then co-opted the divisional artillery of 51 Div and made good use of 13/18 H's Sherman tanks. Gale had successfully 'battle-grouped' his limited forces to achieve a result, using the tanks to 'shoot in' the infantry, the tanks Browning MGs and 75mm guns being used to suppress the enemy's preponderance of MGs.¹⁰¹¹ 6 Airborne losses had been heavy, and for 12 Para Bn alone they had been pyrrhic, but not for the Division. The episode showed derivation from the 'Colossal Cracks' theory espoused by Montgomery: careful preparation had been replaced by skilled spontaneous aggressive action which evokes comparison with the post-war professional British Army. At this crucial moment Gale had banked on the morale of his own troops and the initiative of his commanders. He focussed on utilising the loaned heavy weapons of conventional role units to nullify the firepower of the enemy; which in turn allowed his troops to close with the enemy and maximise the impact of their aggression in close contact.

V. *Sustaining Combat Effectiveness – Holding the Line and Operation Paddle, 13 June – 27 August 1944*

6 Airborne now settled down to holding the line. Despite a 'verbal agreement' that the division would be withdrawn after three weeks 6 Airborne was now retained to hold the static Orne bridgehead front.¹⁰¹² 6 Airborne now held a 9,000 yard front line extending from just east of Escoville to the sea with less than six thousand infantrymen until 4 SS Bde also joined Gale's forces.¹⁰¹³

The experience of US airborne forces on the western flank of the landings was little

¹⁰¹¹ 'Battle-grouping' would certainly have later helped 1 Airborne Div at Arnhem by combining the heavy weapons of the AL units with the flexibility of the parachute battalions. J.W. Greenacre, *Churchill's Spearhead: The Development of Britain's Airborne Forces during the Second World War* (Barnsley: Pen & Sword Aviation, 2010), pp. 195–197.

¹⁰¹² TNA CAB 106/970, "Report on the Operations carried out by 6 Airborne Division 5 Jun – Aug 27", p. 22.

¹⁰¹³ In addition to losses due to combat and scattering, the Glider Pilot Regt had been withdrawn on 8 June whereby Gale effectively lost another 652 trained soldiers. Harclerode, p.97; Gale, 6th, p. 111.

different. US 82 and 101 Airborne Divisions were landed on the neck of the Cotentin to shield the Utah and Omaha landings, and to begin the process of cutting off the peninsula. The parachute drops in this area also suffered considerably from scattering. While many scattered men returned to their units, the 101 recorded 1,204 permanently missing men while the 82 lost 756.¹⁰¹⁴ The first official Air Ministry report delivered to the War Office from Normandy regarding 6 Airborne's descent was upbeat, possibly reflecting a wave of relief that the US landings had not been the complete debacle Leigh-Mallory had feared.¹⁰¹⁵ The two US airborne divisions were withdrawn after approximately three/four weeks; the 101 Airborne was relieved by US 83 Inf Division on 29 June and the 82 Airborne retired into army reserve on 11 July.¹⁰¹⁶ The US airborne division was of similar size to the British model, with around 12,500 men, fifty 57mm anti-tank guns and twenty-four 75mm pack howitzers. Three parachute regiments were fielded with three battalions each of a similar size to the British parachute brigades and likewise a larger, more heavily equipped three battalion glider infantry regiment.¹⁰¹⁷ Like 6 Airborne the US airborne troops were relieved by conventional role forces within 72 hours of landing. The 82 US Airborne Div was relieved three days after landing by the US 90 Div although the airborne troops had to assist the inexperienced division until D +11 (17 June) when the veteran 9 US Div pushed through their positions.¹⁰¹⁸ Bradley's First US Army was able to relieve its airborne forces with conventional role as soon as the shipping situation allowed their deployment.

¹⁰¹⁴ Stephen Badsey, *D-Day: From the Normandy Beaches to the Liberation of France* (Godalming: Colour Library Books Ltd, 1994), pp. 59–62.

¹⁰¹⁵ Leigh-Mallory had feared US airborne losses of aircraft and troops would be as high as 80%. Omar N. Bradley, *A Soldier's Story of the Allied Campaigns from Tunis to the Elbe* (London: Eyre and Spottiswoode, 1951), pp. 234–236; Dwight D. Eisenhower, *Crusade in Europe* (London: John Hopkins University Press, 1997), pp. 246–247; James M. Gavin, *On to Berlin: Battles of an Airborne Commander 1943-1946* (London: Leo Cooper, 1978), pp. 92–94.

¹⁰¹⁶ Ambrose 'Band', p. 105; Gavin 'Onto Berlin' p. 120.

¹⁰¹⁷ George Forty, *U.S. Army Handbook 1939-1945* (Stroud: Sutton, 2003), pp. 82–84.

¹⁰¹⁸ James M. Gavin, *On to Berlin: Battles of an Airborne Commander 1943-1946* (London: Leo Cooper, 1978), pp. 118–119.

In contrast the moment 21 Army Group landed in France it was effectively a wasting asset as the army had reached almost the bottom of its manpower barrel, the adjutant-General general Adam visited Montgomery on 9 July to warn him that infantry replacements would soon be exhausted.¹⁰¹⁹ Gale used his own in house newsletter, Pegasus, to maintain communication with every man under his command -

We have fought for ground and gained all we fought for; all we have gained by skill and guts we have held with courage and determination. Our reputation stands high in the 21st Army Group and at Home. Let us see to it that none of us let the side down. As I go about I am constantly struck by the smart and alert bearing of men in the red and green berets. Just as they look alert and businesslike in the line, so in the rear areas and across the river they look clean and soldierly and fit. There are exceptions, and it is up to you and me to see that those exceptions are eliminated. Do not let us get scruffy and untidy. In this division we all work together; because we have a common interest and common ideal; it is that we should be second to none.¹⁰²⁰

Such a news sheet fostered esprit de corps and allowed Gale to issue directives, as above.

In terms of organisational learning, any new useful experience in Normandy regarding airborne warfare effectively ended with the last Rob Roy supply mission on 30 June (D+30),¹⁰²¹ the further lessons being a shopping-list of order of battle short-comings when the division was obliged to hold the line. The need for more artillery the moment the initial surprise effect on the enemy was emphasised:

However strong an airborne div is in small arms, once the enemy has recovered from his initial surprise it is essential to obtain arty sp on a scale at least comparable to that likely to be available for a normal div.¹⁰²²

More 17 pdr ATk guns were called for, the two A Tk Btys of 16 guns each were found barely 'sufficient.'¹⁰²³ While the Division held the line the challenges faced were essentially outside

¹⁰¹⁹ Stephen Hart, pp. 42-68.

¹⁰²⁰ From a reprinted 'Pegasus' 6 Airborne newsletter, dated 5 August, 1944. Barry Gregory, *British Airborne Troops* (London: Macdonald and Jane's, 1974), p. 108.

¹⁰²¹ TNA CAB 106/970, 'Report on the Operations carried out by 6 Airborne Division 5 Jun – Aug 27', Appx Q, p. 73.

¹⁰²² TNA CAB 106/970, "Report on the Operations carried out by 6 Airborne Division 5 Jun – Aug 27", p.28

the parameters of its role. It had held the line as a conventional role infantry division and had been forced to adapt and improvise to compensate for its OOB shortcomings. 1 Airborne Div benefitted from the Normandy anti-tank lessons as new gun troops were formed in time for Market, and the division would take 52 6 pdrs and 16 17 pdrs to Arnhem.¹⁰²⁴

Infantry reinforcements arrived in early July, 600 men arriving from Second Army.¹⁰²⁵ These men had come from the SLI, and the infantry training they had received was 'very bad.' Notably a few trained paratroopers arrived from Hardwick Hall, trained Vickers machine-gunners who had all been in the KOYLI during the retreat from Burma.¹⁰²⁶ approximately 450 of these 600 remained with the Division, going on to complete their parachute training at Ringway, while the others were posted to conventional role infantry units once the campaign was over.¹⁰²⁷ However no artillery, engineer and provost replacements could be sourced and these units had to manage at only forty per cent strength until the end of the campaign.¹⁰²⁸ While in this static stage of operations the supply situation adequately met 6 Airborne's needs. Initially supplies were drawn over the beach but soon a 'Road Head' was extended into the divisional area. The system was able to sustain the two SS Bdes and the Belgian and Dutch contingents later, but the seconded RA regiments had to rely on other sources for the prodigious amount of shells they consumed.

After the first week's heavy fighting 6 Airborne was well-positioned to hold the Bois de Bavent line, and had gained an intimate knowledge of the ground. The rolling wooded

¹⁰²³ Ibid, p.29

¹⁰²⁴ Martin Middlebrook, *Arnhem 1944: The Airborne Battle, 17-26 September* (London: Penguin, 1995), pp. 35–36.

¹⁰²⁵ Gale, p. 114.

¹⁰²⁶ Author interview with Ron Perry, 7 Para Bn Veteran, 5 November 2013.

¹⁰²⁷ Gale, p. 114.

¹⁰²⁸ TNA CAB 106/970, "Report on the Operations carried out by 6 Airborne Division 5 Jun – Aug 27', p. 26.

landscape allowed the airborne and commando troops' aggressive patrolling to dominate the ground:

The hedges dividing the very small orchards in this country consisted of big trees growing out of high banks on either side of which would run a deep ditch. It was in these ditches and at the junctions of these hedges that both we and the Germans had established our positions. There was no front line in any sense of the word: there was a patchwork of forward posts as often as not, not even mutually visible.¹⁰²⁹

Gale's troops could hold the line cheaply due to its expertise in aggressive patrolling techniques thus freeing up conventional role infantry formations to pursue offensive operations to the south:

TASKS.

(a) 6 Airborne Division

Will confine its self to making the general line LE MESNIL 1372 – BREVILLE 1374 – SALENELLES 1376 absolutely firm. Combined with this task, there will be infiltration and frigging about EAST of the above line to the maximum degree the resources of the Div will allow, but remembering that the security of the firm base is the first consideration.¹⁰³⁰

THE above comments crudely and succinctly summarises the task given to the division as it hunkered down on the eastern flank of the 21AG lodgement. The 'abominably intrepid' Alistair Pearson and his 8 Para Bn held the Bois de Bavent stoically, beating off enemy patrols and continually checking to see 'if the enemy trenches are still occupied' by probing No Man's Land themselves.¹⁰³¹

One advantage of holding the compact Orne bridgehead area was that it nullified 6 Airborne's very low scale of motor transport. Each conventional role infantry battalion fielded no less than forty-six Lorries and trucks and thirty-eight Bren/Universal carriers for its supply and transport needs, and when combined with each brigade's RASC company

¹⁰²⁹ Gale '6th', p. 113.

¹⁰³⁰ TNA WO 171/193 2nd Army HQ Ops June 1944 'I Corps Operational Instruction No. 3', dated 19 June 1944.

¹⁰³¹ Guttery, p. 75. Julian James, *A Fierce Quality: A Biography of Brigadier Alastair Pearson* (London: Cooper, 1989), pp. 105–106.

every division was fully motorised. The three RASC companies attached to the airborne division were charged with simply moving supplies between units once landed.¹⁰³² The 1943 Doctrine pamphlet section 'Part VIII – Administration' concentrates on supply from the air, the RASC Composite companies only being mentioned twice.¹⁰³³ While portions of 398 and 716 Coys were landed by air the full establishment had not been completed until the last seaborne elements had joined the division on D+6 (12 June).¹⁰³⁴ The lack of personnel transportation was keenly felt when Operation Paddle got underway, but would have also prevented 6 Airborne from fully participating in 21 Army Group's greatest offensive operation, Goodwood, if operations had achieved a decisive breakthrough.

Along with motor transport, in its new adopted conventional static role the more heavily equipped elements of the division, AFVs and artillery, were the most unsuitable. The Tetrarch tanks of 6 AARR proved to lack robustness in airborne operations. Two tanks had been lost in the landings phase through an unfortunate glider collision, but then eleven of the remaining eighteen tanks were immobilised after their bogie wheels became entangled in glider tug ropes.¹⁰³⁵ It took most of the night of 6/7 June for the vehicles to be released with blow torches, which fortunately could take place in the safe harbour area.¹⁰³⁶ The enemy appeared to have a healthy respect for the potential of the Tetrarch:

'Fighting Value ... (f) The most dangerous enemy is the transport glider which is capable of putting down complete fighting units ready for action. The 'Tetrarch' Mk

¹⁰³² 63 and 398 RASC Composite Companies were equipped with 3-ton trucks, tasked with packing panniers and containers and moving them to airfields in advance of an operation. 716 Light Composite Company, equipped with jeeps and trailers, was charged with gathering the containers and panniers from the DZ/LZ and distributing them around the Division's units. Harclerode, pp. 23-24.

¹⁰³³ 'Mobile Reserves will be carried in the 5-cwt cars and trailers of the RASC composite company.' The other references concern defence plans for the supply dumps and AA defence. War Office, 'Airborne Operations Pamphlet No.1 1943 (Provisional)', p. 32.

¹⁰³⁴ TNA CAB 106/970, 'Report on the Operations carried out by 6 Airborne Division 5 Jun – Aug 27', Appdx M.

¹⁰³⁵ Shilleto, pp. 169-170.

¹⁰³⁶ TNA WO 171/435, 6 AARR WD, 6 June 1944. Peter Harclerode, *'Go to It!' The Illustrated History of the 6th Airborne Division* (London: Caxton Editions, 1990), p. 76.

VII airborne tank is stated to have silenced German gun positions within two minutes of landing.¹⁰³⁷

Two more tanks were lost on 7 June, one to a SPG and one to a mine.¹⁰³⁸ A reference in 8 Para Bn's war diary makes possible reference to the first incident, 'Armoured Recce reported than an SP gun at [blank space] was giving them trouble and would we deal with it.'¹⁰³⁹ While 8 Para Bn was providing 6 Armd Recce with a safe harbour, their need for infantry to deal with an enemy AFV (probably open-topped and relatively thinly armoured) does not reflect well on the combat power of the Tetrarch, their most powerful asset. This reference perhaps also points to the unit's misuse, an essentially light armoured unit deployed in woods. 13/18 H were used for the Bréville attack as the Tetrarchs were performing useful service carrying out reconnaissance in the Bois de Bavent, were unsuited for such a heavy assault role, and awaiting their arrival would have been an added complication to an operation that had to be launched quickly. However, on 5 July a proposal to use the tanks to support an attack from Le Mesnil on enemy positions was turned down, and by 31 July the regiment had been pulled back to assist 5 Para Bde in the defence of the bridges.¹⁰⁴⁰ On 6 August eight Cromwell cruiser tanks were allocated to the Regiment and organised into two troops within A Squadron, while the HQ Troop retained three close support (3" howitzer) Tetrarchs, while the Regiment's HQ kept two Tetrarchs.¹⁰⁴¹ The 3" howitzer was useful light gun for supporting infantry and had previously been employed in

¹⁰³⁷ TNA WO 208/3163 SHAEF Special Tactical Studies translations. 'Experiences From Allied Air landings', Einzelnachrichte des Ic-Dientes West (Single News of the West Service) 43, 44, 46. 11 July, 21 July, 24 July 1944. The unit war diary states that the Regiment went into harbour once landed, and saw no action until 7 June when a patrol encountered an eight-wheel armoured car. It is possible some of the tanks returned fire once landed, while still immobilised by the ropes, to the consternation of the enemy. TNA WO 171/435, 6 AARR WD, 6 June 1944.

¹⁰³⁸ TNA WO 171/435, 6 AARR WD, 'INSERT', 7 June 1944.

¹⁰³⁹ TNA WO 171/1240, 8 Para Bn WD, 7 June 1944.

¹⁰⁴⁰ TNA WO 171/435, 6 AARR WD, 5 July, 31 July 1944.

¹⁰⁴¹ TNA WO 171/435, 6 AARR WD, 5 July, 31 July 1944; (AA) 3-G1-7.1.2, '6 Armd Recce Regt – Historical Notes', p. 12.

Matilda and Churchill Mk I tanks.¹⁰⁴² This re-equipment gave 6 Airborne an organic tank squadron made up of standard battle tanks, as the Tetrarch was unsuitable for prolonged operations in conventional role. The reason why the Tetrarch featured in the 6 Airborne's order of battle was its air portability, so the change also indicates the extent to which the Division was now operating beyond the parameters of its ordained role.

The divisional organic artillery provision was also entirely inadequate for prolonged operations. Only one of 53 (WY) Lt Regt's batteries had been landed in the airborne phase, 211 Bty, and during the first few days of action the demand for their support was extraordinary:

I had only one eight-gun battery of 75mm howitzers in the bridgehead for the first week. These eight guns shot ceaselessly, expending fifteen hundred rounds on "D" day, thirteen hundred on 7th June and two thousand five hundred on the 8th June.¹⁰⁴³

For 8 June, these numbers represent each gun firing every four minutes for twenty-four hours! The other two batteries would not join the division until 15 June.¹⁰⁴⁴ As discussed in chapter five and in the Bréville case study 6 Airborne was generously supported by the artillery of surrounding 1 Corps formations:

Subsequently the division always had two Fd Regts and one HAA [Heavy Anti-Aircraft] Regt (in the ground role) under command in addition to its airlanding Regt; and on occasions it had a bty or regt of med arty and after 12 August 44, 12 and 4 guns belonging respectively to the Belgian contingent and the Royal Netherlands contingent.¹⁰⁴⁵

In addition to the powerful allocation of field regiments allotted to its infantry divisions, 1 Corps also had 4 AGRA attached with twenty-four 25 pdr, fifty-six 4.5' and sixteen

¹⁰⁴² The Cromwell A27 equipped 7 Armoured Div and the reconnaissance regiments of 11 and Gds Armd Divs. It had nearly six times the armour of the Tetrarch on the front and turret, had the same top speed (40 mph) and carried a much greater armament with a 75mm gun and two MGs. Forty, 'British Army Handbook', pp. 231-243.

¹⁰⁴³ Gale, '6th', p. 109.

¹⁰⁴⁴ Guttery, pp. 63-64.

¹⁰⁴⁵ TNA CAB 106/970, "Report on the Operations carried out by 6 Airborne Division 5 Jun – Aug 27", p. 18.

4.5"/155mm guns.¹⁰⁴⁶ The Division's artillery arm was effectively built up to that of a conventional role infantry division, but while these guns were supporting the airborne forces they were unable to support their own infantry. The attachment of the Belgian Piron Bde and the Princess Irene Netherlands Bde on 6 August added much needed infantry strength to Gale's command but also usefully contributed sixteen 25 pdr guns. These additions were well-timed to support the Division as it prepared to pursue the enemy in Paddle.¹⁰⁴⁷

On 17 August Operation Paddle began, 1 Corps' pursuit of German forces as they fell back along the Channel coast. To the south the Wehrmacht situation had collapsed with the bulk of 7 A.O.K. and 5 Pz-A.O.K. encircled around Falaise, and US/Free French forces driving hard on Paris. Gale had grouped 6 Airborne to make best use of the more mobile elements within it, but the pursuit would essentially be on foot. While 6 AL Bde pushed towards the coast with both the Belgian Peron Bde and Netherlands Princess Irene Bde under command, the two parachute brigades pushed east towards the Dives crossings.¹⁰⁴⁸ 6 Airborne's campaign ended on 27 August when it was ordered to concentrate between Honfleur and Pont Audemer.¹⁰⁴⁹

The final cost for the Division in men had been heavy. 6 Airborne had lost 745 ORs and 76 officers killed in action, 2,510 ORs and 199 officers wounded, with a further 886 ORs and 41 officers missing. 4,457 men lost, represented thirty-six per cent of total WE (war

¹⁰⁴⁶ 150 Fd Regt, 53,65,68,79 Med Regts and 51 Hy Regt. Jean Bouchery, *The British Soldier, Volume 2: Organisation, Armament, Tanks and Vehicles* (Paris: Histoire & Collections, 1998), p. 34.

¹⁰⁴⁷ Guttery, pp. 72–73.

¹⁰⁴⁸ TNA CAB 106/970, 'Report on Operations of 6 Airborne Division in Normandy 1944, 6 Jun - Aug 27', dated 1944, p. 15.

¹⁰⁴⁹ Gale, p. 149.

establishment) divisional strength.¹⁰⁵⁰ The level of casualties was serious, but not as severe as that suffered by 1 Para Bde in Tunisia, although that brigade was mathematically wiped out with a total of 1,700 casualties across three parachute battalions.¹⁰⁵¹ The loss of officers reveals a certain mayfly element to the nature of airborne leadership on the battlefield. 316 officers dead, wounded and missing came from a WE of 701, therefore forty-five per cent losses.¹⁰⁵² In the parachute battalions officer losses were especially severe, 1/CDN losing twenty-four of twenty-seven officers in the campaign.¹⁰⁵³

6 Airborne Div took heavy losses in the first few hours of action, but Gale's focus on aggression and initiative allowed it to absorb these heavy losses and carry on to achieve its tasks. The development of a divisional identity allowed combat support elements to 'blister on' seamlessly with the infantry units, as shown in the integration of 3 and 4 A.Tk Btys in the defence of the perimeter between 6 and 12 June. The divisional artillery support plan created by Colonel Norris facilitated the use of 1 Corps/3 Div and eventually 51 Div RA assets under the direction of airborne FOOs in addition to naval gunfire support.

The results of the landings phase, the actual airborne assault of 6 Airborne on D-Day, compares favourably when set alongside the Airborne Operations success/failure process (**Figure 1**) introduced in chapter two. Despite severe scattering the Division managed to recover its cohesion and take momentum into the attack led effectively by local commanders (such as Hill, Otway and Pearson). The defenders became quickly aware of the airborne landings:

¹⁰⁵⁰ Richard Gale, *With the 6th Airborne in Normandy*, (London: Sampson, 1948), Appendix 1. George Forty, *British Army Handbook 1939-1945* (Stroud: Chancellor Press, 2000), pp. 168–169.

¹⁰⁵¹ Victor Dover, *The Sky Generals* (London: Cassell, 1981), p. 201.

¹⁰⁵² George Forty, *British Army Handbook 1939-1945* (Stroud: Chancellor Press, 2000), pp. 168–169.

¹⁰⁵³ Peter Harclerode, *Go to It!* (London: Caxton, 1990), p. 109.

The reports of the troops about parachute jumps and airborne landings were received by the division at intervals, as the landings occurred, between hours of 0040 and 0105. On the basis of these reports the division ordered at 0110 hours that alarm stage II take effect in the entire divisional sector, after the commander of the coast defence group at Riva Bella had already ordered alarm stage II for his group at 0045 hours.¹⁰⁵⁴

Yet their reaction was sluggish and paralysed by the poor mobility and scattered deployment of the bulk of its infantry. It would be these small garrisons which would be isolated and eliminated rather than the airborne troops. The Bréville episode revealed that airborne troops required considerable co-opted support to confront ensconced enemy conventional role infantry; but again Gale's units benefitted from the tough preparation he had put them through and the cover of darkness. They were able to use their aggression at close range under his direction and that of this carefully selected unit and formation leaders.

Overall Allied command was satisfied with the performance of airborne forces in Normandy, the concerns of Husky now exoriated. Enthusiasm again gripped the highest echelons of Allied command. On 10 August the COS sent a memorandum to the Joint Staff Mission in Washington stating that 'we are in general agreement with General Marshall that the tendency in all theatres is to make insufficient use of airborne forces.'¹⁰⁵⁵ Gale's leadership had defined 6 Airborne Div's identity and its combat effectiveness.

¹⁰⁵⁴ IWM MS B-621, Richter, Wilhelm, Gen.Lt., 'Kampf der 716 Div in Normandie 6.6 – 23.6.44,' p. 55.

¹⁰⁵⁵ TNA CAB 120/262, The Development of Airborne Forces. Memorandum from COS to JSM, 10 August 1944.

Chapter Seven – Conclusion

6 Airborne was created to take part in the invasion of NW Europe. The leadership of Richard Gale moulded it into a high quality division before it was committed to action, stamping his authority on its character through his appointment of its leaders and its capability through a ferocious programme of challenging training. Once landed it generated and sustained its combat effectiveness through aggressive and inventive infantry fighting led by carefully selected leaders.

This concluding chapter will view developments and events beyond the Normandy campaign to frame 6 Airborne's effect into the framework of the wider war. First the enhanced worth attached to the Division after the campaign will be shown. It will then compare and contrast the cost effect comparison with Special Force, a similar sized effort in the Far East theatre 1943-1944. Third, the stabilisation and codification of British Air assault method will be reviewed. In the second half of this chapter the trail of the themes throughout the study will be highlighted with the thesis' research outcomes set by the thesis and research questions.

I. Beyond Normandy

At the end of the campaign the British Army was left with a 6 Airborne Div that was an extremely valuable operational asset. It had executed a successful divisional-scale airborne operation, in which it had achieved its objectives, and was battle-hardened after three months of continuous combat operations. Gale's command was not alone in this; 15, 43, 49, 53 Inf and 11 and Gds Armd Divs had also been inexperienced formations committed to battle in Normandy, and were now also highly thought of as experienced fighting

divisions.¹⁰⁵⁶ The division was called upon to support US forces in the Ardennes during January 1945, when the German 'Bulge' offensive fell upon the US First Army. 6 Airborne was committed as conventional role infantry, rushed by ship across the Channel, in the case of 1 RUR being escorted through a thick London fog under escort by the Metropolitan Police.¹⁰⁵⁷ The use of the Division in this way highlights the shortage of trained infantrymen that the Army was suffering from D-Day onwards. These were specialised troops used once more to hold the line, a task any conventional role formation would have been able to do.

Even in the immediate aftermath of the Market Garden failure, senior Allied commanders saw the value of airborne forces and were keen to include them in their plans. 6 Airborne was ready for further operations by 1 October 1944, and Guy Simonds, the Canadian Corps commander facing the challenge of clearing the Scheldt area of Holland, was keen to use airborne troops to clear the approaches to Antwerp.¹⁰⁵⁸ Indeed, two enormous airborne operations with potentially strategic results, Eclipse and Arena, were planned by Brereton's First Airborne Army staff and presented to Eisenhower in early March 1945. The first operation would have involved a two corps airborne assault onto Berlin and was supported by US General Arnold (the chief of the USAAF) and intended to capture the city before Soviet forces arrived. The second would have used ten airborne and air portable divisions to effectively cut Germany in two and provide a great airborne-defended bridgehead on high ground near Paderborn for conventional role formations to converge on before using it as a

¹⁰⁵⁶ 3 Inf Div had seen action in France in 1940, while 7 Armd, 50 and 51 Inf Divs were veteran formations after extensive experience in N. Africa and the Mediterranean. Kite, pp. 18–19.

¹⁰⁵⁷ David R. Orr and David Tresdale, *The Rifles Are There: The Story of the 1st and 2nd Battalions, The Royal Ulster Rifles 1939–1945* (Barnsley: Pen & Sword Books, 2005), p. 149.

¹⁰⁵⁸ Sir Brian Horrocks, Eversley Belfield and H. Essame, *Corps Commander* (London: Sidgwick & Jackson, 1977), pp. 133–134.

supply hub for a final offensive.¹⁰⁵⁹ With senior commanders still requested airborne forces' assistance and such expansive thinking in play at First Airborne Army, it was inevitable that airborne troops would be used to cross the last great natural barrier opposing the Allies on the border of Germany. Therefore 6 Airborne would be used in role in one other large scale operation before the war ended.

Operation Varsity, the airborne element of 21 Army Group's Rhine crossing operation, Plunder, took place on 24 March 1945. 6 Airborne was given an important role as part of XVIII US Airborne Corps (which also included 17 US Airborne Div), seizing the town of Hamminkeln, bridges over the River Issel and important high ground behind the enemy's main defensive line. The division was inserted in one lift, and landed close to its objectives, showing that the lessons of Normandy and Arnhem had been learned regarding proximity of landings and the need for a maximum first lift.¹⁰⁶⁰ The division did however suffer heavy casualties, particularly amongst the glider-borne units. 53 RA suffered the loss of twenty-two out of seventy-eight gliders.¹⁰⁶¹ 2 Oxf Bucks lost half their strength in the landing, the regimental history attributing these severe losses to a group of German light AA guns saved from the RAF preparatory bombardment by a 'ground haze':

As the gliders cast off and circled for landing they were greeted by fire from 20 millimetre [sic] guns. On the Regimental Landing Zone there were four sites each containing four guns, each having four barrels. The Result was unpleasant. There was scarcely a glider that did not receive a hit somewhere.¹⁰⁶²

¹⁰⁵⁹ ARENA would have used all available SHAEF airborne divisions: British 1 and 6, US 13, 17, 82 and 101, together with 'four air-landed US infantry divisions.' Maurice. Tugwell, *Airborne to Battle: A History of Airborne Warfare, 1918-1971* (London: Kimber, 1971), pp. 269–270.

¹⁰⁶⁰ Peter Harclerode, *'Go to It!' The Illustrated History of the 6th Airborne Division* (London: Caxton Editions, 1990), pp.118-120.

¹⁰⁶¹ Harclerode, p. 138.

¹⁰⁶² Philip Booth, *The Oxfordshire and Buckinghamshire Light Infantry* (London: Leo Cooper, 1971), p. 141.

The aircraft and glider operations for both divisions amounted to forty-four transport planes and eighty gliders, while 6 Airborne suffered 347 killed and 731 wounded.¹⁰⁶³ When compared to the total losses for the period March-May 1945, when the Division advanced to the Baltic, the losses for Varsity amounted to fifty per cent of those killed.¹⁰⁶⁴ The Division's casualties, even in the view of a supporter of airborne forces, 'were eye-watering losses pitted against enemy units at perhaps forty per cent strength, broadly assessed as already beaten.'¹⁰⁶⁵ The use of 6 Airborne and the Varsity operation has been censored by recent authors. The views that 'Plunder would undoubtedly have achieved its aims without the supporting airborne assault' and was a great risk to take considering the 'spotty and limited response' the enemy were capable of have merit set against the situation the Wehrmacht found its self in March 1945.¹⁰⁶⁶ 'The clear lesson was that airborne operations succeed when they can be rapidly joined by formations with heavier equipment', had been made again.¹⁰⁶⁷ The landing of tanks from the air was again of questionable success. 6 AARR flew eight American-built Locust light tanks into the bridgehead in Hamilcar gliders. Four were damaged on landing and only two were serviceable enough to reach the rendezvous point.¹⁰⁶⁸

Launching an airborne operation against an enemy well equipped with anti-aircraft guns in daylight had been costly, and the landing losses of some glider borne units through enemy fire can be compared to those suffered by the Luftwaffe on Crete. However, 6 Airborne

¹⁰⁶³ Barry Gregory, *British Airborne Troops* (London: Macdonald and Jane's, 1974), pp. 146–147.

¹⁰⁶⁴ Losses March-May 1945 – 700 killed, 750 wounded and 400 missing. Victor Dover, *The Sky Generals* (London: Cassell, 1981), p. 201.

¹⁰⁶⁵ Robert J. Kershaw, *Sky Men: The Real Story of the Paras* (London: Hodder & Stoughton, 2010), p. 243.

¹⁰⁶⁶ John Buckley, *Monty's Men: The British Army and the Liberation of Europe, 1944-5* (London: Yale University Press, 2013), p. 285; Sebastian Ritchie, *Arnhem: Myth and Reality* (London: Robert Hale, 2011), p. 255.

¹⁰⁶⁷ Michael Carver, *Britain's Army in the 20th Century* (London: Pan, 1998), p. 298.

¹⁰⁶⁸ Peter Harclerode, *Go to It!* (London: Caxton, 1990), p. 140-141.

concentrated quickly on the ground and succeeded in achieving its objectives, and was rapidly relieved by Second Army.

Beyond the NW European theatre another unconventional forces endeavour is useful to assess and compare and contrast with the Airborne Establishment effort. Though more short-lived and more ad hoc in nature, Orde Wingate's 'Special Force' endeavour is an interesting comparison to the creation of airborne forces in terms of resource cost and operational effect. The Chindits¹⁰⁶⁹ eventually became almost corps sized and absorbed a considerable proportion of the infantry manpower devoted to the Burma campaign.

Archibald Wavell had been inspired by Orde Wingate's use of long range penetration (LRP) operations in the successful defeat of the Italians in East Africa. Wavell therefore supported Wingate with a view to employing similar irregular tactics in defeating Japanese forces in Burma.¹⁰⁷⁰ The first Chindit operation, Longcloth, was launched in 1943, the Special Force being composed of 77 Bde. This formation could not be considered a picked force in its entirety, having units that had been converted from other roles.¹⁰⁷¹ The operation was originally intended to support an offensive by IV Corps across the River Chindwin, but this was cancelled. Wingate gained Wavell's permission to proceed to test the LRP concept in Burma and to consolidate his brigade's morale. The force was structured to disrupt Japanese communications by cutting railway lines and causing confusion through diversionary actions. The operation ended with the Chindit groups dispersing and making their own way back in groups of various sizes to avoid contact with large conventional role

¹⁰⁶⁹ Chindit: from *Chinthe*, the mythical beasts which stand guard over the entrances of temples in Burma. Julian Thompson, *The Imperial War Museum Book of War Behind Enemy Lines* (London: Sidgwick and Jackson, 1999), p.131.

¹⁰⁷⁰ Ibid. p.133.

¹⁰⁷¹ Ibid. p.140. 13 King's was a British battalion composed of older men which had been sent to India for internal security duty; 3/2 Gurkhas was a brand new unit including many under eighteen-year-old recruits; 2 Burmese Rifles was composed of seasoned troops; 142 Commando Company was actually a picked unit of volunteers.

Japanese units. In a post action report, the new C-in-C, Claude Auchinleck¹⁰⁷² praised the operation for lessons learnt regarding air supply, much intelligence gained and possibly six to eight Japanese battalions diverted from other operations. The operation was much lauded in the British and US press and boosted morale as the effort was seen as a spirited offensive action which had succeeded against the until now seemingly invincible Japanese in Burma.¹⁰⁷³

Wingate was recalled in July 1943 to report to Sir Alan Brooke on his operations. By an extraordinary turn of events he was interviewed by Churchill just as the latter was about to embark on ship to the Quebec Conference with Roosevelt. He made a significant impression on the Prime Minister, 'we had not talked for half an hour before I felt myself in the presence of a man of the highest quality.' Churchill was drawn to the proposal for two reasons. First, the effort appealed to his interest in unconventional warfare. Second, as discussed, the effort could begin to eliminate the notion amongst the conventional role army that the Japanese were somehow invincible when fighting in the jungle. This had developed since the fall of Malaya and Singapore in 1942. Churchill spontaneously decided to take Wingate with him to Canada. Wingate presented his ideas and plans for LRP forces in Burma to the combined Chiefs of Staff. Due to Churchill's wish to see offensive action against the Japanese, Wingate's engaging charisma and the Americans' desire to pursue operations in support of Chiang Kai Shek's Chinese Nationalist forces – all his plans were approved.¹⁰⁷⁴

¹⁰⁷² General Sir Claude Auchinleck, a regular Indian Army infantryman. As C-in-C Middle East he took over direct command of eighth Army and halted Rommel's last great offensive in Egypt in July 1942 before being moved to C-IN-C India. John Keegan (ed.), *Churchill's Generals* (London: Cassell, 1991), pp. 130-148.

¹⁰⁷³ Thompson, p. 167.

¹⁰⁷⁴ David Rooney, *Wingate and the Chindits: Redressing the Balance* (London: Cassell, 1994), pp. 102-103.

The resources allocated to the renewed Chindit effort were considerable. Against the wishes of the India C-in-C, Claude Auchinleck, the battle-hardened 70 Div was directly converted to Special Force under Wingate's command. This British division had fought in the Middle East and had played a key role in saving Tobruk in 1941. It was a potential cornerstone with operations in Burma in prospect. As the Special Force would be dependent on close air support and supply, Wingate was also allocated American LRP troops and the Air Commando. This air formation was powerful – with 127 aircraft and 225 gliders.¹⁰⁷⁵ The greatly enlarged Special Force trained hard and also filtered out any unsuitable men which had to be replaced with volunteers from other conventional role forces, 'possibly some forty per cent.'¹⁰⁷⁶ Having a sixth of all the infantry available for offensive operations in 1944, Wingate's force had to be used in key operations.¹⁰⁷⁷ Operation Thursday's goals for Special Force were the establishment of air-supplied defended bridgeheads; the capture of Indaw; and the general aim to disrupt Japanese operations by sending columns all over Burma to attack communications.¹⁰⁷⁸ Beginning on 5 March 1944, 77 and 111 Bdes were airlanded behind enemy lines beginning with an initial wave of fifty-two gliders towed by twenty-six aircraft.¹⁰⁷⁹ Wingate's 'Stronghold' – his theory of a defended air-supplied location – at 'Broadway' was supplied every night by 100 Dakota aircraft which landed 12,000 men, all their equipment and food and 2,000 mules.¹⁰⁸⁰ Wingate would be killed in an air crash in the middle of the operation, which certainly engaged Japanese forces across their lines of

¹⁰⁷⁵ 30 P-51 fighters, 12 B-25 Mitchell medium bombers, 13 C-47 Dakota and 12 C-46 Commando transport aircraft, 100 Stinson L1 and L5 light aircraft and even 6 experimental Sikorsky helicopters plus 225 Waco gliders. Wingate would also have the close support of 84 Squadron RAF which flew Vultee Vengeance dive bombers. Trevor Royle, *Orde Wingate: Irregular Soldier* (London: Cassell, 1995), p. 276.

¹⁰⁷⁶ Maj. Gen. S. Woodburn Kirby, *History of the Second World War: The War Against Japan, Vol II* (London: HMSO, 1958), p. 399.

¹⁰⁷⁷ Maj. Gen. S. Woodburn Kirby, *History of the Second World War: The War Against Japan, Vol III* (London: HMSO, 1958), p. 443.

¹⁰⁷⁸ Rooney, p. 108.

¹⁰⁷⁹ *Ibid.*, p. 113.

¹⁰⁸⁰ *Ibid.*, p. 118.

communication just as the crucial Imphal/Kohima offensives were launched.¹⁰⁸¹ The operation also assisted Stilwell¹⁰⁸² in pushing forward the Ledo road to support Chiang Kai-shek's Chinese forces.¹⁰⁸³ Wingate was viewed as a controversial figure by more orthodox soldiers when alive and by historians since his death. Indeed, he is the subject of a detailed critique in the official history.¹⁰⁸⁴

The bravery and determination of the Chindits cannot be denied, but the project's effectiveness can be challenged. When the Chindits are measured against the primary combat effectiveness metric discussed at the start of chapter five – the achievement of operational goals, an issue can be seen. The Chindits objectives – in practice - appear to have been indistinct and did not directly support Fourteenth Army in sweeping the Japanese out of Burma by supporting a conventional offensive by the latter. The Imphal/Kohima offensive must certainly have been hampered by Wingate's activity, but it is uncertain that the Chindits directly compromised it. With so uncertain a return the investment of resources placed in Special Force must be questioned. The Air Commando presented to Wingate in August 1943, and the promise of considerable transport support from RAF and US Dakota squadrons, was far in excess of what RAF 38 Gp could furnish for the entire British airborne project in the UK in the summer of that year. Not even a complete parachute brigade could be lifted at this time (see chapter two). The Chindits took sixteen per cent of all the infantry available for Burma offensive operations in 1944. While Wingate's small corps included non-British elements, this dwarfs the five per cent of

¹⁰⁸¹ Imphal and Kohima. The Summer 1944 Japanese offensive which tested Fourteenth Army to the limit and was only halted by desperate fighting and an extraordinary effort of air resupply and troop movements. David Chandler (ed.), *The Oxford History of the British Army* (Oxford: OUP, 1994), pp. 294-297.

¹⁰⁸² General 'Vinegar Joe' Stilwell, the Chinese Nationalist leader Chiang Kai-shek's chief of staff and the commander of US forces in the India-Burma-China theatre. David Chandler (ed.), *The Oxford History of the British Army* (Oxford: OUP, 1994), p. 295.

¹⁰⁸³ Thompson, pp. 253-254.

¹⁰⁸⁴ Maj. Gen. S. Woodburn Kirby, *History of the Second World War: The War Against Japan, Vol III* (London: HMSO, 1958), pp. 217-223.

infantry allocated across the Army dedicated to airborne and commando forces in all theatres (**Tables 1 and 2**). The disbandment by conversion of the experienced 70 Div also added to the dislike and resentment amongst the orthodox officers which Wingate's poor interpersonal skills fed. This friction could also be seen as a cost to the project, although the reverse side of Wingate's obvious insight and vision – but in stark contrast to Gale's collaborative style. Overall in sharp contrast 6 Airborne's results can be seen clearly and overall offered a better return on investment.

Operation Varsity showed that the lessons learnt in Normandy and Arnhem had been combined – particularly proximity of DZ/LZ to objectives and the rapid link-up with conventional role forces.¹⁰⁸⁵ The codification of British airborne knowledge was also consolidated in 1945 with a new War office pamphlet.¹⁰⁸⁶ This 118-page booklet is a far more comprehensive, considered and well-thought out than its 1943 fifty-page predecessor.¹⁰⁸⁷ As discussed in chapter two, while the 1943 document is largely the War Office viewpoint of German early war operations that have then been reverse-engineered to assist in planning, the latter pamphlet gathers all the experience of 1 and 6 Airborne Divs in NW Europe. The characteristics of airborne forces are discussed soberly, with a key section on the vulnerability of scattered troops on landing.¹⁰⁸⁸ Air support, planning, training and communications are all dealt with in their own sections, together with the characteristics of airborne forces. In appendix seventeen – 'Outline of Army and Air Force Responsibilities' - all the relative tasks are divided and outlined, ending with 'Selection of dropping and glider

¹⁰⁸⁵ For a wider discussion of the lessons of Market Garden and earlier feeding into Varsity, see Mark Greenacre's chapter in - John Buckley and Peter Preston-Hough (eds.) *Operation Market Garden. The Campaign for the Low Countries, Autumn 1944: Seventy Years On* (Solihull: Helion, 2016), pp. 271-286.

¹⁰⁸⁶ Great Britain. 1945. *Airborne Operations: pamphlet no. 4: Airborne Airtransported Operations*, London: War Office.

¹⁰⁸⁷ Great Britain. 1943. *Airborne Operations: pamphlet no. 1: general 1943 (provisional)*, London: War Office.

¹⁰⁸⁸ 1945 *Airborne Operations*, p. 4.

landing zones and airstrips' as a 'Joint Responsibility.'¹⁰⁸⁹ This is set out as one line upon the page and could be no clearer.

The closer inter-service relationship outlined in the 1945 pamphlet which Gale and Hollinghurst founded, but also the friction over air resources, is echoed in a RUSI lecture some four years later.¹⁰⁹⁰ Major-General Cassels outlined the British airborne experience during the Second World War and explained the factors that could affect airborne operations. In the discussion that followed his lecture, Group Captain G.C. Barrett RAF challenged the lecturer whether 'an attempt has been made to make a balance-sheet' of cost of the creation of Britain's airborne forces? Barrett's point being that if perhaps the effort funnelled into airborne forces had gone into more 'direct support aircraft and heavy bombers' maybe 30 Corps would have got to Arnhem alone. He then tempers, and somewhat contradicts, his comments by suggesting that it should be considered whether the whole Army should be made 'air-transportable.'¹⁰⁹¹ Cassels' responds by stating that the bridges would most certainly not have been taken intact in such a situation, and further airborne forces are a valid way in which the RAF can support the Army in the land battle in addition to close support. He finishes the exchange by saying 'I cannot give you a definitive answer, as it is mainly a matter of opinion.'¹⁰⁹² The discussion is amicable but the resonance of Brooke and Harris' dispute in the autumn of 1942 reverberates within it.

Richard Gale's post-Normandy career reflects well on his abilities as a leader and trainer. He replaced Browning as Deputy Commander of First Airborne Army in December 1944, and commander of 1 British Airborne Corps. He flew out to India to begin preparation for airborne operations against the Japanese, which would have used 44 Indian Airborne Div

¹⁰⁸⁹ 1945 *Airborne Operations*, pp. 92-93.

¹⁰⁹⁰ Maj-General A.J.H. Cassels, '*Airborne Forces*', Royal United Service Institute, 94 (1949), p. 1-13.

¹⁰⁹¹ *Ibid.*, p. 11.

¹⁰⁹² *Ibid.*, p. 12.

and eventually 6 Airborne Div, but the war in the Far East ended before any operations could be launched. His post-war appointments included Director of Military Training at the WO, GOC British Troops in Egypt and C-in-C of the British Army on the Rhine in 1952, and later the NATO Northern Army Group. His skills as a coalition general were highlighted by his recall from retirement on the request of the Americans to take up the role of Deputy SACEUR (the commander of NATO forces in Europe).¹⁰⁹³

II. Thesis Research Results and Themes

Leadership was the first thesis theme. This theme was of key importance not only in the creation and working up of 6 Airborne Division but in the creation of the entire British airborne establishment during the Second World War. As has been discussed, without the direct intervention of Churchill it is unlikely that Britain would have generated the extent of airborne forces eventually fielded at the speed of development it did.¹⁰⁹⁴ Brooke's personal conviction that airborne forces would play a key role in the development of offensive operations, and his determination to maintain them on a divisional scale secured their future such was his hold over the COS and influence over the Prime Minister in changing his mind to keep 1 Airborne Div.¹⁰⁹⁵ The subsequent appointment of Frederick Browning to direct the airborne effort provided the new organisation with an energetic and purposeful leader who grasped a vision of what airborne forces could be, but one not gifted with the important skills necessary to engender collaboration with peers.

¹⁰⁹³ *The D-Day Encyclopedia*, ed. by David G. Chandler and James Lawton Collins (London: Simon and Schuster, 1994), pp. 267–268; Richard Mead, *Churchill's Lions: A Biographical Guide to the Key British Generals of World War II* (Stroud: Spellmount, 2007), pp. 154–156.

¹⁰⁹⁴ William Buckingham's research has uncovered signs that airborne forces were being considered by the WO in 1940, and it is possible that this activity prompted Churchill to make his July 1940 demand for the creation of airborne forces.

¹⁰⁹⁵ Andrew Roberts, *Masters and Commanders: The Military Geniuses Who Led the West to Victory in World War II* (London: Penguin, 2009), pp. 102–115.

The potency of airborne forces, the possibilities they might open up operationally, was treasured by the most influential heads of the British Army as the Second Front loomed – Brooke, Montgomery, Alexander and Dempsey. This enthusiastic support of airborne forces' potential is seen throughout the thesis. Together with the Commandos and SOE, they were novel units that the Prime Minister himself called to be formed in the aftermath of Dunkirk. Regardless of the heavy losses suffered during Ladbroke and Fustian, Brooke, Alexander and Montgomery all remained convinced of airborne forces value to invasion operations. Chapter Four revealed General Miles Dempsey's full awareness of the new operational dimension airborne forces could add to his forthcoming Normandy operations, intending to use them en masse to either outflank the enemy when opportunities arose.

At the formation and unit level, 6 Airborne was highly fortunate to be led by a mixture of superb leaders. Hugh Kindersley, Nigel Poett and James Hill were all excellent trainers of soldiers and implicitly understood the ideal that Gale wished to achieve with the Division. Every unit commander had to be a meticulous planner, such was the complexity of the tasks and the inherent risks assigned to 6 Airborne on D-Day. Terence Otway's Merville plan was complicated, but his intricate scheme had been absorbed by his men, who when faced with adversity were flexible enough to quickly adapt to his improvised plan. Alistair Pearson and James Hill were both 'warriors', and led from the front at critical moments of the campaign.¹⁰⁹⁶ Both were wounded on D-Day, Pearson was shot through the hand while Hill was quite severely wounded in the leg and buttocks, but both carried on with their duties. Colonel 'Reggie' Parker, the Deputy commander of 6 AL Bde, played an important role in the Division's administration and training, and set up a battle school in Ouistreham once the

¹⁰⁹⁶ Rune Henriksen, 'Warriors in Combat - What Makes People Actively Fight in Combat?', *Journal of Strategic Studies*, 30.2 (2007), 187–223.

front had stabilised somewhat. Yet he was still quite prepared to go forward at Bréville when the CO of 12 Para Bn was killed, take charge of the situation and win a crucial victory. 6 Airborne owed much of its success to the mixture of leadership types it possessed; 'thrusters' identified by Gale and the Airborne Establishment, such as 53 RA's CO Tony Teacher to airborne veterans like Peter Luard or Alistair Pearson.

All of the above command and leadership personalities were the figures who played a role in the creation and moulding of 6 Airborne Div. Brooke, Browning and Gale were the most directly involved. Brooke facilitated and shielded Browning's creation of an Airborne Establishment that in turn fostered Gale's Division which would play such a useful part in the D-Day landings.

This thesis has shown that Richard Gale acted as a combat effectiveness accelerator for the Division through his personal command characteristics and his directing tenets for the Normandy campaign specifically. These characteristics are illustrated in **Figure 3**. The volunteers of the Division had first benefitted from the input of Browning and the AAC – their sense of personal value had been built by role-specific training and the transferred high standards of the Guards Brigade. Gale himself personally benefitted from attaining a talismanic status amongst Airborne Forces while projecting the exterior of a reassuring conventional role infantryman. An effective communicator at all levels, he carefully selected his leaders. While planning for D-Day Gale, 6 Airborne Div and the Airborne Establishment insured DZ/LZ were close to the objectives. Simple clear plans supported by repetitive relevant training and a redundancy of force enhanced the chances of success. The result was a Division that was cohesive, resilient and used local initiative to counter the enemy.

The second thesis theme was training. The importance training of airborne forces during the Second World War cannot be overstated. The Airborne Establishment tested its volunteer recruits to the limit with both parachute or glider training and harsh but germane training on the ground at Hardwick Hall. Gale's concept of leading was in effect to continually train and develop his subordinates continually. This carried over into the preparations for D-Day, resulting in a level of briefing that even the scattered landings and darkness did not prevent the Division from fulfilling its tasks.

Hard and realistic training was a key component of Gale's canon in building effective units and formations. First, the role-specific training received by British Airborne Forces recruits in 1943-44. Once a soldier had volunteered for the Parachute Regiment he would be sent to the Airborne Forces Depot at Hardwick Hall in Derbyshire for an intensive two-week pre-parachute training course. The role of this 'toughening' course was crucial; the men who passed were thereafter conditioned to accept a gruelling schedule of training once posted to their units. This formed the basis of high levels of performance once committed to battle. At the Parachute Training School (Ringway) he would be required to make two jumps from a captive balloon and five or six from aircraft. One of the aircraft jumps took place at night while two others would include kit bags attached.¹⁰⁹⁷ The training for airlanding troops was hazardous; initial flying was carried out in Hotspur gliders which had no windows, and crashes for one battalion at least were 'frequent.'¹⁰⁹⁸ While paratroopers waited to make jumps and glider troops for flights, 'the period of waiting was filled with strenuous military exercises and even more strenuous physical training.'¹⁰⁹⁹ In the case of role-specific training

¹⁰⁹⁷ Barry Gregory, *British Airborne Troops* (London: Macdonald and Jane's, 1974), pp. 25–27.

¹⁰⁹⁸ David R. Orr and David Tresdale, *The Rifles Are There: The Story of the 1st and 2nd Battalions, The Royal Ulster Rifles 1939-1945* (Barnsley: Pen & Sword Books, 2005), p. 114.

¹⁰⁹⁹ *By Air to Battle* (London: HMSO, 1945), p. 21.

for his officers, Gale revisited issues observed on exercise but continually pushed an emphasis on aggression and simplicity in formulating solutions to tactical problems. The transplanted discipline and standards of the Guards Brigade helped here, as did the increasingly homogeneous nature of the AAC, and finally the ability to 'return to unit' any man found lacking while training did give Gale and his subordinates a great advantage in moulding the Division.

Gale and his commanders prepared 6 Airborne at a ferocious pace specifically for D-Day operations. The balance of important personalities within the brigades can be seen as the Division prepared for its baptism of fire in the most demanding of circumstances. Each unit in the Division was prepared for specific tasks and rehearsed their role remorselessly, such as assaults on heavily defended enemy positions and river-crossings. The challenges and quality of armour and infantry training in the British army 1939-45 has been closely analysed by Timothy Harrison-Place.¹¹⁰⁰ He concluded that the key issue which blighted the Army's training was a poorly developed and less than coherent doctrine for infantry:

Doctrine was in many cases wrong. In any case, right or wrong, troops in training frequently ignored it the British Army's performance was not hopeless. Much good work was done between Dunkirk and D-Day. But somehow the Army never managed to collect the good together and eliminate the bad.¹¹⁰¹

He pointed to the heavy reliance of the infantry on massive artillery support, 'It left the expectation that an infantry set piece attack behind artillery support required little if any actual infantry fighting. When in battle that expectation was falsified, too few infantrymen knew what to do.'¹¹⁰² The artillery-heavy 'Colossal Cracks' tactics developed by the Army

¹¹⁰⁰ Timothy Harrison-Place, *Military Training in the British Army, 1940-1944: From Dunkirk to D-Day* (London: Frank Cass, 2000).

¹¹⁰¹ Harrison-Place, p. 168.

¹¹⁰² Harrison-Place, p. 168.

from 1942 onwards have been explored by Stephen Hart, who explained that this risk-averse conservative approach was developed for three reasons: To avoid the huge infantry casualties of 1914-18; was easy to impress on war service soldiers, and upheld morale.¹¹⁰³ This set-piece approach was entirely appropriate for the conventional role infantry fighting offensive battles of 1943-4, and made best use of the British Army's massive artillery and armour resources. For the Normandy campaign, the ten British and Canadian infantry divisions would be supported by eight armoured or tank brigades and five Royal Artillery Groups (which divided five heavy and twenty-four medium artillery regiments between them).¹¹⁰⁴ It also went some way towards nullifying the German superiority in armoured vehicles and tactical panache learnt on the Eastern Front.¹¹⁰⁵ This is aside from the massive superiority the Allies enjoyed in the air. John Buckley has recently shown that the British Army in Normandy considerably developed its fighting prowess steadily through the 1944-45 NW Europe campaign, and was able to match German formations in close combat when needed. He identifies developments in British ability to wield armoured formations, logistical organisational ability and firm leadership. Yet he still cites infantry capability as vital. 'Notwithstanding all these improvements and refinements, close-combat troops, and particularly infantry, were still central to success and failure in battle.'¹¹⁰⁶ As already discussed in chapter two, for British airborne troops the battlefield reality once landed was very different when compared to that faced by conventional infantry. For the Tonga objectives they would not be supported by a massive air and artillery preparation and would

¹¹⁰³ S. Hart, *Colossal Cracks: Montgomery's 21st Army Group in Northwest Europe, 1944-45*. (Mechanicsburg, Pa.: Stackpole Books, 2007); John Buckley, *Monty's Men: The British Army and the Liberation of Europe, 1944-5* (London: Yale University Press, 2013), pp. 23-26.

¹¹⁰⁴ L. F. Ellis, *Victory in the West*. (London: H.M.S.O., 1962), pp. 524-531. John Ellis, *Brute Force: Allied Strategy and Tactics in the Second World War* (London: Andre Deutsch, 1990), pp. 352-383.

¹¹⁰⁵ Hart, p. 7.

¹¹⁰⁶ Buckley, pp. 299-303.

have to rely on the shock-surprise effect. They would land close to their objectives, often also valued by the enemy and so well defended, and would have to transmute the momentum gained by their sudden appearance into sharply focussed violence in the assault. They would have to rely solely on their own weapons. High standards of personal fitness and aggression were fostered at every turn in airborne training to further enhance fighting power and stamina in battle.

The third and final theme was adaptation and innovation. 6 Airborne Div was created to retain an airborne capability when 1 Airborne Div had been sent to North Africa. In a sense the Division was an adaptation of the remnants of 1 Airborne Div when it was sent to the Mediterranean. New formations were mixed with 6AARR, 1 RUR, 2 Ox Bucks and Gale used the commonly held building expectation of the Second Front landings to further energise his division's preparations. Being the second airborne division Britain created 6 Airborne had the advantage that it was not viewed as an experimental organisation, a white elephant seeking role justification, an issue which perhaps at points its sister division had fallen victim to.

This adaption was often not ideal, and was representative at times of doing things on the cheap and muddled thinking. The aircraft used by 38 Group RAF to carry 6 Airborne into action were all adapted bomber types. They were not fit for purpose and at one point this fact had a direct and deleterious impact on the D-Day operations when Francis Lennox-Boyd, the CO of 22 Pathfinder Coy, fell from the Albemarle aircraft he was flying in. In terms of applied technology and method, the dropping of parachutists and landing of gliders presented 6 Airborne in its most vulnerable state. The air or transit phase Tonga has to be viewed as a disaster due to the dislocation caused by the severe scattering suffered by the

parachute brigades. The idea of glider borne tanks was fallacious. The Tetrarch tank was at best a mobile machine gun post, a task that the Bren Carrier could have equally fulfilled. 6 AARR could have followed in the seaborne tail and been equipped with more powerful medium tanks that could have ably supported 6 Airborne. The co-option of 13/18 Hussars in the battles 7-12 June 1944 highlights this issue.

Yet Norris' plan of co-opting the firepower of the Royal Navy and surrounding Royal Artillery assets to support reveals the Division's use of adaptation at its best. His use of his officers as effectively Forward Observation officers for other units was practical and highly effective, as these conventional role forces were instrumental in breaking up enemy counter-attacks.

Combat effectiveness and success on the battlefield is bought at a price. Was 6 Airborne's contribution to the Normandy landings and following campaign worth the expenditure? Chapter three addressed the issue of the cost of formation, focussing on the most valuable assets needed – the number of troops selected by the airborne units and the aircraft diverted for their transport. Airborne forces, like the commandos, have been accused of extracting all of the best men from the conventional role infantry, if not the whole Army. An assessment of the numbers involved show this cannot be so. The last Army Strength Return before D-Day showed that only just less than one per cent of the army's total strength and three and a half per cent of the infantry were glider or parachute troops.¹¹⁰⁷ While airborne forces filled its ranks with volunteers, the 1941 WO ruling that no more than ten men could

¹¹⁰⁷ The combined totals for airborne and commandos were 1.32% and 5.5% respectively. TNA WO 73/160 General Strength Return of the British Army 31 March 1944.

be taken from a single unit stopped any battalion being completely stripped out.¹¹⁰⁸ Even if all the men taken from one unit were NCOs, that would still only account for approximately ten per cent of the total in a conventional infantry battalion.¹¹⁰⁹ The units that were converted to the parachute role typically retained their spine of NCOs and officers, while soldiers unwilling to take up the new role were recycled into other battalions within their county regiment. The glider battalions were transformed complete, and were reinforced as needed by their regimental depots. In terms of officers, while 6 Airborne's parachute units contained a higher percentage of TA officers, they did not absorb a disproportionate number of pre-war regular officers, which by 1944 had become a precious resource for the army. The facts show that the manpower needs of airborne forces did not cripple either the army's leadership cadre or infantry strength.

As stated in chapter six, 6 Airborne lost 745 ORs and 76 officers killed in action, 2,510 ORs and 199 officers wounded, with a further 886 ORs and 41 officers missing. 4,457 men lost, represented thirty-six per cent of war establishment divisional strength.¹¹¹⁰ During the whole campaign 21 Army Group suffered 16,138 killed, 9,093 missing and 58,594 wounded between D-Day and the end of August.¹¹¹¹ If these totals are divided by the number of active divisions present during the Normandy campaign (sixteen) 1,008 killed, 3,662 wounded and 568 missing are the averages. Crudely, 6 Airborne is below the average in the each category bar missing. This simple sum obviously does not take into account the losses suffered by the considerable number of independent brigades, the larger size of the conventional role

¹¹⁰⁸ TNA WO 32/9778, Airborne Policy. Memorandum regarding the formation of two Additional Air Service battalions, 26 August 1941.

¹¹⁰⁹ There were 102 Warrant Officers, sergeants and Corporals in a conventional role infantry battalion in 1944. The War Office, *Infantry Training Part 1: The Infantry Battalion* (London: The War Office, 1944), 2–3. Jean Bouchery, *The British Soldier, Volume 2: Organisation, Armament, Tanks and Vehicles* (Paris: Histoire & Collections, 1998), pp. 40–41.

¹¹¹⁰ George Forty, *British Army Handbook 1939–1945* (Stroud: Chancellor Press, 2000), pp. 168–169.

¹¹¹¹ Ben Kite, *Stout Hearts: The British and Canadians in Normandy 1944* (Solihull: Helion, 2014), p. 407.

divisions or the differences in role. 6 Airborne also essentially held its ground for two months of the campaign while other divisions were engaged in fierce battles to the south in the Odon valley for example, or operations such as Operation Goodwood. Yet it does point to the fact that 6 Airborne did not suffer exponential casualties when compared to the conventional role formations, even though it had to be left on the line with inadequate heavy weaponry and little organic transport.

Aircraft for airborne forces were the second critical resource cost, but how much value did the RAF place on the aircraft donated? As C-in-C Bomber Command, Air Chief Marshal Harris showed considerable frustration with the types later allocated to transport airborne troops. The Albemarle was too underpowered to carry an acceptable bomb load; the Whitley was obsolete at the outbreak of the war while the Halifax and Stirling were increasingly outdated and unreliable. The creation of Harris's great fleet of Lancaster heavy bombers was in no way hindered by the expansion of 38 Group with outmoded bombers. 46 Group was created by a US supplied unit equipment of C-47s in early 1944 and largely crewed with Coastal Command crews, increasingly idle as the struggle against the U-Boat had swung in the Allies' favour. Harris and Portal's vigorous defence of Bomber Command never allowed airborne forces' requirement to jeopardise RAF operations, and the pooling of Allied aircraft production and the improving strategic position resolved the situation.

The combat effectiveness of 6 Airborne has been assessed using the airborne operations success/failure process (**Figure 1**) in chapter six and shown to have been successful in its Normandy operations. This process methodology introduced in chapter two could be applied to other areas of operational activity during the Second World War and other conflicts. For instance, a similar scheme could be developed for the assault of armoured

formations 1943-1944, and draw in such aspects as the depth of the defensive zone and density of anti-tank weapons versus the weight of preparatory bombardment and extent of close air support.¹¹¹² Even in the face of considerable confusion and interference caused by the scattering disaster, all the bridges on the Dives were found and destroyed; the Merville battery was seriously disrupted; the Orne barrier bridges captured and the position strongly held in the face of heavy Wehrmacht attacks in the following forty-eight hours. Later 6 AL Bde faced set-backs in the seizure of the villages needed to expand the bridgehead to the south, which bore testament to the fierce enemy opposition which quickly coalesced around the Orne bridgehead.

6 Airborne also achieved considerable intangible effects, particularly the shock and surprise inflicted on the enemy. This inhibited the Wehrmacht's understanding of the developing situation and coherent response until around 0800 hours on D-Day, by which time the seaborne landings had begun and any operational initiative had completely slipped from their grasp. The massed daylight landing of 6 AL Bde at 2100 hours cowed some Wehrmacht observers, who believed Mallard was as an additional British airborne division being used spontaneously in response to the 21.Pz. Div's afternoon counter-attacks. 'But at that moment fresh British airborne forces landed immediately behind the attacking division, which therefore turned about and withdrew.'¹¹¹³ So Kampfgruppe Rauch fell back from the coast, while it lifted the morale of the on looking Second Army as it pushed inland. 6 Airborne held its line in Normandy for three months, and without the same artillery or motor transport resources of a conventional role division. The bloody battle of Bréville on 12 June showed the Division at its best in the worst circumstances and eliminated the

¹¹¹² John Buckley, 'Tackling the Tiger: The Development of British Armoured Doctrine for Normandy 1944', *The Journal of Military History*, 74 (2010), 1161–85, passim.

¹¹¹³ Winston G. Ramsey, *D-Day; Then and Now* (London: Plaistow Place Ltd, 1995), p. 319.

Wehrmacht's best opportunity to roll up the landings area from the east. Measuring 6 Airborne's combat effectiveness by two metrics, time spent on operations and success in operations, 6 Airborne Div scores well. It remained on the line for three months, thereby freeing up a conventional role infantry division for offensive operations and showing 'utility', while 6 Airborne's modest size and range of operations on D-Day itself conforms with a notion of 'proportionality.'

British airborne warfare technique was non-existent at the beginning of the Second World War, and poorly resourced for aircraft throughout. While supported by the additional firepower of surrounding conventional role units, the RN and the RAF, 6 Airborne Div generated and sustained its own combat effectiveness through the creation of a distinct airborne identity that boosted a sense of personal self-worth, and was then constantly trained and focussed on the task in hand by capable charismatic leaders. Richard Gale achieved a command 'fusion' as described by Sir John Hackett and was the main element contributing to the success achieved in Normandy.

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V . Maps

(Bodleian Library) BIGOT Map sheet 16/46 N.W. dated 20 May, 1944.

Appendix A: Tables 1 – 8 and Figures 1 -3

Table 1 - The Proportion of the Infantry which were Airborne or Commando Forces by D-Day

<i>Infantry Strength</i>	No.	Percentage of infantry total.
Conventional Infantry role Bns	469496	81.92
Machine Gun Bns	28248	4.93
Motorised Infantry Bns	16734	2.92
Foot/Motorised Guards Bns	27073	4.72
Total Ab/Cdo Forces	31554	5.51
Total Infantry	573105	5.5% OF TOTAL INFANTRY STRENGTH

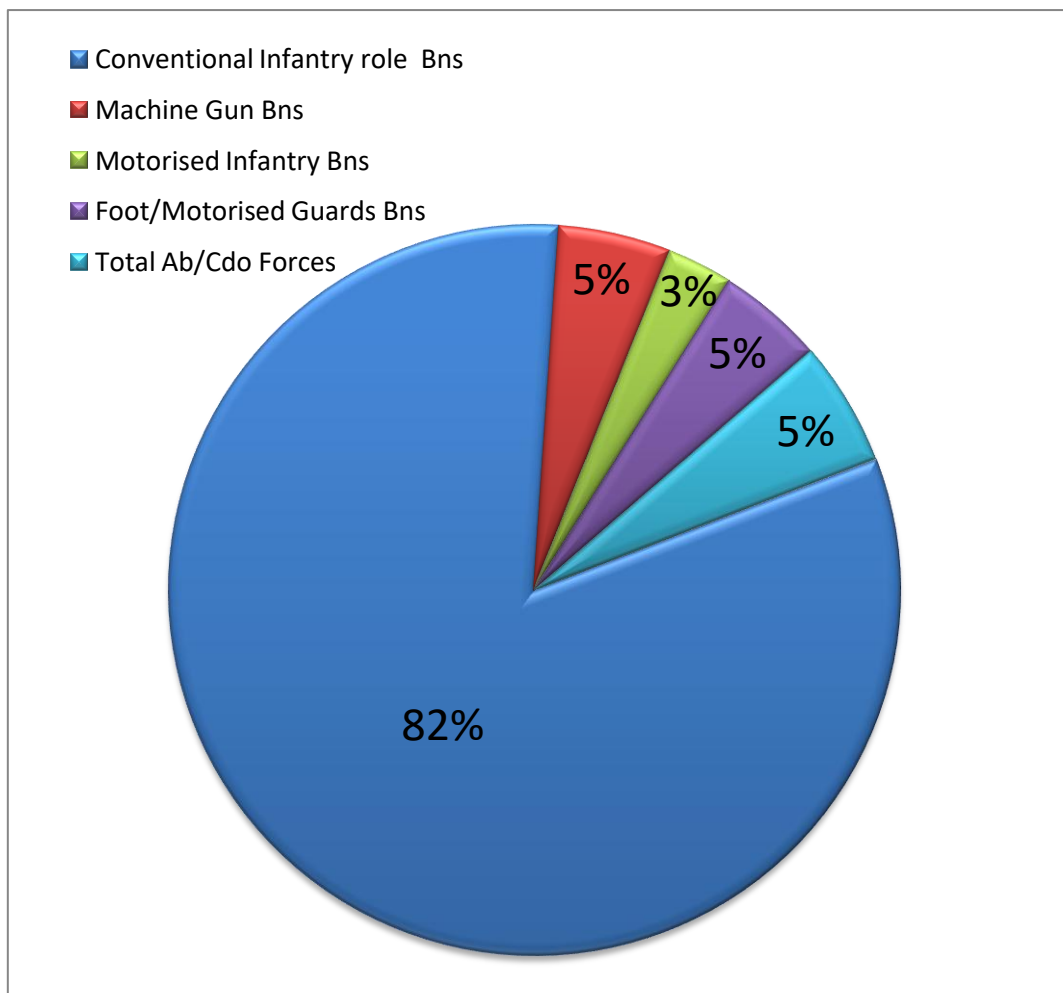


Table 2 - The Proportion of the Army which were Airborne or Commando Forces by D-Day

<u>The Total Strength of the Army, 31 March 1944</u>			
Officers	16,7926		
Other Ranks	2,204,640		
Total	<u>2,372,566</u>		
<u>Airborne Forces</u>			
(WO 73/160 General Strength Return of the British Army 31 March 1944 p.56 - The Army Air Corps)			
	Officers	ORs	
Total UK	733	11,479	
India Command		29	
Middle East	7	75	
North Africa	102	2440	4, 5, 6 Bns
Total	<u>842</u>	<u>14,023</u>	
Total AAC	14,865	All Ranks	
Airlanding Bns	5184		Six Bns at 864 W.E. 1/RUR War Diary, 27/5/44
<u>Airborne Forces Total</u>	<u>20,049</u>		
<u>Special Service and Royal Marine Commandos</u>			
-			
NA CAB 106/7 Combined Operations Report, p.47 March 1944 - The Special Service Group included 739 Offrs, 10,308 ORs (plus 48 Cdo, which would have added another 458 all ranks -NA WO 204/8397. Commando and Infantry Establishments)			
<u>Commando Forces Total</u>	<u>11,505</u>		
<u>Total Ab/Cdo Forces</u>	<u>31,554</u>	1.32% OF TOTAL ARMY STRENGTH	

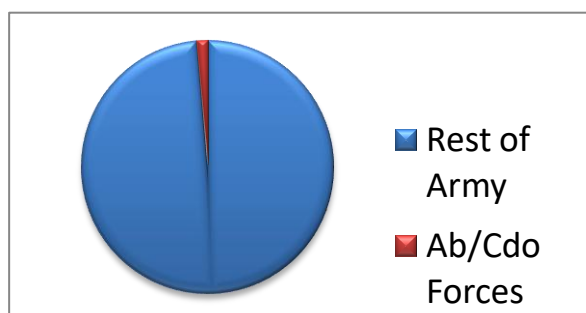


Table 3 – Strengths of 6th Airborne Converted Parachute Units, 1942-1943 (all National Archives sources in italics)

Unit S	Conventional Role Strength on conversion ¹ T	Conversion date U	Volunteer Group from donor unit, Officers/ORs, numbers and percentage of pre- conversion unit where known V	Number who passed Parachute training, Officers and ORs W	Training wastage, numbers and percentage of volunteers, Officers and ORs X	Strength on 1 August 1943, Officers and ORs 205/751 Y	Volunteers needed to obtain June 1944 W.E., numbers and percentage, Officers and ORs Z
Para W.E June 1944						29/584 (Five Bns – 145/2920)	29 (100%), 584 (100%)
10 Som LI (223 Bde) – 7 Para Bn	?	6/11/42 <i>166/8558</i>	420 all ranks, including all officers ² <i>166/8558</i>	?	?	28/212	1 (3%), 372 (63%)
13 Warwicks (223 Bde) – 8 Para Bn	Infantry Bn W.E Dec. 1942 33 Officers, 773ORs <i>32/10400</i>	6/11/42 <i>166/8559</i>	12/130 <i>169/10350</i>	11/130 <i>169/10350</i>	1 (8%), 0 (0%)	19/209	10 (34%), 375 (64%)
10 Essex (223 Bde) – 9 Para Bn	644 all ranks <i>166/8560</i>	6/11/42 <i>166/8673</i>	20/230, 39% all ranks <i>169/10351</i>	12/133 <i>169/10351</i>	8 (40%), 97 (42%)	20/199	9 (31%), 385 (66%)
10/Green Howards – 12 Para Bn	24 Officers and 636 ORs <i>205/751</i>	18/5/43 <i>166/12558</i>	16/199, 67%-31% <i>169/10354</i>	14/147 <i>205/751</i>	2 (12.5%), 52 (26%)	14/147	15 (51%), 437 (83%)
2-4 PWV. - 13 Para Bn	? Officers and 857 ORs <i>166/12668</i>	12/5/43 <i>169/10355</i>	13/317, ?/37% <i>169/10355</i>	13/210 <i>205/751</i>	0 (0%), 107 (34%)	13/210	16 (55%), 374 (64%)
TOTAL	-	-	61/876	50/620 (Only 34% officers and 21% ORs of W.E.)	11 (22%), 256 (41%)	94/977	51 (35%), 1943 (65%)

¹ The Field Strength Return forms in use by 1944 were not in use in the relevant 1942/1943 War Diaries, so pre-conversion strength numbers are taken from any notes made in the diary text.

² The war diary notes an 'all ranks' volunteer number, with no statement as to how many of the 420 group qualified as parachutists, so 7 Para is not included in columns T-X.

Table 4 - The status of the officers of the original units of 3rd Parachute Brigade and two conventional role infantry brigades

(Sources – NA WO 171 series)

<i>Rank</i>	3 Para Bde	3 Para Bde	No. 48 (RM) Cdo	No. 48 (RM) Cdo	185 Inf Bde	185 Inf Bde	9 Inf Bde	9 Inf Bde
	No.	%	No.	%	No.	%	No.	%
Regular	10	9.17	3	10.7	19	17.43	18	14.28
ERC	88	80.73			80	73.39	99	78.57
SUP RES	0	0			0	0	1	0.79
MO	3	2.75			3	2.75	2	1.58
CHAPLAIN	0	0			2	1.83	2	1.58
UNKNOWN	0	0			1	0.917	1	0.79
TA	8	7.33			4	3.66	0	0
CDN	0	0					3	2.38
Total	109		28		109		126	

Key

ERC - Emergency Regular Commission (war service)

SUP RES - Supplementary Reserve

MO - Medical Officer

TA - Territorial army

CDN - 'Canloan' Canadian officers

UNKNOWN - two officers' status could not be confirmed, but most likely they were late joining ERCs

Table 5 - Cost Comparison of Bomber Command versus 38 and 46 Groups as of 6 June 1944 (approximate)

	Squadrons	Initial Establishment	Aircraft	Value £	Total £	% of a grand total	Source
<i>Bomber Command</i>							
Halifax	23	20	460	£21,752	£10,005,920		AIR 20/2023
Stirling	3.5	20	70	£20,014	£1,400,980		
Lancaster	38.5	20	770	£21,866	£16,836,820		
B 17	1	20	20	£41,666	£833,320		
Total			1320		£29,077,040	70%	
38 Group		IE + R					
Albemarle	4	26	104	£31,470	£3,272,880		NA AIR 37/111
Stirling	4	26	104	£20,014	£2,081,456		
Halifax	2	20	40	£21,752	£870,080		
Total			248		£6,224,416	15%	
46 Group							
DC-3	5	30	150	£41,666	£6,249,900		NA AIR 38/110
Anson	5	5	25	£4,151	£103,775		
Total			175		£6,353,675	15%	

Notes

Dakota value Phil Butler *Air Arsenal North America* (Hinckley, 2004) p.34

All British made aircraft values from RAF Museum Hendon 'Price Books', X005.

(1943 deliveries - 150 DC 3 for \$25 million, this equates to £625,000, divided by 150 is £41,666)

Table 6 - Air Transport Asset Order of Battle: 38 Group and 46 Group, 6 June 1944

Squadron	Type	IE + RE Equipment breakdown (initial + reserve)	Total Strength	Aircraft Capacity – paras or glider towed	Max paratroop drop - IE strength x capacity	Horsa Glider troop load – IE x 25 Troops	Based at
48	Anson		5	-	-	-	Down Ampney
48	Dakota		30	20 or Horsa	600	750	
190	Stirling	22 + 4	26	22 or Horsa	484	550	Fairford
196	Stirling	22 + 4	26	22 or Horsa	484	550	Keevil
233	Anson		5	-	-	-	Blakehill Farm
233	Dakota		30	20 or Horsa	600	750	
271	Anson		5	-	-	-	Down Ampney
271	Dakota		30	20 or Horsa	600	750	
295	Albemarle	22 + 4	26	10 or Horsa	220	550	Harwell
296	Albemarle	22 + 4	26	10 or Horsa	220	550	Brize Norton
297	Albemarle	22 + 4	26	10 or Horsa	220	550	Brize Norton
298	Halifax	18 + 2	20	Hamilcar		500	Tarrant Rushden
299	Stirling	22 + 4	26	22 or Horsa	484	550	Keevil
512	Anson		5	-	-	-	Broadwell
512	Dakota		30	20 or Horsa	600	750	
570	Albemarle	22 + 4	26	10 or Horsa	220	550	Harwell
575	Anson		5	-	-	-	Broadwell
575	Dakota		30	20 or Horsa	600	750	
620	Stirling	22 + 4	26	22 or Horsa	484	550	Fairford
644	Halifax	18 + 2	20	Hamilcar	-	500	Tarrant Rushden
Maximum Parachute lift					5816	9150	

Table 6 (continued) Sources and Notes

- NA AIR 37/111 38 Group Organisation and Formation. Loose Minute 20 February 1944, '38 Group Squadrons'.
- NA AIR 38/110, 46 Group fortnightly progress reports. Report, 15 & 25 February 1944.
- Base locations and aircraft capacities – Otway, p.166, pp.398-401.
- The Anson was a line of communication aircraft not used operationally during the Normandy landings.
- The maximum paratrooper lift was considerably reduced by the need for some aircraft to tow Horsas containing heavy equipment/weapons.

Table 7 - Air Assets and Timetable for 6th Airborne Division

	TIME	DZ/LZ	UNITS	AIRCRAFT	Dakotas	Stirlings	Albemarles	Gliders
DEADSTICK	00:20	X & Y	D Coy 2/Ox & Bucks	6 Horsas				6
TONGA		N	Pathfinders 5 Para Bde	7 Albemarles			7	
TONGA		V	Pathfinders 3 Para Bde	16 Albemarles			16	
TONGA	00:52	N	5 Para Bde	89 Stirlings, 27 Dakotas, 19 Albemarles	27	89	19	
TONGA		N	Adv Party HQ 6th AB Div	2 Stirlings		2		
TONGA		V	3 Para Bde (less 8 Para)	71 Dakotas, 11 Horsas	71			11
TONGA		K	8 Para	37 Dakotas, 6 Horsas	37			6
TONGA	03:20	N	HQ 6th AB Div, RE & RA	68 Horsas, 4 Hamilcars				72
TONGA	04:30	Merville Battery	Detachment from 9 Para	3 Horsas				3
MALLARD	21:00	N	HQ 6th AL Bde and 1/RUR	142 Horsas and Hamilcars				142
MALLARD		N	6th AB Div Armd Recce Regt					
MALLARD		W	2/Ox & Bucks less D Coy					
MALLARD		W	A Coy 12/Devons plus supplies 108 Horsas and Hamilcars	108 Horsas and Hamilcars				108
TOTAL					135	91	42	348

Source: Carl Shilleto, *Pegasus Bridge and Merville Battery: British 6th Airborne Division Landings in Normandy D-Day 6th June* (Conshacken, PA: Combined Publishing), p.30

Table 8 - Bomber Command Heavy Bomber squadrons versus 38 and 46 Group squadron numbers 1939-1945

DATE	Total Bomber Squadrons	Lancaster Squadrons	38 and 46 Group Squadrons
Sep-39	37		
May-40	36		
Jun-40	36		0.5
Sep-40	41		
Dec-40	41		
Mar-41	43		
Jun-41	46		
Sep-41	52		
Dec-41	54		
Mar-42	54	2	2
Jun-42	44	5	
Sep-42	45	9	4
Dec-42	48	14	
Mar-43	62	17.5	
Jun-43	56	20	4
Sep-43	62	22	
Dec-43	65.5	31.5	8
Mar-44	75	34.5	15
Jun-44	82	38.5	15
Sep-44	87	41.5	15
Dec-44	97	50	15
Mar-45	99	54	15
Jun-45	83	59	15

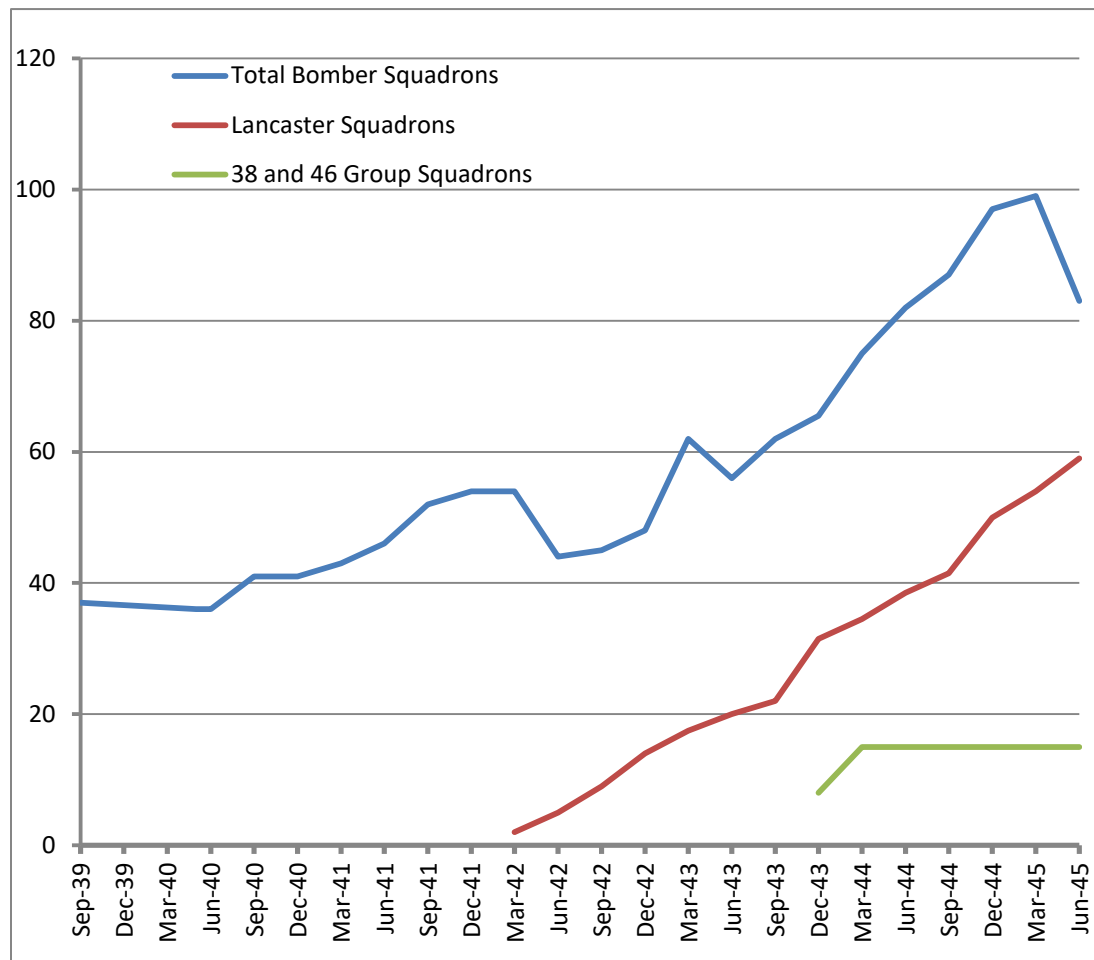


Table 8 (continued) - Notes

Columns A and B drawn from chart 'Number of Squadrons in Bomber Command by type of aircraft August 1939 - February 1946' (AIR 20/2023 Summary of Squadrons by IE and class of aircraft)

*Forming squadrons not included

38 and 46 Group numbers drawn from the same sources as Table 6.

Figure 1 - Airborne Operations Success/Failure Process Diagram

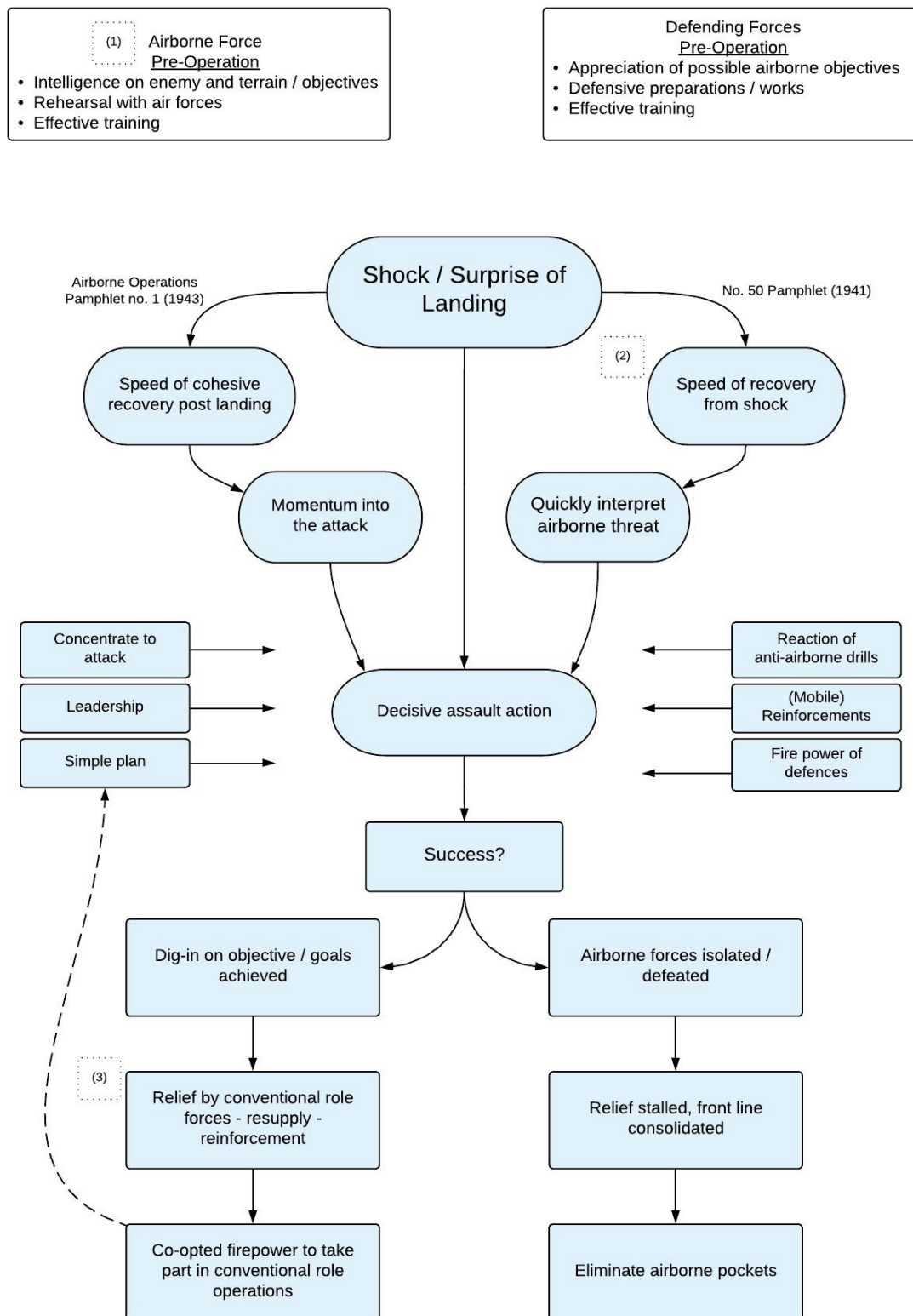


Figure 2 - Diminishing Returns of Raid Type Operations: Cost versus Effect

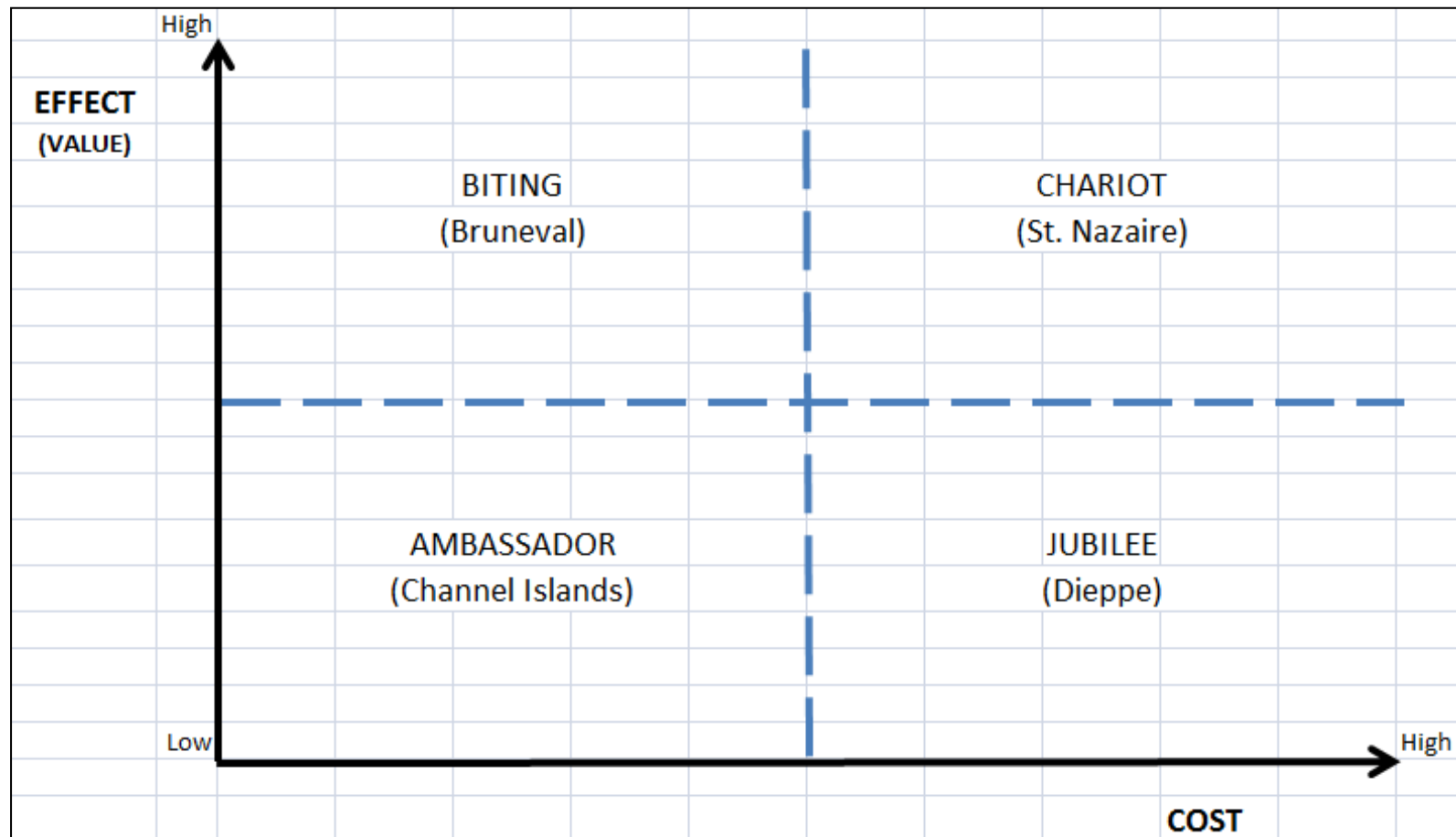
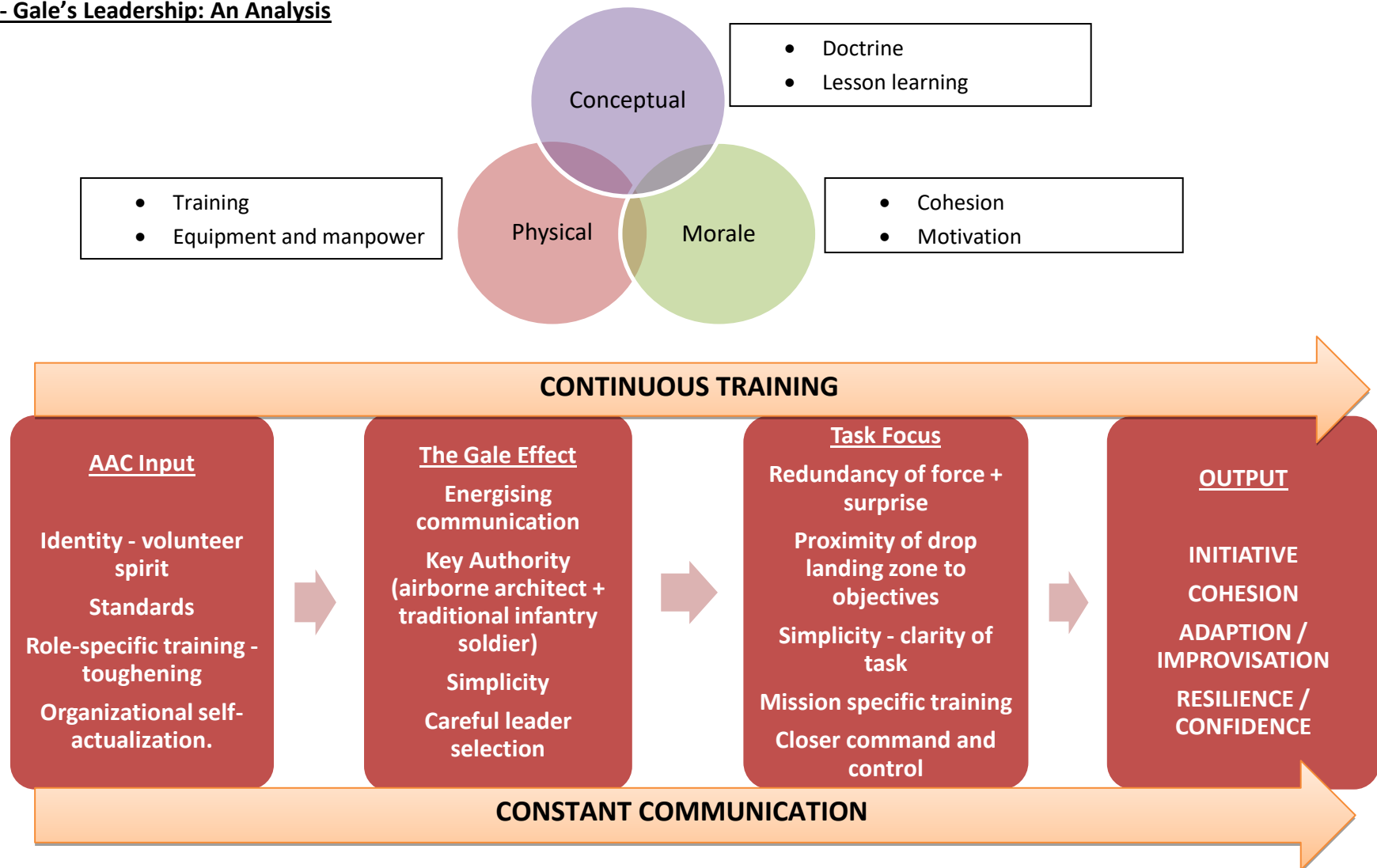


Figure 3 - Gale's Leadership: An Analysis

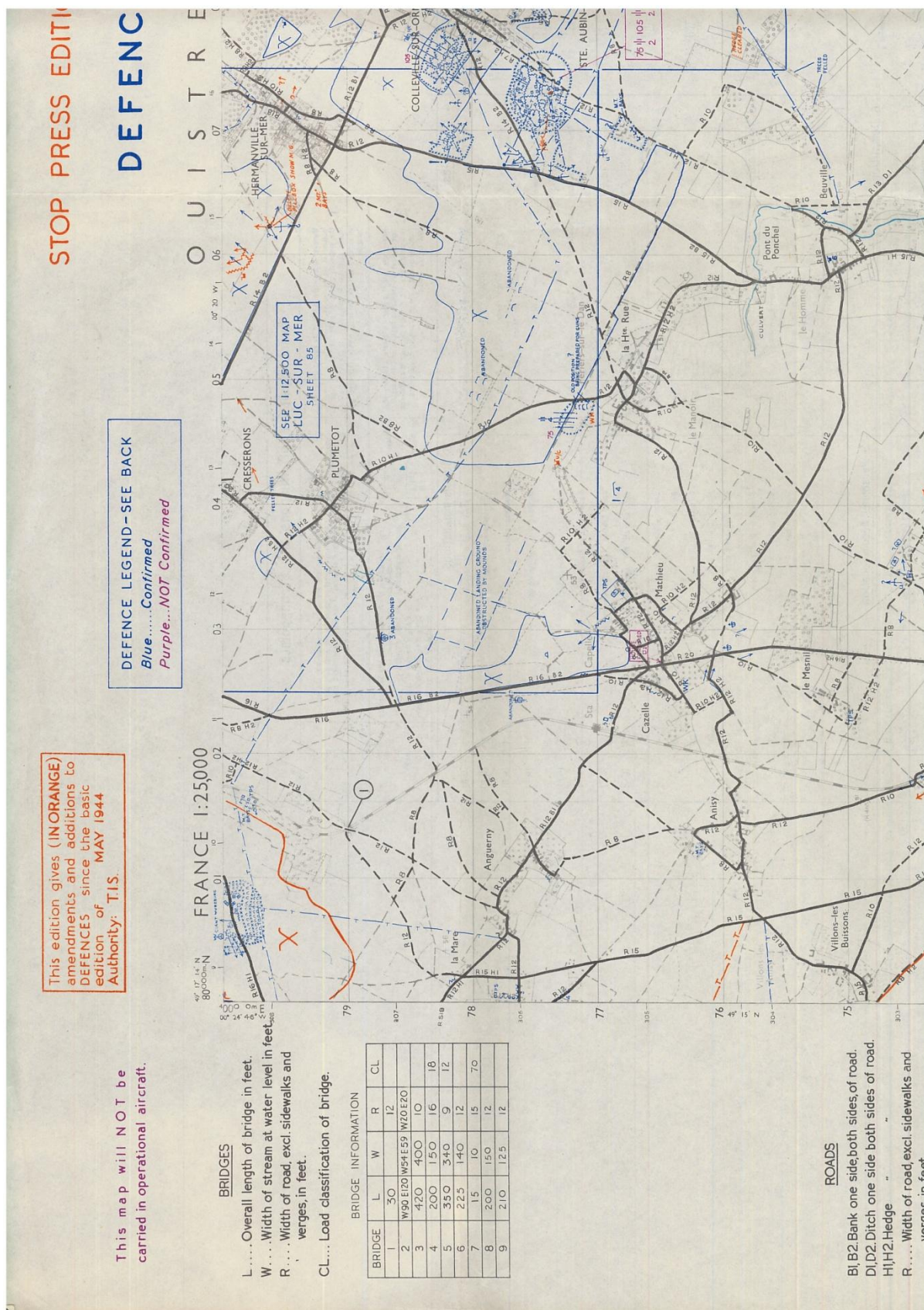


Maps

- I. *Map Sheets A, B, C, and D – Ouistreham area, 20 May 1944 Stop Press Edition, War Office. (Bodleian Library C21 19B)*
- II. *Map Sheets E and F – Dozulé area, 20 May 1944 Stop Press Edition, War Office. (Bodleian Library C21 19B).*
- III. *Map Sheets G and H –Troarn area, 20 May 1944 Stop Press Edition, War Office. (Bodleian Library C21 19B).*
- IV. *Map Sheet I – 20 May 1944 Map Symbol Legend.*
- V. *Map Sheets J, K and L – 1943 Plan of Ouistreham Caen Canal (Bodleian Library)*

The Dozulé pages should be placed to the upper right of the full Ouistreham map, the Troarn pages to the lower right.

I. Map Sheets A, B, C, and D – Ouistreham area, 20 May 1944 Stop Press Edition, War Office. (Bodleian Library C21 19B)

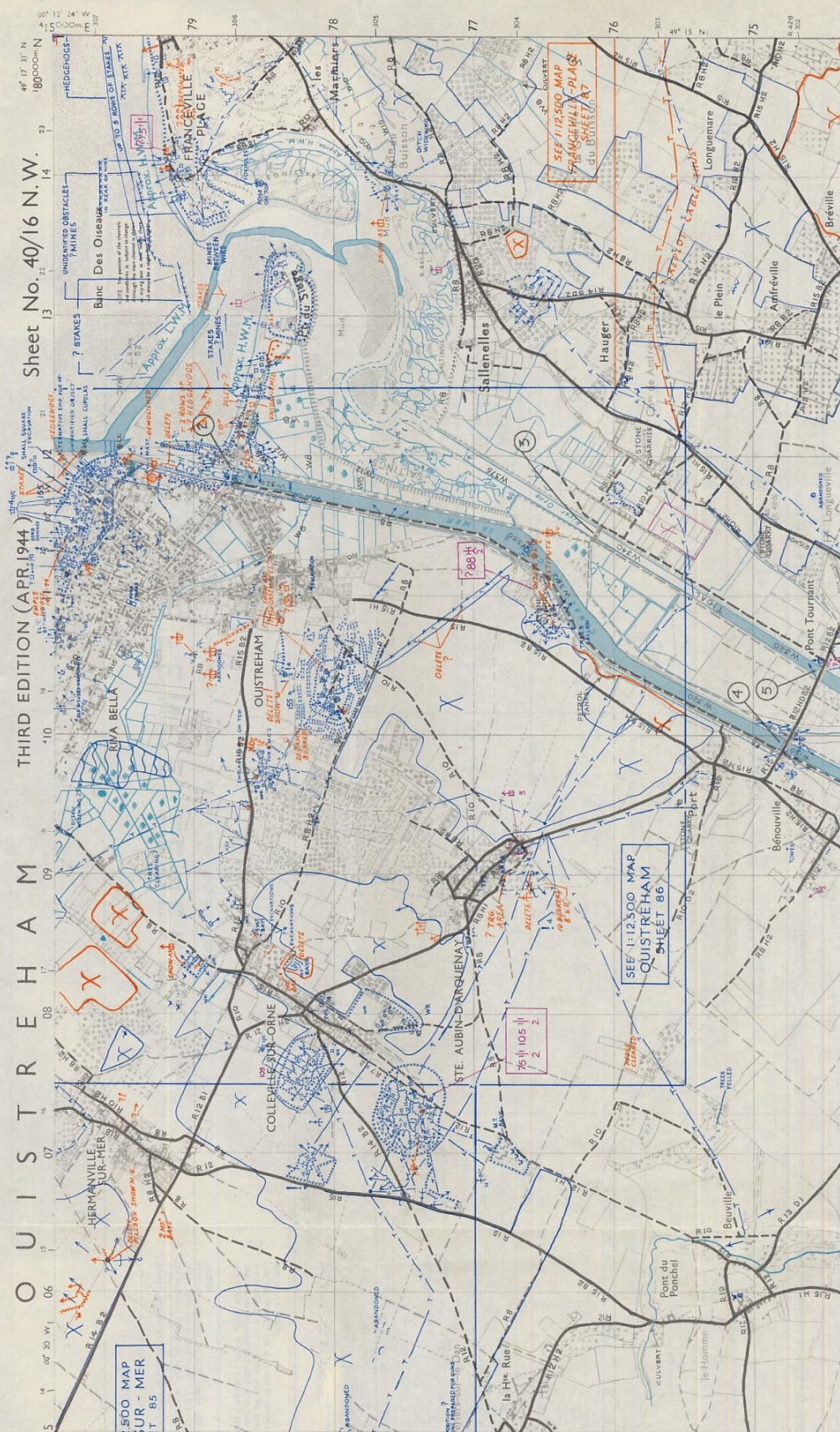


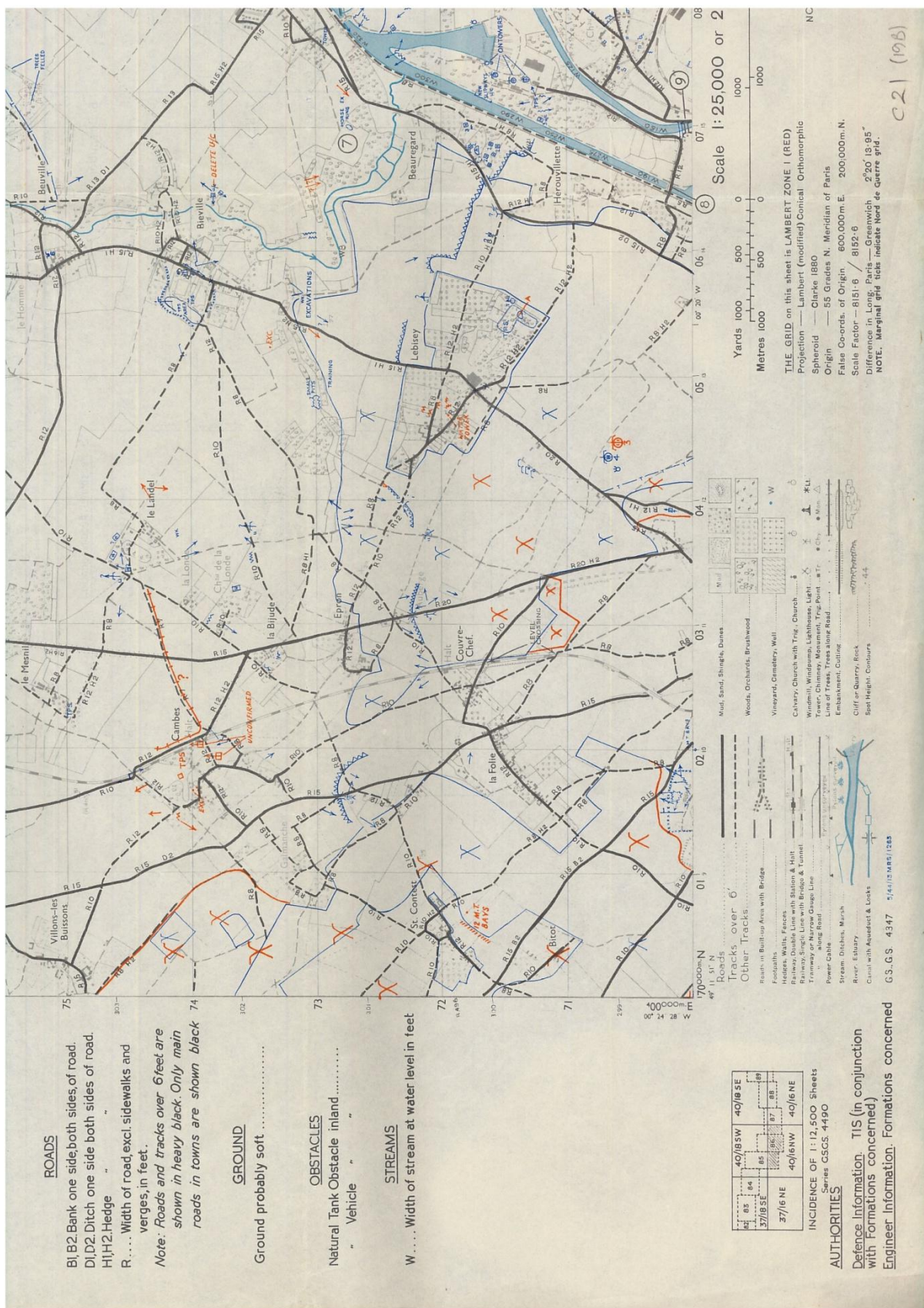
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Authority CMRO MRLG D/SW 3/3/23/1 dd 17-4-73)
Date 10/2/81

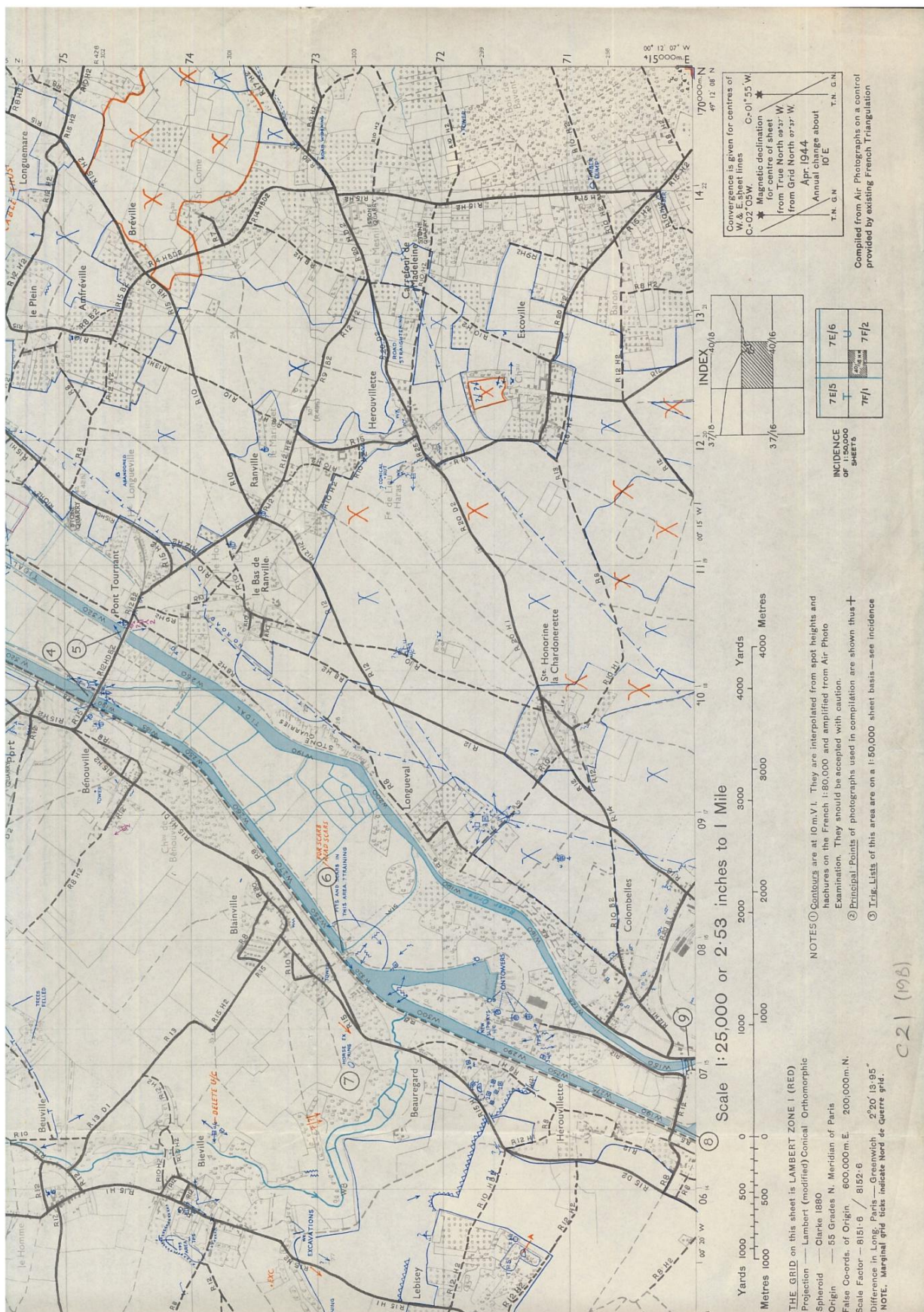
BIGOT Copy No. 593
Information as at 19 May 44

DEFENCES

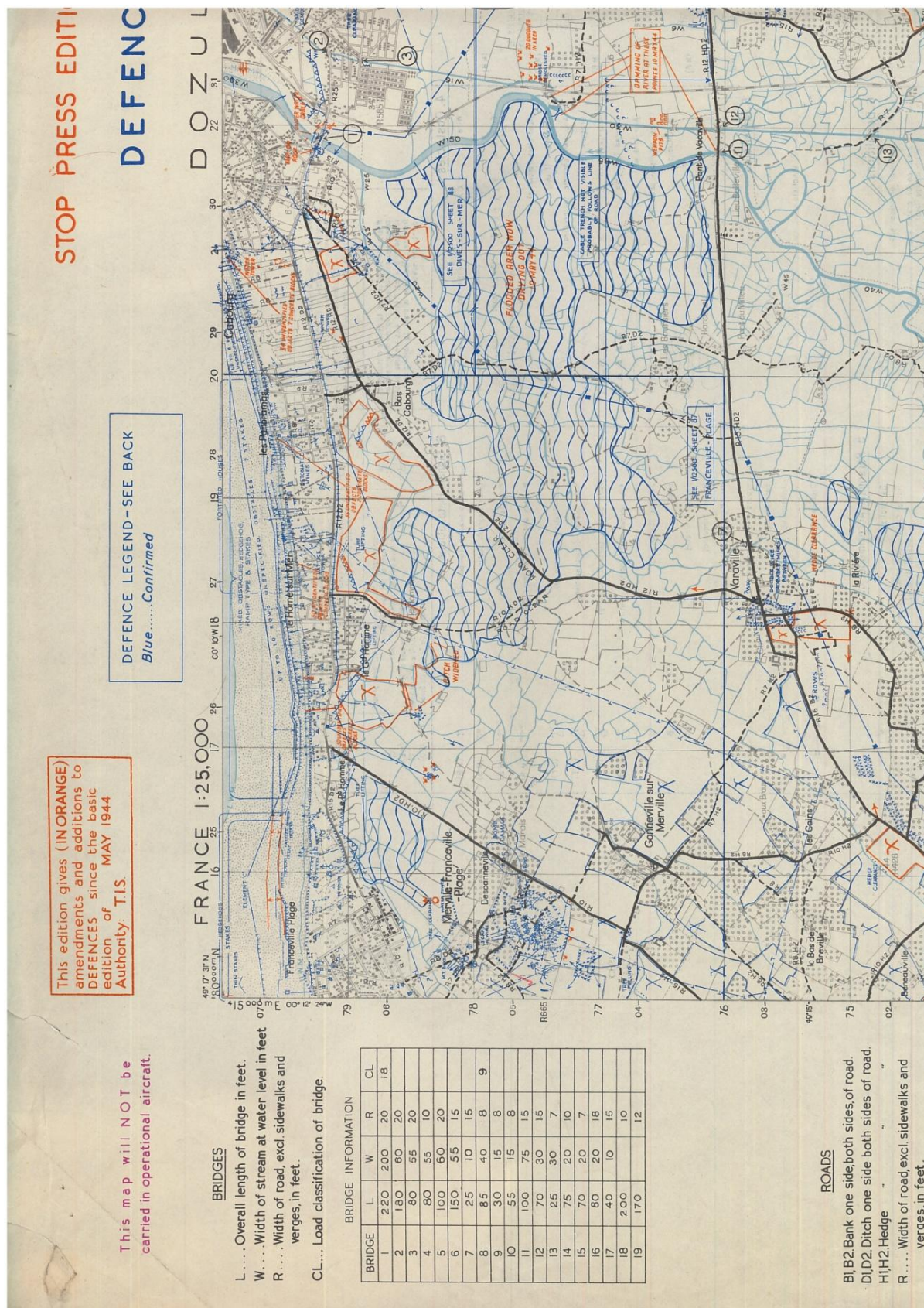
~~TOP SECRET~~ until issued
for briefing ground troops;
thereafter ~~SECRET~~

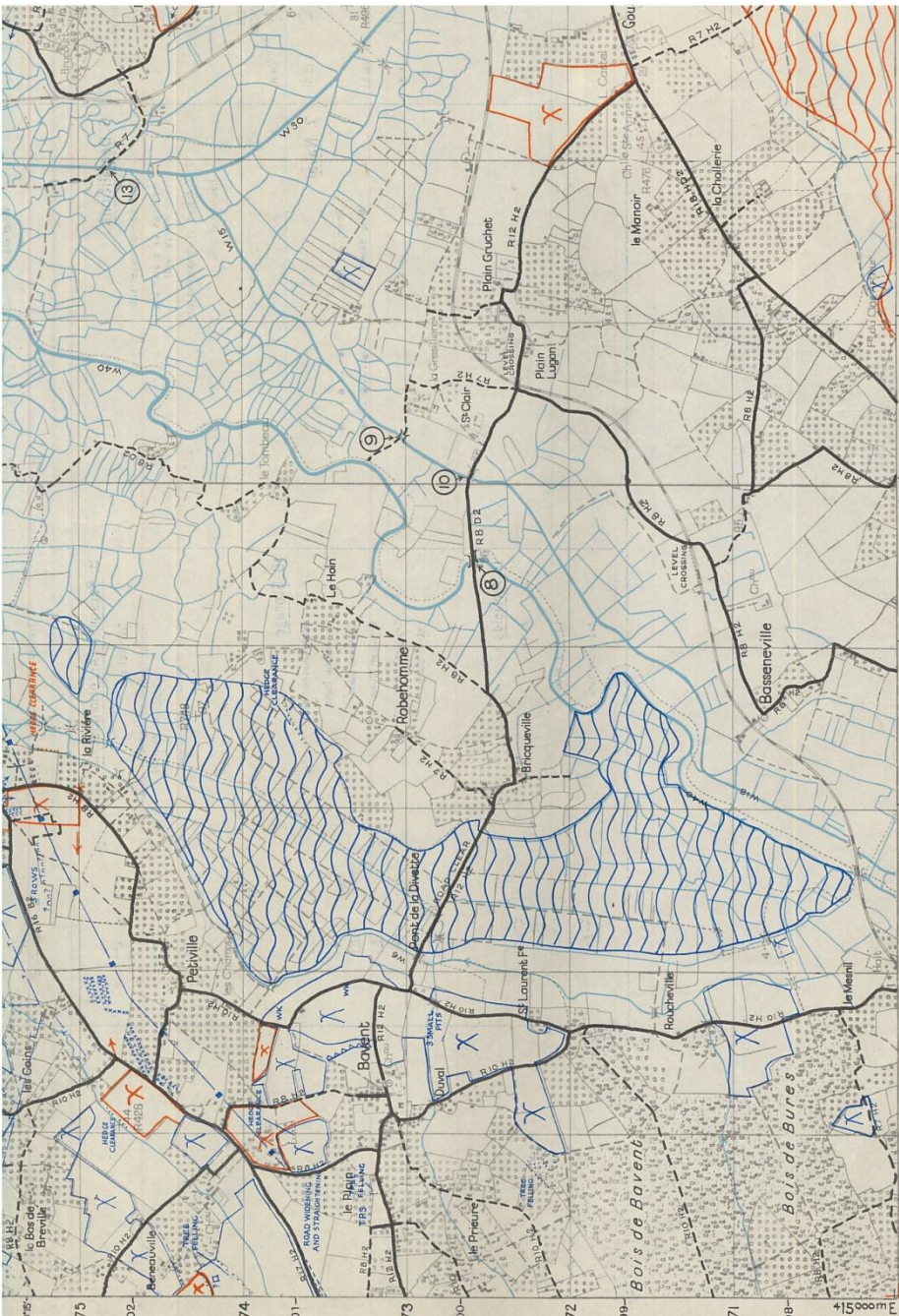






II. Map Sheets E and F – Dozulé area, 20 May 1944 Stop Press Edition, War Office. (Bodleian Library C21 19B)





Scale 1:25,000 or 2

Yards 1000 500 0 500 1000

Metres 1000 500 0 500 1000

THE GRID on this sheet is LAMBERT ZONE I (RED)

Projection — Lambert (modified) Conical Orthomorphic

Spheroid — Clarke 1880

Origin — 55 Grades N. Meridian of Paris

False Co-ords. of Origin 800,000 m. E. 200,000 m. N.

Scale Factor — 8151.6 / 8152.6

Difference in Long. Paris — Greenwich 2°20' 13.95"

- Mud, Sand, Shingle, Dunes
- Woods, Orchards, Brushwood
- Vineyard, Cemetery, Wall
- Catery, Church with Trig., Church
- Windmill, Windpump, Lighthouse, Light
- Tower, Chimney, Monument, Trig. Point, a Tr.
- Line of Trees, Trees along Road
- Embankment, Cutting
- Cliff or Quarry, Rock
- Spot Height, Contours

- Roads over 6
- Tracks
- Other Tracks
- Roads in Built-up Area with Bridge
- Footpaths
- Hedges, Walls, Fences
- Railway Double Line with Station & Halt
- Railway Single Line with Station & Halt
- Tramway or Narrow Gauge Line
- Power Cable
- Stream, Ditches, Marsh
- River, Estuary
- Canal with Aqueduct & Locks

ROADS

- B1 B2 Bank one side, both sides, of road.
- D1 D2 Ditch one side both sides of road.
- H1 H2 Hedge
- R Width of road excl. sidewalks and verges, in feet.

Note: Roads and tracks over 6 feet are shown in heavy black. Only main roads in towns are shown black

GROUND

- Ground probably soft

OBSTACLES

- Natural Tank Obstacle inland
- " Vehicle

STREAMS

- W Width of stream at water level in feet

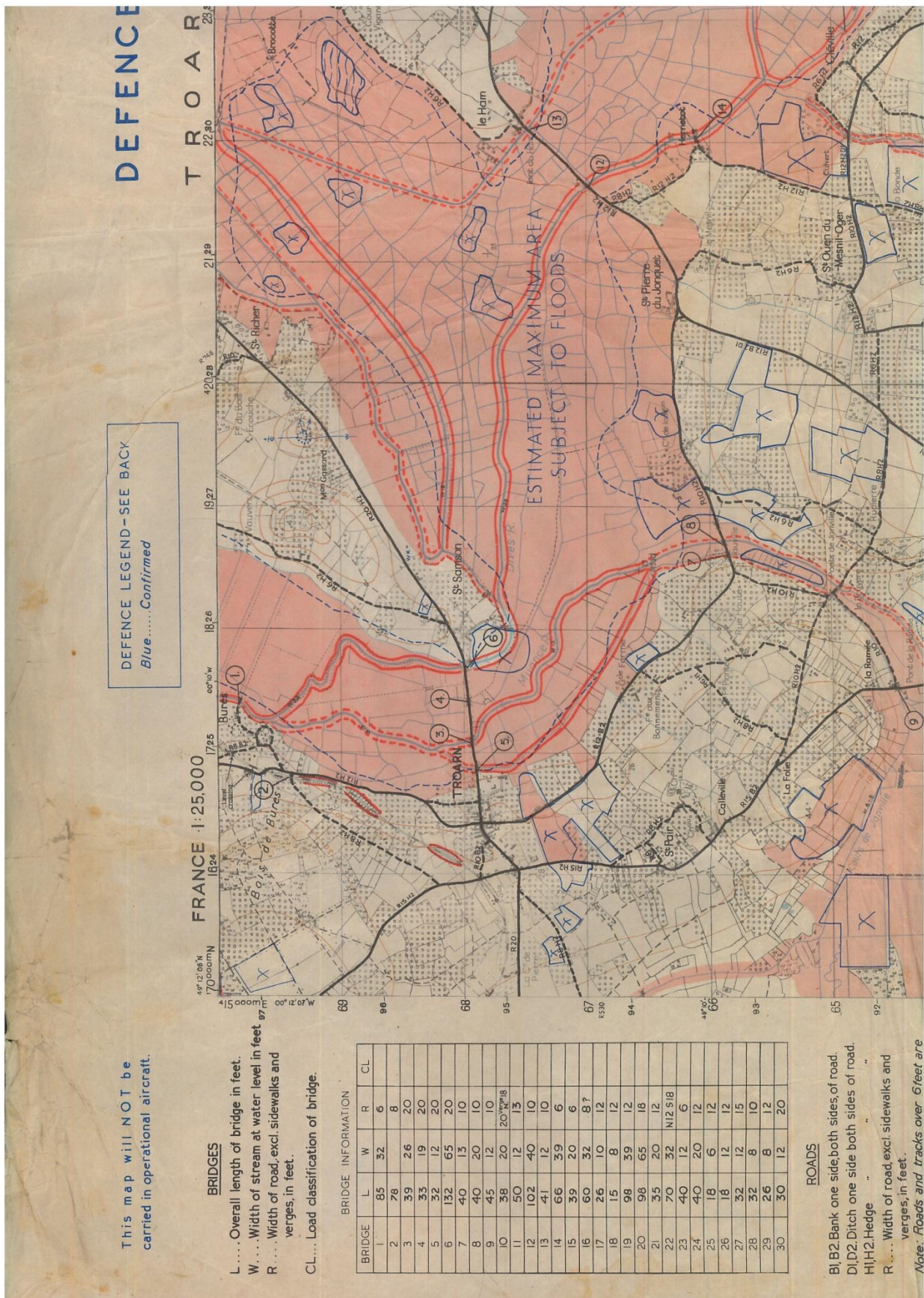
45/8SW	40/8SE	43/8SW
40/6NW	40/6NE	43/6NW

INCIDENCE OF 1:12,500 Sheets
Series GSCS 4490

AUTHORITIES

- Defence Information. TIS (in conjunction with Formations concerned)
- Engineer Information. Formations concerned.

III. Map Sheets G and H –Troarn area, 20 May 1944 Stop Press Edition, War Office. (Bodleian Library C21 19B)



29	26	8	12
30	30	12	20

ROADS

B1, B2 Bank one side both sides of road.
 D1, D2 Ditch one side both sides of road.
 H1, H2 Hedge " "
 R " Width of road excl. sidewalks and verges, in feet.
Note: Roads and tracks over 6 feet are shown in heavy black. Only main roads in towns are shown black.

GROUND

Ground probably soft

OBSTACLES

Natural Tank Obstacle inland

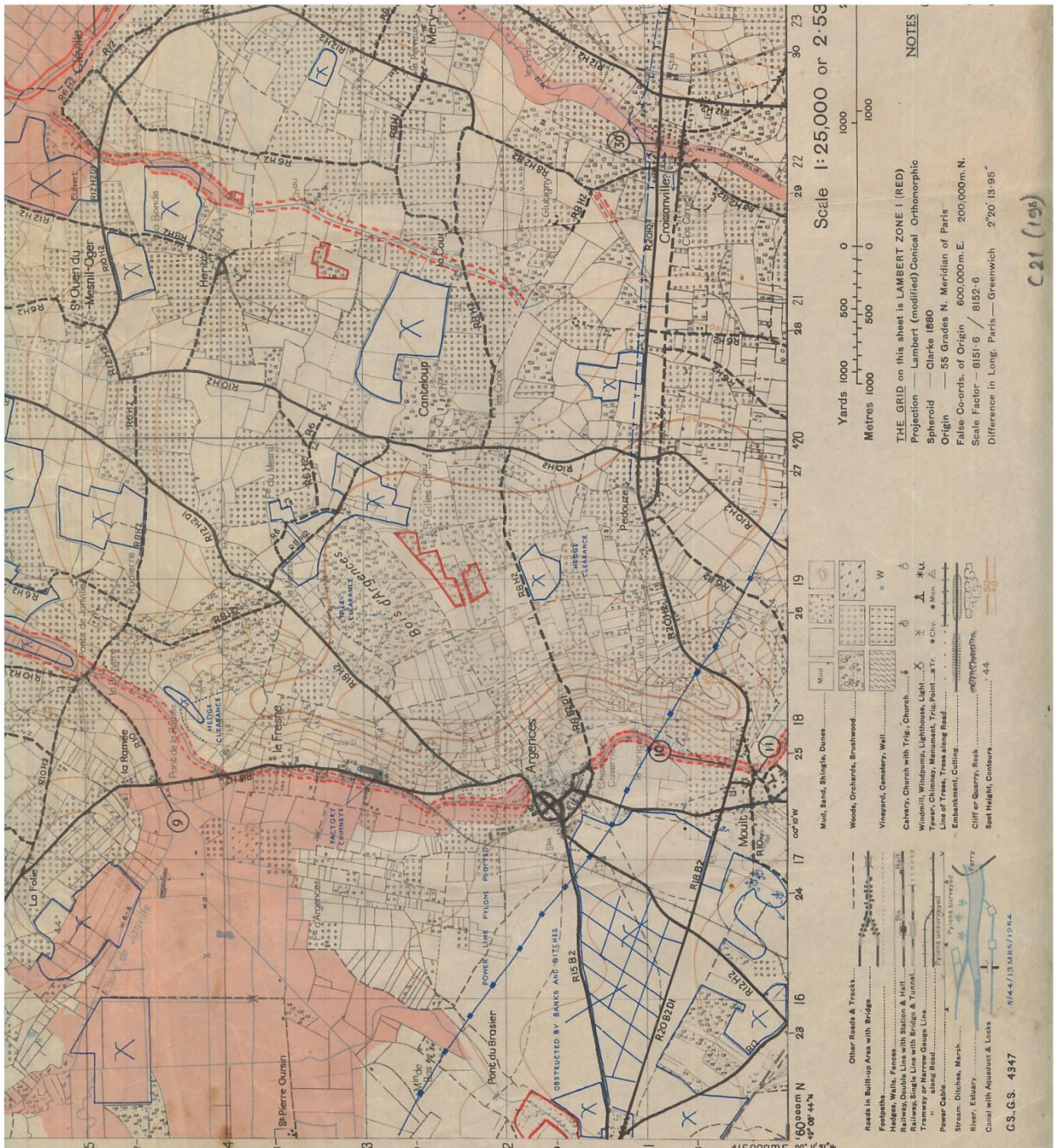
STREAMS

W. Width of stream at water level in feet

1. It is not possible from the scale of the photographs to make accurate measurements of minor roads and tracks. Therefore, whilst these are mainly correct, they must be considered a guide rather than a statement of fact.
2. Culverts are the same width as the roads which cross them, unless otherwise shown.

AUTHORITIES

Defence Information TIS (in conjunction with Formations concerned)
 Engineer Information, Formations concerned

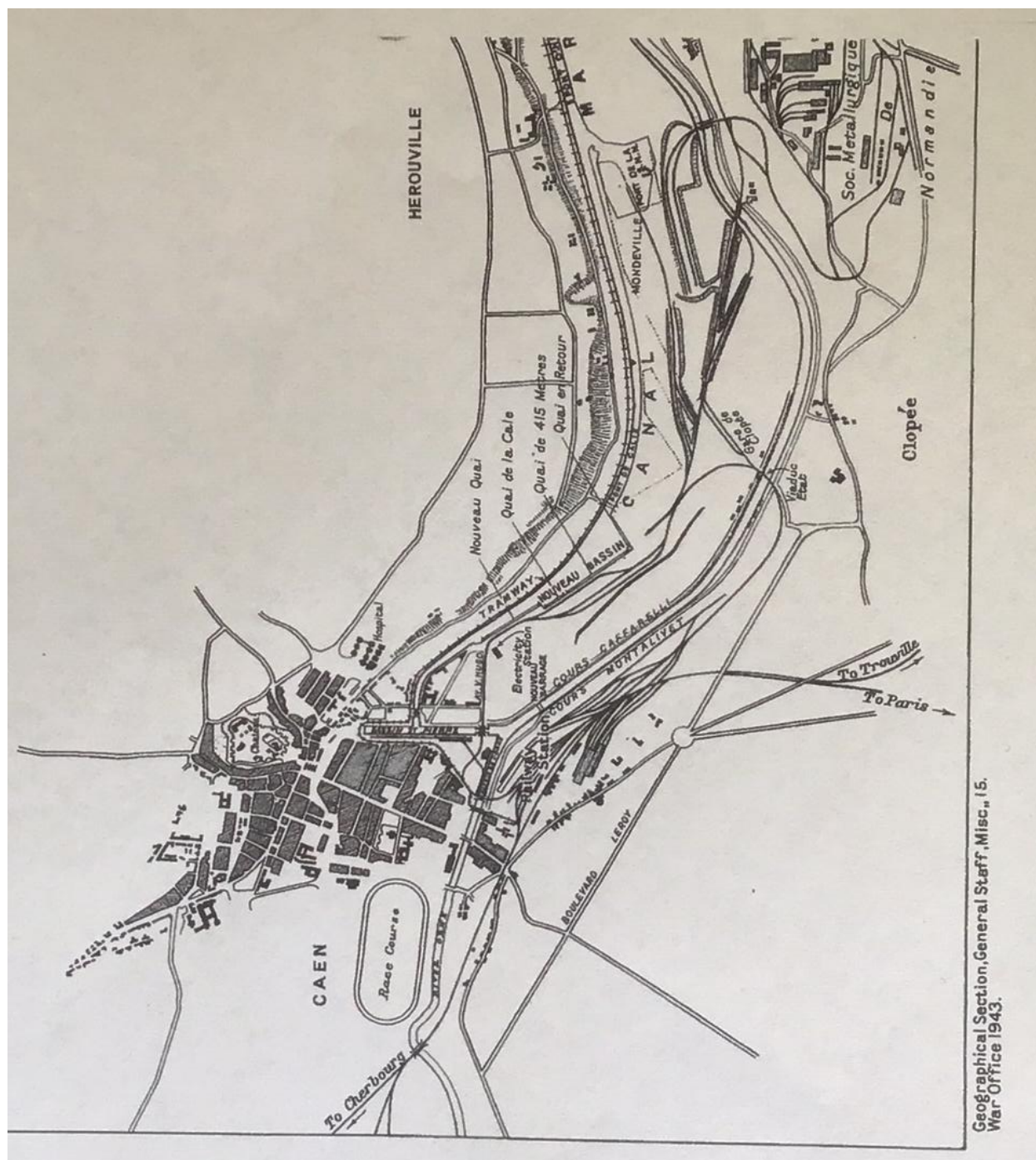


C21 (195)

Map Sheet I – 20 May 1944 Map Symbol Legend

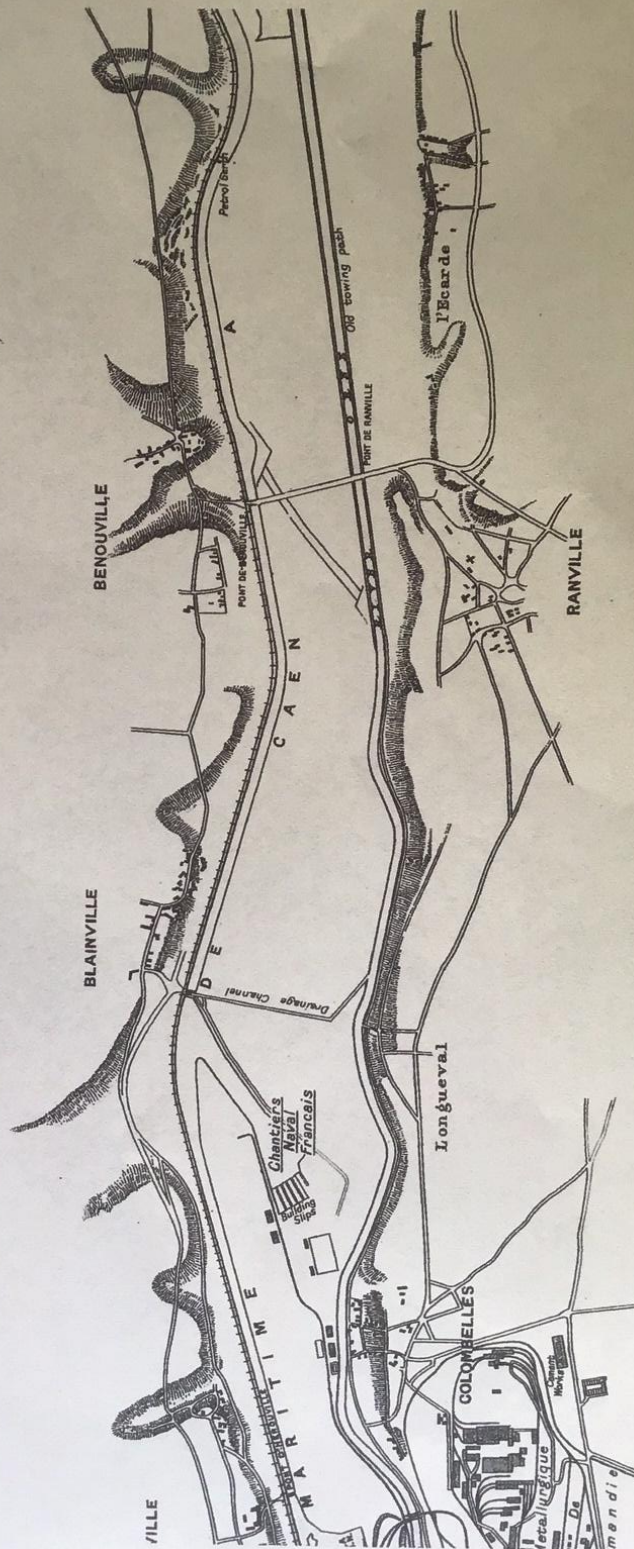
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V. Map Sheets J, K and L – 1943 Plan of Ouistreham Caen Canal (Bodleian Library)

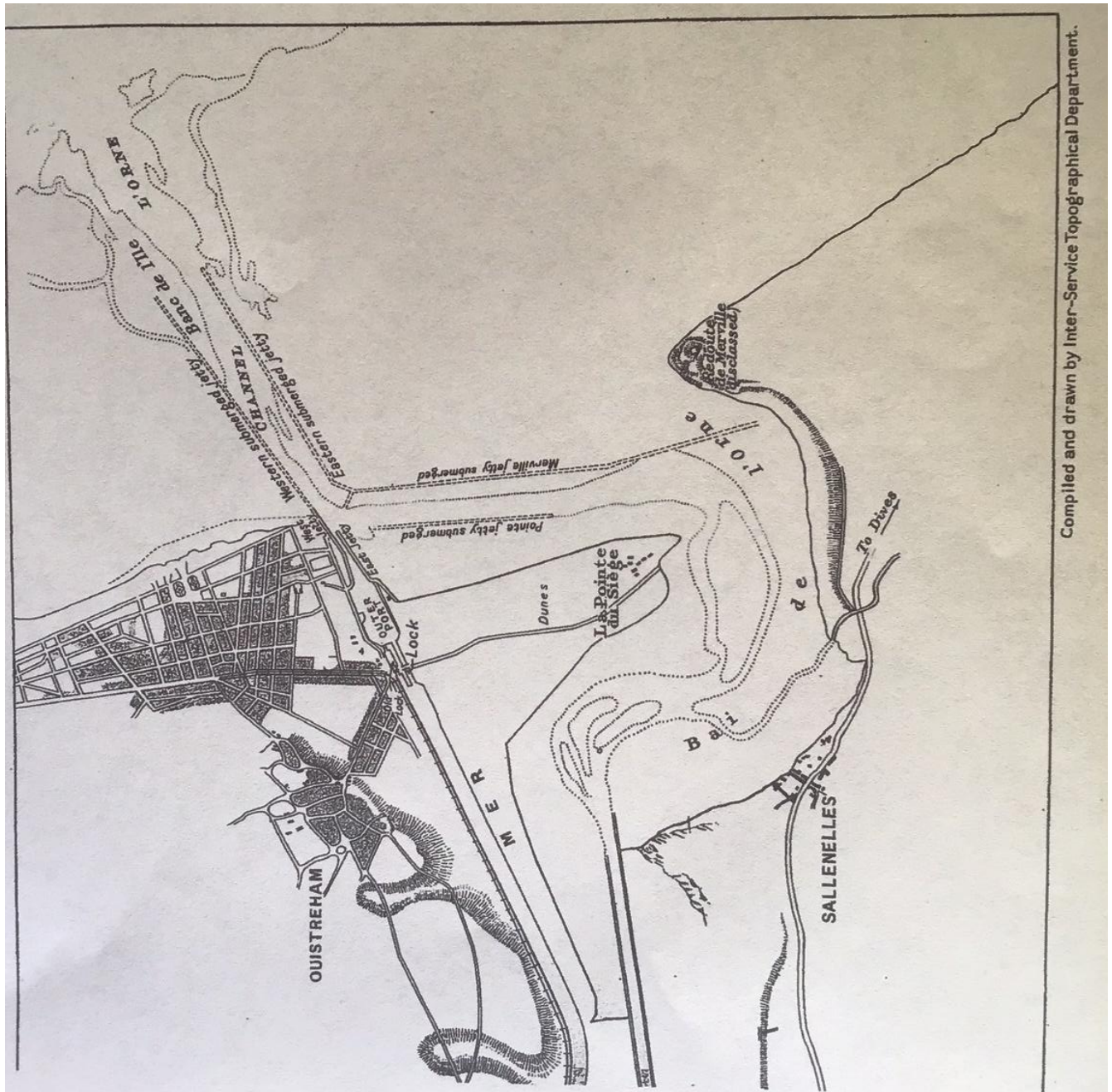


A decorative star symbol, resembling a stylized eight-pointed star or a cross with rounded, overlapping ends, is positioned at the end of a line that extends from the right margin towards the center of the page.

100 0 1 2 3 4 5 6 7 8 9 1000 1 2 3 4 5 6 7 8 1900 Year-Date



Produced under the Superintendence of Vics-Admiral Sir John Edgell K.B.E., C.B. Hydrographer



Compiled and drawn by Inter-Service Topographical Department.