

20th CENTURY MILITARY SITES AND THE LEGACY OF THE GERMAN OCCUPATION IN JERSEY

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INTRODUCTION

This chapter of the Research Framework focuses on 20th century military sites and the legacy of the German Occupation. The introduction to the Resource Assessment sets out the research context, both internationally and with a focus on Jersey and the Channel Islands and in the context of the Atlantic Wall, and the range of archive sources that are available. Topics for study are then introduced, with referenced summaries of current understanding. These same topics are then used as the framework for the Part 2 Research Agenda, with suggested research questions

and activities numbered so that they relate to the relevant sections of the Resource Assessment. It must be emphasised that these are suggestions at this stage, in order to stimulate thinking for all those who are wishing to contribute to future research priorities.

Particular thanks are due to Peter Chowne, to Roger Hills and Susan Freebrey of Jersey Heritage, to Malcolm Amy of the CIOS for kindly showing me around Millbrook and Corbière, and to Phil Marett of Jersey War Tours.

RESOURCE ASSESSMENT

THE RESEARCH CONTEXT AND MATERIAL

Approaches to the legacy of twentieth century conflict

Research on the legacy of 20th century conflict has developed from a diversity of disciplines and approaches. The initial focus was very much on recording what remained and could be identified in the field, such as the pioneering study of UK defences of the Second World War by Henry Wills (1985), who had undertaken fieldwork from the 1960s and was a founder member in 1975 of the Fortress Study Group. Nearly 6,700 volunteers participated between 1995 and 2002 in the Defence of Britain Project, during the course of which awareness grew of the value of documentary sources as a strategic framework for directing field work and understanding factors such as the siting, deployment and design of fortifications (see for example Dobinson, Lake and Schofield, 1997; English Heritage 1997 and 1998); deeper investigation using archives and fieldwork resulted from this, resulting in a number of publications (e.g. Foot 2007) and on-line archiving on the Archaeology Data Service website. The assessment of individual sites has thus benefitted from understanding how they relate to

the broader context, whether for example in terms of their deployment, or the extent to which they conformed to or adapted typologies set at a senior level. The value of such an approach was set out in the first research framework on this topic in 2004: 'It is clearer now than a decade ago that our study demands a multi-disciplinary approach, drawing upon documents, building analysis, archaeology, oral history and other sources to draw a rounded picture of our military past, and the fabric it has left behind. And context is all: historical geographers, social and cultural historians, and students of psychology and literature all have their parts to play.' (Schofield 2004, 1). To this has also been added the work of contemporary artists, who in Colin Renfrew's words 'are nibbling away all the time at what we think we know about the world, at our assumptions, at our preconceptions' (quoted in Schofield and Cooft 2007, 14), and the difficult issue of how to engage with the legacy of total war – and those places that evoke the threat of nuclear annihilation in the Cold War and beyond – in

Europe and across the world (Carr and Jasinski, 2019).

The first global synthesis of studies was published in 2002 (Schofield, Johnson and Beck 2002), after a session held at the fourth World Archaeological Congress in Cape Town, South Africa, in 1999, and 2005 saw the launch of the *Journal of Conflict Archaeology* with its wide remit to cover battlefield sites, all types of contested landscapes and human rights cases. Whilst the evidence offered by the investigation of archaeological sites and structures can be absent from

some syntheses, such as Jeremy Black's *Rethinking Military History* (2006), it is present in others such as Caddick-Adams's new history of D-Day (Caddick-Adams 2019). Another notable recent addition, using the evidence of archaeology to question and offer new perspectives in combination with archival research and the analysis of wartime aerial photography, is the work of David Capps-Tunwell and others on the geography and effectiveness of aerial bombing in north-west France (Capps-Tunwell et al 2016).

The research context for Jersey

There has been significant work on the First World War and the Cold War (see Topics 1 and 5). Inevitably, the vast majority of writing has been concerned with the Occupation period of 1940-1945, its legacy of fortifications and how it affected the lives of the islanders. Daily diaries include those of Leslie Sinel, published immediately after the war and which went through a number of reprintings (Sinel 1984), and of Deputy Edward Le Quesne (Le Quesne, 1999).

The publication of Charles Cruikshank's *The German Occupation of the Channel Islands* marked the 30th anniversary of the Liberation in 1975: it was commissioned in 1970 by the States of Jersey, Guernsey and Alderney, and the Chief Pleas of Sark, and was the first history to make reference to archives across the islands, in London, the United States and Germany. A chapter in Cruikshank's book was devoted to The Fortress, focusing on the fortifications programme, how it was resourced and the labour force. The Channel Islands Occupation Society (CIOS) have played a leading role in the study and conservation of the Occupation period since their foundation in 1961. The efforts of individual researchers, and of those who have been actively engaged in the recording, recovery and conservation of sites, are available through its newsletters, the annual CIOS Review and its special publications. A founder member of the Society was Michael Ginns, who with his family had been deported to a detention camp in Germany in 1942 and then devoted much of his life's work (during his career as a Jersey postman) on the history and legacy of the

Occupation. With Peter Bryans he wrote *German Fortifications in Jersey*, which was published in 1975, making it one of the earliest publications on the built and archaeological heritage of the Second World War. This was soon followed by other studies, such as an article on 'Wartime Tunnels in Jersey' (1978) and in 1994 his ground-breaking work on *Organisation Todt and the Fortress Engineers in the Channel Islands*. *German Fortifications in Jersey* was updated in 1999 (with revised editions following in 2004 and 2010) as *Jersey's German Bunkers*, with many photographs and drawings by Paul Burnal. The various strands of his research were brought together and updated into a single volume in 2009: *Jersey Occupied. The German Armed Forces in Jersey, 1940-1945*. Ginns's phenomenal output, celebrated in a Review article by Matthew Costard (2017), was underpinned by awareness and sensitivity to the sources available to a researcher exploring events in living memory: fieldwork including drawn records, photography, reference to available archives and oral and written testimonies from former members of the German military, labourers forced to work on the fortifications and of fellow islanders. He also worked with Paul Burnal, a former soldier and also a postman who worked with other authors to produce detailed guides for individual sites and military areas, notably for Batterie Lothringen (Burnal 2015). Paul Burnal has also published the first of a detailed series of studies that have focused on the Defence Areas into which Jersey was subdivided: *Defence Sector East*, which is exemplary in its use of fieldwork to reveal, reappraise and document both

known and newly-discovered sites, and of testimonies and sources from the Jersey Archive and elsewhere (Burnal 2020). Burnal has also collaborated with others on the production in 2022 of *The Atlantic Wall in Jersey*, which includes contemporary and wartime photography by Maleka Mansouri-Robbins and Shane Boschat and colour drawings of bunker types and sites by Shane Boschat and Lishu Denton (Burnal et al 2022). Another significant contribution in respect of recording sites has also been made by members of the Jersey Bunker Tours, founded in 2015, whose website (<https://www.jerseybunkertours.com>) is particularly valuable as a publicly available record of sites in that it includes wartime aerial photography, maps, plans as high-quality drone photography. Another recent publication, which has considered the legacy of this period as part of the medieval and later heritage of fortification on the island, is Gabriele Faggioni's *Fortifications of the Channel Islands* (2013).

'Occupation is a suffocating and destructive experience In Jersey there were more Germans per square mile than were to be found in Germany There was no escape from the physical presence of the occupier': so wrote the Bailiff of Jersey, Sir Philip Bailhache, in the foreword to Paul Sanders's *The British Channel Island under German Occupation, 1940-1945* (Sanders 2005, ix). Its unique circumstances demand consideration in its wider context, and demand sensitivity. As Paul Sanders rightly cautioned the reader in the introduction to *The British Channel Islands under German Occupation*: 'The German Occupation of the British Channel Islands in World War Two was unlike any of Hitler's other conquests. So unique, in fact, that it is extremely hard to put into words. To say that the situation was complex would be an understatement, for this same complexity has been the undoing of many an author who attempted to beat sense into the subject matter.... The most formidable challenge to Channel Islands occupation is situated in a highly sensitive zone: between the celebration of the victor nation, with its own taboos, and the soul searching of other formerly occupied nations of Europe' (Sanders 2005, xv). Recent scholarship, notably Mark Mazower's *Hitler's Empire* (Mazower 2008), enable the distinctive polities, economies and circumstances of the Channel Islands to be placed in the context of the diversity

of occupations across Europe, and the legacy of occupation in Jersey and the other Channel Islands to be placed in both a European context and in a global context of how 20th century conflict affected small islands across the world (Carr 2010a and 2015). Closer to the Channel Islands, historians such as Robert Gildea have completed detailed regional studies exploring the inter-relationships of communities, the military and civil administrations in northern France; Gildea's work focused on the lives of ordinary people, reasserting the importance of oral testimonies and describing how passive resistance developed in response to the imposition of direct rule (Gildea 2002).

A particularly important development in recent years has been the critical re-evaluation of archives and the analysis of newly-released sources by university-based historians and archaeologists who have been able to build up a detailed picture of how islanders sought to protect and resist the Occupation. The Jersey Heritage Trust, the Société Jersiaise and the States of Jersey played a key role in commissioning some of this research, notably that of Paul Sanders whose *The Ultimate Sacrifice* – 'the chronicle of the Jersey men and women who lost their lives in the concentration camps and prisons during the German occupation of Jersey' – was republished using new research in 2004 after the first edition of 1998 had sold out (Sanders 2004). Sanders' ground-breaking analysis of German, French, British, American and Russian archives then resulted, in 2005, in publication of *The British Channel Islands under German Occupation, 1940-1945*. Gilly Carr, Paul Sanders and Louise Willmot then collaborated as a team for publication in 2014 of *Protest, Defiance and Resistance in the Channel Islands*.

Consideration of the Occupation inevitably broadens the object of research from military fortifications to all aspects of the legacy of people who lived here in this period - the occupiers, the occupied and the forced and slave workers who were brought here in great numbers from the autumn of 1941. Gilly Carr of Cambridge University has been pre-eminent as an archaeologist working on the legacy of the Occupation in the Channel Islands and across Europe. She has drawn attention to 12 distinctive and tangible characteristics of these 'Landscapes of Occupation' – 6 categories of objects (see Topic 3), the fortifications

themselves, civilian buildings that were converted or requisitioned for military use, the labour camps and other places of ‘internment, terror and cruelty’, the appropriation of landscapes for military use, the graves of all those who died because of the Occupation and the monuments and memorials erected after the war

(Carr 2009 and 2014). This research framework will consider all of these themes, and in addition those of the newly-built infrastructure that sustained the work of Organisation Todt, the impact on cultural heritage, places of resistance, aviation and shipping.

German fortifications and the Atlantic Wall

Whilst this Research Framework has focused on German military sites on Jersey, it has needed to consider also their relationship to those elsewhere in the Channel Islands and the Atlantic Wall from north-west France to Scandinavia, and the broader international context in terms of how military sites developed prior to and during the Second World War.

The first study of German military fortifications and defences, including drawings and photography of the full range of types, was published in March 1945 as a chapter within Handbook on German Military Forces in the closing stages of the war, by the US War Department. The Organisation Todt Handbook was similarly published by the British military in March 1945, forming the basis of John Christopher’s account of Organisation Todt, which has also offered additional context to its legacy in Jersey and the Channel Islands (Christopher 2014) – now added to by another study of the organisation (Dick 2020).

Rudi Rolf first published his research on standard types of fortifications in the 1980s and updated these in 2019, by which time there was an increasing number of publications on this subject (Partridge 1976, a particularly comprehensive account; Saunders 2001; Bassanelli and Postiglione 2011; Ruthven 2014; Forty, Marriot and Forty, 2016). French studies

include Atlantikwall: Le Mur de l’Atlantique en France (Chazette et al 1997), Anderson Bo (1994) on Brittany and numerous studies by Alain Chazette and others published by Éditions Histoire et Fortifications (<https://www.histoire-fortifications.com>). Another valuable source is Kaufmann and Kaufmann’s comprehensive analysis, published in 2003 as Fortress Third Reich, of the development of German fortifications from the fortress garrisons of the late 19th century to the First World War, pre-war rearmament and the development of standardisation and the deployment of fortifications across all parts of Europe during the war. Studies of the whole Atlantic Wall have been published more recently – by Chris McNab in 2014, by Alain Durrieu, Luc Braeuer, Marc Braeuer and Sébastien Hervouet in 2014 and by George Forty, Leo Marriot and Simon Forty in 2016. There are various websites devoted to the topic including:

- Bunkersite (<https://www.bunkersite.com>) considers German fortifications from 1933-1945, including those reused in the Cold War
- Atlantikwall (<http://www.atlantikwall.co.uk>)
- Liberation Route Europe, which includes the Atlantic Wall amongst its other themed routes (<https://www.liberationroute.com>)

Archives and collections

The literature is supplemented by the collections of La Société Jersiaise and the Jersey Museum and Archives; the latter contains nearly 75,000 records, written and oral testimonies for the Occupation period, now including some of the records held at the United States Archive, the Bundesarchiv in Freiburg, The National Archives in Kew and the National Collection of Aerial Photography in Edinburgh; there is further guidance on key documentary and secondary sources in Cruikshank 1975, 347-352 and in Sanders 2005, 261-273.

The Jersey Archives - <https://www.jerseyheritage.org/visit/places-to-visit/jersey-archive/> - has guidance and on-line access to summaries (and some PDF records on subscription) of records for all key periods, especially abundant being those records (nearly 75,000) for the Occupation which include:

- oral testimonies, film and photographs and diaries
- the Bailiff's Occupation and Liberation files
- requisitioning and compensation records for properties affected by military activity
- the archive of the Channel Islands Occupation Society
- the David Maindonald Research Collection which includes research on all German fortifications found in Jersey, Guernsey and Alderney
- copies of German military records archived at the National Archives of the United States (the so-called T-files, copied to L/D/25/K)

- copies of German, British and Allied military records archived at the National Archives in Kew

Already mentioned is the website of Jersey Bunker Tours (<https://www.jerseybunkertours.com>) which includes wartime maps and aerial photography for the whole island and individual maps from the Archives which are not otherwise available in published form.

The National Archives in Kew has Cabinet, War Office and military command files, for research guides see: <https://www.nationalarchives.gov.uk/help-with-your-research/research-guides/>

The National Collection of Aerial Photography in Edinburgh (<https://ncap.org.uk>) has wartime RAF and Luftwaffe photographs.

For guidance on the Bundesarchiv in Freiburg, which includes photography, records and (of relevance to the study of fortifications) drawings and specifications for the key Regelbau types, see <https://www.bundesarchiv.de/EN/Navigation/Use/use.html>.

For guidance on captured German and related records at the US Archives see <https://www.archives.gov/research/captured-german-records>.

There is also a great diversity of collections – representative of the lives, values and conditions experienced by the occupying forces, the islanders and the slave and forced workers brought here to work – in the Jersey Museum, German bunkers managed by the CIOS and in the Channel Islands Military Museum at St Ouen.

TOPIC 1 THE EARLY TO MID - TWENTIETH CENTURY, 1900-1940

1900-1914

By the 1840s Jersey was one of the most heavily-fortified places in Europe, comparable in the strength and diversity of its defences to other strategically vital islands such as Menorca and the landscapes including the islands around the naval dockyards of southern England and north-west France. Its coastal batteries combined with others around the coastline of the British Isles to play a key role in the defence of ports and naval anchorages, providing a critical second line of defence in support of the Royal Navy's primary role in protecting Home Waters and the Westward Approaches (Pattison and Thomas 2018, 66-9).

Despite the growing threat from Germany, and thus planning for new batteries on the east coast, those batteries in the Channel Islands and along the English Channel that survived the reorganisation of coastal defence in 1905 were rearmed with new breech-loading (BL) and quick-firing (QF) guns; a continuation of a perceived (and surprising, in view of the Entente that had been developing over previous decades) need to defend against France. Hence two 6-inch B Mark II guns (the most common type of emplacement, with a range of 17,400 yards (15,910m)) to defend St Helier, sited on South Hill, and two 4.7inch QF guns at Lower Keep Battery on Elizabeth Castle, the latter with a range of 11,800 yards (10,790m); their design largely conformed to the type drawings issued by the War Office, the guns being bolted down with access to recesses for 'ready use' ammunition and set above separate shell and cartridge stores.

The Channel Islands was the only part of the British Isles, and indeed of the Empire, where military service

was compulsory: all Jersey men aged between 16 and 45 were expected to enroll in its the Royal Jersey Militia, and commit time to drill, rifle practice and instruction in warcraft (Ronayne 2009, 15). A locally-raised defence force had been critical to repulsing French attempts on the islands in the 13th and 14th centuries. Weapons and ordnance were stored in parish churches (the doorway at St Lawrence was widened for cannon, for example), drill sheds were erected for all-weather training and six purpose-built arsenals were built in the 1840s. St Helier's was burned down in 1900, with Edmund Berteau (the States engineer) designing a new building in 1907 to house a variety of ordnance and 270 men; it was commenced in 1912 (HER 0401396 and Ronayne 2009, 20). The Militia, which counted over 5,000 among its ranks in the later 19th century, was not immune from the modernisation and reorganisation of the armed services that took place in the first decade of the 20th century, the Militia Law of 1905 setting out the War Office's terms for service after the departure of the garrison in 1904. The British government paid for uniforms, weapons and equipment in return for the States paying for salaries, running arsenals and other facilities including rifle ranges at Crabbé on the north-west coast, Les Platons in Trinity and Grouville Common to the east (Ronayne 2009, 17 and 20). The Jersey District was the HQ for all units based in Jersey, housed in Fort Regent and other barracks, and the new Officer Training Corps, as set up by Haldane's reforms of the Army in 1908, split from the Militia and became the Victoria College OTC with a range in the school grounds (Ronayne 2009, 21).

The First World War

The legacy of the First World War in the British Isles, with a particular focus on England, has been the subject of a recent study (Cocroft and Stamper 2018). For Balleine, the First World War ‘had strangely little effect on Jersey’ (Balleine 1950, 311). Recent research by Ian Ronayne (Ronayne 2009 and 2014), and others, including some published on The Channel Islands and the Great War website (<http://www.greatwarci.net>), has shed further light on the island in this period, and the potential for new discoveries. The Militia, which after withdrawal of the regular army had taken responsibility for the defence of the island, took over barracks and requisitioned houses at the outset of the war; many volunteered for service with the Royal Irish Rifles in 1917-18 after the threat of invasion had lessened. A large contingent of islanders departed for service with the French military and three battalions of the ‘Jersey Pals’ mustered at the Town Arsenal (Ronayne 2014, 24-36 and 2009, 15-16). The 4th Battalion of the South Staffordshire Regiment arrived in September, based at the Grand Hotel, Fort Regent and St Peter’s Barracks in St Helier, and trained around St Ouen’s Bay and other parts of the island. The seas around the Channel Islands were patrolled by aircraft from the French seaplane station on Guernsey, co-ordinated with other air stations in France and southern England – such as at Tresco in the Isles of Scilly, Mount Batten in Plymouth and Calshot where hangars and slipways survive. The Royal Jersey Garrison Battalion was set up in February 1917 to take over the duties of the Militia, acquiring their facilities and buildings, and the Royal Garrison Artillery took over the South Hill and Elizabeth Castle batteries (Ronayne 2014, 158-9). Officers and cadets from the OTC were stationed around the island until February 1917, when Jersey’s Military Service Act compelled all those aged 16 to 41 to join the armed forces and the role of the OTC and Militia was taken over by the Royal Garrison Artillery and the Royal Jersey Garrison Battalion. Other buildings were also used for military purposes, such as for hospitals on Pier Road and also Brighton Road in St Helier (later Rouge Bouillon School).

The legacy of military training in terms of trench systems and other fieldworks has not been systematically surveyed to date. Perhaps surprisingly,

in light of the measures taken in other parts of the British Isles, there is no documentation for additional fieldworks around the coastal batteries or to counter the threat of seaborne raids.

As Ian Ronayne has shown, the British government was critical of Jersey’s perceived inability to contribute more to the war effort, despite the costs to it of maintaining the Militia and its successors (Ronayne 2014, 198-204). Jersey was also mindful of the need to maintain and where possible to boost agricultural production, although prisoners of war did not as elsewhere in the British Isles (after 1917) do farmwork, and neither did as high a proportion of women (Ronayne 2014, 154-173).

The most spectacular legacy of the First World War on Jersey is the prisoner of war camp at Les Blanchés Banques (HER 100193), facing St Ouen’s Bay and sited on a Neolithic and early Bronze Age settlement site and in an area used for military manoeuvres. It is exceptionally well-documented, as set out in a recent study by Heather Morton (Morton 2018), and a team from Cambridge, Liverpool and Bristol universities revealed how much of the layout has survived within the dunescape: Total Station Theodolite and magnetometer surveys proved to be particularly effective in this respect, revealing the locations of buried structures and informing targeted excavation (Mytum, Philpott, Carr and Saunders 2020). This uncovered evidence of the complex system for water supply and waste disposal, illustrating the desire on the part of the camp’s designer, Major T. E. Naish of the Royal Engineers, for a model camp of its kind (Mytum et al 2020 and 2023). Analysis of the site in a broader context of the development of military camps, including those for internment and prisoners of war, has in turn benefitted from studies edited by two of the team (Carr and Mytum 2012; Mytum and Carr 2012). The survival of PoW camps from this period in Britain awaits systematic survey (Kendall 2018, 14-15), but the available evidence – now supplemented by a stunning Lidar image taken for Jersey Heritage in 2020 – indicates that this is an outstanding survival (**Fig 1**). Lidar has proved to be particularly effective in revealing the layout of fieldworks and buildings at other sites,

such as the PoW hospital at Brocton in Staffordshire where there is high potential for a remarkable survival and also the RFC station at Yatesbury in Wiltshire where fencing, sentry boxes and German uniform buttons offer testament to its use as a PoW camp (Morrison 2018, 190; Kendall 2018, 15 and Miles in Lake 2018, 116).

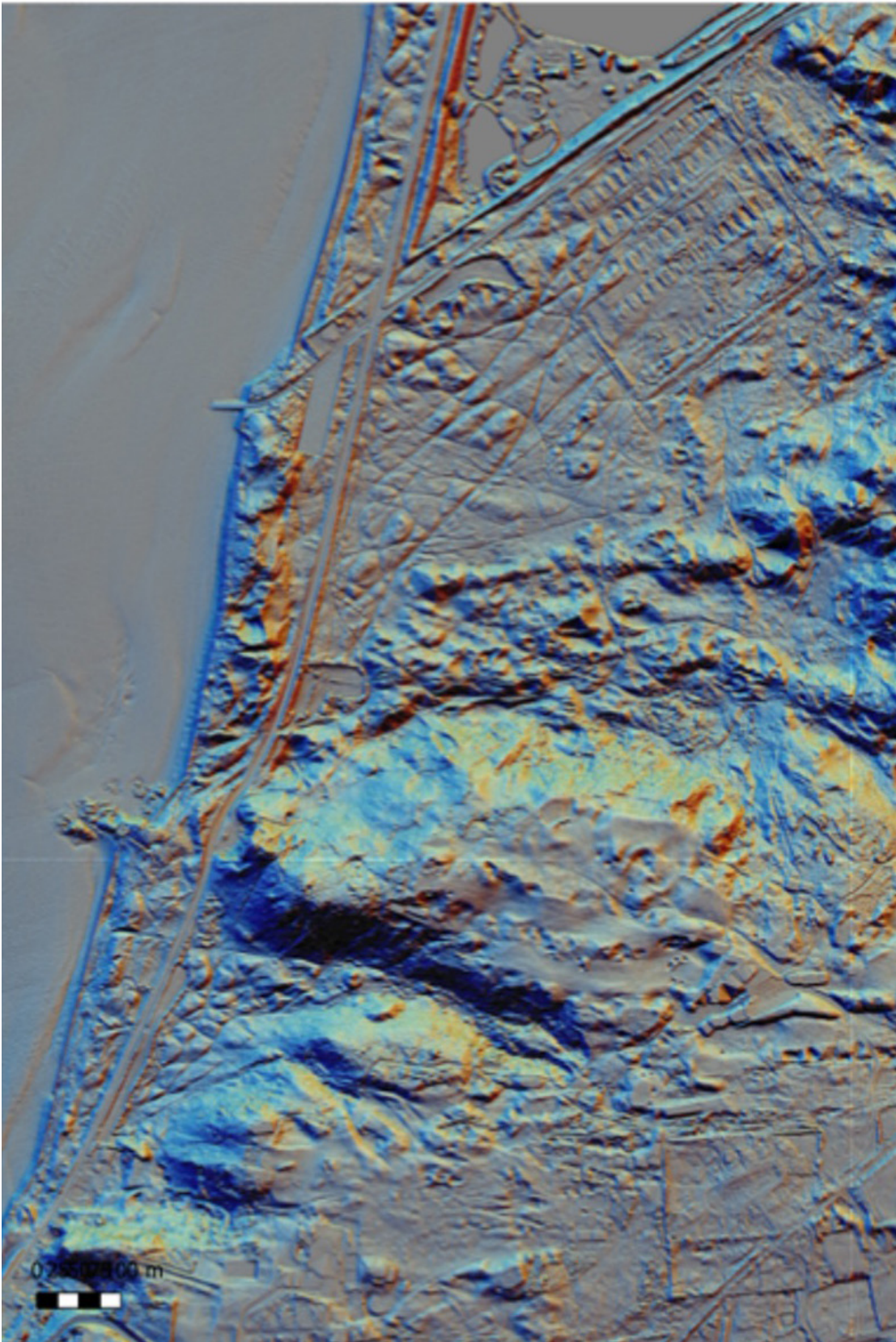


Figure 1. Les Blanchettes Banques: LiDAR imagery captured by Jersey Heritage in 2020 shows the layout of the camp at Les Blanchettes Banques in detail (HER 100193). Both Jersey and UK-based contractors were used in the construction.

The inter-war period and the outset of the Second World War

In 1921 the Militia was reduced to one regiment of 500 men, and 'in 1929, when the British Government withdrew its money grant, this was further reduced to an Infantry Company of 260, and service was made entirely voluntary' (Balleine 1950, 311). The East Surreys were the last regular army garrison to leave in 1932 (Ginns 2009, 53).

The prominent location on The Parade in St Helier of the cenotaph unveiled in 1923 reflected the scale of Jersey's wartime losses, which were comparable to that of the British Isles as a whole (Ronayne 2019, 249-50; Wynn 2019). Memorials throughout the island commemorate the fallen and those who served (see <http://www.greatwarci.net/memorials/jersey>). Examples include the Sir Galahad statue in Victoria College, a stele in the Methodist Church at St Martin and the memorial opposite the school in St John, with its inscription in French and English, and its list of 18 names augmented by a further five from the Second World War and one from Northern Ireland.

The wealthy businessman T.B. Davis made a number of gifts in memory of his son Howard who was killed in the war - including the Howard Davis Park, Howard Hall and the Howard Davis Experimental Farm in Trinity (Balleine 1950, 314). Gifts of landscape formed an important

part of the commemoration of the fallen during and after the First World War, and had a strong influence on the preservation of and public access to open space over the following decades (Grieves and White 2014).

Throughout this period, Jersey became increasingly popular as a holiday destination: Jersey has one of the most striking air terminals of the 1930s in Europe (built in 1937), it was not until March 1940 that its evident suitability as a military airport compelled the Admiralty to establish a Royal Naval Air Station here. It was short-lived, closing on the 31st of May - the same day that over 68,000 were evacuated from Dunkirk. It became quickly apparent to the Cabinet and senior military commanders, despite the efforts of the islands' Lieutenant-Governors to embody the militias and make preparations for the defence of the islands, that the Channel Islands had little strategic importance (TNA CAB 80/12/68 and 84/14/41). Jersey was subject to an aerial attack, when 11 people were killed, on the 28th of June. It then surrendered to German forces on the 1st of July 1940, some two weeks after the fall of Paris and the decision by the British Chiefs of Staff - then making preparations to counter the expected aerial onslaught and the prospect of invasion on the British mainland - to demilitarise the Channel Islands and leave it to its fate (Cruikshank 1975, 12-38).

TOPIC 2 GERMAN MILITARY SITES OF THE OCCUPATION, 1940-1945

German military sites are the most prominent legacy of the Occupation in Jersey and across the Channel Islands, expressing Hitler's intent to make them into an 'impregnable fortress' that could resist any attempt by the British to retake them. The fortification programme also brought the demand for forced and slave labour, largely from the occupied territories of Eastern Europe

and the Soviet Union, that revealed to islanders the brutality of the Nazi regime. This Topic theme sets out the chronology of the fortification programme, the resources demanded by the desire to retain the Channel Islands and the use of forced and slave labour, prior to consideration of the construction, design and typological variation of the fortifications themselves.

Introduction and chronology

Before his release from captivity in 1947, General Rudolf Graf von Schmettow (1891-1970), who from August 1940 was the Commander of German forces in the Channel Islands, submitted his own perspective on how the fortification of the islands had proceeded over the war (von Schmettow 1948). He considered that the programme fell into two principal phases, either side of Hitler's October 1941 order for the islands to be turned into an 'impregnable fortress'. The construction of fieldworks and of reinforced field-type fortifications using reinforced concrete was thus followed by the construction under Organisation Todt of massive fortress-standard fortifications by forced and slave labour including from the Soviet Union which Hitler invaded in June of that year.

The Channel Islands were massively fortified in comparison to most other parts of the Atlantic Wall, their designation as a *festung* (fortress) placing them on an equal footing to other high-priority locations such as the Norwegian coast, the Pas de Calais and naval bases in the period prior to Hitler's order in May 1942 for the construction of the Atlantic Wall. Fritz Todt himself – who had visited the islands in November 1941 in preparation for the greater involvement of Organisation Todt in the fortification programme – had stated that Hitler had regarded the fortification of the islands as another 'memorial to himself' (Cruikshank 1975, 184). As von Schmettow related to his interrogators after the war, the transition from the field-type and reinforced field-type construction more typical of the earlier phases of the war to the heavy or fortress-type construction characteristic of the Atlantic Wall occurred 'two to three quarters of a year earlier [than

on the rest of the Atlantic Wall] and were, therefore much stronger.... By employing very strong forces and great means they were fortified much stronger and much earlier than the Atlantic Wall.... It can only be assumed that the Supreme Command felt induced to fortify and occupy them so strongly for reasons of prestige. The islands were the only British soil that had been occupied so there was the intention, I think, to hold them by all means.' (von Schmettow 1948, 13-14, 61-2). He was well-aware of their symbolic importance for late in 1944, after Jersey had been isolated from France, he ordered the compilation of the remarkable *Taktische Übersichten der Festungsbereich Jersey* with illustrations of German and earlier fortifications (A tactical review of Fortress Area Jersey), also known as *Festung Jersey* and (due the colour of their covers) *The Green Books* and repeated for the other islands. This issue of symbolic importance touches on a significant theme, of the role of 'engineers as ideologues' in displaying the importance that the Nazi regime and German nationalism accorded to technological but reactionary (in opposition to internationalist) modernism, exemplified before the war in the *Autobahn* programme and the construction of the East and West Walls and during the war in the way that Germany's defences and Atlantic Wall were communicated through Hitler's speeches and Nazi propaganda (Herf 1984, 12 and 152-188; Heyl 1981 and 2001).

Records for Jersey show that 154 of 213 planned fortifications had been completed by late 1944, with another 28 under construction; at least an additional 120 had been completed to reinforced field-type construction standards (Burnal et al 2022,

20, and see 2.2.1). That this was a relatively high proportion compared to the Atlantic Wall as a whole was underlined by Rommel, after his appointment in November 1943 as General Inspector of the Western Defences, when he reported that only 30% of intended works had been completed (Partridge 1976, 74). 'At the end of January 1944 the fortifications had taken 484, 000 cubic metres of reinforced concrete, compared with 6, 100, 0000 cubic metres for the whole of the rest of the Atlantic Wall.... When excavation work is brought into the account the balance becomes more remarkable. At the beginning of 1944 the Atlantic Wall had involved the excavation of 255, 000 cubic metres, at the same date 244,000 metres had been excavated in the Channel Islands.

The Atlantic Wall could have been doubled in strength, so far as excavated works are concerned, had the resources devoted to the islands been retained on the mainland.....' (Cruikshank 1975, 187-8).

Table 1 below sets out a summary of the key phases explored in this section, and their relationship to the expanding theatre of war across Europe. This in turn makes clear the immense impact that Hitler's decision to invade the Soviet Union had upon the course of the war, and on how – at the western edge of his empire – its initial conquests and Nazi brutality provided a source of labour from eastern Europe and the Soviet Union to work on the programme for fortress construction.

Table 1.

Jersey and the Channel Islands	Key and related events in WWII
June 1940: plans for evacuation (6, 600 eventually leave) and demilitarisation by British government in June; air raids on 28th. First German units arrive on 1st July.	Evacuation from Dunkirk, official surrender of French forces on 24 June.
May-June 1941: preliminary surveys by Fortress Engineers followed by Hitler's order to strengthen fortifications and place a full division in the Channel Islands.	First fortress-standard works focused on some coastal batteries, key airfields, ports and U-boat pens.
October 1941: Hitler commands that islands are made 'into an impregnable fortress', First Organisation Todt (OT) workers arrive followed next month by Fritz Todt to inspect islands; garrison increased to 11, 500 by end of year.	Invasion of Soviet Union commences 22nd of June, accompanied by massive destruction and loss of life, and acceleration of killings of Jewish population and building of camps; 2 in 3 (2 million) Soviet POWs die in camps over winter of 1941-2. December 1941 order to consolidate defences from Norwegian to French coasts.
March 1942: Abwehr demands banning of wireless sets to minimise risk of intelligence on fortifications, followed by ban on civilian use in June. August 1942: over 1, 000 OT forced and slave workers arrive. September 1942: 1, 186 people deported to internment camps.	March 1942: Hitler's Directive for the Atlantic Wall, followed by German advance to the Volga and into the Caucasus. May 1942: RAF commences bombing campaign in earnest, followed by retreat of Axis forces in North Africa from October. August 1942: Atlantic Wall construction programme launched along Dutch, Belgian and French coasts.
March 1943: St Saviour Wireless Case arrests. April 1943: Civil affairs unit retained in spite of request by military to dissolve it. November 1943: large numbers of OT workers withdrawn and fortification programme slows down. May 1944: drastic reduction in shipping. August 1944: food and fuel shortages as islands are cut off after fall of St Malo. September: military authorities decline offer of surrender from Allies. December 1944: relief of Jersey by SS Vega. 9 May 1945: final surrender of occupying forces.	German forces surrender at Stalingrad in February 1943, followed by failure of Kursk offensive and Soviet counter-attack. Allies invade Sicily in July 1943, and collapse of Mussolini's regime followed by German advance and fortification. Training and preparations for invasion of Normandy underway. Liberation of Rome on 5th June. D-Day on 6th June followed by launch by Soviet army on 22 June of Operation Bagration, Allies reach Paris on 25 August and cross the Rhine in March 1945, Soviet army reaches Berlin in April. Hitler commits suicide on 30 April and German forces surrender on 7 May.

The fortifications in 1940

The fortification of Jersey and the Channel Islands by the German military followed realisation that the existing defences needed to be updated, and that transport to and from the islands was vulnerable to attack (Cruikshank 1975, 76-7). The raids conducted from July 1940 at Churchill's behest, although

ineffective or indeed intended to win the islands back, also highlighted to Berlin the sense of humiliation that had gripped the British government (Cruikshank 1975, 80-102); it also emphasised the importance for Hitler and the German High Command of securing the military occupation of the British Channel Islands.

Military sites during the first phase of Occupation until summer 1941

During the first phase, until May 1941, most coastal and anti-aircraft guns were protected with sandbags and with limited amounts of concrete. Small numbers of Feldwache (outposts) were initially focused on existing fortifications and headlands, the first of these being built by August, stockpiles of ammunition were mostly stored in existing fortifications and the island was split into three defence sectors (Abschnitten) and sub-sectors (Unterabschnitten) (Ginns 1990, 75-6; 2009, 31-2). The focus on field-type and reinforced field-type fortifications, the former built by the troops themselves with reference to field manuals and the latter with the involvement and instruction of Fortress Engineers, reflected the position across other areas of Europe that had fallen to the Third Reich, where the rapidity of the advance made rendered redundant the massive fortress-standard fortifications that had been erected along Germany's east and west frontiers before the conflict. For the remainder of the year – and continuing into the next phase – the German military concentrated on the building of open concrete emplacements, the modification of

earlier fortifications and other substantial structures (notably windmills); personnel shelters, observation and command posts, including also the 'Wellblech' personnel and storage shelters, were also built to 'reinforced field construction' standards (Ginns 2006, 12-14; Burnal et al 2022, 73; see 3.3.2).

The airfield was one of the first sites to be defended with trenches and sandbagged positions, as Le Quesne noted on the 16th of August 1940 (Le Quesne 1999, 10). The airport was enlarged with concrete runways in summer 1940, using requisitioned local labour and the same company that had built the airport (Messrs. Farley of First Tower) to paint the 1937 terminal green. The Jersey airlines hangar was also built during the war. The Blister hangar at St Brelade's Garage probably predates the departure of the squadron in February 1941, the remaining Luftwaffe personnel then being tasked with manning anti-aircraft batteries (Ginns 2001). There was talk of a seaplane base at St Ouen's Pond, but this was not commenced (Ginns 2009, 304-5).

Military sites during the second phase of Occupation from summer 1941

The Channel Islands had enormous importance to Hitler as the only part of British Crown territory to have fallen under Axis control. Hitler's directives, in combination with the correspondence and maps of the Army High Command (Oberkommando des Heeres, or OKH) archived in the United States Archives with copies now available at the Jersey Archives (transcribed and published by the Jersey branch of the CIOS in 1981)

set the Channel Islands on a course to commence fortress construction prior to his order for the construction of the Atlantic Wall in March 1942. Maps show how the fortifications programme was intended to unfold over time, with a mix of fortress construction and less robust reinforced field-type construction, slowing down after the autumn of 1943 and – after D-Day – shifting to the east side of the island (Fig 2-3).

Summer 1941: enhancement to the fortifications and garrison

The construction of fortifications accelerated over the summer of 1941, albeit gradually and with an emphasis on reinforced field-type fortification that could be constructed by soldiers and engineers (Cruikshank 1975, 178-9; von Schmettow 1948, 12). The Inspectorate of Fortifications undertook a strategic overview of the Channel Islands' defences in May 1941, after Allied activity had disrupted shipping in the Gulf of St Malo and the supply of the islands (Ginns and Bryans 1975, 1-2). Hitler was firmly of the view, on reading this report early in June, that the defences were inadequate. He ordered that the islands should be defended by a full division, significantly at a time when the divisional strength across France had been reduced by as much as two thirds in preparation for the 'war of annihilation' on the Soviet Union – which duly commenced with the launch of Operation Barbarossa on the 22nd of June. The 319th Infantry Division arrived later that same month, replacing the 216th Infantry Division and supplementing the defensive strength already offered by Machine Gun Battalion 16. These developments were accompanied by the arrival of Fortress Engineer Staff and an inspection of the islands by the General

of Engineers and Fortifications, including a team of 14 geologists, from OKW in Berlin (Ginns 2006, 15), and a series of reports in June and July set out progress on the fortification programme. A report on progress on the 26th of July noted that 'Until now the coastal strongpoints on the shore are field type constructions; these will be strengthened with concrete shelters The consolidation of field fortifications and reinforced field fortifications is progressing and will shortly be completed. The shelters in the strongpoints have been concreted, the firing positions of the artillery and anti-aircraft guns as well as observation and direction-finding positions are consolidated'. In September High Command made it clear that 319 Division should accept the need for permanent fortress construction, and that 'strengthened field fortifications now under construction will be integrated into the permanent fortifications', the latter being considered necessary for direction-finding, observation and command posts and for strongpoints on rocky headlands which could pour flanking fire onto any invading force and 'must, as far as possible, be protected against shelling and bombing' (CIOS 1981, 14-19).

October 1941-autumn 1943: fortress construction accelerates and peaks

These plans were thus not considered by Hitler to be sufficient (CIOS 1981, 20) and on the 20th of October – following submission of another report – his Fortification Order for the Channel Islands commanded that the islands be transformed 'into an impregnable fortress (which must be pressed forward with the utmost speed..... based on the principles and the practical knowledge gained from building the Western Wall.' (Ginns 2006, 15; Forty, Marriot and Forty 2016, 15). Workers from Organisation Todt (see 2.2) then duly arrived the following month, Leslie Sinel's diary entries (1984, 61-64) noting the 'pouring in' of people and material (7 November) and of 'huge naval guns' (30 November). By the end of the year the island's garrison had increased to some 11,500 from its late 1940 total of 1,750; this out of a population of just over 41,000 (excluding the 6,600 who left

before the invasion) as recorded in the summer of 1940 (Cruikshank 1975, 193-4 and 42). Paul Sanders expressed this in a different way, in that as one in five people in Jersey were in German military uniform, and one in ten in Norway, only one in one hundred were in France (Sanders 2004, 128). Further strengthening of defences was ordered in another of Hitler's Directives and by the Commander-in-Chief for Western Forces on the 14th of December 1941, 7 days after Pearl Harbour. This set out the need to further strengthen defences along the coastline from Norway to the Bay of Biscay 'in order that we can be sure of repelling any landing attempt, however strong, using the smallest possible number of permanently stationed troops'. The defence sectors in Jersey increased from three to four, each defended by a Battalion with a Company held in reserve; each of the sub-sectors were defended

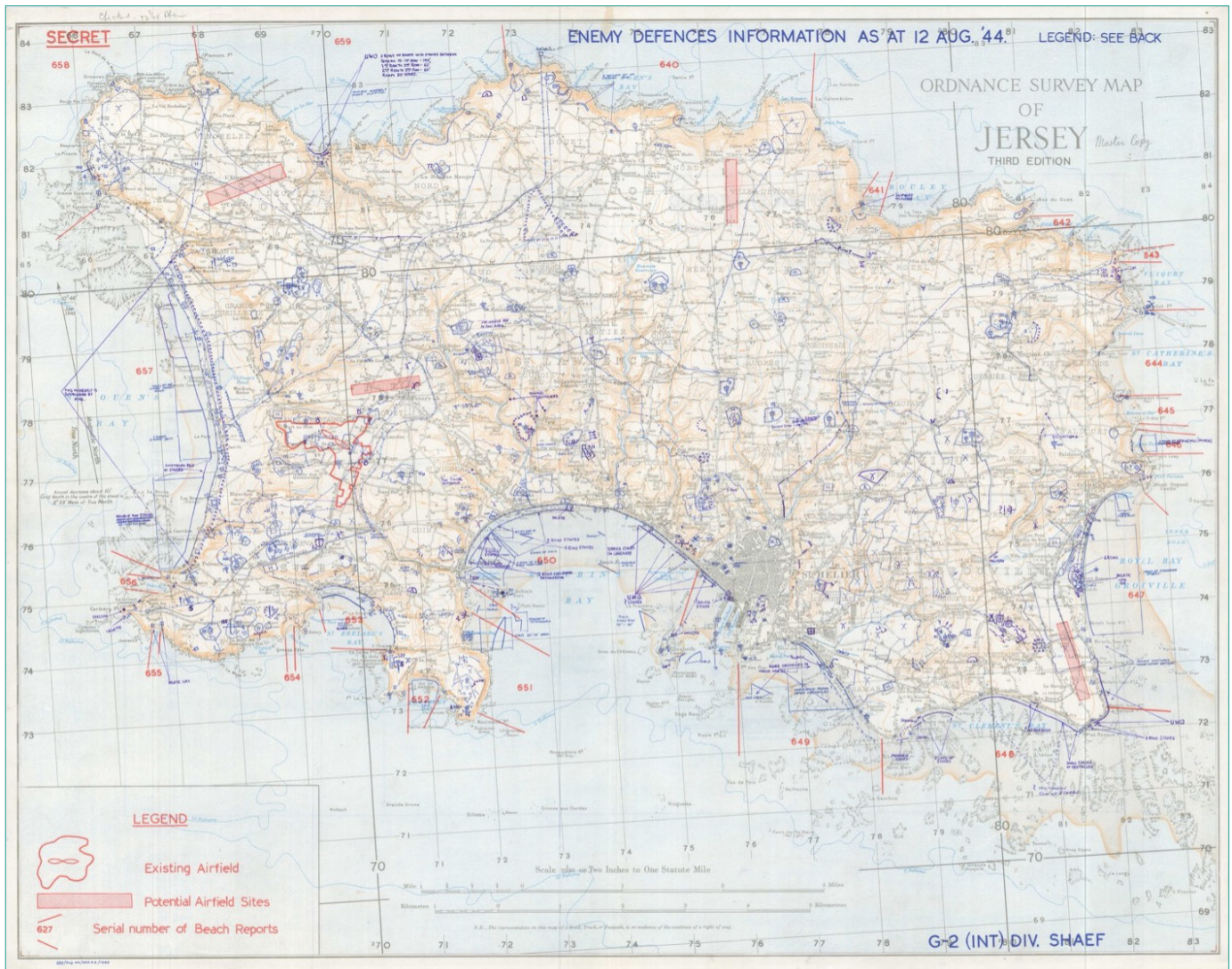


Figure 2. Map of Jersey prepared by the Supreme Headquarters Allied Expeditionary Force (SHAEF), dated 12th of August 1944. SHAEF prepared many maps using the results of aerial reconnaissance and other intelligence in advance of D-Day and in the following months. It clearly shows the obstacles, minebelts and anti-tank walls and ditches (the latter in St Ouen's Bay) placed along the most vulnerable landing beaches, all types of fortress-standard and reinforced field standard defences and other observed fieldworks. There are many wartime maps of Jersey, usually using the Ordnance Survey as a baseline, which show progress on the fortifications programme; these are shown in the works cited in this resource assessment, and also on the Jersey Bunker Tours website (<https://www.jerseybunkertours.com>). As with all such maps, they offer insights into strategic intent that did not always find its way into works on the ground. Whilst Fortress Engineers were tasked with ensuring that Organisation Todt (OT) completed fortress-standard works to the specification given, the records submitted to them were less detailed than those submitted by OT for other parts of the Atlantic Wall. Reinforced field-type construction built by military units was not recorded in this way. (Map from CIOS Collection in Jersey Archive, L/D/25/G/25).



Figure 3. Map of fortifications and other sites, 1975. This map, prepared by the States of Jersey with the assistance of the CIOS in 1975, is particularly useful in that it shows the different categories of military sites as whole sites rather than points on the map: within and around these 'polygons' were fieldworks as well as structures, many of which will have cut into and otherwise affected earlier layers of archaeological potential in the island's landscape (States of Jersey Library Service, Ref. 942.34).

by a Company with a Platoon kept in reserve.

The first phase of construction to fortress standards at Jersey, Alderney and Guernsey thus preceded the Führer's Directive 40, issued on the 23rd of March 1942, for the construction of the so-called Atlantic Wall – the line of coastal defences and fortifications extending from the Arctic Circle in Norway to the Spanish border (**Fig 4**). At that point the only other areas along the North Sea and Atlantic coasts classified as fortresses (festungs) were the gun batteries at Cap Griz Nez near Calais, which were intended to fire upon enemy shipping and support an invasion of England, the line of heavy coastal batteries along the Norwegian coast (considered to be vulnerable after British raids on the Lofoten Islands in March 1941), key airfields and ports including the massive U-boat pens at Lorient and elsewhere (Kaufmann, Kaufmann and Jurga 2003, 182-8). In August 1942, after the Canadians had taken a terrible mauling in the raid on Dieppe, Hitler ordered that the defences should be

strengthened where appropriate to fortress standards and programme should be further accelerated (Kaufmann and Kaufmann 2003, 201). The Armed Forces High Command ordered the casemating of artillery positions in January 1943 (Partridge 1976, 64).

Most of the fortress construction in Jersey was concentrated in the period from the summer of 1942 to the autumn of 1943. Detailed studies of individual sites has offered insights into the chronology of the building programme, enabling it to be seen in the context of the monthly figures for the output of concrete from Organisation Todt (Rose 2020, 88). One example is Strongpoint Corbière, where open emplacements and machine gun shelters had been constructed in 1941. Land was requisitioned in March 1942 and the firm of Kiel & Co. finally commenced work on the fortress-standard fortifications in October; most of the work was accomplished by the summer of 1943 (Amy 2021, 59-60).

Autumn 1943 to summer 1944: the fortress programme slows down

Field Marshall Gerd von Rundstedt, re-appointed as OB West after commanding Army Group South in the Soviet Union, had in October 1943 expressed concern to the Führer over the need for more defence-in-depth including mobile reserves; Hitler followed this by the issue of another directive (No 51) on November the 3rd, his call for 'an all-out effort in the construction of fortifications' being matched by the need for 'the training and development of fully mobile general reserves'. After his appointment in November 1943 as General Inspector of the Western Defences. Rommel reported that only 30% of intended works had been completed, and recommended strengthening of beach defences and the construction of more field defences between strongpoints (Partridge 1976, 74).

A range of factors had affected progress on the Atlantic Wall, including difficulties in the procurement of materials, the long lead-in times for fortress construction (up to a year) and the vast quantities needed for U-boat pens (Kaufmann, Kaufmann and Jurga 2003, 201). Progress stalled further as supplies

of materials declined, attacks on shipping and the French rail system intensified and workers were sent to help repair bomb-damaged areas in Germany and construct defences after the collapse of the Italian army (Partridge 1976, 64; von Schmettow 1948, 14-15; and 34). There was a particularly sharp decline in the supply of cement and steel between September and October 1943, from 20,000 to 3,700 tons a month, and in the workforce for the Channel Islands from 16,000 Organisation Todt workers in May 1943 to 9,500, falling to 4,500 by January and 3,800 by April 1944 (Cruikshank 1975, 194 and 191). Material was also needed for the V-weapons sites in northern France from the summer of 1943 (Christopher 2013, 36-8). Successive reviews had also exposed weaknesses due to both inadequate progress in construction and improvisation leading to more non-standard designs which in some cases did not use adequate reinforcement (Kaufmann and Kaufmann 2003, 302-16). Further changes were introduced early in 1944 by Field Marshall Rommel, who after his appointment in November 1943 as General Inspector of the Western Defences had oversight

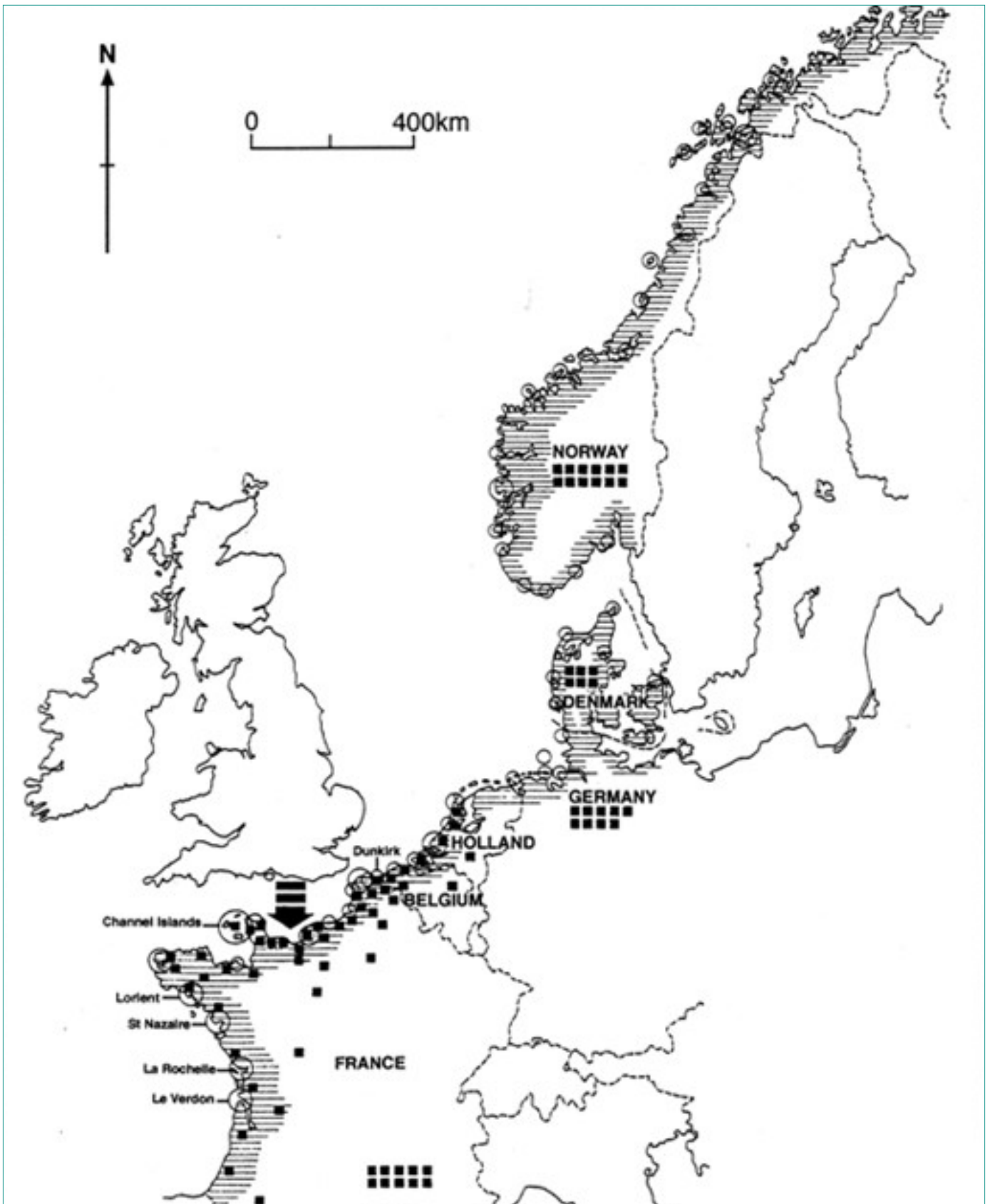


Figure 4. Map showing the extent of the Atlantic Wall from Rose, German Military Geology and Fortification of the British Channel Islands During World War II 2002. The location of fortresses (circled) are indicated and black squares indicate the distribution of German army divisions in June 1944.

of the defences on the French and Channel Island coastlines: priority was accorded to the repulsion of any attack before a foothold was gained on the beaches, and to defence in depth. This resulted in both the strengthening of inland defence and of coastal defence with mines, obstacles placed on beaches, earthworks (including anti-tank ditches and ditches to prevent glider landings) and fortification using the reinforced field construction standards deployed by the army's own construction teams, assisted where possible by remaining units of the Organisation Todt (Christopher 2013, 38-43). After D-Day the final phase of construction moved decisively to the north and east of Jersey, facing Normandy (Ginns 2009, 384).

It is important to note that fieldworks including those structures built to reinforced standards are

absent from the records submitted by Organisation Todt to OKW. and there is evidence that army units continued work in this respect. LiDAR of the anti-aircraft site at Les Gelles in St Lawrence (HER 0600287), just to the south-west of the Jersey War Tunnels, revealed the locations of gun emplacements, air-raid shelters and an ablution block and command centre; comparison of July 1943 and August 1944 aerial photographs showed that additional defences had been built in this period (Fig 5). Limited excavation by Wessex Archaeology was able to show that these had been hastily prepared – possibly in response to the threat of invasion after D-Day – as an infantry defensive position with trench systems, fox holes, small arms positions, field emplacements and barracks huts, using materials ready to hand.

The legacy of forced and slave labour

The massive scale of the Atlantic Wall made it increasingly dependent on foreign companies and labour (90% of the labour force in May 1943), including conscripted, forced and slave labour. Paid local labour had been used from an early stage of the war, assisting army and navy crews in their work as well as in support roles such as drivers and cooks (Ginns 2006, 64-67). This is an issue which would merit research (Carr 2014, 165), though diaries and official records indicate that both the Jersey authorities – citing the Hague Convention – and local firms were reluctant to assist in building fortifications for an enemy power (Bunting 1995, 88-92; Ginns 2009, 243; Le Quesne 1999, 124-5). Prominent exceptions were the firms of Theodore Elsche, who advertised in the local press for local labour, and the firm of O'Sullivan who was known for taking on Irish workers who were citizens of a neutral country (Ginns 2009, 237-8). The acceleration of the fortification programme was also accompanied by strong reservations on the part of the military – after protests and stoppages by workers engaged in works to the airport in August 1940 and at Noirmont in March 1941 – on whether to involve any of the local workforce, due to the security risk and the evident reluctance of the island authorities to allow civilians to be drafted to aid the German war effort (Carr, Sanders

and Willmot 2014, 105-109; also Ginns 2009, 243). One example cited by Michael Ginns is Resistance Nest Les Brayes facing St Ouen's Bay, where after Deputy Le Quesne's refusal to supply local labour army units commenced work on the anti-tank wall and defences in August 1941 (Ginns 2009, 243). This was in striking contrast to France, where a higher proportion of the population was conscripted or forced into work.

The introduction of Organisation Todt brought significant change, at first in the form of armed and uniformed Frontarbeiter (front workers), and contracted Einsatzarbeiter who were uniformed and took an oath of allegiance: this force had clear and established procedures for documenting progress, being answerable to the Fortress Engineers, and for pay (Christopher 2014, 99-125). After Todt's death in a plane crash in February 1942, and as the OT became part of the Reich Ministry of Armaments and War Production headed by Albert Speer, it became increasingly reliant on slave labour (Christopher 2013, 182-8); the death toll across Europe was, in Mark Mazower's words, 'staggering' with less than a third of inmates working for the German war economy surviving the war (Mazower 2008, 311). It has been estimated that between 300,000 and

500,000 men had been involved in construction of the Atlantic Wall (Christopher 2013, 87). In Norway over 150,000 prisoners of war and slave labourers worked on the construction of the fortifications, the Arctic Railway and a motorway scheme linking it to the south, of whom more than 20,000 died.

Prisoners were working on the fortifications programme prior to the acceleration of the fortifications programme, for example political prisoners including Jews from various countries who were imprisoned in Fort Regent (which the Germans called 'Lager Ehrenbreitstein') from early in 1941; concrete latrines survive (Carr 2014, 143). By the middle of 1942, there were 1,621 Germans and 4,265 foreign nationals at work in Jersey (Ginns 2006, 72); around 3,000 Soviet prisoners arrived between August and December 1942, and by May 1943 there were 16,000 Organisation Todt workers across the islands. With the prominent exception of Theodore Elsche, who refused to take on slave labour, a variety of German and European civilian contractors employed slave labour (Ginns 2006, 47-56; Ginns 2009, 237-240; Sanders 2005, 222-223). The numbers of workers fell sharply late in 1943, reaching a few hundred (mostly North African, French and Spanish Republican prisoners) by the summer of 1944 (Sanders 2005, 222-223).

Michael Ginns and Paul Sanders (Ginns 2006, Ginns 2009, 241-246 and Sanders 2005, 224-230) have highlighted the conditions experienced by different categories of volunteer, forced and slave foreign workers in Jersey: 10% of these were private contractors, 25% were people conscripted or press-ganged into work from the Occupied Territories, another 25% were Spanish Republican, North African PoWs and other prisoners handed over by the Vichy French and 40% were Russian, Belorussian or Ukrainian prisoners of war; some of the latter had survived the appalling levels of mortality (the death rate was one in three prisoners) suffered by Soviet prisoners over the winter of 1941-42. Whilst some forced European and North African workers were paid and given rest days, the treatment meted out to those slave workers regarded as racially inferior was shocking in the extreme, with one former inmate, Vassilly Marempolsky, estimating that about 500 Ukrainian and Russian prisoners died in Jersey (Ginns 2006, 88-125; Ginns 2009, 265-7;

Cruikshank 1975, 200-205; Bunting 2005, 149-158; Sanders 2005, 191-230; Carr, Sanders and Willmot 2014, 104-8). The numbers of deaths 'will probably never be known with any accuracy' (Carr 2014, 144).

This workforce required housing in a series of camps, of which there were 14 in Jersey, 5 in Guernsey and 5 in Alderney, those for slave workers being guarded and surrounded by barbed wire (Carr 2014, 157). There are now very few legible remains that can be conserved or further investigated, in striking contrast to the legacy of fortifications on which they were forced to work (Ginns 2006, 74-87 and 2009, 247-251). For example the Russian slave labour camp at Lager Immelmann in St Peter (HER 10000257) was removed in its entirety after the war by the family who owned the land and a housing estate was built over the site of Lager Rommel in Grouville, opened in March 1943 to house Russian forced workers (Burnal 2020, 432). Lager Seekt (HER 0400182), a dance hall taken over by Organisation Todt at the end of 1941 to house foreign workers, has been demolished; a housing estate was built over Lager Rommel in Grouville (Burnal 2020, 432) and a camp at St Lawrence is now a football field (HER 600300). Aerial photography of 1944 and Lidar imagery captured by Jersey Heritage in 2020 of Lager Schepke in St Peter, which housed Spanish Republicans and Russian workers, shows the outline of possible structures, an access road and drainage features. The former holiday camp at Lager Franco in Grouville (HER 300331), briefly used by the British to intern enemy aliens and by the Germans to imprison British servicemen, was used from November 1941 to house forced labourers - mainly French or French North Africans as well as Spanish Republicans (hence the name). Paul Burnal has recently completed a study of the archives and remains, including the surviving air raid shelter built by the inmates which is the only one built on any of the camps (Burnal 2020, 420-24); this is a significant expression of their own agency, and workers must have been aware of their vulnerability as aerial bombing had killed many in such camps in other parts of Europe.

Lager Franco closed after the move to Lager Wick, starting in February 1942. This site, now within a wetland nature reserve, was excavated by a team led by Gilly Carr following consideration of the broader ethical issues posed by this type of heritage across

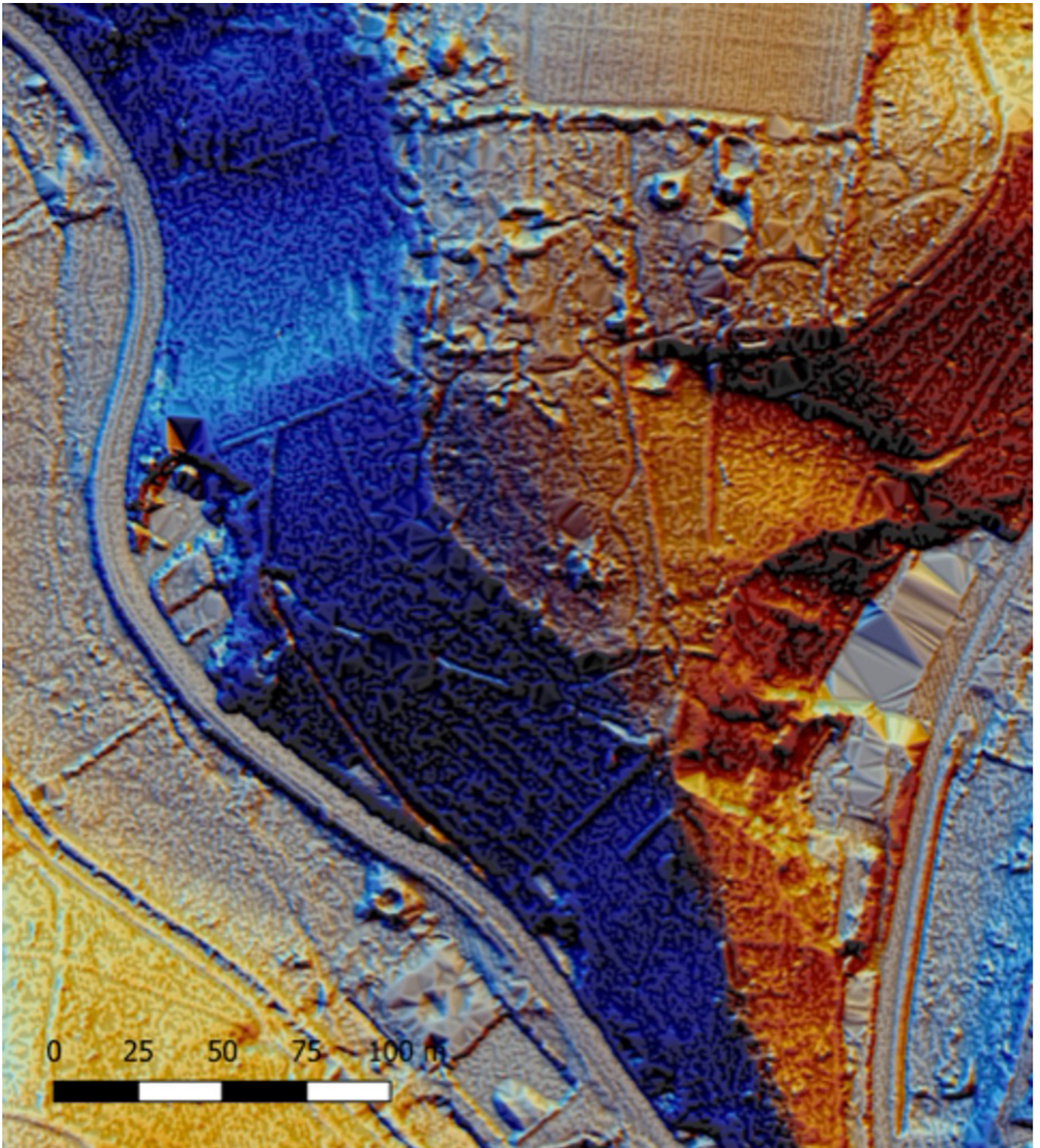


Figure 5. Les Gellettes: LiDAR of the anti-aircraft site at Les Gellettes in St Lawrence (HER 0600287), just to the south-west of the Jersey War Tunnels, revealed the locations of gun emplacements, air-raid shelters and an ablution block and command centre; comparison of July 1943 and August 1944 aerial photographs showed that additional defences had been built in this period. Limited excavation by Wessex Archaeology was able to show that these had been hastily prepared – possibly in response to the threat of invasion after D-Day – as an infantry defensive position with trench systems, fox holes, small arms positions, field emplacements and barracks huts, using materials ready to hand.

Europe and then running in parallel to excavation of a well-known SS punishment camp (now a memorial and human rights centre) in Norway (Carr, G. and Jasinski 2014). The objects recovered from such camps offer a tangible reminder of those who guarded these camps (uniform buttons and coins for example) but also an evocative illustration of the living conditions and diet of the inmates (such as tin cans and bottles modified by prisoners as food and drinking containers). The results of further seasons of work at Lager Wick, and reconsideration of the Channel Islands legacy of labour camps and their associated artefacts in their fuller historical and global context, were then published in 2016-19 (Carr and Sturdy Colls 2016; Carr 2017; Carr 2018a; Symonds and Vareka 2019; Carr 2019 <https://gillycarr.files.wordpress.com>; see also Bernbeck 2018). The character and location of the finds and of concrete footings demonstrated the value of excavation in providing fresh insights into the living conditions of its inmates and the location of the guards' accommodation, not

available from existing wartime aerial photography or other sources; it also raised the public profile of the site, and its interpretation as an integral part of the nature reserve (Fig 6). Paul Burnal has recently added to understanding of this site through study of the archives and remains (Burnal 2020, 425-30).

Work has since been published on the archaeological investigations of the Nazi labour and concentration camps, and the graves of inmates, at Alderney (Colls, Kerti and Colls, 2020; Sturdy Colls and Colls 2022). This has included the study of graffiti, which would merit systematic study in Jersey. There are examples of graffiti inscribed into the concrete of tunnels and fortifications, as at La Corbière where one worker scratched 'Al-Ruski' into the wall of a tunnel connecting two bunkers. At the time of writing the question of how many workers died on Alderney is being taken forward by the Alderney Expert Review (see <https://www.gov.uk/government/news/review-into-the-number-of-prisoners-who-died-on-alderney-during-the-nazi-occupation>).

Design

The design and construction of permanent fortifications for the Third Reich from 1933 drew from experience of how they had performed in the First World War. Following the reforms of October 1934, Fortress Inspectorates (Festungsinspektionen) were set up under regional commands, with the role of Fortress Engineers (Festungspioniere, 'pioniere' being engineers) being later confirmed (in 1936) in their supervisory role. The East Wall along the Polish border was developed between mid-1933 and 1938 as 'a giant training and experimental area for developing fortifications', followed by construction from 1935 of the West Wall - also known as the Siegfried Line - and its development by 1938 into a comprehensive system of defence-in-depth (Kaufmann, Kaufmann and Jurga 2003, 57-75 and 88-101). This period saw the production by the Fortress Inspectorates of the first type designs for fortifications built to fortress standards - the so-called Regelbau, or 'standard build', in which the Army Ordnance Office played a leading role in design and testing (Partridge 1976, 29-32). Each was given its own

series number followed by the number for its type design, component parts being also standardised and numbered. The 600 series of Regelbau designs was introduced in November 1942 for use on the Atlantic Wall, amounting to almost 700 types to choose from, although some of the standard-builds for the West Wall continued to be used (for illustrations and lists of them see Lippman 1986, Rolf 1998 and Forty, Marriot and Forty, 2016, 38-41). Each of these types specified the amount of concrete and steel required.

The business of constructing these was divided between military staff, civilian contractors and the Organisation Todt, an enormous organisation established in 1933 under the leadership of Fritz Todt (1891-1942). Todt had overseen Hitler's Autobahn programme, was called to assist the Fortress Engineer Staffs in the construction of the West Wall in 1938 (supplying more than 350,000 workers) and then became in March 1940 Germany's Minister for Armaments and Munitions (Partridge 1976, 55;

Christopher 2014, 27-8; see also Taylor 2010). The massive scale of the Atlantic Wall made it increasingly dependent on foreign companies and labour (90% of the labour force in May 1943), including forced and slave labour (see 2.2), the Army Construction Teams (the largest of the service construction teams) focusing on fortifications that were not built to fortress standards (Partridge 1976, 63). Supervision of fortress-standard construction was of particular importance for the Fortress Engineers whose work focused on selecting sites, drafting plans and installing armoured, electrical and other internal parts into bunkers (Kaufmann, Kaufmann and Jurga 2003, 200; von Schmettow 1948, 13-14). Organisation Todt were ordered to 'co-operate very closely' with the Fortress Engineers, von Schmettow adding that 'Construction orders of military agencies were mandatory of them.' (Kaufmann, Kaufmann and Jurga 2003, 92-3; von Schmettow 1948, 81); its central office organised the planning for the whole Atlantic Wall, standardised contracts working to specifications were issued after December 1942 whilst the supply of standardised components and materials was organised and controlled by the Fortress Engineers and the Reichsministry (Partridge 1976, 57 and 63).

Most structures built to fortress standards by Organisation Todt conformed to specifications issued by the Fortress Engineers, those prefixed by R indicating a standardised type conforming to the *Regelbau* system; special design (*Sonderkonstruktion*) is indicated by the prefix SK, army (*Heer*) by H, air force (*Luftwaffe*) by L and navy (*Kriegsmarine*) by M. As elsewhere, and as indeed for other armed forces that adopted a standardised approach to design, Army Construction Battalions could also choose to modify type designs to local requirements or construct non-standard structures; this had already been the case when the construction of the West Wall had been speeded up, requiring a degree of improvisation (Kaufmann, Kaufmann and Jurga 2003, 92-3). Of particular relevance to the Channel Islands is that the Jaegerstand and some other fortress-standard designs, which predate the 600 series used for the Atlantic Wall, seem to have been executed in the Channel Islands and later an experimental station in Denmark (Rolf 2019, 316). An example explored by Neil Walker is the Type 514 personnel bunker, with Organisation Todt archives

from Norway showing options to change its design and construction strength, which was commonly built with a Tobruk stand but without the provision for close defence of the entrance which was a feature of the Type 600 designs (Walker 2019). This opens the question as to whether Jersey and the Channel Islands had an experimental role in developing some of the designs used on the Atlantic Wall: a possible reflection of how the Conway towers dating from 1778 to the early 1790s predate and formed a model for the Martello towers erected as a defence against expected invasion in the Napoleonic Wars. The Kriegsmarine (navy) had a greater variety of forms and types than the Luftwaffe which developed its designs from the 'B1' series developed by the army in 1937 (Ginns 1999, 6-7).

Fortress-standard structures feature in the documentary record as entries in the monthly Building Progress Reports submitted to the OKW (Oberkommando der Wehrmacht) in Berlin: these are stored in the US National Archives and now available through the Jersey Archive. It is important to emphasise at the outset that these reports focused on progress of the fortress-building programme conducted by Organisation Todt, and that the construction of improved field-type constructions and some non-standard types by their Construction Battalions, sometimes assisted by locally-contracted labour, was not recorded in this way and so is absent from available records (Ginns 1999, 123). A good example of the latter in Jersey is Alex Fern's research on Strongpoint Le Grouin and other defences facing into St Brelade's Bay, many of which were not recorded in these records or in the 1944 Green Books (Fern, 2017). It must also be emphasised that reinforced field construction continued after the autumn of 1943; it is probable that as in Normandy the army's own construction teams were assisted where possible by remaining units of the Organisation Todt (Christopher 2013, 38-43). The consequence of this system is some uncertainty over how many reinforced field-type fortifications (see 2.3.2) were built.

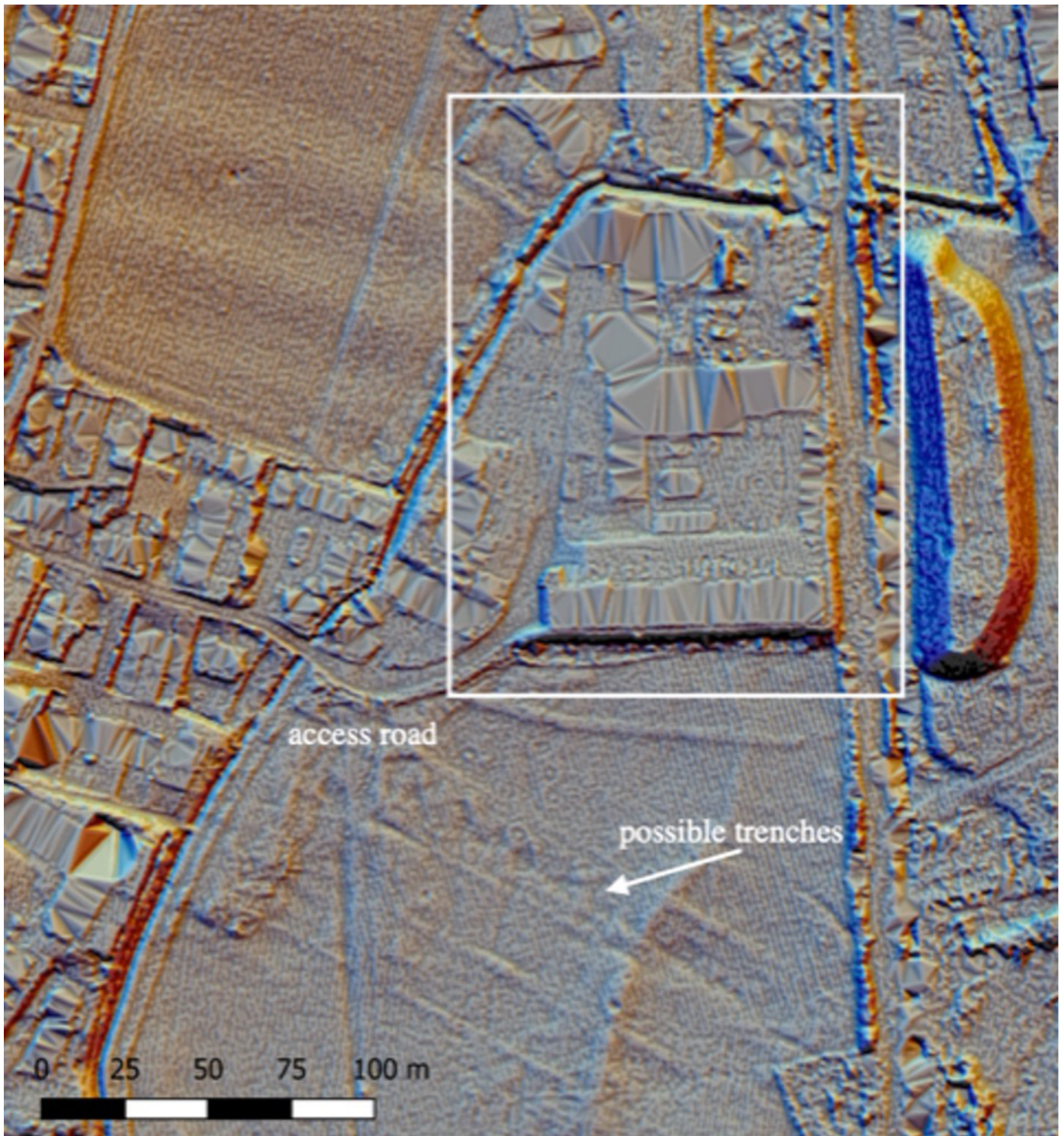


Figure 6. Lager Schepke: Lager Schepke in St Peter (HER 1000253) was built on Goose Green Marsh, close to the Jersey War Tunnels. It housed Spanish Republicans and from August 1942 Soviet prisoners of war working on the Jersey War Tunnels and other sites; next to it was the Organisation Todt coal dump. Comparison of aerial photography of 1944 and Lidar imagery captured by Jersey Heritage in 2020 shows that – despite post-war redevelopment as an industrial site – some features including an access road and drainage features may remain, and there are possible fieldworks remaining from military activity in the common to the south.

Techniques and grades for concrete

The two factors that drove the construction and design process were the strength of construction and the function that a particular structure was expected to perform. Structures broadly fall into three categories:

- field (*Feldmässig Anlage*) construction with walls and roofs of 0.3–0.6 metres thick, usually made of timber and covered with earth; some have concrete roofs
- reinforced field-type construction (*Verstärkt Feldmässig*, abbreviated to *Vf*), commonly found along the West Wall and the Atlantic Wall; these were classed as ‘semi-permanent’ with one-metre (also up to 1.2 metre) thick roofs which were either reinforced with steel beams (*VF Hoyerbalken*) or had curved-profile roofs formed of corrugated steel sheeting bedded in concrete casting *VF Wellblech*); it is worth noting that, though much less strong than fortress-standard bunkers and lacking ventilation units and creature comforts such as stoves, these were substantial when compared to British anti-invasion defences of 1940–41
- permanent (*ständig*, abbreviated to *St*) construction to fortress standards, intended to withstand bombardment and usually with walls and roofs of at least 2 metres thick.

The Order for the Construction of Permanent Fortifications, issued by the Army High Command (*Oberkommando des Heeres*, or *OKH*), set out the basis for standardising construction and components (see 2.4 for the key types of bunkers and other structures). A single structure could use walls and roofs of varying thicknesses or could be built to more varied and individual specifications that responded to local topography, available materials and other factors. Making bunkers and other structures in reinforced concrete – there being typically 50kg of steel for every cubic metre of concrete in fortress construction – followed established methods, a paramount concern being the need to avoid joins and other weak points.

The first task was to excavate the floor and lay the slab. Reinforcing bars (rebars) and steel beams and plates for the walls and roof were then set out, together with the positions of firing ports, armour plating and other components. The concrete was then poured in one continuous operation from hoppers and consolidated, including through the use of jack hammers, into the timber formwork. Steel plates, resting on the lower flanges of the steel I-beams supporting the roof, were intended to prevent spalling of the concrete onto the occupants in the event of a direct hit (U. S. War Department 1945, 3, see also Partridge 1976, 39–44 for details on construction methods). Once completed, earth cover offered further protection and integration into the surrounding landscape.

Grades for the thickness of the armour and concrete (*Ausbaustärke*) to be used had been developed in the 1930s and modified with reclassifications labelled as *neu* and *alt* at the beginning of the war (Kaufmann, Kaufmann and Jurga 2003, 67); each grade was accompanied by an estimate of the amount of concrete and other material needed for its construction, the type of defence work being another critical factor. From 1939 *A-Werke* and *B-Werke* construction applied to structures built to fortress standards – *A-Werke* construction with 2.5–3.5 metre thick walls/roofs for the strongest structures, including for the heaviest casemated gun batteries, the navy’s observation towers, minefield control buildings and U-boat pens; *B-Werke* construction – the most commonly found in Jersey – with walls and roofs commonly of 2 metres thick. Less substantial one-metre thick ‘new’ *B1* (*B1 Alt*) and *B1 Neu* with walls of one to 1.6 metres thick were used for reinforced field construction (*verstärkt feldmässig*, abbreviated to *Vf*). The conversion of mills and particularly fortifications suitable for military use necessitated the insertion of reinforced concrete ceilings, gun platforms and embrasures into their immensely thick granite walls (von Schmettow 1948, 37 and 23–25).

Landscaping and camouflage

It was common practice to either cover bunkers with earth, after their walls had been water-proofed with pitch, and/or use other commonly-employed techniques to make them blend with their surroundings. Von Schmettow stated that: 'Very great store was set on the most careful camouflage of all installations. Already during the erection of the buildings attention was paid to their being fitted into the terrain and their forming a natural part of the landscape. For this purpose it was frequently necessary to move great quantities of ground.

...The camouflage was the task of special firms and detachments that had specialists among them including gardeners. The work was tested from the sea as well as from airplanes.' (von Schmettow 1948, 37). Camouflage took a variety of forms:

- attaching hooks to bunker walls for the fixing of camouflage netting

Siting of defence works

The Channel Islands were accorded special status as island fortresses, placing them on the same level as other fortresses (*festungen*) such as St Malo and Cherbourg. This then set the framework for the deployment of coastal and in-depth defences within each island, in accordance with Hitler's Fortification Order for the Channel Islands issued on the 20th of October 1941 (Forty, Marriot and Forty 2016, 15):

- For the Heer (Army): it is important to provide a close network of emplacements, well concealed, and given flanking fields of fire. The emplacements must be sufficient for guns of a size capable of piercing armour plate 100cm thick, to defend against tanks which may attempt to land. There must be ample accommodation for stores and ammunition, for mobile diversion parties and for armoured cars.
- For the Kriegsmarine (Navy, responsible for coastal defence prior to the war): one heavy battery on the Islands and two on the French coast to safeguard the sea approaches.
- For the Luftwaffe (Air Force): strongpoints must

- adding roofs and painting windows, garden trellises and other features to bunkers to make them look like buildings
- making use of the terrain, including the integration of bunkers into rocky headlands and the application of granite to walls: 'The terrain, whether rather open or rather concealed, was also decisive for what could be used of the reinforced field-type concrete constructions and what had to be completed by fortress-type constructions.' (von Schmettow 1948, 32).

At St. Brelade, in Field B661, is the site of dummy gun emplacements (HER 0100420) built to resemble camouflaged emplacements from the air. They are now slight banks of earth with a distinctive shape.

be created with searchlights and sufficient to accommodate such AA units as are needed to protect all important constructions'.

The heaviest coastal gun batteries, manned by both the army and navy, were sited to protect the west side of the Cotentin Peninsula and shipping in the Gulf of St Malo (von Schmettow 1948, 7-9). For the defence of the islands from amphibious assault, the key principle in terms of deployment, formalised in the Führer's Directive 40 issued in March 1942, was to concentrate 'Defensive power ... as far forward as possible, that is close to the coastline, so as to tackle the enemy at his weakest moment, namely whilst landing' (Forty, Marriot and Forty 2016, 24). Any seaborne assault would thus be met by coastal artillery, supported by howitzers and mortars, and a front line (termed a *Hauptkampflinie*) of bunkers and walls for the destruction and containment of tanks, and reinforced personnel shelters where soldiers could shelter from bombardment and sally forth in the event of counter attack. Behind this front line other bunkers, open gun positions and mobile units provided defence in depth, one company per battalion being kept in reserve (von Schmettow 1948, 13-14).

The deployment of defences in the Channel Islands and the Atlantic Wall, inherited from the pre-war East and West Walls, was based on the establishment of Strongpoints (Stützpunkt, abbreviated to St.P), Resistance Nests (Widerstandsnest, abbreviated to WN) and more lightly-armed Operational Positions (Einsatzstellung), also termed Action Posts. The latter positions were usually named after any neighbouring local landmark or what they were sited upon, in the absence of which they were simply named after their Ordnance Survey datum height (thus WN Hohe 212 etc). Along the Atlantic Wall Operational Positions (Einsatzstellung), also termed Action Posts, were usually (there were exceptions) more lightly armed and only defended when called upon. Army Fortress Engineers were responsible for reconnoitring the coast and selecting 'the sites, numbers and types of defence units' (Partridge 1976, 26).

Existing seawalls and new anti-tank walls formed of concrete and steel provided another line of defence on the coast, together with machine-gun emplacements, minefields, barbed wire entanglements and explosive charges fixed to steel rails; increased numbers of beach obstacles were installed after Field Marshall Rommel's appointment in November 1943 as General Inspector of the Western Defences. Seascape as well as landscape was a critical factor in the deployment of the first line of defences, an obvious contrast to the vulnerability of St Ouen's Bay being St Clement's Bay with its reefs offering a natural defence against landings even in flat-bottomed landing craft. Strongpoints were typically placed at key nodal points and flanking positions such as the outer headlands of open bays. Thus the open bay of St Ouen had Strongpoints sited on its outer edges at Corbière and L'Étacquerel, with Resistance Nests providing flanking fire onto the beaches, supported by some sited inland. The bays of St Ouen, St Aubin and Grouville were the most heavily defended, the intention being to defend them with flanking fire and ensure that all positions could interlock and work in step with each other, the range of guns, especially those with armour-piercing shells, being another critical factor (von Schmettow 1948, 16-17). A wide variety of ordnance - from up to 10 countries and 28 calibres - was available for use (Burnal et al 2022, 52-58; also Ginns 2009, 500-504). A combination of

Czech, French and German anti-tank guns were of particular importance for beach defence, backed up by mortars and howitzers, light and heavy machine guns. Armour plate was taken from the Maginot Line and elsewhere, and by the late summer of 1941 turrets from captured French tanks were being imported and used (Cruikshank 1975, 179; von Schmettow 1948, 9 and 22).

The bays of St Ouen, St Aubin and Grouville were the most heavily defended, the intention being to defend them with flanking fire and ensure that all positions could interlock and work in step with each other. Thus as stated by von Schmettow, noting that his use of the term 'strongpoint' covered Resistance Nests as well: 'The distances of the strong point from one another in lateral and horizontal direction depended not only on the terrain but also on the most effective range of the anti-landing guns, especially of the armour-piercing types. The rear lines, where mostly artillery observation was stationed, were formed by the edges of the plateau, which separated the inner part of the islands from the flat shores that invited a landing. In some places the tongues of land and protruding rocks lying between the bays offered fine possibilities for strong points that had a flanking effect only. The steep coasts ... could be occupied less strongly. Frequently it was sufficient to build strong or small strong points at the entries into the inner parts of the islands, or at the small fishing harbours, as on Jersey. They were given the task of blocking until, if necessary, rearward units had been moved up. The ports were secured particularly strongly to protect them from surprise attacks. In the main entry channels mine obstacles with electric navigation were laid by the navy' (von Schmettow 1948, 16-17).

Communication trenches, weapons pits and trenches were also an integral part of the system. Sited behind the front-line bunkers for anti-tank guns were personnel shelters and more artillery in prepared open positions, improved field-type construction being used for most of what von Schmettow termed the 'rearward strong points': 'The decision on what to build in the various strong points depended on the effect the guns to be employed there could have, and thus on the tactical purpose and value of the strong points.' (von Schmettow 1948, 31-2). Horse-drawn and motorised light batteries could also be sited as required.

Personnel shelters and underground bunkers – already underway by 1940, and frequently lying under 20–30 metres of rock – sheltered and acted as reserves for additional ammunition, weapons and men, other rearward formations including ‘headquarters, command posts, message enters, supply units, repair shops’; their value ‘was first recognised on Jersey’, including for the supply of material for construction of fortifications (von Schmettow 1948, 24–7 and 17).

All of these were surrounded by minefields and barbed wire entanglements, but the type of construction and number of fortification types rose in step change with this hierarchy. All this was supplemented by motorised or horsedrawn light batteries whose guns could traverse at 360 degrees (von Schmettow 1948, 18–19).

It follows that less legible but essential was the ability to dig and erect field fortifications including trenches, dugouts, ditches, barbed wire and other obstacles that adhered to the text and drawings set out in army

manuals or handbooks. Whilst their legacy is barely noticeable to most observers, wartime ground and aerial photography, illustration in the Green Books (see Fern, 2017 for Strongpoint Le Grouin) and modern remote sensing techniques such as LiDAR indicate their existence close to fortifications and across Jersey’s landscape, especially its coastal commons (**Fig 7**). Paul Burnal has used archives and fieldwork to complete a detailed study of the defences sited on the high ground above Grouville Bay, showing how earthworks for machine guns and/or mortars and reinforced field construction structures including Wellblech shelters took advantage of the terrain and natural obstacles such as wetland, and how plans changed over the course of the war (Burnal 2020, 189–221, 298–9).

TYPES OF DEFENCE WORKS

The remainder of this section sets out the site types, whether conforming to the Regelbau standards or non-standard in their design.

Coastal artillery batteries

The coastal batteries (see Ginns 1999, 65–66 and Burnal et al 2022, 216–316 for overviews) were intended to work with the batteries on Guernsey to the west and Alderney to the north, and on the French mainland, in defending the Bay of St Malo. Those on Jersey had a range of between 16 and nearly 25 kilometres, the largest guns (22cm French guns) being at Batterie Roon at La Moye. The westward-facing Mirus battery on Guernsey was the most powerful with a range of 38 kilometres – comparable to some of the heaviest on the Atlantic Wall.

The first phase of construction typically comprised the building of open concrete emplacements – of a type that would have been familiar to Fortress Engineers at the end of the 19th century – with a fire direction centre, one or two personnel shelters

per gun and ammunition shelters (von Schmettow 1948, 32–6). Only the Lothringen battery at Noirmont Point was manned by the Kriegsmarine, with their headquarters in Guernsey, the remainder being manned by the army; Burnal et al states (2022, 283) that the army could man naval batteries whilst the monthly Building Reports could mix naval and army personnel together. All of these batteries were operational from late in 1941, with the exception of Batterie Schlieffen at Grouville which was sited here in August 1944 in order to offer better protection towards the Cotentin peninsula after its occupation by US forces (Faggioni 2013, 142; Burnal et al 2022, 58–9 and 285).

In contrast to the norm on the Atlantic Wall as a whole, casemates for coastal artillery were built in only one instance, for the harbour-blocking battery at Batterie

Endrass on its final move to Westmount on the western edge of St Helier (Burnal et al 2022, 296). They were planned and developed so that they could be both self-sufficient with their personnel shelters, command posts (with their own personnel shelters if they were in exposed positions), signal centres, radio stations and structures for the direction of artillery on naval targets. Defences typically comprised anti-aircraft positions, machine gun and mortar positions. At St. Brelade, in Field B661, are slight banks of earth marking dummy gun emplacements (HER 0100420) which were built to resemble camouflaged emplacements from the air.

Army divisional batteries

Smaller in scale and also mobile – capable of being moved to where needed – were the army divisional batteries which fell under the command of the Divisional Artillery Regiment 319, the headquarters of which survive in the Kernwerk at Le Coin Varin in St Peter (see Command, control and communications). They were built in open positions behind the front line of beach defences and were armed with lower-calibre (8-10 cm) Czech field guns and howitzers for firing on an approaching amphibious force. These were typically provided with two or three-room battery observation posts, which were sited in order to direct fire onto any attacking force (see below). The survival of these is more fragmentary (see Ginns 1999, 66-67 and Burnal et al 2022, 316-26 for an overview), Batterie Defflinger in St. Brelade being the most complete. Additional guns were moved from Guernsey in early August to fortify the island after the fall of the Cotentin Peninsula, the attempt by the US Navy to prevent this being repulsed with considerable loss of life (Burnal 2020, 332-3).

Artillery control and observation posts

These comprise the multi-storied Marine Peilstand und Meßstellung (MP) towers, which are some of the most impressive structures on the Atlantic Wall, and observation posts built to reinforced field construction standards: the latter were either detached from or sited on or in close proximity to the coastal and divisional batteries that they served. These have all been identified by Michael Ginns (1999) and further co-identified and drawn by Paul Burnal and his co-authors (Burnal et al 2022). These also made use of earlier structures such as the purpose-

built towers erected on the medieval Mont Orgueil Castle and the windmills at Rozel and St Ouen.

Due to the availability of underground storage, there was little need for separate large ammunition shelters except for coastal artillery positions – examples survive at the Moltke and Lothringen naval batteries.

Individual Resistance Nests were also provided with observation posts – non-standard or in a Wellblech shelter – which also acted as forward posts for Company Headquarters (Burnal et al 2022, 349-52).

Casemates at Strongpoints and Resistance Nests for medium to light guns

The coastal and inland Strongpoints and Resistance Nests were armed with lighter guns that had a shorter range (12-14 km) but were intended to repel and destroy through flanking or direct fire an enemy force on the point of landing or, should any break-out occur, behind the beaches. The type of ordnance influenced the selection of the most appropriate Regelbau or non-

standard design. Bunkers of different types could be arranged in close relationship to each other and linked by covered or underground corridors as at La Carrière in St Ouen's Bay where Type 631 and Jäger casemates were linked and sited with a Tobruk firing position.

The guns used by the Army were generally regarded as inferior in quality to those of the Navy, most of them

having been taken from the armed forces of occupied territories (Rolf 2019, 13). French 10.5 cm field guns (of a 1913 design), with a 12 kilometre range, were the most numerous as they had been captured in great numbers

in France in 1940. 82 were pressed into service on the Channel Islands, 34 of these in Jersey – 11 in open positions (mostly for the army divisional batteries) and the remainder installed in casemates, by being

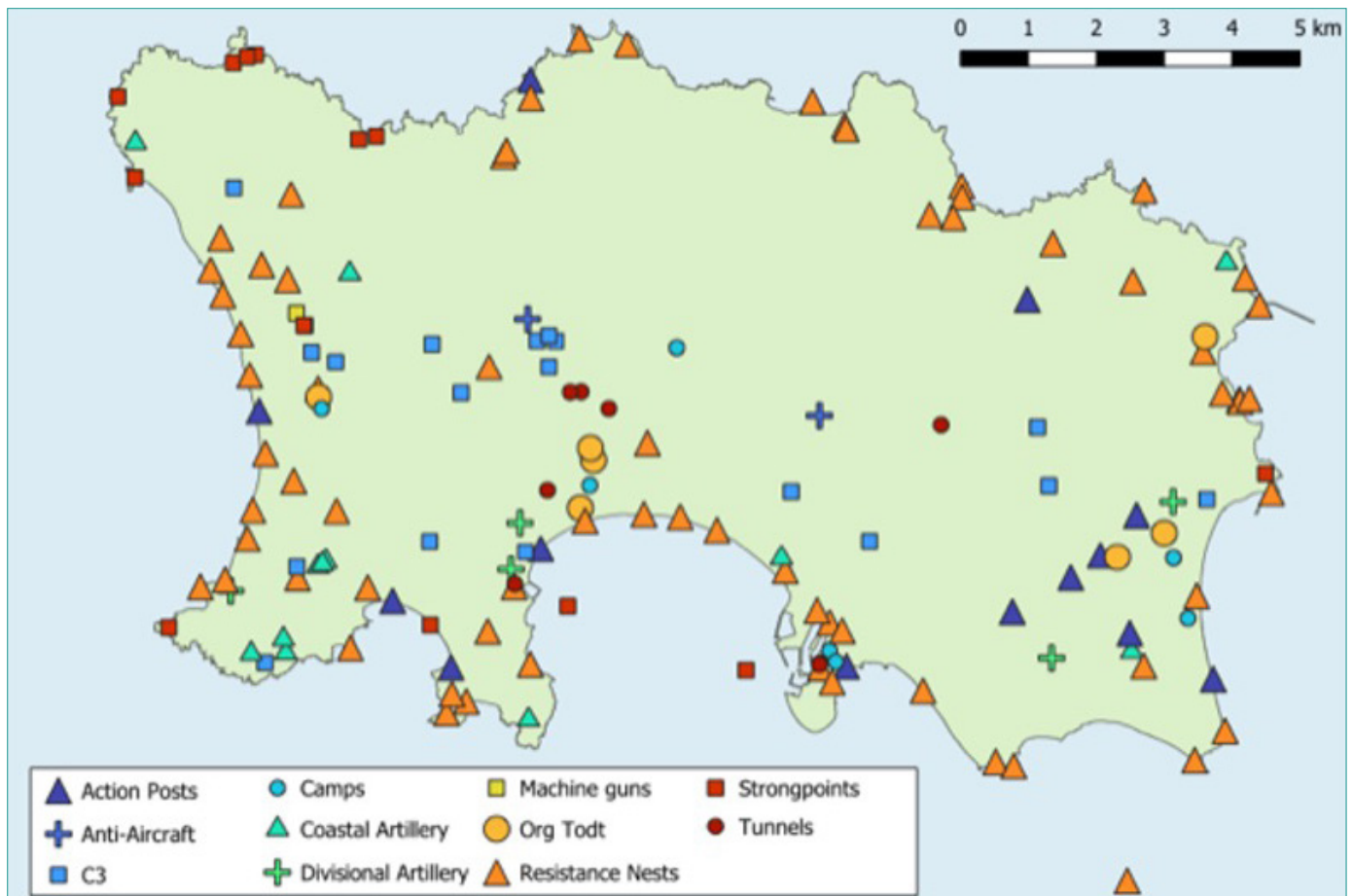


Figure 7. Map of site types shown on the Jersey Historic Environment Record: Records in the HER are focused on surviving rather than all documented sites, and offer an invitation to ensuring that the results of recent and future research are integrated so that the archaeological potential of sites can be taken into account when future opportunities arise.

simply removed from their carriages and mounted on pivots (von Schmettow 1948, 23-4; Ginns 1999, 13-14). These were used for beach defence except four which formed part of Batterie Endrass (see Coastal artillery batteries). By May 1942, 13 were housed in the so-called Jaegerstand casemates named after its designer, Rudolf Jaeger from the Fortress Engineers' ordnance testing office (Ginns 1999, 13; Rolf 2019, 316; Burnal et al 2022, 82-83); 17 of these Jaegerstand casemates were built elsewhere in the Channel Islands, and they are also found in Denmark (see also 2.3.1, where their place in the early development of Atlantic Wall fortification prior to the introduction of the 600 series in November 1942 is considered). The gun positions were all protected from shelling by substantial projecting flank walls.

The remainder of the 10.5 cm field guns were housed in smaller casemates without flanking walls; these were far less costly in terms of the amount of concrete and steel reinforcement that they required. Elsewhere on the Atlantic Wall these usually conformed to the 649-652 and 670-71 Regelbau designs, the former with shell and cartridge stores and the latter with only the gun chamber. Five 670 designs dating from April 1943, intended to replace the Type 649 bunkers which resembled the Jaegerstand casemates (Burnal 2020, 151), had been built in Jersey by July 1944.

15 out of a planned total of 22 bunkers to house Czech 4.7cm Pak anti-tank guns had been built by July 1944 (Ginns 1999, 14-15). These could fire shells to a range of 11, 000 metres (Gander 1981), and had been taken from the Sudetenland in 1938 in order to fortify the West Wall and thence to the Atlantic Wall; 23 found their way to Jersey. These were always

combined with a machine gun and built into existing sea walls or anti-tank walls (von Schmettow 1948, 29), and had armoured shields that could be raised and lowered from inside their gun rooms. Most differed from those on the remainder of the Atlantic Wall by having their shell cases discharging into rooms below the gun rooms (Burnal et al 2022, 137). They were housed in 631-type side-entrance casemates introduced late in 1942 (at Resistance Nest La Carrière and Strongpoint Le Grouin and the longer and narrower 631b rear-entrance casemates, introduced early in 1943, with protective flank walls as used on the Jaegerstand casemates (Rolf 2019, 301-302).

Under construction from January 1944 – as part of the overall plan to speed up construction of the Atlantic Wall – were twelve small Type 680 casemates, which housed 7.5cm Pak anti-tank guns with ammunition lockers (Burnal et al 2022, 137-8). Non-standard shelters for 7.5cm Pak anti-tank guns were also provided in the second line of defence at St Ouen's Bay – planned in May 1943 and completed by January 1944 – unusual as plenty of standard designs to choose from (Ginns 1999, 38; Burnal et al 2022, 237, 245-251). Ginns also recorded a very unusual large bunker at Gorey Harbour (demolished in 1972) which combined features from different type designs (Ginns 1999, 15).

These bunkers all had a range of external and internal features – including armoured plate with sliding shutters, ball mountings, ventilator units, stoves, electrical lighting, toilet facilities and supplies of water – which are illustrated and summarised in Ginns 1999, 152-70 and Burnal et al 22-47.

Machine gun and mortar positions for Strongpoints, Resistance Nests and Action Posts

Fire power was also be supplemented by a variety of other guns, of particular importance and demanding some form of construction being 3.7 cm guns from captured French tanks (Ginns 1999, 118), machine gun positions, giving an all-round field of fire, and high-angled mortar positions. Action Posts were comparatively small defensive positions, manned only at times of full alert. Fortress mortars and

spigot mortars were not included in the Fortress Engineer Progress Reports (Burnal et al 2022, 409).

By far the most common were the so-called Tobruk firing positions (*Tobrukständen*), only a small proportion of 61 these being still legible (Ginns 2009, 105). They were typically built to B1 standards (walls 1.5 metres thick or less) and housed light mortars, machine guns (an MG34 or MG42) or anti-tank guns mounted on

a *ringstand* (*ringstände*), enabling an all-round field of fire and giving them their distinctive appearance; many have niches for ammunition. The first designs for these, of early 1941, actually predate the 1941 siege of Tobruk in North Africa - hence their name as they were first employed in numbers there (Kaufmann, Kaufmann and Jurga 2003, 215-7). They could be sited in combination with Type 514 bunkers (Walker 2019) and bunkers in the 600 Regelbau series (often communicating with them via a voice tube) or, from May 1943, on top of anti-tank walls or as small isolated gun positions. There were 57 of these in Jersey, six of which survive (Burnal et al 2022, 419-25).

Completed early in the programme, by June 1942, and an example of West Wall fortification unique to the Atlantic Wall, was the Type 115d turret bunker at Resistance Nest Bel Royal (Ginns 1999, 105), the cupola from which was removed in the 1950s. There are only two survivors of the six-looped armoured turrets (*Sechsschartenturm*) for pairs of machine guns mentioned by von Schmettow (1948, 20), of which nine were built by late 1944 (Ginns 1999, 103 - at Doctorhaus on a non-standard bunker and the Type

632 bunker (unique to the Channel Islands with one other example in Guernsey) at La Mare Mill. Others were removed after the war for scrap metal - at Strongpoint L'Étacquerel and the Type 632 bunkers at Resistance Nests La Thiebaud in St Ouen, Steps Punkt 43 and Dune (Ginns 1999, 103-4; Burnal et al 2022, 395-405). The Type 749 cupola at Resistance Nest Red Houses in St Brelade is the only steel observation cupola of a type which was once common along the Atlantic Wall.

Otherwise, machine guns and mortars were either sited in open positions or mounted in non-standard reinforced field type positions, requiring a semi-circular firing platform or a small concrete platform in the centre for supporting the mortar. Exceptions are the Type 633 bunker at La Corbière for a 5cm fortress mortar firing through an armoured turret, connected to the Type 634 machine-gun turret bunker (Ginns 1999, 104-5; Burnal et al 2022, 404-5). The WaKofest bunker at A.P. Bucht on La Grande Route des Mielles in St Peter (HER 1000170) is practically complete and of unique design to the Channel Islands. The mortar position is unique because it is the only example in the Channel Islands that is of a "West Wall" (1938) design.

Searchlight shelters

Searchlights were essential for night-time defence. 'The naval coast batteries were commenced with naval searchlights having a great range. The GHQ batteries had to cooperate with the numerous 60cm searchlights, established in the coastal strong points, for repelling landing attempts. At night also the guns (10cm) for repelling landing attempts, which standing under concrete shelter have been assigned to the coastal strong points, fired together with these searchlights.' (von Schmettow 1948, 20)

54 infantry searchlights (30-150 cm diameter) were listed by 1944. Type 606 shelters built to fortress standards survive at Strongpoints Corbière, flanked

by two operating platforms, Elizabeth Castle and Resistance Nests Lewis Tower, Kempt Tower, Steps Punkt 43 and La Carrière, with a searchlight operating platform. At Strongpoint L'Étacquerel, a Type 670 bunker was linked by a tunnel system to a non-standard searchlight shelter. The shelter for a 150cm searchlight at Le Fret Point worked in support of Batterie Lothringen at Noirmont Point (Ginns 1999, 52). Air Force Type L 411a searchlights were provided for Resistance Nest Le Fret and in support of Batterie Moltke (Ginns 1999, 37). See Burnal et al 2022 233-7 for wartime and contemporary photographs including camouflage patterns, and Hamon 2005 for an overview of searchlights in Jersey.

Personnel shelters

Personnel shelters were the most common class of bunkers on the Atlantic Wall, and were sometimes provided with their own gun positions (Kaufmann, Kaufmann and Jurga 2003, 219-21; U. S. War Department 1945, 10). They were intended to shelter those inside from bombardment, and as points from which troops would sally forth in the event of a counter-attack. The range of examples have been set out by Ginns (1999, 35-7) and Burnal et al (2022, 198-224, with colour plans and sections)

- 15 for infantry were built by June 1944, which housed 10 or (less commonly) 20 men. Some designs conformed to standard Types 621, 622, 628 and M 151. Non-standard types were built at Batterie Lothringen and a recent article has shed light on the origin of another specific to the Channel Islands (Walker 2019)

- Kriegsmarine bunkers survive at the Moltke and Lothringen naval batteries, the latter including some for the anti-aircraft battery, and at the Noirmont (MP 1), La Corbière and Les Landes towers
- six type designs were installed for three army coastal batteries

Many of these have been buried within fields, housing estates and coastal dunes. They include many built to reinforced field-type construction standards, including 'Wellblech' shelters with internal and vaulted corrugated iron ceilings. Burnal et al (2022, 225-232) includes colour plans and sections of the different types of ammunition shelters.

Water was essential, with tanks provided in many bunkers. Six examples survive of the Type 646 bunker design – planned from May 1943 – with a handpump and a cistern holding 7 cubic metres of water (Ginns 1999, 38; Burnal et al 2022, 253; Costard 2015a).

Command, control and communications

Each island was provided with a command and communications headquarters for the fortress, infantry and artillery commanders, comprising structures built to fortress standards and known as a Kernwerk (literally a 'core work' or inner fortress building). Jersey's was located at Le Coin Varin in St Peter, in the centre of the island, where all three two-storey command bunkers with their communications bunkers survive, each being a Special Construction (*Sonderkonstruktion*) blend of bunker designs found elsewhere on the Atlantic Wall (Stevenson 2006, 37-8, Ginns 1999, 55 and 2009, 112-3; Burnal et al 2011, 361-4; HER 01000135-6, 01000198 and 01000210). These were built by October 1943, though as Von Schmettow noted at a relatively late phase: 'The command posts of the [artillery commanders] and of the naval commander and the buildings of the signal communication centres, situated near the command posts of the fortress commanders, were built in a later construction period.' (von Schmettow 1948, 34)

Also recorded are eight headquarters bunkers built to reinforced field standards. There are wartime photographs and colour plans and sections of these in Burnal et al 2022, 264-280). There are also two Type L403 command bunkers for flak positions, at Mont a L'Abbe in St Helier (HER 0401311) and next to the telephone exchange bunker at Le Mont Rossignol in St Ouen (HER 0900186).

Clearly-marked road signs and directional signing eased navigation around the island; wooden boards have rarely survived, with some now part of the collections at the Channel Islands Military Museum, and signage has survived at the Longueville Manor Hotel, St Saviour, and two other sites (Ginns and Isherwood, 1990).

Von Schmettow set out the importance of a communications network linked all the defence positions that could be protected from bombardment and – in the case of the cables that linked the islands to France – submarine activity (von Schmettow 1948, 35).

The German Signal Battalion 319 arrived to set up and take command of all communications in the islands late in 1941. A Fortress Signals Network was created, Fortress Cable Platoons laying cables into trenches (dug by Russian slave labour) which were protected within concrete conduits. Over 30 fortress-standard Cable Switching Posts (Kabelschaltstellen) were built to protect the cable switch positions, and some of these have been designated – at St Brelade (HER 0100274) and St Peter (HER 1000157). Apart from the two signals communication bunkers at the Kernwerk in St Peter (see above) three Type 617 telephone bunkers were also built to service the military telephone network –

at St. Saviour (HER 1100181), St. Brelade (HER 100270) and Le Mont Rossignol in St Ouen (HER 0900186, the last retaining many of its original internal features). A small concrete telephone exchange (HER 0300215) was also added to Salem Methodist Church in Grouville. The bunker at Springfield Crescent, St Helier (HER 0401586), was built in late 1943-early 1944 as a repeater station, in order to boost the weak cable network which connected Le Fliquet to Normandy and improve communications with Berlin. There are wartime photographs and colour plans and sections of these in Ginns 1999, 90-92 and 2009, 150-3; also Burnal et al 2022, 355-68 and Walker 2010 and 2011).

Anti-Aircraft batteries

By late 1944 there were 144 light/medium anti-aircraft (AA) guns and 37 heavy AA guns (88's) on Jersey, such a concentration being in accordance with Hitler's October 1941 directive that the islands had to defend themselves against air attack (Faggioni 2013, 54, batteries being listed in Faggioni 2013, 157-161 and in Ginns 2009, 295-303 and Burnal et al 2022, 370-392). The intelligence produced in September 1944 by SHAEF (Supreme Headquarters Allied Expeditionary Force) as part of the planning for the proposed invasion of the Islands (Operation Nest Egg) stated that 'the Islands resemble large static 'Flak Ships'.... [and they are] the most heavily gunned areas as regards coastal artillery' (Jersey Archive L/F/437/A2/1). They were manned by the German Air Force (Luftwaffe), Army (Heer) and Navy (Kriegsmarine), the latter focusing on their coastal batteries. Only one battery (at Mont Rossignol, St Ouen; Faggioni 2013, 159) was built to fortress standards (von Schmettow 1948, 34). Some coast batteries were also protected by four-barrelled anti-aircraft guns, and anti-aircraft guns could be used to intensify fire onto landing beaches (von Schmettow 1948, 21).

Most AA surviving sites are an integral part of artillery sites, strongpoints and resistance nests, and on farmland relatively few have been identified. As so many units were mobile, and as most only required a central concrete gun mounting, they are the least likely to have left any legible trace; all of the documented Luftwaffe sites have been destroyed (Ginns 1999,

98). There are also, as Michael Ginns has pointed out, significant discrepancies between surviving fabric and the documentary record, resulting in the fact that 'nothing matches up to what was actually built' (Ginns 1999, 98): he identified eight naval sites, although the Fortress Engineer reports only mention six. Their reports fail to mention positions set on top of bunkers, as on Victoria Pier at St Helier. There is thus a strong contrast with the substantial anti-aircraft batteries found in parts of the Atlantic Wall, some of which have imposing flak towers as at Den Helder in Holland.

The most recent assessment of survival suggests that traces of other sites have survived as earthworks within encroaching vegetation (Burnal et al 2022, 370-392). Recent fieldwork and remote sensing using LiDAR has revealed the potential of other sites to survive. The battery on the south side of Mont Rossignol, with views towards the airport and St Ouen's Bay, has been recently identified as 'probably the best preserved example of the 8.8cm Flak batteries to be seen today', the layout of which conformed to a standard pattern: a centrally-located radar, emplacements revetted with timber and embanked with earth, and hutments (often sunk into the ground and/or with earth banks for protection) and defensive field works set around the perimeter (Burnal et al 2022, 375-6; Burnal 2020, 387, example of plan on p. 393). Also in St Saviour (HER 01100401) LiDAR survey captured by Jersey Heritage in 2020 showed two rectangular features marking the

sites of Flak 38 guns in semi-permanent positions.

Ammunition stores were dispersed in the landscape, and sheltered where possible by woodland and other natural features. These, if not documented,

can also be detected through remote sensing if not fieldwork. One example surviving from Flakmast II and built of reinforced concrete is set in a wooded valley Field H1274 in St Helier (HER 0401711).

Anti-tank walls and defences

Instead of using the dragons' teeth which were such a common feature of the West Wall's defences, the approaches from potential landing beaches were guarded by anti-tank walls (Panzermauer) and also ditches that took advantage of natural obstacles – the most obvious example of the latter being the well-preserved ditches flanking St Ouen's Pond. By early 1944 these formed a barrier set behind a system of mines and obstacles including barbed wire, anti-tank hedgehogs and Tetrahedra and stakes with explosive charges (the so-called 'Rommel's asparagus' (Burnal et al 2022, 60-70; for mines see Gander 1973). Nine anti-tank walls (Panzermauer) – each 1.5-2 metres thick and with their upper parts concavely-shaped toward the sea, were planned and eight were completed in areas most vulnerable to amphibious landings, these being at:

- Panzermauer 1-5: St. Ouen (HER 0900209), from Crabiere to Kempt Tower
- Panzermauer 6: St. Brelade, La Route de la Baie (HER 0100192) and Ouaisné Bay (HER 0100257)
- Panzermauer 7 in St Aubin's Bay: St. Peter (HER 01000179) and St. Brelade, La Route de la Haule (HER 0100350)
- Panzermauer 8 at St. Clement (HER 0200055) which was mostly left uncompleted: there is a section to the west of Le Hocq Tower
- Panzermauer 9 in Grouville

All these exemplify through their varied heights and sections different phases, builders and techniques (Burnal 2022, 67), the sections of Panzermauer 7 displaying the most variation in a short distance.

Older slipways, which in Jersey are mostly of mid to late 19th century date, were either blocked or crossed over by these anti-tank walls. Where possible, as at Grouville, anti-tank defences were able to make use of pre-existing seawalls which mostly date from the mid to late 19th century. Tobruk and other firing positions were also sited on these – 'Into the walls there were built positions especially for AT guns and also machine guns, so that they could cover the front of the walls facing the sea. The cupolas dismantled from captured heavy tanks were frequently built into the wall with their defence weapons.' (von Schmettow 1948, 31-2).

Minefield Detonation Bunkers

These were single-room non-standard bunkers built to A Werke standards to control, in the event of amphibious invasion, the detonation of the minefields

at St Helier, and are sited on the causeway at Elizabeth Castle (HER 0401426) and at La Collette (HER 401220).

Underground installations and tunnels

Underground tunnel systems, termed 'Hohlgangsanlage' (abbreviated to Ho), were built along the Atlantic Wall and in other parts of occupied Europe for many functions including as factories, stores (including for stockpiles of ammunition), housing personnel, casualty receiving stations, command posts, repair shops and hospitals; von Schmettow stated that their value 'was first recognised on Jersey', including for the supply of material for construction of fortifications (von Schmettow 1948, 24-7 and 17).

The tunnel systems have been the subject of detailed studies by Michael Ginns, drawing attention to the range of remains that may be encountered within them such as the joints that mark the end of a day working in concrete, 60cm-gauge railway lines, brackets to carry cabling and artefacts left by workers (Ginns 1978 (revised 2012) and 2009, 170-176); research has also been brought together by Edwin Rose (2020, 137-143). A rare example of an insignia noting the workers on a tunnel is the insignia cast in relief of the RAD (the State Labour Service) on the entrance to Ho 1 in St Peter (Ginns 2012, 27). More evocative of the forced and slave workers who worked on these tunnels are any remains of graffiti left by them.

Construction had commenced in summer 1941 with the arrival of the Fortress Construction Battalions, each with its own Mining Company and later joined by Rock Drilling Battalions. 25 tunnel systems were planned for Jersey, requiring the expertise of a team of geologists attached to the Fortress Engineer Staff, with von Schmettow noting that 'The geological structure of the islands made it possible to build cave-like underground systems on a larger scale' than the other islands (von Schmettow 1948, 25). Once excavated, up to 36 metres deep, they were internally lined with reinforced concrete roofs and walls.

Providing vital expertise on the potential for excavation of tunnels, first planned in June 1941, was the geologist Professor Walter Klüpfel who was also posted to the engineers and based at the Grand Hotel, and a team of geologists. All except two were blasted out of shale, more easily excavated but extremely hazardous to the labour force (Ginns 2012, 19). The construction order as issued at the end of the year (the 15th of December) followed the submission of the report and consideration of its findings at a Berlin conference chaired by the General of Engineers and Fortifications which was attended by Hitler on the 16th of October.

The airfield

The airfield was one of the first sites to be defended with trenches and sandbagged positions, as Le Quesne noted on the 16th of August 1940 (Le Quesne 1999, 10). The airport was enlarged with concrete runways in summer 1940, using requisitioned local labour and the same company that had built the airport (Messrs. Farley of First Tower) to paint the 1937 terminal green (Ginns 2009, 243). There are also firing butts, possibly of this period to the south-west and the blister hangar

at St Brelade's garage probably predates the departure of the Luftwaffe squadron in February 1941, the remaining personnel then being tasked with manning anti-aircraft batteries (Ginns 2001). There was talk of a seaplane base at St Ouen's Pond, but this was not commenced (Ginns 2009, 304-5). There has not yet been any programme of research on this topic, which in view of the layered history of the aviation heritage would be worth exploring in its international context

(Lake 2004 and see essays in Hawkins et al 2005).

Military shipping and wrecks

The most important shipping route was to St Malo, as Granville lacked the cranes and other infrastructure for the movement of heavy goods. The Kriegsmarine made use of the existing infrastructure of harbours and warehouses, basing their Harbour

Organisation and the Harbour Protection Flotilla in the commercial docks at St Helier. See Ginns 2009, 315-329, for the Kriegsmarine and Ginns 1983b, 1987 and 2009, 330-379, for shipping routes, the Harbour Protection Flotilla and losses of ships around Jersey.

Topic 3: Internment, Resistance and Artefacts, 1940-1945

Places of internment and resistance

There are no legible traces of the French North African prisoner of war camp at Pier Road in St Helier (HER 400009). The concrete base of former squat toilets (HER 401557) remain from a PoW camp next to the gun battery on South Hill close to Fort Regent in St Helier. Michael Ginns has written a history of the site and its inmates (Ginns 1983a), including their testimonies, but the site including reused earlier barrack buildings (HER 401561) still awaits systematic investigation which would benefit from consideration of scholarship on this topic in recent years (e.g. Carr 2011; Carr and Mytum 2012; Carr and Pistol, 2022). Fort Regent was also used as a prison, as recounted by Sinel after the mutiny at Portelet in April 1944 (Sinel 1984, 180).

Local conditions – the size of the island, the sheer number of the occupying forces – ruled out any form of armed resistance, the consequences of which for local communities acted as a deterrent in most but the most mountainous and forested areas in occupied Europe (Mazower 2008, 471-521). Nevertheless, resistance took many forms in Jersey and the Channel Islands (Carr, Sanders and Willmot 2014). 570 of the approximately 4,000 people who passed through the courts in the Channel Islands were sent to prisons and camps in Europe; ‘at least twenty-two Jersey residents and nine Guernsey residents did not return.’ (Sanders 2005, 104); Gilly Carr has published the results of exhaustive research on those political prisoners who

passed through the court system and prisons in Jersey and Guernsey (Carr 2020), adding further detail to research by Paul Sanders (2005, 99-145) and to Protest, Defiance and Resistance in the Channel Islands (Carr, Sanders and Willmot, 2014). Most offences were tried in the headquarters of the Feldkommandantur in Victoria College (HER 0401389 and now Jersey College for Girls), St Helier, and some in the courtroom set up by the 319 Infantry Division in King’s Cliff House, St Helier. A plaque now marks the site of the prison in Newgate Street. Silvertide on Havre Des Pas in St Helier was used as a police and Gestapo headquarters, the interrogation of islanders there featuring in many recollections by islanders available to view at the Jersey Archive.

One of the most remarkable expressions of the passive resistance exemplified by the ‘V-sign’ campaign, broadcast by the BBC from early in 1941, is the so-called Vega Paving in St Helier’s Royal Square which celebrates the relief of Jersey by the arrival at the end of 1944 of the SS Vega with its supplies of food and medicine from Lisbon: inset into the granite paving in front of the old Corn Exchange are the letters VEGA – with an over-size ‘V’ – and the date 1945 (Carr 2010d, 2014, 222); HER 0401418). There is also an ‘Anchor’ in memory of HMS Hood in the East wall of the church of the Sacred Heart of Jesus, at St Aubin, which was inserted during building works when HMS Hood was sunk; also after the war the

bowsprit of WWII HMS Rodney – which amongst many battle honours played a key role in the sinking of the Bismark – was used as a flagpole near the south-east corner of the church of St Aubin on the Hill. Another significant expression of passive resistance on the part of the States of Jersey, following their reluctance to allow local labour to be diverted into the construction of sites for the benefit of the occupying forces, was to devise programmes for the repair and widening-of roads. Its largest project was the ‘New North Road’ which extends east to west across the island, the time taken for this being expressed in the high quality of workmanship of the Department of Labour Culvert at St. John (HER 500095).

There has not yet been a systematic survey of the extent to which sites known to have played an active role in resistance, through enabling escape or sheltering escapees, may have retained some physical trace of their past role. Such a role is associated with several sites across the island (Carr, Sanders and Willmot 2014, 109-115 and 223-229). For example the farmhouse and barn at Bellair in Grouville (HER 0300078), which with the neighbouring East Lynne (HER 300062) had a significant role as a hiding place and embarkation point for escapees. The bringing of slave labour to work on the fortress construction programme was a significant factor – along with the deportation of British-born

islanders and the confiscation of wireless sets, in the hardening of attitudes to the Occupation. Slave workers were hidden in houses and farm buildings throughout the island (Willmot 2014, and Carr, Sanders and Willmot 2014, 109-115, and 193-196 and 202-203 for the role of women in this aspect of resistance in particular). The St Ouen home of Louisa Gould, who died at Ravensbruck, and others whose names are honoured as ‘Righteous Among the Nations’ by the State of Israel, are commemorated with a variety of other sites on Jersey Heritage’s Resistance Trail (www.jerseyheritage.org/resistancetrail): Dorothea Weber hid her Jewish friend Hedwig Bercu in her house at West Park Avenue in St Helier (HER 0400508) and Albert Bedane sheltered a Jewish woman and escaped slaves in his cellar in Roseville Street in St Helier (HER 0400652). Andrew Gilson’s newly-published research has uncovered further evidence of how many farmers played an active role in concealing escapees (Gilson, 2023).

As a counter to this are the premises daubed or marked with swastikas, some of which have left traces by virtue of their being chipped off with chisels; these were not necessarily the homes or work premises of alleged collaborators and black marketeers, as a number in St Helier resulted from the activities of German marines one night in February 1945 (Isherwood 2013).

Objects

There is an extraordinary range of objects held in the collections of the Jersey Museum (<https://catalogue.jerseyheritage.org>) and in significant collections within German bunkers across the island (particularly of the CIOS and in the Channel Islands Military Museum) which reveal how islanders adapted to wartime conditions in a diversity of ways, including in the creation of objects with hidden and encoded meaning, the artefacts fashioned by forced and slave workers and the punishments meted out to them, and also the mix of mass-produced and hand-fashioned militaria, weaponry and other objects that evoke the needs, motivation and ideology of the occupying forces. Numerous articles by Gilly

Carr (see below and Carr 2014, 21-82) have examined this theme, considering typologies and biographies of objects and how they have been perceived and valued as part of museum and domestic collections.

Resistance could be subtly expressed through the wearing of personal jewellery and other objects, such as crest badges that closely resembled Militia badges and by cutting out British coins in a V-shape, as did the Dutch and the Danes (Carr, Sanders and Wilmot 2014, 32-3; Carr 2012b). Hand-fashioned objects such as these are highly evocative, and Gilly Carr, in considering the legacy of Occupation across the Channel Islands, has termed them as ‘powerful memory objects’ whose

meaning can be lost as memory fades and ‘are also, in a very real way, carriers or receptacles of cultural memory for Channel Islanders.’ These include artefacts that illustrate shortages of food and other goods (graters to produce potato flour, presses for making sugar for sugar beet, wood carvings of the only-available food, home-made ovens and re-soled shoes), artefacts that illustrate the power relationship between occupier and occupied (the appropriation of the island’s shields or crests in soldier’s trench art, and their use as symbols of defiance in for example the jewellery worn by islanders), banned items that are hidden within objects (radio sets in books, for example) and other artefacts that ‘express resistance or defiance against the occupying authorities’, such as the V-signs carved

out of coins and fashioned in deportation camps, artefacts such as truncheons that were designed to inflict injury and artefacts that evoke liberation such as cartoons drawn onto German helmets (Carr 2009, 36-41; also Carr 2011 and Carr 2022). In striking contrast are some of the objects fashioned by German soldiers ‘from good quality wood at a time when islanders were burning furniture in order to keep warm, cook food or heat water for washing.’ (Carr 2012b, 328). Carr’s discussion of militaria also highlights the issue of considering the diversity of objects in museums, and that collected in the 1940s and 1950s when many objects found their way into private collections, as archaeology in their own right (Carr 2016b; 2014, 33).

Topic 4 Landscapes of The Occupation, 1940-1945

Occupation has also left a legacy that testifies to the demands that it placed on Jersey’s landscape and resources, including the requisitioning of buildings and land for military use.

Requisitioned buildings and landscapes

The archives of the States and the German military, specifically the Feldcommandant’s Files and Occupation Papers (Jersey Archive D/Z/K), document the requisitioning and derequisitioning of buildings as well as land for military use, listing properties by name and including detailed inventories and requests for compensation. An excellent example of a recent study is the way that Paul Burnal has used analysis of these files to identify requisitioned houses that he has surveyed in the east of the island (Burnal 2022, 18-20, 41-45). Buildings were requisitioned as headquarters for different commands, examples being the use of St Helier Town Hall for the first HQ of the 216 Division and the Grand Hotel in St Helier by the senior staff of the Fortress Engineers, as places for rest and recreation (Soldatheime, an example being St Brelade’s Hotel), for housing troops and for internment. Organisation Todt’s HQ was at 17-19 Midvale Road in St Helier, and its construction workers were housed with an OT hospital in the late 19th century Jersey

College for Girls (HER 0401389). Particularly important for Jersey – despite its post-war alteration – is the Pomme d’Or Hotel, renewed in 1932 and requisitioned as the headquarters of the Kriegsmarine and the focus of the annual Liberty Day celebrations.

The HER has over 40 records for requisitioned buildings. There has not yet been any systematic survey of these buildings, and the extent to which they may have retained tangible traces of their wartime use in the form of evident alterations and graffiti. An example of the former can be seen in the Regency villa at La Hougue in St Peter, where ceiling beams in the study were carved and painted in the Bavarian style (1000074); other buildings were stripped of their contents for firewood (HER 0500156, La Grande Maison

In St John) or simply looted (as at The Barge Aground in St. Ouen, HER 0900160). 300 soldiers were billeted in outbuildings and in surrounding hutments at Hamptonne; here eleven officers have left their names

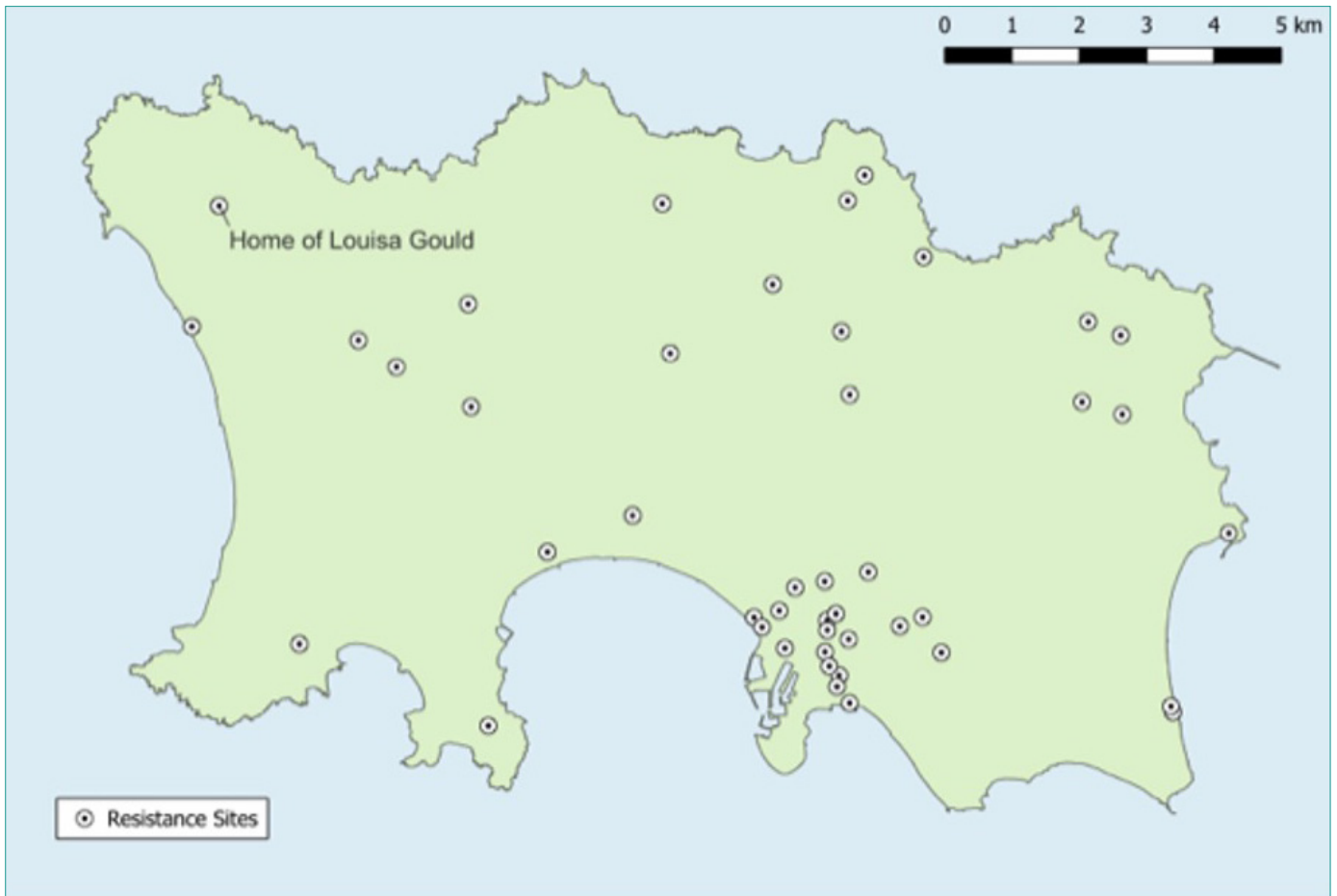


Figure 8. Places of resistance shown on the Jersey HER.

on pigeon holes for mail in one outbuilding, a Storm Trooper's badge was found behind a skirting board and historic buildings were altered with inserted stoves, a detention cell and a shower room (HER 0600123; Jersey Heritage 2017, 11-12, 27 and 80). Church halls were also commandeered for military use (White 1996, 54), and evidence of wartime use at a St Helier garage have been recorded (Isherwood, 2016).

Examples of billet huts, most probably of the type used at Hamptonne, survived in the east of the island

until they were demolished in 2000 (Burnal 2022, 56).

The troops stationed on the islands were in a constant state of readiness through training, demanding detailed understanding of their terrain (von Schmettow 1948, 39); this would have affected most of the island, particular the open commons and coastal areas. Egypt in the north of the island was requisitioned as a training area and its buildings partly demolished in order to facilitate practice in street fighting (Ginns 2004).

Demand on resources: quarrying and transportation

The fortifications programme, both in the Channel Islands and all other parts of the Atlantic Wall, placed exceptional demands on natural resources. The quarrying of stone for aggregate and stone-facing, and the work of the geologists working for the Fortress Engineers, has been well-researched (Rose 2020, bringing together a series of articles published by the CIOS between 2002 and 2014), and the transportation of quarried stone across the island has led to an obvious intermingling of geology on individual sites. Construction in concrete has also left a legacy of slurry spread across the landscape – most prominently on paths – around these fortifications. Organisation Todt and the Fortress Engineers also needed materials, plant and means of transporting them in order to meet the ambitious targets for the fortification programme: in von Schmettow's words (1948, 37), 'Numerous installations were built for the purpose of building materials and other purposes. Quarries, works for obtaining sand and gravel, for making concrete bricks, brickyards, road building, establishing and operating hauling tracks, establishing and operating machinery and repair workshops. For supply and housing: building of camps for housing the crews, equipment stores, ammunition depots. On Jersey establishment of a power station etc. etc.' The geologists attached to the Fortress Engineer Staff quickly realized that sand and crushed aggregate did not need to be imported, there being a plentiful supply on the island (Bishop and Launert, 1979); 80 potential sites for crushed stone were listed, of which 8 were opened (Rose 2020,

146-47). Geological surveys identified distinctively gritty sand and gravel from Grouville Bay as the best for fortress construction, export via train commencing as early as January 1941; equally distinctive are the purplish pebbles from St Catherine's Bay (Burnal 2020, 417-9; Ginns 2006, 40; Rose 2020, 148). Crushing plant was installed on three quarries for crushing aggregate, of which one at Grouville survives (turned into flats and a listed building, HER 300199; Ginns 2006, 40-43). Edwin Rose has played a prominent role in research on the island's geology and the role of the Fortress Engineers, bringing to light duplicate documents in German, British and US archives and publishing the results of successive articles with contributions from other authors in 2020 (Rose 2020, 387-8 for table).

St Helier was the principal port for importing goods, the delivery of construction materials to construction sites then being dependent on an efficient road and rail infrastructure (and associated depots) that necessitated programmes of both repair and construction (Ginns 2006, 30-38; Bonsor 1977). In July 1942 Organisation Todt opened a one-metre gauge railway from St Helier around St Aubin's Bay to Corbière in the south-west and from the granite quarry at Ronez to the north; a 60cm-gauge line from St Helier to Gorey and also from Western Quarries to La Pulente' (Cruikshank 1975, 188). Some evidence of German railways can be traced including the bridge near Bethesda Chapel near to the site of Pont Marquet Railway Station, St. Brelade (HER 1000203).

Demand on resources: energy and water

The fortification programme also required energy and water to supply the construction programme and the increased numbers of people living on the island, Klüpfel preparing a report in January and October 1942 (Rose 2020, 149-157). In 1942/43 Organisation Todt built a coal-fired power station at La Rue de Moulin de Tesson, St. Peter (HER 1000204, and a water-cooling plant at HER 1000235), its purpose being to alleviate the shortage of diesel fuel. The Electricity Transformer Station at Grouville (HER 300123, Bernal 2020, 434-6) is the last surviving example of three electricity transformer stations built in Jersey, for use by Organisation Todt and the Fortress Engineers.

Reservoirs were built to store water required in the construction process, for example at Le Fret, St Brelade (Bernal et al 2022, 442). The site of a mill pond La Maseline Reservoir in St Catherine's Valley, St. Martin (HER 700266), was built by an engineer battalion attached to 319 Division in October 1943. Gardiner has documented the efforts of the civil administration and the Jersey New Waterworks Company maintain water supply for the islanders in the face of dry weather lasting from October 1941 into 1943 combined with the rising demand resulting from the occupying forces and the fortifications programme (Gardiner 2003).

Demand on resources: food, farmland and woodland

The increased population of the island, and the dangers to shipping coupled with the requisitioning of agricultural land by the military, clearly placed considerable demands on Jersey's agriculture. It came under greatest strain after its supply lines were cut off after D-Day, the risk of starvation being averted by the arrival of the SS Vega with food and medical supplies in December 1944 and in subsequent visits. This is a topic that has received considerable attention from Andrew Gilson, published in autumn 2023 as *The German Occupation of Jersey: Agriculture and Survival in a Time of War*. The occupied territories of Western Europe had been net importers of food before the Second World War, although Jersey – like to an extent Holland and Denmark – had been able to weather the agricultural depression better than most due to the export of specialist crops and also of course of Jersey cattle. In addition to stores and workshops, Organisation Todt augmented its own supply of food through managing a farm (at Grands Vaux Valley, St Helier) and building a bakery (Ginns 2006, 23-4). Whilst no surviving evidence for the former has been noted, Jersey has a unique example of a bakery, built in 1941, at Beaumont in St Peter (HER 1000116); the army built their own in Victoria Road which has been demolished.

Less well-known is the impact that the fortifications programme and shortages of fuel had on trees and woodland. Shuttering required large amounts of machine-sawn planks and battens which have left the imprint of larch and other timber. Much of this was imported into the docks at St Helier, as the island's supply of timber was limited. Timber was also required for fuel, railway sleepers and other purposes, and despite notices to the contrary troops continued to lop and cut down trees (Gilson 2003, 399-400). Shortages of fuel resulted in one well-known incident recorded in the diaries of Baron von Aufness, who was Head of Civil Affairs in the German Field Command, in his horrified reaction to the felling of oaks to provide fuel for households on Victoria Avenue in January 1945 (Nowland 1985, 119-20). The German military, however, was actively engaged in the requisitioning of trees: one instance was an appeal for post-war compensation sent from Sands Farm in St Brelade to the Rehabilitation Committee, for about 230 tons of trees that had been requisitioned (Jersey Archive B/A/L4/3/4).

War damage and air raid shelters

The effects of flak and bomb damage were cited on several occasions by Philip Le Sauteur (Le Sauteur 2017, 119, 139, 251 and 254). Pre-war buildings may retain signs of bomb damage and post-war housing may indicate the presence of bombed-out properties, as recounted by Le Sauteur on the 20th of June 1944 when several houses at La Rocque were damaged ‘beyond repair’ (Le Sauteur 2017, 254). There are several examples on the Jersey HER of air raid shelters in houses and other buildings occupied by the German military, one example being the reinforced concrete bunker complex at 3 Gloster Terrace in St Helier which was requisitioned as the headquarters for Infantry

Regiment 582 (Oberst Prah); a doorway was inserted to provide access from the hallway to a corridor leading with four vaulted rooms, each with arched corrugated metal ceilings and steel doors; one room has a vertical access shaft to the garden. Paul Burnal’s survey work and archival research in the east of the island has revealed more examples, and doubtless more remain to be found (Burnal et al 2022, 254-62). Geophysical investigation has proved itself as an effective means of identifying air raid shelters in the UK that might not be revealed through other methods of survey or research (Ainsworth et al 2018).

Impact on cultural heritage

During the war, as indeed was the case in the British Isles and in some other parts of Occupied Europe (e.g. see Gildea 2002 for the treatment of statues and historic buildings in France), concern was expressed over the potential for war damage to heritage. Despite assurances given by the military to La Société Jersiaise, damage was done by building the observation post at La Hougue Bie which was then the subject of a post-war compensation claim prior to it opening as a museum in 1947 (Jersey Archive B/A/L3/4 and B/A/W40/8/63; Burnal 2022, 29-40; B/A/L3/4). Apart from

additions and alterations to some of Jersey’s historic fortifications, the symbolic value of which to the occupying forces was communicated through drawings and paintings in the Green Books commissioned in 1944 by von Schmettow (see 2.2.1), the towers at L’Étacq, Sands and Bel Royal were destroyed by the German military in order to facilitate a sufficient field of fire. There are different versions concerning the damage to La Rocco Tower in St Ouen’s Bay, but its use as target practice is most unlikely (Le Seur 2009).

Topic 5 The Cold War, 1946-1989

The 1990s saw some of the first moves towards gaining a better understanding of Cold War sites and monuments, and assessment for the purposes of heritage conservation, including those adapted from earlier structures. One of the first published studies resulted from survey undertaken by English Heritage (Cocroft and Thomas 2003), again seeking to adopt the same inter-disciplinary approach but more constrained by limited access to archives. As a set of essays exploring how archaeology could contribute to our understanding of the Cold War made clear (Schofield and Cocroft 2007) its heritage is hugely diverse – extending from the archaeology of protest to missile sites and the race for space – and capable of being studied and comprehended in multiple ways; it also calls for a transnational approach – considering the diverse ways in which they are valued prior to consideration of how they can best be recorded, interpreted and in some cases conserved – that recognises that ‘Cold War heritage is amongst the most challenging, being close in memory and ubiquitous (even if many of the sites have been re-used and pass barely recognisable as formerly having military purpose). It presents challenges as a heritage of division, competition and ideo- logical difference.’ (Schofield, Cocroft and Dobronovskya, 2021, 52).

The robustness of Jersey and Guernsey’s German fortifications was such that they could be adapted to shelter those within them from heat, blast and radiation, in contrast to the situation across the remainder of the British Isles, where the overwhelming

majority of sites for monitoring and administration if the unthinkable happened were newly-built as monitoring posts, communications centres and regional seats of government. Both islands developed their own Warning and Monitoring Organisations, Jersey’s (JWMO, formed in 1962 at the end of the first phase of Cold War building in Britain) being a straightforward adaptation of the UKWMO. In this respect they were similar to those in other parts of Europe where German fortress construction had left a legacy of such structures (for example see Kampe 1996). Monitoring posts were established in headquarters, personnel and observation bunkers at La Moye, Vile au Bas, Gorey and Egypt, the ‘nerve centre’ with a map of the island being the Telephone Repeater Station at Springfield Gardens in St Helier which was acquired for this purpose by the States in 1959 (Chowne 2013). New ventilation plant was installed, and communications established with radio transmitters, other monitoring stations and others including commands in the UK and France (Walker 2011). It is worth noting here that the plans for modernisation in 1985 of the Springfield bunker, and for the extension of the programme to include the bunkers at Egypt and Gorey, fell into the period of hardening and building new infrastructure that followed the renewal of tensions between Nato and the Warsaw Pact in 1980. The Militia, which had been disbanded after the war, was reformed in 1988 as the Jersey Field Squadron and have supported HM Forces in operations abroad; they are now based in the historic barracks at Mount Bingham (South Hill).

Topic 6 Commemorating, Conserving and Interpreting the Legacy of Occupation

Jersey and the Channel Islands have – as Paul Sanders stressed in *The British Channel Islands under German Occupation, 1940-1945* (2005, xv and 256) – had the difficult and unique task of reconciling their experience of Occupation by the German military with being part of the British Isles which has focused on its role as a victor and defender of liberty. For the Channel Islands, as indeed for those other parts of Europe whose communities had been affected by the ravages of total war, it took time before there could be reflection on the ‘dark heritage’ of the conflict (Carr 2010b and 2010c; Carr and Jasinski 2013; for an international perspective see Winter and Sivan 1999, Uzzell and Ballantyne 2008, Logan and Reeves 2009, Macdonald 2009 and Symonds and Vareka 2018).

Carr has set out three distinct phases for examining how this legacy has been perceived by islanders and visitors, and the factors that have determined what aspects of the legacy of Occupation have been transformed into heritage: a general desire for ‘Erasure’ in the immediate post-war period to 1953, a period of ‘Amnesia and Disguise’ lasting until the 1970s, including the use of bunkers for illicit purposes and – following the earlier removal of fixtures and fittings for scrap metal – their sealing up by the authorities, and from 1977 ‘Rehabilitation and Restoration’ in which the Channel Islands Occupation Society have played a prominent role and which from 1998 has seen Jersey assume a leading role in interpreting the legacy of forced and slave labour (Carr 2014, 92-113).

Disposal, reuse and conservation

In February 1946, British Forces towed artillery pieces to Les Landes Common, and they were dumped over the cliff at Le Chemin des Landes, between the naval MP3 tower and the army observation post M2. The majority of these weapons – the remains of carriages, cradles, barrels, gears and wheels – lie together at the bottom of the cliff and some have since been recovered and displayed at coastal batteries and bunkers (HER 0900365). At the same time steps were being made to display wartime German artefacts in the Occupation Museum at the headquarters bunker built at La Hougue Bie (HER 0300212), and the German Underground Hospital in St Lawrence.

The Bailiff’s Occupation and Liberation files in the Jersey Archives show that almost immediately after Liberation, and in answer to a British government request for a priority list of what works were needed for ‘the advancement of the rehabilitation of the island in respect of German works, fortifications, constructions, obstacles, etc, etc’, the Bailiff requested that the slips should be ‘cleared as soon as convenient’ to enable the recovery of seaweed for manure, and that priority must also be accorded to the clearance

of fortifications from agricultural land and barriers in St Helier (Jersey Archive B/A/L3/1-2; for the Whitehall position see TNA 106/ 3014). These and other works are detailed in schedules of works (e.g. Jersey Archive B/A/L3/7), and inventories of the contents of bunkers were taken: stoves, radiators, wash basins and other fittings were auctioned off (Jersey Archive B/A/L4/3/1). There were also individual requests for compensation and for reuse where both desirable and practical: for example the owner of Sands Farm in St Brelade suggested to the Rehabilitation Committee that the rubble from a demolished German building could be used to remake a road, and that other buildings could be turned into cottages (Jersey Archive B/A/L4/3/4).

It quickly became apparent that, whilst many of the fieldworks and some of the structures built to reinforced field-type construction could be cleared from agricultural land or simply buried, sometimes leaving gaps in hedgerows that remain to this day, the structures built to fortress standards were a different matter altogether. A rare example would suffice: the large bunker built in 1944 at Gorey Harbour took five weeks to demolish in 1972 (Ginns 1999, 33). Reuse was

also challenging: the casemate at Resistance Nest Third Tower was converted into a café immediately after the war (as The Gunsite Café, for image of 1948 see Jersey Archive L/A/75/A4/22/CS11/2); a small proportion of other surviving bunkers, besides those that have played host to 'bunker parties' and other activities away from the public gaze, have a variety of commercial and domestic uses. The haunting and evocative character of bunkers and tunnels have also given rise to stories of hauntings, another reflection of their association with 'dark heritage' (Carr 2017b, 2014, 92).

Many of the bunkers were stripped of their contents by souvenir hunters and scrap metal dealers, except those which were sealed at an early date (prior to the major scrap metal drive that commenced in 1953, an example being the Millbrook bunker which was sealed in the late 1940s after the slipway was cleared) or which were hard to access and thus uneconomic to clear of guns and gun turrets, armoured doors and other heavy fixtures. An example of the latter is the Kanone 2 casemate at Corbière, which has (an extremely rare survival for the Atlantic Wall and unique for the Channel Islands) retained its gun and other fittings in situ and was reopened in 1978 (Amy 2021, 61-62). Jersey's Public Works Committee continued to seal more bunkers into the early 1970s. All bunkers on public land were sealed in the early 1960s.

After the war, and as early as the summer of 1945, articles appeared in the local press which questioned what to do with the landscapes upon which fortifications had been built. Paul Bernal has documented the story of how, with the involvement of La Société Jersiaise, the local press and the agreement of the landowner, Noirmont Point was made the subject of an appeal to make it into publicly-accessible land. Initial consideration, that it should serve as a memorial to the Occupation and Jersey's escape from the destruction and extreme loss of life that had afflicted so many other communities, was altered, so that when bought by the States in 1950 it was to be as a memorial to all those from Jersey who perished in the war (Bernal 2015, 342-352). Remarkably, consideration had been given to the protection of German fortifications in November 1944, in the midst of the food shortages that then affected the island: the Channel Islands Monthly

Review then stated that 'While undoubtedly the sight of gun emplacements and concrete platforms on hills and cliffs will tend to keep alive unhappy memories, it should be realised that these may be great tourist attractions for generations, and prove material assets which cannot be duplicated anywhere in Britain. What is a disfigurement of the landscape today will be a historic monument tomorrow. The Martello towers have never been things of beauty, but they are distinctive features of the Channel Islands. Wherever possible the German defence works should stay' (Bernal 2015, 355-6). Preservation of bunkers was very much a minority view (see also Carr 2014, 93-94), but similar moves were afoot in Normandy, where the D-Day Commemoration Committee, formed in May 1945, was followed by legislation which included amongst its objectives the establishment of the D-Day Museum at Arromanches and the conservation of sites associated with the landings (Worthington, Thiesen and Bird, 22-3).

Such developments did not of course result in the official designation as heritage of sites in the Channel Islands or that matter anywhere else on the Atlantic Wall. Changing public and official attitudes towards the legacy of the Atlantic Wall reflected the situation across other parts of Europe, although it shall be seen that at an early stage Jersey engaged in a positive sense with this legacy. Paul Virilio's *Bunker Archaeology* (1975), used text and photography (taken from the late 1950s) to convey the impact of bunkers on the senses and how they signified the hubris of military and totalitarian power, how in their architectural form and drive underground they symbolised the destructive capacity of modern warfare and heralded the Modernist movement. 'These concrete blocks were in fact the final throw-offs of the history of frontiers at the precise moment of the sky's arrival in war..... total war, risk everywhere, instantaneity of danger, the great mix of the military and the civilian, the homogenization of conflict..... The bunker is the protohistory of an age in which the power of a single weapon is so great that no distance can protect you from it any longer..... the last theatrical gesture in the endgame of Occidental military history' (Virilio 1975, 38-46). For the writer J. G. Ballard (1930-2009), in his *Guardian* essay 'A Handful of Dust' (20 March 2006), the bunkers of the Atlantic Wall evoked 'an architecture of

death' and the failure (with Soviet Russia) of 'utopian projects that turned into the greatest dystopias the world has known', and revealed themselves to him as 'a set of concrete tombs whose dark ghosts haunted the brutalist architecture so popular in Britain in the 1950s'. There is indeed – whilst there is no proven link – a close resemblance between the monumental form of some of these structures and the rawness of exposed concrete with the marks left by its shuttering in the 'béton brut' of Le Corbusier's immediately post-war architecture, the 'New Brutalism' of the 1950s and the layered 'Massive Brutalism' of Denys Lasdun and Partners' National Theatre (1976) in London. In 1966 Paul Virilio and the architect Claude Parent collaborated in the design of the church of Saint Bernadette in Nevers, France, which clearly took its inspiration from the monumental character of the Atlantic Wall, a link explored by the architectural critic Jonathan Meades in his 2014 TV series 'Bunkers, Brutalism, Bloodymindedness: Concrete Poetry'. It has also inspired art such as Charles Stankievech's *Monument as Ruin* (2015 commissioned for the Agnes Etherington Art Centre, and in which bunker architecture was placed alongside the works of Piranesi and other artists depicting the ruins of lost empires) and Ianthe Ruthven's photography and text (Ruthven 2014; www.iantheruthven.com): 'Mostly built between 1942 and 1945, it is the largest construction project in history to have been executed in so short a time. It remains a testament to the "Thousand-year Reich" – yet it lasted just over a decade, even if the virtually indestructible qualities of reinforced concrete mean that a good portion of it will endure for the millennium Adolf Hitler dreamed about.' The architect Gennaro Postiglione has also played a prominent role in developing the concept of the Atlantic Wall Linear Museum and developing imaginative ideas for reuse of 'their highly problematic heritage: finding a way to voice their material and immaterial value..... to re-appropriate, on a European scale, its specific character as a testimony of memory resistance and as a possible monument for the creation of peace.' (Postiglione 2007; Bassanelli and Postiglione 2011; Postiglione and Lenzini 2019).

For Jersey, official attitudes towards the restoration and interpretation of German works in historic fortifications at Gorey Castle and elsewhere can be followed in the

files of the Department of Public Building and Public Works (Jersey Archive, D/AL/D1/62/32/5). One of the Kernwerk bunkers at St Peter opened as a museum in 1964, and interest in the subject developed as a prelude to the establishment of the Channel Islands Occupation Society in 1971 – the Jersey branch being formed in 1971. The 1970s was a critical decade, individual volunteers and organisations leading efforts to conserve and interpret German bunkers and thus contributing to what Gilly Carr has termed an era of 'Rehabilitation and Restoration' (Carr 2014, 99). Members of the CIOS were surveying across the island in the 1970s (e.g. St Ouen's Bay in 1975: D/W/J1/5). Michael Ginns and Peter Bryans compiled a *Survey and Classification of Occupation Structures* (Jersey Archive L/A/06/J8/0), and writing in 1975 they stated 'it is hoped that the best examples of each type will be preserved' (Ginns and Bryans 1975, 78). Works commenced on the Command Bunker and the MP 1 tower at Noirmont (Batterie Lothringen) in 1977; it was agreed that the Department of Public Works would commence the reopening of these structures, if CIOS then became their custodians (Carr 2014, 101-102). This was followed in the late 1970s and into the 1980s by other sites. The first attempts to preserve the bunker with its 10.5 cm gun at Corbière commenced in 1977 (Amy 2021), Millbrook – sealed since the late 1940s – was first opened in 1985, and other examples are La Carrière, Kempt Tower, La Mare Hill and Batterie Moltke at Les Landes; in 1989 the Channel Islands Military Museum was opened in a restored bunker at St Ouen.

The CIOS took the lead in driving forward the restoration of some of the best-preserved bunkers in the 1980s, as reported in its annual reviews; thus and the Public Works Committee approved restoration of the Command Bunker and Observation Tower at Noirmont in 1991. In 1986 Michael Ginns was invited to present a 'Report on sites of German defensive structures in Jersey of military and architectural importance' the report noting the passing of time allowing for a cooler reflection of their significance, and the uniqueness and excellent state of preservation of what remained in Jersey and the Channel Islands (Ginns 1986, 4). This focused on sites in public ownership and excluded for practical purposes sites in active use (the radio tower at La Corbière), anti-tank walls,

underground tunnels and other sites that could not be removed and those German works sited in already-designated historic fortifications. Fifteen sites were selected, based on assessment of their architectural and military value, types representative of what was built across the island, their degree of preservation and the uniqueness or otherwise of an individual site or element within the context of the Atlantic Wall. In seeking to record and selectively conserve World War Two heritage Jersey was not only ahead of other volunteer and official organisations in the Channel Islands, but also those of the British Isles and Europe where concerted efforts were not generally made until the mid 1990s, in anticipation of and following the 50th anniversary of the end of the war: an example is the battery of casemates facing the Normandy beaches at Longues sur Mer, designated as a Monument Historique in 2001. Designations prior to that date

were rare, an example being the listing at grade II in 1987 of The Citadel in London's Whitehall – described as a 'Massive Cubist fortress' in the list description.

Nevertheless, and has been clearly set out by Gilly Carr in her account of the period of 'Contestation and Memorialisation' that lasted from 1998 to the present, it was regarded that the restoration of bunkers had placed an undue emphasis on the occupier at the expense of interpreting life under the Occupation and the suffering endured by the forced and slave workers who constructed so many of them (Carr 2014, 156-166). Hence the moves towards acknowledgement of an uncomfortable past in which Jersey has played a prominent role – as summarised in 6.2 below – and which would benefit from full consideration of this heritage in its wider European context (Carr 2014, 133-138).

Memorials and remembrance

Gilly Carr has considered how attitudes towards the Occupation have changed over time in a number of articles and in her 2014 book *Legacies of Occupation*. As she has pointed out (2012c, 91): 'The heritage of the German Occupation of the Channel Islands ..., both tangible (such as museums, bunkers and memorials) and intangible (such as annual ceremonies and the memories of the Occupation generation), is plentiful and scattered throughout the islands.' She has defined a 'memorialscape' of 'commemorative stones, statues and plaques erected to the memory of the German occupation of the Channel Islands', reminding islanders of 'their place in European and world history': in summary, monuments in remembrance of fallen heroes immediately after the war were followed by a period of reflection and respects being paid to them which lasted until 1985, then from around 1985 a focus on living heroes and finally – after the completion in 1995 of the monument in Liberation Square, where returning British soldiers were treated by ecstatic crowds – on the victims of Nazism (Carr 2012a, 176-7 and 182).

The cemetery in the Howard Davis Park to Allied servicemen – mostly airmen and sailors – recovered from the Bailiwick of Jersey during the Second World

War was dedicated in November 1943, and those laid to rest here were marked by wooden crosses cut by an oak tree donated by a local landowner who had lost her son in the previous conflict, Lady Stewart; the Commonwealth War Graves Commission respected the wish of the islanders after the war to retain these and not have them replaced in the usual Portland stone (see <https://www.cwgc.org>). Seven prisoners of war and an internee from the 1914-18 war were buried at St Brelade's churchyard, which became the 'Heroes' Cemetery' for the German military in WWII. They and 214 servicemen who had been buried here in the Second World War were exhumed in 1961 and taken to a large ossuary near Mont-St-Michel in France (Ginns 2009, 479-494).

The issue of commemoration has challenged authorities and communities elsewhere in Europe: for example, the principal proponent of *lieux de mémoire*, Pierre Nora, considered that the celebration of liberation has not given due respect to the more than 20,000 victims of the bombing campaigns and those affected by the Normandy campaign of 1944 (Worthington, Thiesen and Bird 2018, 21; and for a European overview see Lagrou 2000). A particularly

sensitive issue for the Channel Islands has been how to keep alive the memories of those islanders who were interred and died within prisons and concentration camps, and of the forced and slave workers who worked on the fortifications programme - places of taboo and sensitive heritage and 'places of pain, where people suffered and died, and remain, for the most part, un-memorialized.' (Carr and Sturdy Colls 2016; Carr 2010c, 257; Carr 2014, 156-166). Francisco Font thus led the campaign for a permanent memorial to these workers at Westmount Cemetery, which was erected in 1971; the Bailiff's Chambers Occupation Files at the Jersey Archive (Jersey Archive B/A/W85/6) has many records of the foreign nationals, including Organisation Todt workers and 14 German military personnel, who are interred here. Another list was prepared by Joe Mièrè, who had been imprisoned three times by the Germans and after the war became director of the German Underground Hospital (opened in 1946): his collection in the Archive (Jersey Archive L/C/24) shows his dedication to telling the story of Jersey's people under Occupation and of those who had been imprisoned and made to work under Organisation Todt. When the tunnels reopened as the Jersey War Tunnels in 2005 they focused on telling the story of the Occupation from the perspective of the

occupied and the political prisoners, forced and slave workers and other victims of Nazism. A similar motive to commemorate those who were forced into work drove the redevelopment and reopening in 2001 of the museum at La Hougue Bie; the creator of the Forced Worker memorial, Maurice Blik (born 1939), is a survivor of Belsen. Both took place during the period that Philip Bailhache was Bailiff of Jersey (1995-2009), when increasing recognition was accorded to Organisation Todt's workforce and victims of Nazism ((Carr 2014, 222 and 229-32). Members of the CIOS, following on from the interviews conducted by Michael Ginns for his work on Organisation Todt (Ginns 1994), have continued to interview and document their experiences (for example in Amy 2021 for Corbière and Burnal 2015, 121-127, for Lothringen). This points the way towards the reconciling of different ways of commemorating those who suffered, and use the memories of all those involved (including those of servicemen who returned and often befriended islanders after the war) to develop a balanced approach to interpreting these places in an ethical and sensitive manner (Carr 2010b, 80 and 82). Jersey is also now included on the Liberation Route Europe (<https://www.liberationroute.com>), which provides themed routes and stories from the war for a new generation as part of a European network of sites.

RESEARCH AGENDA

The Research Agenda suggests research questions and activities which are numbered so that they relate to the relevant topics and sub-sections of the Resource Assessment. It must be emphasised

that these are suggestions at this stage, in order to stimulate thinking for all those who are wishing to contribute to future research priorities.

THEME 1 IMPROVING UNDERSTANDING

As the introduction to this chapter has stressed, Jersey and the Channel Islands have been exceptionally fortunate in the groups and individuals who have spearheaded the understanding, conservation and diverse approaches to its military heritage (both in

terms of defence works and the impact of military activity on its island communities) since the 1970s, and in many respects at a more advanced stage than other early and ongoing work on this subject.

TOPIC 1 THE EARLY TO MID-TWENTIETH CENTURY, 1900-1940

1900-1914

RQ 1.1A: What is the documentary evidence for the coastal batteries – approaches to their planning, their strategic context and how they conform or differ from standard designs.

Activities: There are records in the National Archives of

Fort Records Books, drawings including maps and plans may remain in War Office and Admiralty papers, those of the Home Ports Defence Committee, the Committee for Imperial Defence, and Defence Schemes for ports with accompanying Approved Armaments rosters.

The First World War

RQ 1.2A: What remaining evidence is there for rural militia arsenals and for the training of Militia, Officer Training Corps and regular forces in the landscape?

Activities: Review records in La Société Jersiaise and the Jersey Archives for Militia and OTC; review records in the National Archives and the Staffordshire Museum for the activity of the South Staffordshire Regiment. Any analysis of Lidar and aerial photography will be integral to use of the same sources for identifying the evidence for training in the inter-war period and in the Second World War; cap badges, buttons and other finds will offer an indication of units in these landscapes.

prisoner of war camp at Les Blanchettes?

Activities: target excavation, a critical first step being to consult with key researchers (Carr, Mytum et al) to consider exactly what areas could be targeted given the depth of research cited in Topic 1 and also the Lidar photography.

RQ 1.2C: Is there any evidence for internees working in the wider landscape?

Activities: This can survive in the form of graffiti in farm buildings and houses, and in chance finds of items such as uniform badges.

RQ 1.2B: What further evidence is there for the

RQ 1.2D What evidence is there for adaptation and use of existing defences by the Militia?

Activities: Examine in La Société Jersiaise and the Jersey Archives and match these to any surviving evidence.

The inter-war period and the outset of the Second World War

RQ 1.3A. Can more be known about the thinking behind the design and siting of memorials in public spaces, in places of worship, work and education?

Activities: Jersey Archives and newspaper accounts will offer insights into how the States

and the island's various communities, and specific individuals, sought to commemorate those who fell and served in the First World War.

RQ 1.3B: What is the evidence for military activity in the inter-war period and up to June 1940?

Activities: It would be useful to look at strategic Cabinet and military papers, particularly relevant being those of the Committee for Imperial Defence, the War Office and the Admiralty, which show how Jersey and the Channel Islands fitted within the overall plans for rearmament including the establishment of the Royal Naval Air Station and whether any new infrastructure was intended or not.

TOPIC 2 GERMAN MILITARY SITES OF THE OCCUPATION, 1940-1945

Chronology

Whilst the development of the fortification programme is known in broad terms, a diversity of sources are needed to unravel the sequence of building in more precise terms; individual studies such as those for Strongpoint Le Grouin (Fern 2017), Plémont (Costard 2015b), Strongpoint Corbière (Amy 2021) and ongoing work by Paul Burnal in the different defence sectors (commenced in Defence Sector East, Burnal 2020) is showing how this can be done by using a combination of fieldwork, examination of maps and aerial photography and analysis of requisitioning records. Many of these records are held in the Jersey Archive – for example requisitioning files in the Jersey Archive (D/Z/K), German and Allied maps including the SHAEF plans that show fortifications based on aerial reconnaissance and other intelligence. Some of these maps and a map of the different types of military site are readily available from the Jersey Bunker Tours website (<https://www.jerseybunkertours.com>).

RQ 2.1A: How did strategic thinking regarding the timing of the fortifications programme

develop, and how did it respond to Hitler's directives and the European theatre of war?

Activities: Use maps and available T-files (from US Archives copied to the Jersey Archive) to establish how the fortifications programme developed, thus offering a more detailed framework for understanding how and when the programme evolved.

RQ 2.1B : How do the recorded dates of sites relate to this strategic context and to the SHAEF maps and report produced in the summer of 1944?

Activities: Examine the results of individual surveys and see if the dates of structures affirm or contradict these broad patterns.

RQ 2.1C: What further evidence is there for the symbolic value of Jersey and Channel Island fortifications?

Activities: This is to a greater extent dependant on reviewing publications on Hitler's circle, and the thinking at a senior level revealed by command papers in the United States Archives.

The legacy of forced and slave labour

Fortifications are, in view of the fragmentary nature of the evidence for the camps in which labourers were housed, a tangible expression of the hard work and suffering endured by forced and slave labourers which demands consideration in an international context; the more fragile legacy of the camps in which they were housed has been largely swept away and neglected (Carr 2014, 156-166). Gilly Carr has emphasised the importance of raising awareness, including through using excavation as a means to rediscover and prompt dialogue and debate; collaboration with detectorists, for example, may help to reveal artefacts on sites of which there is little or no tangible trace (Carr 2014, 173-6 and pers. comm.). Approaches towards understanding the characteristics of camps and the legacy of forced and slave workers (layout of camps, the way that workers fashioned objects for survival from what came to hand) also merit consideration in a wider European and global context (e.g. Carr and Jasinski 2013 and 2014, Carr and Mytum 2012, Carr 2017b, Carr 2019a; Carr and Pistol 2022; Carr 2022).

RQ 2.2A: How can we better integrate understanding of the legacy of forced and slave labour with fortifications?

Activities: Examine Organisation Todt and other archives in order to better identify the home countries

and origins those working on specific fortifications.

RQ 2.2B: How can we develop a better understanding of the legacy of workers' camps, and where possible related types of recovered objects to the categories of people that inhabited these camps?

Activities: Build on work by local and university-based researchers to continue work at Lager Wick and to also investigate other sites where there are remains and indications of archaeological potential. Also compare wartime and immediately post-war aerial photographic evidence to establish a typology of different camps and their levels of survival.

RQ 2.2C: What evidence has the workforce left in fortifications?

Activities: Develop a catalogue of recorded graffiti and other marks, and explore how in the course of future work further examples can be identified.

RQ 2.2D: How and to what extent was local labour involved?

Activities: Build on the work of Michael Ginns to explore in further depth how local firms were involved, and how their involvement changed as the fortification programme changed and became more reliant on forced and slave labour.

Design and construction

Issues within this sub-topic focus on the extent to which Jersey and the Channel Islands developed distinct designs, predating and differing from those elsewhere on the Atlantic Wall, the consumption of resources embodied by structures of different types and built to different constructional standards and the tension between standard and non-standard design.

RQ 2.3A: Which Regelbau and non-standard designs are specific to the Channel Islands and why? In there any evidence for the islands being a testing ground for developing new designs?

Activities: Bring together available Fortress

Engineer reports and Organisation Todt archives, including those in the Bundesarchiv, in order to throw more light on the design process.

RQ 2.3B: How did the consumption of resources change over time?

Activities: Examine the resources consumed by different bunker types, and the extent to which these reflect strategic considerations and also the increased shortages of later 1943 and early 1944. Consider whether standards of construction of standard types and non-standard types of a similar function change over time, reflecting the increased pressure on resources.

Siting and Types

This subject has received considerable attention from the writers cited in the text of the Resource Assessment, with Paul Burnal's work in Defence Sector East (Burnal 2020) showing how the range of sources used can be applied to other parts of Jersey. As a result the historic character of some types of site and structure are well-understood: (coast artillery and army divisional batteries with their control and observation posts, casemates for medium to light guns, machine gun and mortar positions, searchlight shelters, minefield detonation bunkers, anti-tank walls and also command, control and communications). There is naturally a close relationship here to some of the questions posed under 2.1 (Chronology). Less well-understood is how whole sites are composed of different elements, and relate to the broader narratives of how the fortification programme developed as part of the Atlantic Wall, although the way ahead has been indicated by some of the excellent research of members of the CIOS and others. Work on military communications and related civil infrastructure (see Cocroft 2013) likewise suggests that Jersey has an outstanding survival representative of developments in this technology.

RQ 2.4 A: How can we deepen our understanding of:

1. key defence sites (coastal and army artillery sites, Strongpoints, Resistance Nests and Action Posts, and headquarters) as whole sites and for signs of military activity in the landscapes around them - buried structures, hard-standings for temporary and other structures, access roads and other features
2. sites in the wider landscape - fieldworks, ammunition stores and anti-aircraft sites
3. tunnels where these are safe to access
4. anti-tank ditches, the most obvious example being those flanking the natural obstacle of St Ouen's Pond
5. the airfield and its related structures (how its landscape developed, evidence for adaptation of the terminal, hangars and any perimeter defences)
6. any evidence for ship and aircraft wrecks in coastal waters

Activities: use archival research and remote sensing as a framework for further investigation.

TOPIC 3: INTERNMENT, RESISTANCE AND ARTEFACTS, 1940-1945

Prisoners of war

RQ 3.2 A: How can we develop a better understanding of the legacy of the PoW camp at South Hill?

Activities: Consider investigation using the

same techniques as for RQ 3.1A, and within the context of recent and ongoing work internationally (see e.g. Mytum and Carr 2012).

Places of internment and resistance

Whilst armed resistance and its legacy of field remains and destroyed settlements (see e.g. De Nardi 2017) was not possible in the Channel Islands, there were other forms of resistance with risks of interrogation, internment and punishment by the occupying forces.

RQ 3.3A: What remaining evidence is there

for internment and resistance?

Activities: Use the HER and recent scholarship as cited in the Resource Assessment to develop a richer record – documentary and through drawn survey – of all sites associated with internment and resistance.

Objects

All aspects under this heading, including how objects evoke and illustrate the needs and responses of all communities within wartime Jersey, merit consideration within the context of scholarship that has examined the remains of Occupation within Jersey as cited in the Resource Assessment and internationally (e.g. Myers and Moshenska 2011; Carr and McAttackney 2011; Postiglione and Bassanelli 2012; Bernbeck and Pollock, 2018). Objects are displayed in significant collections around Jersey, representing the dedication of islanders to collecting all forms of objects and memorabilia that focuses on the artefacts of the German military and civilian occupation (in particular the bunkers restored by the CIOS and the

Channel Islands Military Museum) and all aspects of Occupation life in the collection of the Jersey Museum (<https://catalogue.jerseyheritage.org>).

RQ 3.4 How can we better understand the meaning, range and variety of range of objects from the Occupation?

Activities: Build on scholarship by Gilly Carr, including consideration of the different categories of artefacts (Carr 2009, 37-41), to establish a working group representing different interests to set out the types and meaning of objects and collection items remaining from the Occupation.

TOPIC 4: LANDSCAPES OF THE OCCUPATION, 1940-1945

Although relatively unaffected by aerial bombardment, Jersey's small size meant that it was profoundly affected by the high intensity of wartime activity. As in the UK, where 20% of land fell into military use, large areas of land as well as buildings were requisitioned

– with consequences for mineral resources, water supply, cultural heritage and land use combined with habitats (and issue to be explored in Topic 6.

RQ 4.1A: What effect did requisitioning for military purposes have upon buildings and landscapes?



Figure 9. Resistance Nest Le Braye : The comparison of aerial photographs of different dates, and comparison with Lidar imagery, is a useful tool to inform future investigation of fieldworks in particular. This RAF aerial photograph taken in March 1945 shows the area extending from the First World War PoW camp at Les Blanchés Banques (to right) to the Resistance Nest at Le Braye. To either side of the slipway, which can be seen projecting into the sea, are a Type 631b casemate facing north and a non-standard single-room casemate facing south; there are also three gun positions to either side of the slipway and two 1938-pattern personnel shelters, as used on the West Wall, of which one to the south of the car park is partly still visible. The photograph clearly shows the trench systems and perimeter defences around the site. (NCAP-000-000-364-197).

Activities: Examine the Jersey Archive and the National Archives in Kew for records of requisitioning and applications for compensation, and where possible record the evidence for damage and alterations.

RQ 4.2A: What evidence may remain around quarry sites for artefacts left by workers?

Activities: Consider the potential for remains in any works around quarry sites.

RQ 4.2B : As a result of quarrying and export to construction sites, what is now the pattern of construction using materials from different places across the island?

Activities: Consider integration of this question into any future geological work across Jersey.

RQ 4.3A: Where else along the Atlantic Wall does this evidence for energy stations and reservoirs exist?

Activities: Consider integration of this question into any future work that compares the Jersey and Channel Islands legacy to other parts of the Atlantic Wall.

RQ 4.4A: What effect did the demands of the Occupation have farmsteads, farmland and woodland?

Activities: Consider integration of this question into any future recording of historic buildings prior to alteration, compare the 1935 OS maps to 1945 and immediate post-war aerial photography to determine the extent of any landscape change

RQ 4.5: What effect did aerial activity and counter-measures have on the housing and building stock?

Activities: Consider integration of this question into any future recording of historic buildings prior to alteration, ensuring that evidence of damage and of air raid shelters is recorded, compare the 1935 OS maps to 1945 and immediate post-war aerial photography to determine the extent of any landscape change

RQ 4.6: Is there evidence for an official approach on the part of German military and civilian administration, and the States and La Société Jersiaise, to Jersey's cultural heritage?

Activities: examine documents in Jersey Archive and La Société Jersiaise library, and any relevant newspaper extracts, and relate where mentioned to the physical evidence.

TOPIC 5: THE COLD WAR, 1946-1989

RQ 5A Promote further research into the Springfield bunker and other Cold War sites, how – in view of how they were adapted from German military structures – do they differ from other standard type designs as used elsewhere in the UK and how similar are they to those adapted elsewhere from German fortifications?

Activities: Examine archival sources held by the Société Jersiaise and the Jersey Archives (Defence Committee minutes are closed for 75 years and permission would be required from the States to access them); involve all those involved in an oral history project.

TOPIC 6: COMMEMORATING, CONSERVING AND INTERPRETING THE LEGACY OF OCCUPATION

This is a topic which demands great sensitivity as there are so many perspectives to consider. Different ways of commemorating the Occupation, from remembrance of the victims of Nazi ideology to the legacy of the occupier in the form of fortifications and the immense amount of work invested by members of the CIOs and others in their restoration, are inextricably bound up with the strong identity

and pride of islanders (Carr 2018b). Articulating the diverse ways in which people engage with heritage, and using the historic environment as a framework against and within which people can set out what they value and why, has been an established part of heritage practice in many parts of the world for over a generation (see e.g. Clark 2001), and there are examples of its application in the UK (e.g. Lake and Hutchings,

2009). The importance of recognising bunkers and tunnels as sites of 'both perpetration and victimhood' (Carr 2014, 135) has been further underlined by consideration of the less tangible, and comparatively neglected, legacy of the camps which housed the forced and slave workers who built so many of them. There are opportunities here for a balanced approach that by reflecting on all aspects of the Occupation, and considering Jersey in its broader international context, can set new standards for ethical tourism through using the heritage of bunkers and collections

as material for discussion and moving forward (Carr 2010b, 86; 2014, 127-8). There are clear opportunities for articulating a broad range of community values and ethical issues in interpreting sites - for example in the role of forced and slave labour and other aspects of 'dark heritage', in addition to broader consideration of the thinking behind their deployment and design and their meaning to islanders including those who have spent so many hours dedicated their restoration and interpretation (see also Carr 2014, 239-295).

Memorials and remembrance

RQ 6.1A: What further work should be done to commemorate the Occupation?

Activities: This can only be done through careful consideration involving the local community.

Disposal, reuse and conservation

RQ 6.2A: Document the story of how official and public attitudes, in which the CIOS played a key part, developed since 1945 with regard to newly-built German fortifications and those adapted from historic fortifications; this should include how attitudes towards the conservation of key sites changed, and the timings of designations.

Activities: examine relevant States archives and the CIOS Collection in the Jersey Archive, and involve all those involved in an oral history project.

- *considering how its value to people can be explored, including the many ways in which this legacy evokes an emotional response and can be interpreted to the local community and to visitors*
- *setting out its value to the local economy*
- *setting out its value to nature and habitats, given that many sites are in significant habitats, including SSIs, and have the potential to be used as habitats and also vantage points from which to enjoy and celebrate the island's natural environment and wildlife.*

RQ 6.2B What are the ways in which the diverse legacy of the Occupation should be valued and interpreted?

Activities: Consider the various ways in which values can be explored, for example through:

- *considering the contribution that this legacy makes as evidence (its evidential value) alongside written sources and oral testimonies*
- *exploring the historic value of this legacy*
- *how all types of site illustrate and are associated with the Occupation.*

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