Chris Barrington Brown, The Logistic Build-Up to D-Day

General Omar Bradley is credited with the phrase ‘Amateurs talk Tactics, Professionals study Logistics’. The invasion of Normandy was successful because of the logistics behind it. Once a decision on where the invasion was to take place had been decided, the logistics of ‘how’ dominated the planning. As a background to the remainder of the day’s presentations, Chris Barrington Brown will outline the build up of men and materiel, the decision on which ports and hards would be used, the mechanism of initially Concentrating, Marshalling and Embarking the troops, and how the Build Up was managed with its constantly changing requirements from the far side, availability of shipping and uncertainty of the weather. Drawing on documents and maps from national archives in UK, USA and Canada, plus military museums and county record offices he will set the scene on how the land component of the invasion force was prepared and equipped before the naval and air forces carried them into battle.

Biography

Chris Barrington Brown served nearly 45 years in the British Army, Regular and Reserve. For 30 years he founded and ran a computer software business using geo-spatial data and analysis to solve Defence and Counter-Terrorism problems worldwide. Since retiring in June 2022, he has used his previous experience to research the logistic build up to D-Day in the UK in the first half of 1944. The main output of that research is a website (www.ddaybuildup.info) which shows users how the logistics worked, where installations were located, and which units were where and when. When not researching he is an average orienteer, makes maps for Gunner history publications, and is on the Council of the Defence Surveyors Association. He lives in Romsey, Hampshire.

The picture of the Ammo Dump shelters is from the USA National Archives and Records Administration, and free to use. They were temporary, although some had a concrete base rather than the normal wooden pallets. One dump just south of Wokingham, with two other dumps nearby, formed No.2 Ammunition Supply Depot, holding 144,000 tons, including Chemical Weapons.
The Marston Magna map shows where such Ammo shelters were placed in the huge area between Wincanton and Yeovil. The Marston Magna depot held 45,000 tons of US ammunition in the months before D-Day.

The background mapping is courtesy Ordnance Survey, under their Open Data license, and the data on it is from my website.

The REME diagram of Area J around Brighton is taken at, and used by permission of, REME Museum (previously, but now out of, Crown Copyright)

**Dr Ian Buxton MBE, Building the Tank Landing Craft**

Some 1,300 tank landing craft were built in Britain between 1940 and 1945. Designed by Rowland Baker, they ranged from the 226-ton LCT Mark 1 to the 657-ton Mark 8. Early craft were built by regular shipbuilders, but to produce the numbers required structural engineers were brought in to build most of these flat-bottomed craft. Their construction of these poorly documented craft took up around a quarter of warship production resources in peak years. Making the thousands of 500 bhp Davey Paxman diesel engines sometimes created a bottleneck. The regular shipbuilders were brought back to build LCT 3s for D-Day, which included LCT.7074. Despite being considered short life, many went on to have long lives post war when converted for civilian use.

The paper records their construction, with builders, construction times and costs, with supporting statistics and graphs.

**Biography**

Ian L Buxton MBE, BSc, PhD, FRINA graduated in naval architecture from Glasgow University and served his apprenticeship at the Denny shipyard on the Clyde. Much of his professional work was associated with computer aided design and maritime economics. He held the position of Reader in Marine Transport in the Department of Marine Technology at the University of Newcastle upon Tyne from 1974–2002. He is currently a Vice President of the World Ship Society, taking a great interest in maritime history and writing on ships, shipbuilding and shipbreaking. Naval books include *Big Gun Monitors*, *The Battleship Builders*, and *Battleship Duke of York*. Ian manages the Marine Technology Special Collection at Newcastle University, an archive of shipbuilding and related material and its associated British Shipbuilding Database of 81,000 British built ships.
The Normandy invasion required air, land, and sea forces from the United States and the United Kingdom working in a coordinated and synergistic fashion. However, this amphibious assault was possible only through the collective preparatory efforts of both the Americans and their British Allies. While these nations worked side-by-side in the Mediterranean Theater, the Overlord operation required significantly more coordination, communication, and host nation support. Given this task the two nations had to determine training requirements, come to an understanding of staff functioning, and establish associated logistical requirements for the combined ground and naval forces staging on the British Isles. Furthermore, the influx of American forces and their pre-assault training seriously taxed United Kingdom’s limited resources.

This paper will address how the United States worked with its British counterparts to deploy, train, and equip US forces in the United Kingdom for the cross-channel invasion. Specifically: How did the US and Royal navies coordinate port use, maintenance, berthing, and training requirements for the Neptune flotilla? What were the amphibious training requirements for US forces and how were they addressed/executed in the months preceding the assault? What were the implications on the British subject and their holdings to accommodate the arrival of the “Yanks”? Finally, how did the two nations come to a mutual understanding regarding doctrine and staff functioning?

This paper aims to provide a more focused look at how the two Allies prepared and established a unified amphibious effort, coordinated pre-assault training requirements, and came to a common understanding in preparation for this most important assault of the European Theater of Operations.

Biography

John Curatola is the Samuel Zemurray Stone Senior Historian at the National World War II Museum in New Orleans, Louisiana. A Marine Corps officer of 22 years, he graduated from the University of Nebraska and was commissioned a Second Lieutenant. He is a veteran of Operation Provide Hope in Somalia, Operation Iraqi Freedom, and the 2005 Indian Ocean tsunami relief effort. He holds masters’ degrees in both American and Military History. With a PhD from the University of Kansas, John’s research focuses upon World War II, airpower, and the early Cold War period. Previously he taught history at the US Army’s Command and General Staff College at Fort Leavenworth, Kansas. His first book Bigger Bombs for a Brighter Tomorrow addressed the nature of the American atomic monopoly with his latest entitled, Autumn of Our Discontent, assessing US national security policy development in 1950. His forthcoming book Armies Afloat addresses how the US developed an amphibious assault capability for the European Theater of Operations during World War II. Additionally, his many works are available in compendium books, popular magazines, and academic journals with his presentations and lectures available for viewing on CSPAN and YouTube.
Dr Andrew Jeffrey, From Operation Claymore to the Normandy decision: The critical role of Scotland’s Combined Operations bases in Allied preparations for D-Day

Drawing on British, American and Canadian sources and well-illustrated, this paper will set out the key role of Scotland’s Combined Training Centres in developing the littoral warfare capability and hardware that would spearhead Allied landings in North Africa, Sicily, Italy and Normandy.

No. 1 Combined Training Centre commissioned at Inveraray, Loch Fyne, in 1940. In March 1941, six months after the first unit began training, CTC Inveraray and its naval base, HMS Quebec, mounted Operation Claymore, a raid on the Lofoten Islands by 3 and 4 Commando. Other all-arms operations in which Inveraray was heavily involved included Gauntlet, Anklet, Archery and Biting.

In 1942, as the Allied focus shifted to permanent, sustainable landings, the Clyde training facilities expanded to include a major landing craft base on the Ardlamont peninsula and extensive beach landing schools on the Renfrewshire and Ayrshire coasts. Some sense of scale can be gained from the fact that, despite daunting challenges, more than 250,000 British and Allied trainees passed through CTC Inveraray alone, some 61,500 landing craft crew were trained and 4.96 million military personnel movements were recorded in and out of the Clyde.¹

The paper will examine the pivotal ‘Rattle’ conference held at HMS Warren, the headquarters of Vice-Admiral Combined Training in Largs, in June 1943. Partly thanks to wavering Allied commanders present having their minds concentrated by the outbound Operation Husky assault convoy KMF1 sailing past, it was this conference, held around the swimming pool of the former Hollywood Hotel, that took the decision to land in Normandy in 1944.² The Hollywood Hotel is long gone, but the paper will conclude with notable examples of surviving CTC infrastructure.

Biography

Dr Andrew Jeffrey has a history Ph.D. from St Andrews University. He has written extensively on military and maritime history and his published work includes a trilogy on Scotland’s role in the Second World War. Media work has included British, Dutch and French documentaries. He recently completed a consultancy at Dundee Museum and is working with the Dutch Navy in their search for the submarine O-13 lost in 1940.


² The National Archives, DEFE 2/529, DEFE 2/530; General Sir Frederick E. Morgan, Overture to Overlord, Doubleday, 1950, p. 143.
A former sea fisherman, Royal Navy reservist and RNLI lifeboat coxswain, Dr Jeffrey led the Dundee International Submarine Memorial project to completion in 2009. [https://www.facebook.com/profile.php?id=100064563436799](https://www.facebook.com/profile.php?id=100064563436799)


Operation Claymore – first steps on the road to Normandy.

Watched by Norwegian civilians, No. 4 Commando re-embarking in landing craft from the assault ship Queen Emma at Svolvær in the Lofoten Islands at the end of Operation Claymore on 4 March 1941. Claymore was launched from Scotland using 3 and 4 Commando, the first two units to have passed through No.1 Combined Training Centre at Inveraray in Argyll, as the landing force.

Scotland’s Combined Training Centres were central to the creation of the Allied amphibious warfare capability that, less than two years after Claymore, would make the first large scale permanent landings in North Africa. And the potent force created in those remote Scottish sea lochs would go on to spearhead the much greater Allied landings that followed.

Free to use © Lofoten Krigsminnemuseum, Svolvær.

Matthew Mackmin MBA, MSc, Operation NEPTUNE and the Combined Operations Experimental Establishment

The Combined Operations Experimental Establishment (COXE) was formed by Louis Mountbatten as the Chief of Combined Operations in the autumn of 1942 to support the development of specialist materiel and technique for amphibious assault. An evolution of the various Technical and Development centres that already existed within Combined Operations, this organisation was deliberately located in the Instow area of North Devon due to the similarities in the geography and topography of the beaches to those of Northern France, as well as the similar climatic conditions these experienced. Operating from dedicated facilities in Appledore, Barnstaple and the surrounding area, as well as from several beach training areas, COXE engaged in extensive research and development of landing craft materiel and the specialist technique required to command and operate these craft on the shallow and gentle sloping beaches of Normandy.

This presentation will examine the circumstances of the establishment of COXE alongside the rationale for its location and the development of facilities in the
It will examine work carried out at these facilities in support of Operation NEPTUNE, including with Allied partners, to develop landing craft materiel, the techniques that would be necessary to operate that materiel successfully on the beaches of Normandy, and in the disembarking (including waterproofing, wading) of both armour and personnel under fire. Further, it will examine the work conducted by the establishment on the clearance of underwater obstacles and beach clearance, including the recovery of stranded landing craft. It will also look at the research and experimental work conducted at the establishment in support of the 79th Armoured division in the development of ‘Hobart’s Funnies’, the specialist armoured vehicles used in the initial assault phase of the Normandy landings.

Biography

Matthew Mackmin is an amateur Naval historian and a graduate of the Naval History MA at the University of Portsmouth. Matt’s thesis paper on the work of the Combined Operations Experimental Establishment and their work to support the Normandy Landings was based on original research of the previously uncatalogued ‘Instow’ collection conducted at the NMRN Portsmouth where Matt is a volunteer.

Matt earned an MBA from Henley Business School, and an MSc in Resilience from Cranfield University, where his thesis paper won the Security Institute’s ‘Wilf Knight’ award. Matt holds a Bachelor of Science degree in Computing and Mathematical Sciences.

Andy Skinner, Southampton and the Preparations for Operation Overlord

The port of Southampton played a crucial and decisive role in build-up to the Allied invasion of Occupied Europe in June 1944, and in the succeeding months as the campaign to liberate the continent reached its conclusion.

On D-Day, tens of thousands of British and Canadian troops passed through the town and in the subsequent months a total of 3.5 million personnel embarked from the port, including over 2 million American soldiers. In the two months after D-Day, nearly 687,000 men and over 140,000 vehicles transited from Southampton on 3,517 vessels. This incredible feat did not occur in isolation, but rather was the result of over two years of careful planning and preparation that impacted every quarter of Southampton, and hundreds of years of development into the country’s primary military port.

In addition to being a major point of departure, many other facets of Operation Overlord planning were in Southampton: the town became the headquarters of the US Army 14th Major Port, a control centre for the British Army, a site of planning for PLUTO, and a construction base for parts of Mulberry Harbours.

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3 Including Appledore, Barnstaple, Bideford, Fremington, Instow, Braunton Burrows, and the beaches of Croyde, Saunton, Instow, and Westward Ho!
In short, almost every aspect of the preparation for D-Day involved Southampton in some way.

This paper will present a synthesis of the known history of Southampton’s role as an embarkation port and will present new research on aspects of the campaign, based primarily on Southampton City Council’s archive. It will focus on the preparations in Southampton before D-Day itself, with specific reference to the establishment of military infrastructures and administrations in the town, in addition to some of the surviving features that speak of the vital part that Southampton played in the Greatest Day.

Biography

Holding academic degrees from the University of Southampton and the University of Leicester, Andy Skinner is a public historian and educator based in Southampton, UK. In his capacity as a Learning & Engagement Officer at SeaCity Museum he shares the story of the port city of Southampton across a range of audiences.

Andy presents lectures widely and regularly delivers walking tours in the Southampton area. In addition, he has been featured in several media features and documentaries. He has written several publications about the history of Southampton, including Regal Southampton and Medieval Southampton and the Wool Trade.

Andy Skinner website: https://andyvskinner.wordpress.com/

Dr Jacob Thomas-Llewellyn Prefabricating Victory: The Design and Development of the MULBERRY Harbours, 1942–1944

Fabricating novel (20th century) assault port components inside a Victorian dock was challenging – even for some of Britain’s established civil engineers. Chronicling unpublished commercial files, private papers and photographs, the story of how London’s East India Docks together with other sites across southern England, were allocated, refurbished and utilised can be explained.

An examination of how the civil engineering industry organised itself, how priorities were set against taught deadlines and the work conditions, provide lessons for contemporary national constructions where time, cost and performance remain critical.

The contribution of the East India Docks to Project MULBERRY cannot be overstated. The historiography illustrates that port infrastructure, a finite asset in 1943, needed significant expertise and investment to bring it up to specification – all this before construction of the MULBERRY components could commence.

This paper and associated presentation will reveal elements of Project MULBERRY which have not entered into the public domain, including extracts from the private diaries of employees from well-known civil engineering contractors. Additionally, a secret contingency plan, codenamed SHARK, which was overseen by the British engineer, Allan Beckett, will be outlined to illustrate
how MULBERRY engineers were given the additional task of devising port contingency options should the artificial harbours fail.

This paper ultimately benefits from over four years of unpublished primary doctoral research examining in detail the success and failures encountered in fabricating the MULBERRY harbour components.

Biography

Dr Jacob Thomas-Llewellyn received his doctorate from the Department of History at the University of Reading. The basis of his thesis was the study of British wartime industrial mobilisation and the influence of logistics on the decision making and planning for Operation OVERLORD with a specific focus on the development of the prefabricated Mulberry Harbours and the Pipeline Under the Ocean (PLUTO). He is currently a full-time lecturer with the Department of Politics and International Relations, University of Reading. He has authored numerous articles ranging from medieval warfare to Artificial Intelligence. His first book on the English Revolution and the 1643 Storming of Alton is planned for publication in 2025.

Dr Adrian Webb, The road to D-Day: The Hydrographic Department’s role in supplying Allied Forces

The impending war made the Hydrographer of the Navy make plans to deal with unprecedented demand for charts and publications, the like of which his department had never seen before. Thus, a new purpose-built chart making factory was constructed in Taunton. Opened in 1941, this unique edifice was capable of printing hundreds of thousands of navigational charts and publications that were key to all Royal Navy operations. The biggest single challenge faced by the Department was to meet the demands for D-Day.

Captain Kenneth St Barbe Collins was the Department’s focal point for all matters relating to navigation and the supply of products. Through him the Surveying Service, chart compilers based at Bath and the Production staff based mainly at Taunton, were tasked with unprecedented tasks. For example, surveyors undertook clandestine hydrographic surveys of the areas for the landings and for positioning the Mulberry Harbours. Chart Branch compilers produced numerous new products, worked around the clock and dealt with the Baedeker problem. Production staff printed the photographic coastal profiles of the landing beaches, of whom two ladies who undertook this task are still alive.

The resulting figures of charts produced by the Department are staggering as in 1938 only 1,104,671 were issued, compared with 6,897,736 in 1944. During the war 30,727,000 charts and diagrams were supplied to 4,969 vessels from fourteen allied countries, compared with an average of 3,500,000 over a similar period in peacetime. This had a tremendous knock-on effect for chart correcting staff in the Department who in 1938 made 181,403 corrections compared with
1,617,677 in 1944 and 1,558,170 in 1945. This was, without doubt, the Department’s finest hour. The story of their secret chart making activities has not been told in full until the publication of my book – “Churchill’s Secret Chart Makers: The Road to D-Day and Beyond in Somerset, 1939–1945”.

**Biography**

Former Head of the UKHO Archive, Adrian is a freelance researcher and consultant. He holds an MA and PhD from the University of Exeter in Naval History. He produced and edited the Maritime History of Somerset series, authored Thomas Hurd RN and his hydrographic survey of Bermuda, 1789–1797, as well as Charts and surveys of the Somerset coast, c.1350–1824. He has lectured on numerous hydrographic subjects and is currently working on an edition of Lieutenant Henry Mangles Denham’s correspondence during his survey of the Bristol Channel.

Adrian hopes to have his book on the war-time activities of the UKHO staff in print by May. His website in progress: [www.somersethistory.com](http://www.somersethistory.com). His Facebook page about Somerset maps and charts: [www.facebook.com/somersetmapsandcharts/](http://www.facebook.com/somersetmapsandcharts/). He also edits the Somerset section of Somerset & Dorset Notes & Queries - going since 1888: [www.sdnq.org.uk/](http://www.sdnq.org.uk/)

Adrian Webb, *Churchill’s Secret Chart Makers* (book cover)

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Neptune Chart, Juno Area, 1944, from an Assault Map for D-Day printed by the British Hydrographic Department. It is in the public domain on the US National Army Museum website and out of copyright as it was published in 1944.