NO ROSES ON A SAILOR'S GRAVE

Report of Search for

WW2 Landing Craft Headquarters LCH 185, Normandy

Southsea Sub-Aqua Club | BSAC Branch 0009

December 2018

Front cover image ‘Roses on a Sailor’s Grave’ Normandy

There are no roses on a sailor’s grave,

nor wreaths upon the storm tossed waves.

No heartbroken words carved in stone,

just shipmates lying there alone.

The only tributes are the seagulls' sweeps,

and tear drops when a loved one weeps.

(Naval Ode, unknown author)

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Summary

The 'No Roses on a Sailor's Grave' project was inspired by the experience of Royal Navy veteran Patrick Thomas, who served aboard the WW2 Landing Craft Headquarters (LCH) 185 during Operation Neptune. The vessel and many of her crew were lost on 25 June 1944 after a striking a mine. Many of Patrick's shipmates lost their lives when the ship sank beneath the waves.

Patrick's dearest wish was to pay his respects to his comrades and our aim is to help him find their last resting place, the wreck of LCH 185. This project was undertaken as part of a larger endeavour helping Patrick honour his friends and tell the story of the tragic events of that day. Archaeologist John Henry Philips, having heard of Patrick's experiences and desire to honour his shipmates, promised that he would find the ship for him and establish a permanent memorial to those who lost their lives on LCH 185. John has kindly contributed to this project and this report.

Patrick's experience of the loss of LCH 185 and John's endeavours to find Patrick's ship were filmed as part of a documentary film produced by Go-Button Media[1]. Having put out an appeal for help on social media Southsea Sub-Aqua Club were approached to help John locate the wreck, believed to be to the eastern end of the Baie de Seine, Normandy. Hydrographer and D-Day expert Chris Howlett identified a wreck site that was a candidate for LCH 185 for investigation. This report documents our findings as a result of our underwater survey of the site in question and our historical research.

In addition to investigating and recording the wreck our project aimed to raise awareness of Operation NEPTUNE and its place in modern history. We also wish to help share Patrick's story and the part recreational divers can play in documenting the historic environment that otherwise remains unseen and potentially forgotten.

Acknowledgements

Our sincere gratitude goes to the many people and organizations who have assisted and supported us in this challenge especially;

- Département des Recherches Archéologiques Subaquatiques et Sous-Marines (DRASSM)[2] In particular, we wish to thank Cécile Sauvage;
- Patrick Thomas; for sharing his experiences with us;

[1] Gobuttonmedia.com a boutique production company based in Canada creating and delivering unique projects for all screen sizes.

[2] The French organization responsible for the management of all subaquatic and submarine archaeological activities. DRASSM is qualified to deal with all matters of archaeological research that involve diving, is charged formally to control submarine archaeological research and discoveries, and to implement the legislation on maritime cultural goods.

- John Henry Phillips; archaeologist, for his support and determination to keep his promise to Patrick Thomas and for his contribution to this report;
- Go Button Media; Producer Daniel Oron and the film/support team and their financial supporters (including crowd funders);
- Chris Howlett – Subject matter expert on the Normandy Campaign and formerly of UKHO, for his advice, support and contribution to this report;
- Stephen Fisher – Historical researcher and archaeologist for his research and contribution to this report;
- Danny Lovell – Subject matter expert and researcher;
- The D-Day Story, Portsmouth[3]. Andrew Whitmarsh, D-Day Museum Development Officer.
- O'Three Dry suits[4], for their generous loan of dry suits and equipment.

Copyright Statement

[3] https://theddaystory.com/
[4] https://www.othree.co.uk/

NO ROSES ON A SAILOR'S GRAVE

1. Introduction

In June 1944, following two years of meticulous planning the city of Portsmouth and other harbour towns along the south coast of England prepared for Operation NEPTUNE[5], the Naval assault phase of Operation OVERLORD, and the largest ever maritime invasion. The Allied fleet of 7,000 ships, vessels and craft with their precious cargo of hundreds of thousands of troops and equipment finally set sail on 5 June 1944 to cross the Channel to Normandy. In the early hours of D-Day on the 6 June 1944, the first soldiers landed on the French beaches code named UTAH, OMAHA, GOLD, JUNO, and SWORD. So began one of the most daring and ambitious campaigns of WW2 which ultimately led to the liberation of France and the end of WW2 in Europe. Many vessels were lost or damaged during Operation NEPTUNE as German defences fought to repel Allied forces. More than 70 years later the wrecks of the Baie de Seine are the last resting place for many who made the ultimate sacrifice for our freedom.

Of the nearly 7000 vessels that took part in the Normandy Campaign many were lost as a result of enemy action, weather, or mines. Thousands of men made the ultimate sacrifice and for many their last resting place is unknown.

This project was centred on one vessel lost on 25 June 1944, namely a British Landing Craft Headquarters (LCH) 185 and those serving aboard at the time of her sinking. Our role was to help find the wreck of LCH 185 and thereby assist in enabling Patrick to honour his friends and shipmates.

1.1 Background

Since 1954 members of Southsea Sub-Aqua Club (SSAC)[6] have enjoyed exploring our underwater world and the history that lays hidden by the depths. Over time our members have contributed much to the recreational diving world and the wider community through their determination, skills and hard work. From the invention of Octopush (underwater hockey) to

[5] The codename for the naval assault phase of Operation OVERLORD.
[6] Established in April 1954 as Branch 0009 of the British Sub Aqua Club (https://www.bsac.com/home/)

the discovery of the historic Tudor flagship 'Mary Rose'[7] SSAC Branch[8] have been one of the most active and productive branches of the British Sub-Aqua Club. For the last ten years the club have been actively recording wrecks along the south coast of England and in particular the wrecks associated with the largest ever maritime invasion; the WW2 wrecks of D-Day and Operation NEPTUNE[9].

It was a natural progression to extend this work to learn more about the Normandy campaign through the investigation and recording of unidentified wrecks of the Baie de Seine believed to be lost during this historic endeavour. In 2017 our Project Cardonnet investigated and recorded several of the WW2 Operation NEPTUNE wrecks on the Banc du Cardonnet, located in the Baie de Seine, Normandy. In order to achieve this the dive team were required to obtain formal permission from the French authorities and also to achieve French commercial diver equivalence certification. The success of Project Cardonnet in recording these wrecks has enabled the dive team to return to Normandy and, having obtained approval, to conduct additional projects, the 'No Roses' project was one of two conducted in Normandy during 2018.

This project was brought about as a result of an enquiry from archaeologist John Henry Phillips to our friend Chris Howlett. John had been researching the story of the loss of LCH 185 which was lost on 25 June 1944. John was keen to locate the wreck of the ship for a veteran Patrick Thomas who was believed to be the sole remaining survivor from the ship and John was determined to locate the wreck and establish a memorial to those lost as a result of her sinking. Patrick had a strong desire to pay his respects to his friends and comrades by laying flowers on the water over the site of the wreck and to say a few words in their honour.

1.2 No Roses on a Sailor's Grave… the Documentary

Go Button Media were creating a documentary film of John and Patrick's story and divers from Southsea Sub-Aqua Club were approached to help locate and identify the wreck of LCH 185. The words from a well-known naval poem that Patrick wished to recite in remembrance of his comrades '*No Roses on a Sailor's Grave*' were chosen as the title of the documentary.

The documentary 'No Roses on a Sailor's Grave' follows Patrick and John as they search for the shipwreck, archaeologically survey and record it, and the plan to build a memorial to the crew that lost their lives. Go Button media, a Toronto based production company, plan to release the film in 2019 and in time for the 75th anniversary of D-Day.

[7] Led by Alexander McKee it was members of SSAC that found and identified the wreck of Henry VIII warship Mary Rose.

[8] www.southseasubaqua.org.uk

[9] Operation NEPTUNE was the maritime phase of Operation OVERLORD - The invasion of Normandy by sea and the liberation of France.

Figure 1. Veteran Patrick Thomas (© Go Button Media).

1.3 The Wreck Site and Survey

In addition to LCH 185 a number of vessels were lost in the anchorage area to the north of Ouistreham including that of Landing Craft Gun (Large) 1062. The wreck site under investigation was documented by DRASSM as LCG (L) 1062. However Chris Howlett considered that the dimensions of the wreck did not appear to align with that of a LCG (L) but the width of the wreck was more consistent with that of a LCI (L) or LCH. The only way to confirm was to conduct a visual survey of the wreck to record any key features that would assist in confirming the identity of the wreck.

2. Project Aims and Objectives

2.1 Project Aim

Our aim was to locate the wreck of British LCH 185 which was reported as sinking to the eastern end of the Baie de Seine, in the area of Sword beach. Our dive team consulted subject matter expert and hydrographer Chris Howlett. With Chris's help we identified a wreck site which might be that of LCH (185). The wreck had been located during a 2013 side scan sonar survey[10] and subsequently recorded using multi-beam by DRASSM[11] in 2017.

2.2 Project Objectives

Our principal objective was to investigate and record wreck possibly that of LCH 185 with the aim of confirming its identity as follows,

Objective 1: to contribute to the knowledge of the archaeological sites through production of a field report and photogrammetry models to assist in the interpretation of the wreck. The resultant documentation may be used to confirm the extent and preservation of the vessel which can become a baseline for future condition surveys. The data will be submitted to DRASSM and may be of use to professional archaeologists, avocational archaeologists, and also for recreational divers who only want to visit the wreck and enjoy the experience.

Objective 2: to confirm or otherwise, the wreck of LCH 185 for Patrick Thomas and to enable, through the support the documentary film, his story and that of his lost comrades to be told in order that they can be remembered today and in the future.

2.3 Permission to Survey

In order to undertake a survey and document the wreck permission must first be sought from the French authorities, namely DRASSM and the Prefecture Maritime. An application, with supporting project plan was submitted on 27 November 2017 and permission was granted on by the Ministry of Culture on 28 March 2018[12] and Prefecture Maritime on 3 April 2018[13] (see Appendix 1).

[10] MC4 and SOS survey
[11] DRASSM reference (EA3151).
[12] Ministère de la Culture OA 3374 date 28 March 2018.
[13] Préfecture Maritime de la Manche et de la mer du nord No 0-9910-2018/PREMAR MANCHE/AEM/NP dated 2 April 2018.

3. Operation NEPTUNE, Force S and Landing Craft Headquarters

3.1 Operation NEPTUNE

On D-Day, 6 June 1944, Allied forces launched a combined naval, air and land assault on Nazi-occupied France[14]. Codenamed Operation 'Overlord', the Allied landings on the Normandy beaches marked the start of a long and costly campaign to liberate north-west Europe from German occupation. Early on 6 June 1944, Allied airborne forces parachuted into drop zones across northern France. Ground troops then landed across five assault beaches; Utah, Omaha, Gold, Juno and Sword. By the end of the day, the Allies had established a foothold along the coast and could begin their advance into France.

The invasion was conducted in two main phases - an airborne assault and amphibious landings. Shortly after midnight on 6th June 1944, over 18,000 Allied paratroopers and gliders were dropped into the invasion area to provide tactical support for infantry divisions on the beaches. Allied air forces flew over 14,000 sorties in support of the landings and, having secured air supremacy prior to the invasion, many of these flights were unchallenged by the Luftwaffe.

Beginning at dawn on 6 June 1944, two naval task forces landed over 132,000 ground troops on the beaches of Normandy as part of Operation 'Neptune', the seaborne invasion of northern France. The target 80 Km (50-mile) stretch of the Normandy coast was divided into five sectors: UTAH, OMAHA, GOLD, JUNO, and SWORD. The Western Task Force was responsible for the American beaches at Utah and Omaha, and the Eastern Task Force was assigned to the British at Gold, Juno and Sword. Within these task forces were five Naval Assault Forces - one for each of the five beaches. The Allied navies bombarded German coastal defences both before and during the landings and continued to provide artillery support after D-Day as troops moved further inland. Nearly 7,000 vessels took part in the invasion.

Naval forces and merchant ships also helped transport men and supplies during the crucial post-invasion build-up. Daily convoys, controlled and guarded by the Royal Navy, brought reinforcements and supplies from England and took casualties and German POWs from France. Between D-Day and the end of Operation 'Neptune' on 30 June 1944, the Allied navies landed over 850,000 men, 148,000 vehicles and 570,000 tons of stores on the beaches. By the time the Battle of Normandy ended in August 1944, these numbers had increased to over 2 million men, 400,000 vehicles and 3 million tons of stores and supplies.

3.2 Force S

SWORD, commonly known as Sword Beach, was the code name for one of the five sectors of the Allied invasion of German-occupied France in the Normandy landings on 6 June 1944 (D-

[14] Source Imperial War Museum web site. https://www.iwm.org.uk/

Day), during World War II. Stretching 8 kilometres (5.0 miles) from Ouistreham to Saint-Aubin-sur-Mer, the beach was the easternmost landing site of the invasion. Taking Sword was to be the responsibility of the British Army with sea transport, mine sweeping, and a naval bombardment force provided by the British Royal Navy as well as elements from Polish, Norwegian and other Allied navies.

Among the five beaches of the operation, Sword is the nearest to Caen, being located around 15 kilometres (9.3 miles) from the goal of the 3rd Infantry Division. The initial landings were achieved with low casualties, but the advance from the beach was slowed by traffic congestion and resistance in heavily defended areas behind the beachhead. Further progress towards Caen was halted by the only armoured counter-attack of D-Day, mounted by the 21st Panzer Division.

Thousands of ships, vessels and of 'S Force' assembled in ports and harbours along the south coast of England, setting sail for the Normandy coast on 5 June 1944.

Figure 2. Two LCH amongst many landing craft assembled in Southampton for Operation Neptune June 1944. © IWM (A 23731).

3.3 The Role of Headquarters Ships and Craft During Operation Neptune

The following extract from the Combined Operations Staff Notebook[15] describes the use of Headquarters Ships and Craft for the exercise of command and control by naval and military commanders;

> *"19. Headquarters ships and craft - The naval and military commanders will exercise command and control of the assault phase, at their various levels, by setting up their joint headquarters afloat in headquarters ships and craft. The RAF (or naval air arm where applicable) will be represented down to and including divisional level (assault force headquarters ship). There will also be an air representative in the reserve brigade headquarters ship acting as stand-by to the assault force headquarters ship.*
>
> *(a) At corps (or army level if applicable), the headquarters ship will be a landing ship headquarters (command) (LSH(C)). It will contain the headquarters of the naval force commander, the corps (or army) commander and the air commander.*
>
> *(b) At divisional level the headquarters will be a landing ship headquarters (large) (LSH (L)) and will be the headquarters of the naval commander assault force, the divisional commander and an air commander or his representative.*
>
> *(c) At the brigade level the headquarters ship will usually be a landing ship headquarters (small) (LSH(S)) and will be the headquarters of the senior officer assault group and the assault brigade commander.*
>
> *(d) At the battalion level the headquarters for the assault will be a landing craft headquarters (LCH) and will contain the deputy senior officer assault group and the assault battalion commander. Headquarters ships and craft are specially fitted for naval, military and air communications."*

Headquarters ships played a vital part in the initial assault but also throughout Operation Neptune.

3.4 Landing Craft Headquarters

The US Navy Landing Craft, Infantry (Large) were ocean-going infantry carriers designed for direct unloading of infantry onto the beach. There were several modifications to the plans during later production including the heightening of the bridge/conning tower and the main mast moving forward.

[15] http://www.combinedops.com/PDFs/COMBINED%20OPERATIONS%20STAFF%20NOTEBOOK.pdf

Some of these ships were later converted to Landing Craft Headquarters for use by both US and British navies. On conversion they retained the same pennant number but prefixed by 'LCH'. Hence LCI (L) 185 became LCH (185).

3.5 Landing Craft Infantry (Large) - LCI (L)

The Landing Craft Infantry (LCI) were several classes of seagoing amphibious assault ships of the Second World War used to land large numbers of infantry directly onto beaches. They were developed in response to a British request for a vessel capable of carrying and landing substantially more troops than their smaller Landing Craft Assault (LCA). The result was a small steel ship that could land 200 troops.

The American designed and built LCI (L) had 3 officers and 21 men to crew the vessel and capacity for transporting 6 officers and 182 enlisted me or 75 tons of cargo. Troops would be landed ashore via two landing ramps, one each side of the bow.

LCI (L) Specification

Length	158' 5 ½"(48.31m)
Beam	23' 3" (7.08m)
Draft (light)	3' 1½" (0.95m)
Displacement	236 t.(light), 264 t.(landing), 419 t.(loaded)
Armament	Four single 20mm guns, one bow mounted, one each port and starboard forward of wheelhouse, one each port and starboard aft of wheelhouse.
Propulsion	Two sets of 4 General Motors 6051 series 71 Diesel engines, 4 per shaft (2 shafts) 1,600 bhp (1,193 kW). Single General Motors Main reduction gears. Two Diesel-drive 30Kw 120V D.C. Ship's Service Generators. Twin variable pitch propellers, 2,320shp
Speed	16 knots (30 km/h)
Range	4,000 nm (7,400 km)

Table 1. US Landing Craft Infantry (Large) general specification. (Source Wikipedia)

Later versions of the LCI (L), which were used by the US forces included modifications to the wheel house (conning tower) which were heighted and changed to a rounded shape.

4. LCI (L) 185 / LCH 185

LCI (L) 185 was launched in December 1942, at Federal Shipbuilding Corp., Port Newark, New Jersey, USA. She was transferred to the Royal Navy on 13 January 1943, under terms of the Lend-Lease Act.

The images below are of LCI (L) 185 prior to her conversion to LCH as Allied invasion troops embark at Tripoli on 4 September 1943 for the invasion of Italy.

Figure 3. Military personnel embarked onto LCI (L) 185 and preparing to sail. (© IWM A19165)

After taking part in the invasion of Italy LCI (L) 185 was converted to a Landing Craft Headquarters (LCH 185) in Chatham, England during November 1943. After conversion the pennant number was retained and LCI (L) 185 became LCH 185.

Figure 4. Boarding LCI (L) 185 (© IWM A19163).

The above image shows the square wheel house of the earlier versions of LCI (L).

4.1 The Conversion to LCH

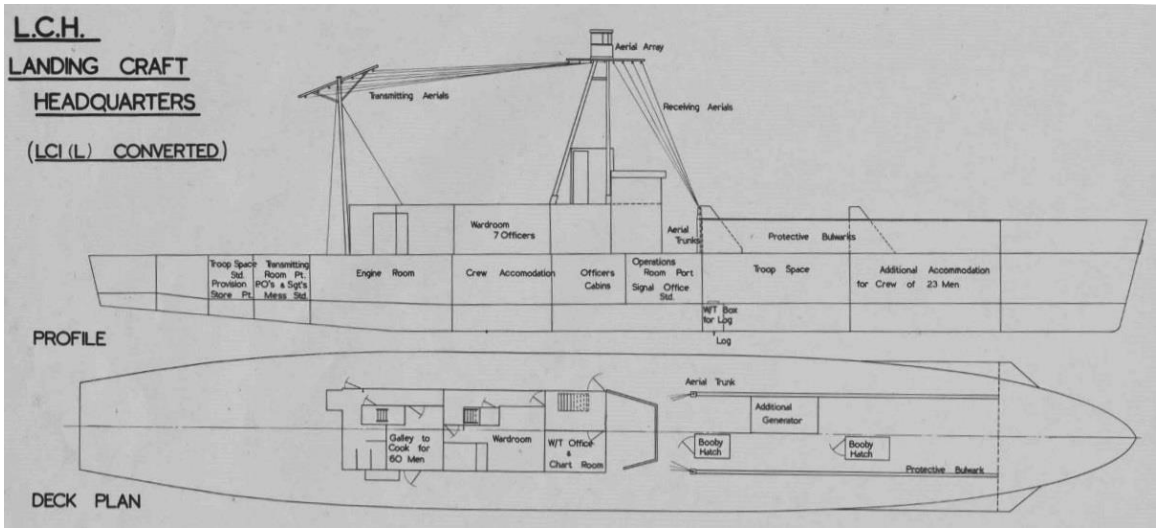


Figure 5. Simplified ship arrangement drawing for a British Landing Craft Headquarters. (Courtesy Stephen Fisher).

The conversion involved turning the troop decks into operations rooms and wireless offices, the installation of additional British command and control and communications equipment;

6 x Army No. 22 Radio sets;

6 x CDG, B28 receivers;

1 x CDF, B29 receiver.

Echo Sounding type 763;

8 type visual signals (lanterns and torches);

Type 970 Radar for navigation and control of assault craft;

Outfit QH (Gee Hyperbolic Radio Navaid)

1 x TCS Transmitter.

A tripod foremast was added to mount the additional aerials.

Additional single cabins were installed to accommodate assault force staff officers when embarked.[16]

Models showing the extent of the conversion are below.

Figure 6. LCH Model starboard side. (© IWM MOD 604)

Figure 7. LCH Model port side. (© IWM MOD 604)

The following images are of Landing Craft Headquarters though not LCH 185. These clearly show the distinctive tripod mast installed for communications equipment.

[16] https://www.royalsignals.org.uk/index.html#info

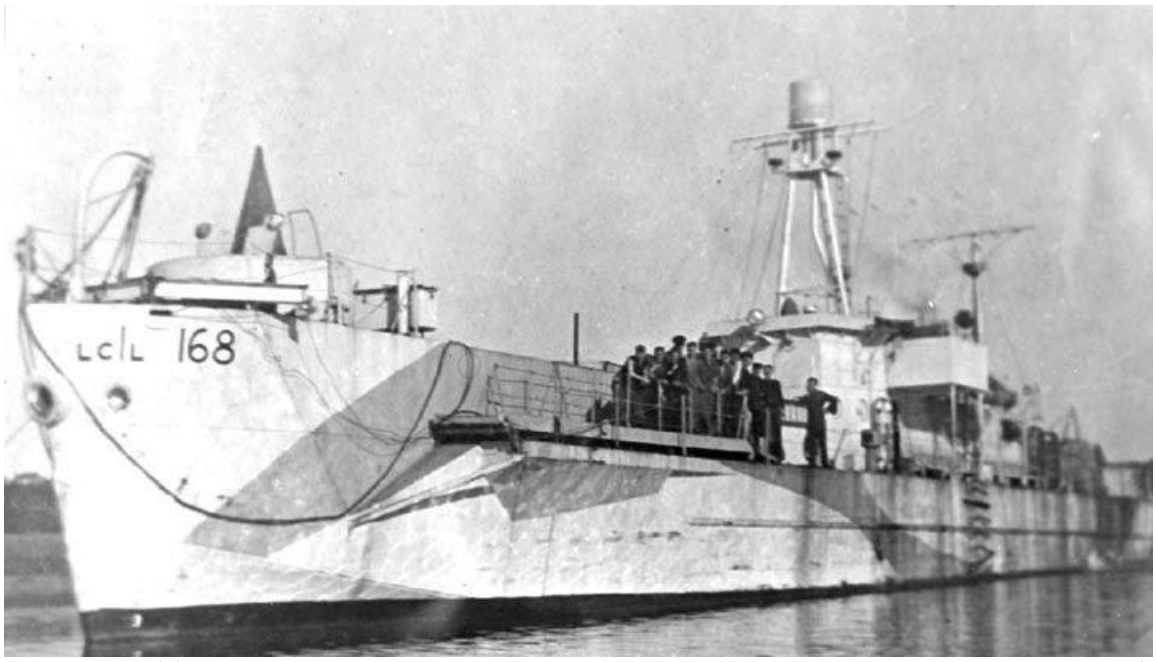


Figure 8. LCI (L) 168 Following conversion to LCH 168 (note the pennant number has yet to be changed). © Unknown.

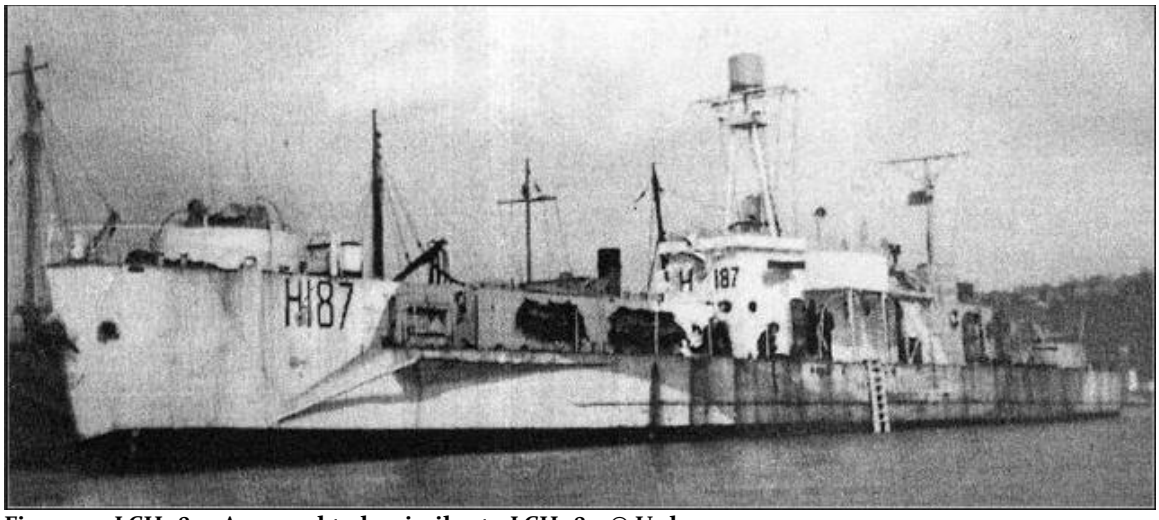


Figure 9. LCH 187 - Assumed to be similar to LCH 185. © Unknown.

5. LCH 185's Role and D-Day

Our thanks go to John Henry Phillips and Stephen Fisher for their significant contribution to this section of the report.

5.1 Patrick's recollections of Operation Neptune[17]

Patrick's recollection of LCH 185's role on D-Day, after seven decades, are short but precise, involving Portsmouth, the Isle of Wight and ultimately, Normandy. In the days preceding the invasion, the craft was pulled into the dry dock in what is now the Historic Dockyard to have the 'bottom scraped' and an electrical current put through the hull in an attempt to wade off magnetic mines. From there, Patrick recalled heading to the Isle of Wight to pick up '20 Naval Commandos'. Thereafter, the craft headed towards Sword Beach with the first wave of the invasion, dropping the Commandos onto the beach itself before heading out to sea in order to undertake ship to shore communications for the subsequent land battles. In researching LCH 185's role on D-Day, Patrick's story, whilst close to the historic record, varies in a number of ways. By no means a slight on a veteran's memory, this is, in contrast, a reflection of the reality of oral histories and the importance of combining multiple sources when piecing together LCH 185's role in the Normandy invasion.

5.2 The Official Records[18]

The research of any landing craft involved in Operation Neptune can be made extremely difficult by the use of Landing Table Index Numbers (LTINs) in the fleet. These numbers were assigned to infantry and mechanised units in order to establish their order of landing on the Normandy beaches. In order to facilitate the loading of men and vehicles onto landing craft, the same LTINs were applied to vessels. This meant that the ground troops only needed to identify their LTIN on a vessel, rather than the vessel itself. It also made it easier for the Royal Navy to allocate vessels to roles. In theory, if a landing craft broke down the day before embarking its troops, a new landing craft could take its place and its LTIN. Thus, embarkation of troops would be unaffected.

Fortunately, being a headquarters vessel, LCH 185 carried a number of senior officers on board. The craft had embarked Commander E.N.V Currey RN, in charge of Group 1, and Brigadier G.E Prior Palmer, Commanding Officer of 27 Armoured Brigade, who were assigned to support the British 3rd Infantry division at Sword. Lieutenant H Cook, likewise, is shown as

[17] As compiled by John Henry Phillips.
[18] As researched by Stephen Fisher.

Commanding Officer of LCH 185. The report of the Senior Officer, filed 30 of June 1944[19] confirmed that LCH 185 was the headquarters ship of Group 1, Assault Force S3.

Alongside the Senior Officer's report, the Fleet Orders[20] further confirm Commander Currey's appointment and assigned craft. Once this information was found in the archives, it could then be followed through into the list of devolving command,[21] in the event of senior officers being killed or wounded. In this, Brigadier Prior Palmer is shown as being aboard LCH 501, thus confirming LCH 185's LTIN number as 501. This identification was then confirmed by comparing the listings of other officers on board. In some lists these officers were allocated to LCH 185, in others to LTIN 501 (DEFE 2/403).

To add weight to this identity, the loading tables for Assault Force S[22] lists two LCHs that would need to embark troops from South Parade Pier on D-Day -1. These are listed as Fleet No. 501 and 531. The two craft would need to embark troops at 0830 hours. This document lists 501 as being in Group 1 and 531 as being in Group 2. As LCH 185 was in Group 1, this further confirms Patrick's landing craft as being 501.

Commander Currey commanded the Support Squadron on D-Day: eight flotillas of support vessels including LCT (A), LCT (R), LCF and LCG. The squadron's planned formation comprised of:

- 330th Support Flotilla: 4 LCF, 3 LCG, 1 LCT (CB)
- 32nd LCT Flotilla: 14 LCT (Mk IV)
- 38th LCT Flotilla: 9 LCT (Mk IV)
- 100th LCT (A) Flotilla: 8 LCT (A)
- 321st LCT (R) Flotilla: 5 LCT (R)
- 592nd Assault Flotilla: 9 LCA (HR)
- 704th Assault Flotilla: 4 LCP (L), 2 LCP (Sy)
- 707th Assault Flotilla: 12 LCP (L)

As well as operating as Currey's command vessel, LCH 185 carried a number of other men to Normandy. With the LTIN established, it was possible to identify LCH 185's anticipated load and movements on and prior to D-Day.[23] The loading tables for Force S list 185's load as:

- 10 men of 'R' RN Beach Commando
- 1 man from Detachment 21, A Group MC Pool (5 Beach Group)

[19] Enclosure 1 to Naval Assault Group Commander's No 664 page 185 Officers or Military Embarked.
[20] ONEAST/S.1. Appendix I, List of Senior and Commanding Officers, General, page 1, dated 21st May 1944.
[21] ONEAST/S.1 General, Page 3 dated 21st May 1944.
[22] ONEAST/S4 – Loading and Assembly, Appendix I page 3 – Naval and Military Loading Plan.
[23] British 3rd Infantry Division Group Landing Table. WO 219/3075

- 3 men from 'P' RN Beach Commando
- 1 man from 'A' Bombardment Troop
- 1 man from the HQ of 27 Armoured Brigade (Brigade Commander)
- 1 man from B 13 Beach Signalling Section
- 2 men form 27 Armoured Brigade's Signalling Section
- 3 men form 7 Field Regiment Self Propelled artillery
- 2 men from HQ 5 Beach Group
- 2 men from Detachment 21 A Group MC Pool.

The fleet orders also identified other men who would embark on LTIN 501. One of these men, Lieutenant P.B. Gueritz, RN (Principal Beach Master of Fox Commando) left a detailed oral archive with the Imperial War Museum that recounted a lot of detail on 185's journey to Normandy[24]. Also on board was Commander H.R.M. Nicholl RN (designated Naval Officer in Charge, Sword Beach), Lieutenant Commander A.S. Pomeroy, RN, Staff Operations Officer to Commander Currey. (DEFE 2/403) and Lieutenant Commander J. K. B. Stephenson, representing GCO and Director of Navigation (DEFE 2/420).

HEADQUARTERS SHIPS AND CRAFT

DAY	FLEET NO.	CRAFT	LOADS AT	TIME	MILITARY TO EMBARK	UNIT	Ldg. No.	Table Page
		ST.ADRIAN	S.R.Jetty	1000	2	1 W.T.		
	222	DACRES	P.H. "	0900	19	HQ 8 Br. Inf. Bde. etc.	DR2	70
	307	COATHLAND	" "	0600	34	HQ 3 " " Div. "	DR3	"
	308	LARGS	S.R. "	1400	30	HQ 3 Br. Div. etc.		66
	364	LOCUST	P.H. "	0900	19	HQ 9 Br.Inf. Bde. etc.	DR4	"
D-1	501	LCH	S.Parade Pier,S'sea	0830	27	'R' RN Commando etc.		"
	531	"	" "	0830	12	" "		
	561	M.L.	" "	0830	2	76 Fd. Regt. SP etc.		"
	562	"	" "	0830	2	33 " " " "		"
	505	LCP(L)	" "	0830	4	76 " " " "		"
	516	"	" "	0830	4	33 " " " "		"
	517	"	" "	0830	2	7 " " " "		"
	571	M.L.	" "	0830	2	7 " " " "		"
	506	LCP(L)	" "	0830	-	RESERVE		

Figure 10. Extract from Loading Tables (Courtesy Stephen Fisher)

LCH 185 was required to collect her load of men from South Parade Pier, Southsea on D-1 (i.e. the 5 June) at 0830. From there she sailed to mooring area 27, just east of Gilkicker Point. Although many landing craft had been moored here for a number of days, LCH 185's stay was only brief and at H-19h.15m (i.e. 1210, 5 June)[25] she weighed anchor at and sailed through the Lumps Fort Channel out of Spithead with Sailing Group S3 (DEFE 2/403).

Whereas Patrick remembers the craft actually stopping at the Isle of Wight to pick up the Commandos, the archival material instead shows that they boarded at South Parade Pier, in Southsea. It is understandable, however, that Patrick remembers stopping at the Isle of Wight,

[24] https://www.iwm.org.uk/collections/item/object/80016848

[25] H-hour, the time for the very first landings at Sword, was set at 7.25am.

because it is almost directly opposite the pier. Patrick's role as a telegraphist meant he was working deep within the landing craft itself. He acknowledges not having seen the commandos board the craft itself, or having seen the Isle of Wight from the window. It seems likely that this confusion is perhaps a result of faded memory, reading about the invasion in the post-war years or even someone shouting down to Patrick that they were at the Isle of Wight. In any event, Gueritz's testimony confirms that he embarked from Southsea, and there were no principal embarkation area on the Isle of Wight owing to the logistical trouble of ferrying men across the Solent.

LCH 185 and other Landing Craft Infantry and Landing Craft Tanks were berthed in Area 27 of the Solent, just outside Portsmouth Harbour. This highlights how close the Isle of Wight and Portsmouth actually are and the high chance for confusion whilst in the thick of invasion preparation.

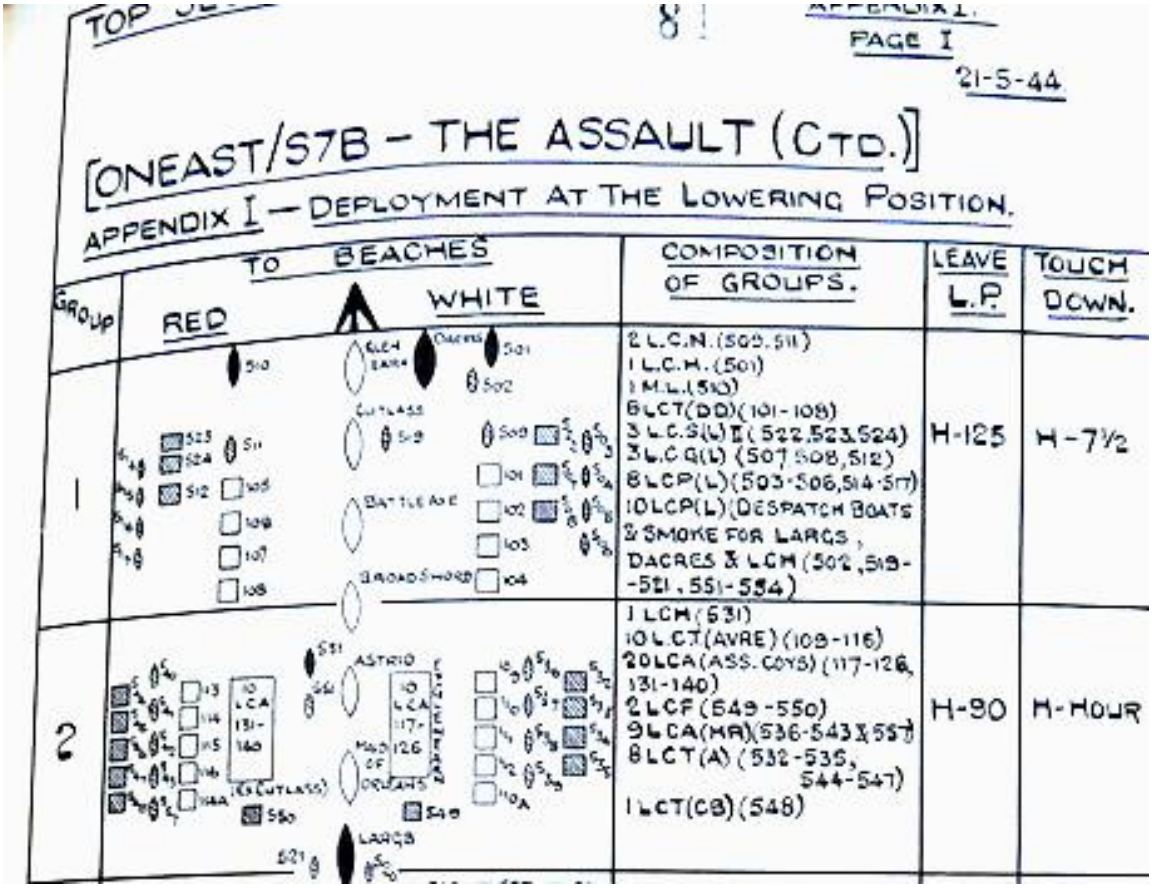
Lieutenant Commander Stephenson's report (pages 22-23), though scant on details relating to the craft, noted that during the crossing to France, LCH 185's "*recently fitted Pitometer Log…failed to function. This was unfortunate as some difficulty was experienced in judging the correct revolutions to obtain the desired speed through the water in the conditions of wind, sea and swell obtaining".*

The sailing groups, numbered S1 to S17 are not to be confused with the other group numbers used in Force S. The task force was broken down into several different elements that dictated their role on D-Day. Assault Group S3 would land the first assault brigade of the 3rd Infantry Division, along with attached armoured units. This would be followed by Group S2 landing the intermediate brigade, and then Group S1, landing the reserve brigade.

Once the passage to Normandy was complete, the sailing groups devolved into the landing groups allocated to Groups S3, S2 and S1. Groups 1 to 10 made up the Assault phase (S3), 11 to 15 were the Intermediate phase (s2) and 16 to 19 made up the Reserve group (S1). The Support Squadron would be distributed amongst the leading five groups to provide support – not all of its vessels were expected to beach.

Similarly, although Group 1 was the leading group, only a few of her vessels were intended to beach. Group 1 was primarily focussed around the launching of the swimming Sherman DD tanks of the 13/18 Hussars from eight LCT (Mk III) of the 14th LCT Flotilla. On the flanks, various craft from the support squadron would bombard the shore. As well as commanding the Support Squadron, LCH 185 was the senior vessel in Group 1. It would be Currey and Prior Palmer's responsibility to oversee the launching of the DD tanks and their journey to the shore (DEFE 2/403).

With the LTIN of LCH 185 definitively confirmed as 501, it was possible to use invasion plans to determine the role of the vessel during D-Day. As seen below in the disposition plan for Assault Force S[26], 501 was to be at the forefront of the invasion.


PAGE I

21-5-44

[ONEAST/S7B – THE ASSAULT (CTD.)]

APPENDIX I – DEPLOYMENT AT THE LOWERING POSITION.

GROUP	TO BEACHES RED	TO BEACHES WHITE	COMPOSITION OF GROUPS.	LEAVE L.P.	TOUCH DOWN.
1			2 L.C.N. (502, 511) 1 L.C.H. (501) 1 M.L. (510) 8 LCT (DD) (101-108) 3 L.C.S.(L) II (522, 523, 524) 3 L.C.G.(L) (507, 508, 512) 8 LCP(L) (503-506, 514-517) 10 LCP(L) (DESPATCH BOATS & SMOKE FOR LARGS, DACRES & LCH (502, 518--521, 551-554)	H-125	H-7½
2			1 LCH (531) 10 LCT (AVRE) (109-116) 20 LCA (ASS. COYS) (117-126, 131-140) 2 LCF (549-550) 9 LCA (HR) (536-543 & 555) 8 LCT (A) (532-535, 544-547) 1 LCT (CB) (548)	H-90	H-HOUR

Figure 11 Extract from disposition plan for S force. (Courtesy Stephen Fisher)

In his book 'Tubal Cain'[27], author Denis Muskett, who served aboard LCH 185 gave a detailed account of LCH 185's role on D-Day (page 49-51):

> *"On Monday 5th June, an army general came on board, hundreds of ships had now been waiting, full laden, for two days, waiting for a final decision from the weather men, and at 12:15 hours we received sailing orders and we were on the move down the Solent, leading a long line of LCTs of Force 'S'. We kept astern and on station of a flotilla of destroyers, ships everywhere, all moving in one massive pattern south, this must be it!*
>
> *At about 24:00 hours we were still going South at about 4 to 5 knots, it must be France! The sea was rising and a 4 foot swell was enough to send some of the landlubbers to the side rails to get rid of their recent meal of compo rations of self-heating soup. It was a pitch black night, a slight breeze, it was impossible to sleep and standing on the upper*

[26] ONEAST/S7B – The Assault, Appendix I page I, 21 May 1944.

[27] Tubal Cain by J D Muskett HB DJ - Sinking of HMS Barham. ISBN-10: 0863321445..

deck made a cold shiver run down the spine, fortunately I had a flask of neat rum and this I passed round our small team. Time crept on and so did the enormous fleet, no matter where you looked, even though the night was pitch black, ships could be identified by their white wakes. Some of the vessels towed barrage balloons, it was a vast fleet of silent ships, the slight drum of diesel engines and the rising wind in the rigging, the troops spoke in whispers as they brewed tea or heated soup in the well deck. I still had the rum and we all had another "sippers". This was it!

On Tuesday 6th June 1944 at 06:30 hour the French coast was sighted on the Port side and we assessed it to be the Le Havre side. It was getting lighter, the Cherbourg Peninsular would be on the Starboard bows, in front of the Normandy beach. D-Day, and we increased speed towards Sword beach and the seaside villages of Coleville, Hermanville, Lion-sur-Mer and Ouistreham. On the port side the entrance to the river Orne.

At 06:45 hours LCH185 proceeded into the bay at about 10 knots, alone, in the rear of our wake the LCPs followed, the fleet of LCTS were left astern. The P-boats began making smoke, and a black smoke screen was laid for about five minutes, then stopped. LCH 185 proceeded close in shore. I could clearly see the colour of the houses on the front all intact, everything was peaceful, not a shot was fired. It reminded me of a country village where even the dogs and hens sleep until suddenly the church clock strikes seven and immediately windows shoot up, bedding is thrown over the sills to air, and the cock crows and people are about like toy town.

We proceeded along the shore from Ouistreham to St Austin-sur-Mer, about 200 yards from the beach. Not one gun opened fire.

At 07:00 hours we steamed out again and took our position ahead of the landing force.

At 07:05 hours very close to the shore the whole fleet was now stopped engines, just gently under way.

At 07:10 hours behind the sandy beach there is a low line of sand hills, then the road and then a rising land with houses on either side of the road. Suddenly it looked as if the whole land blows up as if mined every few yards. Heavy planes bomb the foreshore and the villages on the coast. Heavy shelling from the big ships on the sea horizon behind us. Heavy explosions continue along the coast, many heavies overhead. A black haze begins to rise from the land inland.

At 7.20 hours 12 Mark V LCT begin to beach, Mark (3 St) unload floating tanks, 40 of these skirted tanks manned by the 13th and 18th Royal Hussars."

In this gripping account of LCH 185's role on D-Day, we gain an insight not seen in Patrick's less detailed memory. Interestingly, Denis Muskett recalls the craft heading to the beach alone, unopposed, ahead of the landing force. The accuracy of this account must be

questioned – there is no reference to this in the fleet orders or post-action reports, and the likelihood of a headquarters ship needlessly exposing itself to close range fire from the batteries believed to be at Ouistreham *and* alerting the enemy is low. Although LCH 185 certainly led Group 1, it seems that Muskett has mistaken the distances and times involved, as 200 yards would have been dangerously close.

Commander Currey's report talks about the beach approach from his perspective aboard LCH 185:

> *"Group I left Lowering Position at 0520 and proceeded inshore. By this time it was light enough to distinguish features on the shore, and to identify the beaches with certainty. Although sea conditions were not very favourable, it was decided that the D.D tanks should swim and the signal "Floater" was passed. During the approach to the launching position, the signals from X-Craft 23 were seen, but the submarine itself was not sighted."*

The reference to X-23 further suggests that 185 did not initially advance beyond the DD launching position as, had it done so, it would have passed X23, which was waiting ahead of the main force to signal the correct approach to the beach.

Captain Eric Bush, the commander of group S3 reported that in fact the DD tanks were launched at 0645. In his report[28] he recounts of the first wave describes how;

> *"It had been planned to launch DD Tanks at 7000 yards, but in view of the sea conditions, the need to conserve fuel in the tanks, and the lack of opposition, tanks were launched at 5000 yards. The sea was still rather rough at 5000 yards, but the majority of DD tanks were launched successfully and commenced their swim at the correct time, 0640, led by L.C.N. (A) 189 and 197, who were by then able to identify their beaches with certainty."*

It is clear from this description that LCH 185, with Commander Currey in command, made the decision to launch the DD tanks closer than was planned, likely helping with their success in the landing. This was as previously stated, due to poor sea conditions and a lack of opposition.

As can be seen in figures 12, 13 and 14 below, there are two Landing Craft Headquarters in Assault Force S in the minutes immediately before H-Hour. It is safe to assume from the above disposition plan, that the LCH closest to the beach is 501 (LCH 185) at the 3,000 yard mark. In figure 14, the intended situation at H-Hour, she was to be 2,000 yards from the beach. This may represent the limit of its advance.

[28] Enclosure 1 to Naval Assault Group Commander's No 6644 dated 30 June 1944 pages 186-188.

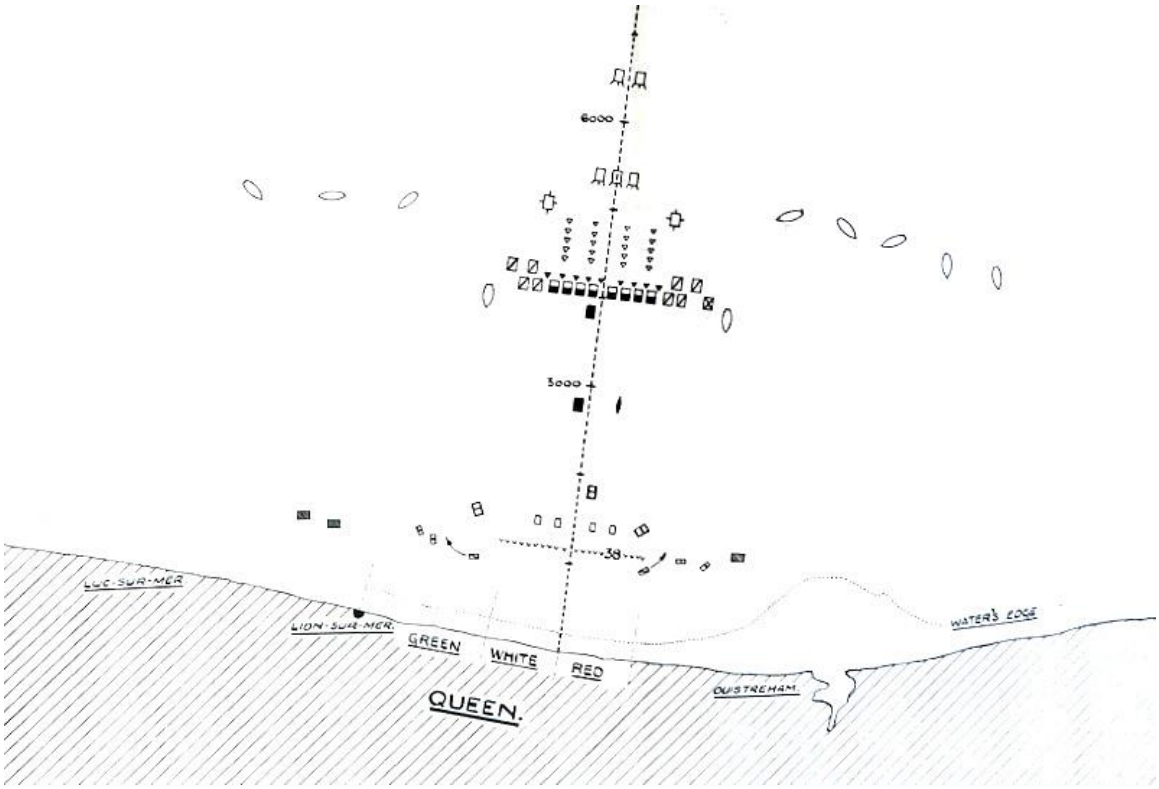


Figure 12. Disposition plans for Force S. LCHs are represented by the solid black rectangles. LCH 185 is depicted at 3,000 yards. (Courtesy Stephen Fisher).

SECRET. Page 184.

ENCLOSURE NO. 1 (Continued)

Enclosure to Naval Assault Group Commander's No. 0644 dated 30th June, 1944.
(Continued)

GROUP I - DEPLOYMENT AT LOWERING POSITION AT 0520.

88.

RED.	WHITE.
ML 294	LCH 185
LCN(A) 197	LCN(A) 189
LCS(L)256	LCT 467
LCS(L) 260	LCT 443
LCG(L) 9	LCT 465
LCP(L)	LCT 455
LCP(L)	
LCP(L)	
LCT 461	LCS(L) 253
LCT 444	LCG(L) 11
LCT 462	LCG(L) 9
LCT 456	LCP(L) 286
	LCP(L) 285
	LCP(L)

Figure 13. Extract from fleet orders for Group 1 –Deployment at lowering position at 0520 on D-Day (Courtesy Stephen Fisher).

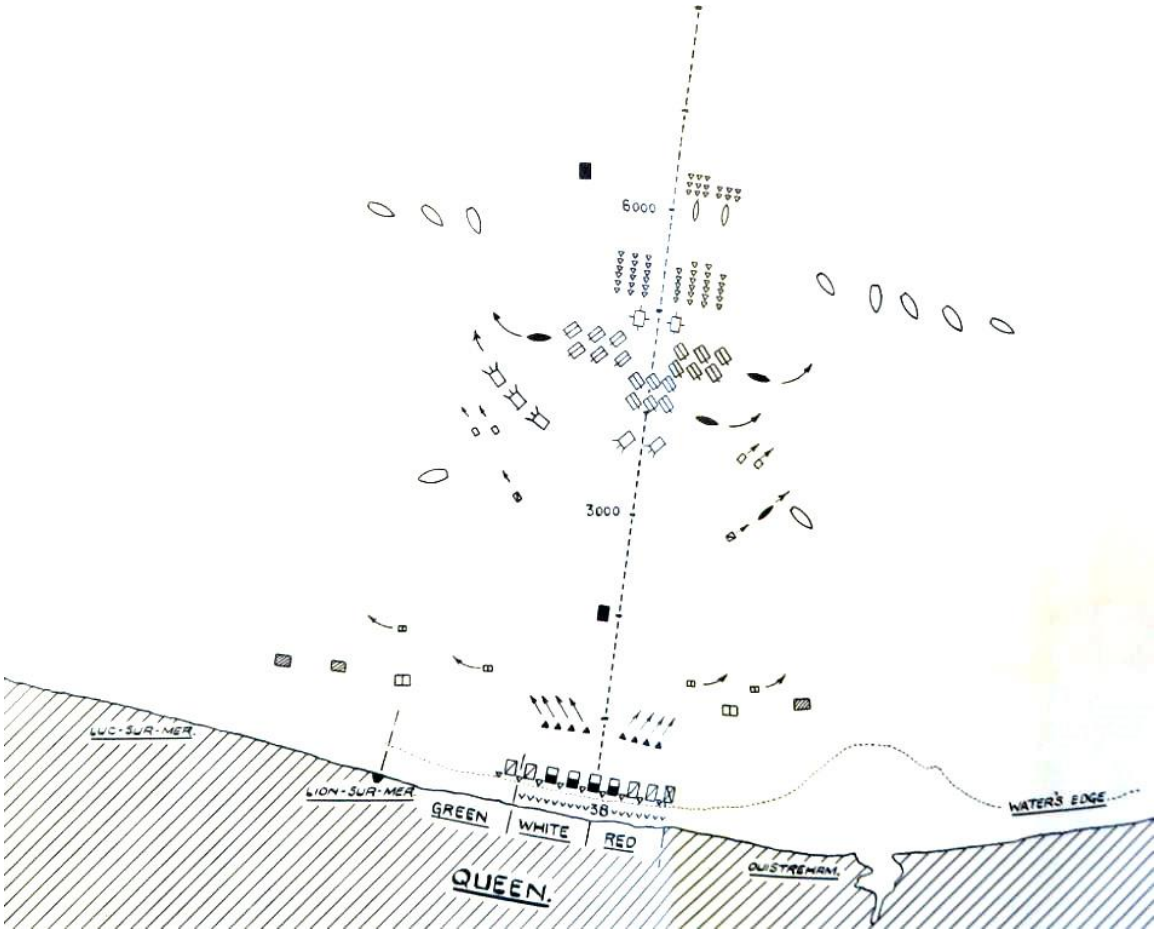


Figure 14. The situation at H-Hour. LCH 185 is depicted at 2,000 yards. This is most likely the limit of its advance. (Courtesy Stephen Fisher).

At this point the leading vessels were the LCNs, the DD tanks themselves and, closely following behind, the LCTs carrying the AVREs who would land 5 minutes after the DD tanks. As it transpired, the DD tanks were only able to make 3 knots, not the anticipated 4.5 knots, and so they arrived on the beach at almost exactly the same time as the AVRE carrying LCTs.

Once the DD tanks had launched, LCH 185 followed behind, overseeing the advance of both the tanks and the support vessels on the flanks (DEFE 2/420). Although details of what the craft's role was immediately after the initial wave are scarce, Patrick remembered leading in each wave that followed. This is further confirmed by Denis Muskett:

> *"…HMS LCH 185 continues to lead each section onto the landing beach. Wave after wave".*

Certainly as can be seen from the above plans, LCH 185 was the only headquarters vessel within 6,000 yards of the beach and will have been directing the support squadrons, the AVRE carrying LCTs and the LCAs ahead of her.

At some point afterwards, an LCA came alongside and took off some of the embarked senior officers, including Gueritz. It is possible that Prior-Palmer disembarked at the same time as he also went ashore on D-Day.

Patrick's recollection of picking up and landing twenty Naval Commandos onto Sword Beach was correct, although the number of personnel according to the loading tables was in fact twenty seven. Even so, it's not impossible that the loading tables were modified between their composition in March and the actual launching of Neptune, so either may be correct. The loading tables also interestingly state that the commandos would be ferried onto the beach under Royal Navy arrangements and that LCH 185 itself was not scheduled to beach. This seems the most likely action – there was no need for LCH 185 to beach and risk becoming stuck – its position and that of Currey was at sea. The fact that a shuttle to the shore was planned for the commandos and that Gueritz recalls it, suggests that the planned arrangements took place.

LCH 185 will doubtless have overseen other elements of the operations on D-Day, although these are not well recorded in Currey's reports. In the days following D-Day, 185 remained in the beachhead area and was soon allocated to the Support Squadron Eastern Flank, which oversaw the defence of the D-Day beaches along the 'Trout Line' against enemy naval incursions from the Dover Straits or Le Havre.

Figure 15. The view from LCT 610 carrying Sherman tanks of 13th/18th Royal Hussars during the initial assault on Queen Red beach, Sword area, in front of strongpoint 'Cod', circa 0800 hrs, 6 June 1944. © IWM (B 5111).

6. The Loss of LCH 185

Very little can be found in the official documentary records about the loss of LCH 185 and much of our research is based on the personal accounts of veterans and in particular Patrick Thomas.

6.1 Official Record of the Loss of LCH 185

Only one reference of LCH 185 could be found in the Operation Neptune After Action report stating that on 25 June 1944 LCH 185 was operating off SWORD beach and after taking on supplies of water from a water boat she hit a mine and sank almost immediately in area "S".

The Admiralty After Action Report, narrative for Phase III, Post Assault, Section E, Defence of the Anchorage[29] provides the following details;

> *"243. The gale of the 19th - 22nd June and resultant suction effect of the swell was presumably responsible for sending off a number of these mines simultaneously. The sketch at Enclosure 5 shows the number of mines observed to fall in SWORD Area and those that were detonated. Not one of these was set of by a minesweeper and, fortunately, only a few by ships underway. Indeed, for a while, ships in the anchorage seemed to hold charmed lives, as those mines were going up all round the. Then the luck turned and, in 24 hours, no less than five ships between 23rd and 24th June were mined.*
>
> *244. The ships concerned were:-*
>
> *HMS SCYLLA (seriously damaged).*
>
> *HMS SWIFT (sunk).*
>
> *HM Trawler LORD AUSTIN (sunk).*
>
> *HM M/S 8 (sunk).*
>
> *SS DERRY CUNAHY (sunk)[30].*
>
> *245. There was heavy loss or Army personnel in DERRY CUNAHY and the Naval and Merchant Service casualties in the other four ships amounted to 30 killed or missing and 110 wounded.*
>
> *246. The foremost half of DERRY CUNAHY was kept afloat by the good work of HM Salvage Vessel SALVICTOR under the directions of Commander SCURR, until the M.T[31]*

[29] Page 31, paragraphs 243 to 247.
[30] Official record misspelt the correct name was SS Derrycunihy.
[31] Ministry of War Transport cargo.

in this portion of the vessel had been hoisted out, using the ship's winches and steam from the SALVICTOR.

247. At 1300 on 25th June LCH 185 was also lost by mining with an even greater proportionate loss of life. Fortunately, D.S.O.A.G.I. (Commander E.N.V CURREY, D.S.C, R.N.), whose Headquarters Ship she was, was visiting HMS LARGS at the time with about three members of his staff. The casualties, nevertheless, amounted to 5 officers and 60 ratings missing, presumed killed, and 1 officer and 3 ratings wounded."

The loss of LCH 185 is also recorded in the Admiralty War Diary for Sunday 25 June 1944, Situation Report, Home Commands, Operation "Neptune", Casualties;

"LCH 185 mined and sunk in area S."

The following day, Monday 26th June the Admiralty War Diary confirms the loss stating;

"*LCH 185 mined and sunk, Sword area at 1300/25."*

The only official survivor's report that has been located was recorded many months later. Interviewed on 20 November 1944 at Westcliff an unnamed rating (Cook) confirms that;

"This craft [LCH 185], which was engaged as an H.Q. Ship in the vicinity of Queen Beach had just taken on supplies of water from a water boat anchored in the artificial harbour. The craft had been underway only a few minutes and struck a mine and is believed to have sunk within four minutes. This rating states that he was thrown into the water and picked up later in an unconscious condition; it is not, therefore, possible to obtain any further detailed information as to the number and names of survivors. It is know that there were a number of executive officers and ratings over and above the ship's complement who were on board at this time."

From the personal account of veteran Patrick Thomas, a Telegraphist on board we believe that LCH 185 'turned turtle' before sinking upside down.

6.2 Patrick's Recollections

In his discussions with Patrick Thomas (believed to be the only surviving veteran from LCH 185) John Henry Phillips has recorded Patrick's experiences (Pers. Comms, 2017) during his time aboard the ship and his personal memories of the loss of LCH 185 and his friends and shipmates. We are grateful to them both for their moving contribution to this report below;

In post-war correspondence Peter Dwyer, who served aboard LCH 269 recalled to Patrick Thomas the process by which servicemen were chosen for either LCH 185 or its sister ship, LCH 269:

"Through correspondence with Len Norman and Derrick Kinsley [of LCH269], I was able to find out how I joined 269. Len and five others were sent down to Roskeen Camp to pick up two LCHs: 185 and 269. He relates how, on the train,

on the way down to Chatham they decided among themselves who would go to which LCH. The Senior Yeoman of Signals would go to the senior craft, which at that time, by virtue of Skipper's rank, was 185. With him would go a Leading Signalman who was an old shipmate of the Yeoman. The Leading Signalman was in the same hut at Roskeen as Leading Telegraphist Jack Barringer, so they stuck together. Yeoman Tony Jones and Norman went to 269. I presume that when 185 and 269 arrived back at Invergorden those of us still at Roskeen Camp were allotted to one of the LCHs. I joined 269 with Len Norman and Tony Jones. As he said in his letter, "it just goes to show how it works out". So that is how we were where we were – pure chance.'

Through this correspondence, we can see that the fate of the men aboard LCH 185, most of whom perished, and that of LCH 269 who witnessed the sinking of 185 but survived the war, was decided on a train.

Peter Dwyer, on the 60th anniversary of D-Day, spoke to a newspaper about the two craft.

> *"Jack was on LCH 185. Suddenly someone said '185's bought it' and when I turned round, she'd vanished. [Coming back to France] has been one of the most moving experiences. I didn't expect it to affect me like this. Still, it has helped to lay some ghosts"*

On 24 June 1944, LCH 185 crew had been heading towards HMS Swift (G46) which had hit a mine, to rescue any survivors. As they got close, MV Derrycunihy exploded within eyesight. Patrick vividly remembers seeing the stern of Derrycunihy being completely blown away. LCH 185, however, was unable to help; they were at capacity with survivors from HMS Swift. Both of the vessels had been struck by enemy mines, and just a few hours later on 25 June 1944, LCH 185 would succumb to the same fate.

Denis Muskett recalled a 'red warning' at 0600 whilst on board the landing craft, and witnessed a German plane flying over the anchorage before being shot down somewhere over the River Orne (Muskett, 1986: 61). It is possible that this plane dropped the acoustic mine that would cost so many lives aboard LCH 185.

LCH 185 and 269 had been heading towards shore together when the mine struck. The first time Patrick realised he was in trouble was when he awoke to find the bow of the landing craft he had grown to call home being driven beneath the waters of the Baie de Seine. He had blood pouring from his head and found himself to be covered in Battleship Grey Paint. The paint tins, meant for vessel touch ups, had been stored in the bow and burst during the explosion. A Sparker[32] with one blue and one brown eye ran to a hatch on the upper deck. He climbed down

[32] Naval slang for an Electrician.

a small chain ladder that was hanging on by a single link. He was trying save the men trapped in the wireless office. When he got there it was completely destroyed. As the man stood staring into the room, he was in awe of the sight: boys still in their teens crying and screaming, mangled within the twisted metal of the wreckage as if they were one and the same. He could not help; the companionway door burst open and water began to rush in.

The Sparker rushed back up the ladder and left the terrified young men to their fate. He was still a hero in Patrick's eyes. The ladder could have given out at any moment. The men that were below deck never made it out. Their bodies would never be found; their stories lost to history. Patrick quite easily could have been one of them.

The landing craft had been keeping watch as part of the 'Trout Line' during the night, and the daylight hours were designated for repairs and sleep. Every other day he had slept below deck, but it was sunny and for the first time he slept on the forecastle of LCH 185. For seven decades after the sinking, Patrick would wonder whether his survival had been pre-ordained. His watch shifts were every two hours; two hours on, two hours off. Patrick slept because he was off shift. It could have been so different that day. He could so easily have been below deck, he could have slept deep within the bows and been trapped like the rest of the crew. But the sun was shining, and he stayed up top.

By the time Patrick made it to the port rail the water was already up to his knees. The deck was a shambles, the bridge was destroyed (Muskett, 1986: 61). He turned and saw a man holding his dying comrade. Within four minutes, LCH 185 would be lost forever.

Patrick had no shirt on, no life jacket and was wearing a new pair of heavy leather boots. Wrestling to untie the laces with trembling hands, he thought the weight would drag him to the seabed, but the craft was turning and Patrick had to give up. With a deep breathe he jumped into the murky, green water. Patrick was in the Baie de Seine, lying on his back and struggling to stay afloat. The deck of LCH 185 had risen up and was looming over him. Huge pieces of debris were splashing into the water at an alarming rate and with a vicious ferocity. He and the crew were “green as grass”.

Patrick would never forget the friends he lost. He knew they shouldn't have been there. As an 18 year old on board with high qualifications in music whom had played at Portsmouth Cathedral before joining the crew. He couldn't even peel a potato. Another young chap was sea sick even in dry dock. Swimming away from the metal hailstorm, Patrick saw Jack Barringer's lifebelt floating on the surface. Patrick knew Jack well; he had trained with his brother Les before the invasion. Patrick recognised the belt as Jack's from the scribbles and personalisation so often gained during the hours of boredom that came with life at sea. Patrick grabbed the lifebelt and felt safe until he looked up and saw Jack screaming out for help. He was badly injured and struggling to not sink beneath the waves. Knowing he could swim without it, Patrick hatched a plan to throw the lifebelt to Jack. As he leaned back to toss it, another member of the crew began thrashing towards him, screaming in terror; both of his legs were

shattered. Patrick gave him the life belt instead. This man survived but would never walk again.

In later years Patrick would insist that saving his life was by no means an act of courage. Rather, he knew that if the man had grabbed hold of the lifebelt, the weight of the two men would cause them both to drown. When Patrick looked back to where Jack had been, he was gone. Jack would become one of just four men from the sinking to be given a grave on dry land. He left behind a wife and child.

As most of the crew remained trapped deep within the bows of LCH 185, Patrick found himself yanked out of the water by a matelot aboard a Landing Craft Gun. Patrick stood on the deck of his saviour ship and looked to watch the Landing Craft he had called home for so long sink to the seabed. He saw Christie Adams, a fellow telegraphist, sitting on the upturned hull with his arms crossed. Patrick never saw him again.

The survivors were transferred to a Landing Ship Tank. Patrick was rushed through the bow and saw the bright lights hanging over an operating table. There was blood all over the floor and a man lying there. Patrick had a part of his hair shaved and a bandage wrapped around his head before heading to the upper deck just in time for a gun battery on the shore to open up. The shells were dropping all around the LST and getting closer and closer with each hit. Less than an hour ago Patrick had almost been blown to pieces by a mine, then avoided near certain drowning. Now he was certain he would be blown up on board what he thought was the safe haven of his rescue ship. The shells kept coming, kept getting closer. The pressure in Patrick's head built and built until he instinctively threw himself onto the cold, wet floor of the ship's deck and hoped that somehow, someway he could dig himself a foxhole. Of course, he couldn't. His whole body began to uncontrollably shake. Nothing would stop it. As he lay on the deck, a small cog in the enormous war machine, he felt completely helpless, but the shells never hit.

In his later years, he would talk of trying to dig a foxhole into a ship's deck and laugh at how “silly” he was being. A few hours later Patrick had cleaned himself up, dried off and calmed down. He was called to attend the funeral of one of his crew. It must have been the young man he saw lying on the operating table, another Stoker[33]. There was a short service by the Captain of the LST and the man's body, sewn up in canvas and draped in a Union Flag, was slipped off the stretcher and into the sea to be reunited with the rest of his crew. Patrick watched on as the nameless man slip beneath the waves and into a forgotten corner of history that so many victims of the Second World War would occupy.

When news of the sinking got back to England, Patrick was listed as missing, presumed dead. He was taken back to England and given a week off. The Royal Navy called it 'survivor's leave'. He first went to collect the diary he had kept in the build up to the invasion, which the Navy had made him give up in case the enemy got hold of it. Then he went home to see his Mother. Everyone he met reacted like they'd seen a ghost. They all thought he was dead. Whilst at

[33] Naval slang for marine engineer.

home, he read his own obituary in the local newspaper. He kept it in his wallet for years; a reminder of how close he had come to becoming another name and age etched on a memorial along Portsmouth seafront.

When Jack Barringer's family heard that Patrick had been presumed dead, but turned up alive, Les Barringer, Jack's brother, wrote to Patrick hoping to hear that Jack would turn up as well.

> *Hello Pat!*
> *I hope this letter comes as a pleasant surprise to you and that you don't mind my writing.*
> *You see we went into [REDACTED] a little time ago and of course I went along to see Edith, Emma and so on. Edith said you were still ok. Well, I believed you killed as Jack has been reported killed as no doubt you know. I thought if I wrote to you, you wouldn't mind telling me anything what did happen to Jack, as all we, or I should say, Mum, had was saying he was missing then after a telegram saying he was killed, how or where it never said. If you could enlighten me in anyway, I would be very grateful to you as you could guess it shook me up well, but Mum and his wife were much worse than I.*
> *I hope you are in good health and so on, myself passable. Pleased when this lot is all over and finished so we can all get home again what's say?*
> *Well Pat I'm afraid I haven't much else just now but if you could tell me what happened out there I sure would be grateful to you for the information as Mum still hopes that it will turn out for the best.*
> *So please write when you can spare a few moments, if it's just a few lines.*
> *So until next time I'll say cheerio and keep smiling.*
>
> *Your pal,*
>
> *Les.*
>
> *P.S I hope you don't mind my writing.*

Patrick, of course, had to write back to Les explaining that Jack, in fact, would not be turning up alive. Patrick visited Jack's grave for the first time on the 69th anniversary of D-Day. He still has the letter that Les sent him.

7. Landing Craft Gun (Large)

7.1 Landing Craft Gun (Large) Development

There were two versions of LCG (Large) based on Landing Craft Tank (LCT) Mark 3 and Mark 4 hulls. Both versions carried two 4.7 inch guns on a reinforced deck over the tank well, with large quantities of ammunition above the water line.

Figure 16. Gun crew of Landing Craft Gun Large (LCG (L)) close up at action stations on a 4.7 gun. (© IWM A 23752)

7.1.1 LCG (L) (Mk 3 hull)

Royal Marine detachments of two officers and 31 other ranks served in these modified Mark 3 LCTs, which had a total complement of 47, commanded usually by a lieutenant RNVR[34]. They also carried two or four 20mm quick firing cannons. The craft numbers were:

1–4, 6–7, 9–10, 12–14, 17–25

[34] Royal Navy Volunteer Reserve is the volunteer reserve force of the Royal Navy in the United Kingdom.

Numbers 1, 2, 15 and 16[35] were sunk.

LCG Mk 3 - In Commission June 1944:

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15*, 16*, 17, 18, 19, 20, 424, 426, 449.

7.1.2 LCG (L) (Mk 4 hull)

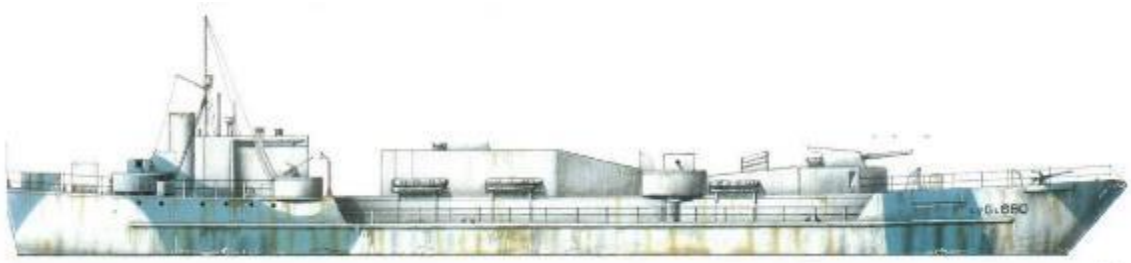


Figure 17. Drawing of LCG 680 - A Mk 4 version Landing Craft Gun (Large).

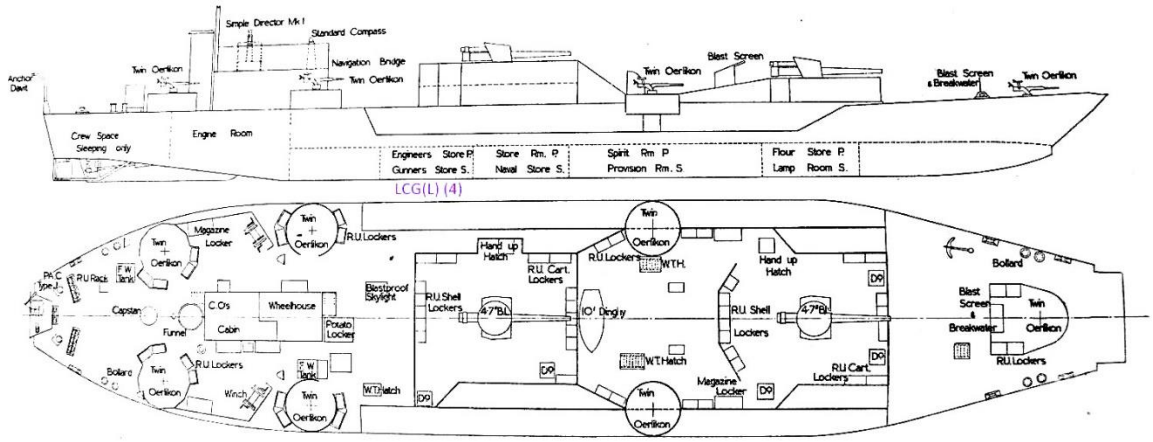


Figure 18. Simplified General Arrangement LCG (L) Mk 4. (Courtesy Danny Lovell)

[35] LCG Mk 3 Lost - 1 and 2 lost off Milford Haven (1943) - 15 and 16 Lost Walcheren November 1944.
* Assumed pennant numbers reused.

Figure 19. LCG 939 afloat (note the LCT flat bow of earlier Mk 4 hull conversions) (© IWM A 23754)

The LCG (L) built on a modified Mark 4 LCT, had a slightly larger complement and the two 4.7 inch guns were mounted so that both could fire forward, with the second turret superimposed to fire over the forward turret. They also carried three 20mm cannons.

The following LCG Mk 4 were commissioned:

(26, 27[36]), 424, 426, 449, 680–687, 764, 811, 831, 893, 939, 1007, **1062**.

Numbers 764, 831 and **1062** were lost in action.

LCG Mk 4 - In Commission June 1944

680, 681, 687, **764**, 811, **831**, 893, 939, 1007, and **1062**.

[36] LCG Mk 4 26 and 27 – Conversions was not started until 1945.

Figure 20. Passing 4.7 inch projectiles through the hatch of a Landing Craft Gun (Large) (LCG (L)) during an invasion rehearsal off the Isle of Wight. Note the crew wearing anti-flash clothing. (© IWM A 23771)

The last batch of Mk4 conversions were intended for operations in the Far East. These craft had better accommodation, a ship–type bow, a raised bridge and improved armour, compared to the Mk 3. Few were completed before August 1945.

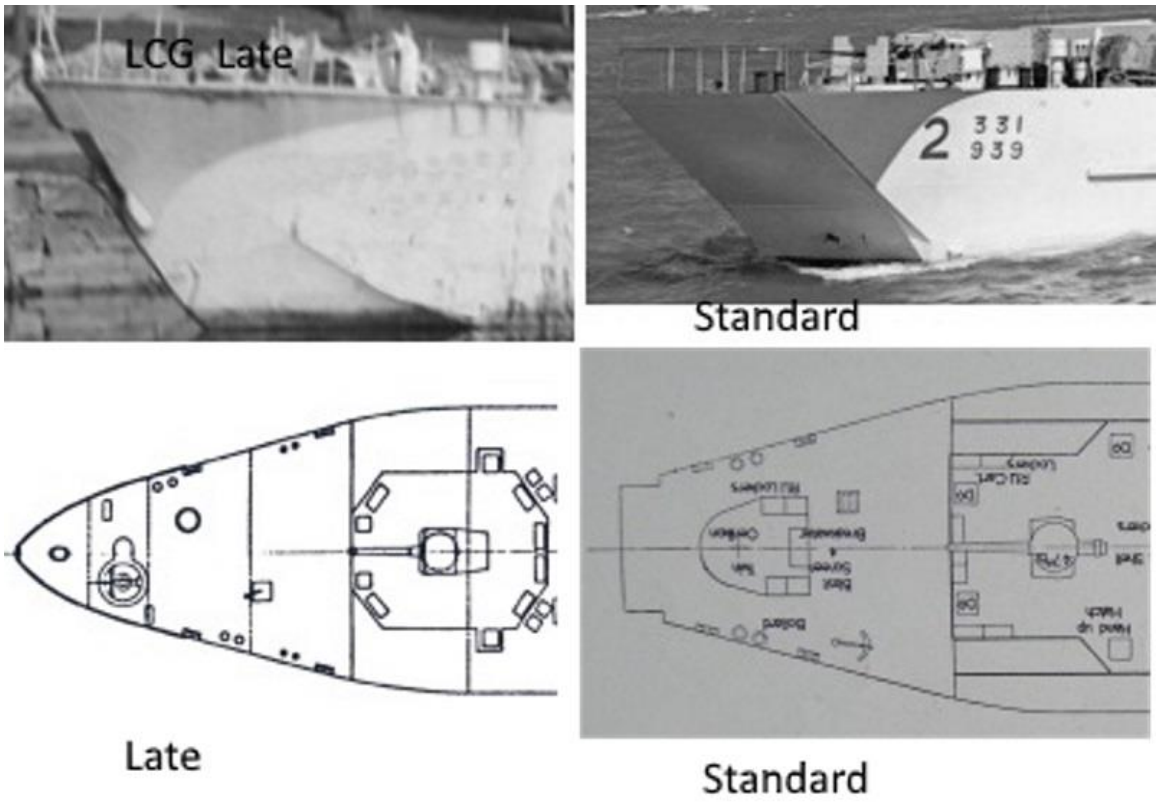


Figure 21. Later versions of LCG Mk 4 were given a traditional ship's bow. LCG 1062 would have been a standard bow. (Courtesy Danny Lovell).

8. LCG (L) 1062

On the 5 June 1944 333 Flotilla, 1st Support Squadron consisted of:

LCF(2) 1, LCF(4) 33, LCF(4) 37, LCG(L)(4) 831, LCG(L)(4) 1007, **LCG(L)(4) 1062**, and LCT(5) 2041.

Figure 22. LCG 1062 (right), Southampton, dated May 1944, with some of the other craft in 333 Flotilla. (Courtesy Danny Lovell)

On D-1 Force 'J' sailed from the Solent and went first to Area 'Z' and then used swept Channels 7 and 8 to cross the Channel.

LCG (L) 1062 sailed with J Force Group 312[37] - Armoured Vehicle Royal Engineers (AVRE) Group and left from Southampton.

She passed South Gate at H-20 hours, 10 minutes. These craft were to form the second wave, Speed 5 knots: 3 x LCG(L), 831, 1007 and 1062 from 333 Support Flotilla. This group was overtaken by Group 311 at which time the three LCG (L) joined it.

The following would provide close support for 7th Canadian Infantry Brigade:

LCG 831, 1007 and **1062** - Landing Craft Gun each with two 4.7" guns, and

LCF (2) 1 - Landing Craft Flak.

Close support for 8th Canadian Infantry Brigade was provided by:

LCG 764, 681, 680 and 939 - Landing Craft Gun each with two 4.7" guns.

[37] http://www.6juin1944.com/assaut/juno/tables.pdf (Page 6) Capt. (N) (Ret'd) Michael Braham.

All were to cover the launch of Duplex Drive (DD) tanks. If the tanks were fired on by shore batteries then they were to return fire, otherwise LCG would engage German beach defences from H-30 minutes:

LCG 831 and LCF 1 were to engage beach defences on Mike;

LCG 1062 and 1007 were to engage beach defences on Nan Green;

LCG 939 and 680 were to engage beach defences on Nan White; and

LCG 681 and 764 were to engage beach defences on Nan Red.

Figure 23. Canadian Infantry Division, disembark from an LCA (Landing Craft Assault) onto Nan Red beach, Juno area, near St Aubin-sur-Mer, at about 8.00am on 6 June 1944, while under fire from German troops in the houses facing them. © IWM (IWM FLM 2570).

After successfully completing her mission as part of J Force during the initial assault, LCG (L) 1062 was assigned to the 'Trout Line' (see section 9.1) to protect ships and vessels in the British Anchorages.

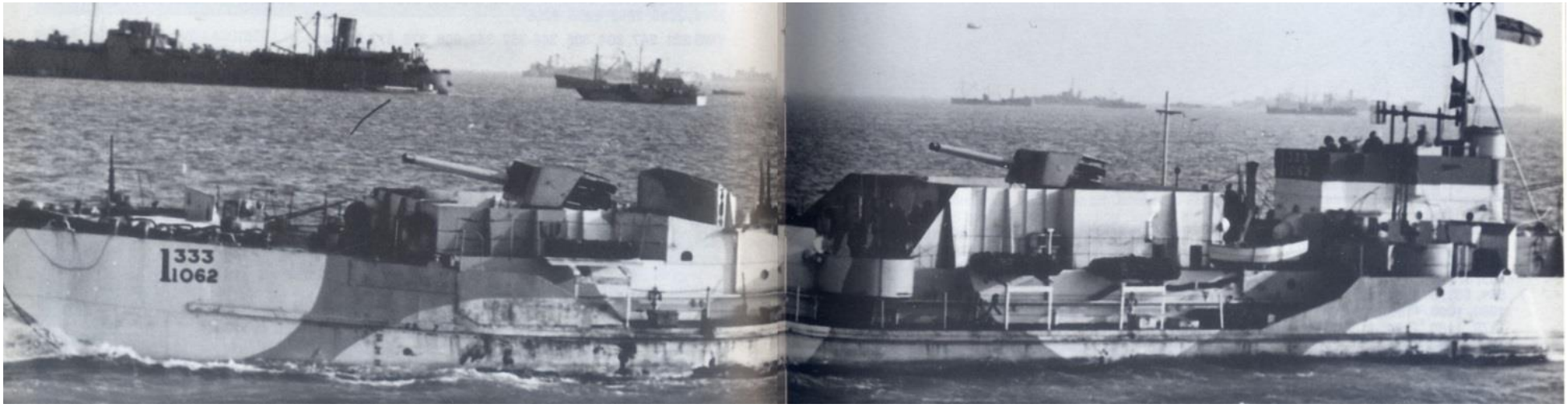
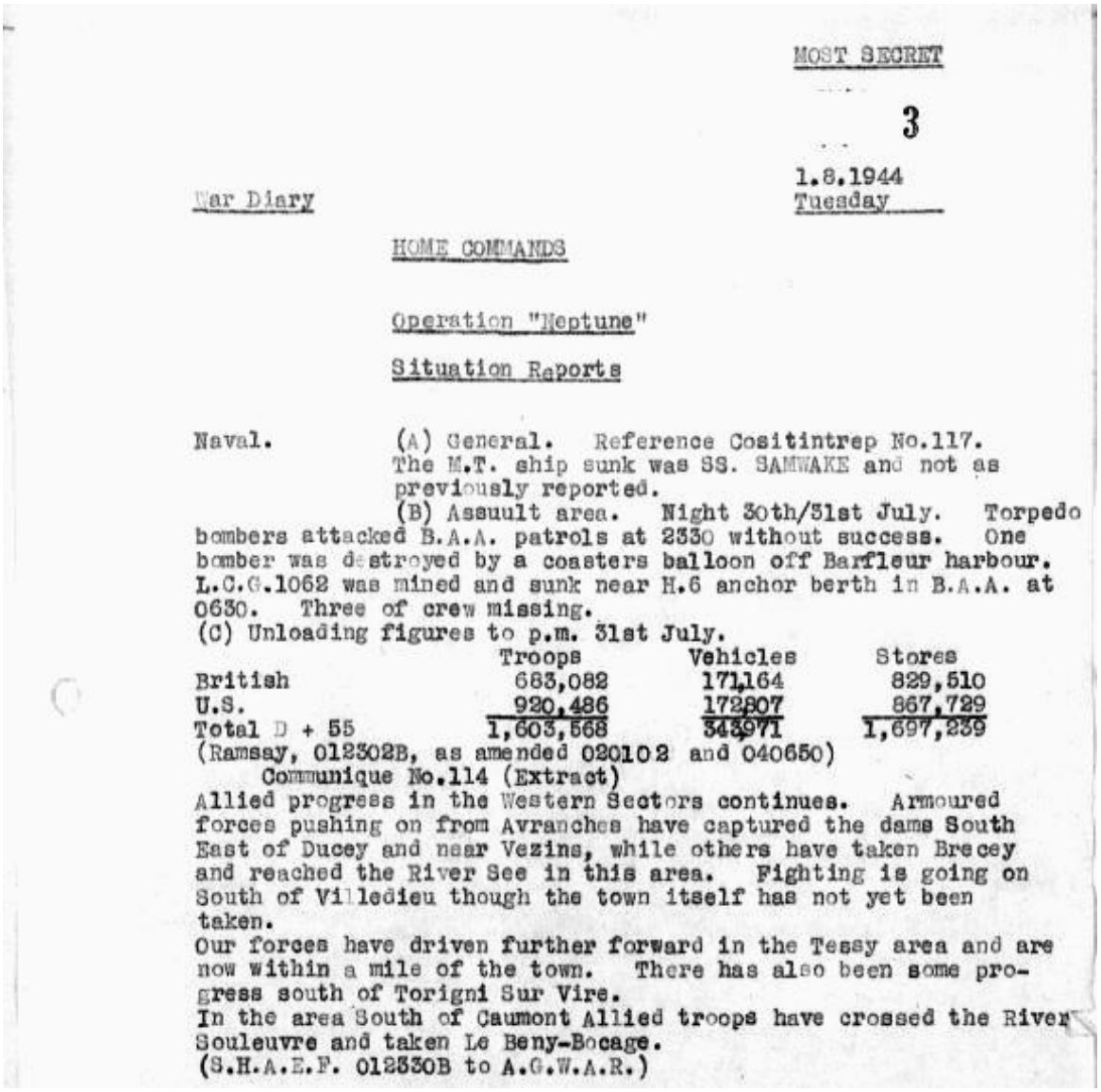


Figure 24. LCG (L) 1062 in the area of Juno Beach 1944.(From 'The D-Day Ships'. Neptune the Greatest Amphibious Operation in History (John de S. Winser))

9. The Loss of LCG 1062

9.1 Official record of the Loss of LCG 1062

The official documentation of the loss of LCG 1062 can be found in the War Diary entry for Operation Neptune.



MOST SECRET

3

1.8.1944
Tuesday

War Diary

HOME COMMANDS

Operation "Neptune"

Situation Reports

Naval. (A) General. Reference Cositintrep No.117. The M.T. ship sunk was SS. SAMWAKE and not as previously reported.
(B) Assault area. Night 30th/31st July. Torpedo bombers attacked B.A.A. patrols at 2330 without success. One bomber was destroyed by a coasters balloon off Barfleur harbour. L.C.G.1062 was mined and sunk near H.6 anchor berth in B.A.A. at 0630. Three of crew missing.
(C) Unloading figures to p.m. 31st July.

	Troops	Vehicles	Stores
British	683,082	171,164	829,510
U.S.	920,486	172807	867,729
Total D + 55	1,603,568	343971	1,697,239

(Ramsay, 012302B, as amended 020102 and 040650)

Communique No.114 (Extract)

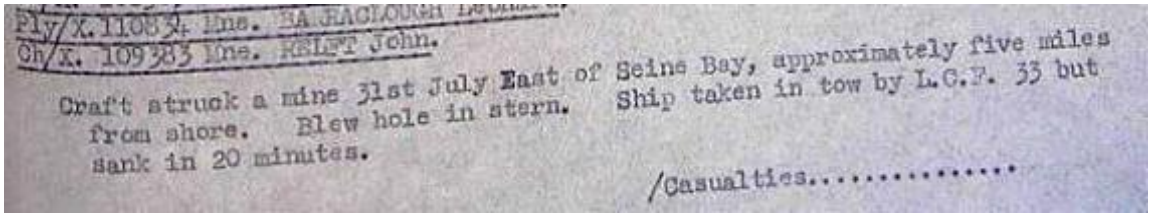
Allied progress in the Western Sectors continues. Armoured forces pushing on from Avranches have captured the dams South East of Ducey and near Vezins, while others have taken Brecey and reached the River See in this area. Fighting is going on South of Villedieu though the town itself has not yet been taken.
Our forces have driven further forward in the Tessy area and are now within a mile of the town. There has also been some progress south of Torigni Sur Vire.
In the area South of Caumont Allied troops have crossed the River Souleuvre and taken Le Beny-Bocage.
(S.H.A.E.F. 012330B to A.G.W.A.R.)

Figure 25. A copy of the official Admiralty War diary entry for Operation Neptune 1 Aug 1944 (Courtesy Danny Lovell)

Other reports regarding the loss of LCG 1062 are as follows;

31 July 1944

> "LCG 1062 Mined and sunk in position 049° 21 mins North 00° 15 mins West at about 06.30 today Monday. 45 out of 48 Survivors."


Ply/X.1108[illegible] Mne. [illegible]
Ch/X. 109383 Mne. KELLY John.

Craft struck a mine 31st July East of Seine Bay, approximately five miles from shore. Blew hole in stern. Ship taken in tow by L.C.F. 33 but sank in 20 minutes.

/Casualties.....

Figure 26. Extract from After Action Report confirming the loss of LCG 1062 and attempts to take her under tow. (Courtesy Danny Lovell)

> "Craft struck a mine 31st July East of Seine Bay, approximately five miles from shore. Blew hole in stern. Ship taken in tow by L.C.F. 33 but sank in 20 minutes."

Recorded casualties (8)[38] indicate that as well as the three missing crew three died that day plus a further two others died afterwards from their wounds.

[38] http://www.naval-history.net/xDKCas1944-08AUG.htm

10. Other Landing Craft Losses in the 'S' Area.

10.1 The 'Trout Line'

There were a total of five major landing craft losses reported in the area to the east of the Baie de Seine.

In addition to LCH 185 and LCG(L)1062 the three other vessels were lost, two being Landing Craft Guns (L) both being sister ships of LCG 1062;

> **LCG (L) 831**. - 11 July 1944. 09.45 hours hit mine. Sank after 15 minutes. One recorded casualty.[39]
>
> **LCG (L) 764** - 3 August 1944. 03.05 hours hit by Explosive Motor Boat. Still afloat at 05.45 hours. Was in position E5 when hit. Nine Recorded casualties.

The other vessel being Landing Craft Flak (2)1.

These vessels were assigned to support the anchoring area in what was to become known as the 'Trout Line'. This was a defence barrier set up around the Normandy anchorage to protect the ships from the multiple threats of E-boats, R-boats, human 'Neger' torpedoes and Linsen explosive motor boats based in Le Havre.

The Trout Line itself was composed of LC (Guns) LCG, LC (Flak) LCF and LC (Supply) LCS set up in a continuous double line one cable apart.

Minesweepers slotted in at 5-cables (half mile) intervals six miles seaward on each side and parallel to the beaches. Sword Beach, on the eastern flank, was particularly vulnerable to attack from the Le Havre area and also enemy submarines and human torpedoes.

British minesweepers HMS Magic, Cato and Pylades were casualties of German attacks on ships of the Trout Line. Other losses include HMS Lord Austin, and HMT Gairsay were sunk while undertaking this duty, illustrating how vulnerable this area was to attack or from mines.

References to the position of ships lost (e.g. A5) refers to the anchorage position identified in the British Anchorage Area. (See image below). The 'Trout line' was positioned in the north eastern anchorage points.

[39] http://www.naval-history.net/xDKCas1944-07JUL.htm

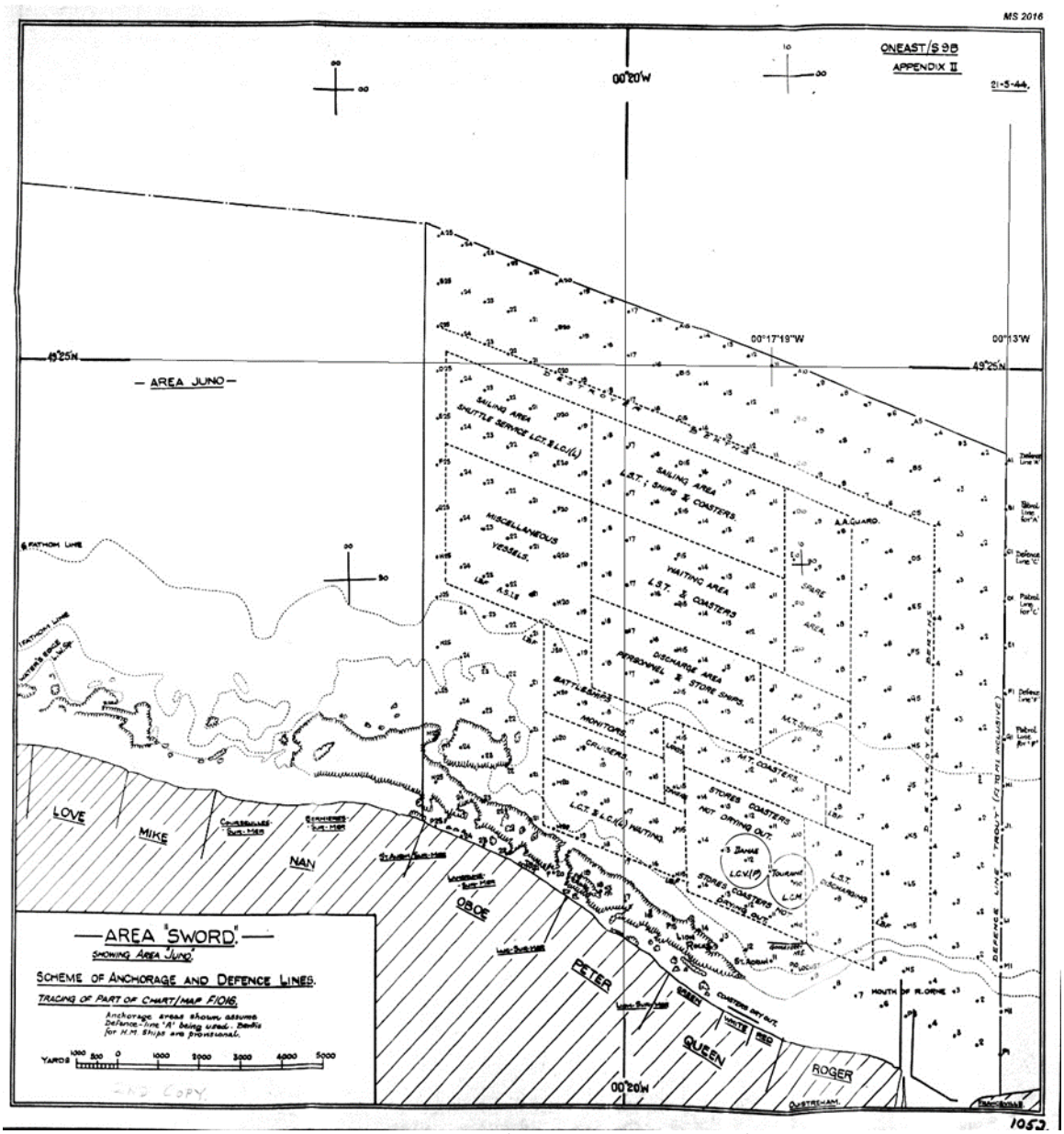


Figure 27. The Anchorage Plan for Sword Beach (Courtesy Danny Lovell).

10.2 Landing Craft Flak

The Landing Craft Flak (LCF) was a conversion of the LCT that was intended to give anti-aircraft support to the landing. The ramp was welded shut, and a deck built on top of the tank deck. They were equipped with several light anti-aircraft guns—a typical fitting was eight 20 mm Oerlikon gins and four QF 2 pounder "pom-poms" and had a crew of 60. The operation of the craft was the responsibility of RN crew and the guns were manned by Royal Marines. They carried two naval officers and two marine officers.

LCF (2)1, formerly Beach Protection Craft (BPC) No. 1[40] was built experimentally in the summer of 1942. She had twin 4 inch HA/LA[41] guns with several 20mm cannons in a modified LCT Mark 2[42]. Her gun houses were on a deck over the well. She was in action on 6 June 1944 during the Normandy landings and was subsequently sunk on 17 August 1944 by a torpedo while positioned on the 'Trout' line. There were few survivors from her Royal Marine detachment of 50 all ranks.

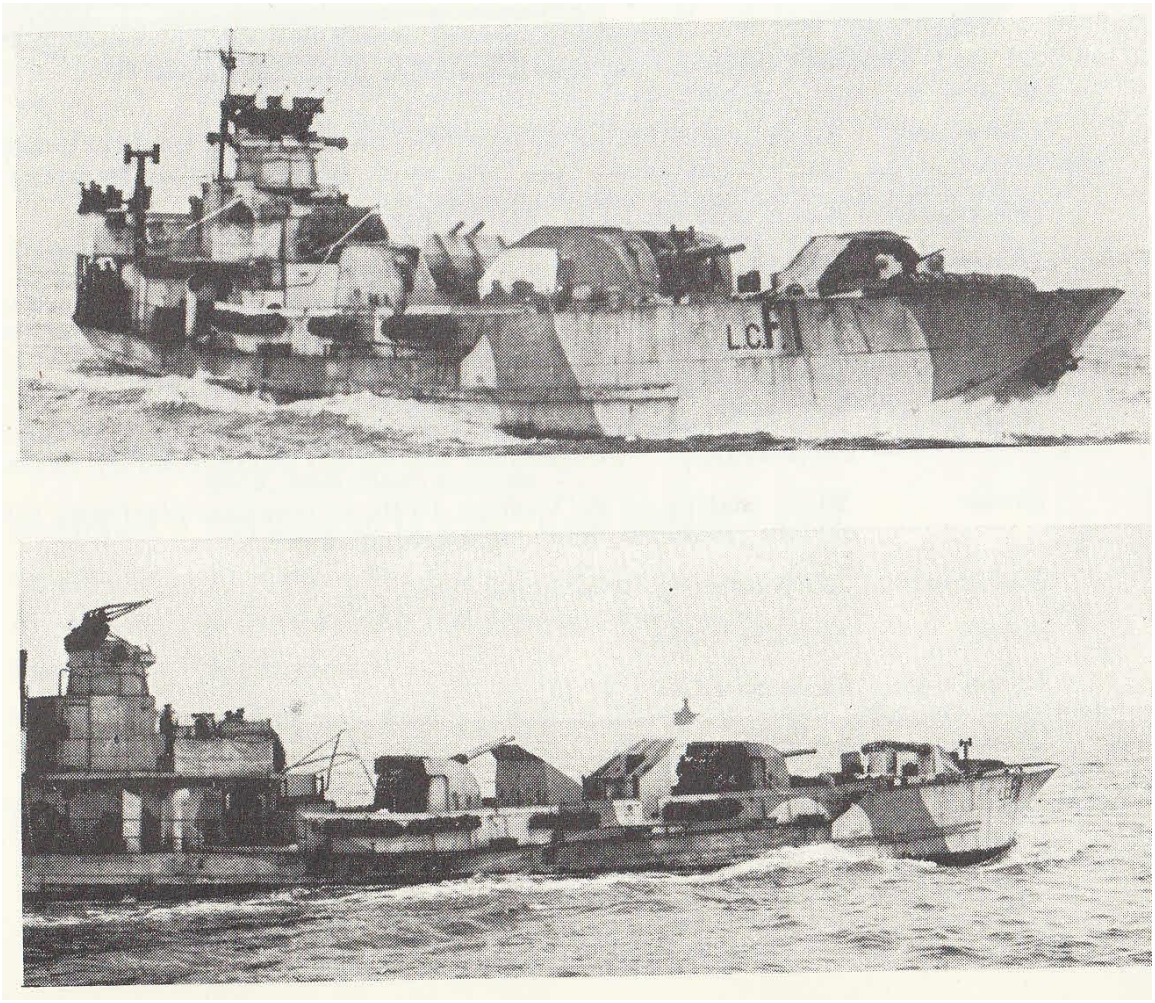


Figure 28. LCT (2) converted to Landing Craft Flak 1 (Prototype) (© ONI 226).

In an extract of a report dated 21 August 1944 from "The Senior Officer, Support Squadron Eastern Flank, British Assault area. Signed by Lt. Commander J. Hotham, RN, for Commander RN concludes;

[40] Originally named Beach Protection Vessel, renamed Beach Protection Craft and later Landing Craft Flak.
[41] High Altitude/Low Altitude. Anti -Air and Ship. Ability to elevate and fuse for Anti Air as well as engage surface targets.
[42] Allied Landing Craft and Ships by Office of Naval Intelligence. (ONI 226) Landing Craft Flack (2). ISBN #978-1-940453-16-3.

"It is considered that the sinking was undoubtedly due to a human torpedo as the craft is of much deeper draft (8 feet 6 ins to 9 feet) than other landing craft and therefore vulnerable to torpedo attack and a human torpedo was seen and subsequently destroyed by [LCF (2) 1] in the immediate vicinity of berth E5 only six minutes after the explosion occurred."

LCF (2) 1 17 August 1944. Time Exploded 06.32 hrs. Human Torpedo. Position E5. Was weighing anchor when hit in the stern.

With a total of 70 casualties recorded LCF (2) 1 had the greatest loss of life reported amongst the 5 Landing Craft lost in the area.

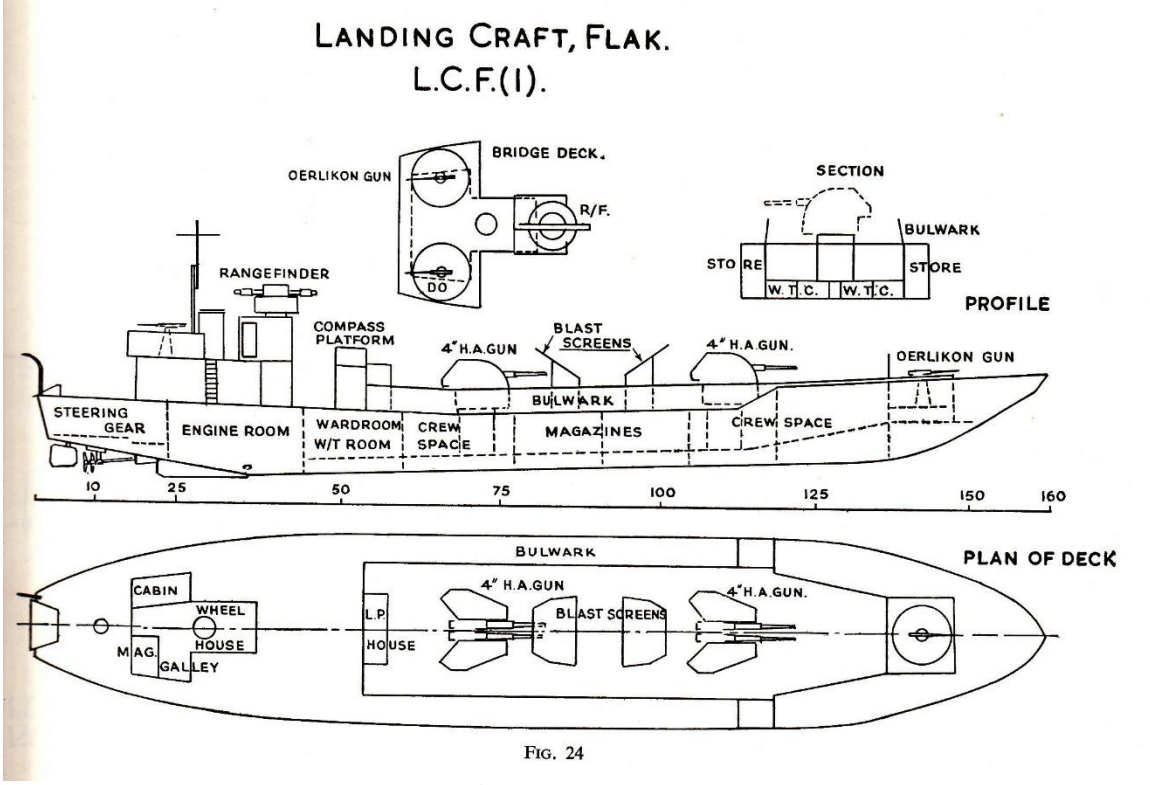


FIG. 24

Figure 29 General arrangement of LCF 1. (© ONI 226)

11. Preparations for the Survey

Building on the data gathered by side scan sonar surveys by the MC4[43] and SOS[44] in 2013 and working closely with subject matter experts Chris Howlett and Stephen Fisher, our target was the wreck labelled 'Target 16' and located 5km (3 miles) off the coast of Ouistreham.

Our base for operations was a beautiful historic cottage near Bréville-les-Monts which had been used by the British Army (9th Parachute Battalion) as a Headquarters and first aid post. This historic house was the perfect setting for both our project and also the documentary film.

Figure 30. The house we rented in Bréville-les-Monts was the HQ and first aid post for 9th Parachute Battalion (©Martin Davies)

A nearby plaque records the details of the 9th Parachute Battalion's action in the Normandy campaign and the defence of the nearby Châteaux.

> *"During the night of 7 June 1944 9th Parachute Battalion, reduced to 85 men after Merville and Amfreville/Le Plein, occupied les Bois de Mont Chateau St.*

[43] A French TV company.

[44] Sherrill Ocean Surveys now known as Sherrill Marine Services & Consulting.

Come position with orders to hold at all costs as it overlooked Ranville plain and the Orne bridges.

In the next few days men re-joining from scattered drops increased the battalion strength to 270. It was reinforced by 5th Battalion the Black Watch and elements of the Royal Armoured Corps, 1st Canadian Parachute Battalion and other airborne troops. Between 7-13 June the enemy attacked with increasing strength, finally using three infantry battalions, artillery and a squadron [of tanks[45]], outnumbering the defenders by about four to one. Despite severe hand-to-hand fighting the enemy did not penetrate the perimeter and suffered very heavy casualties.

On 13 June 9th Parachute Battalion was relieved by 52nd Oxfordshire and Buckinghamshire Light Infantry and moved to another front line position with only 150 men."

Figure 31. The rear view of this historic house at Bois de Mont. (© Alison Mayor)

[45] The word 'tanks' is omitted in the English version of the text on the plaque.

Figure 32. A photograph of the house (June 1944) where several casualties were buried (later to be re-interred at official war cemeteries). © Unknown.

We established a HQ 'Operations Room' where we could meet each day to discuss our findings and plan the next day's activities. After completing the underwater survey, towards the end of the week, we were delighted to receive a visit from Patrick Thomas and to share some of our discoveries with him and hear more of his experiences during WW2 and his career in the Royal Navy.

Figure 33. The project team in the 'Operations' room at 'No Roses HQ'. Left to right, Martin Davies, Alison Mayor, Stephen Fisher, John Henry Phillips, Jim Fuller, Richard Rowley, Tom Templeton and Doug Carter. (©Daniel Oron)

Figure 34. Filming John Henry Phillips and Stephen Fisher in the grounds of the house. (©Martin Davies)

The project team members are extremely aware of the ultimate sacrifice made by many in the Normandy campaign and throughout WW2. We are always respectful of the fact that many of these wrecks are the last resting place of brave soldiers and sailors from the Allied forces. Based in the Naval city of Portsmouth, from where Patrick and thousands of other men set sail for Normandy, we are always sensitive to the fact that we are visiting a special place, one that few people are able to visit. Indeed many of the project team have either served in or with the British Armed Forces and have family members who also have served. We always take the greatest care not to disturb or interfere with any wreck or artefacts.

We recognized the sensitivities associated with diving on wrecks where brave men lost their lives and were determined to behave in a solemn and respectful way when diving the wrecks. We also have produced guidance for British divers/clubs so that they too may be encouraged to visit France by better understanding the rules and regulations that apply when diving in French waters. Our diving operations fully met the requirements set out by DRASSM as a condition of the formal permission to conduct the survey.

12.The Wreck Site 'Target 16' / EA3151

12.1 The Wreck Site

There are four potential wreck sites that have been surveyed by sonar/multi-beam and are potential candidates for the wreck of LCH 185, however there are 5 vessels reported as lost in the area and one wreck site is out of bounds for diving being a prohibited area on the navigation charts.

Having reviewed the sonar images Hydrographer Chris Howlett thought the most likely to be the wreck of LCH 185 was located at position:

Latitude: 49° 21.1525' North / Longitude: 00° 14.803' West (WGS84).

The wreck has a charted depth of 14.3m with a general sea bed depth of 16m (lowest astronomical tide).

Dimensions are – Length 48m - Width 8.5m - Height 1.2m.

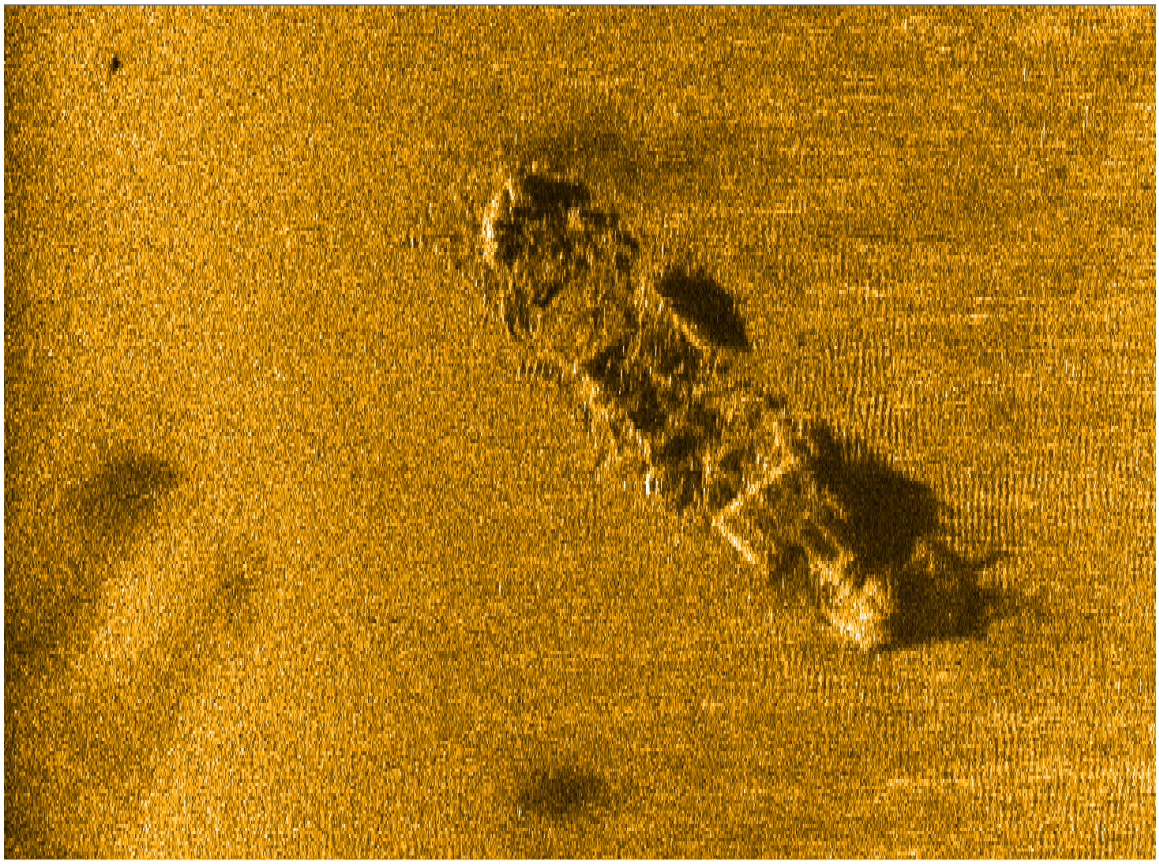


Figure 35. The MC3 side scan survey of the site - recorded as 'Target 16'. (Courtesy Chris Howlett).

The DRASSM multi-beam data for the same wreck site obtained during their survey in 2017[46] indicated that the wreck dimensions may be that more appropriate for an LCH. The wreck is in the vicinity of LCH 185's reported loss and no other wrecks in the area are recorded as LCH 185.

DRASSM had recorded the wreck as a Landing Craft Gun (LC(G) 1062) however indications were that the width/beam of the site was not wide enough to be that of a LCT(Mk4) hull of the type used for conversion to LCG(4) 1062.

In his research to locate the wreck of LCH 185 Chris Howlett overlaid the outline of an LCI (L)/LCH over one of the multi - beam images and this indicated that the wreck (Target 16) may be the correct width.

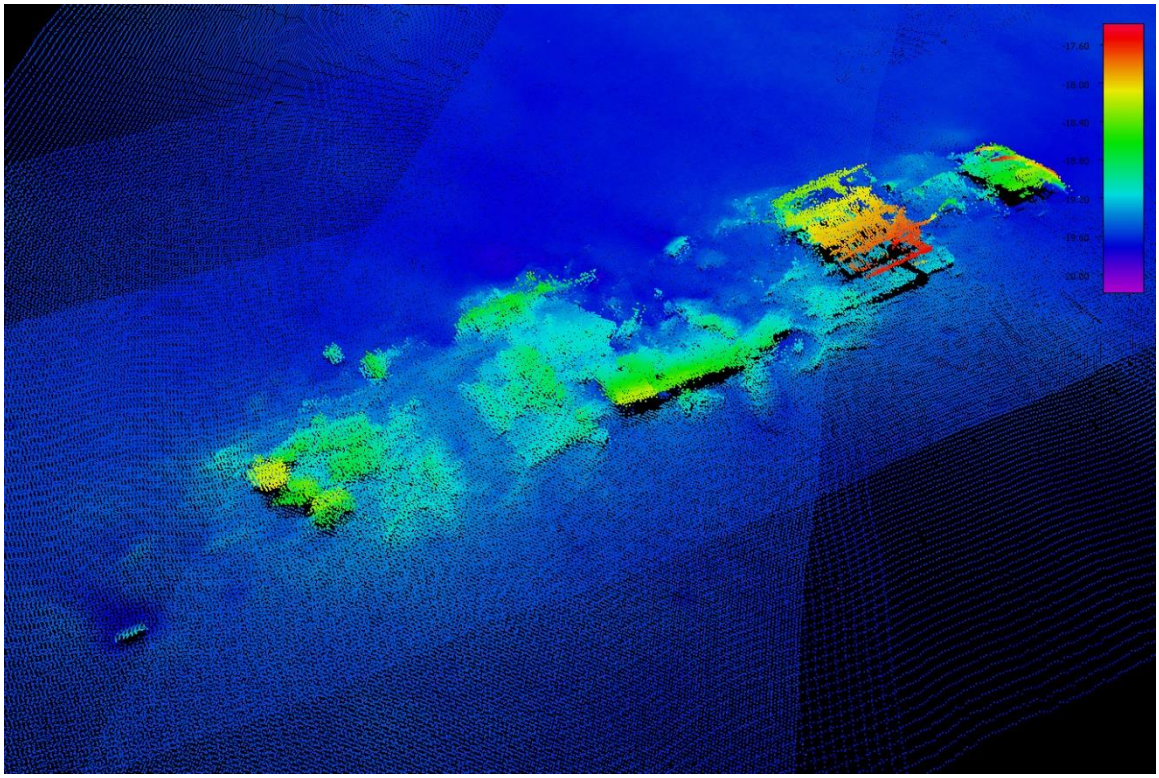


Figure 36. A DRASSM multi-beam of the wreck. Bow to the left. (EA3151 Courtesy DRASSM).

[46] (DRASSM wreck reference EA3151)

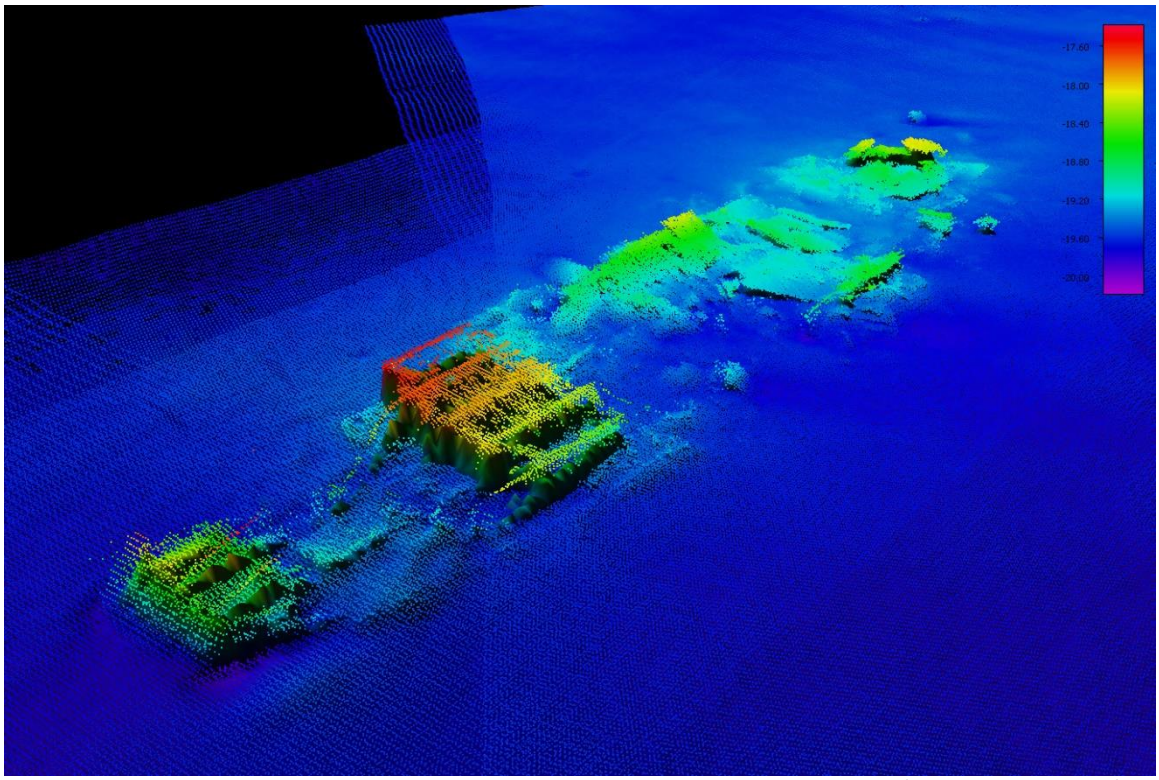


Figure 37. Another DRASSM multi-beam survey image of the site, bow to right. (Courtesy DRASSM).

However the only way to confirm this would be to dive the site and take some basic measurements. We therefore needed to examine the wreck to confirm whether it was a LCH or LCG.

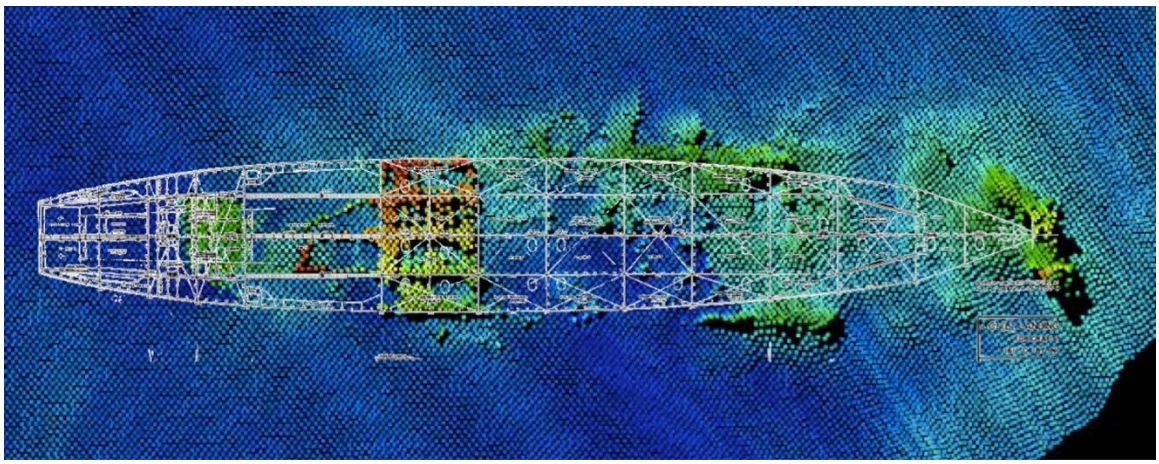


Figure 38. The outline drawing of an LCI (L) superimposed on a multi-beam image of Target 16 (Courtesy Chris Howlett).

Although difficult to confirm the difference between the 2013 side scan and the DRASSM 2017 multi-beam images indicated that the wreck may be deteriorating as the DRASSM image lacked definition in many areas.

13. Project Methodology

13.1 Diving and Survey Methodology

We were aware that in order to record and document the wreck we would require permission from the Département des Recherches Archéologiques Subaquatiques et Sous-Marines (DRASSM) and the Prefecture Maritime.

An application with associated project plan, risk assessment and emergency plan was submitted to DRASSM on 27 November 2017 and subsequently approved on 28 March 2018. A copy of the DRASSM and Prefecture permission documentation can be found at Appendix 1.

All divers taking part in the survey activity were met the required certification level of INPP Level 1B. The diving was conducted in accordance with BSAC Safe Diving Practices and French diving regulations and MT12. All divers held current 'Fit to Dive' medical certification. The other recreational divers who were part of the group (John Henry Phillips and Daniel Oron) were not permitted to dive during the survey and conducted a recreational dive on the site after the survey had completed.

13.2 Project and Diving Management

The nominated Project Leader was Martin Davies and the appointed Dive Operations Manager was Tom Templeton. The table below details the dive/survey team members, their qualification and roles in the project.

Name	Qualifications	Role
Martin DAVIES	INPP Level 1B* BSAC Advanced Diver CMAS 3* diver BS EN 14153-3 ISO 24801-3	Project Leader Diving Officer for SSAC Photographer/Photogrammetry
Doug CARTER	INPP Level 1B* BSAC Advanced Diver CMAS 3* diver BS EN 14153-3 ISO 24801-3	Survey Diver
Jim FULLER	INPP Level 1B* BSAC Advanced Diver BSAC Open Water Instructor CMAS 3* diver CMAS 2* Instructor BS EN 14153-3 ISO 24801-3	Survey Diver
Alison MAYOR	INPP Level 1B* BSAC Advanced Diver CMAS 3* diver	Survey Diver Photographer

	BS EN 14153-3 ISO 24801-3	Report writer Report writer
Tom TEMPLETON	INPP Level 1B* BSAC Advanced Diver BSAC Open Water Instructor CMAS 3* diver CMAS 2* Instructor BS EN 14153-3 ISO 24801-3	Dive Operations Manager Survey Diver Photographer/Video

Table 2 Project diving team and roles.

In addition, valuable logistical support was provided by Richard Rowley who helmed the boat for the survey. Hydrographic expertise was provided by Chris Howlett who also was able to provide historical expertise along with Stephen Fisher, an archaeologist and historical researcher specialising in the Normandy campaign. Assistance with research has also been received by Danny Lovell (WW2Talk) and Andrew Whitmarsh from the D-Day Story, Portsmouth City museum service who kindly accessed the Landing Ship and Landing Craft Association archives left to the museum by the late Tony Chapman.

A comprehensive dive plan and risk assessment and incident plan were produced as part of the approved project plan submitted to DRASSM for consideration. All members had third party liability insurance (BSAC) plus travel and medical cover.

Following approval by DRASSM and the Maritime Prefecture a Notice to Mariners was issued to inform sailors and vessels that the survey was taking place. Two INPP certified divers were required to remain on the boat during diving operations to provide surface / rescue cover during diving operations.

Before the project began and prior to each dive a comprehensive briefing was given to all taking part. Relevant information was provided including;

- Diving team composition;
- Boat details, including safety equipment;
- Dive times to coincide with slackest possible water;
- Pre-dive planning using French diving tables (MT12) to back up computer calculations;
- Risk assessment including a daily risk assessment; and
- Daily operations plan and weather.

All boat and diving equipment used were certified as in test/service. Emergency Oxygen and first aid equipment, boat radios and navigation equipment were checked each day.

On the day before the survey was due to commence our boat (Southsea Explorer) developed a critical engine failure and, having been unable to arrange a repair quickly it was decided that the boat should not be used for the project. This had an immediate impact on the project/survey programme and put at risk the project plan. Following a search of boats for hire we subsequently sourced and rented a slightly smaller RHIB (5.4m) which allowed us to

conduct the survey. However due to the lack of a functional boat we lost 2 days of planned diving.

Figure 39. The replacement boat used for the survey (©Tom Templeton).

We chose to conduct our operations from Ouistreham where there is a large and well maintained slip way to launch boats. Access to the open water was possible 3 hours before and after High Water. We launched and recovered the boat daily.

Figure 40. Leaving the harbour at Ouistreham. Care was required near the Ferry Port (©Martin Davies).

The survey was planned to coincide with a good neap tide to maximise slack water period and thereby dive times.

13.3 Survey Methodology

Survey methods used in this survey included swim-over surveys to get a general impression of the wreck and determine any key features to aid identification. In addition basic measurements were taken and the site recorded using photography and video. The main reason for using photography was to produce 3D images using photogrammetry[47] which uses methods from many disciplines, including optics and projective geometry. Digital image capturing and photogrammetric processing includes several well defined stages, which allow the generation of 2D or 3D digital models of the object as an end product.

The dive team recorded the wrecks in detail using 3D images created by photogrammetric techniques as well as by video and by taking basic measurements.

[47] Photogrammetry has been defined by the American Society for Photogrammetry and Remote Sensing (ASPRS) as the art, science, and technology of obtaining reliable information about physical objects and the environment through processes of recording, measuring and interpreting photographic images and patterns of recorded radiant electromagnetic energy and other phenomena.

Images were processed using AGISOFT PhotoScan to produce 3D visualizations that can be converted to a pdf image and viewed using ADOBE pdf reader (via Google Chrome). Ultimately be viewed using Virtual Reality (VR) technology for a fully 'immersive' experience.

Photogrammetry relies on a disciplined approached to the survey process and is particularly challenging when underwater visibility and light penetration is poor. A degree of overlap and recognizable points assists the photogrammetry software to process multiple points (pixels) in a geometric space. In the underwater environment marine growth, movement and current provide additional challenges to obtaining a series of images that are capable of generating a 2D or 3D image.

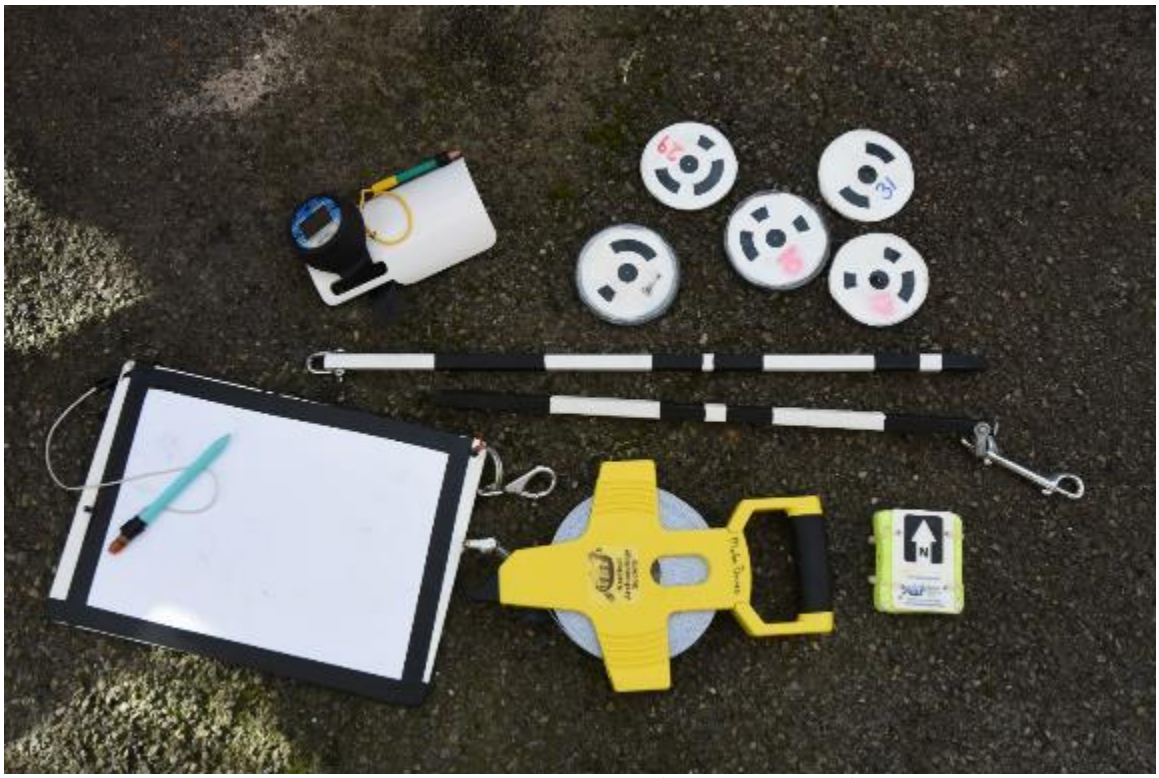


Figure 41. Typical survey equipment used for the project. (© Martin Davies)

Additional survey equipment such as scale bars and circular 'targets' can help the software to identify control points and assist in the creation of the image. Targets are placed around an object. Each target has a unique identification symbol irrespective of orientation.

In due course the images and supporting documentation telling the story of the tragic events that led to the loss of LCH 185 will be made fully accessible World Wide Web[48] and will allow use of Virtual Reality (VR) to visit the wrecks in a fully interactive way.

[48] To be hosted on Sketchfab.com.

Figure 42. Use of photogrammetry targets (© Martin Davies)

Before each dive a survey strategy was briefed detailing the objectives for each diving pair and each site. Where known the relevant information on the vessel's history and possible orientation/features were included. Ship construction plans and photographs were used to gain an appreciation and understanding of the construction and lay out of a Landing Craft Headquarters (LCH) as they might relate to the wreck.

Following each dive, log sheets were completed and archived. From the log sheets it was possible to develop plans for future work. Recording sheets were those recommended by DRASSM Survey record sheets.

As this project was a non-disturbance survey project a finds index was not appropriate.

13.4 Skills Developed

Most of the work done was by video and photography. However the low visibility and poor light penetration proved challenging in obtaining photographs that could be used for the photogrammetry process. Numbered individual discs that assist with photograph alignment provided some benefit as did scale bars which also proved useful as a rough measurement guide underwater.

At the end of the diving day a debriefing session and log completing session allowed discussion of results and made sure that the record of the day's diving could be used to contribute to the outcomes of the project.

The collaborative feedback was really useful in helping people to understand what they had been recording and resulted in increased understanding of what had been observed and recorded. Where possible images were viewed to help identify key features of the wreck.

13.5 Research and Documentation/Drawings

In order to assist in the identification of the wreck it was important for us to obtain details of the construction of each type of vessel. Whilst there were construction drawings available for the US built Landing Craft Infantry (Large) and indeed a fully restored LCI (L) on display in the United States, details of the modifications undertaken when converted to be a British Landing Craft Headquarters were not readily available. However, after much persistence Stephen Fisher located some archive boxes in the Museum of the Royal Navy archives (the 'Instow Collection', housed in the Royal Marines Museum, at Eastney, Portsmouth) and to his (and our delight) finally found copies of ships' drawings including conversion specifications.

The other significant 'find' from this research and visit to the RM Museum archive was the drawings for the conversion of LCT (Mk4) to LCG (L) and general arrangement for a LCG (L). In particular the bow and stern plans were very informative in reaching our conclusions about the wreck. As time was limited photographs were taken though further more detailed research and scanning is highly recommended. Our thanks to Stephen for sharing this information with us.

Other relevant historical information was also provided by Chris Howlett and Danny Lovell. Chris was able to supply details of the anchoring sectors and Danny details of the WW2 After Action reports regarding the loss of each vessel and also various photographs.

John Henry Phillips had obtained copies of LCI (L) plans for use during the survey in Normandy and also had been undertaking a lot of research into the crew including communicating with relatives of some of those who had served aboard LCH 185. This correspondence which included original letters and photographs enriched our appreciation and understanding of what it was like to have friends, comrades and loved ones serving during this time.

13.6 Other Tasks

The major post survey task was the processing of photographs to produce the photogrammetry 3D images.

Diving was not possible on the first two of the days due to the boat engine problems. This was an ideal opportunity to visit museums and other places of interest in order to conduct research but also to better understand the context and challenges that were present during the historic events of 1944.

14. Project Results – Wreck Survey

14.1 Locating the Wreck (Target 16)

From our base of operations at Ouistreham we had planned a total of 4 days of diving with opportunities to visit the site on multiple occasions. However we were unable to complete this plan due to a combination of boat engine problems and weather and tidal constraints. Our first attempt to locate the wreck was unsuccessful principally because of unfamiliarity with the hired boat navigation equipment and limited sonar ability.

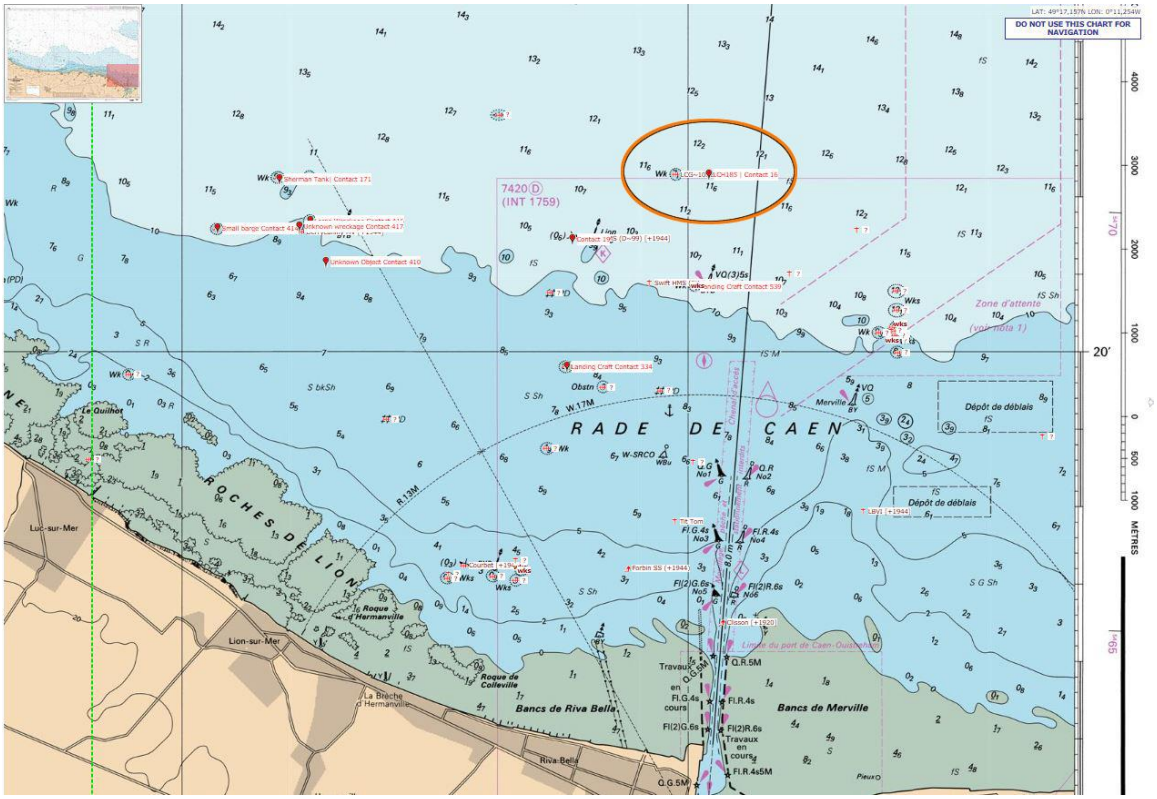


Figure 43. Extract from SHOM chart showing the location of the wreck site Target 16 LCH 185/LCG 1062.

The SHOM[49] chart for the area is number 7421 (De la Pointe De la Percee a Ouistreham). Tidal predictions were calculated with UKHO 'Total Tide' software. High and Low water calculations based on 1582 LE HAVRE. The tidal predictions for area SN159AQ. The wreck site (Target 16) is 3 nautical miles (5.5km) north of Ouistreham port. Other WW2 wrecks in the area are three LCG (L): numbers 1062, 831 and 764, Landing Craft Flack (LCF) (2) 1 and LCH 185. Diving is prohibited at one of these sites, assumed to be LCF (2) 1 due to the presence of munitions.

[49] Service hydrographique et océanographique de la Marine or SHOM) is the French Naval Hydrographic and Oceanographic Service, Part of the French Ministry of Defence.

A total of 3 dives over 2 days were achieved (11 individual dives). A recreational dive was conducted after the survey had finished to allow John Henry Phillips to dive the wreck so that he could tell Patrick Thomas what he had seen.

Wreck Position: 49° 21.1525' North / 00° 14.803' West.

Maximum depth on High Water dive: 19.9m.

Maximum depth on Low Water dive: 14.5m.

Total number of individual dives: 11.

Total time on site: 610 minutes.

Underwater visibility proved a challenge on low water due to the discharge of fresh water from the River Orne which flowed into the area at low tide. At depth there was a layer of clearer sea water and although it was darker some photography could still be carried out. Visibility on high water was much improved at 5 to 6m. To aid navigation around the site a line was laid between bow and stern.

Despite the severe impact to the diving and survey plan a remarkable amount of data was successfully recorded which will help inform greater understanding of the site. Our findings from the site are summarised in the next section.

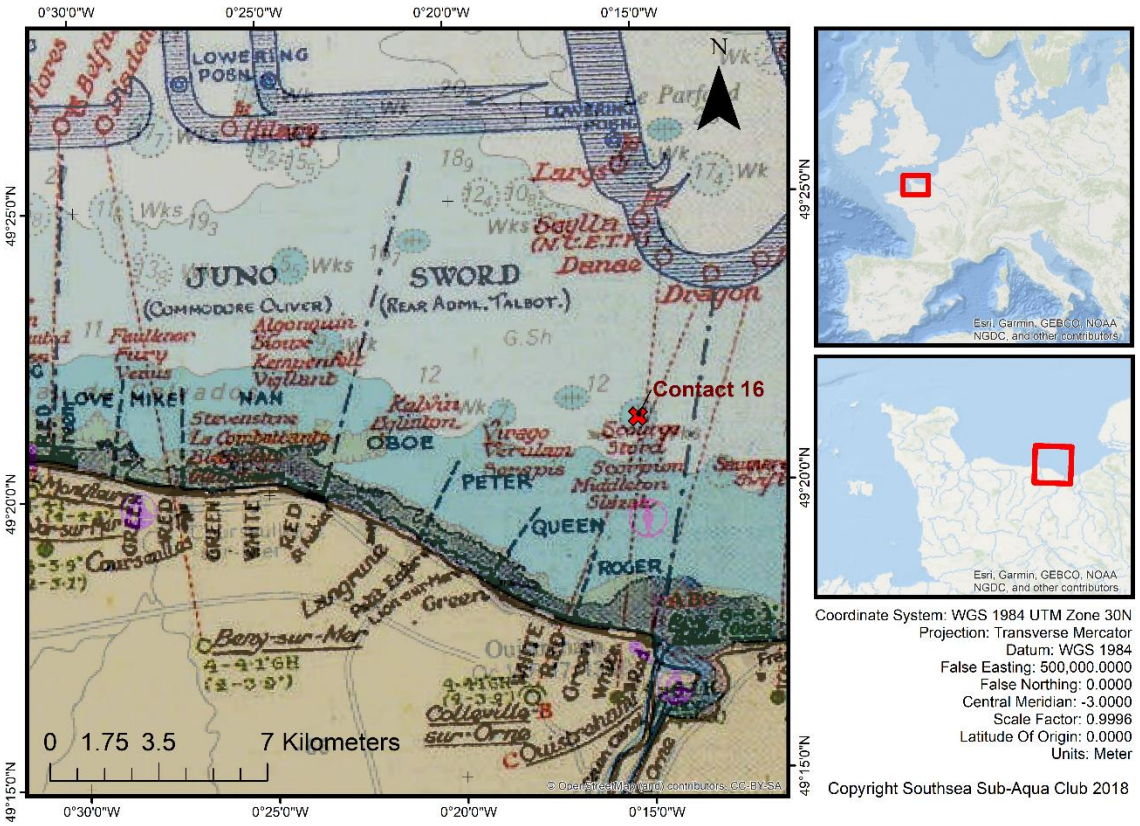


Figure 44. Historical map showing position of Target 16 (Courtesy Richard Rowley)

15.Survey Findings

15.1 General Overview

Despite the limited time on site and poor conditions a number of key observations were made which have helped us reach a conclusion about the wreck.

The wreck is much degraded with three main sections of wreck with debris fields between the forward section, the main hull section and the stern. The wreck is confirmed as upside down.

The construction of the middle framework section is consistent with that of a flat bottomed vessel without a distinct keel and typical of a tank landing craft. The wreck superstructure had collapsed as had the sides of the vessel. The highest point were the skegs on the top of the upturned stern.

The main features are illustrated on the following image;

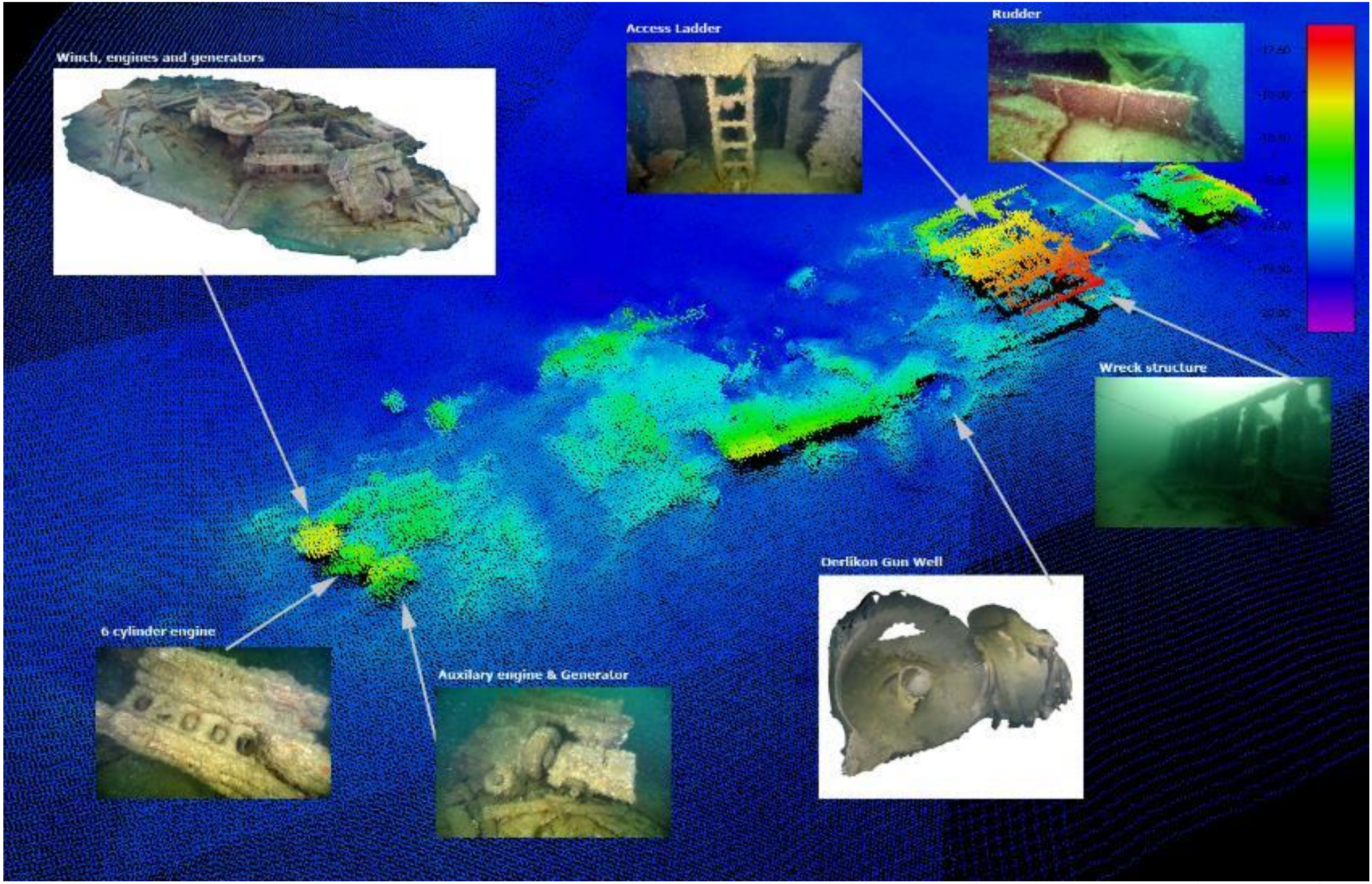


Figure 45. Multi-beam sonar image with images of the main objects that were identified during the survey – main sonar image ©DRASSM, inset images (©Martin Davies)

15.2 Key Observations

The key observations/features recorded from the survey dives were:

15.2.1 The Wreck is Inverted

The upturned stern is clearly visible with rudders and skegs. There are no hatchways visible in the frames of the main hull section (framework). The five ladders that were observed had no hatchways visible at the top of the ladder.

Towards the bow area the large capstan winch is upside down with the mounting base uppermost. The conical anti-aircraft gun pedestal is also base upwards.

The stern is also inverted with the vessel's two skegs[50] clearly visible.

These observations also indicate that the hull is upside down.

Figure 46. One of the access ladders into the stores area of the ship. (© Martin Davies)

15.2.2 Bow Area

The bow of the craft was not located. The bow was a key feature of a LCH with its distinctive anchor hawser which would have helped confirm the identity of the wreck. There was only

[50] A 'skeg' is a sternward extension of the keel of boats and ships.

minor debris in the area forward of the main winch and this could not be identified as any specific piece of the bow structure. Neither the anchor nor any chain was found.

15.2.3 Auxiliary Machinery

Behind what would have been the bow, an upturned winch, believed to be used for raising the anchor was the most prominent feature. There were a number of engines/motors and generators in this area. A 3D photogrammetry model of these features was made and used to compare against ship plans. Below is a view the photogrammetry model and the full 3D model can be seen by following the hyperlink:-

https://sketchfab.com/models/592770153fcf4d90aaa216c49639a75a

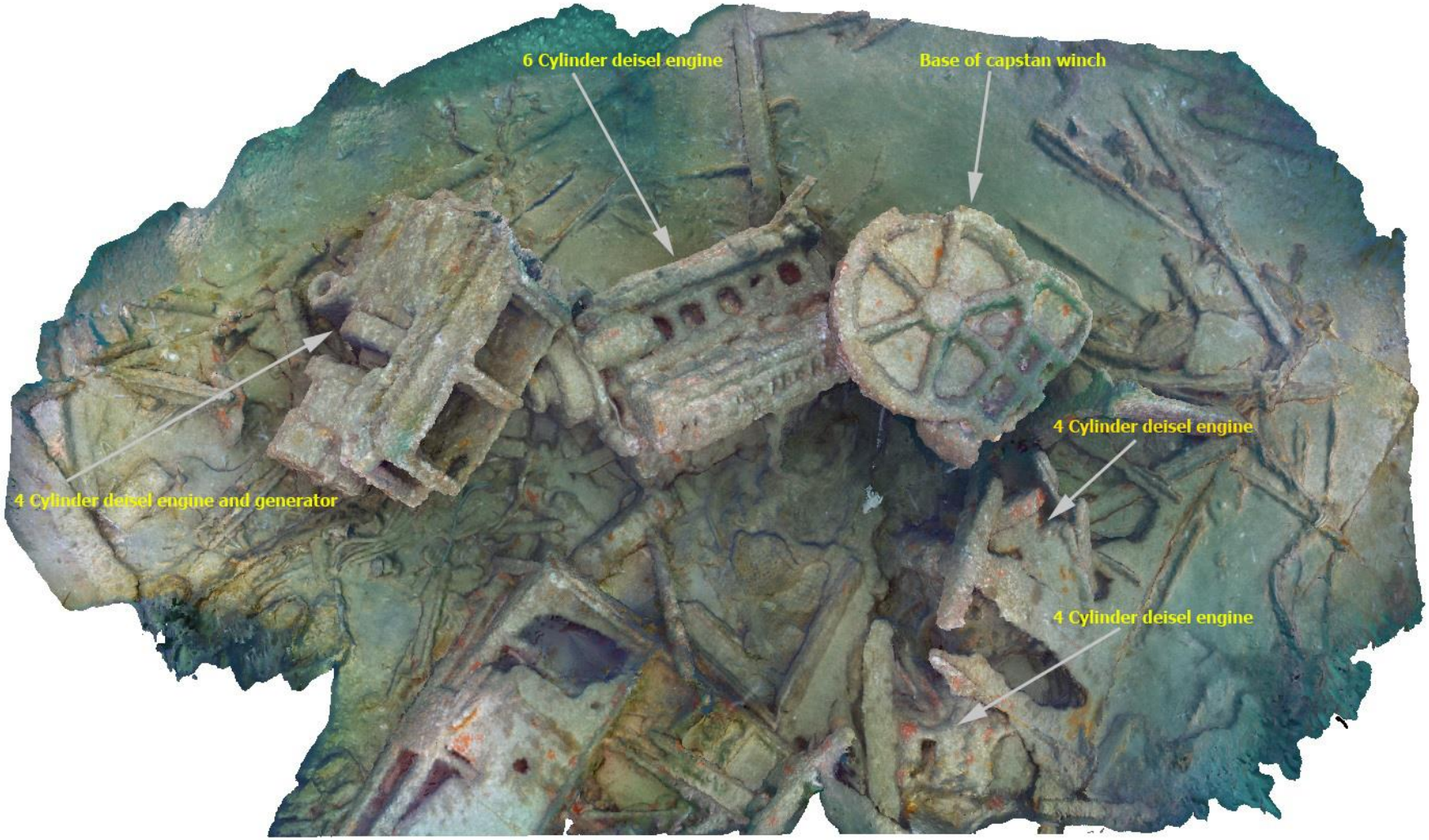


Figure 47. Photogrammetry plan view of the winch and auxiliary machinery. (©Martin Davies)

Figure 48. A second view of the winch and auxiliary machinery. (©Martin Davies)

15.2.4 Anti-Aircraft Gun Well

This feature can be seen on the DRASSM multi-beam images and is likely to be the gun well of a 20mm Oerlikon Anti-Aircraft gun. The surrounding 360° armour plating remains intact with the conical gun pedestal mount upside down in the centre.

The gun well measured 2.70m diameter. No ammunition was observed (of any size).

Figure 49. Photogrammetry view of the conical Anti-Aircraft gun pedestal and circular armoured protection. (©Martin Davies)

Figure 50. Another view of the Anti-aircraft gun position with the gun pedestal in the centre. (©Martin Davies)

15.2.5 Hull Framework

From the multibeam surveys this section of hull appeared to be of a similar width to that of a LCI (L) / LCH hull and therefore it was important to record this feature. The hull construction was compartmentalised and consistent with that of a WW2 tank landing craft. However there was evidence that the two outer sections of hull at the sides of the ship had collapsed leaving the four inner hull sections standing.

Figure 51. View of the side of the hull section with evidence of the sides of the vessel on the sea bed. (©Martin Davies)

The main section measured as between 7.95m and 8.03m beam (depending on whether the measurement was taken to the outer edge) and between 4.92m to 4.99m long. The average height of the framework structure was 1.2m.

The beam measurement was significant in determining the vessel. The LCT Mk 4 hull ship plan (at Figure 54) shows the measurement of the inner 4 compartments as 26 feet (7.95m) which aligns exactly to the measurements taken.

There were three strengthened centre joints that ran the length of the framework. Two of these strengthened joints extended aft towards the stern. There were 5 ladders seen in this section.

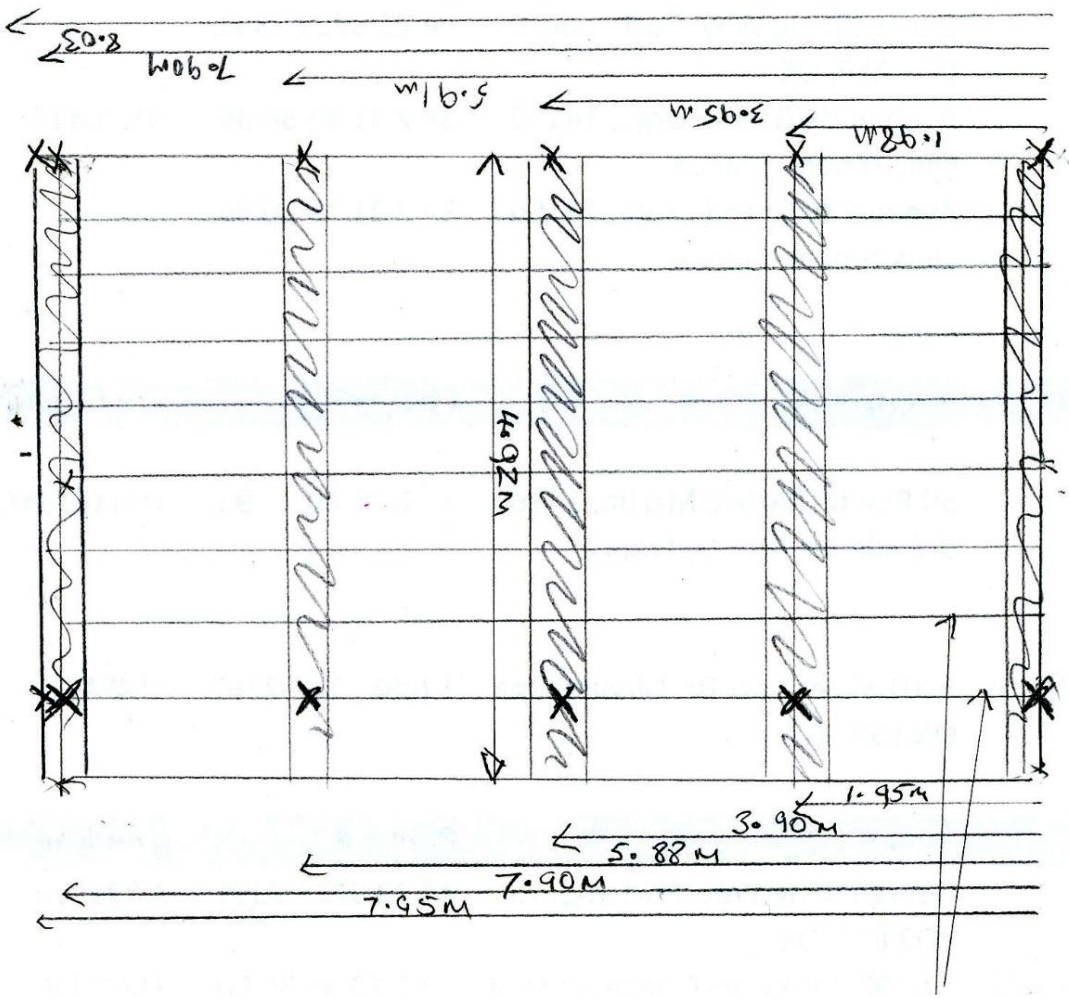


Figure 52. Diver's sketch and measurements of hull framework. (Doug Carter)

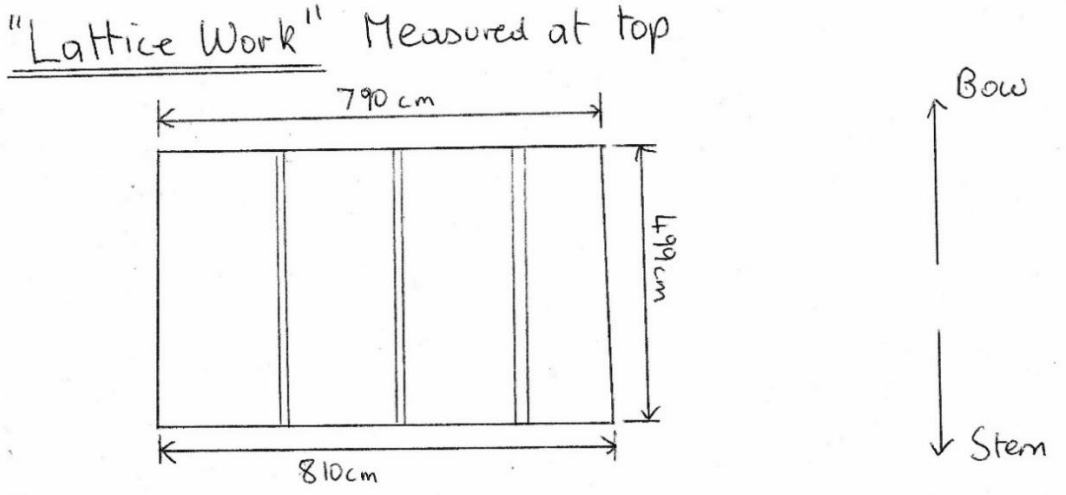


Figure 53. Diver's sketch and measurements of hull framework. (Jim Fuller)

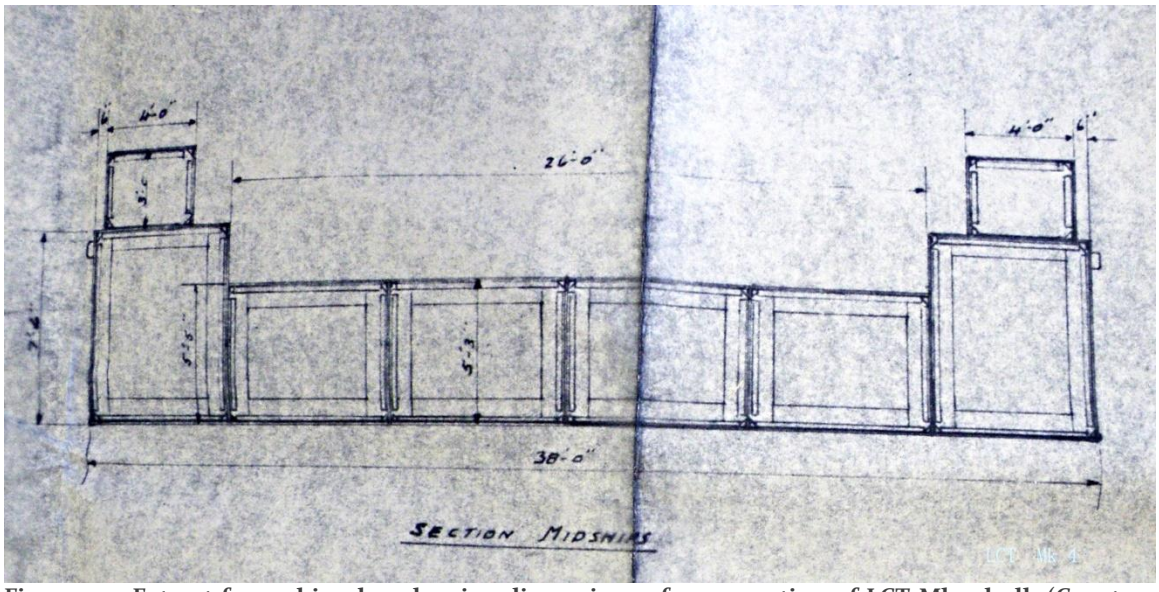


Figure 54. Extract from ship plan showing dimensions of cross section of LCT Mk 4 hull. (Courtesy Danny Lovell).

15.2.6 Propulsion Systems

No engines or other elements of the propulsion system could be found. The lack of propulsion/engines, normally the most robust part of a ship, indicated that the wreck had been heavily salvaged as this high quality steel and other metals would have monetary value and be relatively easy to remove. This would also explain the severe damage toward the bow area where much of what remained of the vessel was twisted, incoherent pipes and plates of metal; consistent with extensive salvage.

15.2.7 Stern Area

The stern was upside down and with two 'skegs' visible.

The two propellers were missing. Two rudders were located (see below).

The stern measured 4.55m wide at the highest point and 4.6m wide at seabed level. The end of the stern was 10.88m away from the hull framework.

These measurements are consistent with the ship's plans for a LCT Mk 4 hull.

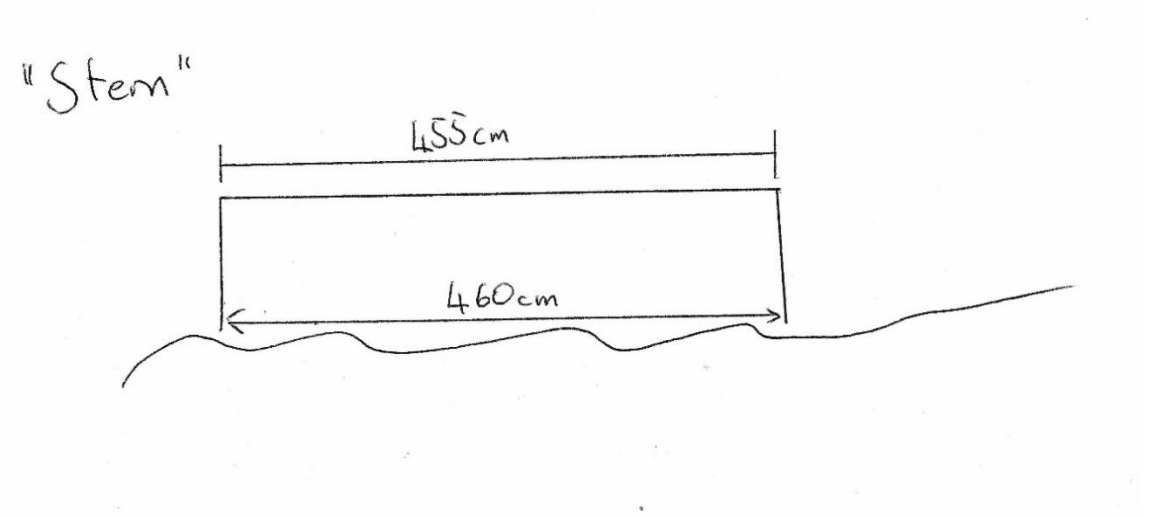


Figure 55. Measurements and sketch across the width of the stern. (Jim Fuller)

Figure 56. The upturned stern and one of the skegs of the vessel. (©Martin Davies)

15.2.8 Steering Gear

Two rudders were found on the site; the first was found resting flat on top of the stern, the second was just forward and standing upright. Both rudders were observed to have additional ridges to strengthen the as can be seen of the ship drawings for a LCT Mk 4.

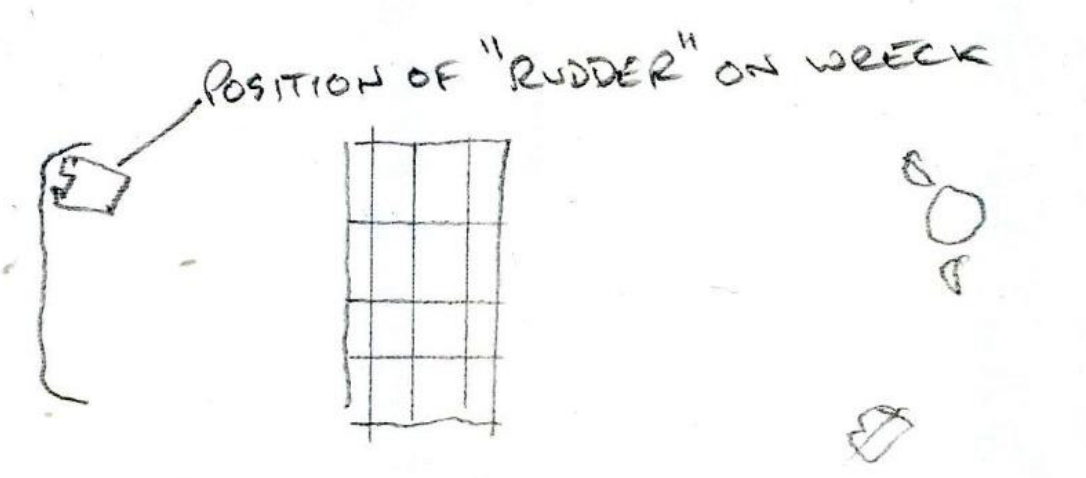


Figure 57. Diver's sketch illustrating position of rudder 1. (Doug Carter)

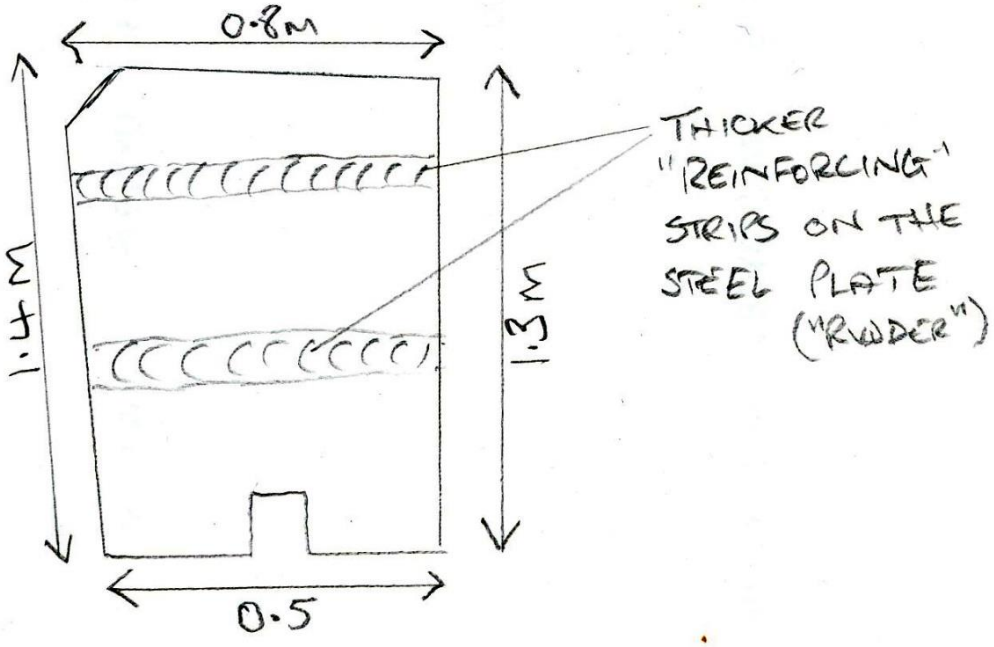


Figure 58. Diver's sketch and measurements of rudder 1. (Doug Carter)

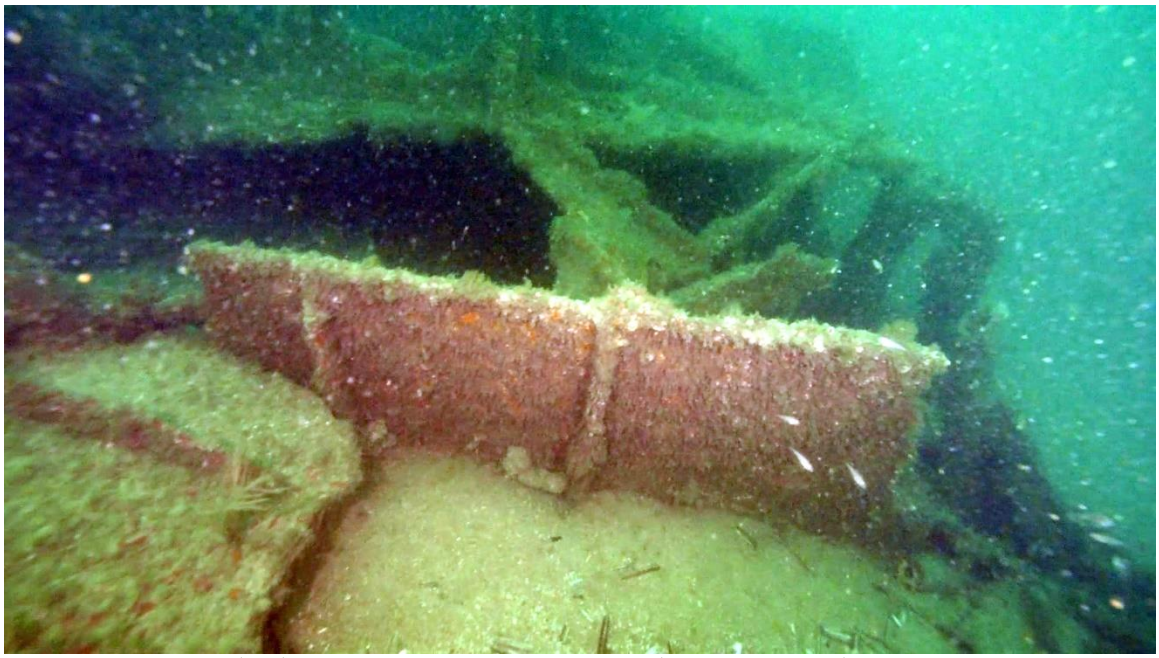


Figure 59. Rudder 2 (left), note the strengthening ridges. (©Martin Davies)

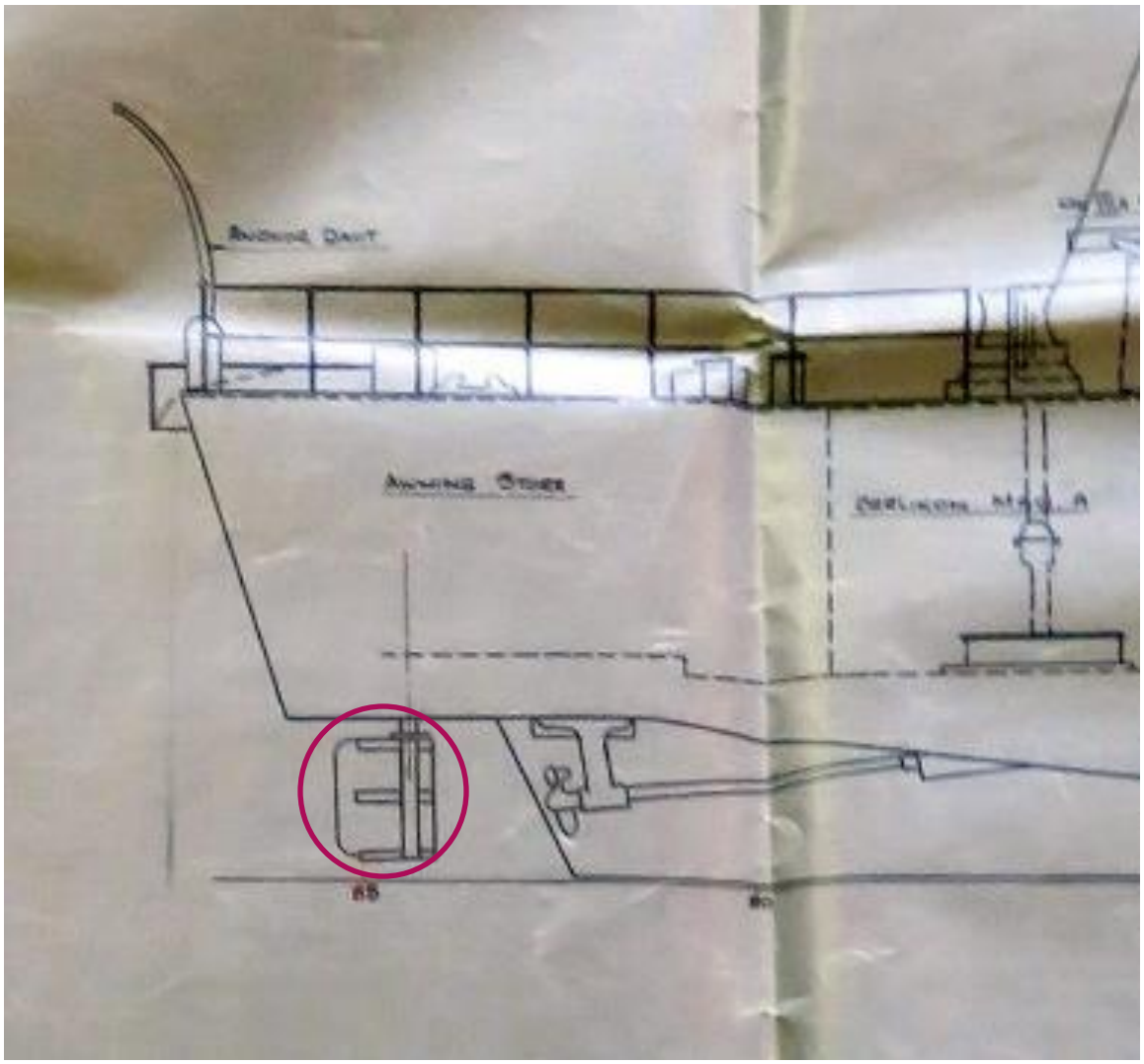


Figure 60. Image taken from ships plans of an LCG (L) showing the rudder. (Courtesy Stephen Fisher).

The extract from the LCG Mk 4 plans above it is noted the strengthening ribs that were part of the rudder design. The plans for LCI rudders do not have the same reinforcing features.

15.2.9 Debris Fields

There were two areas of debris;

1) between the framework and forward anchor winch and

2) between the framework and the stern.

Debris field 1 included the Anti-Aircraft gun well and a 2nd generator/motor. This area would have been where the two 4.7 inch guns of an LCG would have been fitted.

Debris field 2 would have been where the engines of the vessel would have been located.

16. Survey Conclusions

16.1 General

Although the diving programme was severely affected by the failure of our boat engine, tide/currents and at times the underwater visibility/weather the project team were successful in gathering a significant amount of information about the wreck site.

Although from the overlay of the LCI (L) drawings on the multibeam image had appeared to indicate that it may be similar to the water and fuel tanks present on a LCI (L) / LCH, the divers' visual inspection and measurements have confirmed the outer sections of the ship had collapsed leaving only the centre 4 sections of that section of hull. The width of the frames (7.95m) exactly matches that of the LCT Mk 4 hull cross section whereas the LCH beam was only 7.09m. From this we can establish that the hull is that of an LCT Mk 4. The LCT Mk 4 hull was used as the platform for conversion to Landing Craft Gun (L)) including that of LCG 1062.

Other observations also add to this conclusion; namely;

- The presence of ladders in the frame section;
- LCH Anti-Aircraft gun wells only had 270° armoured protection whereas LCG (L) Anti-Aircraft gun wells had 360° protection.
- LCH had 2 x rudders however it appears they did not have re-enforcing strips whereas the LCG (L) rudders were strengthened in this way.
- The anchor winch (forward) and associated auxiliary machinery are not recognised by LCI (L) experts in USA[51].

Our conclusion therefore is that this wreck is not that of a Landing Craft Headquarters but probably the wreck of a Landing Craft Gun (Large).

We cannot be definitive in identifying the wreck as LCG 1062 as there were two other Landing Craft Guns lost in the area (LCG 831 and LCG 764).

The wreck appears to have been heavily salvaged. The debris fields indicate that both guns, engines and propellers have been removed. These substantial pieces of equipment would have been valuable sources of scrap metal / steel. It is known that many of the wrecks were commercially salvaged in the 1970s.

This information and supporting images/video will help further understand the wreck and provide an opportunity for future research.

[51] Amphibious Forces Memorial Museum restored LCI(L) 713 David McKay
https://www.amphibiousforces.org/lci713page/lci713page.html

Figure 61. In this painted sketch the stern of a LCT lies rusting on the sand at low tide at Courseulles clearly showing the construction of the LCT Mk 4 hull. © IWM (IWM ART LD 4363)

16.2 Location of LCH 185

There appears to be no obvious other candidate wreck for LCH 185 in the Sword area where she was reported as having sunk. We will continue to conduct research on new information should it emerge which may eventually enable us to locate and identify the wreck of LCH 185.

17. Honouring Those Who Perished

17.1 Remembrance at Sea

We were privileged to be invited to join Patrick Thomas and John Henry Phillips in a participating in a commemorative service at sea courtesy of the Société Nationale de Sauvetage en Mer[52] lifeboat crew based in Ouistreham.

Figure 62. The SNSM lifeboat crew Patrick Thomas, John Henry Phillips and the SSAC dive team (©Daniel Oron)

We joined Patrick in honouring those lost by placing floral tributes over the wreck site to those who lost their lives aboard LCH 185 and in the Normandy Campaign. In a moving tribute to his friends and shipmates Patrick recited the poem which had come to mean so much to him and other sailors around the world; No Roses on a Sailor's Grave.

[52] The Société Nationale de Sauvetage en Mer (SNSM) is a French voluntary organisation founded in 1967 whose task is saving lives at sea around the French coast, including the overseas départments and territories.

Figure 63. Patrick Thomas recites the poem 'No Roses…' as flowers were placed on the surface above the wreck. (©Martin Davies).

There are no roses on a sailor's grave,

nor wreaths upon the storm tossed waves.

No heartbroken words carved in stone,

just shipmates lying there alone.

The only tributes are the seagulls' sweeps,

and tear drops when a loved one weeps.

A minute silence was observed in their memory before returning back to Ouistreham.

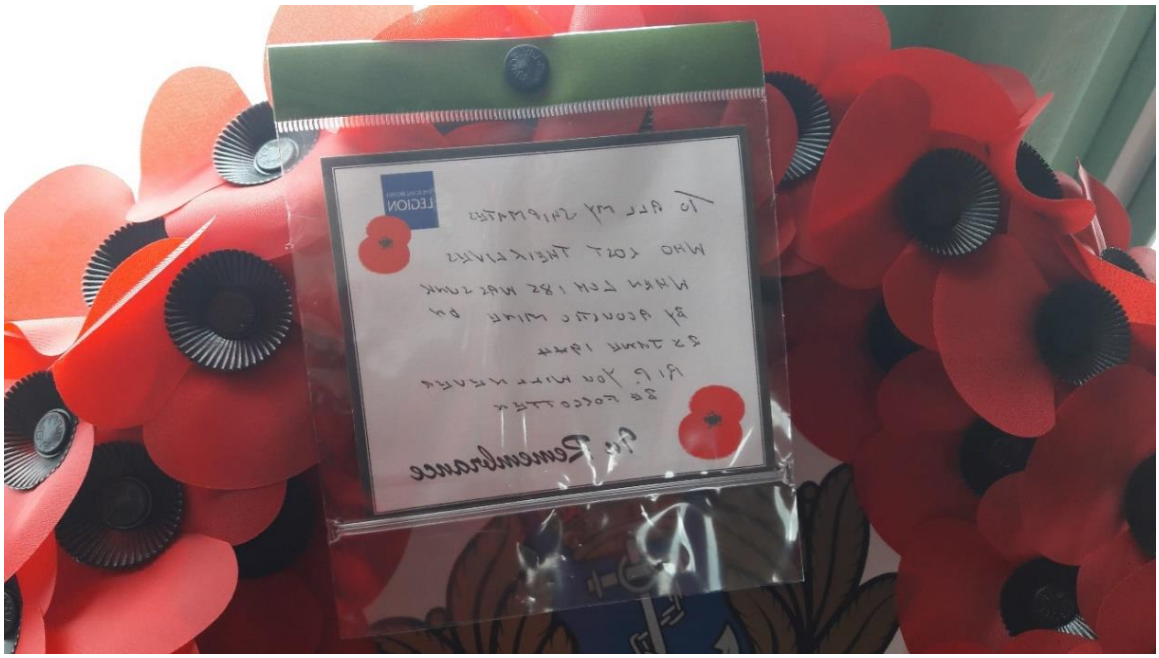


Figure 64. The wreath laid over the wreck by Patrick Thomas, in remembrance of his shipmates. (©Martin Davies)

17.2 Remembering Jack Barringer

We also took the opportunity to locate and visit memorials and cemeteries that commemorated those who were killed or missing in action in order that we could pay our respects. In particular that of Jack Barringer, who was a casualty of the sinking of LCH 185 and a comrade and good friend of Patrick Thomas. Jack's grave was only a few minutes' drive away from our headquarters house at Ranville cemetery.

Figure 65. The grave of Jack Barringer, Patricks close friend on LCH 185 at Ranville cemetery, Normandy. (©Tom Templeton)

17.3 Memorial to Those who Perished Aboard LCH 185

As part of the No Roses project a memorial was established close to the beach at Lion-Sur-Mer to honour the memory of those who lost their lives when LCH 185 was sunk. Regrettably work commitments meant that we were unable to attend the unveiling ceremony however we did visit the memorial to pay our respects when conducting another project a few weeks later.

Figure 66. The inscription on the memorial stone to those who perished aboard LCH 185. (© Tom Templeton)

Figure 677. The memorial stone for those lost aboard LCH 185 at Lion-sur-Mer. (©Alison Mayor)

18. Summary and Conclusions

Our expedition to Normandy to investigate and document wreck of 'Target 16' challenged us in many ways. Our team of divers were supported throughout by many people and organisations who helped us achieve many of our aims and objectives. Regrettably, a number of technical problems, not least the failure of our Club boat engine, severely curtailed our survey programme and we only achieved 3 survey dives on the site. The challenge was also increased by tidal conditions and poor underwater visibility. Nevertheless, we gathered a remarkable amount of information about the wreck site which has enabled us to confirm the wreck as a LCG, most likely that of LCG 1062. We have also conducted a significant amount of research which has given us greater understanding of the Normandy campaign and will contribute considerably to future investigations of Normandy D-Day wreck sites.

The 'No Roses' Project has demonstrated our determination to conduct a responsible and carefully managed project, always mindful of the sensitive nature of these sites. We were also aware that we were ambassadors for the British diving community. By ensuring that we scrupulously met the requirements and constraints demanded by the French Authorities for the conduct of such a project in French waters, we aimed to give confidence to those who trusted us to act appropriately.

Despite our conclusion that the wreck was not that of LCH 185, the information gathered during the Project and laid out in this report contributes significantly to the record of the relics of the Normandy invasion that lie in the shallow waters of the Baie de Seine. Consequently, we consider that Project was ultimately a success.

We offer our sincere thanks to all those who have helped us with this remarkable endeavour to understand and honour the loss of those men of LCH 185 and others who gave so much during the Normandy Campaign.

Appendix 1 – Letters of Authorisation

Liberté . Egalité . Fraternité
RÉPUBLIQUE FRANÇAISE

MINISTÈRE DE LA CULTURE

Arrêté du 28/03/2018 n° 2018 – 26
Relatif à une opération d'archéologie sous-marine
OA 3374

000385

Direction générale des Patrimoines

Département des Recherches Archéologiques Subaquatiques et Sous-Marines

Affaire suivie par
Cécile SAUVAGE

Poste

Références

DRASSM
147, plage de l'Estaque
13016 MARSEILLE
(France)

Tél. +33 (0)4 91 14 28 00
Fax +33 (0)4 91 14 28 14
le-drassm@culture.gouv.fr

La Ministre de la Culture,

Vu le Code du Patrimoine ;

Considérant la demande présentée par M. Martin DAVIES, le 27/11/2017 ;

Arrête

Art. 1 – M. Martin DAVIES est autorisé à procéder, en qualité de responsable scientifique, à une opération archéologique d'identification de biens culturels maritimes, avec plongée humaine et utilisation de matériel spécialisé, à compter du 23/04/2018 jusqu'au 28/04/2018.

- Façade maritime : Manche
- Département : Calvados (14)
- Commune : Ouistreham (14)
- Intitulé de l'opération : LCH 185 - 2018
- Coordonnées géographiques (rayon de 200 m autour de chaque point mentionné ci-dessous) :
49° 21.1525' N / 00° 14.803' O [EA 3151]
49° 25.03884' N / 00° 17.959' O [EA 4636]
49° 21.123' N / 00° 19.043' O [EA 4460]
- Numéro de la carte marine : 7421 (SHOM)
- Profondeur : 30 m maximum

Art. 2 – Conformément à l'article L. 532-8 du Code du Patrimoine, l'opération est exécutée sous la direction effective du titulaire de l'autorisation et placée sous sa responsabilité.

Art. 3 – L'opération est effectuée sous le contrôle du Directeur du Département des recherches archéologiques subaquatiques et sous-marines, qui prescrit toutes mesures qu'il juge utiles pour assurer le bon déroulement scientifique de l'opération.
Le titulaire de l'autorisation doit présenter, à toute demande des autorités compétentes, une copie de ces documents.
Le titulaire de l'autorisation tient régulièrement informé le Directeur du Département des recherches archéologiques subaquatiques et sous-marines de ses travaux et découvertes. Il lui signale immédiatement toute découverte importante de caractère mobilier ou immobilier. Les mesures nécessaires à la conservation de ces vestiges doivent être prises après son accord.

A la fin de l'opération et **avant le 1er décembre**, le titulaire de l'autorisation adresse au Directeur du Département des recherches archéologiques subaquatiques et sous-marines, en double exemplaire plus une version numérique, **un rapport final d'opération** accompagné des plans précis, des photographies nécessaires à la compréhension du texte et d'un résumé illustré destiné au *Bilan scientifique du Drassm*. Le contenu de ce rapport devra être conforme au document de *Recommandations pour le rapport final d'opération dans le domaine public maritime* transmis au responsable de l'opération.
Les coordonnées géographiques mentionnées dans le rapport devront être exprimées en WGS 84 (degrés minutes décimales). Enfin, les archives éventuellement consultées seront indiquées et des copies des éléments pertinents seront jointes au dossier et indexées. Le rapport indiquera aussi les études complémentaires à envisager.
Il est attendu que le contenu et la présentation du rapport soient soignés, notamment dans le rendu des textes et illustrations.

L'ensemble des documents relatifs à l'opération (notes, photographies, relevés, correspondances, etc.) est remis au Directeur du Département des recherches archéologiques subaquatiques et sous-marines aussitôt que sont rédigés les rapports, notes ou publications scientifiques sur les recherches effectuées.

Art. 4 – Prescriptions particulières à l'opération :
Cette opération d'identification de biens culturels maritimes a pour but de poursuivre la documentation de quelques vestiges maritimes du Débarquement de Normandie. La même équipe a déjà conduit une opération similaire en 2017 sur des épaves du banc du Cardonnet (OA 3331). Il s'agit de préciser l'identification du site aujourd'hui inventorié dans la carte archéologique nationale comme le LCG 1062 [EA 3151], que le responsable d'opération pense être en réalité le LCH 185. Une seconde épave déjà connue pourrait également être, d'après le demandeur d'opération, le LCH 185 : il s'agit d'une épave non identifiée dénommée par convention « épave Lion-sur-Mer 2 » [EA 4636]. Enfin, l'équipe se propose de retravailler sur les vestiges d'un char Sherman [EA 4460] déjà documenté par le Drassm en 2017 au large de Sword Beach. Ces sites ont fait l'objet de recherches antérieures, dont les plus récentes sont celles menées en 2017 par le Drassm [OA 3136]. Les levés réalisés en 2017 sur ces sites au sonar multifaisceaux ont été transmis pour information au porteur de l'opération. Lors de la campagne 2018, l'équipe devra confirmer l'identification de ces sites (typologie des vestiges et, lorsque cela est possible, identification exacte du site) par le biais de plongées d'expertise et d'une confrontation entre les données de terrain et les données d'archives.
Par ailleurs, l'opération permettra d'assurer une documentation plus fine de ces trois sites. Ainsi, au cours des plongées, un maximum d'informations sera recueilli sur ces sites : dimensions, nature des vestiges, enfouissement, degré de conservation, etc. **Chaque site fera *a minima* l'objet de la rédaction d'une fiche épave,** en vue de préciser l'inventaire (carte archéologique nationale). Le propos devra s'appuyer sur des prises de mesures ainsi que la réalisation de croquis et de photographies.
L'utilisation ponctuelle d'un sondeur ou d'un sonar à balayage latéral est autorisée sur ces sites afin de compléter l'imagerie qui pourra être acquise par photographie sous-marine.
Les photographies réalisées pourront également servir à la réalisation d'une photogrammétrie 3D des sites étudiés.

Concernant le mobilier archéologique :
Aucun vestige archéologique mobilier ne sera prélevé lors de cette opération.

Concernant les conditions d'intervention :
Les interventions s'effectueront conformément au *Manuel des procédures de sécurité en milieu hyperbare applicable aux activités placées sous le contrôle du Drassm* (manuel téléchargeable sur le site du ministère chargé de la Culture : http://www.culturecommunication.gouv.fr/Politiques-ministerielles/Archeologie/Archeologie-sous-les-eaux/Documentation-scientifique). Il est notamment rappelé que **seuls les participants disposant d'un certificat d'aptitude à l'hyperbarie (minimum classe I) valide et à jour de leur visite médicale,** sont habilités à participer à cette opération.

Art. 5 – Le titulaire de la présente autorisation se conformera strictement aux prescriptions émises par le Préfet Maritime de la Manche et de la Mer du Nord, qui sont annexées au présent arrêté.

Il est notamment tenu de signaler, sans délai, au Centre des Opérations Maritimes de Cherbourg toute découverte ou suspicion de munition ou d'élément explosif via le CROSS Jobourg (VHF 16 ou téléphone 196) ou le sémaphore de Villerville (VHF 71).

Art. 6 – Le Directeur du Département des recherches archéologiques subaquatiques et sous-marines est chargé de l'exécution du présent arrêté.

Pour la Ministre et par délégation,

Le directeur du Département des Recherches Archéologiques Subaquatiques et Sous-Marines

Michel L'HOUR

Copie :
- Préfet maritime de la Manche et de la Mer du Nord

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PRÉFECTURE MARITIME DE LA MANCHE ET DE LA MER DU NORD

Cherbourg-en-Cotentin, le 03 avril 2018

N° 0-9910-2018/PREMAR MANCHE/AEM/NP

PRÉFECTURE MARITIME DE LA MANCHE ET DE LA MER DU NORD

Division « action de l'État en mer »

Bureau « Domanialité - Energies marines »

Le vice-amiral d'escadre Pascal Ausseur
préfet maritime de la Manche et de la mer du Nord

à

Monsieur le directeur du Département
des recherches archéologiques subaquatiques et sous-marines

OBJET : avis du préfet maritime de la Manche et de la mer du Nord relatif à la demande d'autorisation de recherche archéologique sous-marine formulée par Monsieur DAVIES (référence OA 3374).

RÉFÉRENCE : courriel du DRASSM du 16 février 2018.

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Vous m'avez adressé pour avis une demande d'autorisation d'études archéologiques sous-marines sur diverses épaves associées à la campagne « WW2 1944 Normandie – Opération NEPTUNE » au large de la commune de Ouistreham pour identification et prises de vues.

Cette campagne d'études, qui se déroulera du 23 au 28 avril 2018, à bord de l'embarcation de sécurité « Southsea Explorer » inclut des plongées sous-marines.

Ces opérations seront accompagnées par une équipe de tournage la journée du 22 avril.

Au regard des responsabilités dont j'ai la charge en application de l'article R532-7 du code du patrimoine, j'émets un avis favorable.

Pour l'ensemble de sa campagne, le pétitionnaire veillera à respecter les règles de la navigation et à prévenir les autorités maritimes 72 heures avant le début des opérations, ainsi que de toute modification ou annulation de celles-ci :

- au **Secrétariat de la division « action de l'État en mer »**
  Fax : 02.33.92.59.26 Mèl : sec.aem@premar-manche.gouv.fr
- au **Centre des Opérations maritimes de Cherbourg**
  Fax : 02.33.92.60.77 Mèl : comnord.off-permanence.fct@intradef.gouv.fr
- au **CROSS Jobourg**
  Fax : 02.21.87.78.55 Mèl : jobourg@mrccfr.eu
- au **Sémaphore de Villerville**
  Mèl : semaphore-villerville.cdq.fct@intradef.gouv.fr

Si des engins tractés engageant la colonne devaient être mis en œuvre, le pétionnaire en informera le préfet maritime dans son message prévu ci-dessus.

Si des engins de pêche devaient se trouver sur votre zone de travail, je vous demande d'y prêter attention.

En cas de découverte d'engins explosifs, le pétitionnaire devra alerter sans délai le Centre des Opérations Maritimes de Cherbourg via le CROSS Jobourg (VHF 16 ou téléphone : 196) ou le sémaphore de Villerville (VHF 71) conformément à l'arrêté n° 03/2017 du 23 février 2017 relatif aux engins suspects trouvés en mer. Il veillera à limiter les manipulations de l'engin, à éviter les chocs et à rester éloigné de l'engin qui devra être considéré comme dangereux.

Le préfet maritime de la Manche et de la mer du Nord,
par délégation, l'administrateur général de 2ème classe
des affaires maritimes Jean-Michel Chevalier
adjoint pour l'action de l'État en mer

Original signé : AG2AM Jean-Michel Chevalier

DESTINATAIRE :

- Monsieur le directeur du Département des recherches archéologiques subaquatiques et sous-marines

COPIES :

- DDMT/DML 14
- CROSS Jobourg
- COM Cherbourg
- Sémaphore de Villerville
- GPD Manche
- Archives (AEM n° 3.6.3.0 - chrono)