

Notes on the History of Corbyn Head Battery, Torquay During World War 2 (1939-1945)

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Summary

These notes on the history of Corbyn Head Battery during World War 2 are based mainly on the Fort Record Book for Torquay at The National Archives (TNA) in Document Reference WO192/144. At different times throughout this period there were two Royal Artillery Batteries stationed there, and the local Home Guard also provided a manning detail.

On 25 June 1940 the Naval Officer in charge of the Torquay Port Defences contacted the Local Defence Volunteers (LDV – the forerunner of the Home Guard) and asked them if they could guard the Coastal Defence Guns that had arrived at Corbyn Head earlier that day. This is the first known event regarding the Battery site during the Second World War.

The first formal Battery at Corbyn Head was 361 Coast Battery. Their exact arrival date is unknown, but it can be proven that they were at Corbyn Head on 1 September 1940 (See “Brixham Battery notes”). They stayed until sometime between 21 July 1942 and 16 November 1942 when 363 Coast Battery moved into Torquay from Dartmouth and 361 Battery moved out of Torquay and went to Dartmouth. The exact date of transfer is currently unknown, but documents exist proving that 361 Battery was there in July 1942 and that 363 Battery had arrived by November 1942.

These two Batteries worked very closely with the Battery at Brixham, and they both originally came under 18 Coastal Artillery Group. Later their parent unit was 556 Coast Regiment, Royal Artillery which in turn was part of 8 Corps.

It must be noted that the name of the location of the Torquay Battery can appear as either Corbyn’s Head or Corbyn Head. The latter is in current usage according to Google Maps so this document has used the Google Maps terminology.

Abbreviations

Abbreviation	Meaning
AA LMG	Anti-Aircraft Light Machine Gun(s)
AFV	Armoured Fighting Vehicles
APC	Armour Piercing Capped (ammunition)
APR	Army Plotting Room
ARP	Air Raid Precautions
BCA	Battery Commander's Assistant
BOP	Battery Observation Post
BSM	Battery Sergeant Major
C in C	Commander in Chief
CASL	Coastal Artillery Search Light(s)
CCA	Corps Commander Artillery
CD	Coastal Defence
CDM	Coast Defence Maintenance Unit – from the Royal Electrical and Mechanical Engineers
CINO	Chief Inspector Naval Ordnance
CP	Common Pointed. This was a type of naval ammunition which had a solid nose and a percussion fuse in the base rather than the shell's nose.
DCRE	Deputy Commander Royal Engineers
DEL	Defensive Electric Lights (a term used for the searchlights)
DNO	Director of Operations (Naval Cooperation)
DR	Dispatch Rider (Motorcycles)
DS	Duty Sergeant (probably)
EBOP	Emergency Battery Observation Post
ED	Efficiency Decoration – an award for long service in the Auxiliary Military Forces after 20 years as an officer.
FC	Fire Commander (for an artillery Battery etc)
FD	Fixed Defences
FOO	Forward Observation Officer
FS	Flag Staff
GPO	General Post Office. It was the public body responsible for telephone lines.
GWR	Great Western Railways
HCD	High Current Density (regards the searchlights)
HE	High Explosive
HG	Home Guard
HQ	Head Quarters
i/c	In charge
IG	Instructor in Gunnery
LDV	Local Defence Volunteers
Lt	Lieutenant
LTO	Leading Technical Officer (this is probably the correct interpretation but the source is not clear on this)
MTB	Motor Torpedo Boats
NCO	Non-Commissioned Officer

OC	Officer Commanding
OOW	Officer on Watch
OP	Observation Post
OR	Other Rank
PAD	Passive Air Defence
PWSS	Port War Signals Station, Located at Berry Head, Brixham
QE	Quadrant Elevation
R/T	Radio Telephone
RA	Royal Artillery
RASC	Royal Army Service Corps
RCE	Railway Construction Engineer
RCOS	Royal Corps of Signals
RE	Royal Engineers
REME	Royal Electrical and Mechanical Engineers
RN	Royal Navy
RNA	Royal Navy Armament
RNO	Royal Naval Officer. These officers oversaw the various local ports
SLO	Search Light Operator
Sn Command	Southern Command
TNA	The National Archives, located at Kew, London
UP	Unrotated Projectile – This was a type of anti-aircraft rocket. According to Brixham Battery website it was also called a Universal Projector.
WO	Warrant Officer

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Units at Corbyn Head, Torquay

The role of the Battery at Corbyn Head was Coast Defence (CD) and the first guns arrived on 25 June 1940 which pre-dates the arrival of the first known formal Battery. Although their exact date of arrival is unknown 361 Coast Battery, Royal Artillery, had arrived by 1 September 1940. They were replaced by 363 Coast Battery, Royal Artillery, sometime between 21 July 1942 and 16 November 1942. These two Batteries switched between Torquay and Dartmouth.

361 Battery initially came under 18 Coastal Artillery Group but by 15 May 1942 361 Battery was listed as a sub-unit of 556 Coast Regiment, Royal Artillery. 556 Coast Regiment was part of 8 Corps which came under Coast Artillery South Western District which was part of Southern Command.

Other units known to have been active with the Battery are the Torquay detachment of the 10th Battalion Devonshire Home Guard, 51 Heavy Regiment (Royal Artillery), Devonshire Heavy Regiment (Royal Artillery) and 2 Docks Group from the Royal Engineers. The last three of these require further research.

According to “On Guard!” (See References p. 87) the Home Guard Gunner Platoon at Corbyn Head was from H Company, 10th Battalion Devonshire Home Guard. This Platoon was initially called No 1 Platoon, and it had its origins in the Torquay Platoon, South Devon Mobile Company. The other Platoons in the South Devon Mobile Company had their roots in the Public Utility undertakings and it appears that the South Devon Mobile Company was renamed H Company at some point¹. This platoon started being active at Corbyn Head in 1941 when half the platoon helped the Battery per se, and the other half defended the approaches to the Battery. Later the whole Platoon helped manning the Battery as “gunners” and eventually the Battery comprised mainly of Home Guard with a few Regulars to help with maintenance etc.

Brixham was the Master Battery for Torbay which meant it was “in command” of Torquay regarding engaging the enemy etc. The units stationed at Brixham were 362 Coast Battery from 7 September 1940 to 2-4 September 1942² and 378 Coast Battery from 2-4 September 1942 to May 1945 (the end of the war in Europe). Both the Torquay and Brixham batteries came under 556 Coast Regiment and this information helps to date various events / documents etc.

Siting and Location of the Battery

According to the Fort Book the Torquay Battery was sited such that the main Torquay to Dartmouth Road was in front of it. There were many alternative routes through the Torquay area such as the main Plymouth – Exeter which was joined at Newton Abbott.

The location of the Torquay – Dartmouth Road being in front of the Battery is surprising as Corbyn Head is currently on the seaward side of the main Torquay – Paignton Road not the landward side!

¹ “On Guard!” says that there were numerous re-organisations of the 10th Battalion Devonshire Home Guard during its existence.

² The two Batteries changed locations during these dates rather than on just a single day.

Reason for the Battery's Existence

The coastal area of Torbay presented opportunities to the enemy for both attacks on shipping and landings on the beaches etc. The Battery therefore had to consider that the local area could be attacked from the sea, land and air.

Any seaborne attack may have been in the approaches to Torbay, the harbours, or the local beaches. This attack may have been undertaken by minor war vessels, Merchant ships with troops, Armoured Fighting Vehicles (AFVs) in assault boats, Motor Torpedo Boats (MTBs), submarines or Armed trawlers.

Attacks may have been diversionary to draw attention away from more larger scale enemy operations elsewhere. Land based attacks could have materialised via landings at other parts of the coast or via aircraft (i.e. parachutists or air landing troops). Such attacks could have concentrated on guns, ports, vulnerable points and critical industries. Air attacks were expected to consist of high- and low-level bombing, as well as strafing attacks because the shipping in the bay were good targets for the enemy.

The Role, Responsibilities and Purpose of the Fort

Seaward targeting information would be passed to the Battery via the RN, but the Battery's duties also covered landward defence. The objectives of the Battery and its roles were to:

- a) Support the close defence of the Torbay region using the Fixed Defences and the Defensive Electric Lights (DELs also called searchlights).
- b) Deny the enemy access to the local ports (especially Torquay), harbours and beaches as well as their approaches and to stop such vessels approaching the coast at Torbay. The Battery would do this under close contact with Brixham Battery as the latter was the Examination Battery for Torbay.
- c) If necessary, any small enemy craft approaching the harbours or beaches were to be destroyed.
- d) To target enemy shipping such as transports and vessels carrying Armoured Fighting Vehicles. Any enemy vessels that were beached or anchoring to facilitate disembarkation were priority targets.
- e) The engagement of enemy warships if the Battery Commander considers that these vessels threaten the Battery.
- f) To help with the defence of the local beaches provided those duties above permits this and assist the field forces with the defence of the beaches as far as practical.
- g) To engage landward targets if the primary roles above permit and the Battery also had anti-aircraft roles (as and when required).
- h) To fire on predicted concentrations under the control of the Army Plotting Room (APR).

Some of the Battery's target areas were visible from the Battery site enabling direct fire whilst others were not visible (indirect fire), so especially the latter had to be surveyed. Therefore, the Battery's targets were Registered so that the bearings and ranges etc were known in advance.

The Naval Responsibility

Given that a large part of the area under the protection of the Battery was seawater then the Royal Navy also had a significant role and input into the defence of this region. The

responsibilities of the land and sea commanders therefore had to be clearly defined so that each knew their duties and scope of responsibilities.

The RN was responsible for the navigation of the waterways, and it was to pass to the Battery via telephone or messenger information on the movements of ships at sea, any impending sea-based attack, and the entry / exit of all vessels. This information could be conveyed to the Battery from:

- (i) the Port War Signals Station (PWSS) at Berry Head,
- (ii) the local Royal Naval Officer (RNO) or
- (iii) the Naval Officer in charge (i/c) Dartmouth.
- (iv) Pyrotechnic signals were to be used by Auxiliary Patrols when operating outside the approaches to the bay when required.

Naval System of Defences

The Naval defences were based around:

- a) The PWSS at Berry Head passing information to the Battery.
- b) Auxiliary Patrols made by the appropriate vessels.
- c) Three torpedo tubes located at Haldon Pier.
- d) There was another RNO located at Rocky Point in Torquay.

The entry / exit to Torquay Harbour was controlled by the RNO Torquay and via the Naval Officer i/c of the torpedoes. Torquay Battery was to maintain close contact with Brixham Battery and Brixham as the Examination Battery would check on shipping entering Torbay via the Brixham based Examination vessel. Brixham therefore controlled the shipping entering / exiting Torbay and during daylight hours the Examination Vessel was to be positioned outside of Brixham Harbour.

Military System of Defences

The military defences of Torquay Battery consisted primarily of:

- 1) At Corbyn Head – 2 x 4.7” naval guns and 2 x Anti-Aircraft Light Machine Guns (AA LMG), 1 x Naval Barr and Stroud Range Finder, and the Battery Observation Post (BOP).
- 2) On Torquay Road, Torquay – 2 Fighting Lights (one with a 16-degree beam and the other with a 3-degree beam). These were termed the Defensive Electric Lights (DELs) and / or Coastal Artillery Searchlights (CASLs).

The local infantry was split into:

- a) A company covering the area between London Bridge Arch to Corbyn Head.
- b) A Home Guard platoon for the stretch from Corbyn Head to Roundham. The Paignton Gas Works Home Guard Detachment also helped with this section.
- c) A company covering from Roundham Point to Paignton.
- d) A support company based at the Avon Hotel.

In case of an emergency, a “Stand To” call or other event requiring the manning of positions various alarm signal systems existed. The BOP had circuits connected to the bells at the gun

pits and the War Shelter, and to the bells at the Engine House and the Searchlight Emplacements.

The Battery Office originally had a telephone alarm system which was rung via the Battery Telephone Exchange (at the BOP). This Alarm was one ring for 30 seconds. However, later the Battery Office telephone system was modified to: (1) a General Alarm for sea-based attacks and (2) an intermittent ringing of the alarm bells for an enemy landing.

Regimental Commander's Standing Orders Regarding Zonal Defence

After 556 Coast Regiment had assumed command of the Battery it issued Standing Orders for the two Batteries in Torbay. At the time of publication of this order Torbay was covered by 363 and 378 Coast Batteries which dates these Standing Orders to after September 1942. We know that 361 Battery moved out of Torquay between July / November 1942 and 378 Battery arrived at Brixham in early September 1942.

The distribution of fire between the two Batteries was to be based on a zone system. Each Battery was responsible for the water area within 3,500 yds of its position. 378 Battery (Brixham) was the Master Battery, and they would decide which guns were to engage targets outside either zone (i.e. targets > 3,500 yds from either battery). In cases of doubt 378 Battery decided on the fire programme.

The Defence of Torquay

There is a note dated 20 August 1940 that states that 2 Docks Group, Royal Engineers (RE) would prepare Defence Plans including the immobilization of two ports (presumably Torquay and Brixham). Around the 19 to the 23 August 1940 the Officer Commanding (OC) Beach Defences, 2 Docks Group, RE, received instructions defining the responsibilities of the Port Commanders from the South Devon Sub Area. Then on the 28 August 1940 the Port Commander (Military) was placed in charge of the RE Detachment in Torquay (which probably means 2 Docks Group).

A plan of Immobilization was created between the RNO and the Port Commander, but it was considered that there was little to do in this respect. The RE prepared some camouflet (underground explosives) which were to be used under the command of the OC Beach Defences. This work was to be liaised between the Port Commander and the Naval parties working in the Docks area.

The RNO's Battle HQ was completed in the summer of 1940 (about 23 August 1940). It was located at the Fixed Defences Observation Post (OP), and it was in direct communication with the Fixed Defences HQ. This location was good for the RNO, but it was outside of the perimeter of the military posts, so it was not suitable for the Land Defences Battle HQ. The Land Defences Battle HQ was constructed / located at the White House in High Terrace. Although this location was in use by the RAF it would be available if required in battle conditions.

Around late August 1940, the communication systems between the Fixed Defences HQ and the RNO's Battle HQ were extended. The communication system between the two Battle HQs (the Fixed Defences and RNO at the Observation Post) was extended to the OC 10th Devons, the Port Commander's Battle HQ, the OC Beach Defences, and the 2 Docks Groups' HQ. Strangely the RNO was to arrange for these extensions, but the work itself was to be conducted by the military.

The RNO was to initiate any “fighting action” and to communicate between the two Battle HQs. The RNO on the authority of the Port Commander could undertake limited operations of a minor nature. This included immobilizing the dry dock and this would be undertaken via the OC 10 Devons Detachment [presumably the Home Guard] as it was in their zone.

The two main roads out of Torquay and the coastal road were to have roadblocks. The siting of these had been agreed with the Civil Police. A roadblock was to be on the road leading out of Torquay [Harbour] and the other along the road to Bastion Point³. The OC Beach Defences was to command this construction work via the Divisional Commander Royal Engineers (DCRE). Local personnel were to be supplied to garrison the roadblocks. The Home Guard, 10th Battalion Devonshire Home Guard had a Detachment whose Section Post was near to the harbour and under battle conditions these roadblocks would come under the control of their OC.

Notes on the Defence of Brixham Harbour

Within the Torquay Fort Book there is a note regarding the Defence of Brixham Harbour, and it concerns the Brixham based Battle HQs. The Brixham Port Commander (Military) was a Lt Clark from the 10th Devonshire Home Guard, but he had his Battle HQ in the area near to the petrol installation!

This was considered too remote from the joint [Brixham] HQ for the RNO and the Fixed Defences. Lt Clark’s HQ was also not suitably placed for the OC Land Defences (RE Detachment) and therefore Lt Clark could not fulfil all the defensive responsibilities. Therefore, the OC RE Detachment was nominated as the Sub Area HQ and Lt Clark was still responsible for the petrol plant area. Lt Clark was to be informed of the military situation via the RNO / Port Commanders.

Notes on the Defence of the Dart Estuary

The nearby Dart estuary was covered by 399 and 361 Coast Batteries⁴ which were also part of 556 Coast Regiment and hence they operated in coordination with Torquay and Brixham. The Dart area was split into two zones: (1) the Outer Zone being the area to the south of Brownstone Battery to Coombe Point, and (2) the Inner Zone covering the area to the north of that line. The Inner Zone covered all the water within 2,000 yds of Dartmouth Battery. In essence, 399 Battery was responsible for the Outer Zone and 361 Battery for the Inner Zone.

399 Battery would follow targets already engaged by it into the Inner Zone provided there were no remaining targets in the Outer Zone. If new targets appeared in the Outer Zone 399 Battery would engage them and 361 Battery would take over the Inner Zone target. Likewise, if there were no targets in the Inner Zone 361 Battery would engage targets in the Outer Zone. 361 Battery could also use its searchlights to engage targets in the Outer Zone if ordered by the Fire Commander (FC).

399 Battery’s main targets would be Blockships regardless of the zone in which they were located and 361 [later 391] Battery would distribute fire according to the Fighting Light Scheme.

³ A Google Maps search did not locate this position.

⁴ This document must be dated after 361 Battery moved out of Torquay for Dartmouth and at the same time 363 Battery moved from Dartmouth to Torquay. This change over happened between 21 July and 16 November 1942.

Operational Duties of Torquay Battery

The Torquay Battery was responsible for the area of sea water within a range of 3,500 yards from Corbyn Head. Outside of this range any target was the responsibility of the Brixham Battery and Brixham was the Fire Commander for that purpose. The Torquay Battery was to work closely with the Brixham Battery and the PWSS at Berry Head.

The Brixham Battery was the Master Battery, and it would allot targets to Torquay. Torquay's No 1 gun was to cover all targets to the right of 135 degrees and No 2 gun for all targets to the left of this bearing. Any targets were to be engaged under a Sequence System with the leading target to be engaged if all the targets were of equal importance. Enemy transports had the highest priority, and enemy warships were only to be engaged if the Battery Commander considered that the enemy warships were going to neutralise the Battery.

A handwritten note in the Fort Book says that the Fire Scheme should be identical to that of the Brixham Battery and that the two Fire Schemes should be rewritten accordingly. This note was dated March 1944.

Areas of Responsibility

There are no water channels in Torbay area and the 6-fathom line follows the contours of the coast uniformly. Many of the areas of operation had to be surveyed and the Torquay Battery was responsible for⁵: Saltern Cove (range 5,300 yds bearing 194 degrees), Daddy Hole Plain, Abbey Sands, Livermead Sands, Preston / Paignton, , Goodrington Sands, Broadsands (6,300 yds, 191 degrees), Elberry Cove (6,800 yds, 184 degrees), Churston Cove (6,900 yds, 169 degrees - where visible), Paignton Harbour (range 3,200 yds, 203 degrees), Torquay Harbour (900 yds, 97 degrees) and Brixham Harbour (7,200 yds, 162 degrees).

Anti-Aircraft Defences

There were two Anti-Aircraft Light Machine Guns (AA LMG) on site which were either Lewis or Bren guns. Some documents imply the AA LMG were Lewis guns, but it is conceivable that both types could have been used for this purpose. The other main AA armaments was a Unrotated Projectile (UP) rocket system and a 40mm Bofors (which was a later addition to the site). One of the AA LMG was permanently manned, and the Unrotated Projectile (UP) always had an operator standing by.

When the ALERT was sounded the second AA LMG was manned and all Battery personnel present would arm themselves with rifles. Once armed they would take positions facing seawards.

Aircraft were not to be engaged unless they made a hostile act, or they were recognised as enemy aircraft. The AA weapons were not to be used until the target(s) were within range. If the enemy aircraft made a low-level attack to destroy the main guns, then they were to be engaged with the AA LMGs [the Battery probably had Lewis AA LMGs rather than Bren guns] and rifles in addition to the principal AA weapons. In case the Battery was attacked by waves of enemy aircraft the Battery was ordered to note that the second and any subsequent waves may have friendly fighters in pursuit. The Battery was thus ordered to be careful in such circumstances.

⁵ Ranges and bearings given where known.

Defence Against Land Attack

The Battery was to cover the beach and land targets as detailed above.

The roads leading to the Battery were covered by two Spigot Mortars and a 6-pounder Hotchkiss gun covered Seaway Lane. The latter could fire on the beach to the north of the Battery. Around the Battery's perimeter there was a double belt of barbed wire (see the Section regarding Barbed Wire) and there was another belt of barbed wire on the line of the railway.

This outer perimeter was manned by the Reserve Detachment when "Stand To" was declared and this detachment would send out patrols to 0.5 miles distance. The "Watch Off Duty" would be held as a reserve to counter any possible enemy counter attacks. However, this did depend upon sufficient Home Guard personnel being present.

Any ground defence was to be liaised with the local Home Guard and the GPO phone line enabled communication with the Home Guard HQ. The latter received information from their patrols and forwarded it to the Battery. The Paignton Gasworks Home Guard were also able to pass on information as their stretch of water was dead water⁶ to the Battery.

Local Defence of the Battery

The Battery was responsible for its own local Defence and the scheme of operation was to be revised based on experience by the Battery Commander together with the Local Infantry Commanders. Copies of the Local Infantry schemes and the arcs of fire from the Beach Defences were to be kept "Secret".

Ships using Brixham / Torquay Harbour or Torbay were to be examined by the Brixham Battery. Entry to Torquay Harbour was controlled by the RNO at Torquay. All Intelligence / Reports were to be consolidated at the BOP and the Battery Office was to be informed. Then the following were to be informed:

- (1) PWSS at Berry Head via Battery Commanders,
- (2) RNOs via Battery Commanders,
- (3) CFD [Commander Fixed Defences] via the Battery Commanders and
- (4) NO [Naval Officer] i/c Dartmouth via the local RNOs and the Battery Commanders.

Proposed Barbed Wire Defences at Torquay

To protect the Torquay Battery there was a requirement that some barbed wire was to be placed on nearby Great Western Railways (GWR) property. No railway working was to be affected, and the bridge concerned also carried a private footpath. Access along this footpath was not to be interfered with.

361 Battery (via 556 Coast Regiment HQ) contacted the Railway Controller GWR Exeter to request permission to place the barbed wire. Approval from the Railway Construction Engineer (RCE) (5) Southern Command, Salisbury was sought so that the unit (361 Battery) could start placing the wire as soon as possible.

⁶ Dead water means an area that the Battery cannot use its guns or searchlights in. This is normally due to geographic reasons such that the gun's projectiles cannot reach this area or the searchlight's beams cannot reach.

On 20 March 1942 instructions had been received enabling 361 Battery to serve notices to local establishments regarding the wiring of the perimeter of the Battery's positions. This perimeter was found to pass through the grounds of the Grand Hotel and the Livermead Hotel. No access or paths to these properties would be blocked as both properties had been requisitioned and the OC 361 Battery was told to contact the Officers i/c of these hotels before proceeding with the work.

The Main Guns and Other Weaponry

There were two main types of targets for the Main Guns. There were those that were visible from the Battery position (direct fire) and those that were not visible (indirect fire). The latter were effectively ranged and targeted via geographical survey data. 556 Coast Regiment requested Survey Data from its Batteries around May to 23 July 1941. At this time 556 Coast Regiment HQ was stationed at Totnes.

The Battery's (i.e. both guns) area of responsibility is defined above see "Areas of Responsibility".

The coastal targets that No 1 gun was allocated included Torquay Harbour Entrance, London Bridge Arch, Port War Signal Station (PWSS) Berry Head, the Old Redoubt at Berry Head, Brixham Lighthouse, 362 Battery's CASL (at Brixham), Churston Station, Broadsands, White House DP, Paignton Harbour, Livermead Head and the Railway right of Brixham Harbour. The landward targets not visible from the Battery at Torquay were Mudstone Sands, Cross Rd Reservoir, Linthorpe, Churston Railway Junction, Broadsands Viaduct, Clayland Cross Rd, Tweenaways Cross.

Targets Visible from the Battery for the Main Guns

The Commander Fixed Defences Plymouth (in a document dated 5 September 1940) requested information regarding the Map Coordinates for both Main Guns and the BOP as well as some local referencing's such as Paignton Pier FS [Flag Staff], the centre point of Oar [Ore] Stone Rock, and South Mole. The heights above sea level were also given for No 1 gun, No 2 gun, the Range Finder and the BOP floor.

The List of *visible* targets that can be engaged by 363 Battery as of 29 June 1943 were: Brixham Harbour, Brixham Battery, Churston Cove, Elberry Cove, Broad Sands, Saltern Cove. The Battery developed target coordinates, and these included the bearing, range and necessary angles for the above. There is a note dated 11 December 1942 detailing the arcs of fire and searchlight bearings for London Bridge Arch to Berry Head which were the principal targets of Torquay Battery.

Brixham's 363 and 378 Batteries (note 378 replaced 363 Battery) covered Paignton Harbour, Paignton Sands, and Preston Sands. 378 Battery's targets included Livermead Sands, Tor Abbey Sands, Torquay Harbour, Meadfoot Sands, and Shoalstone Point. They were also responsible for Torquay Battery if the latter was under attack and these targets were probably the same for 363 Battery when it was at Brixham prior to the switch with 378 Battery.

On 17 December 1942, 556 Regiment signalled Torquay and asked them for the landwards targets' ranges, bearings and coordinates. These landwards targets were for the potential Landing Beaches, Landing Grounds & Harbour Installations. This information required the

coordinates from the BOP. They included the bearing and range to London Bridge Arch from Torquay Battery and the height of the BOP floor (62.22 ft based on the Newlyn Datum).

Range points for the visible beaches were determined and recorded as they would be used for laying fire on these locations. Should the enemy appear at another point within a target area the BC was allowed to order the exact switch via his binoculars with a new estimated range.

The Batteries at Salcombe and Brownstone also came under the same command unit as those at Torquay and Brixham. Their principal targets included their local beaches, Fort Charles, the Ferry (presumably at Dartmouth), Beesands, Salpton Sands, Blackpool Sands, Dartmouth Battery, Kingswear Castle, and Brownstone Battery.

Landwards Firing and Targets not Visible

A document dated 7 February 1942 stated that landing beaches would have priority over other land-based targets and no unobserved fire was to be allowed and the Coastal Artillery Regiments were asked to create tracings of the targets from their Batteries (361 Battery was at Torquay at this time). If there were more than two target beaches the priority order would be determined by consultation with the RN and infantry commanders.

Silent registration of targets would be made with brief notes such as the method of laying fire for line and range. Details of the location of OP used for observing the landwards fire were to be made if the BOP cannot be used to observe this fire and the methods of communication between the OP and the BOP were to be detailed. Once the targets had been determined panoramas were to be drawn for the selected Observation Post (OP) so that officers acting as Forward Observation Officer (FOO) were fully trained and that they knew their targets and zones. Orders for firing must be constructed with input from the Infantry Commanders concerned.

On 17 February 1942 361 Battery supplied tracings of their relevant beaches to their commanding unit 556 Coast Regiment. The method of firing to be used for these targets was via a pointer on the shield and a degree arc on the gun floor. The Battery calculated the target's range by coordinates using a formula and range tables. Communication between the BOP and the Main Guns was by loudspeaker / telephone.

On the 8 March 1942 there were amendments made to the firing methods for landwards firing. These amendments to the 17 February 1942 document were that the range was to be calculated via a formula and the method for setting the gun was:

- a) The range was to be set via the Range Drum.
- b) A spirit level was to be placed on the sight bracket and the bubble was to be centralised via the elevation handle. This should then make the gun laid accurately for elevation.
- c) If a clinometer was available, then the Quadrant Elevation (QE) is put on the gun by means of the clinometer and the necessary QE should have been worked out for all landward targets.

The Regimental targets of Paignton Sands, and Preston Sands are not visible from Torquay Battery. Preston Sands could not be engaged by Torquay due to the geography of Livermead Head Crest as there was insufficient clearance for the guns.

At night the guns could fire using the pre-defined target information and a spirit level was used to ensure the correct elevation etc. Any landwards firing was based off maps.

The Main Armament

The main role of the Battery was Coastal Defence (CD), and it had 2 x 4.7-inch Quick Firing (QF) Naval Mark V* guns. These guns were made by the Japanese at the Kure factory, and they were mounted on PX mountings (P10 models). They were placed in and protected by structures with brick sides, a concrete roof and extension shields.

No 1 gun was #1642 (made 1918) with an arc of fire of 54 to 205 degrees and No 2 gun was #1351 (made 1917) with an arc of fire of 35 to 208 degrees. Both had a region of dead water stretching from Livermead to Sadlers Cove. However, another page in the Fort Book contradicts the Serial Number for No 1 gun as it says No 1 gun was #1648 not 1642 but it does have the same manufacturing dates as 1918 and 1917 respectively.

Over time there were several surveys made for the arcs of fire for the main guns and the CASLs. The arc of fire of the Battery was from 217 degrees on the right to 030 degrees on the left and the main guns were referenced for Paignton Pier Flag Staff, CP Carstone Rock and South Mole. There is another entry for No 1 gun's registration, but it is not legible.

There is some evidence that a 75mm British Field Gun was also at the Battery. However, the dates for when it was there are unknown. It may date from after the arrival of 363 Battery as it is listed as an amendment in some of the papers.

At a date probably after January 1943 a 40mm Bofors gun was placed in a position to the front of the Battery. Its role was to provide AA defence for the harbour and if required, in an anti-shiping role for light craft. A 363 Coast Battery diagram gives the arc of fire for the Bofors from Corbyn Head. It reached approximately 3,800 yards with self-destruction ammunition and 9,200 yards with normal ammunition.

Ammunition for the Main Guns

The Main 4.7-inch Guns could use a variety of ammunition / charge types:

- 1) Shrapnel ammunition with Fuse types T & P No. 80 and this used Charge Types 4 C, R and H [C, R, and H are undefined in the source document].
- 2) High Explosive (HE) ammunition with Fuse types 44 and 45P with Charge Types 4 c, r and h [c, r, and h are undefined in the source document].

The main gun ammunition would comprise of HE Fuse 45P unless otherwise ordered and the estimated Muzzle Velocity for the ammunition types listed above was 2,350 feet per second.

There are two documents that concern the storage of Main Gun ammunition on the gun floors. One document refers to the Gun Floors and Recesses separately and the other document does not differentiate between the two guns as it seems to treat both guns equally. Any ammunition surplus to that listed here was to be kept in the Main Magazine.

Gun	Location	Ammunition
#1	Gun Floor	20 Common Pointed 20 High Explosive 40 cartridges
#1	Recess	10 Common Pointed 30 High Explosive 2 Practice Shots 43 cartridges
#2	Gun Floor	20 Common Pointed 20 High Explosive 40 cartridges
#2	Recess	10 Common Pointed 29 High Explosive 40 cartridges

Main Gun Ammunition (both guns treated equally)

On the Gun Floor:

- 10 Fused High Explosive⁷
- 10 Armour Piercing
- 20 cartridges within tubes and placed in boxes with loose lids

In the recesses

- 20 HE rounds with caps in place
- 20 rounds AP
- 10 boxes of cartridges with loose lids (making 40 cartridges in total)
- 5 tins of cartridge tubes

The Main Magazine was to hold at least 10 rounds of HE (fused and capped) and 10 rounds of Armour Piercing Capped (APC) ready for usage. Any further ammunition was to be positioned in the Main Magazine.

Ammunition Statement as of 26 June 1940 and Ammunition Economy

There is an Ammunition Statement dated 26 June 1940 for the 4.7-inch guns, and it gives:

- a) Shells
 - i) 80 x HE,
 - ii) 80 x CP,
 - iii) 1 x Practice
- b) Cartridges – 161 QF

⁷ They were to have their caps free but not removed and Lutine was to be used to stop any damp entering the fuse mechanism.

- c) Fuses
 - i) 70 x (45P) MK VIII.Z
 - ii) 10 x (45P) MK XZ
 - iii) 80 x (No. 12) F

- d) No of Tubes – 161 percussion.

As this Statement was dated early in the war (shortly after the Dunkirk evacuation) the supply of ammunition etc would have been very sparse and this can explain the low quantities in the Statement. There is a signal from C in C (Commander in Chief) Western Approaches dated 4 July 1940 to Torquay and it discusses how in the event of an invasion the policy was to disable as many vessels as possible rather than sinking a few. The ammunition supply was deemed to be uncertain and therefore it had to be economised.

The Main Guns Being Put Temporarily Out of Action

Rather surprisingly there are documents within the Fort Book regarding the removal of parts from the Main Guns to make them unusable / disable them. Given the dates of these papers this may have been related to anti-invasion measures.

There is a signal dated 28 November 1940 that indicates that parts of the guns were to be hidden. Only two officers within the Battery were to know the location(s) of where these parts were hidden. Another signal also dated 28 November 1940 from HQ Fixed Defences Southern Command (HQ, FD Sn Command) requested information from the Fire Commands and Emergency Batteries (such as Torquay and Brixham) asking where the parts of the guns were to be hidden, and sketch maps were requested. However, orders were also given that no written record of the hiding place was to be made but HQ FD Sn Command had asked for sketch maps!

The location(s) were kept between 2 officers in the Battery and when Battery officers were to be changed, such as Watches / postings, this “location” information was to be passed along to the new officers. This scheme was reviewed on 21 September 1941, and it was expanded from just two officers to all the officers in the Battery, the No 1s, and the Gun Artificers.

There are signals from / to the Corps Commander RA (CCA 8 Corps) dated 28 November 1940 and 21 September 1942 regarding these sketch maps so the policy of hiding gun parts must have prevailed for some time (at least almost 2 years). What is surprising is that no written records of the location(s) were to be kept but the senior HQs had requested sketch maps!

Firing the Main Guns for Targets at Sea

The Battery was to receive information regarding shipping from a few sources:

- i) the Army Plotting Room (APR) at Dartmouth which had a direct line to the BOP.
- ii) the RNO Torquay could / may supply more information.
- iii) the Batteries at Brixham (378 Battery)⁸ and Shaldon (362 Battery) had phonelines to Torquay Battery.
- iv) the PWSS at Berry Head
- v) the Bofors gun site near the seafront could also pass on information generated by themselves or received from other guns along the coast.

⁸ This dates this document to after 378 Battery arriving at Brixham.

The guns were to be ready both day and night for firing. They were controlled by the Senior Officer present or by the Fire Commander (if appointed). Whilst in action they were to engage as many targets as possible. The No 1 gun was to fire to the right of a bearing of 135 degrees and No 2 gun was responsible for the left side of this bearing.

When "Action Stations" was called various lookouts were to be deployed, and they were to watch the area of water allocated to their gun. Ammunition was not to be wasted but the guns were not to be idle during an engagement. Normally, the guns were not to engage targets beyond a range of 5,000 yards.

The Battery had some "rules of engagement", and it would engage the enemy if:

- 1) any ship became hostile,
- 2) any submarine or MTB came into the zone and no previous information on them had been received from the Naval Authorities,
- 3) any vessel approaching the bay which had been deemed not friendly when an "Impeding Attack Warning" had been declared by either (via telephone or wireless)
 - (a) the Naval Officer i/c Dartmouth,
 - (b) PWSS at Berry Head
 - (c) the RNO
 - (d) the firing of pyrotechnic signals from A/Ps [Action Points] or Inshore Patrols.
- 4) any warship at night or during poor visibility that was approaching within 3 miles of the shore for which no prior notification had been received from the Naval Authorities.
- 5) any vessel(s) that the RNO requested to be fired upon or requested fire to cease.
- 6) if there was any doubt the Battery was to fire a warning shot across the vessel's bow. After this shot, if the vessel did not stop it was to be sunk.

However, during any state of emergency the Battery Commander was to liaise with the RNO as to the best policy to adopt.

Distribution of Fire Schemes Dated 19 and 21 March 1942

There were several local Coastal Artillery Batteries, and they all came under 556 Coast Regiment. These Batteries needed to know where their respective zones of action were and any procedures for engaging the enemy. There are documents dated 19 March 1942 and 21 March 1942 detailing the respective zones.

In March 1942, 362 Battery at Brixham was the Master Battery for Torbay and was in tactical control for Torbay. 362 Battery was to use an arc from Shag Rock to Berry Head and it was to cover the beaches at Meadfoot, Paignton, Goodrington and Saltern Cove as none of these were accessible to 361 Battery at Torquay.

361 Battery at Torquay was to cover London Bridge Arch to Berry Head but the common ground between Thatcher Stone and Berry Head would come under the orders of 362 Battery as individual conditions arise. 361 Battery was to cover the beaches at Elberry and Broadsands because 362 Battery at Brixham could not cover them.

Unrotated Projectile

The UP was to be manned throughout the day and the operator could not leave his post unless he was properly relieved. This soldier (operator) would inspect the UP when he took over. He was to check that the rockets were placed properly in the crates, that the cardboard damp excluders were intact and that the switches on the crates were in the “On” position and the Turret switch was in the “Off” position. The sight was to be checked for damage and checked that it was set correctly (e.g. deflection zero and range 600). Any damage was to be reported to the Number One in his section.

The UP was not to be stowed overnight, and the crates were to be in the vertical position so that rain could not enter the open end. The duty operator had to phase the crates every half hour and he was to maintain a look out for any aircraft within range. He would swing the UP with the sights on the aircraft, but the main switch would not be in the “On” position unless an Air Raid Alert had been given or the aircraft proved to be hostile.

Enemy aircraft were to be identified either by their markings or by committing a hostile act. The UP operator was allowed to fire upon such aircraft if they were within range and according to instructions (these were issued in January 1943). When the main switch was switched to the “On” position the operator had to make sure that he did not Phase Up, make any practice swings or do anything else that may cause him to lose his balance. If the crates became out of alignment causing the sights to be inoperable then the operator would only fire the UP if he was able to target the UP via observation of the crate’s alignment and elevation.

Rather interestingly there is a note dated 21 July 1942 when 361 Battery was at Torquay regarding the “Rockets U 2 in [Unrotated Projectile 2 inch]” from the Naval Officer i/c Dartmouth (NO i/c Dartmouth) requesting an inventory of the equipment and stores for UP. This note suggests that these rockets had a calibre of 2 inches, but this calibre is not confirmed.

Another document dated 24 November 1944 from 556 Coast Regiment’s Armament Officer to 361 (and 391), 362, 363 (at Torquay), and 378 Coast Batteries (at Brixham) noted that there was no RN labour available at present to remove the UPs. The local Naval Authority was to maintain the UPs in a state of preservation until such time that they can be removed. Presumably at this very late stage of the war they were no longer needed to defend the coastline. Based on these two documents the author believes that the UPs were therefore a Naval weapon that had been “loaned” to the Batteries at Torquay and Brixham.

Gymbal Mountings

There is a letter dated 8 June 1943 to Capt. Chipchase RA, Corbyn Head, Torquay from a RNVR Lieutenant who had recently been to the Torquay Battery, and it regards the Gymbal Mountings. The RNVR Lieutenant gave a report to the Naval Officer in Charge at Dartmouth on these mountings and there are references as to (1) how things were progressing and (2) enquiring if any Germans had been shot down by the Battery.

It is not clear which weapon(s) the RNVR Lieutenant was referring to but his comment regarding any enemy aircraft implies that the Gymbal Mountings were for AA defences not the Main Guns. These comments probably refer to the Unrotated Projectile as the UPs are believed to be a naval type of weapon “loaned” to the (Army) Batteries at Torquay and Brixham. The two main guns at both these Batteries were also naval guns but they were mounted on PX (P10) mounts.

At Furzeham (Brixham) and Torquay the mountings were manned by soldiers and there was no satisfactory arrangement regarding the maintenance of them. The Army thought the Navy was responsible. At one point the Corbyn Head mounting was out of order because the Army crews did not understand the hydraulic system.

The Army Capt. at Corbyn Head responsible for the mounting(s) did agree to accept responsibility for the maintenance of the mountings except for their electrical systems. This maintenance arrangement was acceptable to both parties and that the Army crews could maintain the mountings. Any electrical problems were to be referred to an LTO, via The Armament Officer, Dartmouth. This officer had agreed that a Petty Officer LTO would make periodical inspections of the mounting at Corbyn Head.

Practice Firing of the 40mm Bofors at Torquay

A document dated 25 February 1944 says that the arc of firing for the Bofors gun has been calculated to give a clearance of 8 degrees at London Bridge Arch and 5 degrees at Berry Head. These new settings were made after consulting with the IG (Capt. Aikman) [Instructor in Gunnery]. They permitted a larger arc for seawards practice firing than compliance with the original Instructions for Practice AA Artillery (43/AA/1012). Had the old system been used then the limits would have been not nearer than 880 yards from land at London Bridge Arch and Berry Head. This would have reduced the arc of fire from 28 degrees to about 11 degrees.

No 2 Gun Accident August 1944

This chapter is based on the papers in the Torquay Fort Book (WO192/141), the relevant 556 Coast Regiment War Diary (WO166/15045), Dartmouth Fort Book (WO192/149), Coast Artillery Fixed Defences for Dartmouth (WO199/1165), and an eyewitness account by Captain C H Fursdon ED (Efficiency Decoration) in "On Guard!". There is also some information about this disaster in Arthur Cook's book.

Captain Fursdon, quoted in "On Guard!", gives some details of the funeral arrangements for those killed in the accident and this information is not in the other sources except for Cook. WO199/1165, for the Coast Artillery at Dartmouth contains several pages relating to the "after-effects" of the accident as the other guns of the same design were modified to prevent a reoccurrence of the accident. As Dartmouth came under the same Coast Regiment as Torquay, Dartmouth must have retained some of the papers relating to the post-accident modification of the guns within its records. Strangely these papers are not in Torquay's records and the following has been presented in a rough chronological order.

On 11 August 1944 Brigadier J Wedderburn-Maxwell DSO, MC who was the Brigadier Royal Artillery Southern Command with Brigadier E T Weigall, the Commander Coast Artillery for the South West District visited 363 Battery at Torquay. They had arrived to oversee a seaward firing practice conducted by the local Home Guard (See: The National Archives (TNA) Document Reference WO166/15045, the "War Diary").

An explosion occurred in No 2 gun as it was being demonstrated and several personnel were killed and injured. Three members of the Home Guard died immediately and another two died later due to their injuries. Another four Home Guard were seriously injured. One Regular Army soldier was killed and another two had severe injuries. The War Diary (WO166/15045), the Coast Artillery Fixed Defences for Dartmouth (WO199/1165), "On Guard!", and Cook list the

Home Guard and Regular Army personnel killed and wounded. WO199/1165 gives the role each man had in the gun crew (see below).

A Court of Inquiry was established regarding the explosion in gun #1351 which was the No 2 gun at Torquay. The after-explosion report indicated that the chamber of the bore was not apparently damaged but both breech threads were damaged as the breech screw was blown out. The breech mechanism had been blown clear of the gun, and it was almost disassembled. The breech fittings were deemed unserviceable whilst the sighting telescopes were fire damaged. The PX (P10) mounting was undamaged.

Further details are available in the appropriate War Dairy (WO166/15045), and this gives details of the type of ammunition and a pre-explosion condition of the gun. Just prior to the explosion the gun would not fire a Ranging Salvo as a round had jammed in the gun. The gun then fired three rounds in succession before firing another Ranging Salvo that fell short.

The Report says that a muffled explosion was heard and then an outbreak of fire occurred. The gun was sited within a gun housing made of brick and concrete with an overhead cover and the ready to use ammunition was already placed on the gun floor. The fire was associated with the ammunition, and it was extinguished within 5 minutes.

In Arthur Cook's book there are notes from Ron Coleman who was on duty at the time of the accident and there is an account of the incident by Captain C H Fursdon [neither "On Guard!" or Cook say if he was Home Guard or Regular Army]. Cook may have sourced Capt. Fursdon's eyewitness account from "On Guard!" as the latter was written closer to the time of the tragedy. The text in Cook's book is very similar to that in "On Guard!" regarding the Captain's report and the funeral.

There are a few versions regarding the aftereffects of the accident at Corbyn Head:

556 Coast Regiment War Diary (WO166/15045)

The War Diary says that on the 14 September 1944 "a new piece installed on No 2 gun [at Torquay] and tested", but it does not specify what this new piece was. This usage of terminology implies that some part was replaced rather than a whole gun. However, the Torquay Fort Book (WO192/141) and the Coast Artillery Fixed Defences for Dartmouth (WO199/1165) clearly say that the whole No 2 gun was replaced not just a piece of it.

Torquay Fort Book (WO192/141)

There is a letter from the Armament Supply Officer, RNA Depot [Royal Navy Armament Depot], Plymouth dated 2 September 1944 to the Officer in Charge 363 Coast Battery, Torquay, saying that a QF 4.7-inch Mark V* gun had been dispatched to the [Railway] Stationmaster, Torquay on 31 August 1944 in railway truck No GW32722. This delivery was based on orders from the Director of Armament Supply, Bath. The New gun was #1335 and it came complete etc and with the necessary mechanism. There was a request for the Battery to collect this gun (presumably from the railway yard at Torquay).

Coast Artillery Fixed Defences for Dartmouth (WO199/1165)

Dartmouth came under the same Coast Regiment as Torquay and several papers regarding the implications of the accident are held in this Document Reference. At the time of the accident 361 Coast Battery was at Dartmouth.

About a week after the accident on 18 August a Report was forwarded from RA Southern Command to GHQ Home Forces RA (Coastal Artillery) regarding the Torquay accident. It states that:

- (1) During a seawards practice firing by 363 Battery (with two 4.7-inch QF Naval Mk V* guns on PX mountings) at approximately 20:30 hrs on 11 August 1944 an accident occurred to No 2 gun. The first firing series was a Battery Controlled salvo. No 2 gun could not fire because a cartridge had jammed, and it did not fire until after No 1 gun had already fired several rounds. No 2 gun then fired 3 rounds and on attempting to load the fourth cartridge a jam occurred. This case was removed, and another case was loaded. It is believed that as the breech closed the gun fired. The breech mechanism was blown away and the cartridges on the gun floor caught fire.
- (2) The Court of Inquiry is now sitting (as of 18 August 1944) with technical personnel. The cause is pending all evidence being reviewed.
- (3) Casualties⁹:
 - a. Home Guard Killed: Gnr FG Wellington (No 2), Gnr GJ Buckingham (No 3), and Gnr JH Fishwick (No 4).
 - b. Home Guard Died due to Injury: Gnr WS Kench (EL)
 - c. Home Guard Seriously injured: WG Houghton (SS Recorder)¹⁰
 - d. Home Guard Detained in hospital: Lt S Gorrely (Safety Officer), and Gnr FM Bailey (EL).
 - e. Regular Personnel Died due to injury: #1059461 RSM FWJ Blackett (Gun Critic)
 - f. Regular Personnel Seriously injured: 7601860 A/QMS GF Cole (REME), and 1708352 Gnr W Gammon (SS Recorder)
- (4) It was requested that another gun was to be provided to Torquay, and that this is very important to the morale of the Home Guard. It is suggested that a gun from Dartmouth Castle Battery (361 Coast Battery) which was on a Care and Maintenance Basis be sent to Torquay if another gun is not immediately available from elsewhere (see below).

On 19 August it was decided that No 2 gun at Torquay was unfit for further service and that arrangements were to be made for a replacement of this gun from either Dartmouth or elsewhere depending upon availability (see below). A Lt Davis, RN was to arrange for a new 4.7-inch gun to be sent by rail to Torquay yard. GII Soutco [GII Southco is probably a Staff Officer in position GII within Southern Command] was to be informed of its arrival so it could be off loaded by crane on to a siding and wait for the arrival of an armament party which was being sent to Torquay.

⁹ Some of the Home Guards' ranks vary according to the source used and so do some of the surname spellings.

¹⁰ He later died from his injuries.

By 3 October 1944 the Court of Inquiry had published their proceedings, and they had been circulated. A Capt. J E Wardle (RA) a SORA (Amn) (Staff Officer Royal Artillery Ammunition) wrote to the HQ of Royal Artillery Southern Command at Salisbury saying that he had spoken with a Lt Davis RN at the War Office (RA4 Branch) and the Lt had suggested a modification to the breech mechanism. The suggested modification was discussed, and it appears that the Torquay accident was not the first such accident with this type of gun.

By early October (between the 6th to the 9th) modifications to the firing gear of the 4.7-inch QF Naval Mk V* guns were being proposed. A note says that the Coast Battery at Dungeness West had modified their guns via No 9 Coast Defence Maintenance (CDM) Section by 8 October and these modifications related to the trigger mechanism. Each trigger was now fitted with a solid screw eye and retained by a split pin to ensure maximum strength and security.

Interestingly on 8 October 1944 a RA Brigadier's staff officer was writing to the district commands regarding the Torquay accident. In this correspondence it was decided that the firing of all 4.7-inch QF Mk V* Naval guns would cease on a temporary measure. They then said that modifications to the firing gear would have to be made under local arrangements.

These modifications involved:

- (a) the extension to the trigger is to be removed by extraction of the split pin; the supporting bracket may be removed from this carrier.
- (b) the trigger spring is to be examined and tested by cocking the striker several times; any failure to cock the striker will entail rejection of the spring as unserviceable and a new spring will be inserted.
- (c) the trigger should be fitted with a loop of wire or material strong enough to withstand the pull of a lanyard.
- (d) all these guns will be fired from a lanyard in the future.

Furthermore, the RA (Coast Artillery) Branch at the War Office said that "The Preparations for Firing" these guns will be done according to the Handbook and these instructions were to be observed. The Drill for these guns was going to be amended accordingly so presumably the Handbook would also be updated accordingly.

There was a discussion between the RA's Coastal Artillery Branch (RA(CA)) and the Chief Inspector Naval Ordnance (CINO) (on 9 and 26 October 1944) on the Mk I* and Mk II strikers which were used in the guns' firing mechanism. This letter indicates that these Strikers are not available, and it seems that only one type of equipment (gun) was using them at that time in Imperial Service [British and Commonwealth etc].

On 9 October a Brigadier, RA wrote to the Under-Secretary of State at the War Office regarding the Torquay accident and its Court of Inquiry. In the letter the Brigadier says that the only probable mechanical cause of the accident was that the explosion occurred by a combination of the slam-off of the breech and a sheared keep-pin in the cocking handle.

He says that there were two patterns of Striker used on these guns. One is like the Land Service Striker Types E and P as used on the Land Service 12 pounder and 4.7-inch guns. In this pattern there is a projection on the cocking handle which fits into a recess on the striker's body so that unless the safety lug is vertical and therefore in mesh with the D-cam the striker cannot go

forward. The Torquay gun did not have this projection so the only device to prevent the striker going forward with the safety lug not vertical was the keep-pin. In the case of Torquay this keep-pin was already sheared.

Modifications were now to be made to these guns so that they were fired using a lanyard and action would be taken regarding the pattern of Striker. All examples of this type of gun in Coastal Artillery service were to be reduced to a Care and Maintenance basis effective 13 October 1944 so a recurrence of this accident was considered unlikely. However, there might still have been some of these guns still in Naval usage.

On 13 October the RA were discussing with CINO a suggestion that all strikers which did not have a specific projection and recess could be modified. The striker used at Torquay did not have this fitting and it is thought that had the Torquay gun had the other pattern of striker then the tube would not have been struck even if the pin securing the cocking handle had been sheared and the cocking handle out of alignment. However, the note goes on to say that the accident may still have occurred if the cocking handle had sheared off on the release of the striker at the slam of the breech.

On 23 October 1944 CINO wrote to the War Office regarding remarks made to the Director of Operations (DNO part of Naval Cooperation). It appears that the breach mechanism in the Torquay gun was fitted with a Mark III striker on which the cocking handle has no projection engaging the striker nut. The CINO / DNO said that the purpose of this projection is not that stated by the Court of Inquiry as it was introduced for safety in assembly on Mark I* and Mark II strikers. On Mark I* and II strikers an additional safety precaution was used which prevents the cocking handle being fitted upside down. Had this been done to Mark III strikers the lug engaging the D-cam would be inoperable and the striker free to slam off. This explanation may be the root of the accident. Also, the "additional safety precaution" consisted of mating flats on the cocking handle and the striker. Therefore, the CINO recommended that the withdrawal of all Mark III strikers was made.

Other Coast Batteries had to modify their guns of this type and 375 Coast Battery at Normans Bay (under South East Command) reported on 4 November that they had completed their modifications. The other Coast Batteries must have followed by modifying their guns in October / November 1944.

Summary

So, there are the two different "stories" regarding the replacement / repair of Torquay No 2 gun. The War Diary (WO166/15045) implies that the gun was repaired i.e. "a new piece installed on No 2 gun". However, the Torquay Fort Book (WO192/141) and the Coast Artillery Fixed Defences for Dartmouth (WO199/1165) both indicate that a replacement gun was provided to Torquay. WO199/1165 does imply that a repair was initially considered but it was decided to have a replacement.

It does seem that the No 2 gun involved was replaced and the different stories may be explained by bad terminology. In the Torquay Fort Book, there is a letter dated 2 September 1944 which gives the new gun's serial number as #1335. The Fort Record Book for Dartmouth Battery (WO192/149) gives their QF 4.7-inch Mark V* Naval guns' serial numbers as #1209 (No 1 gun) and #1280 (No 2 gun). However, the Dartmouth Fort Book only covers 1941-1943 which precedes the accident at Torquay (August 1944). Unfortunately, this therefore does not prove

either way if the replacement gun #1335 came from Dartmouth but the replacement serial number does not tally with those known to have been at Dartmouth between 1941-43. The end date of the Dartmouth Fort Book, 1943, does imply that the Dartmouth guns were on a Care and Maintenance Basis prior to the Torquay accident.

Range Finder and Fire Control System

The Range finder for the 2 x 4.7-inch Main Guns was an essential piece of kit for the Battery as it enabled the guns' range etc to be set correctly. Like the Main Guns the range finder was also of naval design and origins. The Battery had a Naval 12-foot Barr and Stroud Type FQ2¹¹ No #2287 and it was located 30 feet above sea level with an arc of view of 105 to 199 degrees. It covered a region of water from London Bridge Arch to Broadsands, with a range of 2,000 to 40,000 yards.

The Battery's Standing Orders says that the method of range finding would be via the Barr and Stroud when time permits else it would be by estimation and the Fire Control System was a Dumaresq and Coventry Range Clock Mk I Serial Number 64.

The Coastal Artillery Search Lights (CASL)

During the life of the Battery there were 3 different searchlights. Probably the first two were installed together and the other was either a supplement or a replacement for one of the original two. These lights were termed Torquay #1, #2 and #3. The details regarding searchlights #1 and #2 in the Fort Book were usually in type whilst the details for #3 were added later by handwritten amendments. This amendment may have occurred after 363 Battery moved to Torquay.

The original searchlights were sited to the seafront and north of the Battery. No 1 light could be under remote control and No 2 was only hand operated. The lamps were High Current Density (HCD) with a 2-degree arc of dispersion and their effective range was normally 3,000 yards (more in good conditions). A third "Regimental Reserve Light" probably #3 was sited close to the BOP so that it could illuminate an area of dead water to Nos 1 & 2 searchlights.

Within the Fort Book there are several documents relating to the CASL. However, they are not all in agreement with each other in terms of specific components of the lights. The following table lists the various information.

¹¹ The original entry is barely legible.

Light Number	Probable Serial Number	Diameter	Projector	Lamp	Bearing of Left and Right of arc for Moving Lights	Arcs of Operation
#1	338851	90 inches	Mark V AA Mark VII Fortress Mark V* Mark VII C&D	Mark III Mark III	118-180 degrees	Centre of the Bay (135 degrees) to Goodrington Sands (180 degrees)
#2	339852	90 inches	Mark VI AA Mark V* Mark VI*	Mark V Mark III	128-180 degrees	London Bridge Arch (110 degrees) to Centre of Bay (135 degrees)
#3		90 inches	Mark VI AA	Mark V	100-190 degrees	

The beam divergence types for Torquay #1 and #3 were both “Concen” (Concentrated) and “Moving”.

The Coastal Artillery Searchlights were also termed Defence Electric Lights (DELs). The Battery Commander was in tactical control of his DEL (searchlights), and they would only be exposed on the orders of the Officer in Tactical Control. They could be exposed either on a specified bearing or on “default” bearings which was #1 light 128 degrees and #2 light on 135 degrees. The former had a 3-degree beam, and the latter was unspecified.

The DELs would be manned for 30 minutes prior to and after Official Nighttime. There were defined circumstances when they could be exposed and these were: (1) on the order “Expose” from the Battery Commander or the Alarm signal, (2) to investigate a suspicious object but this type of exposure was to be limited to fulfilling this objective, and (3) at the request of the RNO.

Sea based targets were likely to be mobile so the overriding principal was to illuminate as many targets as possible so that the guns could engage them. The Torquay and Brixham Batteries were to work together so the illumination of targets was coordinated by these Batteries and dual illuminated targets would be allocated to either Battery.

As well as having policies as to when to use the searchlights they also had policies for when not to expose them. Such examples included friendly vessels, and no nighttime checking purposes. Once the DELs had been doused then there was to be no kind of lighting displaying seawards.

There were some Standing Orders for the CASL, and their purpose was to (1) to act as fighting lights and (2) to be observation lights. The Orders stated that the normal opening bearings were to be 135 degrees for #1 and operated remotely, and #2 was 128 degrees. The arcs of traverse are in the table.

The Battery would be at 15 minutes readiness and both the engines for the searchlights would be started as soon as the alarm was sounded. The BC or Duty Watch would issue all the orders to the switchmen who relayed them to the Engine Room and Emplacements. The beams were never to be crossed, and the Distribution of Fire was to be based on the Fighting Light system.

If the Remote Control for #1 Light broke down, then it would be controlled by hand. The Search Light Operator (SLO's) had to inform the DS (the Duty Sergeant) 15 minutes prior to a necessary change in the positive carbon element and they should then await orders to change. The Warning Bell would then ring for 5 minutes.

The engines were to be run for a minimum period of 20 minutes each day and a reserve of 50 gallons of Diesel Oil would be always kept for the Lister Engines. Personnel replacements would be drawn from the Reserve Watch if there were any casualties within the searchlight crews.

Ryder Flares and Lyon Lights

There is a message dated 29 April 1942 saying that 2 Ryder Flares are installed at Torquay (361 Battery) and the map coordinates are given. Ryder Flares were magnesium flares that were lit in front of a polished metal reflector, and they provided illumination.

The Battery also had a Lyon Light, but the author has been unable to find any descriptions of this type of device.

Engines and Power Circuits

There were two Lister Diesel Engines, and they powered both the searchlights and other equipment. Torquay #1 Light was powered by a Lister 22kw Serial Number 2493 and Torquay #2 Light was powered by a Lister 22kw TG AA engine which had a Serial Number of 2939. The engine for Torquay #3 Light is unknown but it was probably powered by either of the known Torquay engines.

The engines powering the searchlights were to be kept running once an Imminent Attack notice had been received. They were to be tested and run for 30 minutes or until they were warm during Official Nighttime. If the [engine] temperature fell below 175 degrees Fahrenheit, then the engines would be re-started. Their temperatures were not allowed to fall below this threshold as they could be difficult to re-start. The Motor Direction Switches would be tested before Official Nighttime and twice during the night.

Both engines had a power lead to the [searchlight] emplacements. No 1 Engine had a power lead to a Mark 5+ switch and a switch which drove a motor directing its elevation. The leads from the engines to the lights were buried but the lead from No 1 Light to the BOP was partly exposed as it ran along the sea wall.

Small Arms and Ammunition at the Battery

Small Arms are generally those weapons that personnel can carry easily such as handguns, rifles, small calibre mortars and (light) machine guns. The Battery's inventory of small arms varied over time and the following notes are representative.

There is an undated statement giving the Battery's Small Arms as:

- a) 84 (81 at a different date) x 0.300" calibre American rifles¹² (the entry for 84 rifles was crossed out in the Fort Book so they must have been removed after January 1943).
- b) 2 x 0.303" calibre Lee Enfield rifles
- c) 2 x Spigot Mortars
- d) 2 x Thompson sub-machine guns (this entry was crossed out in the Fort Book so they must have been removed after January 1943).
- e) 2, later 4, x LMG (this entry was modified from 2 to 4 guns presumably after January 1943)
- f) 3 x Very Pistols
- g) 49 x 0.303" calibre P14 rifles (this entry was added presumably after January 1943).
- h) 7 x Sten guns (this entry was added presumably after January 1943).

There is also a note added in pencil regarding the "AFG 854" but the author cannot determine what this entry means.

All ranks armed with rifles were to carry 50 rounds. All reserve Small Arms Ammunition was to be kept in the main magazine and issued when needed. Hand grenades were to be kept fused and ready in the Main Magazine. They were to be issued on receipt of a warning of imminent attack. All the magazines for the AA LMG (Lewis / Bren guns) were to be kept full and ready in the gun pit. The ratio of standard rounds to tracer (for the LMGs) was 5:1.

There is a document titled "The Proposed War Establishment for Emergency Batteries (Class C 2-gun)" which is applicable to Torquay Battery and dated 4 August 1942. It has a handwritten amendment which probably dates from after the document's original date. This amendment gives 2 x 0.38", 25 x 0.303", Twin AA LMG and 4 x TMSG. Based on the calibres of standard infantry weapons the 0.38" would be standard revolvers, the 0.303" would be either Rifle No. 1 (SMLE) or Rifle No. 4 (the latter depends on the exact date of the amendment), Twin AA mounted Lewis / Bren guns and 4 x Thompson Sub machine guns.

The "War Establishment for Special Coast Batteries" dated 8 October 1941 gives the following small arms allocated to the Battery:

Detail	Number	Ammunition - Rounds	
		On Man	Reserve
Pistols 0.38"	1 for each officer	12	6
Rifles 0.303"	1 for each other rank	50	-
Light Machine Guns 0.303"	2	1,000 2,000 ¹³	12,000

¹² These were probably P1917 rifles.

¹³ One document gave 1,000 and another gave 2,000. Presumably they are from different dates.

There is an inventory of the Small Arms Ammunition at the Battery dated 26 June 1940 giving:

- 1) 0.303" Ball ammunition
 - a. 4,050 rounds to be packed in Bandoliers,
 - b. 1,000 rounds in Bundles and
 - c. 12,798 rounds in packed Cartons.
- 2) 499 rounds of 0.303" Tracer ammunition.
- 3) 1,590 rounds of 0.22" rimed cartridges
- 4) 62 hand grenades.

In the above list of Small Arms there were 84 (or 81 depending upon the date) 0.300" calibre American rifles. As there is no 0.300" ammunition in the inventory dated 26 June 1940 it can be presumed that the American rifles were at the Battery either before June 1940 or after June 1940.

The Home Guard originally had rifles issued to them by the Battery when required and the Duty NCO would sign for these rifles before issuing them to the HG against individual signatures. They were to be returned the next morning in a clean condition. However, it was found that this system of arming the Home Guard was deficient especially in emergencies and eventually the Home Guard were to have their own rifles separate to those belonging to the Battery. It is possible that the American 0.300" rifles may have been for Home Guard usage as the Home Guard (in general) was often given these rifles as opposed to ones of British 0.303" calibre.

Accommodation and Cooking

The Battery's accommodation for the men was split into: (1) a Nissen hut holding 20 men, (2) a War Shelter holding 10 men, (3) a Training Hut housing 50 men (4) the Searchlight Nissen hut holding 20 men, (5) the BOP (Battery Observation Post) holding 3 men including the OOW (Officer on Watch), (6) the engine room holding 1 man and (7) the emplacements holding 2 men each.

This arrangement provided 106 spaces which was less than the number of ORs to be housed. The officers and NCOs were housed separately to the above. There were enough beds to sleep 20 men in the Battery position and more beds could be taken to the position from the above-mentioned billets.

Cooking was mainly conducted on a large range in the Emergency Cookhouse and supplementary Soyer stoves. The Battery carried a supply of Reserve Rations sufficient for 11 men for 3 days. These rations were distributed between the Battery and Searchlight positions. Some spare rations may have been stored in the Canteen and they consisted of tea, sugar, milk, jam, sausage, biscuits, salt, Preserved and Concentrated milk. These reserve rations were sourced from the RASC at Denbury. The Home Guard had a separate supply of reserve rations, and these were kept in the Battery position.

The site's water supply was from the local Mains, and it fed taps in the lavatories and emergency cookhouse. Two gallons of water in cans were kept in the Emergency Cookhouse as a spare because there were no alternative supplies of fresh water.

The male lavatories consisted of a urinal, 2 cubicles and two hand basins with running water. There are 5 taps (2 in each lavatory and 1 in the cookhouse) within the Battery and two 40-gallon drums of water are stored behind No 1 gun. The Battery had no reserve water supply.

The First Aid Post was the Ladies lavatory which had 4 cubicles, and 2 hand basins. Any casualties were to be evacuated by the ARP to Torbay Hospital after receiving treatment at the First Aid Post. The Battery's First Aid Post carried a supply of equipment necessary for First Aid requirements and some stretchers.

However, in January 1943, there was not any sufficiently trained First Aiders on the Battery's establishment. A local medical doctor, Colonel Ward, performed the normal Battery medical services and the nearby Grand Hotel (which was under the command of the RAF) had a fully equipped First Aid Post so they could help when required to do so.

Cookhouse and Dining Hall

The Duty NCO for the Cookhouse and Dining Hall was responsible for the cleanliness and management of the Cookhouse, the Preparation Room, the Fatigue Room and the Dining Rooms. These rooms were to be inspected daily at 11:00 hrs. He had to make sure that there was no unnecessary wastage and that the byproducts would be disposed of accordingly (e.g. bones were to be boiled in the stockpot and placed in sacks, swill was to be separated to cooked and uncooked, fats were to be separated according to their type, bread waste was to be made into bread puddings etc). The sanitary orderly was to skim the grease traps daily.

He had to prepare the weekly diet schedule, and this was to be submitted to the weekly mess meeting for approval. He was to wear clean [kitchen] whites which should be changed when they became dirty. Any problems regarding keeping the whites clean was to be reported to the Messing Officer. Meals were to be issued at the specified times unless the Duty NCO deemed otherwise, and men were not allowed to have their meals in the cookhouse.

Manning the Battery and Operational Status

The Torquay Fort Book indicates that before early 1943 the Battery was manned primarily by the Royal Artillery (RA) and that after this date it was manned by a mixture drawn from both the RA and the local Home Guard. However, "On Guard!" implies that the Home Guard were active in the Battery since about 1941. This difference may be explained by the roles that the Regulars / Home Guard undertook. One record dated 1943 says there were 31 all ranks from the RA and alongside this there were 2 officers and 90 ORs from the Home Guard.

During 06:30 to 19:30 hrs one gun was always manned with 2 hours' notice and between the hours of 19:30 and 06:30 one gun was always at 15 minutes notice. Normally both guns could be manned at a slightly longer notice period. The Home Guard supported the RA during the overnight shifts so that there were enough personnel to man one searchlight and one gun. During the daytime the Battery was the preserve for the RA.

The Home Guard officers did turns of duty at the BOP with a RA Regular Officer on call. The Duty NCO was responsible for both the Regular RA and Home Guard personnel. However, the Home Guard would also be under the charge of one of their own NCOs when they performed overnight duties.

A handwritten amendment dated sometime after 25 January 1943 indicated that the Regular (RA) establishment had been reduced to one Captain and 7 men whose duties were to: (a) maintain the Battery, (2) train the Home Guard, (3) man the 40mm Bofors in action and (4) to provide one emergency gun detachment.

The Home Guard were required to provide 7 men who were either trained or partly trained in the usage of Coast Defence Emergency Batteries. Their training days were Tuesdays, Fridays and Sunday mornings and the total time spent on training was 5 hours per week. Those required for "Stand To" had to muster and those who were not required immediately were allowed to go but they had to report at "Action Stations". The Home Guard were fed by the Battery if they were at "Action Stations" but not otherwise. It appears that those Home Guards who did Night Manning and at some other times were allowed a subsistence allowance, but this allowance was probably rescinded later as it is crossed out in the Fort Book.

The Home Guard contingent was split into four-gun teams, a BOP section (which comprised 50% signallers and 50% Range finding Specialists), and a CASL section (slightly less than half were engine room men and the remainder were Lamp Attendants and Switchmen).

When Action Stations was called the personnel was split into:

- i) "A" Watch – A1 being Regulars and A2 Home Guard
- ii) "B" Watch – B2 being Regulars and B1 Home Guard
- iii) "C" Watch – C1 and C2 being Home Guard

The Home Guard were organised on arrival at the BOP so that the Regulars had key personnel in each Watch and a similar arrangement was applied to the CASL sections. The Home Guard gun detachments were commanded by their own NCOs and these NCOs were responsible for the training and disciplining of their men. The Home Guard officers rotated as the OOW.

Initially all the men at the Battery were allocated to one of the Watches so that it was possible to man both main guns simultaneously. To meet this requirement, it was necessary for the Office Staff and Batmen to have frequent training. The two strongest Home Guard watches comprised "C" Watch, but this comment was crossed out presumably sometime after 25 January 1943.

The above system was dated 25 January 1943 and items (i), (ii) and (iii) was amended sometime afterwards so that at "Action Stations" the Home Guard was divided into 3 Watches and each Watch was strengthened by 2 Regular personnel.

The Engineer manning detail was specified as those personnel manning the CASL. These men initially lived outside the Battery in King's Drive where their Nissen Hut was placed. Later they lived inside the Battery's perimeter but occupied King's Drive on "Action Stations". Their CASL were outside the Battery's grounds (presumably Torquay #1 and #2 Lights) as they were on the seafront and to the left of both guns. A mobile searchlight (probably Torquay #3) was located within the Battery's perimeter, but it was not a permanent fixture. Only one light was manned throughout nighttime as there was a lack of available personnel to man anymore. However, if "Action Stations" was declared then the Home Guard would bring the strength up so that two lights could be manned.

During daytime an NCO will always be in the Battery position, and he would have enough men to man the AA LMGs and the Unrotated Projectile (UP). He would also have sufficient men at short call to man one of the main guns and the BOP. At nighttime the Duty Watch had to remain within the Battery's perimeter, and they would be supplemented by the Home Guard between 19:30 and 06:30 hrs [sometimes 06:00 hrs]. One searchlight would always be manned, and the arrival of reinforcements would enable the second light to be brought into action.

The Officer of the Watch would control the Battery in the absence of the Battery Commander. A Reserve Officer would organise the men drawn from the Reserve Watch who would be making up a sufficient Duty Team to man the Duty gun first and then the second gun team. Any surplus men would then be allocated Local Defence duties.

Other than the Regulars and Home Guards previously mentioned there were no further specialist troops at the Battery such as infantry, signals, engineering or anti-aircraft personnel.

Manning the Battery during a Mobilisation

When a "Stand To" was declared, the Battery was brought to state of immediate readiness. The Home Guard were called out via their commander, Capt. H G Grant. The Home Guard were to be mustered, and their numbers checked. They could be released back to their civilian work if the circumstances allowed but they had to report back to the Battery if "Action Stations" was declared.

Upon mobilisation all the stores including the cookhouse stores, PAD stores, First Aid appliances, spare bedding, Soyer Stoves, all documents and cash in hand were to be brought to the Battery position. Any telephones in the Battery Office were to be taken to the Battery and used as Field Telephones.

Upon the appropriate order, a Battle HQ would be formed with an information board and field telephones inside it. This would have been located within the Emergency BOP. The Ladies lavatory would be used as the First Aid Centre and for the PAD stores. In the possible event of a gas attack the Ladies lavatory was to be used for a decontamination centre.

The Duty Officer would organise the manning of the Battery and the RA would supply two-gun crews (see RA Watches A1 & B2). When the Home Guard arrived after a "call-out" their individual arrival times could vary and so too could the numbers available. Upon their arrival in an emergency, they were divided into gun teams A2, B1, C1 and C2. Due to this the Duty Officer at the Battery had to make re-dispositions of the Home Guard, and these re-dispositions would be conducted in consultation with the Home Guard officer.

The organisation of the personnel into the 3 watches enabled a rota of duty to be constructed. This enabled all the men to have a quota of rest, meals, maintenance duties and relief. This system was partly flexible, and it was to be revised in due course with experience. On mobilisation the guns would be manned and maintained, and patrols would be conducted around the outer perimeter. The patrols could be reinforced with a mobile striking force and the 3 watches were thus allocated: one to man the guns, one on perimeter watch and the other in reserve and resting.

Lessons Learnt from Previous Mobilisations and Mannings

The Battery had several "alarms", or "practice / drill" events and they learnt from these experiences. One problem that was identified was the time required to get food and medical

supplies to the Battery once a “Stand To” had been declared. After February 1943, the medical and PAD supplies were held within the Battery site as previously they were held outside of the Battery’s site.

The acute lack of sleeping accommodation for the Battery and Home Guard personnel caused another issue. This problem was so acute that there was no sleeping accommodation in the Battery area for Sergeants and officers. Hence, the time required to assemble the officers, Sergeants and men was too great. Therefore, a new system was implemented for the relief personnel and their sleeping hours.

It was deemed that the organisation of the patrols and the passage of information from them to the Battery was too poor. These patrols were conducted by the Battery’s RA personnel and the local Home Guard were probably also involved to some degree.

It was found that the Home Guard Manning Drill needed to be refined as pre-January 1943 attempts to mobilise the Home Guard resulted in confusion and delays. The Battery issued rifles to the Home Guard, and they had to sign for them individually. This process caused delays in manning the positions. There were no checks to see if a rifle had not been signed for but taken from the armoury. It was recommended that in the future the Home Guard had their own rifles and not those issued via the Battery’s armoury (see the section on Small Arms).

Also, it was noted that the firefighting equipment was insufficient and that there was a need for a better emergency water supply. The latter may have been connected to the lack of firefighting equipment as firefighting hoses require a water supply.

States of Readiness

Three states of operational readiness were used: “Normal Routine”, “Immediate Readiness” and “Anti-Aircraft Readiness”.

The “Normal Routine” was such that the Battery Commander or the Duty Officer would be available ready to attend his Action Station. During nighttime and periods of low visibility he would stay close to his Action Station location.

In daylight hours, the watch on duty for the gun detachments will be in their work locations or in the Battery accommodation whilst the reserve watch would be in the Billeting Area. Overnight or in low visibility conditions the watch on duty will be in their War Shelters where sitting accommodation was provided but they were not allowed to sleep or lie down in this location. The Reserve Watch was to be positioned close to the Guns and they were allowed to lie down.

Some personnel were required to be always at their “Action Stations” locations and periods were deemed to be Official Day, Official Nighttime or Periods of Low Visibility (see table). At both the dusk and dawn “Stand To” the complete detachments would attend their “Stand To” positions.

		Normal Routine		Immediate Readiness			
		Daytime	Nighttime or Low Visibility	Daytime	Day - 2 mins notice	Nighttime	Night – 2 mins notice
Battery Observation Post							
	Officers			1	1	1	1
	Battery Commanders Assistant			1	-	1	-
	Assistant BCA			-	1	-	1
	Battery Commander Ack [Acknowledgement] or Look out	1	1				
	Operator Telephonist	1	1	1	1	1	1
	Orderly	-	1				
	Switchmen	-	1	-	-	1 to man phone to lights	1 to man phone to lights
	Rangefinders	1	1	1	2	1	2
	Clock operators	-	1	1	-	1	-
	Exchange Operators	1	1	1	-	1	-
At the Battery							
	Telephonists	1	1	1	1	1	1
	Gun lookouts	-	2	1 per gun from the Duty Watch		1 per gun from the Watch on Duty	
DELs							
	Telephonists	1	1 per light and engine room	1 from the Duty Watch		1 from the Watch on Duty	2 from the Reserve Watch
	Lights	-	1 per light	-	-	2 from the Watch on Duty	
	Engine Room	-	2	-	-	1 from the Watch on Duty	1 from the Reserve Watch

During “Anti-Aircraft Readiness” the main principal was that the Battery was to be part of the local AA defences. “AA Readiness” could be ordered by either:

- (1) the BC or the Duty Officer if they deemed it necessary or
- (2) the Duty Officer if they received an Air Raid Message (either Purple or Red).

Upon the signal being given the Duty Officer (at either the BOP or Gun Positions) and the AA LMG Detachments would go immediately to their “Action Stations”. The Battery would also be placed into the 2 minutes notice status and the following would be implemented:

- a) The Exchange Operator would sound the Alarm and notify the guns via the OP on the omnibus circuit.
- b) The phones in the emplacements, and the lights would be manned.
- c) The telephonists would man the phones to Brixham.
- d) The BCA would man the OP phone to (i) the guns, (ii) the Clock Operators and (iii) the phones to the Sight Setters.
- e) The Ass BCA [Assistant to the Battery Commander's Assistant] would man the phone to the Duty Officer's telephonist (This was later removed from the duties).
- f) The Switchmen would man the phones to the DELs until relief arrives.

Administrative Issues

For administrative purposes the Battery Commander had to liaise and inform the local Commander Fixed Defences, the RNO and the Local Military Commander. Any disciplinary matters were to be referred to the CO 51st Heavy Regt, RA and later the CO 18th Group, Coastal Artillery.

War Diaries were to be kept by the Battery Commander, and they were forwarded to the CFD (Commander Fixed Defences) at Plymouth for onward transmission. Later they were to be sent to the CO 18th Coastal Artillery Group once it had been formed. The Duty Officer would create a report each day noting any necessary comments that should be placed into the War Diary.

Any stores such as rations, and fuel were provided via the RASC in Exeter and the local RE contact was the Deputy Commander Royal Engineers (DCRE) at Exeter on phone number 5378. The local Medical Officer was Col Rowland Ward (retd) who was stationed at Kirkham, Babbacombe, Torquay. The PAD Arrangements were with the local ARP Committee for decontamination, first aid etc on telephone Torquay 4355.

Duties for Officer of the Watch

On 17 January 1943 the officer commanding 363 Battery detailed the duties of the Officer of the Watch and specified these duties under Standing Orders. This officer would:

- a) Be on duty for a period of 24 hours from 08:00 hrs.
- b) He must remain during the Official Daytime within the Battery Position or in one of the Battery's buildings.
- c) During Official Nighttime or in periods of bad visibility, he must be within the Battery's position or within 5 minutes call.
- d) He was responsible for the Watch on Duty and had to make sure that they were always alert and fit for duty.
- e) He was to ensure that the Training Programme was carried out and he should inspect the guns during his period of duty.
- f) Make sure that the men in his Watch had sufficient rest and that his men were informed and drilled with the appropriate Standing Orders from 363 Battery.
- g) He was to ensure that the Training Record Books, the BOP records, and the records for men on Short Passes were kept properly.
- h) If anything unusual occurred then he was to report this to the Battery Commander.
- i) If he had to leave the Battery Area during his duty period, then he must ensure that another officer was appointed as his deputy during his absence.

Duties for the Duty NCO

His period of duty was for 24 hours from 08:30 hrs and he held the position of the Senior NCO of the Duty Watch. He had to remain within the Battery position throughout his duty period except for meals or for duties outside the inner perimeter. He could only do the latter if he was relieved by the Orderly NCO or another NCO not below the rank of Bombardier.

All men in his Watch had to rise at reveille, clean their rooms and lay out their kits before morning parade. He was responsible for the Gate Guards, that all sentries were properly dressed and that they knew their orders. Reliefs were to be made of the Gate Guards and the men in the BOP so that they could be fed. The Duty NCO was required to make periodic visits to the sentries to make sure that they were alert.

During daytime the Duty NCO made sure that the AA LMG was manned and that this soldier knew the appropriate orders. The soldier manning the UP had to make sure that it was operational and prepared ready for action.

The Duty NCO had to make sure that the Battery Training Programme was conducted by all men inside the Battery perimeter and that all equipment was maintained. He was responsible for the guns and would hand them over to his successor at the end of his duty period.

The Home Guard NCO was responsible for the Gate Duties from 19:30 hrs until the following morning and they were issued rifles by the Duty NCO.

All men going on Pass were to be inspected by the Duty NCO and he could refuse them leave if they were improperly dressed. Records would be kept by the Duty NCO as to the times of exit and entry of men with Passes.

Duties for the Orderly Room NCO.

This NCO was to be on duty for 24 hours from 08:30 hrs daily. He was to remain within the Battery position or in the immediate vicinity of one of the Battery's buildings. If the Duty NCO needed temporary relief such as for meals or when the Duty NCO had to leave the Battery, then the Orderly Room NCO would temporarily assume the duties of the Duty NCO.

The Orderly Room NCO had to attend morning parade and accompany the Duty Officer on his morning rounds of the billets. He was to attend all mealtimes and report any complaints to the Messing Officer.

His responsibilities included collecting the mail from the Battery office at 10:50 hrs and he was to deliver it to the searchlight positions and the Watch Shelter for the 11:00 hrs break. He had to collect the afternoon mail immediately after the manning parade and deliver it appropriately.

At nighttime he had to ensure that the blackout shutters were in place prior to the Official Nighttime. He had to check that all men not on Late Passes were in the billets by 10:30 hrs and that all lights were extinguished. In the event of an Air Raid Alert, he was to go to the Battery position.

He also had to make sure that all the local leave passes and the Local Pass Record Book [presumably for the Short-Term Passes] was collected daily from the Battery office at 12:30 hrs and that these papers were handed to the Duty NCO.

Conditions of Short-Term Passes

Invariably, men had to leave the Battery's perimeter for a variety of reasons. These reasons could be of a social nature or related to duties. The former required Passes to prove that they had the necessary authorisation to leave the Battery.

The rules governing Short Passes were that:

- a) No men are allowed outside the Billet area unless on duty or with a pass.
- b) The Billet area is within the bounds of Seaway Lane (up to Seaway House), Chelston Road (up to Chelston Dene), Seaway Lane to Torquay Railway Station via Hennapyen Road, Torquay Railway Station to the searchlight position via the seafront and then from there back to the Battery.
- c) The men were allocated Permanent Passes, but they were only valid on any specific day if the envelope containing the Pass had been signed by the Watch Keeping Officer and dated. The men with these passes could remain in Torquay or Paignton until 23:59 hrs.
- d) Any personnel leaving the above area or wanting a later pass had to request one.
- e) All men near the Battery buildings during the night were at 10 minutes readiness. This applied to all men except those with Passes.
- f) The Duty NCO would issue the passes in the Battery position, and they had to report to him upon returning to the Battery. The times of departure and return were to be noted by the Duty NCO.
- g) The Duty NCO had to inspect the men wanting Passes and he would only allow them out if they were properly dressed.
- h) The return time was used both for the Passes and for Privilege Leave.
- i) Any personnel outside the above area without a Pass were considered Absent Without Leave.

Organisation and Equipment at the Battery

Personnel Issues

The personnel allocated to a RA Coast Battery such as Torquay changed over time and some (dated and undated) snapshots are recorded. The Fort Book gives details of the minimum number of men required to man the Battery, and it gives the minimum as:

- 1 - Battery Commander or Section Commander
- 1 - Battery Commander Ack¹⁴
- 1 - Look out
- 2 - Operating the Range Finder
- 1 - Clock operator
- 1 - Telegraphist on the exchange
- 4 - Operating the AA LMG
- 22 - Operating the main guns
- 6 - on local defence
- 4 - Operating the DELs

¹⁴ The original document uses "Ack" but often there was the Battery Commander's Assistant (BCA). The author could not find an explanation for the term Ack, but it may well refer to the BCA.

The Army developed what are termed Tables of Organisation and Equipment. Most combatant armies in World War had these documents although their exact name may change from nationality to nationality. In short, they listed the personnel, their roles, and equipment allocated to units. Units were not always at full strength according to these tables and this particularly tended to occur after periods of combat etc. These Tables of Organisation and Equipment changed over time as experience was obtained and there are several versions that are applicable to Torquay Battery.

As of 8 October 1941, the War Establishment for Special Coast Batteries, Royal Artillery, such as Torquay with 4.7" guns were:

Detail	2-gun Battery	2 CASLs	Total Special Coast Battery (111 all ranks)
Captains	1	-	1
Subalterns	2	-	2
Battery Sergeant Major	1	-	1
Sergeants	2	-	2
Tradesmen	1	2	3
Lance Sergeants	2	-	2
Bombardiers	4	1	5
Lance Bombardiers	7	1	8
Gunner	72	12	84
Army Catering Corps Corporal (attached)	1	-	1
Army Catering Corps Privates (attached)	2	-	2

The men were allocated to the following duties (trades):

Trades and Duties	2-gun Battery	2 CASLs	Total Special Coast Battery
<i>Tradesmen</i>			
Driver / Mechanic	-	2	2
Clerk	1	-	1
<i>Non-Tradesmen</i>			
Range-finding specialists	6	-	6
Telephonists	3	-	3
Gun detachments	52	-	52

Battery Commander's Assistants	3	-	3
Rate Clock Operators	3	-	3
Lamp Attendants	-	4	4
NCOs i/c searchlight directing station	-	2	2
Switchmen	-	2	2
Searchlight telephonists	-	4	4
Gun Storeman	1 ¹⁵	-	1
AA Light Machine Gunners	4	-	4
Local Defence	6	-	6
Sanitary Orderly	1	-	1
Batmen	3	-	3
Drivers IC	1	2 ¹⁶	3
Medical Officer's orderly	1	-	1
Motor cyclist	1	-	1

A signal dated 6 April 1942 from 556 Coast Regiment HQ to all its batteries indicates that the War Establishment had changed. Originally there were 6 Bombardiers including a Bombardier Cook. This was replaced by 1 Bombardier and 2 Gunner Cooks. The new distribution of ranks was (making a total of 105 men):

- 1 x Warrant Officer
- 2 x Sergeants
- 2 x Lance Sergeants
- 5 x Bombardier
- 8 x Lance Bombardier
- 3 x Tradesmen
- 84 Gunners.

There was another revision to the War Establishment for Emergency Batteries (for Batteries such as Torquay) dated 4 August 1942 for the Class C 2-gun Batteries within Southern Command. This establishment comprises (30 all ranks):

- 1 x Captain
- 1 Subaltern [these are normally Lieutenants or 2nd Lieutenants]
- 1 x BSM WOII [Battery Sergeant Major Warrant Officer Class II]
- 1 [later modified to 2] x Sergeants
- 3 x Tradesmen
- 1 x Lance Sergeant
- 2 x Bombardiers (to include 1 Bombardier AI Sigs)
- 2 x Lance Bombardiers

¹⁵ This man also performs the duties of searchlight and administrative storeman.

¹⁶ He would also perform the duties of relief engine attendants.

16 x Gunners
1 x Army Catering Corps (attached) Corporal
1 x Army Catering Corps (attached) Private

The Distribution by Trades was as follows:

Tradesmen (3 men)

2 x Drivers / Mechanics
1 x Clerk

Non-Tradesmen (21 men)

2 x RF Specialists
1 x Telephonists
8 x Gun Detachments
1 x BCAs
None specified x Clock Operator
2 x Lamp Attendants
1 x NCO i/c CASL
1 x Switchmen
1 x CASL Telephonists
1 x Gun Storeman
None specified x AA LMG Gunners
None specified x Local Defence
1 x Sanitary Orderly
1 x Batmen
1 x Driver i/c
None specified x Medical Officers' Orderly
None specified x Motorcyclist

A note dated 25 January 1943 gives the ranks for the Regular RA establishment as (31 all ranks):

1 x Captain
1 x Subaltern¹⁷
1 x Battery Serjeant Major (BSM a WO Class II)
2 x Sergeants (one for the searchlights)
1 x Lance Sergeant
2 x Bombardiers
2 x Lance Bombardiers
16 x Gunners
3 x Tradesmen
2 Army Catering Cooks (attached to the Battery)

The Regulars as of 25 January 1943 were dual trained so that they could undertake at least two different roles. An example is a Gunner could dual role as the Battery Commanders Assistant (BCA) and operate a Searchlight. There were 2 qualified fitters for the engine room and a trained clerk. The trades on 25 January 1943 were designated as:

¹⁷ This term usually refers to Lieutenants and Second Lieutenants.

2 x RF Specialists
 1 x Telephonists
 8 x Gun detachments
 1 x BCAs (1)
 2 x Lamp Attendants
 1 x NCO In charge of the CASL
 1 x Switchmen
 1 x CASL telephonists
 1 x Gun storeman
 1 x Sanitary orderly
 2 x Batmen
 1 x Drivers

There is yet another document giving the Distribution of Trades which differs to the previous Tables, but it is undated. As it is undated it could be before or after the table above.

Trades and Duties	2-gun Battery	2 CASLs	Total Special Coast Battery
<i>Tradesmen</i>			
Driver Mechanics		2	2
<i>Non-Tradesmen</i>			
Rangefinder Specialists	6	-	6
Telephonists	3	-	3
Gun Detachments	52	-	52
Battery Commander's Assistants	3	-	3
Rate Clock Operators	3	-	3
CASL Emplacement Numbers	-	4	4
NCOs i/c CASL	-	2	2
Switch Operators remote control	-	2	2
CASL Telephonists	-	4	4
Gun Storeman	1	-	1
AA Lewis Machine Gunners	4	-	4
Local Defence	6	-	6
Clerks	1	-	1
Sanitary Orderly	1	-	1
Cooks	3	-	3
Batmen	3	-	3
Drivers IC	1	2	3
Medical Officer's Orderly	1	-	1

Motorcycle Dispatch Rider (DR)	1	-	1
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Equipment

Torquay Battery's parent unit was 556 Coast Regiment and in 1943 it provided several "Basic Returns" to HQ Coast Artillery, South Western District. These notes are based at the Regimental level, so it is not possible to discern the changes at Battery level.

On the 1 June 1943 556 Coast Regiment's Basic Return there was an amendment such that 75mm British guns, 75mm American guns, a 40mm Bofors gun and some Lyon Lights were added to the Regiment and the Projector for a searchlight was changed.

Later on, 2 July 1943, 556 Coast Regiment provided another amended Basic Return to HQ Coast Artillery, South Western District and the Regiment's 6 pdr mobile gun was to be removed from the establishment of the Regiment and the Regiment gained a trailer Artillery No. 33.

The OC 556 Coast Regiment wrote to the HQ Coast Artillery, South Western District on 30 January 1944 as the Regiment had made some changes to its establishment. A QF 40mm Bofors was added, and some searchlights were removed from the Regiment.

Communication Systems

The Communication systems for the Battery consisted of internal / external telephones, Alarm Systems, Public Address systems, Wireless Telephone (W/T) and Radio Telephone (R/T). The BOP was to hold a "Position" Book with diagrams detailing the local command telephone and alarm circuits in case there were any communication issues / problems. Each of the Telephone Exchange Operators was responsible for his lines and these lines were to be tested a few times every day. Also, all alarms would be tested 30 minutes prior to Official Nighttime.

Keeping time was also very important for the Battery so the current time would be obtained via the Post Office twice a day and all clocks would then be set appropriately. This was coordinated with Brixham Battery as Brixham Battery was the Master Battery.

Standing Orders for External Telephone Calls

The two main telephone systems were the Military Line and the GPO Line. A record of all calls from the Military Line were kept and these records comprised of the person making the call, the person receiving it, and a summary of the business conducted. These details were to be recorded by the person making the call.

All calls via the GPO Line were also documented. The details noted were the person making the call, the number called, whether it was a personal call or a Battery call. Personal calls were only allowed with the permission of an officer who would only give such permission in very special circumstances. When making a personal call the BOP had to be informed. The amount due to be paid had to be obtained from the Exchange Operator and that this sum was to be paid to the Battery Clerk who would keep a record of payment. Normally personal calls would have to go via the nearest call box on Walnut Road.

Telephone Lines – External

There was the normal GPO line, and a military line wired on the GPO system. The normal GPO line number for the Battery was 4811 which presumably went to the Battery's exchange and there was an extension to the Battery Office.

The Battery's telephone exchange was in the BOP. The BOP's exchange had two extensions such that three conversations could be held with the BOP simultaneously. The BOP exchange had the following connections (after September 1942):

- a) No 1 originally was to the RNO Switchboard. This connection was removed later.
- b) No 2 was to the Berry Head WSS [Port War Signals Station].
- c) No 3 went to 362 Coast Battery at Shaldon.
- d) No 4 went to 378 Coast Battery at Brixham.
- e) No 5 went to the RNO but this was removed later.
- f) No 6 went to the War Shelter and the main gate.
- g) No 7 went to the Battery Office and the BC [Battery Commander's] room.
- h) No 8 went to the BOP side set.
- i) No 9 went to the HQ of 556 CRRA [Coastal Regiment Royal Artillery]
- j) No 10 went to [another] the BOP side set

Telephone Lines – Internal

There were three main internal circuits: (1) the Main Circuit, (2) the Emergency Circuit and (3) the Alternative Main Circuit.

(1) The Main Circuit

The BCA's phone was connected to both main guns on an omnibus circuit which also connected to the No 1's telephone. The Sight Setting phone line connected to the Sight Setters' phones on each gun. They were provided with hand, head and breast sets. The CASL circuit went to both searchlights and the Engine Room on an omnibus circuit. The emplacements had both hand, head and breast sets.

(2) The Emergency Circuit

This existed in case the Main lines were not operating. This subsidiary line ran from the Emergency BOP to the guns on an omnibus circuit. A similar line was connected to the Searchlights. To initiate operation of this system it was necessary to turn a switch on the guns, the Searchlights and the BOP. Then it was possible to communicate from the BOP to the EBOP [Emergency Battery Observation Post].

(3) Alternative Main Circuit

This was a secondary main circuit that could be operated if time permitted. It was put into operation by the Royal Corps of Signals (RCOS) and the maintenance NCO. Once operational it was not necessary to use the Emergency Battery Observation Post (EBOP) system.

On 25 January 1943 the Battery made an "Application for Five Line Concentrators" as this would have connected the guns and lights' main lines. However, the outcome of this application is unknown.

The Wireless Telephone (W/T) and Radio Telephone (R/T) system originally used by the Battery was able to communicate with 378 Coast Battery at Brixham using a W/T No 17 set. The range of this set when installed was 6 to 8 miles and the calling sign was TOC-BEER-BEER. Later a No 11 set was installed which could communicate with the other Regimental Stations.

Telephone Exchange Personnel

The Exchange was the hub of the Battery's communications, and it was a vital component. Therefore, the Exchange Operator had as his Standing Orders:

- a) That his period of duty would be assigned to him by the NCO of the Duty Watch.
- b) He had to keep records of all outgoing calls.
- c) He kept a register for keys and other records.
- d) He could not leave the Exchange unattended.
- e) He must be satisfied that any Home Guard personnel on duty in the BOP were properly trained instructed as to their duties.
- f) He must keep the BOP in a clean condition.

Emergency Torquay Exchange System

On 20 May 1942 a new Telephone Communications system was implemented at the Battery. In the event of an urgent operational call and the normal channels having delays there was a special code (starting 61) that the Battery operator could use.

There was the potential risk that the [GPO] Switchboard Room may have to be evacuated, and, in that case, locally dialled calls would be obtained using the usual manner. However, on evacuation truck calls other than those for direct dial would have to start with 61 until normal service was resumed. If difficulties arose with calls starting 61 then the [GPO] Exchange Supervisor was to be contacted on Torquay 4505 and details of the problems were to be reported to them. The usage of the 61 code was to be restricted to a small number of personnel.

The Exeter Telephone Area, Post Office, wrote to the Battery on 22 May 1942 saying that during periods of emergency Torquay 4811 (the Battery's number) should be contactable.

Alarm Signals and Procedure

The PWSS at Berry Head was to give information on shipping traffic to the Battery. The Battery Commander would be notified by ship to shore signal for the entry of British and Allied warships into his domain and the local herring fishing fleet would use a recognition signal. The Torquay Battery had no role in examining vessels entering the Bay as this came under 378 Battery at Brixham.

The first signal of an enemy invasion was the ringing of the church bells in the Torbay area. If a naval patrol vessel fired a Green Flare, then the Battery was to expose its searchlights. If the Battery's Alarm was sounded, then all personnel were to proceed to their designated "Action Stations" (according to the Manning Detail Board).

Alarm Systems

The Battery had two Alarm systems. They were both operated from the BOP. One rang bells in the War Shelter, Chelston Dene [as of 2024 this was Holiday Apartments so it must have been

some type of accommodation during the war], Seaway, Monard [this is an unknown location] and the guns. This system was worked from the bench near the clock operator in the BOP. The other system went to the Searchlight emplacements, the engine room and the Searchlight Nissen hut. This was hand operated via a control unit sited under the searchlight phone bench. Both systems were tested twice daily.

Public Address Systems

A Public Address system operated within the Battery, and it was operated by either a 12-volt accumulator or 200-250 AC mains supply with an output of about 15 Watts. The microphone was waterproof and consists of a coil. The output has four loads and the 15W output is sufficient for one to four loudspeakers. A gramophone input was also possible.

Wireless Communications

There was a wireless communication system for the passing of orders from the Searchlight HQs to the [Gun] Detachments, for the Gun Detachments to the Searchlight Section HQs, and for other administrative work. This system was for short verbal messages which the receiving operator would normally write down and repeat it to the intended recipient.

The sets provided were No. 17's and they allowed speech in one direction at a time. Therefore, after speaking the operator had to switch the set to "receive" mode to hear that the receiving station had understood the message. Unlike telephones it was not possible to interrupt a transmission. All the Detachments would work with the same frequency as their Section HQ and each Section in a Company would use a different frequency.

Sometimes the Section HQ may have to speak to all 5 detachments [Regimental HQ to Batteries] at once and such broadcasts need to be done carefully. The Section HQ was the controlling station, and it made sure that:

- a) No detachment could call Section HQ unless it was to pass important information or in an emergency.
- b) Detachments were forbidden to contact each other directly. All inter-detachment messages were to be passed via Section HQ.

These messages were not secure, and they could be intercepted by the enemy.

Wireless Set No 17 AA Operating Instructions

The No 17 Set was a R/T transceiver designed for use between Searchlight Section HQs and detachments. The frequency range was 50.0 to 52.0 mc/s, and the control dial was calibrated on a scale 0 to 100. The range is normally around 5 miles, and a reflector can increase the range to 8 miles.

It was powered from a 2-volt accumulator which had about 150 hours of working time before re-charging was necessary. A spare accumulator was supplied with the set. For portable use a different style accumulator was fitted to the compartment in the case. A High-Tension supply such as an ordinary 120-volt commercial type HT battery could be used as an alternative. This had an approximate 300-hour usage time before replacement. Another alternative was 2 x 60-volt Service Pattern HT batteries (Battery dry HT 60V No 1).

The transceiver was designed to enable it to be permanently on in the “Receive Mode” without undue battery consumption. During the hours of darkness and at stated intervals during the day tests should be performed and the system should be used for administrative purpose as detailed by the OC Search Light Battalions and Regiments.

An aerial lead of 40 feet was provided and the dipole aerial had a diameter of 2.25 inches which was fitted to the top of the aerial. The Wireless Set was contained in a teak case 15 inches high x 14.5 inches wide and 9 inches deep and has a carrying handle. The top has the transceiver whilst the section below is the compartment for a set of headphones, a hand microphone No 3, a HT battery and a small LT battery. There are Terminals for the external LT battery, and for earthing the set. A socket is provided for the plug of the aerial. There was an absorption type wavemeter, and the weight of the entire system varied based on the combination of equipment being used (e.g. different types of battery etc).

Interference was possible when operating the Wireless and this tended to occur if transmission of other radio sets on adjacent frequencies took place within 800 yards. The receiver (super-regenerative type) can have interference with other receivers within 250 yards. The same could be true for receiving signals in Morse Code but this interference could be eliminated by altering the position of the aerial coupling coil.

Motor Transport Allocated to the Battery

The Battery’s transport consisted of:

- a) 1 x 10 HP Hillman Utility Truck
- b) 1 x Ariel motorcycle. This was for the usage of officers on duty and not for DR (Dispatch Riders).
- c) 1 x bicycle for PAD purposes

Further transport could be arranged via the Transport Officer at Regimental HQ. Another document gives the Battery’s transport as just a 15-cwt van and a motorcycle. The War Establishment dated 8 October 1941 says that 1 motorcycle and 1 van (15 cwt) were allocated to the Battery.

There are references to the Battery having a “Trailer Artillery No 33” but the exact type of this equipment is unknown. Some artillery trailers were used for the transportation of artillery ammunition, so it is possible that this was the role of this item.

Other Units to Research

The men stationed at Torquay under 361 Battery (1 September 1940 – July / November 1942) initially came under 51st Heavy Regiment, Royal Artillery for disciplinary purposes. Later this changed to 18th Group, Coast Artillery (whilst 361 Battery was still present at Torquay) and 556 Coast Regiment.

The War Dairies for 51 Heavy Regt RA are:

- WO167/560 – France 1939/9-1940/5
- WO166/1879 – Home 1940/6-1941/12

WO166/7214 – Home 1942/1-1942/12
WO166/11398 – Home 1943/1-1943/12
WO171/1035 – North West Europe 1944/1-12
WO171/4876 – North West Europe 1945/1-12
WO171/9089 – North West Europe 1946/1-12

There was also the Devonshire Heavy Regiment, Royal Artillery which was formed in 1924. This later became 566, 567 and 568 (Devon) Coast Regiments in April 1941. Their War Diary is in WO166/1875 covering 1/9/1939-31/10/1939.

Also, 2 Docks Group, Royal Engineers was active in the Torquay Harbour area and their War Diaries are held in:

WO167/876 – France 1/6/1939-30/6/1940
WO166/3460 – Home 1/7/1940-31/12/1941
WO166/7971 – Home 1/1/1942-31/10/1942

Chronology of Events at Brixham and Torquay

In the author's previous notes on Brixham Battery there is a detailed section on the events at Brixham and Torquay Batteries. To avoid duplication the reader is referred to the earlier research conducted into Brixham Battery.

References

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WO192/144 Fort Record Books, Southern Command, Torquay Battery, Devon, 1940-1944.
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WO199/1165 General Headquarters, Coast Artillery, Dartmouth

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