

ABOVE AND BELOW: Separated by approximately 120 years, these two images illustrate the differences in the landscape of the South Foreland. Two things are obvious; first, the extensive growth of trees and shrubs that has taken place such that the numerous routes across the headland have disappeared. Secondly, the beach area was once a scene of habitation with many houses and even gardens along the entire foreshore. Today, the houses are almost all gone and the space is allocated to promenade and car park, with a lawn. The tall High Lighthouse remains clearly visible, whilst the short Low Lighthouse has disappeared into the tree-line.





## South Foreland in the 21st

# Century

Extracted from: Light On The Forelands by Ken & Clifford Trethewey, Jazz-Fusion Books (2022)

A visit along the White Cliffs today; the dominance of Dover; increased public access versus the desire for privacy; a rare visit to the Low Lighthouse and a detailed description; the industrial archaeology.

Tt is a fact of these times that, in the very place where a lighthouse could (using past logic) be most needed, Trinity House has no presence. When the first station was digitally automated back in the 1980s, it was clear that lighthouses - once at the forefront of technological innovation - were to become a victim of it. We still operate and maintain lighthouses, but in a manner that would be unrecognizable to the characters who have illuminated this book with their dedicated service. A detailed analysis of that process of change has been presented elsewhere.<sup>1</sup> This book has concentrated not just upon the scientific and engineering achievements at this and some other sites, but also on the lives and working practices of the light keepers. Their image has always been associated with isolation and solitude. This was true until that time in 1982 when the keepers were withdrawn from their offshore outpost at the Eddystone lighthouse; the families of light keepers on-shore continued to enjoy membership of their local communities until 1998 when the last manned lighthouse was automated at North Foreland. The walk to school for a child living at a South Foreland light was as long as

anywhere.

As the two images on the facing page show, the impact of change in lighthouse practices was perhaps smaller than the changes in the landscape. During the middle part of the 20th century, the ravages of war severely affected these parts being so close to Europe, but throughout the century the population supervised a significant transformation of the countryside in which windswept acres became covered by trees and undergrowth providing sought-after privacy and degradation of the many paths and routes across them. It was inevitable that these changes would greatly disguise the many important activities that took place here, and it has been an aim of this book to support and catalogue the unique story of South Foreland.

There is no doubt that the nation greatly values the heritage of this part of England, and, thanks to the expanding impact of the National Trust and other local historical societies, we must believe that those locations of interest that can be enjoyed by visitors investigating the past will be protected. Perhaps the biggest improvement was made by the nation's purchase of land along the cliffs from Dover to St. Margaret's Bay, so let us begin with a view of

<sup>1</sup> Trethewey, Ken: Lighthouses of Cornwall and Devon.

#### Dover Harbour and its lighthouses

Probably the UK's busiest port in 2021, Dover Harbour covers the area where the first Romans landed more than two thousand years ago. Its proximity to the European continent is the main reason for its existence and after a long period as a ferryport it now operates berths for cruise liners as well as a growing cohort of private leisure craft. There are four lighthouses and a number of other small lightstructures. Inset, we see a cruise liner exiting the southern harbour entrance. Cross-channel ferries use the eastern entrance. BOTTOM - LEFT TO RIGHT: The lighthouse on the knuckle of the southern breakwater; the lighthouse on the southern end of the Old Admiralty Pier; the lighthouse on the end of the Prince of Wales Pier.









Calais is more than 32 km (20 mi) distant from the White Cliffs path. Even so, the passage of the great volume of shipping that passes through the narrow sea lanes is made more dangerous by the criss-crossing ferries out of Dover.

BERRES AND ADD A



#### A Magnificent Coastal Footpath

**C** ince the purchase by the National Trust of **O**land at the extremity of the coast between Dover and the South Foreland lighthouse, visitors wishing to experience the famous White Cliffs depart from a location high up to the east of Dover, a short distance from the Castle. The walks are popular, generous in choice and width, and provide breathtaking views, first of the harbour, the surprisingly close coast of France, and the frighteningly precipitous, jagged, chalk edge. Ferries come and go with remarkable frequency, navigating the dock entrance with the skills learned only after endless practice. Then, with the assistance of the latest satellite navigation tools, they zig-zag between the relentless through-Channel traffic to their destinations on the continent. Julius Caesar would have been dumbstruck!

Many things of interest crop up along the way - often at random. Air traffic by daring young men and women in their flying machines is an unexpected bonus, whether it be a hot-air balloon, a Goodyear blimp (as in the photo on the right), or a preserved WWII Spitfire making a flypast of the Battle of Britain Memorial just along the coast at Folkestone. And let us not forget the wildlife that enjoys the adjacent farmland. With so much to occupy our attention, it seems only a short time before our destination - the two lighthouses - come into view, and before long we are enjoying our choice from a wide range of refreshments available in Mrs. Knott's tearoom (when it is not closed because of COVID-19 restrictions!)



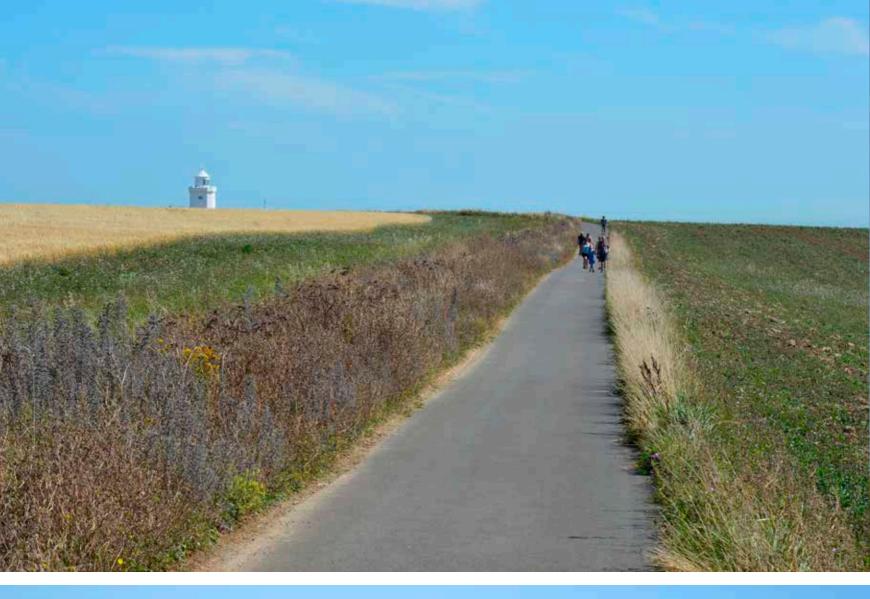












ABOVE: If you can find it, the mettled road approaches from the southwest and is easy on the feet. Only authorized traffic can drive here. Most visitors choose to walk along the cliff paths. BELOW: Approaching from the northwest would be across farmland and is not approved.









ABOVE: Lighthouse residents and 'old-timers' would have approached from the village in the northeast. They would have arrived at the 'front gate' of the High Light. Today, the old kitchen gardens behind the wall on the right are used for staff car parking.

## The High Light Of A Visit

The site of the South Foreland High Lighthouse is one of the top attractions in the National Trust portfolio and it is easy to see why. Not only is the lighthouse site one of best of its kind, but the location is of great historic cultural interest. The southwest approach is recommended; from St Margaret's in the northeast, the routes are not well identified.

The front gates mark the end of the northeast approach where the visitor now finds herself leaving the rough, often wooded terrain and entering the head of the foreland with its magnificent panoramic views over the Channel. Here stands the site that has been used for four centuries for so many purposes. Here stands the castellated, brilliant white tower with its winged cottages like some grand albatross awaiting take-off. Behind it a nest of outbuildings that support the modern functions of this marvellous place. The geometry of this structure is too much for me. At first, the tower seems square, rather than round (as is generally the case for lighthouses). Closer inspection reveals that it is almost octagonal, but probably better described as square with its corners cut off! The word truncated comes to mind, but doesn't seem correct somehow. Oh well...

On each opening day, a group of knowledgeable volunteer hosts provide a warm welcome and enable visitors to inspect the lighthouse in close detail. We enter one of two doors at the front to find ourselves inside a generously proportioned foyer with a good historical display. The hall is dominated with a fine double-staircase. In its centre, beneath the stairs, a short group of stone steps leads down into the basement of the tower, a multipurpose storage space where fuel stores were once kept. With electric lighting in use throughout the past century, the space became home to some of the electrical installations and batteries. Worth seeing is the superb brickwork, of the ceiling especially, which leads one to wonder how it stays up!

Back in the entrance hall, the stairways lead up to the what we might call the base level of the tower, although it is above the outside ground level. Here is the main stone staircase that leads up the tower, but dominating the centre of the space is a white

The entrance hall has a beautiful vaulted timber ceiling and is accessed by a door on either side of the double staircase. It's as if each keeper from the adjacent cottage was given his own personal stairs to the lighthouse. Below the staircase is a storage room.

€ 九 🔠

pillar that encases the tube down which fall the weights that drive the clockwork optic rotation mechanism.

During the period of my latest visits to this lighthouse from 2019 to 2021, I found the lighthouse to be in the throes of a major renovation. This is reflected in the photos that accompany this essay. In August 2019 I was informed that the lighthouse would be closed for a substantial period whilst remedial work was continuing. It was clear that the condition of the main fabric of the tower was poor enough to demand removal of the plaster. This exposed the original brickwork of the walls. On one visit, all of the major items had been wrapped in protective plastic in preparation for the building works. Unfortunately, at the start of 2020, the arrival of COVID-19 left the tower in a state of hiatus - still closed to the public but with all work halted. Fortunately, during the two years that followed, it was possible to re-open on a limited basis, although the works have still, at the time of writing, not re-commenced. Indeed, the serious shortfall of the income to the National Trust that resulted from the National closure of its assets has cast a shadow over the whole project. However, we can be assured that the project will be completed at some as yet unknown future date.

Passing up to the first floor above the tower bottom we arrive in what might be called the watch room or service room. The focus of the space is the duty keeper's desk, neatly positioned in front of a window. To the left stands a fine glass-fronted cupboard containing all the things he might have needed through the course of his watch. Behind him stands the white pillar through which the clock weights pass, and a bell is mounted there to ring in warning when the weights reach the bottom of their travel and require winding back up to the top. When he needed to do this so as to keep the optic rotating another flight of stairs led up to the lantern room, a space filled with all of the hardware that constituted an early 20th-century lighthouse light.

The installation was both standard and unusual. It was standard in the sense that there was a large, heavy apparatus of solid bronze castings holding up many panels of glass lenses and prisms. The design of this optic is simple, but unique in the author's experience. Sixteen identical panels stand in a circular arrangement. When it was installed, the device rotated very slowly on rollers, making one complete revolution every eight minutes. Since there were sixteen



ABOVE: Two of the four sides of the optic installed at St. Catherine's light in 1904 when the original optic was taken to South Foreland.

panels, then there would have been one flash at sea every thirty seconds; each flash lasted for five seconds. The energy for the rotation was provided by a compressed air motor.

The introduction of the mercury bath design into general service at the end of the nineteenth century enabled a much more efficient rotation of the optic, with almost no friction. In the major renovation of 1904 the optic was taken from St Catherine's and installed at South Foreland, the new mercury bath allowing a rotation time of just forty seconds and each of its sixteen panels giving a flash every 2.5 seconds.<sup>1</sup> Clockwork mechanisms were used to drive the rotation in both cases and these would later be replaced by electrically driven motors.

After the initial burst of enthusiasm for electric lighting had past, there was a general hiatus in lighting development as experience of the new and expensive installations was acquired. Even by the 1920s, besides the South Foreland site, Trinity House was still only using electricity at Dungeness, Souter Point and the Lizard. The carbon arc light source required much work to keep it running satisfactorily and the local power generation plants were expensive to operate. Outsourcing was considered. In 1919, the Corporation approached the Dover Electric Supply Company with a view to providing mains electricity to the lighthouse. A cable some 5000 yd (4.6 km) is length was installed from the Duke of York School in Dover to the lighthouse and came into service on 27 March 1922. Equally important was the decision to extend the cable to St Margaret's where local residents were able to enjoy the benefits of

<sup>1</sup> The optic at St. Catherine's was changed to a four-sided device that remains in place today.

Below the staircase is a storage room, originally for oil and other general stores, latterly converted to accommodate basic electrical equipment and batteries.

-

At the top of the stairs is the first floor where the main spiral staircase ascends the tower. In the centre is the foot of the tube down which the weight descends to drive the clock mechanism.

All agrinos



TOP LEFT: The eleven circular weights each of 22 kg rest at the bottom of the 22 ft (6.7 m) winding shaft. TOP RIGHT: The stone staircase leading to the first floor.

BOTTOM LEFT: Looking down to the lower level. BOTTOM RIGHT: A bell rang to tell the keeper that the clock needed winding.







ABOVE: At the first floor level stands a beautiful glass-fronted storage cabinet alongside the duty keeper's desk. BELOW: From the other side of the space, the stairs down are through the door on the left. The bell is behind the white pillar on the far left.





LEFT: In the lantern, you arrive at the bottom level in the presence of the optic that rises to a great height above your head, top right. Floating on a bath of mercury centre right the optic is prevented from rocking as it rotates by one of a set of rollers, just visible in the centre of the photo. On the left a small metal ladder leads through a small door outside onto the gallery.

Воттом: Beneath the optic is the clockwork mechanism that turned the optic to create the flashes. The spindle to attach the winding lever is bottom left. The mechanism was designed specifically by Chance Brothers of Birmingham in 1904. The falling weight was made up of eleven discs, each weighing 20 kg, making a total of 220 kg (485 lb) and fell down a vertical tunnel called the winding shaft through a height of 7 m (22 ft). (see the image, TOP LEFT on p378). In order to maintain one revolution every 40 seconds, the weights needed rewinding every 2½ hours. The entire mechanism was removed and refurbished in 2004.





ABOVE: When the incandescent light bulb was adopted for the light source in 1922, a mechanism was designed - manual at first, but automated from 1928 - to switch a failed bulb out of the focus and bring a new bulb into use. This mechanism is shown here. The bulb in use is out of sight at the top. A new replacement bulb is in position (centre right) ready to be switched upwards into the centre of the lens if the present one fails. The empty bulb holder at the top right would normally have a smaller 500 W battery-powered bulb. The green unit behind the centre pole is the lamp changer electric motor and the hexagonal brass lever on the left swivels to set the lamps in the correct position. Loss of prisms and lenses due to war damage is clearly visible in this image.

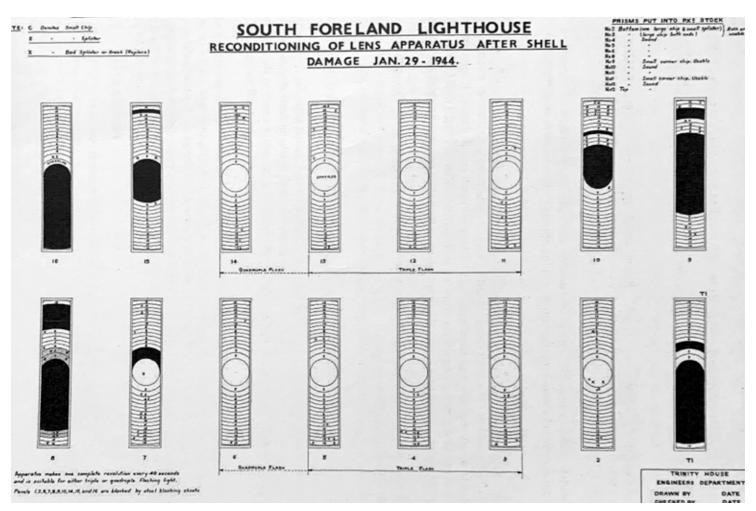
RIGHT: A bulls-eye lens is always a great opportunity for interesting photography.



On the elevated walkway that surrounds the great optic, a clear view is obtained of one group of three tall panels of lenses and prisms that make up the present arrangement.

1





ABOVE: A drawing showing each of the sixteen panels of the optic and the location of all war damage on every lens and prism. It was clear that a number of the panels were unusable so ten panels were covered in steel sheets so that now there were two groups of three. The image BELOW RIGHT shows one of these groups with a steel cover over the panel on the left. Damaged panels presently screened behind the metal plates can be seen in the image on p381.

electricity for the first time. Costs were shared between Dover Council and Trinity House.<sup>2</sup> Whether the supply was from overhead cable or underground is not known. The 1922 modifications rendered the local plant redundant and the land and buildings were sold by auction on 24 August 1922. Another significant development was the invention of the tungsten filament light bulb that was to transform the lighting of the world for a hundred years or so. South Foreland was the first to benefit with a 4 kW, 80V lamp running off a 2 kV/80 V transformer.<sup>3</sup>

## Wartime Damage To The Optic

In 1944, the South Foreland artillery battery opened fire on enemy shipping in the Channel. Return of fire from those being attacked resulted in significant damage to many of the sixteen panels of the optic. Adopting a minimum cost and maximum speed approach for the necessary repairs, Trinity House decided to install steel sheets over the damaged panels such that ten were covered. The remaining six were arranged in two groups of three so that now three flashes would be produced every 20 seconds. This new characteristic continued in service for the remainder of the service of the lighthouse up to September 1988.



<sup>2</sup> NTCMP p127.

<sup>3</sup> NTCMP p128.

#### To The (Low) Lighthouse

It is hardly surprising that the first ALK<sup>4</sup> lighthouse visit since the COVID-19 lock-down was received so enthusiastically by the membership. No fewer than 56 members arrived on the White Cliffs of Dover on Saturday 23 October 2021 for what was to be a unique day. A visit to the magnificent South Foreland lighthouse is always special of course, perched loftily above the political hot potato that is the English Channel.<sup>5</sup> In the hands of the National Trust, one of our oldest lighthouse sites is now safely preserved, unlike the situation that pertains with the Old Low Lighthouse. This was a very rare opportunity of getting up close and personal with a sad skeleton of a lighthouse and it brought our members out in their scores.

The South Foreland lighthouses are located on a small part of a chalk massif of astonishing proportions. Not only does the chalk extend across the water to cover an equally large area of France, but it goes very deep below the feet of the traveller. The awesome power of geology is perfectly displayed here as you realise that in the distant past the two land masses were joined and at some point the sea carved its way through a billion tons of chalk.

Just a short distance along the cliffs to the west those visitors brave enough to visit the extensive, dark WWII tunnels of the Fan Bay Deep Shelter are stunned by the uniformity and whiteness of the chalk - deep underground to great depth, where courageous men, under orders from Churchill, excavated a refuge from heavy artillery with picks and shovels, and found fossils and sharp laminar flint tens of metres down inside the chalk.

When, back in the 1600s, it was decided to place two lights here, there were only primitive paths in place across the barren terrain. Today, after a very busy twentieth century when the landscape was heavily re-shaped by wartime activities, it seems there are still only primitive routes there, wider than those of the 17th century, but probably much the worse for wear and rainfall.

St Margaret's at Cliffe on the top, and St Margaret's Bay at the bottom were the two foci for those living and working at the South Foreland. Between Dover and Deal, the Bay was the only sensible landing place in centuries past, the scene of many Channel crossings when boats were made of wood and men were made of steel. Smuggling and fishing were obvious occupations for those challenged by the hardships of life, and for many years, a row of cottages on the beach housed the families of men charged with enforcing the laws against smugglers. And when the work was done, there was the attraction of a drink at the *Green Man*<sup>6</sup> situated at the bottom of the hill leading up the steep cliffs.

If we think of the two centres simply as St Margaret's, a local tension lies just under the surface. The main village has no pubs, one post office and one shop, a couple of tea rooms and little else to encourage visitors. Those fortunate enough to live here with their wonderful sea views - many of them DFL<sup>7</sup> - decline to share its pleasures and appear content to shop in Dover supermarkets. The proliferation of private roads and rich vegetation keeps many houses masked from the penetrating eye of the Google cameras.

There are many apparent routes to South Foreland. All could be passable by car, yet all are firmly discouraged by those wishing to keep their properties free from tourists in SUVs and the gratuitous parking that goes with it. "No Access to the Lighthouse" is a sign often seen at the entrance to roads in St Margaret's. In 1974, I drove down Lighthouse Road in my antique Morris Oxford, watching the road become ever narrower to my wife's dismay. Nothing has changed - indeed, the routes have deteriorated. At the ends of the inhabited locals-only zones there are badly dilapidated tracks suitable only for off-roading which is also "Verboten." St Margaret's gives the firm impression that it is off-limits to lighthouse baggers. Locals walking their dogs enjoy the privileges of residency along the many paths across these cliffs.

The strong presence of the National Trust focuses attention. Great numbers of walkers are now encouraged to traverse the cliff paths from the new visitors' centre at the Dover "White Cliffs Experience", a short distance behind the Castle. From here the way is now fully open across lands that join the two locations and that were more recently acquired by the Trust to fill in gaps in the

<sup>4</sup> The Association of Lighthouse Keepers, alk.org.uk, is a UK-based society with the objective of keeping the lighthouse heritage alive. It has members, both private and corporate, from all over the world.

<sup>5</sup> At the time of writing, thousands of refugees attempt crossings of the English Channel in flimsy, unseaworthy boats at a cost of many lives and great human suffering.

<sup>6</sup> Along with much of the beach area, the *Green Man* was badly damaged during WWII and today the rebuilt public house is called *Coast Guard*, a name with a new irony in view of present efforts to control the flow of illegal immigration.

<sup>7</sup> Down From London.



ABOVE: Looking east from the gallery of the High Light. St Margaret's Bay is just visible, top left. The fenced-off property is privately owned and known as the Cliffe House Estate. (Cliffe House is amongst the trees on the right.) On the day of our visit we entered the property through a small gate close to the white gates of the High Light (left). The path to the Low light, used for nearly 200 years, can just be seen behind the low building in the centre. The remains of the Low Light can be seen protruding out of the tree-line, centre right. The unassuming white building in the centre of the photograph is unique in the British military history of WWII for it was built in 1941 under the direct orders of Prime Minister Winston Churchill as the Fire Control Post for gunnery defences of the Eastern Counter Bombardment Fire Command in this vulnerable part of our coastline. Churchill visited it several times and its existence and role were kept top secret for many years. After the war, the building was maintained by the Army until the 1950s when it was handed back to the private owners. It was then converted into domestic accommodation and rented to tenants who lived in it known as a cottage called Baby Dolphin. The last attendant of the High Light, John Blanche, was unable to occupy the cottage at the lighthouse because his predecessor was allowed to continue to live in it after his retirement. Thus, Blanche lived in Baby Dolphin until the Attendant's role was no longer required, painting it in the familiar colours used for Trinity House buildings. The cottage has continued in use until recently as rental property of the owners. In 2021 it is empty and part of an expected sale of the Estate.

coastal path. And there are many who trek much farther to the Bay and beyond. So St Margaret's rests uneasily in its slumber as increasing numbers of one can't help feeling, unwelcome - visitors swarm about with backpacks, walking sticks and happy dogs.

Yes, the car is unwelcome at South Foreland, unless you are a Trust Volunteer, in which case there is a beautiful new tarmac road across the top to the lighthouse where parking in the field alongside is generously provided. Everyone else must walk, although - curiously - on the day of our visit there were taxis too.

Yes, the occasion was very special. Without doubt the High Lighthouse is always a wonderful attraction, but nobody had been allowed to visit the Low Light in living memory. It was in 1974 when I first took up the hunt for my ancestors at South Foreland. During the years since then, only once have I got close to the remains of the Low Light when in 1984 I been forced to trespass to get my photographs (see p282). Fenced off and secluded then, it was not the sleeping fortress it is today. All this time, the Low Light where my family had lived for so long had been very much off-limits - barely even visible. Then, suddenly, in September 2021 an invitation arrived in my mailbox. At last, a visit had been arranged. It would be a unique experience, probably not to be repeated in the foreseeable future. The Estate on which the lighthouse now rests in retirement is for sale and there seems little doubt that the new owner will continue the policy of "This is all mine" so common with private ownership of public heritage. Impoverished after two years of social upheaval, the NT is not likely to be bidding.

We had been instructed to park at the White Cliffs Visitor Centre and walk along the cliffs to the lighthouse. We arrived at the starting point soon after ten. This is now a very popular walk; even late in the afternoon there are many people, including families with young children, investigating these wonderful walks and wildlife. The views are extraordinary, even on an ordinary day, but on this day they were stunning. The walk is about 2.5 km with much up hill and down dale, but there are many tracks to choose from.

We arrived at the High Light around 11 am. On this occasion, the High light was merely a meeting point for our party so I did not go inside the lighthouse. We were all excited to go to the Low Light and our leader's meticulous organisation that placed us all into groups was entirely for nothing. In typical sheep-like fashion the group of like-minded enthusiasts simply meandered down at their own convenience. Never mind, it didn't matter, except that we could only enter the old lighthouse in groups of eight or fewer.

On previous visits I had walked the entire length of the "Front Road" (see p186-7), a curiously ignored surface that bears no soil whatsoever, but whose rutted ridges would test all but a serious 4x4 vehicle. One house labelled *Dolphin's Leap*, inside the private enclosure had a crate of empty bottles outside for recycling. Clearly occupied. The entrance to the unmarked Cliffe House said nothing but "Keep Out." Seriously private, then. I wonder why? Perhaps it comes with the desire for exclusivity only deserved by the very wealthy? I wondered if there was a minefield behind the fences.

Today, miraculously, we could enter. We made our way down to the low lighthouse, entered the enclosure through the gate adjacent to the eastern entrance to the High Light. Immediately on the seaward side of this entrance is an old WWII "command post" which was built in typical military style - two flat roofed buildings now more recently linked into one and for sale, ripe for conversion into another posh pad. That will take a great deal of money as it is in a very poor condition at present.

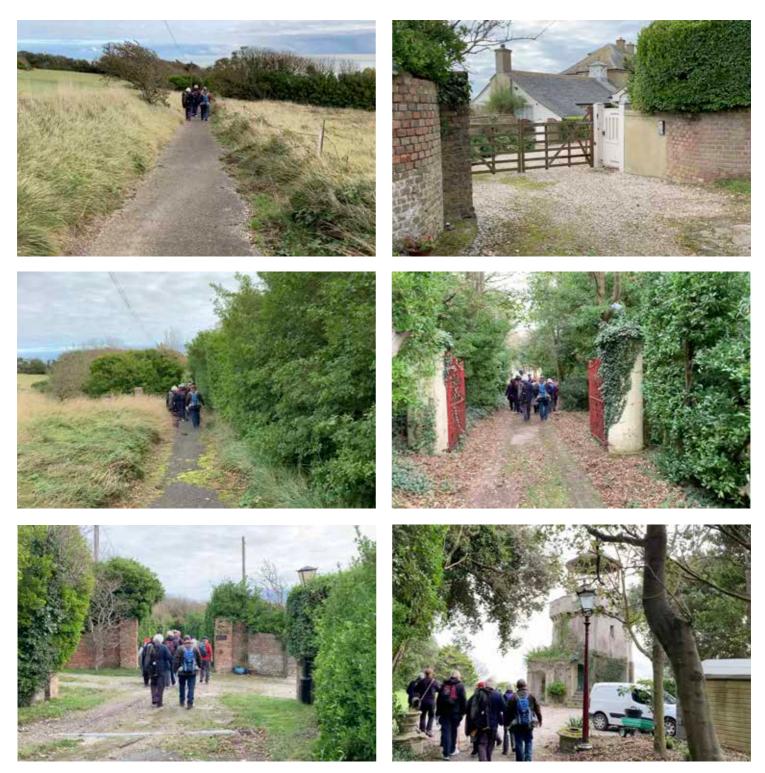
The whole of the l2-acre, fenced-off area is called the Cliffe House Estates. There is an estate manager called Gary who was, so I was told, at first doubtful about allowing such a visit. He'd thought it would be for 8-10 people. Later, he discovered that 61 had signed up! Fortunately for us, he warmed to the idea, especially as the NT were keen to help in guiding and stewarding. After all, every NT volunteer was busting to go in too! After telling Gary my story, I soon got to know him and he was very helpful. He did not hurry anybody at all and was very patient. He lives with his wife on site in the sweet little cottage called *Dolphins Leap* adjacent to the low lighthouse. The lighthouse is essentially in his front garden.

So, the estate is for sale at £4.5m and has been so for some time. It seems that the reason why it does not sell is that everything is run down and overgrown. The very nice house was quiet with all curtains drawn - obviously empty. I asked Gary if there were staff - gardeners, to keep it going. He laughed, and pulled up a few weeds as if it would make any difference at all. No, just me and my wife, he said.

Cliffe House, which is just a small part of the Estate as a whole, is a very private house and garden, itself fenced off so that it is separated from anyone else who might be on the land. I got the feeling that the owners did not care at all about using this as a luxury pad in the country. Perhaps they had other purposes in mind.

It would cost millions more to raise it to the standards of modern ownership. As I later remarked, it felt like a mausoleum, but it is, after all, the remains of an industrial site, and there is a surprising amount left from the old days. The site was a large one with substantial installations and much adaptation of the ground levels, so residual markers of its earlier function could not have been entirely eliminated. I cannot see how the house could have been built using anything that was previously there, apart from reusing the stone perhaps and, of course, the foundations, which are not hard to find on this extensive chalk massif.

It was so exciting to walk down that straight road between the two lights, used countless times by my ancestors. Now much of it is screened - even enclosed - by shrubs, and the bottom section is an avenue of hedge. We saw two sets of gates and I tried to match them to those I had seen countless times in the old postcards (see, for example, p228). I think I know which were the original - shown in the image



ABOVE: The walk down to the lighthouse is presented in this series of photographs.

LEFT TOP: The pathway follows a straight line (see the plan on p199)and has been used for hundreds of years. The High Light is behind the camera, the Low Light straight ahead.

LEFT CENTRE: Once devoid of vegetation, mature trees and shrubs form effective screens to the different parts of the property. LEFT BOTTOM: A cross-ways is situated halfway down. The brick walls and gateway form the entrance to Dolphin's Leap, a separate part of the property that is home to the Estate Manager and where the Low Light is situated. Left leads to the exit from the main house and right is the main house itself.

RIGHT TOP: The entrance to the main house, which is isolated within the wider estate.

RIGHT CENTRE: A second gateway appears to be the location of the lighthouse gates seen in many old images of the Low Light (see for example p231).

RIGHT BOTTOM: Some thirty metres beyond the lower gateway, the old lighthouse sits in a clearing in the front garden of Dolphin's Leap, its once cultivated ground now much overgrown.



right-centre on p388 - but they may have been modified.

The Low Lighthouse is in surprisingly good shape considering what it has gone through. The stonework looks good. You can easily see where the two cottages were adjoined. There is a basement oil store with a separate entrance from the lawn. I suppose this was once inside the whole building. The door to the tower leads up a few steps into the low level and a concrete - not stone - staircase goes up on the left, clockwise. I was surprised at this for I think the staircase is modern in vintage, perhaps put in during the war?

I was surprised to find that the whole lantern is of cast and wrought iron. So on the inside, when you reach the level below the lantern itself there is a great, dark, rusty chamber with many air vents that would have assisted the combustion process of the oil lights. Sadly, the room has been capped off with a cover that reduces the height of the lantern room ceiling. This is because, I'm sure, the rain would come in. There is, of course, no glass, but the wrought iron cupola looks in good shape, if rusty. So when you go out onto the balcony you are at head height with the capped roof, looking through the astragals.<sup>8</sup> The exterior of the lower lantern was coated in something that has now degraded making a curious effect that looks like a coating of barnacles.

The tower - while close to the edge, about 5 metres - seems to be on solid ground and there seems to be little chance of a cliff fall in the near future; these are rare, in any case. During the course of decades being untended, much vegetation grows along the cliff edge.

There was so much to take in that I reached saturation and had to give up by 2 pm. We took a gentle walk back along the cliffs and then went into the Deep Shelter Tunnels at Fan Bay. It was a truly amazing visit. The tour lasted for an hour and was hosted by a veteran of the Royal Artillery who explained everything - mostly graffiti it seemed.

As a stunning sunset rounded off a superb afternoon of atmospheric views of the Channel and France, we arrived back at the car at 4.30. Hungry.

<sup>8</sup> Astragals form the criss-cross framework of a lighthouse lantern that holds the panes of glass in place. In the designs made before the 1870s they crossed at right angles, but Trinity House Engineer James Douglass introduced a new design of helical framing that increased the brightness of light visible at sea.



TOP: The remains of the lantern, CENTRE TOP: A skylight in the cellar. CENTRE BOTTOM: The High Light viewed from the Low Light balcony. BOTTOM: The narrow gap between the tower and the cliff edge.

Our walk was especially interesting on this day because of the great variety of weather conditions we experienced. Even the yellow layer of smog cause by the heavy diesel traffic added to the plethora of colours.

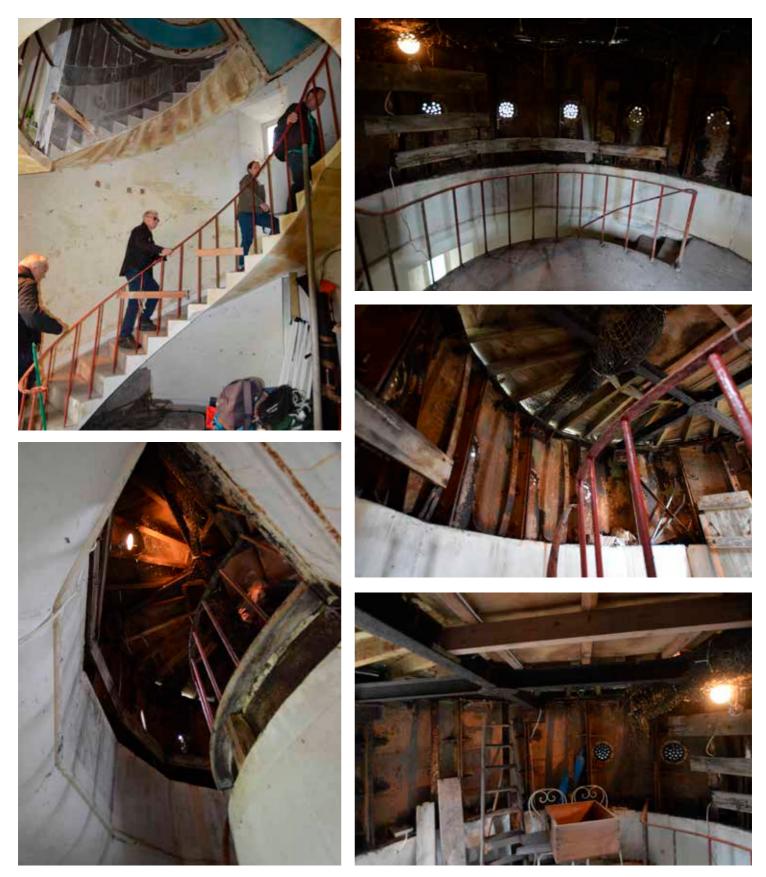






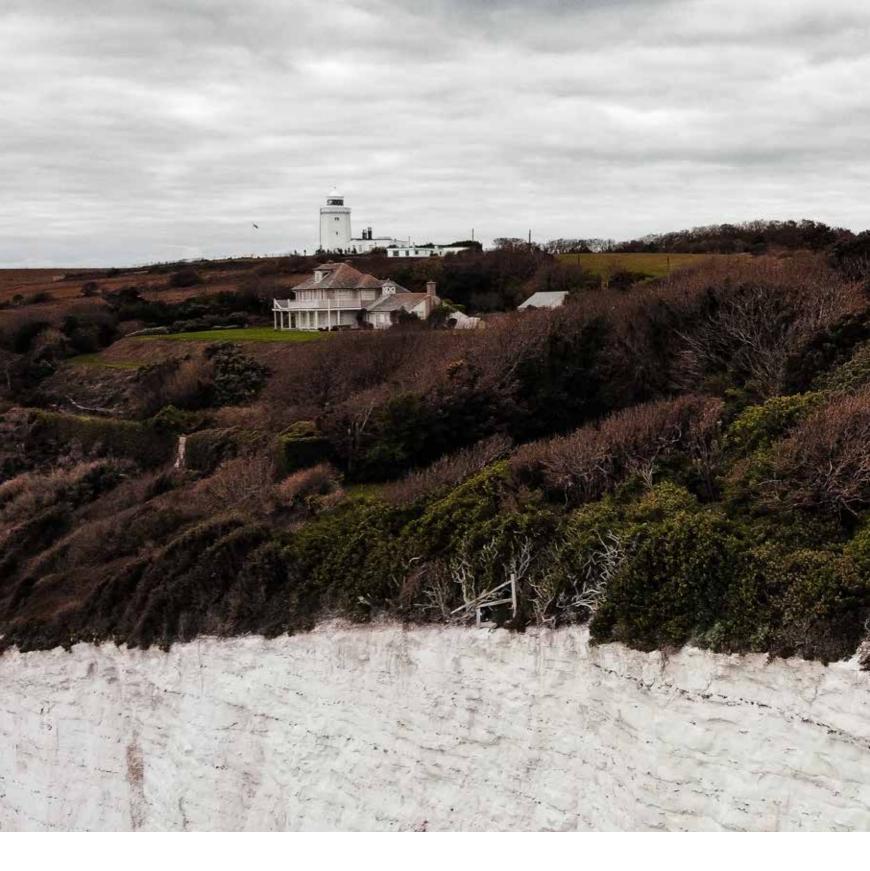






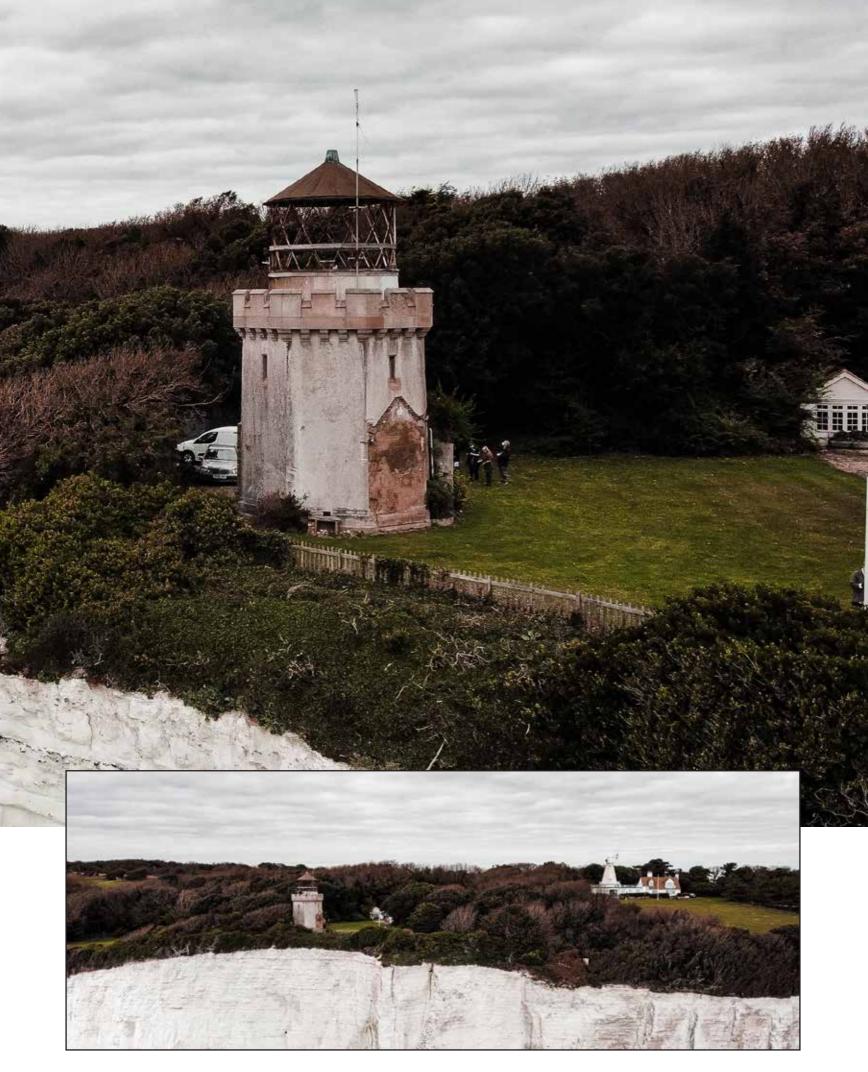
LEFT TOP: Climbing the stairs. LEFT BOTTOM: Looking up to the service level. RIGHT: Three views of the interior of the service level.

FACING PAGE - LEFT TOP: Looking up from the entrance level. LEFT BOTTOM: The skylight in the floor of the ground level that lets light into the cellar. RIGHT TOP: An intermediate level of the staircase. RIGHT CENTRE: Looking down the stair well to the ground floor level. RIGHT BOTTOM: At the top of the staircase is the entrance door that leads up what would have been the service level for the lantern.



ABOVE: In this excellent drone photograph taken in September 2021 by Nick Tadd, it is hard to imagine that it was once possible to walk in front of the Low Lighthouse, so much of the chalk having now collapsed. However, it still stands proudly on solid ground. Cliffe House is on the left, immediately below the High Lighthouse. The terraced front lawns are protected by the remains of the photometric gallery, now covered in vegetation. The old lighthouse remains in remarkably good condition, both outside and in, and the location of the east cottage, removed in the 1950s, can still be seen clearly.

FACING PAGE BOTTOM: The second drone image completes the view farther to the east where the site and remains of the famous old windmill can be seen. An ominous vertical crack in the chalk face can also be seen close to the left centre of the photograph.



### Cliffe House And The Remains Of The Old Engine House

The entire estate is a maze of sections compartmentalized gardens that offer different aspects and atmospheres. Each area was heavily landscaped in the past and most are now well beyond rescue - even with an estate manager. There were many different levels, especially when I went into the garden of Cliffe House to find the priceless source of water. With our new friendship established, Gary was most helpful and took me on a private tour. The stepped levels at the front of the house are really high - much higher than I had gleaned from my studies of the property using Google Earth. And right at the front is the remains of the outer wall of the photometric chamber, three bricks in thickness and about 8 feet (2.5 m) high. It still runs along most of the length of the seafacing side of the property, although it seems to end where the original west room would have been. The remains of a room on the eastern end still exist, having been partially converted into a curious room with no windows but nice plastering! A strange, secure building indeed with false doors on the outside to make it look like another shed, which it was not! Adjacent to the wall was a lovely lawn. How curious. No view at all of anything. Just a high bank at the rear held up with a wall of railway sleepers that were now on the brink of collapse. Gary told me he had got a quotation to fix it, but the owners "were not interested."

At the back of the house is a level that was where tanks had been placed to hold water for the steam engines. Concrete retaining walls at the side were covered in grass to make more lawns. The water outlet pipes are still to be seen. Gary showed me a place where there was a large slab on the ground and he thought that it was the cover of the well. He said he thought there were steps down inside, but he probably didn't know for sure. He said he had been there for seven and a half years, but the slab has not been moved in that time and was very overgrown, as was so much else on this property. There was one remaining large black-painted cast iron cog on the lawn that was clearly part of the old machinery.

I asked him about the shafts that led down to the beach for the installing equipment - fog signals there in Victorian times. He said they were inside the old lookout point at the very corner of the property. All now sealed off for safety, of course. FACING PAGE: Inside the grounds of Cliffe House.

LEFT TOP: The house is closed up, ready for sale. The lawn falls away steeply to the right, towards the cliff edge where the remains of the photometric gallery can be found at a significantly lower level.

LEFT CENTRE TOP: The site of the old well is almost covered in undergrowth. A concrete slab capping stone is just visible on the right of the photo.

LEFT CENTRE BOTTOM: A view looking west. The 19-century photometric gallery once occupied this long flat space close to the cliff edge and in the front garden of Cliffe House. The outer brick wall is mostly intact and almost all that remains. The bricks from the lost walls were salvaged by past owners in the 20th century and extensively re-used for many aesthetic features around the estate.

LEFT BOTTOM: A pair of outhouses occupies space at one end of the site of the photometric gallery. The remains of the wall immediately in front of the Estate Manager show the thickness of bricks used in the building.

RIGHT TOP: Water tanks used to supply the steam plant were enclosed in concrete and can still be seen in the rear garden that is terraced. An overflow pipe outlet is visible on the right. At the far end, in the left of the photo and behind the Estate Manager, the original well is now capped and buried in thick undergrowth.

RIGHT CENTRE TOP: There are few other signs that this was a busy experimental, industrial site, but an especially large and immovable gear wheel peeks out from behind some ivy in the rear garden.

RIGHT CENTRE BOTTOM: Looking east towards the Low Light, the photometric gallery wall is on the right, the bank held up with railway sleepers to the left.

RIGHT BOTTOM: Walking back up the path towards the High Light, we pass the important WWII command centre otherwise known as Baby Dolphin - in the corner of the estate on our left. In this shot, the buildings look like they are part of the lighthouse but they are not!





