

## HONG KONG'S LIGHTHOUSES AND THE MEN WHO MANNED THEM

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[Complementary HKBRAS lectures were delivered by Fr. Louis Ha (**Part One**) and Dr. Dan Waters (**Part Two**) on 3<sup>rd</sup> May 2002. The following day, courtesy the Director, Government Marine Department, 93 HKBRAS members and guests visited Waglan Lighthouse. The above two lectures were based on the following text. All photographs accompanying these complementary papers were taken on the visit by long-time RAS member Charles Slater.]

### **PART ONE**

*Lighthouses on the coast, "sentinels of the sea," are without doubt romantic and interesting to the ordinary person. Their loneliness and isolation, the mental picture of waves dashing vainly at their feet while the light shines overhead, far and wide over darkness and angry waters, the drama of shipwreck and rescue, and of successful passage through storm and stress, combine to give them a special appeal to the hearts and minds of all men.'*

This is one of the beautiful descriptions of lighthouses written by the Deputy Commissioner of Customs of China, T. Roger Banister, in 1932.<sup>1</sup>

### **Practical aids**

In reality, lighthouses exist for much more practical purposes; as aids to navigation in avoiding shipwrecks or grounding of ships. Traditional navigation aids include Light Vessels, Light Buoys, Beacons and Fog Signals such as bells, gongs, reed horns and explosives. These aids have been developed out of necessity over the ages.

### **Pharos**

One of the oldest lighthouses was the Pharos at Alexandria, in

Egypt, which was built in the 3<sup>rd</sup> century B.C. - one of the Seven Wonders of the Ancient World. It was an eight-sided tower on top of which was a cylinder that extended up to an open cupola where the fire that provided the light burned. On the roof of the cupola was a large statue of Poseidon (the Greek God of the Sea and Earthquakes) facing the sea, northward. It was said ships could detect the light from the tower at night or the smoke from the fire during the day up to 100 miles away. The lighthouse collapsed in the 14<sup>th</sup> century, probably as the result of an earthquake. The remains of Pharos are now at the bottom of the Mediterranean. Its name, however, has become the root of the word "lighthouse" in the French, Italian, Spanish, Portuguese and Romanian languages.<sup>2</sup>

### **Modern navigation aids**

By the 21<sup>st</sup> century traditional aids to navigation have already gradually taken over. These include satellite navigation systems in order to cope with the needs of high speed and the huge volume of modern sea transportation. Even more recent inventions like the Radio Beacon and the Decca Navigator System are now almost obsolete.

The Global Positioning System (GPS), provided by satellites, is now the primary position fixing system for marine navigation. A public Differential GPS service is able to enhance the accuracy of GPS signals to within 10 metres up to 50 nautical miles around the coasts off the United Kingdom and Ireland. This system assists the safe passage of all classes of vessels from cargo ships, cruise liners and fishing vessels to small yachts. As a back up system to the GPS, chains of Loran C on land are also adopted.<sup>3</sup>

### **Nineteenth century Hong Kong**

In Hong Kong, things were quite different. There was not much sea traffic going to China before the first Opium War (1839-42) because of the Chinese policy of keeping its doors closed to foreign trade. Canton (Guangzhou), in the Pearl River Delta, was the city where limited foreign trade was permitted under stringent conditions. Macao under Portuguese administration served well as a buffer for foreign merchants waiting for the start of the trading season. Only after the Treaties of Nanking, Peking and Tientsin (1842-1860) was China forced to open up more and more ports for trade. Hong Kong's Victoria harbour became

an important strategic port for merchants.

In the process of competing with Macao as the doorway to China trade, Hong Kong had its moments of hesitation. It had its own internal problems to solve during the three decades after 1841, such as building roads, houses, godowns, and having to provide an attractive and safe environment for trade. Only in 1875, after Hong Kong had developed into a port which was busy receiving Chinese junks from the north as well as Japanese vessels from the East and European steamers from the West was the first lighthouse at Cape D'Aguilar constructed to facilitate the navigation route leading to its harbour.

### **Ships from the West**

To build lighthouses was a need formed by several elements. First, the marine navigation route from Europe to Asia used to go round the Cape of Good Hope off South Africa. In 1869, the Suez Canal was opened for navigation, shortening the distance between Europe and East Asia by 20 to 30 per cent as well as cutting the cost, facilitating more frequent sea traffic.<sup>4</sup> Secondly, the Industrial Revolution in Europe increased drastically the supply of consumer goods which, in turn, demanded more and more large steamships with greater speed to carry them. Thirdly, shipping costs depend not only on the size and speed of the vessel or the time needed for the transportation. Part of the cost goes to the insurance against the danger of shipwrecks. The safe route with good navigation aids affected the cost of the goods directly. Because of the above elements, the demand for building lighthouses on the sea route to Hong Kong became more pressing with the increase of trade.

### **Old lighthouses**

Before the setting up of lighthouses in Hong Kong there were already lighthouses in nearby waters. On the Eastern approaches to the Singapore Straits Horsburgh Lighthouse was established in 1851.<sup>5</sup> Off the west coast of Taiwan located on Xi Yu Island of the Pescadores/Penghu Islands, the Fisherman Island Lighthouse (Yureng Tao Lighthouse) was set up as early as 1778.<sup>6</sup> In Macao, the Guia lighthouse (Farol da Guia), built in 1865, claims to be the oldest on the China coast.<sup>7</sup> These lighthouses, however, did not provide enough help for

steamships sailing towards Victoria Harbour.

## Hong Kong's first lighthouse

In 1875, the Government Gazette<sup>8</sup> announced that 'a light will be exhibited on Cape D'Aguiar<sup>9</sup> on and after the 16th April next. The illuminating apparatus is fixed Dioptric of the First Order showing a white light. The focal plane of the light is 200 feet above mean sea level, and in clear weather it should be seen at a distance of 23 nautical miles. The tower is round, of stone, 30 feet high, with a total height from its base to the lantern vane of 57 feet.'

This official announcement was meant for the marine community with a series of technical terms. In laymen's language, 'fixed' means the showing of a continuous or steady light. Most of the lights of the time were of this type. They are brighter and simpler technically speaking. The disadvantage was that fixed lights were sometimes confused with lights of ships or with neighbouring shore lights. Later, improved types could show their distinctive characteristics and were known as "flashing" or "occulting" depending on the shorter or longer duration of light respectively.

The Dioptric system adopted by the Cape D'Aguiar Lighthouse aimed at concentrating and intensifying the light. It used lens and prisms to concentrate the light from the burner into beams of parallel rays directed to the horizon, just like an overhead projector which takes a light bulb and forces the light forward in one direction. This kind of lens was first designed by Augustin Fresnel in 1822 and was named after him as the Fresnel lens.

Another older system, which was first employed in the mid 1700s, is called the catoptric system which involves using a parabolic metallic reflector behind the light, similar to that used in flashlights. A combination of these two systems is also available called the CataDioptric System.

Lights of the Dioptric system are classified according to their power which depends on the focal distance from the centre of the burner to the lenses. According to the British system the focal distance in diameter of the first Order is 1,840 mm, the second Order 1,400 mm, the third

Order 1,000 mm, the fourth Order 500 mm, the fifth Order 375 mm and the sixth Order 300 mm.<sup>10</sup>

However, the brightness of a light does not depend only on focal distance. Different kinds of burners and fuel also affect its power. At first coal and wood were used as fuel for lighthouses. Starting from the 19<sup>th</sup> century sperm oil derived from the whale was used but was later completely replaced by colza oil, which was cheaper. Mineral oils were used starting in the mid 19<sup>th</sup> century. The next kind of fuel was gas. Oil gas was introduced in the 1870s. Because it required huge containers for storage it was quickly replaced by acetylene and dissolved acetylene. This burns to a bright incandescence far beyond that of many other fuels. Another kind of fuel is liquid petroleum (incandescent mineral oil), which was first used at the end of the 19<sup>th</sup> century. Liquid petroleum was injected into a vaporizer, where the liquid was heated and vaporized. The vapour moves into the burner where it combusts. Normal oil burners are improved about sixfold with this burner. The latest development was electric arc lamps. Once electricity became a common commodity many lighthouses were converted to its use often using gas as a backup fuel. In Hong Kong, coal and paraffin were used in most of the lighthouses at the beginning. Only after 1915 was acetylene gas installed in Hong Kong's lighthouses.

The lights of lighthouses also have colour, usually red or green in addition to white. White is generally preferred because white lights can be made brighter. Colours are used in some sectors. White lights are used to indicate the most desirable route to port while coloured sectors indicate dangerous waters.

The distance a lighthouse light is visible depends on its height and the elevation of an observer when light intensity and weather conditions are considered equal.<sup>11</sup> The lighthouse at Cape D'Aguilar has the standard height of 200 feet above mean sea level; therefore its light can be seen 23 nautical miles away by an observer at an elevation of 30 feet.

The lighthouse at Cape D'Aguilar, situated at the southeast of Hong Kong Island, was also known as Hok Tsui Lighthouse. Its tower was of stone, of conical shape, with a circular and smooth outer surface. This specific structure is typical of lighthouses in Order to keep the centre

of gravity of the tower low and to afford the minimum resistance to wind and wave. This lighthouse became superfluous and stopped operating in 1896 after Waglan lighthouse came into operation in 1893.

### **Several considerations**

In building Hong Kong's first lighthouse many factors were considered, such as need, finance, location, the apparatus to be installed and the staff.

In the beginning of the 1870s the need to erect lighthouses was envisaged by the Western mercantile community. In fact, in 1872, the combined tonnage, outwards and inwards, amounted to about six million. The need to provide navigational aids for the heavy sea traffic was thus obvious. The revenue raised by levying vessels entering Victoria Harbour would be able to support the running costs of lighthouses.<sup>12</sup>

Surveys were conducted to look for suitable sites on which to erect lighthouses to light the approaches to Hong Kong harbour. The three best sites were considered to be,

- Waglan, an island off the south-eastern extremity of Hong Kong,
- The North East head of Lema Island, and
- Gap Rock, 26 miles southward of Hong Kong.

However, all these three were then under Chinese jurisdiction. Negotiations with the Chinese Government did not reach satisfactory conclusions for both parties. This was because the Chinese Government would not cede or lease any island for such purposes and the British Government did not wish to spend money on projects not under its direct control.

The second-best sites, all within the jurisdiction of Hong Kong, were considered to be Cape D'Aguilar, Green Island and Cape Collinson, as reported by the Harbour Master, H.G. Thomsett in March 1873. Lighthouses in these places would cover the eastern entrance and the western entrance to Hong Kong harbour. Eventually, this is

where the first three lighthouses were built.

To manage the new lighthouses a 30-year-old man from the county of Surrey, Mr. Archibald Baird, was recruited in England. He received training at Trinity House in London,<sup>13</sup> for a fortnight, to gain experience with various Dioptric Lamps and their management.<sup>14</sup> He also stayed with Messrs. Chance Brothers, the manufacturer of the apparatus, for another fortnight to acquire further working knowledge<sup>15</sup> He arrived in Hong Kong in 1874 in the capacity of Principal Light Keeper for Cape D'Aguilar. He was also responsible for the supervision of the lights at Cape Collinson and Green Island, although all these lighthouses were not yet in operation.

### Green Island Lighthouse

Green Island Lighthouse started to operate on 1<sup>st</sup> July 1875, about three months after Cape D'Aguilar Lighthouse was set up. The illuminating apparatus was fixed dioptric of the fourth Order showing a red light on the bearings from N. 16 E. to S. 18 E. (146 degrees). From N. 16 E. to N. 44 W. (60 degrees) and from S. 18 E. to S. 25 W (43 degrees) it showed a green light. The focal plane of the light is 95 feet above mean sea level and in clear weather it should be seen at a distance of 14 miles.<sup>16</sup>

The small round Green Island lighthouse tower is constructed of granite and is about 12 metres high. Its arched doorway is decorated with granite blocks with a cross-shaped opening above. In comparison to Cape D'Aguilar, Green Island Lighthouse cost much less, about one sixth of the cost for the Cape D'Aguilar lighthouse.<sup>17</sup>

When the Cape D'Aguilar Light became obsolete after the construction of Waglan Island Lighthouse, in 1893, Governor Henry Blake later proposed to move the lantern of Cape D'Aguilar to Green Island.<sup>18</sup> In 1905 a higher and larger tower to accommodate the Cape D'Aguilar Light was completed and the new lighthouse on Green Island came into operation the following year. It has a round tower, is 17.6 metres high and is constructed of granite and concrete with a spiral staircase. The steel lantern on top of the tower is painted white.<sup>19</sup>

## Cape Collinson Lighthouse

The light at Cape Collinson was established on 1<sup>st</sup> March 1876, the year following the other two lighthouses. The reason for being later was that its apparatus was mistakenly sent to the Cape of Good Hope. The illuminating apparatus was fixed Dioptric of the Sixth Order. The focal plane of the light was 200 feet above mean sea level, and in clear weather it could be seen for a distance of eight miles. This lighthouse showed a white light on the bearings from N. 22 W. by East to S. 22 E. Ships heading for Victoria Harbour from the North and the Eastward were thus able to avoid Bokhara and Tathong Rocks, also the rocks outlying Sy Wan Bay by keeping the white light in sight. It also showed a red light from S. 22 E. by West to N. 22 W.<sup>20</sup>

When all three lighthouses were first in operation, vessels entering Hong Kong harbour were adequately provided with navigational aids. Gradually, as time passed, lighthouses were required to display their own distinguishing characteristics and to repeat these at shorter intervals for more frequent observation as the speeds of steamships increased. In the beginning of the 20<sup>th</sup> century an 18-knot ship could travel over a quarter of a mile every minute. The older optics that revolved at the speed of four minutes per revolution were replaced by new ones revolving at 15 or 20 seconds. This was made possible by floating the lantern in a mercury bath causing it to revolve with minimum friction. This new technique was installed in lighthouses built in the 1890s.

## New lighthouses

In 1892 and 1893, after much discussion and negotiation between Hong Kong and China, lighthouses were built on the two best sites initially chosen to light the approaches to Hong Kong: namely on Gap Rock and Waglan.

As early as 1867, before the building of the first lighthouse in Hong Kong, Commander Reed, a naval surveyor, was instructed to investigate suitable locations for lighthouses to cover the port approaches. He proposed Waglan Island and Gap Rock, small islands to the south of Hong Kong Island en route to Singapore. However, as neither of the proposed locations was within Hong Kong waters, these recommendations were not pursued.<sup>21</sup>



In 1888 the Chinese and Hong Kong Governments reached agreement. Gap Rock Lighthouse would be built by the British and maintained by them. The island remained Chinese territory not to be used for any other purpose. On the Chinese part, the Kowloon Customs was to contribute \$7,500 towards the initial cost of the light and \$750 annually towards its maintenance.<sup>22</sup> The agreement was not put into effect. Towards the close of the nineteenth century, however, the proposal for lighthouses at the two main approaches to Hong Kong, on Gap Rock and Waglan Island, was revived. The previous agreement was then implemented.

In 1891 a lighthouse was built on Gap Rock, at the south-western extremity of Lema and Kypong Islands. Lighting equipment was constructed in Sweden and the light was first shown in April 1892. Three years later the lantern was smashed by a severe typhoon. According to experts' opinions later the lighthouse should have been built on the northern part instead of the southern part of the rock. But to rebuild it would cost somewhere near \$140,000. So, the original light continued to function usefully through forty years of typhoons until the Japanese invasion in 1941.

Gap Rock is in the form of two hillocks, about 80 to 100 feet high, and the gap between gave the place its name (in Chinese it is called *Man Mei Chau*, meaning the last island or Mosquito Tail Island). The lighthouse tower is nearly 50 feet high, and the light is thus about 142 feet above mean sea level. In heavy storms seas broke right over the lighthouse but it stood, as a tribute to its builders and a pointer to the developments which have marked the growth of the port of Honking.<sup>23</sup>

### **Waglan Lighthouse**

Unlike Gap Rock Lighthouse, Waglan Lighthouse has a different history. It was constructed by a Paris company for the Chinese Customs Light Department of the Imperial Maritime Customs in 1893. It started to operate on 9<sup>th</sup> May in the same year. It was run by the Chinese Maritime Customs from Shanghai. Following the lease of the New Territories by Britain, in 1898, it was transferred to the administration and control of the Hong Kong Government on 1<sup>st</sup> January 1901.

Waglan was a First Order light of 45,000 candle-power burning

mineral oil with rotating apparatus floating on mercury. This method for rotating lights by floating the apparatus on a bath of mercury, which eliminated friction and permitted revolutions as frequent as every 15 seconds, was invented in 1890. The technique led to a system of identifying lighthouses by the pattern of intervals of light and darkness. Waglan Light was one of only two such modern pieces of equipment introduced and installed in Asian waters at that time. The other one was installed on the Lao-t'ieh-shan Light at Dairen. The British, after taking Waglan over, installed a diaphone fog signal. During its eight-year history as a Chinese light, no fewer than 222 fog-signal guns were fired during the month of April 1894. The fury of the sea at this spot during typhoons is notorious. In 1896, waves flooded the fresh water tanks and completely carried away the derrick used for landing stores, while the spray reached the lantern, 225 feet above high water, pitting the panes with sand and gravel.<sup>24</sup>

The cast iron tower is 52 feet high in the shape of a cone. It is painted white with a red upper portion. During the Second World War Waglan Lighthouse was extensively damaged by bombing. Repairs took place after 1945. It has been unmanned since August 1989. Waglan Lighthouse acts not only as a navigation aid but also as an outpost where weather information on the eastern corner of the territory is collected and fed to the Hong Kong Observatory.

## **Tang Lung Chau Lighthouse**

Situated on Tang Lung Chau, a small island to the west of Hong Kong Island, Tang Lung Chau Lighthouse is also commonly known as Kap Sing Lighthouse. It was put into service on 29<sup>th</sup> April 1912. It has a skeletal steel tower, 11.8 metres high, with a white lantern on top. The steel tower and light apparatus were obtained from England. Skeleton structures are normally used for supporting lights on soft or insecure bottoms - such as on sandbanks, coral reefs and shoals.<sup>25</sup> The brick building which was the light keeper's house has a bedroom, a kitchen, a latrine and a storeroom. Rainwater was collected from the roof and diverted into an underground tank as there was no spring or fresh water supply on the island. The lighthouse is now unmanned and automated. Together with Waglan, this lighthouse was declared a historical structure on 29<sup>th</sup> December 2000.

## PART TWO

Ships that pass in the night, and speak (to) each other in passing;  
Only a signal shown and a distant voice in the darkness;  
So on the ocean of life we pass and speak (to) one another,  
Only a look and a voice; then darkness again and a silence.

### Introduction and aims of Part Two

With the rapid advancement of technology, especially since World War Two, many trades and professions have been severely affected and, in some cases, phased out altogether. Horses were replaced as draught animals by motor vehicles. Electronic sciences and automation have drastically altered our world. Lighthouses have also been affected, as we have seen above by the relentless march of progress, including by such inventions as radar surveillance, Loran and other shipboard navigation aids.<sup>26</sup>

The Trinity House automation programme in Britain involved the conversion of 60 lighthouses and lightvessels to automatic operation and the withdrawal of keepers (Navigation News;1998). The last manned lighthouse in the United Kingdom was the North Foreland Lighthouse which withdrew keepers on 26 November, 1998. This ended the profession of lighthouse keeping in Britain with a history of nearly 400 years. It dated back to 1609 when Trinity House opened its first lighthouse at Lowestoft, in eastern England.

Hong Kong's first lighthouse, as we have seen, set up at Cape D'Aguilar, commenced operations in 1875 (Endacott;1958,163). But the Territory, too, has followed the trend to automation. Waglan Island (sometimes spelt Wang Lan) Lighthouse withdrew keepers in August 1989 (Gazetteer;1960,108).<sup>27</sup>

The aims of Part Two of this paper are to look largely at the men who manned Hong Kong's lighthouses. What sort of people were they? What kind of life did they lead and under what conditions did they work? In a letter to the author, Royal Asiatic Society (Hong Kong Branch) member A. J. S. Lack,<sup>28</sup> who served as Deputy Director of Marine in Hong Kong in the early 1980s, wrote (Lack;1999):

*I am sorry I cannot tell you much about the life of the keepers. If you have not been able to question Charlie Thirlwell (and people like him) then it is likely their story has gone forever. Sad, but so many stories are already lost.*

The good news however is that, over a period spanning approaching half a century, the author has been able to question, off and on, some of Hong Kong's lighthouse keepers, together with seafarers and Government Marine Department staff. Accounts given by them and the life keepers led are detailed in this paper. Much of the material is based on oral history gleaned in discussions with Government Marine Department staff, both serving and retired, as well as other persons. Both authors have made several visits to Hong Kong's lighthouses and have appeared on television programmes about them (Video;2001).

Emphasis in this paper has been placed on Waglan Lighthouse because, situated approaching five kilometres from and to the south of Cape D'Aguiar, and nearly 13 kilometres from Lei Yue Mun, Waglan is the most isolated lighthouse in the Territory (Banister;1932,50) (Lee, HC). Other lighthouses include those at Cape D'Aguiar and Cape Collinson, both on Hong Kong Island. Others at Green Island and Kap Sing lighthouse are both within harbour limits.<sup>29</sup>

## **Climatic conditions**

The author recalls visiting Waglan Lighthouse with the Royal Asiatic Society (Hong Kong Branch) by boat on a lovely afternoon on Saturday 9<sup>th</sup> June 1990. Indeed on some days out there in the South China Sea it can be idyllic - a not-to-be-forgotten experience. Terrence Courtney, an Australian who served as Superintendent of Lights in the late 1950s and '60s, used to stay overnight on the island because he found it 'enchanting.' He slept in an isolated, small, brick building which is still standing.

But the helipad, constructed in mid-1982, destroyed much of the romance although helicopters do of course provide a vital service - if a keeper fell seriously ill for example. Also, they were useful for getting keepers on and off Waglan in bad weather. Previously, it had sometimes meant their being hauled up or lowered in a basket which served the

same purpose as a breeches buoy. With extremely bad weather it could mean, with supplies running low, men having to stay on the island for an extra couple of days or so before they could be relieved.<sup>30</sup>

But lighthouses are constructed in exposed positions because of their role and for much of the time out there in the South China Sea life can be anything but enviable. One can even be swept away by hurricane force winds and huge waves in mountainous seas (Jones;1985,387). One only has to live in Hong Kong for a relatively short period to realize what the weather can be like (Dyson;1983). For example the typhoon which struck the colony on 2nd September 1937 was said to have been the worst natural disaster in Hong Kong's recorded history. Estimates of the final toll range up to 11,000 dead.

By comparison the Battle of Hong Kong, which lasted from 8<sup>th</sup> to 25<sup>th</sup> December 1941, saw some 2,250 Allied servicemen killed, an estimated 4,500 Japanese deaths, plus unknown but significant civilian casualties (Dyson;1983,62). Since World War Two death tolls from typhoons have been lower because of today's more efficient weather forecasting and warning systems.

The maximum recorded gust in Hong Kong was 259 kilometres an hour at the Royal Observatory during the passage of Typhoon Wanda, on 1<sup>st</sup> September 1962 (Hong Kong Observatory;1999). On that occasion Waglan recorded a gust of 216 kilometres an hour. The maximum gust ever recorded at Waglan was 230 kilometres per hour. This was during the passage of Typhoon Ruby on 5<sup>th</sup> September 1964.

Try to imagine being cooped up in the cylindrical prism of Waglan Lighthouse, with windows that do not open and no air-conditioning, after the Number Ten Typhoon Signal had been hoisted.<sup>31</sup> This signal indicates a probable direct hit. It was not until the 1970s that the lighthouse watch tower was air-conditioned.

It is recorded that, in 1893, a severe typhoon passed over Gap Rock (which can be seen by telescope from Waglan).<sup>32</sup> This caused extensive damage to the lighthouse which extinguished the light for several days (Hong Kong;1962,14). In spite of the base of the tower being well above sea level and the lantern windows being situated approximately 15 metres or so above the base of the tower, the windows

were smashed by the mass of water being blown against them.

The Royal Observatory reported:

*Gap Rock is lying very near the track of the worst typhoons that have been felt in the Colony, in an exposed position, and the conformation of the sea bottom, as well as the shape of the rocks causes the sea to be much worse than in other places (Bruce;1990,3).*

It was reported in 1984, that the Royal Observatory and the Guangdong Meteorological Bureau had signed an agreement to set up a joint venture automatic weather station on Huang Mao Zhou, about two kilometres from Gap Rock so, presumably, the weather is as interesting today as it was in the 1890s (Bruce;1990;3).

It is obvious that lighthouses have to withstand immense force during bad typhoons. Consequently, they are designed circular on plan so as to offer the least resistance to both wind and sea. Lighthouses are expensive to construct. Nevertheless, like the cast-iron tower at Waglan, they can be reasonably pleasing in appearance.

Before December 1952, and from 1964 onwards, weather observations on Waglan were taken by Marine Department lighthouse keepers and transmitted by radio (Hong Kong Observatory;1999).<sup>33</sup> The Observatory staff started taking weather observations on Waglan in 1952 and withdrew from the Island to the meteorological station at Cape Collinson Lighthouse in 1964.

As Waglan was no longer manned after 1989, the observatory constructed an automated weather station on the Island. The old weather recording station and a small store where equipment was housed were still there when the author visited in 1999, although the latter is no longer used. But the typhoon mast, where signals used to be hoisted, has been taken down.

## **Water supply**

Waglan has no wells or springs. Keepers depended on rainfall for their water supply. Catchment areas consisted of roofs of a clutch

of small, mostly single storey buildings, such as quarters, as well as paved areas which drained into channels, gullies and pipes. These led into tanks both above and below ground.<sup>34</sup> A record was kept and a plan for the use of water. Following Hong Kong custom water was boiled before being used for drinking.

During an especially dry period, after storage tanks became empty, they were cleaned and limed. Orders used to be posted in the look-out room to this effect. To reduce requirements salt water was pumped up from the sea for flushing toilets. It is understood that on one occasion a building worker who had gone to the island to carry out repairs was caught in the nick of time as he stood behind a building about to relieve himself into a gully. Had he done so the fresh-water supply system would have been contaminated.

Up to the 1970s Hong Kong as a whole was generally short of water and, together with rainfall, it was a common topic at cocktail parties. For several months in 1963, and again in parts of July and August 1967, water for the average household was on tap for only four hours once every four days. Water shortages were part of every Hong Kong resident's lifestyle in those times and for no one more so than the keepers on Waglan. There, during especially dry periods, water had to be brought in by tanker.

## **Manpower**

Over the years lengths of tours of duty varied. After World War One keepers, it is understood, spent one month at a stretch on Waglan which was followed by only one week's leave. Later this arrangement was changed to one month on duty and two weeks' leave (Bruce; 1990, 6).

In an interview with the Superintendent of Aids to Navigation the author was told that the establishment on Waglan comprised 1 Principal Lighthouse Keeper, 2 Lighthouse Keepers, 5 Attendants (who cut the grass and cleaned the windows etc) and 1 Cook. This made a total of 9.<sup>35</sup> Figures have, of course, varied, off and on, over the years.

In the years leading up to 1989 (when Waglan was automated), one team would be on duty for one week. They would then be relieved

by a second team. The change-over day was Tuesday. This meant, roughly, one week on and one week off. The light would be manned 24 hours a day, with four hours on duty for keepers (who wore uniforms) and eight hours off. There were also two replacement Marine Department staff who stood by at headquarters in the event of a lighthouse keeper taking leave or falling sick.

Every Sunday there would be a lighthouse “spring clean,” when windows would be cleaned and everything made shipshape. In addition equipment would be checked and minor maintenance carried out. Nevertheless, a maintenance section would visit the island once a month to attend to anything not functioning correctly and which was beyond the capabilities of lighthouse keepers to rectify.

## Defence

In addition to Marine Department staff it is understood that during various periods, for defence purposes, British soldiers were stationed on Waglan. Quarters for a military presence were provided. Similarly, a squad of Japanese soldiers was stationed there during the Second World War.

Both Waglan and Gap Rock, where there were air-raid shelters, were damaged by bombing during World War Two. There are said to be two Japanese ghosts on Waglan with one Japanese soldier, so it is believed, having been buried under what is now the floor of the recreation room which was built later. One member of staff of the Marine Department said to me:

*It's no wonder keepers saw ghosts on Waglan, cut off from their families as they were. It was a psychological thing.*

To defend Waglan in the event of attack, at the start of the 20<sup>th</sup> century, cannons were mounted on the island. These were said to have been transferred later to the Government Queen's College (Bruce; 1990, 7). There are, in fact, two cannons in the grounds of the College. The cannons are marked:



*CROWN*  
*B.P.*<sup>36</sup>  
*1844*  
(Harrison;1999)

Apart from oral history, no written evidence has been uncovered to confirm that these two cannons, now at Queen's College, once fortified Waglan Island (Lee;1999).

Badly corroded, an old cannon is set on its muzzle and buried into the rocks up to its trunnions, where the old landing stage used to be. This old cannon acted as a bollard for tying up boats. A small boat would transport supplies from the mother ship to shore. From there drums of diesel, bags of coal, firewood and other material were manhandled up the steps to the top of the Island. Coal and firewood were the only fuels for cooking up to the late 1960s. A new, larger landing stage, a little to the north, was constructed in the 1960s. A cable railway was also installed for raising stores and equipment.

Because it is a restricted area, there were (and still are) few visitors to Waglan although there was a visitors' book. It was considered an auspicious day when the late Sir Robert Black, Governor of Hong Kong from 1958 to 1964, visited the lighthouse in 1963.

## **Communications**

In other parts of the world lighthouse keepers, years ago, would use semaphore for signalling. The author has not seen nor heard of this happening in Hong Kong. Also, in the Hong Kong Marine Police (previously called Water Police), up until about 1926 around 50 pigeons were kept on strength. Half a dozen or so were taken out on each police launch to fly messages back to headquarters. There is no record, as far as the author knows, of pigeons being used to fly messages from lighthouses. Signals used to be sent by flashing lamps, however, using Morse code, to passing ships. In the mid-1950s HMS Tamar operated a radar station on Waglan.

Waglan also had two sets of fog horn signalling equipment (there were also two electrical generators), in case one broke down. When the foghorn was operating it sounded every five minutes. Normally the

main lamp in the lighthouse could, allowing for the curvature of the earth, be seen for a distance of about 26 nautical miles (one nautical mile equals 1,852 metres). If because of fog, the light's visibility was reduced to less than two nautical miles, the fog horn system would switch on automatically. It could also be switched on by radio.

After World War Two there was a hotline radio link to Cape Collinson, on Hong Kong Island, from where calls could be relayed elsewhere. In the years leading up to automation, in 1989, a direct exchange line telephone was provided in the air-conditioned communications tower to enable staff to keep in touch with their homes. No relatives or friends were allowed on the island. There was also an inter-communication system installed at Waglan so that staff could communicate between buildings on the island.

### **Creature comforts and sustenance**

Like life for the man on the top of a tram in Wanchai, living conditions improved considerably over the years for lighthouse staff. In earlier years staff would stock up larders with enough food to last keepers for a full tour of duty. A few days later food would no longer be fresh. In more recent years they had refrigerators. In the first instance these were powered with kerosene. Electricity had to be used sparingly and was available from dusk to dawn when the beacon light was switched on.

Staples were different kinds of noodles, meat, vegetables and fish.<sup>37</sup> The last was supplemented by delicious fish which they caught themselves, by line or cage. These were commonly *nai mang ue and sek gau kong*. It was much tastier than the salted fare which they ate in earlier days.

Little food was wasted. Waglan was a homely place. They kept pets. The half dozen or so cats finished off leftovers. In addition, some staff with green fingers would grow vegetables and bring shrubs and flowers back to the Island after shore leave, to plant and beautify their surroundings. In the days when the lighthouse was manned there was a bed of red-leaf flowers grown in the shape of 'WL,' standing for Waglan. As Superintendent of Lights, Yip Kin-sang, told the author, lighthouse keepers had a strong 'sense of belonging.'

## Exercise

Being cooped up on a steep, precipitous, hummock of rock, which consisted of a small, high island and a second island forming, as it were, a long straggling tail meant there were limitations to physical activity. There is a sea-water channel varying from seven to nine metres wide separating the two islands. In a total area of approximately 11.75 hectares, there were obvious limitations to taking exercise.

Although the overall length of the “main” island is only about 0.8 of a kilometre, like being on board ship there are certain things that an enthusiast can do. Some lighthouse keepers did not bother to exercise. Lai Tak-wah, however, told the author that he used to try to get in 30 minutes every day. *Some of this would include climbing up and down the 224 steps which led from the new pier at sea level to the buildings at the top of the Island.*<sup>38</sup> Some keepers liked to swim. Others practiced Chinese martial arts.

## Wildlife

Apart from higher up towards the crest, little vegetation grows on the main island. Except for a small sisal tree and a chilli tree which stood there in 1990, the author recalls there were no real trees although there are a few bushes. On the smaller “tail” island there is even less - just the odd patch of sparse grass.

The top part of the main Island is partly covered with vegetation, including a few plants and flowers, such as Chinese Hibiscus.<sup>39</sup> For those interested in wildlife, when the Royal Asiatic Society members paid their visit in 1990, there was a colony of red-rumped swallows nesting in the cliffs on the leeward side of the main Island. However, on subsequent visits the author did not spot these birds, although there are usually a few swifts and the odd black-eared kite circling in the sky. But no matter whether a person is interested in wildlife or not, Waglan, with the waves breaking together with the foam, is a beautiful spot.

Near the end of the low, straggling island, surrounding a cavern that goes right through the island, you can see two very large rocks. Using a little imagination, these, some proclaim, seem to be leaning over “kissing.”<sup>40</sup> Yes, there is even romance at Waglan!

## Recreation

Certainly man cannot live by rice alone and provision had to be made for recreation and welfare. What facilities were there? One imagines in the early 20<sup>th</sup> century a limited amount. But in the years leading up to Waglan becoming automated, in the 1980s, colour television, stereo music, radio, a small library, darts, ping-pong and mah-jong, all accommodated in the air-conditioned recreation room, were available (Port Services Division;1987).

Let us now turn to the actual men who manned the lighthouses.

## Lighthouse personalities

In 1838, Grace Horsley Darling (1815-1842) became the heroine of Britain when she and her lighthouse keeper father rescued nine of the crew of the good ship Forfarshire. It was wrecked near the Longstone Lighthouse on one of the Farne Islands off the Northumberland coast, England.<sup>41</sup> It is fitting that Darling's name is still recorded in English dictionaries and encyclopaedias although today people are more likely to hero-worship figures like astronauts, film stars and footballers.

What about Hong Kong's keepers and others associated with lighthouses? What sort of men were they? Let us look at some of them.

James Arthur William Deakin's father was a British soldier who married his Chinese wife in 1935.<sup>42</sup> He served as a gunner on Mount Davis when the Japanese attacked in December 1941. Later, as a child, James was called upon by his mother to put food parcels through the wire fence of the Shum Shui Po Prison Camp where his father was incarcerated.

When he grew up, after attending the then Government King George the Fifth Secondary School, Jimmy Deakin went into government service.<sup>43</sup> In the late 1950s he was posted to the Marine Department from the Electrical and Mechanical Engineering Division of the Public Works Department.

Allen Lack informed the author that he had known Deakin earlier, as

a Petty Officer in the Hong Kong Royal Naval Reserve (Lack;1999).<sup>44</sup> Deakin later became Assistant Superintendent of Lights, the Number Two to Terrence Vincent Courtney, an Australian. When the latter retired Deakin took over as Superintendent although he himself never actually served as a lighthouse keeper. He proved to be an excellent manager (according to Lack), and he significantly raised the efficiency and morale of the Lighthouse Section. He followed in Courtney's footsteps in improving the living conditions of lighthouse staff. He was described by Lack as the "salt of the earth." Attempts were made it is understood, unsuccessfully, to get him a decoration in the Queen's Honours List for which competition was keen.

At one time Deakin started, so he told the author in 1990, to write a history of lighthouses. It was never finished. He was buried in the Chiu Yuen Eurasian Cemetery, at Mount Davis, in 1995. On his gravestone, in both English and Chinese, are the characters, 'A fighter to the end.' The author attended his funeral.

At one stage Deakin told the author, when Waglan Lighthouse was managed by the Chinese Maritime Customs from 1893 (which is the date on the lighthouse bell), it was manned by German keepers. That was before it was taken over by the British Colonial Government on 1<sup>st</sup> January 1901. After it was handed over to the British it soon became the practice for lighthouses to be manned by Eurasians, in the same way that railways in India were staffed to a large extent by Anglo-Indians.

The post of lighthouse keeper was seen rather as a middle management, technician-type of job, which offspring of, typically, British military fathers and Chinese mothers, could handle adequately. Indeed servicemen sometimes took their discharge in the Crown Colony. The job of lighthouse keeper required a reasonable amount of intelligence, integrity, attention to detail, personal discipline, self-sufficiency and the ability to live communally.

Up to about 1960, the Hong Kong and Shanghai Bank recruited Eurasian and Portuguese as clerks, secretaries and typists. The Bank only recruited Chinese as janitors and for similar, low-level posts. Likewise, in those days Chinese were not employed as lighthouse keepers. In the late 1990s a (Chinese) member of staff of the Marine

Department opined - sincerely - to the author that lighthouse keepership had become a kind of Eurasian tradition. They had developed the expertise and took pride in this. One can see, looking in Government staff lists, that lighthouse keepers in the 1950s and '60s usually had English names. But they were generally Eurasians.

They are still talked about by those who remember them. In fact the eccentricities (if they may be called that) of some of the old timers are recalled with affection (Rull;1999). When on shore leave the Brown Brothers (Henry and Richard) would go fishing. Marine Department staff used to laugh and say it was because they found, after working in an isolated lighthouse for so long, that the "hubbub" at home was just too much to bear.

Their grandfather was a Danish mariner named Bruhn, although the family was of German stock with the spelling Braune (commonly spelt Braun). It is not known when the family changed its name to the English Brown.<sup>45</sup> Grandfather travelled in and around China and lived for a time at the old treaty port of Amoy (now called Xiamen). It was a large family, generally tall, and several of the children were educated at Diocesan Boys or Diocesan Girls schools in Hong Kong. Most family members have now emigrated to Britain, Canada or Australia.

Henry (born in 1898) was a big man in more ways than one. He liked double-breasted suits and bow ties. He enjoyed parties, telling jokes and drinking with friends - although not to excess. He made up for his time at Waglan when on shore leave. Both brothers liked fishing and shooting. Richard (born in 1896), who had lost fingers in an accident, was the quiet one. Both used to talk to family members about Waglan and of having to be hauled up in a basket in bad weather. One of the Brown brothers acted for a time, in the mid-1950s, managing the Lighthouse Section until the post of Superintendent of Lights was filled in March 1957 by Terrence Coughtney who was posted from Sarawak (Lack; 1999). Because the Brown family was of Danish nationality, and Denmark was not technically at war with Japan, the Brown brothers were not interned during the Japanese occupation.

Another colourful character, who served as a lighthouse keeper starting in 1937, was Charles Beatty Allenby Haig Thirlwell. With three of his four given names taken from surnames of two famous British

generals and an admiral, he must have had a very patriotic, British father.

As a British subject, Charlie Stilwell was interned in Stanley prison camp during the Second World War. A great story-teller he liked to recount how a police superintendent escaped. In reprisal, the entire police contingent at Stanley was incarcerated in Stanley Prison proper. Some had brought musical instruments from the police band into camp. As they were marched away to prison, Thirlwell recounted, the musicians struck up the well known, stirring march, *Colonel Bogey*, and everyone in camp joined in singing: 'And the same to you!' As a result, the Japanese felt they were losing control of the situation and fired their revolvers into the air (Sinclair; 1997, 32).

After the war, besides working as a lighthouse keeper, Thirlwell led an active life when on shore leave. This included community service. Thirlwell had close connections with the Chaiwan fisher folk and boat people and his wife, in fact, was one of them.

'He was a nice, cheerful man,' Dr James Hayes recalled, 'and yes, he sang very well...' (Hayes; 1999).

He not infrequently sang stylised, Cantonese opera, with correct tones. He even sang lusty, boat-people songs which were beyond the capabilities of most native Cantonese. This surprised many who did not know his background. Charlie's appearance was much like a European. In reality, he was a Hong Kong born and bred Eurasian and he started learning Cantonese at his mother's breast. Perhaps surprisingly, he spoke English with a bit of a North Country English accent.

HKBRAS member Louis Thomas agreed with Hayes: 'Yes, he was a jolly man, humorous, and one of those people who seemed to know everyone. He was well thought of. He enjoyed a glass of beer.'

Thomas said that at one stage his *Round Table* in Wanchai linked up with a boat people association at Chaiwan to provide assistance. Thirlwell was one of their leading members. He did a great deal of much needed community service.

Deservedly, for his work as a loyal lighthouse keeper (and later in

charge of the government gunpowder depot), coupled with community service, Thirlwell was awarded an MBE in 1971 by Her Majesty the Queen. Towards the end of his government service he was awarded a merit trip to England. But, Louis Thomas recalled, after about five days he requested permission to return to Hong Kong. We are talking of a Hong Kong before the MTR and the like and Thirlwell was having difficulty in adjusting. Britain was quite different then to Hong Kong and especially to being stationed out at Waglan.

But although lighthouse keepers during most of British colonial times by tradition were mainly Hong Kong Eurasians, in November 1956 three Chinese joined the lighthouse service as keepers at Waglan. In the run up to automation and as localisation took effect, by the 1980s all such posts were filled by Chinese. How does Lai Tak-wah, who still serves in the Marine Department, who had been at sea as a radio operator before joining the civil service, look back on his ten years spent at Waglan?<sup>46</sup>

'It was all right for someone who enjoyed a peaceful existence. But separated from one's family out at Waglan, life was boring,' Lai told the author.

### **'A week at a stretch was too long.'**

How would he have felt pre-World War Two, when keepers did a one-month tour of duty in one stretch, one wonders? But he said that for three to four years of his time spent on Waglan he studied for his City and Guilds of London Institute telecommunications examinations.<sup>47</sup>

These sentiments, regarding boredom, were echoed by Lai Kwok-keung, another Chinese employed at Waglan. On being interviewed by a reporter when the island's lighthouse was changing over to automation, he said, as he lowered the Union Jack for the last time: 'I'm not sad to leave' (*Hong Kong Standard*; 1989).

Superintendent of Aids to Navigation Tam Cheong-wai (now retired), a Chinese (previously this post, as mentioned before, was held by a European and later by a Eurasian), who spent one week's induction training at Waglan when he first joined the Marine Department, agreed. 'It was boring,' he said.<sup>48</sup> Not everyone shared his views. There are



records of “old salts” who were happier “afloat” than when taking shore leave (Jones; 1985).

In 1955, Sydney Frank Bamsey occasionally used to drop into the author’s home in Conduit Road for a mid-morning cup of coffee. He sometimes smiled and said, ‘I shall leave my bones in Hong Kong.’ The author did not realise at the time what he meant. In fact, in his will he requested that he be buried on Waglan Island where he had spent many, what he considered to be, peaceful years as a keeper. He had deep affection for ‘The “Rock.”’ When the last trumpet call sounded government approval was sought and Bamsey’s ashes were interred at a lovely spot with a small garden.<sup>49</sup>

His Malaysian Chinese wife visited his grave at appropriate Chinese festivals, such as at *Ching Ming and Chung Yeung*. But after Waglan was no longer manned, with no Marine Department boats going there on a regular basis, she had difficulty in visiting his grave. His remains were then exhumed and moved elsewhere. The author recalls the grave, but what was a tranquil spot is now overgrown.

How did life at Waglan over a period of years, mould personalities? Although it is an interesting question the author is not a psychologist and thus not really qualified to answer. But certainly, with a small group of men living together for 24 hours a day, one can speculate that there must have been instances of personality clashes although the author did not hear of any. But also many close friendships were, at the same time, forged.

It is relevant that Roger Parry told the author that Hong Kong lighthouse men were, ‘a wonderful bunch of special people.’<sup>50</sup> Stories were handed down by word-of-mouth and there was a kind of mythology and history belonging especially to them.

### **A comparison: before and after automation**

For a time, after Waglan was automated, the island retained some of its original glory.<sup>51</sup> But since that changeover, in many respects, it has become rather run down. Every step, leading from sea level to the top of the island, is no longer clearly numbered in brightly coloured paint. What had been a garden has become overgrown. There is litter.

When it was manned there was that special feeling of the island being “inhabited.” Hands were always available to tend flowerbeds or to do odd jobs in off duty hours. That was when a small group of buildings and its contents were “loved” and better looked after - with brass gleaming like treasured altar plate - than the most fastidious housewife cares for her home.<sup>52</sup> Without a human presence a lighthouse is dead.

The smell of cooking, the clink of cups and the buzz of conversation were replaced by the silent, cadaverous chill of the tomb. Yet at times this is broken by weird insect-like noises emitted by banks of grey cabinets of electrical equipment which demand neither leave nor pensions.

In 1989, with automation, at Waglan an era had ended.

## **Conclusions**

Some people, both visitors and lighthouse keepers, saw Waglan in the days when it was manned, as a place lacking creature comforts and mod cons. Life was simple and austere. Conversely, others viewed it as a jewel in the South China Sea and close to nature.

Near the shores of Hong Kong Island or Kowloon, especially in the vicinity of the harbour and to the west of the Territory, pollution is commonplace. There are the murky, estuarine waters of the Pearl River. But out at Waglan one can experience the true tang of the ocean. One feels at peace. This is how lighthouse keeper Sydney Frank Bamsey, whose ashes were at one time buried there, saw it.

Conversely, it is also possible to feel like another keeper, Lai Kwok-keung. He told the press when automation was introduced in 1989, ‘I am not sad to leave.’

Have you been to Waglan? What were your feelings about the island? One thing however is certain. Lighthouse keepers around the world are a fast dying breed.

## **Acknowledgements**

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and Monuments Office and the Government Marine Department and to everyone mentioned in the text. Without their help this paper would not have been written. Special thanks are also due to Yip Kin-sang Superintendent of Aids to Navigation of the Marine Department. Thanks are also due to many other helpful people including Master Mariners Roger Parry and Alan Lack, Dr James Hayes, Simon Lord, Paul Brown, Phillip Bruce, Louis Thomas and S J Chan. This paper would not be complete without photographs and those published here are indeed rather special. For these, a very sincere thank you to Charles Slater.

## NOTES

### Part One

- <sup>1</sup> T. Roger Banister (1932). *The Coastwise Lights of China, Shanghai*: Inspectorate General of Customs, Statistical Department.
- <sup>2</sup> Lee Krystek - <http://unmuseum.mus.pa.us/pharos.htm>
- <sup>3</sup> Trinity House - <http://www.trinityhouse.co.uk/>
- <sup>4</sup> A day in history - <http://www.sis.gov.eg/calendar/html/c1171196.htm>
- <sup>5</sup> It was named after James Horsburgh (1762-1836), an eminent hydrographer for the East India Company, author of the book *Sailing Directions*, which became the most widely used nautical directory of Eastern waters during the first half of the 19th century. He was also a Corresponding Member of the Russian Academy of Sciences. The lighthouse has a cone-shape tower painted with black and white horizontal bands. <http://www.lighthouseclothing.com/database/searchdatabase.cfm>.
- <sup>6</sup> It was rebuilt in 1875 in the form of a white conical cast-iron tower with black trim. The 30-foot high tower with lantern constructed of oyster shells had a light visible for 20.5 nautical miles.
- <sup>7</sup> T.R. Banister concedes that the claim is good only in its literal sense. '...if we except such primitive lights as the old open beacon at north-east promontory, or the ancient native light on Fisher Island in the Pescadores. The Tungsha Lightship, in the Yangtze Estuary, was established in 1855, and the Taitan Light was apparently first shown by the Chinese priests in 1863. But neither of these were exactly light [houses].'

The Guia Lighthouse, situated at Longitude East 113°35', Latitude North 21°11', is 52 1/2 feet (13.3 m) high. Its light, originally lit by paraffin as an unclassified light, was modernised in 1910 by the installation of a group-flashing apparatus of the Third Order which can be seen for 20 miles in clear weather.

- <sup>8</sup> On 20<sup>th</sup> March 1875.
- <sup>9</sup> Cape D'Aguiar is at Latitude 22° 12' 14" N. Longitude 114° 15' 44' E.
- <sup>10</sup> T. Roger Banister (1932). *The Coastwise Lights of China*, Shanghai: Inspectorate General of Customs, Statistical Department, p. xiii.
- <sup>11</sup> An example provided by the Encyclopaedia Britannica, 1957, Vol.14, p. 88 shows that a lighthouse of 200 ft. in elevation is visible at a distance of 16.22 nautical miles. It can be seen by an observer at an elevation of 30 ft., which by itself has a visible distance of 6.28 nautical miles, within  $16.22 + 6.28 = 22.50$  nautical miles.
- <sup>12</sup> CO 129/166 pp.351-357 Letter from Earl of Kimberley to Hong Kong Governor Arthur Kennedy, 11 July 1873.
- <sup>13</sup> The corporation of Trinity House is said to have developed from the Trinity Guild formed by Archbishop S. Langton in the 13th century. The Guild owned a hall and alms-houses at Deptford for the benefit of seamen and their families. It also checked the pillaging of wrecked ships on the English coast. Trinity House, located at a place overlooking Trinity Square in London, has been the headquarters of the Lighthouse Service in U.K. since 1796. At present it owns 72 Lighthouses, 13 Major Floating Aids, 18 Beacons, 429 Buoys, 48 Radar Beacons and 7 DGPS Reference Stations. <http://www.trinityhouse.co.uk/>
- <sup>14</sup> CO 129/172 pp.17-22. 1974/06/03
- <sup>15</sup> CO 129/172 pp.17-22. 1974/06/03
- <sup>16</sup> HKGG, 12 June, 1875. P. 242.
- <sup>17</sup> CO 129/167 pp.124-128.
- <sup>18</sup> Sessional Papers of 1901.

- <sup>19</sup> Antiquities Advisory Board site visit 1996.
- <sup>20</sup> HKGG 12 February, 1876, p. 87.
- <sup>21</sup> <http://www.lcsd.gov.hk/dept/pressrelease/dec/2912h.html>
- <sup>22</sup> HKPRO HKRS 156 1/144 No.49, 1888 May 21.
- <sup>23</sup> *The Hong Kong Chamber of Commerce*, on page 330 under the heading Gap Rock Lighthouse.
- <sup>24</sup> T. Roger Banister (1932). *The Coastwise Lights of China*, Shanghai: Inspectorate General of Customs, Statistical Department.
- <sup>25</sup> Patrick Beaver( 1973). *A History of Lighthouses*, Citadel Press, p.5.

## Part Two

- <sup>26</sup> Loran (Long range navigation) is a navigational system operating over long distances. Synchronized pulses are transmitted from widely spaced radio stations to aircraft or shipping, the time of arrival of the pulses being used to determine positions.
- <sup>27</sup> Tat Hong Lighthouse, on Tung Lung Island, was the last to be manned in Hong Kong. It was manned by two technicians until 1993.
- <sup>28</sup> [Hon. Editor - Died 27<sup>th</sup> December 2002. R.I.P.]
- <sup>29</sup> The author was informed by retired Marine Department staff member, James Deakin, in 1990, that a baby was born in the Cape Collinson Lighthouse at the turn of the century. On reaching maturity, he too became a lighthouse keeper.

As another aside, in Ma Wan Village, not far from Kap Sing Lighthouse, a large quantity of gold was discovered on Tang Lung Island after World War Two. This was handed over to the government.

- <sup>30</sup> In the spring of 1999, the dilapidated basket was still kept in a store (which had a telephone when the lighthouse was manned), halfway up the steps to Waglan Lighthouse.

- <sup>31</sup> Under such conditions temperatures could reach 40 degrees Celsius.
- <sup>32</sup> Gap Rock is sometimes known as *Daam Gon Shan*, in Cantonese, meaning “Carrying Pole Hill.”
- <sup>33</sup> Besides Waglan Island, lighthouse keepers on Green Island (who were also Government Marine Department Staff) carried out weather observations and passed information on to the Royal Observatory Office at Kai Tak Airport.
- <sup>34</sup> When the author visited Waglan, in 1999, all the buildings, including keepers’ and soldiers’ quarters and the fog-horn building, were still there although they were generally dilapidated.
- <sup>35</sup> Author interviewed Tam Cheong-wai, then Superintendent of Aids to Navigation, Government Marine Department, 22<sup>nd</sup> February 1999. Tam has since retired.
- <sup>36</sup> B.P. stands for “Bailey Pegs” the maker’s name.
- <sup>37</sup> Fare was not spartan if compared to that given to British soldiers during World War Two when, the author recalls, on active service “iron rations” sometimes consisted of a tin of bully beef and a packet of “hard tack” (army biscuits) for each soldier.
- <sup>38</sup> Author’s interview with Lai Tak-wah, Government Marine Department, 12 February 1999.
- <sup>39</sup> Sometimes known as the “Rose of China.”
- <sup>40</sup> A number of rocks in Hong Kong are imagined as resembling animals, birds and other objects. There are Lion Rock, Amah Rock and Lovers’ Rock’ (“Marriage Fate Rock”). The last is along Bowen Path and is supposed to symbolise an erect phallus.
- <sup>41</sup> The author recalls in Britain, between the two World Wars, that there were still a number of pictures of Grace Darling hanging in homes showing her rowing a lifeboat in a storm.
- <sup>42</sup> The notification of marriage appeared in the *South China Morning Post* in August 1935.

- <sup>43</sup> At King George V School the medium of instruction was (and still is) English. Most of the pupils, when Deakin attended, were Europeans.
- <sup>44</sup> Allen John Stockman Lack is a Master Mariner who served in the Hong Kong Government's Marine Department. He became Deputy Director.
- <sup>45</sup> Conversation 25<sup>th</sup> February, 1999, between author and Paul Brown, a family member then working as Chief Information Officer in the Hong Kong Government Information Services Department.
- <sup>46</sup> Lai Tak-wah interviewed by author on 12<sup>th</sup> February 1999.
- <sup>47</sup> Lighthouse keepers frequently had mechanical engineering backgrounds.
- <sup>48</sup> Tam Cheong-wai interviewed by Author on 23<sup>rd</sup> February 1999.
- <sup>49</sup> Some old seafarers have requested permission to have their ashes scattered in Hong Kong Harbour. This has been done on several occasions.
- <sup>50</sup> Interview by author with Master Mariner Roger Henry Parry who joined the Government Marine Department in 1973.
- <sup>51</sup> Observations by author.
- <sup>52</sup> Hong Kong Government Marine Department caption under picture of Waglan with no title and no date.

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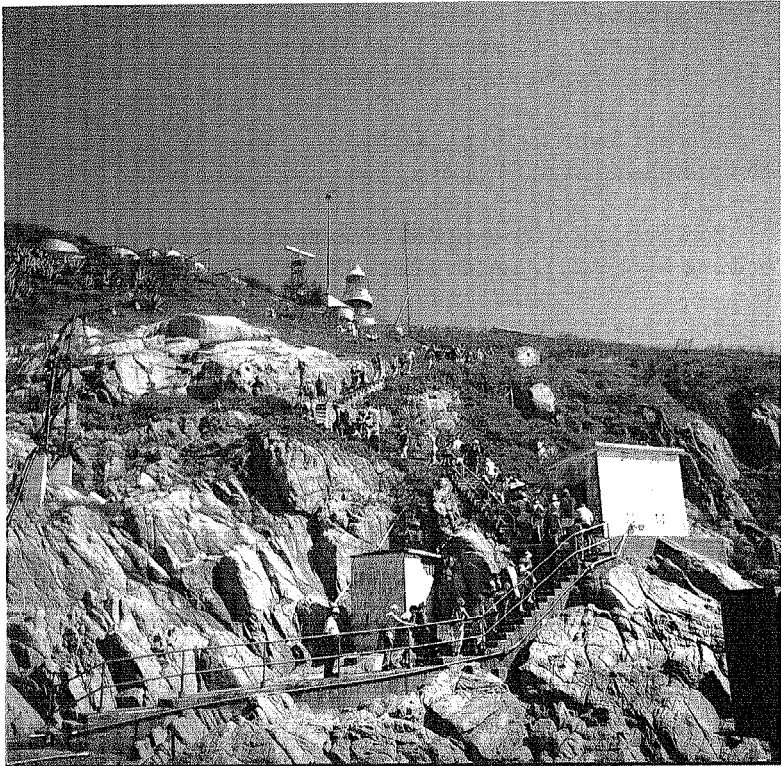
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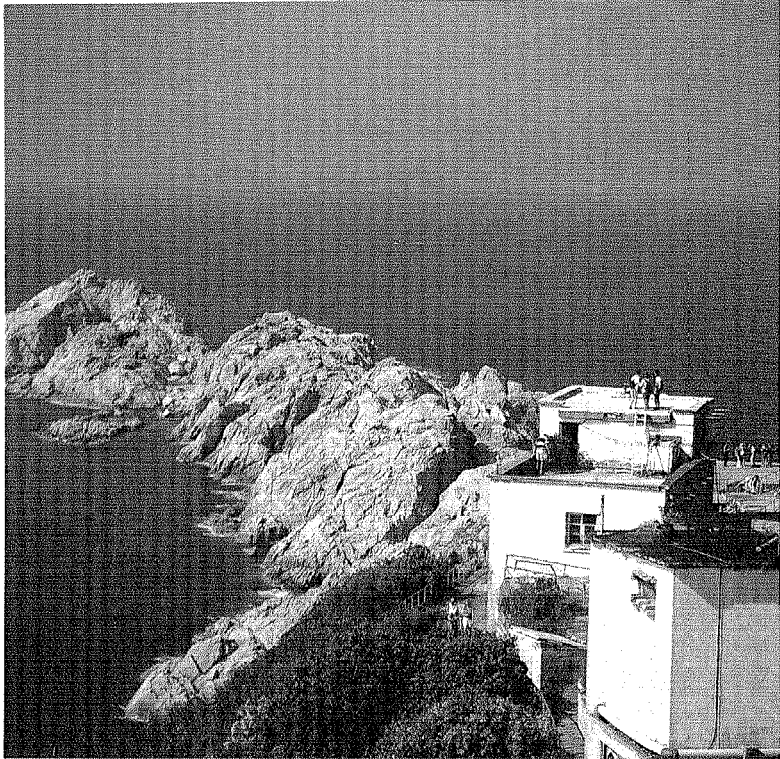
Video (2001), Hong Kong's Lighthouses, Radio Television Hong Kong.



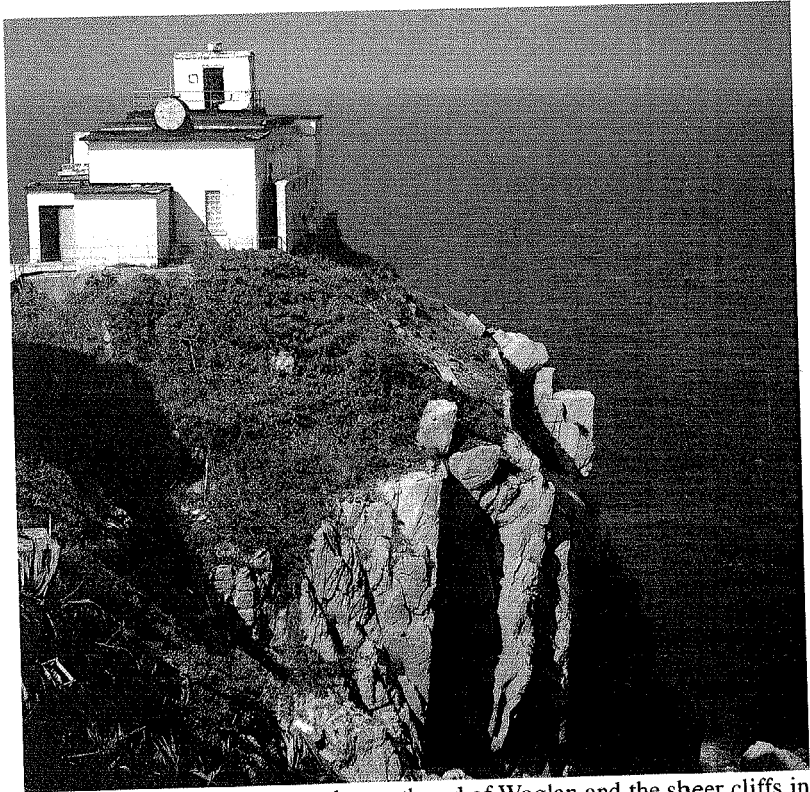
93 HKBRAS members and guests climbed up the path to Waglan Lighthouse



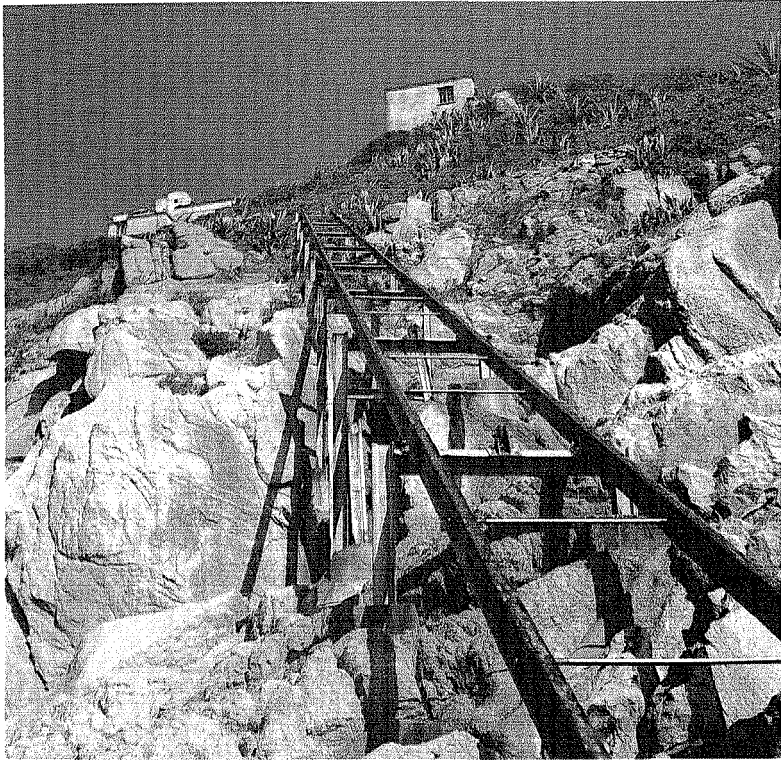
We were allowed access to the light



Looking north towards Tung Lung Chau showing former quarters for lighthouse staff and the barren "tail" of Waglan



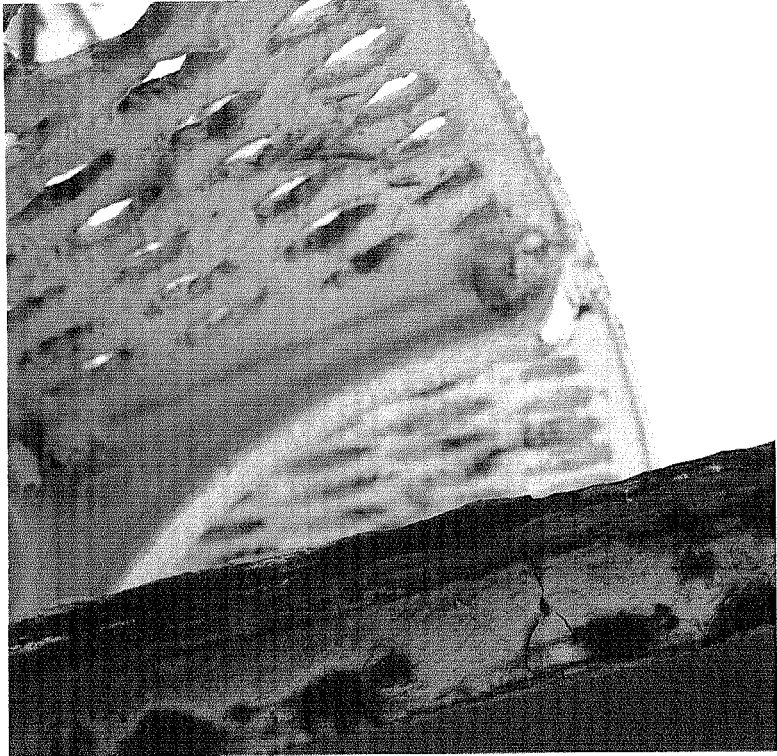
Abandoned buildings at the north end of Waglan and the sheer cliffs in which red-rumped swallows at one time nested



The old goods-hoist track leading up from the landing jetty. Up to the 1960s, everything was manhandled up to the lighthouse



Fishing vessels in the west bay of the Island



The old lighthouse fabric is clearly deteriorating