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THE STORY OF KUWAIT



KUWAIT OIL COMPANY LIMITED

KUWAIT OIL COMPANY LIMITED

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CENTRE FOR ARAB GULF STUDIES
UNIVERSITY OF EXETER

London, January 1957

H.H. Shaikh Sir Abdulla
al Salem al Sabah, K.C.M.G., C.L.E.
Ruler of Kuwait



FOREWORD

The following pages tell briefly in text and pictures the progress of Kuwait Oil Company. An account of the history of Kuwait and its surroundings and a description of the considerable developments undertaken in the State have also been included.

The achievements recorded in these pages have been accomplished by national and expatriate employees working together in a spirit of enthusiasm and co-operation without which these large developments would not have been possible.

In presenting this story the Company desires especially to record its gratitude for the co-operation it has received from His Highness the Ruler and his officials in the Kuwait Government.

L. A. P. Johnson.

Managing Director

THE STORY OF KUWAIT

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Part I

AN OUTLINE
OF THE HISTORY OF KUWAIT
AND ITS SURROUNDINGS

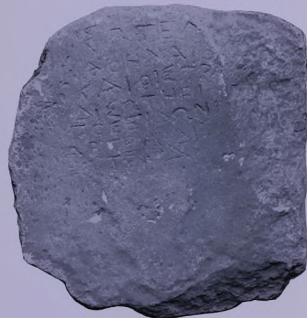
EARLY TIMES

VERY little is known of the ancient history of Kuwait. Although situated on the fringe of the great Mesopotamian basin that teems with traces of early civilisations, beginning with the Sumerian empires of over 5,000 years ago, Kuwait and its surroundings always belonged to the sparsely populated, nomadic desert of Arabia, rather than to the settled populations of the plains watered by the Euphrates and Tigris rivers.

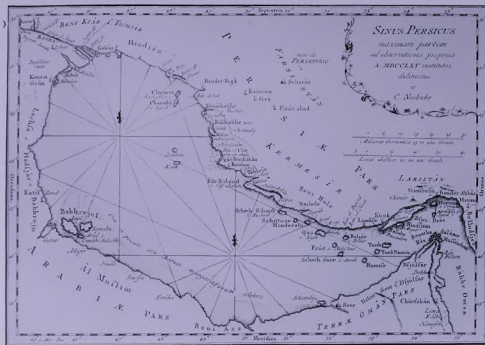
It is generally believed by historians and archaeologists that the Gulf originally extended much further north. The head of the Gulf gradually became filled with alluvial soil brought down by the Tigris and Euphrates rivers, which in Neolithic times flowed into the sea through separate estuaries. These can still plainly be traced, that of the Tigris near Samarra, and that of the Euphrates near Hit, and the flat, low-lying islands of Warbah and Bubiyan to the north of Kuwait and the coastal plain adjoining them, are comparatively recent land formations.

Apart from some flint implements of the Palaeolithic period found in the Burgan area, the only survival of early times is a stone now preserved in the Political Agency at Kuwait, which was found on Failaka Island near the mouth of Kuwait Bay. This stone bears a Greek inscription recording the escape from shipwreck of Soteles, one of the captains serving under Nearchus, an admiral commanding the fleet of Alexander the Great, which sailed

Greek stone C. 325 B.C. found on Failaka Island



SOTEL(ES)
AN ATHENIAN
AND SOLDIERS (?)
TO ZEUS SAVIOUR
POSEIDON
ARTEMIS
SAVIOURS



Map of the Gulf by Carsten Niebuhr, 1765

from the Indus to the Euphrates in 326-25 B.C. Among the ports visited by Nearchus during this adventurous voyage of 1,800 vessels was Diridotis or Teredos, a town placed by some authorities near Jebel Sanam on the present Kuwait-Iraq boundary, which at that time was the emporium of the sea-borne trade in frankincense and other spices from the Arabian interior.

THE MEDIAEVAL PERIOD

In the time of the Prophet Mohammad, the founder of Islam, Persia and Mesopotamia combined to form the Sassanid Empire which was ruled by Khosroes. After the death of the Prophet, and on the succession of the Caliph Abu Bakr, his general Khalid ibn al Walid, known as the "sword of God" on account of his victories over the enemies of Islam, led an army against the Sassanids, whose southern defences consisted of a large ditch running from Hit, on the Euphrates, to Kazama on the north shore of Kuwait Bay. A fierce battle, known as "the battle of the chains," took place in A.D. 636, near Ubulla, the capital of the Western Persian province, the site of which was near the modern town of Zubair, just south of Basra.

Khalid ibn al Walid was victorious and the whole of Mesopotamia fell under Muslim rule.

From 750 until 1250, Mesopotamia and its surroundings formed part of the Abbasid Caliphate, under which the cities of Baghdad and Basra were built and flourished. This period of great Muslim culture and prosperity was finally brought to an end by the Mongol invasion of Genghis Khan, a period of violence and destruction during which Baghdad and Basra dwindled to mere villages. The overthrow of the Abbasid Caliph and the breakdown

of orderly government in the Mongol period, enabled the warlike Beduin tribes from the Arabian interior to encroach upon the settled lands of the lower Tigris and Euphrates, further disturbing the agricultural system of this area.

RECENT TIMES

Ordered government was only resumed with the establishment of Ottoman sovereignty in 1546, following the conquests of Sultan Suleiman the Magnificent, when Mesopotamia was brought under Turkish rule which lasted until 1918. Although the whole of the area lying north and west of Kuwait was nominally under Turkish suzerainty, the administration was only effective in Mesopotamia; in the desert areas, the Arab tribes maintained their independence while the Gulf became the scene of activity for the European maritime nations.

European influence first penetrated into the Gulf in the 16th century when, following the exploration of Bartholomew Diaz and Vasco da Gama, Portuguese ships reached these remote waters. The Portuguese influence, which lasted for about a century, was never more than a maritime one, maintained by a chain of forts along the coast. It is interesting that among the places where Portuguese forts were established, was the small island in Kuwait Bay opposite the present college at Shuwaikh, which was known as Grane from al-Qurain (the little horn).

The British connection with the Gulf dates from the enterprising expedition of the Lancashire man, Ralph Fitch, who reached Basra, travelling overland from the Mediterranean in 1600, and thereafter proceeded to Hormuz and India.

Following this, the East India Company was founded to foster trade with India, and British vessels entered the Gulf and established a footing on the Persian coast. There ensued a three-cornered struggle between the Portuguese, British and Dutch (who arrived on the scene soon after), for control of the seas for trading purposes, and thanks to the support of their Government, the Dutch were at first successful. The British, however, maintained a rather precarious position both at Bushire and Basra, the latter becoming the junction of the sea trade from India and the overland mail route to Turkey; this position only became firmly established in these places after the withdrawal of the Dutch at the end of the 17th century.

Our knowledge of the early history of Kuwait is mainly based on the few references in early travel books, and the traditions handed down by the older families.

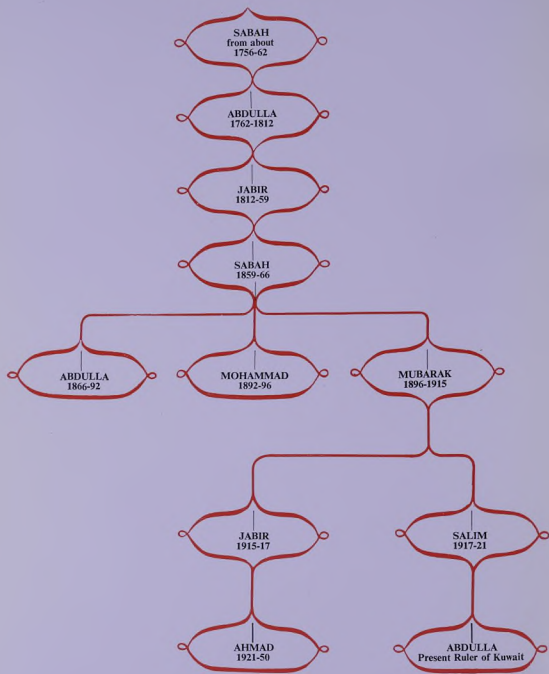
The name of Grane was certainly well known to Portuguese and British mariners who



Indiamen in fresh breeze, 18th Century

(Reproduced by permission of the National Maritime Museum Greenwich.)

THE AL SABAH RULERS OF KUWAIT



sailed these seas in the 16th and 17th centuries, but there can have been little more than some struggling settlements of fishermen and Beduin herdsmen on the shores of Kuwait Bay at this time.

The origin of the present town of Kuwait is usually placed about the beginning of the 18th century, when a number of families of the famous 'Anaiza tribe migrated from the interior to the Arabian shore of the Gulf. These migrants included such important families as Al Sabah, Al Khalifa, Al Zayed, Al Jalahima and Al Ma'awida, from whence many of the present Kuwaitis are descended. It is interesting to remember in passing that three of the great families who rule in Arab countries to-day—the Al Sa'ud of Arabia, the Al Sabah of Kuwait, and the Al Khalifa of Bahrain—stem from the 'Anaiza tribe.

The reason for the migration above mentioned is said to have been the search for a home where they could be stable and independent. It is related that they spent some time at Qatar, but did not find it entirely to their liking and, in the course of further journeyings, had to fight a fierce battle near Ras Tanura, in which they defeated the Al Salim tribe. They then moved to Al Mukhraq and from there to the Khor Sabiya to the north of Kuwait Bay. This was apparently too near to the Ottoman Government in Basra, who became suspicious of their growing strength, and so they moved further south until they found a suitable resting place on the southern shore of Kuwait Bay, where they founded the small township of Kuwait.

It seems that the name Kuwait is derived from "Kut," meaning a fort, which, although not an Arabic word, is found in this sense, in neighbouring Iraq. Kuwait is the diminutive of "Kut" which thus became Arabised and soon replaced Grane as the accepted name of the place.

The Sabah ruling dynasty is usually dated from 1756, and it seems that it was then that the settlers at Kuwait decided to appoint a Chief or Shaikh to administer their affairs, provide them with security, and represent them in their dealings with the Ottoman Government; and, for this purpose, chose the head of the Al Sabah family.

Under the wise rule of Shaikh Sabah, Kuwait seems to have quickly become a flourishing port, thanks to a sheltered anchorage for sailing ships and trade routes leading into the interior of Arabia.

That the town quickly prospered is clear from the account of the Danish traveller, Carsten Niebuhr, who, visiting it about 1765, described it as containing some 10,000 inhabitants, possessing 800 vessels, and living by trading, fishing and pearling. In the summer, when many of the inhabitants were engaged in pearling, or escaped the oppressive heat of the sea-coast by travelling into the interior, the town dwindled to less than 3,000 inhabitants.

Soon after this, Kuwait had a stroke of good fortune which stimulated its prosperity. In 1776, war broke out between Persia and Turkey, and the Persians, under Karim Khan, after a siege, captured Basra, which they held until 1779. During this time, the East India



Shaikh Mubarak al Sabah, Ruler of Kuwait 1896-1915



Naif Gate, Kuwait Town

in 1791-92 we learn that the town suffered almost daily alarms from the incursions of Wahhabis, who cut off the water supply by seizing the wells outside the town. These raiders were kept at bay, partly by the presence of a small guard of Indian soldiers at the East India Company depot and of a warship belonging to the Company anchored off the town, and partly because of the Shaikh's possession of a large cannon. On one occasion, a single discharge from this cumbersome weapon put to flight, bloodlessly, a force of 500 Wahhabi raiders.

The balance of power in this part of the world at this time was maintained by a *modus vivendi* whereby Ottoman dominion was accepted over the mainland in return for the recognition of British trading interests over the route from the Mediterranean to India through the Gulf. In order to protect these interests, the East India Company maintained a Resident at Basra with Consular rank, whose office was moved to Baghdad in 1788. Another Residency with responsibility for the Gulf was established at Bushire.

The early years of the 19th century were a period of lawlessness at sea as well as on land. Trading ships suffered severely from the attacks of pirates operating from the creeks and inlets of the Gulf coasts. Among the most notorious freebooters was a native of Kuwait, named Rahmat ibn Jabir, who did not exclude the shipping of his own birthplace from his unwelcome attentions.

It was the depredations of these pirates which brought the British Navy into the Gulf, and it was by their efforts that piracy was suppressed and ships were enabled to pursue their lawful occasions.

In addition to bringing peace and order to the Gulf, the British Navy carried out extensive marine surveys from which were compiled the excellent charts which enabled navigators to sail these waters in safety.

Owing to the activities of the Wahhabis by land, and piracy by sea, Kuwait's prosperity declined somewhat and when Stocqueler visited the town in 1831, he estimated its population at no more than 4,000. The decline of the town, however, proved to be only temporary,

Company moved the southern terminal of its overland mail route to Aleppo from Basra to Kuwait, and much of the trade of Basra was diverted to the new port. In 1778, the Shaikh of Kuwait, Abdulla, who had succeeded Sabah in 1762, was reported to have become very well disposed to the British, who for their part held him in high regard as being a man of his word.

About this time, Kuwait began to be threatened by danger from the Wahhabis—fanatical tribesmen from central Arabia—who sought to impose their beliefs of a return to the primitive faith of Islam, by raiding trading caravans and settled communities. Becoming increasingly bold, the Wahhabis started raiding towns, including Basra and Kuwait, and the need for protection against these fierce enemies was an important factor in fostering Shaikh Abdulla's relations with the British. From accounts of life in Kuwait

and by 1860 the population had more than made up its lost ground.

From travellers' accounts at this period, Kuwait was a prosperous town with a vigorous trading and shipbuilding industry. The famous author, William Palgrave, who travelled in Arabia in 1862-63, praised the skill and daring of the Kuwait mariners, who were foremost among the seafarers of the Gulf.

He described the town in the following terms:

"Its chief, Eisa by name, enjoys a high reputation both at home and abroad, thanks to good administration and prudent policy; the import duties are low, the climate healthy, the inhabitants friendly, and these circumstances, joined to a tolerable roadstead and a better anchorage than most in the neighbourhood, draw to Koweyt hundreds of small craft which else would enter the ports of Aboo-Shah (Bushire) or Basrah. The inhabitants are Mahometans, Arab fashion, that is tolerant to others and not over-rigid to themselves; Wahabeism is carefully proscribed, and all the efforts of Nejed have never succeeded in making one single proselyte in Koweyt. In its mercantile and political aspect, this town forms a sea outlet, the only one, for Djebel Shomer (Jabal Shammar) and in this respect like Trieste for Austria."

In order to retain their autonomy, the Kuwaitis had to keep good relations with both the Turks and the British. Although not under direct Turkish administration, the Shaikh of Kuwait recognised a general Ottoman suzerainty over the area by the payment of tribute, and Shaikh Abdulla al Sabah, who ruled from 1866 to 1892, accepted the title of Qaimaqam (Commandant) under the Turkish Vait (Governor) of Basra in 1871.

About this time, a fierce dynastic struggle was raging in the interior of Arabia between the rival houses of Rashid and Sa'ud. At first the green and purple banner of Rashid triumphed over the red and white standard of Sa'ud, and Mohammad ibn Rashid, who became ruler of Hail in 1868, extended his domains by the capture of Riyadh in 1886, and became Amir of all central Arabia. In 1890, his defeated rival, Abdul Rahman ibn Sa'ud, was forced to flee with his young son, Abdul Aziz, to Kuwait, where he was given sanctuary by the Shaikh. It was in this way that Abdul Aziz (afterwards to be famous as King Ibn Sa'ud) spent his formative years in Kuwait, where he learnt much statecraft from the famous Shaikh Mubarak who became ruler in 1892.

The house of Rashid was supported by the Turks, who took advantage of the triumph of Mohammad Ibn Rashid to extend their control over the coastal province of Hasa to the south of Kuwait, by establishing garrisons at various points. Mubarak's fears that the Turks would occupy Kuwait led him to turn to the British for protection and, in January,



Street in old quarter, Kuwait Town



Kuwait "boom" in full sail

1899, the British Resident from Bushire signed an agreement with the Shaikh, the provisions of which included an undertaking not to cede territory without Britain's consent in return for British protection.

Soon after this Germany, in pursuance of a policy of eastern expansion, tried to secure a terminal for her projected Berlin-Baghdad railway on the northern shore of Kuwait Bay. In 1900, a German Railway Commission, under Herr Stemrich, the German Consul-General at Constantinople, accompanied by the German Military Attaché, visited Kuwait in an attempt to obtain Shaikh Mubarak's agreement to the scheme. The Shaikh, however, mindful of his Treaty obligations, politely but firmly refused the German proposal. This action provoked Germany to incite her Turkish ally to occupy Kuwait. The British, however, were prepared for this, and when a Turkish warship, carrying troops, steamed into Kuwait Bay, she found a British cruiser waiting. The Turkish captain withdrew after being warned that the British would open fire if any attempt was made to land. British help was again invoked when disloyal relations of the Shaikh sought to seize the town; and yet again in 1902 when the Turks, clearly at German instigation, established military posts at Umm Qasr and on Bubiyan Island, just north of Kuwait Bay.

Meanwhile, the Rashid-Sa'ud struggle in central Arabia still continued and, in 1901, the Rashid Amir, Abdul Aziz, who had succeeded Mohammad in 1879, sent a force to attack Kuwait, and a battle took place with Mubarak's forces at Sarif, of which the Kuwaitis had the worse, but the Rashidi attack was not pressed home. The next few years saw the active



The Barassi Gate, Kuwait Town

resumption of the struggle for the command of Arabia between the Rashid and Sa'ud dynasties, commencing with a daring exploit carried out by Abdul Aziz Ibn Sa'ud from his refuge in Kuwait. In 1902, he led a small camel force across the desert to Riyadh. With a handful of followers he secretly entered the town and, having hid overnight in the house opposite the fort in which the Rashidi Governor was sleeping, killed him as he emerged at dawn, and took possession of the town. This exploit paved the way for the ultimate Sa'udi triumph, which was consummated when the Amir Abdul Aziz Ibn Rashid was killed in a battle in 1906, thereby restoring the Sa'udi Amirate to its rule over Nejd. The Rashidi armies suffered further reverses until the last Rashid Amir surrendered in 1921, and Ibn Sa'ud added Hail to his other domains.

King Ibn Sa'ud never forgot the sanctuary he had been accorded in Kuwait in the time of his adversity, and maintained friendly relations with the Shaikhs of Kuwait, which, except for a break in the reign of Shaikh Salim, lasted until his death in 1954.

The reign of Shaikh Mubarak from 1896 to 1915, marked the rise of Kuwait from a shaikhdom, under Turkish suzerainty, to an autonomous State. Under British protection the town grew and prospered. Visitors to Kuwait, about 1900, reported that: "The town contains from 10,000 to 12,000 inhabitants. It possesses more bagalas (dhows) than any port in the Gulf; it is remarkably clean; it has some very well built houses and the finest harbour in all Eastern Arabia."

In 1903, Lord Curzon, Viceroy of India, paid an official visit to Kuwait and was most hospitably received by Shaikh Mubarak whose followers acclaimed the Viceroy's triumphal progress in the town's only horsed carriage by firing a loud *feu de joie*. This meeting reaffirmed the agreement of 1899, and resulted in the appointment in 1904 of a British Political



Shipbuilding at Kuwait

Agent in Kuwait (Captain S. G. Knox) under the authority of H.M.G.'s Political Resident in the Gulf. The British Government firmly asserted its determination to look after the interests of the Gulf sheikhdom whose integrity it had guaranteed, and to resist encroachment by other powers. In consequence of this, no further attempts were made to interfere with Kuwait.

In 1909, Great Britain and Turkey opened negotiations which resulted in an agreement containing the following provisions:—

- (i) recognition by Turkey of Great Britain's special Treaty relations with Kuwait;
- (ii) the territories of Kuwait to be autonomous;
- (iii) the Shaikh to have direct control over a limited area surrounding his capital, and a sphere of influence extending some distance beyond;
- (iv) Turkey would not extend the Baghdad railway south of Basra without first obtaining Great Britain's consent.

Five years after this came the outbreak of the first world war, and Shaikh Mubarak, although not directly involved, remained firm in his support of the British cause. At the outset of

The late Ruler—Shaikh Sir Ahmad al Jabir al Sabah, (1921—1950)



The flag of Kuwait



hostilities in this area, an incident occurred which resulted in the adoption of the existing flag. Up to that time, the Kuwaitis had no flag of their own and used that of Turkey. A British patrol vessel sighted a motor launch flying Turkish colours at the mouth of the Shatt al Arab, and fired a shot across her bows to bring her to a stop. It was then found that the launch belonged to the Shaikh of Kuwait and was carrying messages to his ally, the Shaikh of Mohammerah. To avoid further incidents of that kind, the present Kuwait flag, consisting of the Arabic words "Kuwait" and "la illahi ila Allah—Mohammad rasul Allah" (there is no God but Allah and Mohammad is Allah's prophet), in white lettering on a red ground, was adopted.

Shaikh Mubarak, whose name has come down to posterity as the greatest of his line, died in January 1915. Jabir, his eldest son, succeeded first, but died in 1917, and was followed by Salim, who lacked his father's political judgment and handled his foreign relations less successfully by taking the losing side, both in World War I when he supported the Turks and in the Arabian dynastic struggle between Rashid and Sa'ud.

By allowing the Turks access to Kuwait, he brought upon the town a blockade which lasted for some years. By espousing the cause of Ibn Rashid, he incurred the wrath of Ibn Sa'ud, who, in 1920, ordered his General Faisal al Duwish to attack Kuwait with his Wahhabi force. An engagement took place at Jahra in which the Kuwaitis were successful in repelling the invaders but, fearing a further and more determined onslaught, the Kuwaitis built a town wall five miles long and fourteen feet high to help keep out their fierce opponents.

Shaikh Salim died in 1921, and was succeeded by his nephew, Ahmad al Jabir, who adopted a foreign policy of re-establishing friendly relations both with Britain and Ibn Sa'ud.

The period between the first and second world wars, was on the whole a peaceful and prosperous one. In 1922, the boundaries between Iraq and Sa'udi Arabia were defined at a conference at 'Uqair attended by King Ibn Sa'ud and Sir Percy Cox, the British High Commissioner in Iraq. A line was drawn from Jebel Anaiza to the Gulf, which gave Sa'udi Arabia a considerable slice of the Ruler of Kuwait's undefined sphere of influence mentioned in the Anglo-Turkish Agreement, which owing to the war had never been ratified. A Neutral Zone was also delineated to the south of Kuwait, in which Sa'udi Arabia and Kuwait were to have equal shares.

On the whole, however, Kuwait continued to prosper during this period thanks to the maritime enterprise of its population. Foremost among the town's activities was its flourishing shipbuilding industry. Kuwait dhows—booms, bagalas and sambuks—built of teak, were famous for their sturdiness and seaworthiness. These ships traded cargoes of Basra dates far down the coasts of India, Arabia, and East Africa, bringing back teak from India, mangrove poles from Zanibar, and many other useful items of Eastern trade. The Kuwaiti captives were as distinguished for their resource and seamanship as were their boats for their seagoing qualities.

In addition to shipbuilding and maritime trading, there was another industry which contributed to Kuwait's prosperity, namely, pearling. Some of the finest pearls are found in the Gulf, and Kuwait was one of the chief centres of the industry.

Every summer, when the Gulf waters had become warm enough for diving, the pearling fleet, numbering some 600 vessels, set off for the pearling grounds to the south. In accordance with time-honoured practice, the proceeds of the pearling were divided between the crews of the boats, the captain and divers receiving three shares and the sailors two shares between them. Pearling, though profitable for the merchants who traded in the pearls, was a hazardous and arduous business, causing sickness and in some cases early death to the divers exposed without protection to long immersion.

Under Shaikh Ahmad's wise rule, progress came slowly but surely to Kuwait. Schools, few but good, were established; the first hospital was founded by American missionaries, and was followed by a Government hospital; houses of solid construction and design were built, and the town expanded.

It was also under Shaikh Ahmad that the foundation of the oil industry was laid. After considerable geological prospecting by interested parties and various unrealised projects, Shaikh Ahmad finally decided, in 1934, to grant a concession to Kuwait Oil Company Limited. The first deep drilling started in 1936, and this was just beginning to show promising results when war broke out in 1939.

The second world war produced less local excitement than the first, and the ephemeral Rashid Ali outburst in Iraq had no repercussions in Kuwait. As a precautionary measure, however, the oil wells were plugged in 1942 and drilling was suspended during the period of hostilities. Shipping flourished, however, and the traders and shipowners waxed prosperous by adapting their dhows for the transport of war materials.

Immediately the war ended, the development of the oil industry in Kuwait was resumed on an extensive scale. Further drilling in the vicinity of Burgan, about 28 miles to the

south of Kuwait Town, revealed the presence of a most productive oil reservoir. The Company's headquarters were moved to a convenient position on a ridge between Burgan and the sea, and a new settlement quickly sprang up which was named Ahmadi, after the Ruler. At the same time, a site was selected on the coast about five miles east of Ahmadi for the oil port which was named Mina al Ahmadi, and the export of oil from this terminal was inaugurated by the Ruler in June 1946. The latter part of Shaikh Ahmad's reign saw the transformation of the Kuwait economy from a basis of pearling and dhow trading to one based on the production of oil.

Shaikh Abdulla al Mubarak, C.I.E.,
Head of Public Security,
Kuwait State



The Ruler of Kuwait,
with Sir Rupert de la
Bère, Lord Mayor of
London, during
his visit to London for
the Coronation,
June 1953

In consequence pearling, which had already been affected by the discovery of cultured pearls, declined still further until only a handful of pearlers remained in this arduous occupation. Sailing ships were fast being replaced by steamers, and the local shipbuilding industry suffered a corresponding decline. All this was, however, more than compensated by the very rapid oil developments and the wealth arising from them. Thus, in a few years, the character of Kuwait was changed from an old-fashioned dhow port to a thriving modern city supported by the revenues of the oil industry. Regular air services connected Kuwait with all parts of the outside world; paved roads were built to carry ever-increasing motor traffic; the life of the community was revolutionised by the supply of electricity, ample fuel, water, and air-conditioning.

On the 29th January 1950, Shaikh Ahmad died and was succeeded by his cousin, Shaikh Abdulla al Salim al Sabah, who had previously served the State as President of the Majlis and was also the son of a former Ruler.

Shaikh Abdulla has proved a wise and able Ruler, combining great natural dignity with tolerance, foresight and political skill. His policy is to keep on good terms with all nations, and to use the oil revenues for the improvement of his country and the well-being of his people. In 1951, he inaugurated an impressive programme of public works and educational and medical developments which is quickly turning Kuwait in this respect into one of the best planned and equipped countries in the world. At the same time, he is taking care

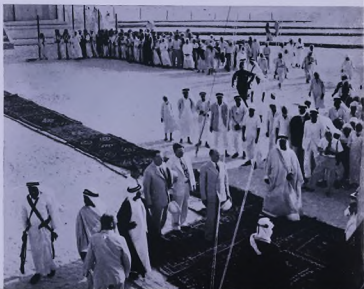


The "Sif" palace on the Kuwait seafront

to uphold the teaching of Islam and to preserve Arab traditions and the old-established customs and institutions of the Kuwaiti people.

Most of Shaikh Abdulla's time and energy is devoted to the conduct of State affairs, but he is interested in world affairs and developments in other countries, and has travelled in Great Britain, France, Italy and Egypt, and also pays frequent visits to more neighbouring countries such as Iraq, Sa'udi Arabia, India, Syria, Jordan and the Lebanon. Thanks to his enlightened policy and temperate character, and the wise use to which he puts the oil revenues, Shaikh Abdulla Salim has become a world-renowned figure, and has made Kuwait Town one of the principal cities of the Arab world.

Shaikh Ahmad al Sabah starts the flow of oil from Kuwait in 1946



Street in Kuwait Town



Fishing boats in the harbour, Kuwait Town

Part II

KUWAIT
OIL COMPANY LIMITED

DEVELOPMENT AND OPERATIONS

IN 1934, Kuwait Oil Company Limited was formed as a joint British and American enterprise in which the Anglo-Iranian Oil Company (now The British Petroleum Company) and the Gulf Oil Corporation of America, became equal associates in the quest for oil rights in Kuwait. In December 1934, the late Ruler of Kuwait, Shaikh Ahmad al Jabir al Sabah, granted to this Company an exclusive concession for the production of oil in the territory of Kuwait. In the first stages, the Ruler's income under this concession was on a royalty basis, but under a new agreement in 1951, the Ruler received a half share in the total profits arising from the operations in Kuwait. The original period of the concession was 75 years, but it was extended in 1951 by a further 17 years.

Before describing the Company's operations, it is necessary to mention briefly the geological structures from which oil is produced in Kuwait. The greater part of the territory consists of residual gravel and wind-blown desert sand lying on limey sandstones of Mio-Pleistocene age. Exposures of the latter rocks occur in south-western and northern Kuwait, while outcrops of slightly older (Miocene) sandstones are to be found on the northern shores of Kuwait Bay and in the Burgan region some 28 miles to the south of Kuwait Town. In the latter region, there are substantial deposits of bitumen-impregnated sandstones while, further north, gas seepages occur at Madaniyat and Bahra.

Following preliminary geological surveys carried out in 1935 and 1936, the first exploratory well was drilled in 1936-37 at Bahra on the north shore of Kuwait Bay to a depth of 7,950 feet. Although this well did not prove a commercial producer, the results were sufficiently encouraging to justify further extensive geophysical surveys, which confirmed a promising structure in the Burgan area 28 miles south of Kuwait Bay and 14 miles from the coast of the Gulf.

A second well was accordingly drilled there, which penetrated oil-bearing sands at a depth of 3,672 feet and produced very encouraging results.



A drilling rig at Burgan



A Kuwaiti drilling crew at work

Between 1938 and 1942, eight additional wells were drilled which confirmed the earlier hopes of extensive production from the Burgan area. During the same period, geological survey work was carried on steadily including an exhaustive search for water. Owing to the difficulty of obtaining supplies and manpower, further operations had to be suspended in 1942, and the oil wells were plugged with cement as a precautionary measure.

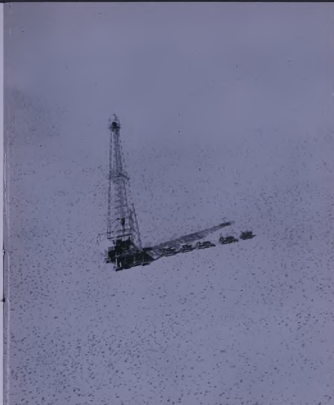
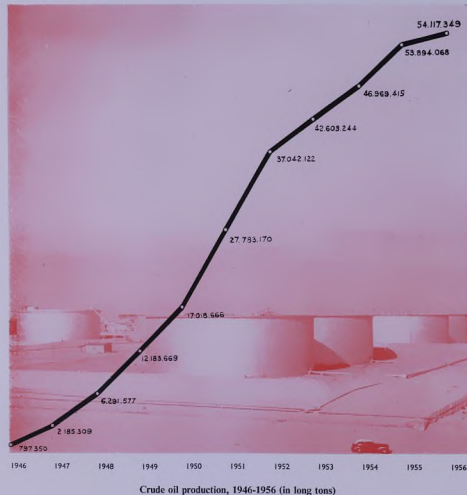
As soon as the 1939-45 war ended, operations were resumed and in October 1945, under a programme for securing additional sources of petroleum in the Middle East, a scheme was put in hand for the production of oil in Kuwait at a rate of 30,000 barrels per day. Commercial shipments of crude oil began in June 1946, when at a ceremony to mark the occasion the late Ruler, Shaikh Sir Ahmad al Jabir al Sabah, turned a silver-handled valve to start the loading of the s.s. *British Fusilier* with the first cargo of crude oil.



The late Ruler, Shaikh Sir Ahmad al Jabir al Sabah, turning the silver-handled valve to start loading the first cargo of crude oil

The Managing Director, Mr. C. A. P. Southwell, on the occasion of the ceremonial opening of the pipeline which began the export of Kuwait oil to the world's markets on 30th June 1946, ended his speech with the following words:—"Your Highness will agree that this successful result of the Company's preliminary endeavours presents no mean achievement, particularly as much of the work has had to be carried out under the very difficult conditions caused by the war, when the manufacture of essential drilling and other equipment was often greatly delayed, and shortage of shipping imposed further limitations on activities. The success that has, so happily, crowned our efforts would never have been possible without Your Highness's unflinching patience, loyal friendship and close collaboration, the excellent work of our Kuwait personnel, and the technical skill and large resources of this Company, in which British and American interests and personnel are so happily blended."

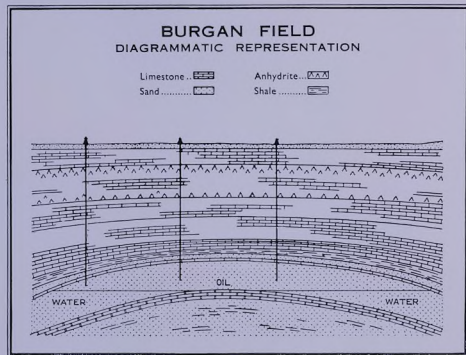
Since that time, the oil resources of Kuwait have been developed steadily as the following graph shows:—



A 99-mile rig skid from Ahmadi to Raudhatain No. 1, North Kuwait, where a deep test well was bored in 1954

Initially, the productive area in Kuwait was confined to the Burgan field which is oval in shape and covers more than 135 square miles. The structure is an elongated dome, having the major axis running north and south, about 15 miles in length, and about 10 miles in width.

In Kuwait, oil is found in sands of Middle or Lower Cretaceous age. In contrast to Persian and Saudi Arabian fields, in which the normal reservoir rock is limestone, the producing formations of the Burgan field are sand and sandstone. Depths of the productive horizons vary between 3,500 feet and 5,000 feet, and the productive zone contains three major sand layers, separated from each other by shale or limestone breaks. The productive



zone is underlain by salt water. The oil/water contact is almost horizontal and appears to cut across all the individual producing sands.

The specific gravity of the oil produced from the various horizons increases with depth, the average being about 0.868 (31.5° API).

Since 1946, the development of the Burgan field progressed apace, and in 1951 drilling was extended to Magwa, a few miles to the north, which also proved a good productive field although not as remarkable as Burgan. In 1953, drilling was extended to the Ahmadi ridge, and drilling in all three areas is still proceeding.

Most of the geophysical work of recent years has been carried on in the northern part of Kuwait territory. In 1954, it was decided to drill some exploration wells to test the productivity of some promising structures revealed by the seismic work in this area. The first site chosen was Raudhatain, about 50 miles north of Kuwait, where drilling started in September 1954.

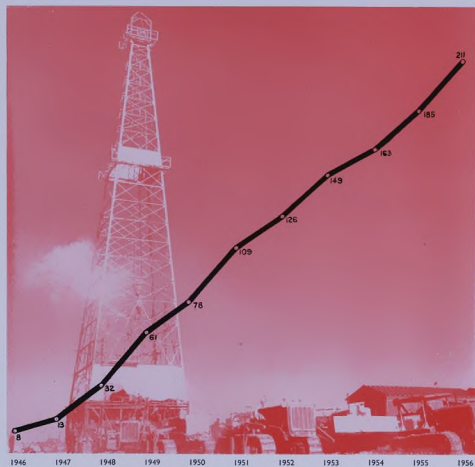
In the course of drilling, the well penetrated oil sands at about 7,700 feet similar in characteristics to the productive sands in the Burgan field. The well was completed at 10,301 feet and production tests were carried out. These tests, which were completed by the end of November 1955, proved the existence of a considerable oil accumulation but the actual extent of the field and its commercial value could only be established by further test

A producing well on the Burgan oilfield



drilling. In order to do this, a second test well was started in December 1955, some 1.8 miles to the south-east of the first well. This second well has penetrated an oil-bearing formation at 7,600 feet and was completed at 9,695 feet.

Further exploration wells in North Kuwait are being drilled near Bahra, the site of the Company's first "wildcat," and at Sabriya about 10 miles south-east of Raudhatain.

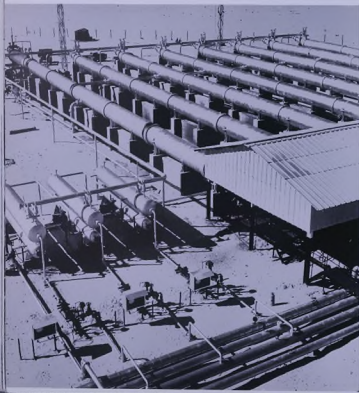


Number of oil wells connected, 1946-1956

During the years of expansion of Kuwait's oil production, drilling techniques have constantly been improved and streamlined. The normal type of production drilling rig is the National Type 50 Rotary Draw-Works and 136-ft derrick, designed to carry a load of 400 tons. The rigs are not dismantled but are towed from site to site across the desert. The majority of producing wells in Kuwait are completed as dual producers with oil flowing through casing and tubing from separate sands.

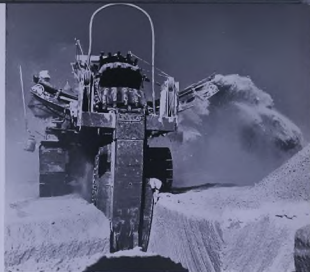


A gathering centre at Burgan



Horizontal gas separators at a gathering centre

The mixture of crude oil and gas from the producing wells is carried by six-inch diameter flow lines to gathering centres where the oil and gas are separated and the pressure is reduced to atmospheric in three or seven stages. Gas is piped from the separators at the gathering centres to Mina al Ahmadi where it is used at the refinery and main power station, and to Ahmadi for domestic and industrial use. It is also piped to Kuwait Town where it is used as fuel in the State sea water distillation plant, power station and brick factory. The crude oil is pumped to large tanks situated on the high ground of the Ahmadi ridge about seven miles from the coast. At the beginning of 1957, there were 32 tanks in use having a total operating capacity of 5,060,000 barrels.



A mechanical trench digger at work

To bring crude oil from the oilfields to the seaboard presents no special difficulty as the terrain rises from the sea in a series of gentle undulations so widely spaced that only a single ridge of some 390 feet in height lies between the oilfields and the coast. Thus gravity lines can be used to carry oil from the storage tanks on the ridge to the coastal terminal.

To convey oil from storage tanks to coast by gravity flow, two 22-inch and three 24-inch pipelines were originally laid, and to these have been added one 30-inch, one 30-34-inch, and one 34-inch line. This last is believed to be the largest pipeline so far in use for transporting oil.

The nature of Kuwait's coastline nearest to the oilfield area, however, did little to simplify the problem of bringing the oil from shore to ship. There is no inlet or bay to give protection to shipping from the strong winds which prevail in the Gulf, and the sea remains shallow for considerable distances from the shore. Even in Kuwait Bay to the north, large vessels have to anchor several miles from the town. It was, therefore, apparent from the first that the creation of facilities for the loading of tankers commensurate with the capacity of the oilfield would be a task of considerable magnitude, and that to enable the movement of oil to proceed in the meantime, temporary facilities, which could be quickly installed, would be needed.

At the beginning of 1946, operations were begun to lay on the sea-bed, to a distance of



Laying a gas line to Kuwait Town

approximately a mile from low water mark at a point between the villages of Fahahil and Shaiba, the first of a series of 12-inch submarine pipelines. In addition, a hose buoy to which the submarine line was connected, and two mooring buoys at which tankers could make fast, were placed in position. The submarine line was first laid in sections on land, and after being given a protection coating of coal tar enamel, was placed on trolleys running on narrow gauge track, the line of the track forming a projection of the position for the pipelines on to the sea-bed. The pipeline, sealed at the outer end to give it buoyancy, was then pulled out to sea by a tanker navigating on pre-arranged shore marks, and the successive sections welded together as each was pulled past the shore. Following this first line, four more similar lines were subsequently installed.

Meantime, plans for the permanent oil and cargo facilities needed by the Kuwait Oil Company had been prepared. By the close of 1949 the new oil port named Mina al Ahmadi, after the last Ruler who had taken a close personal interest in its progress, was in full operation. The problem of bringing oil from shore to ship had been solved by the construction of the largest pier of its kind in the world, and the subsequent removal of three of the five submarine lines, whose position close to the pier rendered them no longer operative.

Aerial view of the oil pier, Mina al Ahmadi



Pipeway on the oil pier

This pier, one of the major projects of engineering carried out in Kuwait, is an all-welded steel structure built in a "T" formation. The approach roadway stretches 4,140 feet eastward to the open sea. The northern extension of the "T" head, 2,805 feet long and 105 feet wide, carries six loading berths. The shorter extension to the south, 1,077 feet long and 100 feet wide, has two berths which were originally intended exclusively for unloading cargo vessels. The minimum depth of the water at the loading berths is 40-49 feet which permits the largest modern tankers to come alongside.

Owing to the increase in oil exports, however, it was subsequently found necessary to equip the two cargo berths for oil-loading and to recommission the two original submarine berths. Three new submarine berths of 24-inch diameter were also completed by the end of 1953, and all five are now in use. To control berthing and loading at the three new berths, an additional signal station was constructed with special lighting to assist in night loading.

The approach to the loading jetty, with a roadway 24-feet wide and a 35-foot wide pipeway carrying eight 24-inch crude oil lines, a 16-inch line for fuel oil for ships' bunkers, and a 12-inch line for diesel fuel, connects the jetty with the shore. Smaller lines supply to each berth fresh water, sea water for fire-fighting services, and compressed air.

Some idea of the task of constructing the pier can be gained from the quantity of materials used. No fewer than 3,853 steel piles averaging 90 feet in length, totalling 350,000 linear feet, and each a 14-inch "H" beam weighing 73 pounds a foot, were driven into the sea-bed.

To complete the main structure of the pier, 65,300 lengths of structural steel, all the joints of which were welded, and 3,000,000 feet of timber were needed. Each piece of steel was sand-blasted and coated as a protection against corrosion, and every piece of timber was given preservative treatment. The total quantity of all materials, the major part being steel which came from the United States, was just under 38,000 tons.

A further problem of particular interest was the design of suitable fenders to safeguard from damage in rough weather, both the oil berths and the ships using them. The exposed nature of the port and the prevalence of strong northerly and south-easterly winds made the solution of this problem one of the highest importance. The type of fender adopted by the Company is similar in principle to that used with the floating "Mulberry Harbours" which played such an important part in the landing of Allied forces on the coast of France in 1944. Each of the 44 fenders in use in Kuwait consists of a set of three cylinders filled with concrete, each 6 feet in diameter, 21 feet 3 inches in height, and weighing 50 tons, suspended at the top and bottom on links between trunnions which enable them to swing inwards and upwards on the impact of a vessel. Each of the cylinders is faced by 14-inch timbers. These fenders are spaced at intervals of 135 to 165 feet along the pierhead.

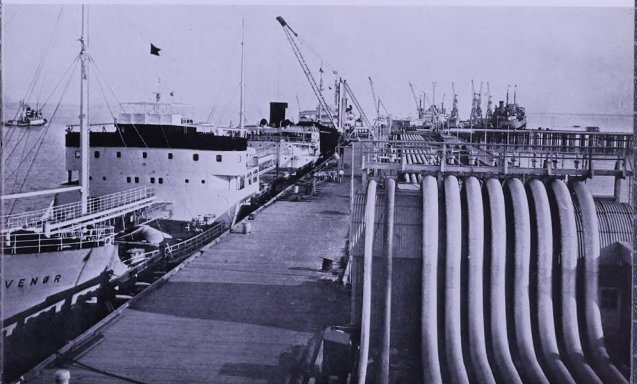
In order to ensure a maximum life, the most careful thought had to be given to the problem

General view of tankers loading at the oil jetty, Mina al Ahmadi



Night loading at the pier

Vertical loading line expansion loops rising over a compressor house on the oil quay



The Baker gravity fenders against which tankers are berthed



of corrosion which is particularly serious in the warm waters of the Gulf, and a cathodic system to supplement the protection afforded by the coal tar enamel with which the steel piles were coated, has been installed.

The superstructure of the pierhead includes office buildings for the staff in charge of loading and for administrative work connected with the loading and discharge of general cargo. There is also a recreation room for officers and crews of vessels using the port. The buildings are air-conditioned. In addition, there are buildings for storage, pumping stations and an air-compressor unit. For handling oil hoses the pier is equipped with six double stiff-leg derricks, and for general cargo the southern extension has four 5-ton Portal cranes and a 54-ton stiff-leg derrick.

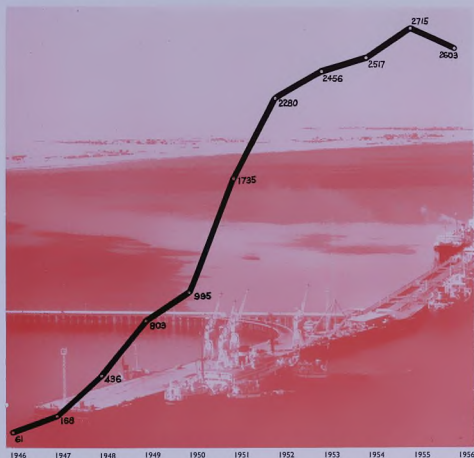
The largest oil tankers in the world can be handled at this jetty and high loading rates



Loading in progress

have been achieved, as for example, the loading of 27,739 tons of crude oil into a super-tanker in 6½ hours at the rate of 4,268 tons per hour.

The rapidly increasing volume of tanker traffic at Mina al Ahmadi since the commissioning of the oil jetty is shown in the graph below:



Number of tankers loaded, 1946-1956

During the single month of March 1956 no less than 247 tankers loaded at Mina al Ahmadi. A notable date in the history of the Company was 9th June 1954 when the tenthousandth tanker sailed from Kuwait with a cargo of bulk oil, while April 1956 saw the fifteen-thousandth tanker sail.

It is interesting to note that during 1955, all tankers in service of over 38,000 tons called at Mina al Ahmadi. It is due to the exceptional depth of water available at the jetty that the oil port is now regularly used by this large group of major tankers.

An essential feature of the port facilities needed by the Company was a harbour adjacent to the jetty, to give sheltered anchorage for tugs and small craft, and to enable imported



The refinery, Mina al Ahmadi

local materials to be discharged directly from lighters. This boat harbour, with a dredged water area of 20 acres, has within it a lighter quay 660 feet long and a steel jetty for berthing tugs. To protect the harbour, breakwaters had to be constructed of stone quarried some 17 miles inland. More than 130,000 cubic yards of stone were used to construct these breakwaters to a strength sufficient to withstand the violent storms encountered on this coast, and more than 216,000 cubic yards of sand and stone were dredged from the harbour to provide an adequate depth of water.

At Mina al Ahmadi are situated also the Company's refinery (with a capacity of 30,000 barrels a day), the bitumen plant, the power station with an installed capacity of 22,500 kilowatts, the sea water distillation plant, pump houses and storage tanks, and an electrically

controlled manifold for the distribution of oil to various installations concerned with the export or refining of crude oil.

The refinery was brought into production in 1949; it produces motor gasoline, kerosene and gas oil for local consumption, as well as furnace oil and marine diesel oils for bunkering ships calling at the port. The plant consists of a topping unit, together with a gasoline refractorator and stabiliser, and a chemical treating plant for treatment of motor gasoline fractions.

Preparations are now being made to expand the existing refinery at Mina al Ahmadi to approximately six times its present capacity. This will raise the quantity of crude oil refined from 1,400,000 tons to 8,500,000 tons a year.

The purpose of the extension is to produce greater quantities of middle distillates, marine diesel and furnace oils, including bunker fuels for tankers loading at Mina al Ahmadi.

The extension programme involves the installation of two atmospheric crude oil distillation units, each capable of refining 80,000 barrels a day. It also includes the installation of oil storage tanks of varying capacity for crude, fuel and products, with ancillary inter-connecting lines and pumps. Equipment will have to be provided for increasing the power, steam and



The oil refinery at night

The bitumen plant at Mina al Ahmadi



Bitumen transporter loading



water supply facilities; also the necessary oil/water separating plant and distribution lines. Some extensions will be required to the existing oil-loading system to the jetty and submarine berths.

Work commenced on a site adjoining the existing refinery at Mina al Ahmadi in July 1956 and it is expected that the whole scheme will be completed by the beginning of 1958.

The small boat harbour, Mina al Ahmadi



One of the major filling stations in Kuwait Town

Bitumen for the Kuwait State road construction programme, as well as for the Company's use, is provided by Kuwait Oil Company's plant which has been incorporated in the refinery. This plant came into full production in June 1953 and has a designed capacity of 10,000 tons per annum. Distribution of oil products from the refinery is mainly carried out by seven major filling stations, six of which are in Kuwait Town and its suburbs, and one at Ahmadi. Further stations are planned, of which one is already under construction in the eastern section of the town and additional stations will shortly be constructed at the large villages of Fahahil and Jahra.

High-grade spirit equivalent to the premium grade of motor spirit sold in Great Britain, is at present imported, and a new pipeline to convey this product from Mina al Ahmadi to the Company's distribution centre at Shuwaikh was laid in 1956.



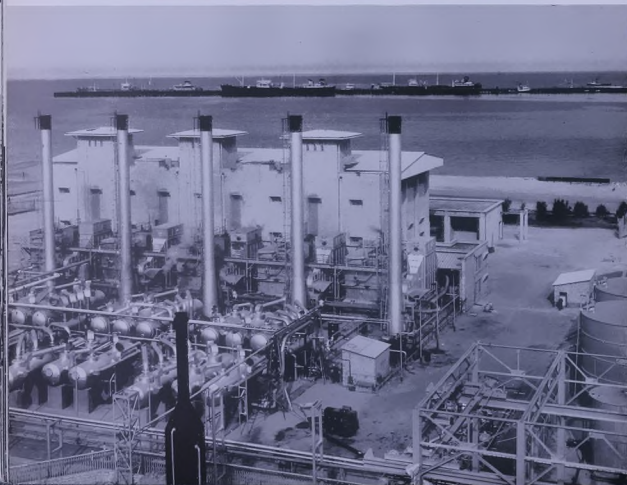
The sea-water distillation plant

Another important side of the Company's operations is the distillation of drinking water for the needs of the large staff and their families. Shortage of potable water was a great problem in Kuwait in the early stages of the Company's developments, when, with the co-operation of the Ruler, its supplies were obtained by sea from Basra in tankers. This difficulty was overcome by the installation of a sea water distillation plant at Mina al Ahmadi with a daily production of 800,000 gallons, and assistance was given to the town of Kuwait until its own distillation plant was completed.

In addition to the distilled water used for drinking purposes, a large quantity of brackish well water is used in the Company's areas for industrial and domestic purposes and the irrigation of gardens and roadside trees. This water is obtained from Abduliya, 16 miles west of Burgan, where there are fourteen wells, about 550 feet in depth, each equipped with an electro-submersible centrifugal pump. The present average daily output over the year is approximately 1,270,000 gallons, but during the summer period this rises to an average of 1,600,000. All the water produced is pumped to Ahmadi with the exception of about 50,000 gallons per day used on the spot for watering the sheep and camels of neighbouring Beduin.

The operation of such a vast industrial enterprise involves the procurement and storage of a tremendous range of supplies and materials. At the outset, local supplies were very limited and practically everything required for the Company's operations was imported

The main steam power station at Mina al Ahmadi, showing the water distillation plant



Industrial area and housing estates at Ahmadi, from the air

from overseas and large stocks of spare parts, provisions, and building materials had to be maintained in the Company's stores at Ahmadi.

Gradually it has become possible to obtain an increasing number of items locally as merchants began to handle such business. The items purchased locally now include bricks from a brick-making plant, other building materials, motor vehicles, tyres and spare parts, home and office furniture, paint, tiles, stationery and electrical equipment.

It is the Company's policy to expand the range of local purchases with the aim of procuring all the normal materials required from local suppliers, subject to equitable price, quality and service. It is still, however, necessary to obtain specialised engineering plant and other machinery, much of which has to be specially manufactured in close co-operation with the Company's engineers, from United Kingdom manufacturing firms who specialise in oil-field equipment.

Since the start of the Company's operations local commercial enterprise has developed to a stage where local contractors can carry out constructional and other functions for the Company. During the last few years, virtually all the constructional work has been carried out by local contractors who work in the closest and happiest co-operation with the Company's Engineering Department. The Company owes a special debt to the enterprise of these contractors who have contributed so materially to the success of its operations.

PERSONNEL

At the outset of the Company's operations, there were virtually no qualified Kuwaitis available for technical posts, and it was necessary to import British and American staff to fill these. It was also necessary to import Indian and Pakistan artisans to meet nearly all the requirements for skilled labour. The local supply of unskilled labour was also inadequate in the early years, owing to the extensive scale of the operations, which at one time involved a labour force of 15,000 men. This demand, coupled with large-scale building and civil construction projects in the town of Kuwait, has placed a heavy strain on the market for unskilled labour and it has been necessary to engage labourers from neighbouring Arab countries to supplement the supply available.

With the completion of the initial major construction, it has become possible to dispense with much of the foreign labour imported to cope with the heavy initial construction programme. The Company's permanent labour force has now become stable at a strength of about 6,000 men, the majority of whom are Kuwaitis or Arabs from neighbouring territories. Kuwaitis are gradually replacing foreign artisans as they acquire the necessary experience and ability. This process is being accelerated by the specialised instruction in skilled trades provided in the Company Training Centre.

The Company Labour Division has a staff of experienced officers who look after every aspect of the worker's employment and welfare. This Division is responsible for establishing equitable working conditions, and for ensuring that all workers receive benefits due to them, and that action is taken to remedy any grievances or complaints found to be justified.

A constant check is kept upon rents and retail prices, and a cost of living index is drawn up and revised four times a year.

All jobs on the labour pay roll have been analysed and evaluated into different grades by means of a job evaluation system, and wage rates are constantly reviewed in order to ensure that they, with the allowances and services in kind which the Company provides, compare favourably with those paid in the State of Kuwait and in neighbouring oil companies.



Shaikh Jabir al Ahmad, Head of Public Security, Ahmadi

Continuous service pay is granted to those who have been in the regular employment of the Company for more than five years. Other benefits include a weekly paid rest day, a housing allowance, special allowances for shift workers, annual paid vacations, paid pilgrimage leave, subsidised meals in the Company's canteens, and free medical treatment.

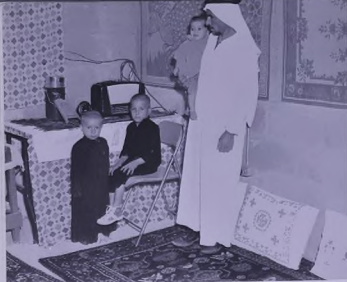
To assist workers to provide for their future, a Thrift Scheme is operated whereby they may deposit up to fifty per cent. of their wages in the Savings Bank managed by the Company. The Company pays interest on these deposits, and the limit has been placed at six months basic wage, plus certain permitted allowances, in any one calendar year, and up to a maximum deposit of two years' salary plus certain permitted allowances.

There is, in addition, a Leaving Benefit Scheme which provides gratuities for workers who have more than twelve months' continuous service in the Company. To men with less than three years' service, gratuity payments are nominal, but rates of gratuity rise sharply thereafter so that men with five years' service receive a total of 105 days' pay, grading up with additional service to 1,575 days' pay with forty years' service.

A rental allowance of Rs.1/8 a day is paid to all married men with families legally domiciled in Kuwait, and to all single men who are the sole supporters of legal dependents living

Housing for Company Arab employees, South Ahmadi





Interior of worker's house
in South Ahmadi

in Kuwait; an allowance of 12 annas a day is paid to all others. The rents charged for Company accommodation are kept within the limits of the rental allowances.

During 1955, a scheme was introduced whereby paid pilgrimage leave was authorised to all Muslims in the Company who desired to go on the Pilgrimage and who had four years' continuous service with the Company.

The welfare of workers is also under the supervision of the Labour Division. Nourishing midday meals are provided for all workers who wish to avail themselves of the facilities provided. These meals are served in well equipped canteens, situated close to the main employment areas in Ahmadi, Mina al Ahmadi and Magwa, and cost 12 annas, a charge which involves subsidisation by the Company. The meal consists of rice with meat, fish or vegetables according to individual taste, as well as tea and chapatties, and a choice of at least two different dishes is served every day.



Houses for workers'
families in South
Ahmadi

It is the aim to provide good recreational facilities and, to achieve this, a social club with swimming pool and other amenities has been built. There is also a club for the Indian and Pakistani workers. The workers themselves have been invited to co-operate through their elected representatives in the organisation and administration of social and recreational activities. There is also a personal welfare service in which the Welfare Officer makes himself available in the clubs twice a week in order to offer advice, guidance and assistance to any worker who wishes to present his personal problems.

For the benefit of Indian and Pakistani artisans and clerical staff, the Company employs a senior Pakistani as a Liaison Officer. Through him it is possible for them to ventilate problems which may not fall within the sphere of the Welfare Officers.

HOUSING AND AMENITIES

In 1945, when the Company resumed its development after the war, there were no housing or other facilities in the oilfield areas for the accommodation and welfare of the Company's employees. The Company was, therefore, faced with the task not only of providing its own administrative and industrial buildings and technical facilities, but also living accommodation for over 5,000 employees, with the amenities and services necessary to make work tolerable in the extreme climate of the Gulf.

The Company's guest house at Ahmadi





The Kuwait Oil Company's main office, Ahmadi

The site chosen for the Company's headquarters was a long ridge about 400 feet above sea level, 22 miles south of Kuwait town, some six miles from the coast and a similar distance from the oilfields of Burgan and Magwa. On this site, the modern town of Ahmadi, which includes the administrative offices of the Company, an industrial area and other technical establishments of the Company's operations, and housing estates for the accommodation of the employees, has been built. A paved road connects Ahmadi with Shuwaikh, 22 miles to the north.

Parallel with the development of the technical side of its operations, the Company carried out the building of houses and the installation of comprehensive services and amenities for its employees at Ahmadi. In the course of the last seven years, a well planned and spacious settlement has gradually sprung up in this previously barren and unpopulated area.

This settlement is served by paved roads, electricity and gas, piped water, sewage, and telephone systems. It contains its own mosques and churches, schools, cinemas, restaurants and guest house, bank, post office, food stores and other shops, fire station, printing press, bakery, laundry, as well as refrigeration plants for the storage of food supplies for the needs of its employees. The Company pays special attention to the provision of facilities for organised recreation. There are clubs with swimming pools, playing fields for football, cricket, tennis, golf and hockey, in which employees of all nationalities participate.



The mosque in South Ahmadi

The temporary quarters of the early construction period have now been replaced by permanent family homes and bachelor accommodation.

Ahmadi includes houses for Arab workers and their families. These are mostly built of brick. They are supplied with electricity, gas, water and fans, and are connected to a modern drainage system. Each family house has its walled compound to ensure the privacy demanded by Arab custom.

The Company also encourages its Kuwaiti staff to build their own homes. To further this aim, a Home Ownership Scheme has recently been introduced to assist men to build houses to their own specification, and in areas of their own choosing. The employee is required to provide evidence of ownership of the plot of land upon which he wishes to build or, if he does not own any land, to select a plot and put down a deposit of ten per cent. of the value of the land and the house he wishes to build. Thereafter the Company arranges

Kuwait Oil Company's
workers' accommodation
in South Ahmadi





A general view of the Company's housing area at Ahmadi

for a loan of eighty per cent. of the value of the house, or seventy per cent. of the combined value of the house and land, and at the same time opens a suspense account in the employee's name for the remaining twenty per cent. of the value. The employee repays this loan at four per cent. interest per annum, on the diminishing balance of the loan. When the initial loan has been repaid, the Company contributes the remaining twenty per cent. of the value, and the house becomes the employee's own property. To ensure that good houses are built, certain basic requirements have been laid down in the Scheme, including satisfactory standards of construction.

This Scheme has attracted considerable interest and it is hoped that it will prove to be a valuable contribution to the housing of the Arab worker.

For their expatriate employees, the Company provides modern facilities designed to make life pleasant in the heat and humidity of the Gulf climate. The houses are attractive in appearance and design, and equipped with all modern requirements. A supply of brackish water is provided for the irrigation of the gardens which surround the houses, and which bloom with oleanders and other flowering shrubs and many varieties of annual flowers in the winter and early spring. What was formerly a monotonous desert has now been transformed into an attractive settlement of white-walled bungalows, tree-lined avenues, and gay gardens on a rising slope overlooking the sea.



Football at Ahmadi



The Company provides well equipped co-educational schools for the children of its expatriate employees. The Anglo-American school educates children from the ages of 5 to 14 years on the British pattern of education, and has grown from six pupils in 1947 to 285 pupils in June 1956. The Indian-Pakistani school, which provides education from 5 to 12 years for the children of Eastern staff, now has 160 pupils. Both schools are administered by a British Principal and staffed by well qualified men and women teachers. The curriculum for each school is framed to meet the different needs of its pupils, and to suit

Bakery at Ahmadi



Children at play in the garden of the Arab school, Ahmadi



Children at play in the Anglo-American School, Ahmadi



General view of public security headquarters, Ahmadi, with a member of the security force in foreground

requirements for further education in their own countries. Selective examinations for admission to schools in the United Kingdom can be taken and the curriculum has also been found by experience to be suitable for children continuing their education in the U.S.A.

Considerable value is attached to organised games on the House system within the school timetable, and coaching in swimming, netball, tennis, hockey and football is given. There are also active Brownie, Guide, Cub and Scout movements.

In 1954, schools for Arab boys and girls, staffed and administered by the State Education Department, were opened in buildings provided by the Company. There are at present about 200 boys and 150 girls attending these schools. There is considerable liaison and interchange of ideas between the Company teachers and those of the Kuwait Government, and children from the Arab school take part in the annual sports organised by the Company.

Public security in the Company areas is maintained by a force of State Police and Field Guards under the control of a representative of the Ruler—His Excellency Shaikh Jabir al Ahmad al Sabah, who is responsible for the administration and security of the oil Company's areas. The Security Headquarters occupy fine buildings including a mosque, offices and quarters for the officers and men of the force, which were constructed by the Company on the west side of Ahmadi in 1953-54.



A ward in the Company's hospital

MEDICAL CARE

The Company's medical service was started early in 1947 in Kuwait town, but with the development of the Burgan field, a hospital was opened in Magwa, pending plans for a new building later in Ahmadi. The hospital at Magwa has 211 beds and 23 children's cots, is completely air-conditioned, and is equipped to ensure the most modern forms of diagnosis and treatment. The medical, nursing, technical and ancillary personnel are on a scale similar to that of a general hospital in the West, so that with very few exceptions, patients can receive all necessary care and treatment. A site and plans for a 250-bed hospital, located in Ahmadi, have now been prepared, and construction will commence early in 1957.

The Out-Patients' services, supplemented by a 24-hour air-conditioned ambulance

Kuwait Oil Company's hospital at Magwa



The dental clinic

Magwa hospital—
a blood test



service, are concentrated in the Ahmadi Clinic where routine visits are dealt with, and a full range of specialist treatment is provided. Smaller clinics are held in the Mina al Ahmadi and Burgan areas on working days. In 1954, a second clinic was opened at Ahmadi for the emergency treatment of the wives and children of Arab employees of the Company. It has accommodation for six adult in-patients and eight infants, and facilities for treating 100 out-patients daily. There is an emergency operating theatre and full modern equipment and facilities, and the clinic is under the supervision of a British medical officer. The staff includes nurses trained in midwifery and child welfare.

An Industrial Health Division undertakes comprehensive preventive medicine, including routine check-ups for industrial hazards, regular inspection of food handlers, pest control, and examination of drinking water and food. Special care is taken to prevent the breeding of flies and other noxious insects.

Baby-weighing at the families' clinic, Ahmadi



A carpentry class in the Training Centre

TECHNICAL TRAINING

In pursuance of its policy of training Kuwaitis to replace imported artisans, the Company has established a Training Centre at Magwa to teach local boys the skilled trades needed in the operation of the oil industry. The Training Centre is under the charge of a British Training Manager with long experience in the Ministry of Labour Training Department. The staff consists of 25 qualified instructors. The Centre is open to boys of Kuwaiti nationality who must pass a medical examination. No sleeping quarters are provided at the Training Centre, but those of the pupils who live within reasonable distance are transported to and from their villages, and a subsidised midday meal is provided by a canteen at the Training Centre. A number of pupils who come from remote parts of the territory are accommodated in the Company's housing area at South Ahmadi.

The pupils spend their first three months of training in a basic class where the curriculum is divided equally between primary class-room education and practical instruction in the Centre's workshops. After passing through this basic class, the pupils move on to a course of specialist training in the trade which they have selected, which lasts from 18 months to two years. At the end of this training, the pupils are offered appropriate employment in the Company, but at the present time a number find work in Kuwait on Government schemes or in other enterprises for which the demand for skilled men is very great.



Electricians' class in the Training Centre

The Centre also provides training for men already in the Company's employment who wish to learn a skilled trade or to improve their existing skill. In this way an opportunity is open to all workers to improve their status and earning capacity. Certain trades which it is impracticable to teach in the Training Centre itself, are taught "on the job" under the general supervision of the Training Manager.

Trainees, whether new recruits or existing employees of the Company, are paid at standard rates during their training. The number of trainees is from 200-250 in the age group of 15-30 years. Approximately seventy-five per cent. are Beduin and the remainder of town origin. The successful results attained by the Company in training local boys for skilled occupations



Kuwaiti trainees



Instruction at the Training Centre

is encouraging and this Training Centre may be said to constitute an important contribution to the educational and economic development of the State as a whole. It has also demonstrated that by careful and early training Arab boys can be fitted for posts for which it had previously been necessary to use non-Kuwaitis.

SUPERVISOR TRAINING

The Company runs a Supervisor Training Scheme for instructing staff of all categories in supervisory skills. This scheme is based upon the T.W.I. (Training Within Industry) system, which has been modified to meet circumstances applicable in Kuwait. At present, the whole of the English-speaking staff in supervisory jobs are required to attend a two-fold course in Job Relations and Job Instruction, and these courses are also held in Arabic for Kuwaitis who are Supervisors or show ability in leadership. Groups have also been taken



A Kuwaiti trainee



A Kuwaiti telephone operator

in Urdu for Eastern Staff Supervisors whose English is not adequate for the discussion method used in the programmes. This training has been extended to include every grade of Supervisor.

LANGUAGE INSTRUCTION

The Company devotes special attention to teaching the Arabic language to its expatriate staff. It is compulsory for non-Arab employees to learn basic Arabic, and all new employees on arrival are enrolled in elementary Arabic classes in the Company's Language Centre at Ahmadi. At the end of this course, an examination is held which must be passed during the employee's first contract period.



A Kuwaiti laboratory assistant

In this course, instruction is given by direct methods, using a phonetic system of transliteration advised by the School of Oriental and African Studies (University of London). The Company's instructional staff have prepared a special handbook of Kuwaiti Arabic. Gramophone records of colloquial Arabic are played in the classes and students are also encouraged to make use of tape recorders to hear their own voices, and improve their accent.

There is also a voluntary course in written Arabic for those who show a special aptitude for the language. The most promising students attend advanced Arabic courses at the Middle East Centre of Arabic Studies at Schemlan in Lebanon.

In response to a demand from Arab employees, English language classes are conducted in the Language Centre and other accommodation areas, and are becoming increasingly popular.

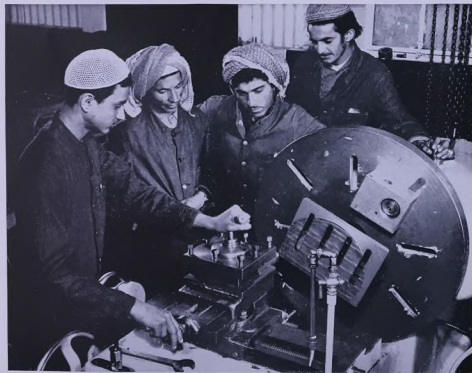


A Kuwaiti bulldozer driver



Kuwaiti students at work in the Technical Training Centre, Magwa

Kuwaiti students learning to operate a lathe in the Technical Training Centre, Magwa



DISPLAY CENTRE

In 1956, a Display Centre was opened in Ahmadi for the use of visitors and employees interested in learning about the Company's operations. The Centre contains photographs and models illustrating the technical side of the Company's activities, and also a small lecture room where oil films can be shown. This is proving a very popular asset, and the many visitors include parties of pupils from the State Schools, Government officials and journalists.

TOWN OFFICE

In order to facilitate commercial and governmental relations with Kuwait State Departments at all levels, and also with the commercial community in Kuwait, the Company opened a centre in Kuwait Town in 1955, with offices for the staff who handle the Company's government, commercial and press relations. This centre keeps in close touch with State developments and does all that is possible to foster the Company's integration into the local background and to issue accurate information about the Company's activities.

The first house occupied by Kuwait Oil Company in Kuwait Town



Part III THE NEW KUWAIT

THE STATE TO-DAY

BORDERED on the east by the waters of the Gulf, on the north and west by Iraq, and on the south by Sa'udi Arabia and a "Neutral Zone," the State of Kuwait has an area of approximately 6,000 square miles, which is roughly the size of Wales or the State of New Jersey. From the coast, the desert terrain rises in gentle undulations until it reaches the depression of the Wadi al Batin, which forms the western boundary. The highest points in the state, found in the south-west corner, are some 900 feet above sea level. Occasionally the skyline is broken by isolated hillocks, the highest of which stands no more than 150 feet above the surrounding desert.

To a visitor arriving in Kuwait by air during the summer, the region presents a picture of Nature in her severest mood, for the desert appears to be—and is—almost entirely unrelieved by any form of vegetation. How, he may ask himself, could plant life exist at all in such scorching heat and arid conditions? But between late October and early March, when rain falls at intervals, the desert is transformed. If good rains are experienced, grazing

The old harbour, Kuwait



The market, Kuwait Town

for Beduin flocks and herds is plentiful, flowers and plants in great variety make their appearance, and in the spring truffles and even mushrooms can be found.

Kuwait is more fortunate than other parts of the Gulf in its climate. The intense humidity which is experienced elsewhere only occurs in Kuwait for a few weeks in the year, usually in August and September. Between November and April the climate is pleasant, with cool nights and warm sunny days. In December and January night temperatures are low, occasionally touching freezing point, and artificial heating is frequently necessary in the houses. In the hottest period of July and August, the maximum day temperatures usually exceed 110° Fahrenheit and 120° is sometimes reached. The prevailing north wind or "shimal" is welcomed in the summer as a cooling breeze, but is also regarded with apprehension since it is often strong enough to cause severe sandstorms. These sandstorms can reduce visibility to a few feet and are as great a menace to shipping

and other forms of transport as are the thick fogs of the industrial West. In spite of extremes of temperature, Kuwait is not unhealthy, for the dryness of the climate and scarcity of water combine to form an effective barrier against malaria and other diseases prevalent in the East.

The State's principal geographical feature is its spacious bay, whose sheltered waters have in the past given Kuwait its livelihood. For generations its shores have been the scene of intense activity in trade, boat building, the repair of sails and fishing nets and preparations for the pearling season. The channel to the north-west of Ras al 'Arhd is deep enough for

A shop in Kuwait market





ocean-going vessels, and in recent years it has been a common sight to see as many as ten such ships anchored off Kuwait with materials and machinery for State developments.

The population of Kuwait has much increased since 1946, and is now estimated at some 250,000 persons, of whom probably about 180,000 reside in the capital town or its suburbs. The large majority of the inhabitants have their origin in the tribes of Nejd. Proud, courteous, dignified and intensely individualistic, the Arabs of Kuwait possess a high code of honour, and an astuteness and acumen in commercial affairs which has been one of the country's greatest assets. The minority communities include the "Baharna" who are skilled in

Selling a falcon



The main square in Kuwait Town (Al Safa'at)



In a Kuwait merchant's office

shipbuilding and who came originally from Bahrain, and a Persian community. There are also smaller numbers of Palestinians, Indians and Pakistanis, many of whom are employed by the Government and the oil company. Since the discovery of oil, Kuwait has been converted into a modern town and in size and importance now ranks among the half-dozen leading cities of the Middle East.

Outside the town, the settled population is confined to villages along the coastline where the principal occupation is fishing. The Beduin, whose traditional grazing or summer camping grounds bring them to Kuwait, are from sections of the Ajman, Muntafiq, Mutair, Bani Harb, Bani Khalid, Utub and other Arabian tribes. The laws of the desert, rather than international frontiers, govern the movements of these hardy people, who are tent-dwelling nomads occupied in herding camels and sheep.

Like coastal towns all over the world, Kuwait Town has grown up beside the harbour and round the central market square. The main street, which runs from east to west, has been widened to accommodate an ever-increasing flow of motor vehicles, and traffic control points have been established at the main crossroads. A road along the seafront gives access to the old harbour, shipyards, Customs offices and warehouses. Many of the winding

A sergeant in the
Kuwait Security force



streets which lead from this road to the market place are roofed as a protection against the heat of the sun in summer and are lined with shops. Round the landward perimeter of the town runs a fourteen-foot wall, four miles in length, built in Shaikh Salim's day as a protection against attacks by fierce Wahhabi zealots from Sa'udi Arabia.

The older houses in Kuwait are of simple but pleasing character, the walls built of coral taken from reefs in the bay, laced with cement or sun-dried mud, and finished with a plaster made from burnt limestone. Poles procured from India to support the roof are covered with a datefrond or reed matting over which is laid plaster and a thick covering of mud. The flat roofs serve as sitting and sleeping places during summer evenings and nights, and in the winter as catchment areas for rainwater, which is stored in underground tanks. The rooms of the houses are invariably arranged to face upon a courtyard, in one of the walls of which is a sturdy door which forms the single entrance. The doors of these houses are a product of the great tradition of wood-carving and carpentry associated with the ship-building industry. They are handsomely carved from teak and have frequently outlasted the rest of the house. Modern developments using brick and steel frames have practically superseded the traditional building methods.

The Arab inhabitants of Kuwait belong mainly to the Sunni sect of Islam, and incline to the more austere and puritanical forms of their religion.

Along the main streets many new buildings of imposing design have recently been

The Amiry State Hospital



Headquarters of
Public Security,
Kuwait Town



constructed by the State to provide improved accommodation for Government offices, schools, medical services and the Police. But still one of the most distinctive buildings from the architectural point of view is the old town palace situated on the sea-front, which was in its glory at the time of the famous Shaikh Mubarak al Sabah.

RECENT DEVELOPMENTS IN KUWAIT

Kuwait to-day is a prosperous and thriving territory under the wise and progressive government of its Ruler, Shaikh Sir Abdulla al Salim al Sabah. The Ruler's policy is to devote a major part of the large revenues accruing from the production of oil to the social and economic development of the territory along modern lines, while at the same time preserving the traditional Arab and Muslim character of the community. The Government is conducted according to Arab traditions. The Ruler appoints the heads of the State Departments and directs the administration of the territory and the disposal of the revenues for the needs of the State. The Ruler also supervises the financial arrangements under which the oil companies operate the Concessions held by Kuwait Oil Company and the American Independent Oil Company for the production of oil in Kuwait and the Neutral Zone (where Kuwait enjoys an equal share with Sa'udi Arabia).

The importance of Kuwait as an oil producing State has led to a transformation of the territory in recent years and the following notes aim at giving some account of the new developments which are taking place in the educational, medical, industrial and town-planning fields.

A street in Kuwait Town



The government is organised along the following lines. At the apex is a Council of State, comprising members of the Sabah family, which acts as an advisory body to the Ruler for the general conduct of the affairs of State. The government is organised into administrative departments as follows:—

Awkaf (Moslem endowments)	Municipality
Civil Aviation	Orphans
Customs	Personnel
Education	Police
Electricity	Port
Finance	Press and Printing
Health	Public Security
Housing	Public Works
Justice	Social Affairs
Lands Registration	Telegraph and Telephone
Law Courts	Water

In addition, there is a Development Board to superintend the extensive development programme which will take some years more to complete. As occasion demands, new departments are formed, the latest one being the Department of Civil Aviation formed in 1956 to operate Kuwait's airport which was recently taken over by the State.

Each department is under the supervision of a President, who is usually a senior member of the Sabah family, with a Director, who is a senior civil servant, for the administration of the department. The number of classified government officials is about 1,800 and in addition, there is a large unclassified staff filling subordinate posts.

Aerial view of the State Secondary School, Shuwaikh



The development programme includes a very comprehensive list of new public utility projects, some of which have been completed, others are still in progress, and again a further number have not yet started.

It is only possible to enumerate a few of the developments in the fields of education, public health and public utilities. The first need was to provide a comprehensive system of first-class schools so that the best education would be available to all children in the territory entirely free of charge. First and foremost must be mentioned the Secondary School at Shuwaikh, on the shores of Kuwait Bay, which comprises the finest group of buildings in the territory. This school when complete, will accommodate 1,200 pupils, all boarders, and is designed to become ultimately the University of Kuwait. The buildings occupy a fine position in spacious grounds over 100 acres in extent. The main block contains classrooms, offices and a fine assembly hall of imposing dimensions. Subsidiary blocks contain science laboratories, dining hall, gymnasia, library and study rooms. There are six large boarding houses each accommodating 200 students. To the east of the school buildings proper are some fifty fine bungalows with gardens for the accommodation of the staff. To the south is a beautiful mosque. In the grounds large playing fields surround a central stadium and a large swimming bath.

In Kuwait Town, there are many fine Primary and Intermediate Schools of modern

The State Secondary School, Shuwaikh



design and excellent construction, with facilities similar to the Secondary School. The classrooms are light and spacious with mosaic walls, coloured tile floors and glass walls.

No expense has been spared in the construction of Kindergarten Schools for boys and girls in the pre-Primary stage.

There are in all fifty-five State schools, of which twenty-seven are boys' schools, twenty girls' schools, four mixed (kindergarten) and four schools overseas. At the present rate of development, the aim of comprehensive education for all children will soon be achieved. Teachers, men and women, now number over 1,000, consisting of teachers imported from other Arab territories, mainly Palestine and Egypt. The number of students is nearly 20,000, of whom over one half are boys.

Mention should also be made of the magnificent Technical College at Shuwaikh which is designed to provide training for 600 students in engineering and other technical skills. Other schools maintained by the State include a religious institute with 500 students, an evening commercial school and schools in Bombay, Karachi, Sharjah and Ras al Khaima. There are also about 130 Kuwaiti students at Universities and Colleges in other countries.

The Boy Scout movement flourishes in Kuwait, and in 1955 a party of Scouts attended an International Jamboree in Canada.

Main gateway to the State Secondary School, Shuwaikh



Turning to Public Health, it is the aim to provide first-class medical treatment for the whole population free of charge. In addition to the Amiry Hospital on the sea-front in Kuwait, which was built in the reign of Shaikh Ahmad al Jabir, there is a new general hospital at Sulaibikhat, five miles west of Kuwait, opened in 1954. Another general hospital, with 750 beds, is being built in the same neighbourhood, and a fine tuberculosis hospital on the coast, west of Shuwaikh. There are also medical clinics at six rural centres in the territory. The Health department is staffed by Arab and British doctors and Arab nurses, the policy being to employ non-Arabs only where a suitable Arab cannot be obtained.

Among the public utility projects, pride of place must be given to the sea water distillation plant which is the biggest in the world. This fine project is designed for an eventual output of five million gallons of drinking water a day. To date, the first two sections have been completed providing two million gallons a day. The plant is powered by gas-fired boilers and steam-driven turbines, thereby keeping the running costs at an economical level. Natural gas for this purpose is piped from the oilfields 25 miles away.

After distillation, the water is diluted with ten per cent. brackish water to give it body and taste, and it is then chlorinated and filtered to free it from marine organisms. The distribution

The Assembly Hall, State Secondary School, Shuwaikh



The Technical school, Shuwaikh

General view of a primary school in Kuwait





Children at one of the Kindergarten schools in Kuwait

system includes three ground reservoirs, each of three million gallons capacity, adjoining the main plant, from where the water is pumped to high level towers that ensure an even pressure all over the town. Tanks for brackish water are also incorporated in the water towers.

Brackish water for domestic and irrigation purposes is obtained from natural wells at Sulaibiya some 20 miles from Kuwait, which at present supply about 200,000 gallons a day. A water survey of the territory has been made by Kuwait Oil Company, and brackish wells bored at different places provide the needs of the Beduin and their herds.

A scheme is under consideration for bringing water from the Shatt al Arab at Basra, about 100 miles in a direct line from Kuwait.

At the outset of the development programme, the Ruler directed that Kuwait should be converted into the finest city in the Middle East, with the best possible living conditions for all classes of the population. Town-planning consultants were engaged to draw up a plan to convert Kuwait into a model town. The plan includes the redevelopment of the central area within the city walls to provide broad arterial and perimeter thoroughfares and spacious sites for the main government offices. It also includes the replanning of the market and commercial areas to enable these to cope with the town's increasing business

needs. This plan is gradually taking shape; broad thoroughfares are replacing the old narrow streets, which involves much demolition of old buildings. To rehouse the population thus displaced, the town is being expanded beyond the walls by the development of eight neighbourhood units, each of 6,000 population, and each self-contained, with its own shopping centre, light industries, schools, mosques and recreation grounds. The construction



Class in progress at a commercial school in Kuwait

of houses both by the Government and by private enterprise, is proceeding apace, along avenues radiating from the main roads.

The scale on which paved roads with double-carriageways are being constructed, is most impressive. These include a new main road *via* Jahra to the Iraq frontier, and a coastal road from the east side of the town connecting Kuwait with the oil port of Mina al Ahmadi, which is nearing completion.

The provision of an adequate supply of electric power, both for commercial and domestic consumption, was one of the earliest projects of the development programme. The first main power station in the industrial zone at Kuwait was completed in 1955. The plant consists of four turbine alternators of 7½ megawatts each, giving a total capacity of 30 megawatts. The normal output is 22½ megawatts with one set in reserve as a standby. A tender for a second main power station to contain four sets each of 10 megawatts has recently been awarded.

The electricity system is at present confined to the city of Kuwait, and the suburbs of

Aerial view of the Shuwaikh Industrial Zone



New house, Kuwait Town

Shuwaikh and Jiwan, but the new station will enable electricity to be supplied to all the surrounding villages including Salamiya and Hawalli, and thereafter southwards along the coast to the villages of Fantas and Fahahil.

Considerable progress has also been made in the provision of overhead street lighting of the latest design, and the town and environs of Kuwait now present a well-illuminated appearance at night.

Among other projects which have been planned are the dredging of the new harbour at Shuwaikh, and the construction of further alongside quay space. Other projects envisaged include a new airport on the Magwa Road about seven miles south of Kuwait.

Although it is very noticeable in Kuwait that education and social welfare take precedence over military expenditure, mention must be made of the well trained and well equipped Security Force which carries out the function of patrolling the frontiers and maintaining peace and order in the territory. This Force is equipped with armoured cars and Bren carriers.



General view of a new housing estate, Kuwait Town

In the town of Kuwait, law and order is maintained by a large Police Force known as the Sharta which, in addition to patrolling the town and investigating crime, has an efficient and highly mobile traffic wing to cope with the problems caused by the circulation of 15,000 motor vehicles in a comparatively small area. The increase in the number of high-powered motor cars largely of American manufacture, is a noticeable feature.

Nobody can fail to be impressed by the careful lines on which the town is being developed, and the signs of prosperity and progress which characterise it.

Efforts are being made to create local industries, to develop agriculture under irrigation, and to stimulate commerce by sea and air.

The past history of Kuwait has been mainly bound up with the sea and, thanks to its good situation, Kuwait should remain a busy commercial port in the future. The oil revenues are steadily increasing and this fact, together with the well known enterprise of the Kuwaitis, should ensure the future prosperity of the territory.



Two views of the Water Distillation Unit and State Power Station, Shuwaikh



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