

## Black Gold Part 2: War and Peace

By Gérard A. Besson

*Ten years after the Wright Brothers had made their first motor flight, Frank Boland alighted on the Queen's Park Savannah with his little bi-plane in January 1913*

**B**ecause of Trinidad's oil, and because of the refineries' capacity to produce gasoline and later aviation fuel, Trinidad attracted the intrepid globe-hopping flyers from a very early stage of that adventure. The magnificent men in their flying machines – from the start of aviation, Trinidad was a part of it. Plenty fuel, fine weather, an ever-curious populace – all conditions were optimal for flying demonstrations!

An American called Frank Boland was the first. Ten years after the Wright Brothers had made their first motor flight, Boland alighted on the Queen's Park Savannah with his little bi-plane in January 1913. A demonstration was scheduled for the 23rd, and hundreds of Trinidadians came out in their Sunday best, the ladies in long skirts, carrying parasols, and the men in elegant hats. Boland took off and most of the spectators saw the wonder of a flying machine in action for the first time! A few minutes later, however, tragedy struck. When Boland attempted to land near the north western end of the Savannah, where the 'Magnificent Seven' stood in brand-new splendour (mansions built by wealthy cocoa planters in the 1900s), he lost control of his plane in wind turbulence and



Governor Sir John Chancellor KCMG: *The powers that be, 1939*

crashed into the ground. He died instantly and left the watching crowd in shock.

Trinidad, situated at the southern end of the Caribbean chain of islands, was on the north-south route of the aviation pioneers, who in wintertime took to warmer climes for their flying demonstrations. Hopping from island to island in their minuscule wooden planes, avoiding mountainous islands like St Lucia because there was no safe landing there, these

dare-devil personalities approached flying like circus artistes, touring the world and making money with their novelty showcase.

A month after Boland's tragic death, Trinidadians were able to witness a more successful flying demonstration: W. Schmidt from the USA droned with his 'Red Devil' over the expectantly upturned faces in the Savannah below and landed safely afterwards.

Undoubtedly, there must have been some boys in the crowd who were bitten by the 'flying bug'. When World War I broke out a year afterwards, several youngsters lost no time in enlisting in the British Army, and several of them distinguished themselves in the world

*The first aeroplane to land in Trinidad and Tobago: The aviator Frank Boland makes his approach*



of aviation afterwards.

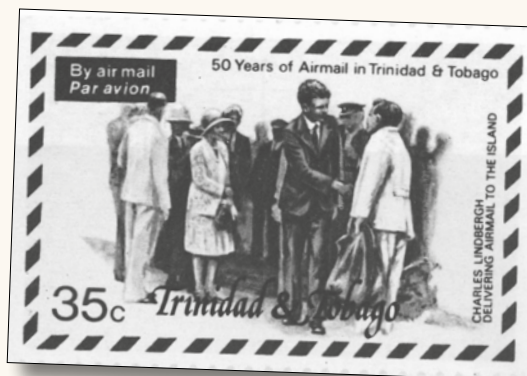
A Tobagonian, Charles M. Pickthorne, for example, qualified as a pilot and shot down the 'Red Baron', German legendary flying ace Friedrich Karl von Preußen. Sangre Grande-born Edmund R. Lickfold flew BE2c type aircraft, fighting German columns over East Africa, and later became a flying instructor in Egypt and an 'aerobatic' pilot. He was also the one who taught our legendary pilot Mikey Cipriani.

With so many sons of the colony involved in the air war, Trinidadians and Tobagonians raised enough money to buy several planes for the RAF: a BE2c which was emblazoned with 'Trinidad and Tobago Aeroplane' and put to service in India, and an FE2b bomber, labelled 'Trinidad' at the cockpit, which was flown in Europe. The Trinidad and Tobago Chamber of Commerce bought two FE2b and three RE8 type aircrafts, all of which carried the name of the country with them into the battle of the skies. The first Trinidadian ever to be killed in an aircraft crash was Frank Vernon Bonyon from San Fernando, whose plane crashed in thick fog while he was flying a mission during the First World War in Belgium.

All in all, 84 Trinidadian and Tobagonian men became involved in aviation between 1914-18. Four of the local war pilots stayed on in military aviation afterwards: Frank Rooks, Horace Brown, Eric Hobson and Claude Vincent, who attained the rank of Air Vice Marshal by the end of the Second World War, serving the British Empire as far afield as Iraq, Somaliland and Afghanistan.

The adrenalin-packed war action, the leather helmets and long leather coats, the oil-splashed

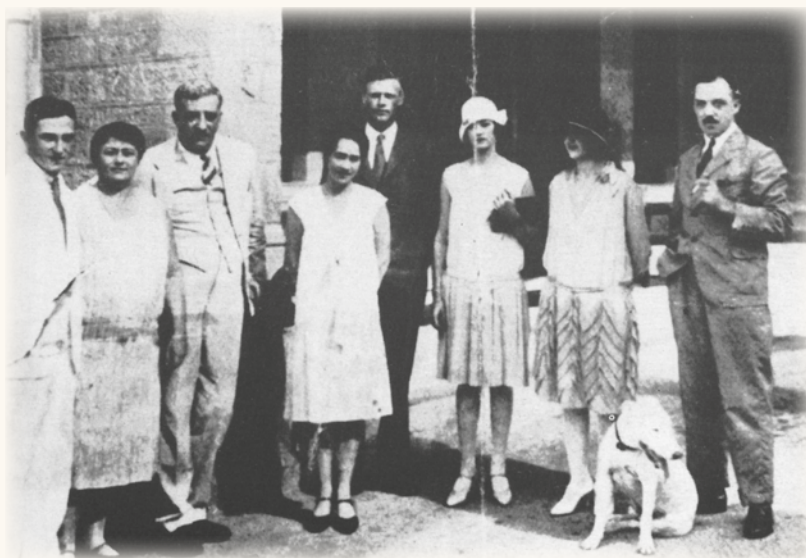
*An envelope commemorating the inauguration of the air mail service in 1929. Colonel Charles Lindbergh hands the mailbag to the Postmaster General, Mr Littlepage. A.J.V. de Boissière, ADC, is on the left, with Mrs Lindbergh in the centre*



goggles and the smell of gasoline in the open cockpits: the flying bug was to stay with many of these young pilots forever. Some of the survivors went on to become technicians for aeroplanes, some moved on to become flying instructors, and a few remained as pilots when the era of civil aviation began.

After the war ended, aviation came to a standstill in Trinidad. Nobody had any particular interest in it. About once a year or so planes came on infrequent visits to the island. The interest in aviation was only re-kindled in 1927, when Charles Lindbergh made the first non-stop transatlantic flight ever. Two years later, the same Lindbergh was sent by PanAm airlines (also formed in 1927) to explore the possibilities of putting Trinidad on their map of ►

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*Lindbergh's party at Government House, Port of Spain. L-R: A.J.V. de Boissière, Sir Selwyn and Lady Grier, Colonel and Mrs Lindbergh, Joan Alcazar, Mrs J.W. Pocock and the Director of Petroleum and Mines. Lindbergh afterwards took the entire party on a flight over the coast of Venezuela and the Gulf of Paria*

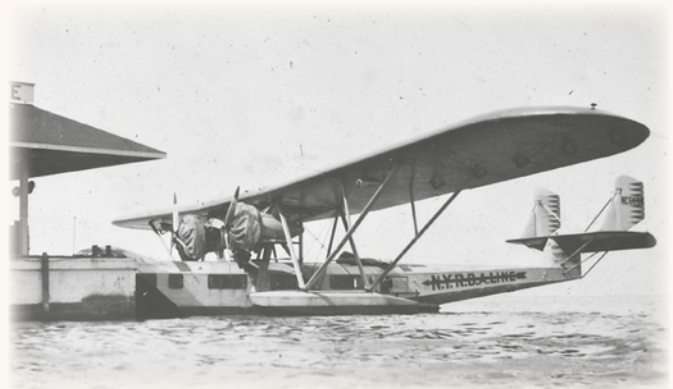


*Chaguaramas was chosen as the ideal site for the 'flying boats.' On 22nd September 1929, the crowd lined five miles of the Chaguaramas waterfront to see the world-famous Lindbergh! He personally handed over the first bag of mail to the Postmaster General*

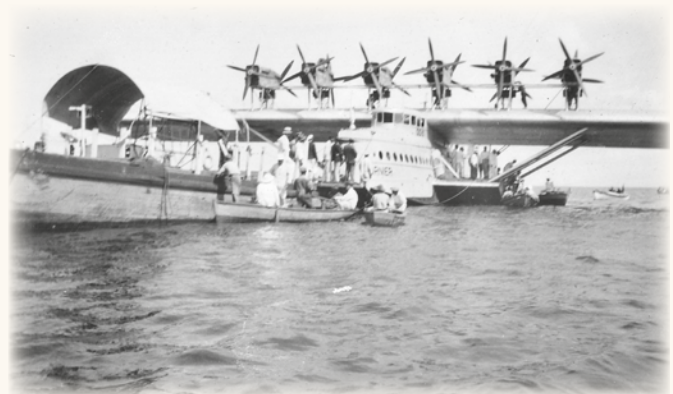
► destinations. In July of 1929, a PanAm survey team landed off San Fernando to look into the feasibility of a service to British Guiana, and Chaguaramas was chosen as the ideal site for the 'flying boats' (amphibious planes that can start and land on water). On 22nd September 1929, the crowd lined five miles of the Chaguaramas waterfront to see the world-famous Lindbergh! He personally handed over the first bag of mail to the Postmaster General, B.B. Littlepage, and thus inaugurated the era of air mail service to our country. The remains of the jetty for the sea-planes are still visible in the sea behind the Bayside apartment towers at Cocorite.

In May 1930, PanAm's competitor airline, New York Rio Buenos Aires Lines (NYRBA), was the first to land in Tobago. The plane was called 'Port of Spain', and it landed in the bay off Plymouth. NYRBA started to carve out a niche for itself in inter-island excursion traffic, but when the much larger PanAm became aware of this, they bought out the small airline and serviced those destinations themselves.

With so much water around, it was only natural that PanAm exclusively used amphibious planes to service the Caribbean. The government, however, was anxious to link Trinidad to land plane traffic. In 1930, the Piarco Savannah was chosen to build an airstrip for land planes. Previously, the land plane pilots had used the Queen's Park Savannah, but the winds there proved treacherous and the mountains too close for comfort. On 8th January 1931, the first plane touched down at Piarco, registered by the French Compagnie Générale Aéropostale, which later



*"Just fill her up, we are flying down to Rio via Maracaibo this afternoon"*



*The DOX at Port of Spain harbour, August 1930*



*The Cocorite facility for seaplanes with its long jetty and slipway for amphibious planes, 'flying boats', as they were called*

became the Línea Aeropostal Venezolana.

The first Trinidadians to ever own a plane were Edmund Lickfold and Mikey Cipriani. Their de Havilland Moth airplane was first tried out on the 19th September 1931, and was christened 'Humming Bird'. Cipriani and Lickfold did hundreds of joy-flights for passengers who were curious to see parts of Trinidad from above, and they gave flying lessons at Piarco. Mikey and his plane became a familiar sight for Trinidadians, inspiring the imagination of little boys who, upon sighting the 'Humming Bird', instantly turned into courageous pilots, flying paper planes and roaring through the clouds in respectable drawing rooms.

From 1932 onwards, the 'Humming Bird' also flew to other Caribbean islands. Tobago, however, had no suitable airstrip for Cipriani to land. On the 3rd June 1934, Mikey decided to try Shirvan Park as a suitable landing field in Tobago. In bad weather, he lost his way in the Northern Range and crashed in the forest of El Chiquero.

### **The early pioneers**

**It was a heroic time, these first decades of the oil industry in Trinidad.** It was here, along with a handful of other places scattered around the world, that the industry was formulating itself.

There was about it a sense of innocence that may exist at all beginnings, a random arbitrariness that was driven by instinct, underpinned by the sciences of the day. All this was ongoingly supplemented by innovation, indeed invention, and a lot of wishful thinking, the true mother of free enterprise.

There are a few names of

men, and of the firms that they created, which must always be invoked when this marvellous period is remembered, as their shades still hover, sustained by the far-reaching effect of their aspirations and their deeds:

E.H. Cunningham Craig, Trinidad's Government Geologist, 1903-07. Arthur Beeby Thompson, geologist and engineer, who started the development of Guapo, now Point Fortin, in 1907. John Cadman, Government Inspector of Mines, Trinidad, 1904-07. The 'local' surveyor, Mr Gilkes. The scientists, Dr Hans Kugler and Professor Urich. The visionaries, risk takers, investors, Hon Charles Warner, Oskar Maresceaux, and T.A. Finlayson. We name a very few, and beg forgiveness of those not called, but their endeavour has served to enrich and indeed to make a future beyond imagining.

P.E.T. O'Connor, from whom we heard earlier, was born in 1899 into a family of Irish and French descent long resident in the colony. He recounts in his memoirs his early youth in Manzanilla and remembers these early pioneers: "Before I went off to school in Ireland, those early oil pioneers John Cadman, Arthur Beeby Thompson and E.H. Cunningham Craig had been frequent visitors to ►

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Government Geologist, E.H. Cunningham Craig (on buggy) with TLL Manager H. Korkhaus, 1913

*John Cadman, later Baron Cadman, had been Professor of Mining at the University of Birmingham when he came to Trinidad to advise the colonial government on its future oil policy*

► our estate as they combed the island in search of oil. I was enthralled by their tales of far-off lands and gushing oil wells and by their enthusiasm at the future prospects of oil in Trinidad.” With the help of John Cadman he would later be accepted at the University of Birmingham. Cadman, later Baron Cadman, had been Professor of Mining at the University of Birmingham when he came to Trinidad to advise the colonial government on its future oil policy. As a mining engineer, Cadman had recognised the need for specialist engineers in the young and growing oil industry and had established his school of petroleum as an ‘adjunct’ to his Faculty of Mining at Birmingham. P.E.T. O’Connor was one of the early graduates of that school and the first Trinidadian graduate to enter the infant Trinidad oil industry. Both he and his brother Connor O’Connor, who was also an engineer and invented valves that still carry his patent, worked in the industry for some 50 years. P.E.T. O’Connor writes in his memoir *Some Trinidad Yesterdays* that his role as the first ‘local’ university graduate in Kern oilfields, where he began working after he had graduated in 1923, was somewhat vague, and his description of being a ‘jack of all trades’ illustrates the various skills required in those early oilfield days: “I was Geologist when I spent hours collecting cuttings from the well as the drill neared the depth at which I had hopefully predicted an oil sand and thrilled at that first smell of oil which heralded success. I was Chemist when I sampled a tank and took it to the refinery at Point Fortin for analysis. I was Civil Engineer when I surveyed the route for a new road or pipeline through the forest. I was Leasehound when the Chinese shop keeper in the village suggested that my credit might be enhanced if I would persuade the company to lease his friend’s ten acre parcel.”

Of the 150 or so oil companies that were registered in the first decades of the 20th century, only about a dozen remained active and achieved commercial successes by the 1950s. These companies, such as Trinidad Lake Petroleum, United British Oilfields

of Trinidad, Trinidad Central Oilfields, Trinidad Leaseholds, Apex (Trinidad) Oilfields, Trinidad Petroleum Development Company, Kern (Trinidad) Oilfields and Trinidad Oilfields Operating Company, were led by outstanding individuals, engineers, drillers and entrepreneurs who were the driving forces behind the advancement of the oil sector in this country, in fact the world, in the early 20th century. Here we remember the six major producers of the oil in the first 30 years of the industry in Trinidad and some of the men who pioneered the industry in the early years.

**Trinidad Lake Petroleum Company (TLP)** could be regarded as the doyen organisation of the industry in Trinidad. It was a subsidiary of the Barber Asphalt Corporation and was primarily involved in the exploitation and export of asphalt from the Pitch Lake. Originally, it exploited its freeholds for oil, but after 1920, it invariably leased its lands for development by other companies.

Brighton, situated at good anchorage on the coast near the Pitch Lake, was its headquarters. The Brighton Pier, as well as its oil storage of 150,000 barrels in the 1950s, afforded excellent loading facilities and was in continuous use from 1912.

The names of early managers and senior officials include W.D. Fowler, McPherson, Weller and Paul Munoz and its popular manager Vandenburg.

**United British Oilfields of Trinidad (UBOT)**, a branch of the worldwide Shell organisation, took over the properties of Trinidad Oilfields in 1913. Most of the production came from the Parrylands and Point Fortin fields, which were discovered and originally produced by the Trinidad Petroleum Company.

K.P. Ingram and later T.L. Scott were early managers of Trinidad Oilfields. The first refinery in the island was erected at Point Fortin in 1912. Refining operations on an extensive scale were to continue there for many years. The capacity of the refinery was always in excess of company production, and TPD, Kern (Trinidad) Oilfields



and other foreign companies provided additional crude supplies.

The high-pressure sands that were found in the Point Fortin and Parrylands fields presented considerable technical difficulties to normal exploitation. The use of heavy muds and electrical surveys eventually solved these problems. From 1936 to 1940, new fields were opened at Penal, Erin, Guapo and Barrackpore, as well as considerable new production at Los Bajos and Point Fortin. Between 1938 and 1944, production varied from 730-790,000 tonnes per annum. As a member of Shell, UBOT had one of the strongest financial and most progressive technical backgrounds, making it one of the most influential organisations in the Trinidad oil industry.

One of UBOT's earliest managers was George Bailward, and another H.D. Fleming, directed the company from the First World War until the Great Depression of 1931, he was followed by Colonel Tanner. Van Zeulen was one of its best-known field superintendents.

**Trinidad Central Oilfields** was formed in 1911 and had its headquarters in Tabaquite. The company was founded by Alexander Duckham who was associated with the industry from its inception until his death in 1945.

Duckham's firm was involved in the manufacture of lubricating oils. As his interest in the overall oil

industry grew, its wider implications were brought to his attention by First Sea Lord John Arbuthnot Fisher, who expressed his uneasiness about the lack of oil produced by the British Empire. As the US, Russia, Romania and the Dutch East Indies were practically the only sources of supply, it was potentially a hazardous situation from the British naval point of view in the event of hostilities breaking out. Duckham sent a geologist to Barbados in 1905, who cabled him that "Barbados was a wash out". In reply, Duckham cabled: "Have heard there is pitch in Trinidad, examine and report". This report led to Winston Churchill's historic decision to change the firing of His Majesty's ocean-going battle fleets from coal to oil.

**Trinidad Leaseholds Ltd** was founded in 1913, with Mr H. Korkhaus as its first manager in Trinidad. He was succeeded by H.S. Fuller at the outbreak of the war with Germany, who was followed by Mr R. Beaumont. He was aided by outstanding engineers like A.W. Ibbet and H.C.W. Johnston. Their initiative and foresight were largely responsible for the construction of the refinery, storage and landing facilities at Pointe-a-Pierre. Its production was mainly available in those years from the development of the Forest Reserve, Apex, Barrackpore and Guayaguayare Fields. These last two had been Randolph Rust's concessions. This body of work included the construction of ►

*As a mining engineer, Cadman had recognised the need for specialist engineers in the young and growing oil industry and had established his school of petroleum as an 'adjunct' to his Faculty of Mining at Birmingham*



*One of the many refineries that were built in the south of the island during the 1920s. Quite a few were left to rust in the forest that quickly returned*

*The oilfields of the 1920s were still considered 'fever holes' from which few returned alive' by many, even though yellow fever had been largely eliminated*

► 26-mile 6-inch pipeline from Forest Reserve to the refinery at Pointe-a-Pierre, which over the next few years would include a pipeline system of 12-inch, 8-inch and 6-inch connections from the above named fields to the refinery and its facilities.

The Venezuelan Oil Exploration Company was acquired, which afforded the company additional production from Barrackpore as well as more land at Pointe-a-Pierre. This was essential for improved storage and refinery facilities. Trinidad Leaseholds at Pointe-a-Pierre became the largest producing and refining company in Trinidad. In 1938, these facilities were comparable to any in the world.

**Apex (Trinidad) Oilfields Ltd** was registered in 1919. It developed a few hundred acres of cocoa estates adjacent to the Forest Reserve concession, operated by Leaseholds Ltd. Its first General Manager, Colonel H.C.B. Hickling, ran a successful operation from 1919-37, leaving a prosperous, well-organised oilfield.

The concession comprised proven and very rich oil lands, which were freehold, consequently most of the production was exempt from royalty. Having no outside fields, the company confined itself to the production of oil. The company was fortunate to have Paul Tilbury in charge of drilling and in control of high-pressure wells and the expertise of Dr Kugler as its first geologist.

The success of this company was due to the sound and practical technical policy and economical local control initiated under the enterprising direction of Colonel Hickling, who was also able to give valuable service to Trinidad and Tobago as a member of the Legislative Council.

**Kern (Trinidad) Oilfields** was a subsidiary of Kern Oil Company, which had considerable interest in California. It acquired Perseverance Estate from C.C. Stollmeyer in 1919. Stollmeyer, some years prior to selling to Kern in circa 1912, had erected a second hand percussion rig on the far end of this estate and there, and "with quaint antediluvian tools" at the

depth of only 250 feet, had struck one of the most spectacular gushers in the early history of Trinidad's oil. Beeby Thompson describes this in his book, *Oil Pioneer*, "... a rich oil sand was unexpectedly struck and such a violent and sustained outburst of heavy oil followed that the immediate vicinity became flooded with oil... unprovided with any means of control, my colleague C.E. Buch offered Stollmeyer to shut in the well, but Stollmeyer declined assistance saying that he did not intend to interfere with the actions of nature. Consequently most of the oil was lost." Some 80,000 barrels of oil, it is reckoned, as the well flowed at 500 barrels a day for some time. Other estates were purchased from private owners or leased from the Crown. Kern's first manager was Mr Stokes, who was succeeded by Mr Ruthven Murry in 1928. W.F. Penny remarks in his paper on Trinidad oil that up to 1938, profits from the Kern Trinidad venture were only £49,995 and observed that such results by a long-established and successful company should remind optimists of the inescapable hazards of oilfield development.

**Trinidad Petroleum Development Company** was registered in 1918 and from 1920 had its headquarters at Palmiste on Sir Norman Lamont's estate. In 1927 it moved to Palo Seco, where its original interests were located, as well as on the Oropouche lagoon. Its first manager was Mr G. Kemsley. The first well at Palo Seco was drilled in 1926, with new fields coming into existence at Los Bajos in 1930, and Quarry and Coora in 1938. Trinidad Petroleum Development Company drilled at considerable depth for the times, for example at Palo Seco in 1935 to 7,610 feet, at Coora in 1945 to 7,590 feet, at Los Bajos in 1946 to 8,011 feet, at Quarry in the same year to 7,800 feet. Their methodical approach and deep drilling made the company one of the most consistent producers in Trinidad.

The technology that these companies employed to strike 'black gold' in the 1920s and '30s was a far cry from the gleaming tanks and orderly pipelines that one associates with the industry today. In those early decades, the theories as to the origins of oil and

as to the likelihood where oil might be found were still in their infancy. The chemical analysis of the substance was not far advanced, and the distillation process initially was a straight breakdown of the oil into gasoline, kerosene and fuel oil. An oil well that was deeper than 2,000 feet was considered very deep indeed!

“The transition from cable tool drilling to the rotary method was still in progress,” writes P.E.T. O’Connor. “The combination system was generally installed at every drilling site and the cable tool went with its squat wooden derrick and was left in place on the completion of drilling to service the well in its production stages.”

Oil was pumped out of the well and flowed into large pits that surrounded the site, and there were few labour-saving devices. Generally, the thick forest around a well was cleared by hand with axes, and land and roadways graded with shovels and forks by men (and women!) who were called the ‘Tatoo Gang’ in the local parlance. “The bulldozer has replaced the Tatoo Gang,” writes O’Connor, “but the miles of road through our forests remain as a silent monument to the very special breed of men and their women folk who have passed into oblivion!”

The oilfields of the 1920s were still considered ‘fever holes from which few returned alive’ by many, even though yellow fever had been largely eliminated. However, the fields were remote, often miles away from the next village through dense jungle, and not connected to settlements by proper roads. Telephone service was fraught with problems, and when the radio was invented, it was a major improvement in communications.

Employee safety and environmental concerns were simply not on the agenda of the oil companies, government officials, and only to a degree on that of the workers where it directly affected them. Hard hats or even boots were unknown and the labour force was mostly barefoot. The roughness of the oilfields was proverbial and O’Connor remembers that talk about safety was considered ‘sissy talk’. There was a job to be done and only the toughest of guys could do it, ►



*Drilling by muscle power at Tabaquite, 1928*



*Picture postcards were all the rage in the 1920s. The oilfields of Trinidad were new, novel and original subjects, just great to send home to show what the old man was up to down there in the tropics*

*Employee safety and environmental concerns were simply not on the agenda of the oil companies or government officials. Hard hats or even boots were unknown and the labour force was mostly barefoot*



*The staff on the fields were mainly of British origin, with a large percentage of locally-recruited personnel. An important minority were the drillers, initially of Canadian and Polish descent, who were largely a law unto themselves*

► in 12-hour shifts, being on call 24/7.

The staff on the fields were mainly of British origin, with a large percentage of locally-recruited personnel. In geology and refining, more British experts were available, and there were also many Swiss geologists. An important minority were the drillers, initially of Canadian and Polish descent, who were robust, uneducated types who feared neither God nor man and were largely a law unto themselves. As time went on, more and more drillers with specialist knowledge were recruited from the United States, advising on drilling and production. With the oil industry coming of age, the era of the technologist had begun, and many new developments came from the United States. One of these was that weighting the drilling fluid used in rotary drilling with barytes allowed for better control of the high pressures encountered while drilling through the oil horizons. UBOT brought a complete drilling crew from California in the 1930s to introduce the method to Trinidad, but in spite of the heavy fluid, the first well drilled by them blew out and cost several lives. The tests were continued, however, and the new science of drilling fluids revolutionised the industry in Trinidad and allowed for much deeper wells to be drilled.

The development of the oil industry in Trinidad was in its greatest part implemented by the availability of a population capable of providing

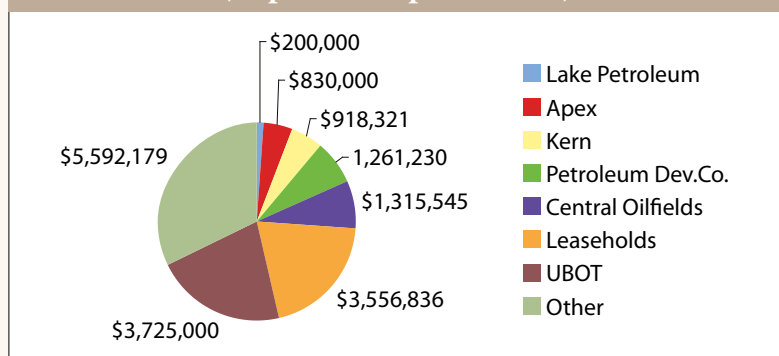
the physical effort and mental capacity. Referring to the Trinidadian population of all racial mixtures, augmented by immigrants from Barbados and other British colonies in the region, Penny and L. Harris write “endowed with good humour and strong sense of loyalty, their outlook and temperament were admirably suited for all kinds of work on the fields and in the refineries.”

The transition from an agricultural economy to an industrial one had its ironies that were not lost on those who experienced it. Oil workers who went out to Guapo, Fyzabad and other areas, were housed in the buildings used by the former cane or cocoa estates, which had been built to accommodate the indentured Indian workers of some 50 or even 60 years before. Some of these had been constructed using material, wood, from the old slave barracks of the 1820s or '30s. These newcomers saw the abandoned sugar mills and boilers, leftovers from the older slave plantation economy, long forgotten relics of other men's ambition, which had been left to rust and to be engulfed by the jungle.

The living quarters in the oil industry for the European staff and the local workers, in the pioneering days, were hardly what you could call comfortable. Those who actually got beds to sleep in could consider themselves lucky! Those who didn't had to rest their weary limbs in hammocks, on blankets on the floor, and on tables. The very fortunate may have commandeered a dilapidated deck chair or planter's chair, and one had to be lucky to find it unoccupied when knocking off one's shift... Pigs and other half-domesticated farm animals roamed the former cocoa estates. As such there were, from time to time, great cook-ups. If a building had mosquito screens, it was considered luxury accommodation. But even then, its furnishing was rudimentary, resembling a monk's cell: iron cot (perhaps), wash basin and pitcher, a potty (sometimes). It was truly a frontier life.

Transport was one of the main problems for oil workers. J. Brackenreed remembers in his memoir, “Transport from San Fernando to Port of Spain was

Major producers among the Trinidad oil companies  
(Capital Receipts 1908-38)



next to nothing. The fields had Model T Fords for their senior personnel, and Mr Arthur Reid in La Brea had a Buick touring car which he hired out, charging \$25 to San Fernando and \$50 to Port of Spain. The only other alternatives were the gulf steamers. On one occasion, returning from Port of Spain, the boat was due at Guapo at dusk, but did not arrive until 11pm. The mule cart which was standing by to carry us and our bags, had already left when we arrived, so there was nothing left but to walk. There were two rivers crossing the beach and the tide was high, so we had to take off our lower garments and carry these and our bags on our shoulders. Have you ever tried doing this with water nearly waist high, on a lovely moonlit night, but with millions of sand flies feeding on the exposed areas?"

There are other stories, like how Amond O'Connor, one pitch black night on his way to a party in town with friends, while driving his beat-up old pick-up truck, saw an alligator (cayman) crossing the road. Well Amond, tough as rocks, got out and grabbed the 'gator by the mouth and threw it in the tray. A few miles on, some locals wanted a ride, so no problem, hop in – that soon turned into hop out! The story goes on to add that the management of the Country Club would not allow the 'gator in because he was not a member, despite the fact that he was wearing a suit and tie...

The price of oil would from this time onwards have a direct effect on the Trinidad and Tobago economy. This being the case, it is interesting to see the actual price fluctuations between its earliest development period to the 1970s:

1860	- \$9.59 /bbl
1861	- \$0.49
1910	- \$0.61
1923	- \$1.34
1930	- \$1.00
1939 to 1945	- between \$1.02 to \$1.21
1955	- \$1.93
1960 - 1970	- around \$1.80

### Times change and the war clouds gather

**The work was very dangerous, it still is**, and requires a kind of élan, of the sort that is sometimes noticed in fighter pilots or deep-sea divers. One of the most spectacular demonstrations of the earth's natural energy that is encountered in the oil industry is the 'blow out', when the drilling mud, generally followed rapidly by oil, gas or water and sometimes sand or pebbles, is violently ejected from the well.

Oil and gas trapped in a porous formation flow to the surface when tapped because they have been held under pressure, the reservoir pressure, higher than that of the atmosphere to which it is opened. Reservoir pressures are the driving force behind blowouts. Abnormally pressured areas are naturally more liable to blowouts, since the forces to be held in check are greater, forces which are quite capable of smashing a derrick, twisting heavy metalwork into fantastic shapes, shooting the drill pipe hundreds of feet vertically into the air and sometimes smothering the area in oil or piles of formation sand. The oil industry in Trinidad is unfortunate in that conditions which merit the title 'abnormal' elsewhere in the world must often be considered normal here. This is particularly true of the reservoir pressures under which oil, gas and water may be confined frequently, at relatively shallow depths. Consequently, preventative measures and safeguards are here of even greater importance than in most 'normal' areas.

Dangerous business. "A remarkable occurrence in 1936 was a blow-out at Well 306 in Barrackpore," write Penny and L. Harris. "A crater was formed which engulfed the derrick and drilling rig, and probing with a 300ft length of tubing, failed to discover any trace of equipment." They go on to remark in their paper that, "It would be tedious and unprofitable to give a chronological account of the many oil-well fires and blowouts which took place at the time. In fact, some of them are not recorded because it was generally accepted that the larger well would come in as a gusher and, if it did not catch fire, would proceed to fill up the surrounding ►

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*Between 1938 and 1940, the first exploration efforts in the Northern Basin of Trinidad, with test wells at Barrancones, Talparo and Montserrat, were not crowned by success, as none of these encountered commercial oil-sands*

► depressions in the land. In cases where foresight had been exercised, such hollows had been transformed into reservoirs by the building of dams. Blowouts were frequent at Parry Lands and Point Fortin, where gas pressures were exceptionally high.”

P.E.T. O'Connor recalls in his memoir *Some Trinidad Yesterdays* one of the more tragic accidents of the early years: “The Dome fire started with the obstinacy of an old Indian land owner. He owned a ten-acre block in the middle of the rich Apex field at Fyzabad. He had once had a dispute with the Company and although the Company had successfully drilled all around him, he had stubbornly refused to lease his land to them. Eventually, a small local company was formed to drill the area and a young Trinidad driller was persuaded to undertake the drilling for a share in the venture. His name was Bob Wade. He somehow assembled a drilling rig to drill the first well. All went well; the well was successfully completed and ‘came in’ with a large flow. Everything seemed to be well under control and Bob Wade left for the club to celebrate his good fortune. As darkness fell, however, a small leak developed in one of the control valves and within hours the well was out of control, spouting oil and gas into the air. The whole surrounding area was covered with oil and the air saturated with gas. The owner and his entire family rushed to the scene, rejoicing no doubt in the thought that they had struck it rich. Bob Wade hurried back from Port of Spain in an attempt to cap the well when the whole area exploded. What remained of Bob Wade was found in his car. He had apparently tried to start his engine so as to focus his headlights on the well head and this had sparked the holocaust. The whole Indian family perished and several workmen.”

O'Connor goes on to relate that the Dome Field was later successfully exploited and was reported to be one of the richest ten-acre blocks ever drilled in Trinidad.

In 1938, the Texas Company who had marketed kerosene in Trinidad in 1912, acquired an interest

in the Canadian company McColl Frontenac's Antilles venture. They were drilling at Vessigny on the old Merrimac holdings. The American Merrimac Oil Company, had had a long presence at La Brea, where their works had shipped ‘several gallons of lube oil’ and where they had a plant for the manufacture of lamp oil in the 1850s. “It is said,” writes oil historian George Higgins, “that Messrs O'Connor were shipping pitch from the sea banks annually to France”. P.E.T. O'Connor joined them there as geologist and then manager in 1937.

Between 1938 and 1940, the first exploration efforts in the Northern Basin of Trinidad, with test wells at Barrancones, Talparo and Montserrat, were not crowned by success, as none of these encountered commercial oil-sands.

To expand the oil industry, marine exploration was the obvious step. Several tentative applications for marine oil rights had been made as early as 1936, but the Trinidad and Tobago government had not yet allotted marine concessions to the various oil companies operating in the island. Notwithstanding the dramatic moments, Penny and Harris in their unpublished paper note that a more marked expansion of the oilfields began in 1934 and a stronger financial situation soon developed, concurrent with the refinery developments. The Cruse field, an exceptionally rich area of the Upper Cruse oil-sand, found in 1933 by Trinidad Central Oilfields and Trinidad Leaseholds Limited, produced 800,000 barrels of crude in 1935. This was followed by UBOT's boundary developments, which were made possible by the use of heavy mud. TCO and TLL also drilled in 1936 the first Wilson field well, which marked the resuscitation of the dying Barrackpore field and heralded a period of productivity, which lasted well into the mid-1950s.

The oil camps, in very much the same style as the sugar factories, had a form of seclusion, exclusion, finely tuned and not so subtly enforced racial prejudice, although the sugar factories were more accommodating to visitors. They had separateness from the rest of the colony. It started at the gate:



all visitors were checked and the purpose of the visit authenticated. The guard, usually an estate policeman, with the practised eye of all good servants of the colonial era, could tell at a glance if the contents of the motorcar were acceptable, and could enter and be served at the club by even more discerning bigots. The oil camps excluded most Trinidadians – certainly all blacks and Indians, except in specific roles and stereotyped functions such as nannies, cooks, chauffeurs, gardeners and various sorts of handymen, who were ever present. Notwithstanding all of that, the irony is they were often exalted by the families which they served, their faces fondly remembered in photograph albums to this day. They themselves recall in their old age, kindnesses and acts of unprecedented generosity received from their European employers.

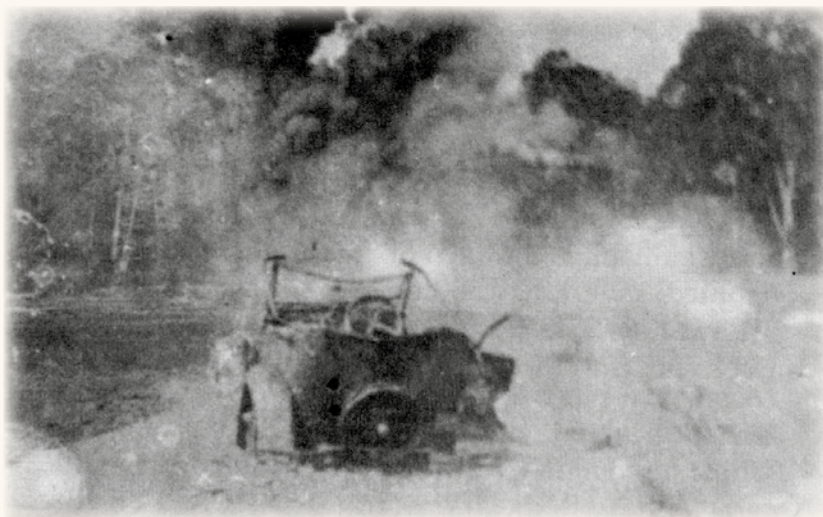
Then there is the voice of the expatriates speaking from those times: “Since the turn of the [19th] century, the bungalows and staff accommodation have been excellent, while the village erected for the housing of labour employed on the Pitch Lake has provided a standard of workmen’s accommodation which has been a model for other oil and kindred agricultural interests of the island,” write Penny and L. Harris about TLP. “The amenities extended to the staff, which include a very fine club, admirable bathing facilities and a pleasant golf course, have always been available to employees of other companies and generally the open-handed hospitality invariably experienced at Brighton is indeed proverbial.” They would not of course mention the segregation that started at the main gate of the camp. No one spoke of it. It simply did not exist.

Of course special exceptions were made for individuals in the colony’s small, but also exclusive, coloured professional class, particularly if these persons had received a knighthood. Remembered for all time, to be politicised at a later date, are appalling stories of insults, slights, cruelties, some physical, most mental, others fabricated, that were digested, internalised, never forgotten or forgiven. “South Africans, you know, don’t know anything about West Indians, they think we are like their people at home, savages,” would complain the local press.

Initially, the oil camps had been established to accommodate the foreign personnel who had to be brought in from all over the world. These ranged from artisans to professional engineers. All had to be housed and provided with basic amenities in parts of the island where the forest, ‘high woods’ as it was called locally, was as old and ‘impenetrable’ as it had once been marked on ancient maps – similar to that of the neighbouring South American continent, of which it once formed a part.

The oil camps were isolated from each other and from the local communities by long distances and by roads that were at times impassable. The camps consisted almost entirely of expatriate families. It was natural that these developed into close-knit ►

*To expand the oil industry, marine exploration was the obvious step. Several tentative applications for marine oil rights had been made as early as 1936, but the Trinidad and Tobago government had not yet allotted marine concessions*



*The Dome fire. In the foreground Bob Wade’s mangled car, in which the driller died during the gas explosion*

*The oil camps were isolated from each other and from the local communities by long distances and by roads that were at times impassable. The camps consisted almost entirely of expatriate families*

► communities, depending entirely on their own resources for their physical and social needs. They had little in common with the few planter families around, who did not necessarily seek them out, each being attached to their own ways, prejudices and customs. Neither did the oilfield employees have a lot to do with the government officials, Wardens, Justices of the Peace, all of European descent or the local Police Inspector, who in those days would have been an Englishman, unless it

was absolutely necessary. P.E.T. O'Connor wrote that they had little contact with the business community in San Fernando, as they had little to offer. "Port of Spain was a very long way off over almost impassable roads. As the industry grew and the camps expanded, they provided their own clubhouses and other recreational facilities for their members, and these had the effect of making them even more self-contained and separate from the general community."

He goes on to remark that there was, however, one aspect of camp life that had unfortunate repercussions. "By the very nature of their self-containment, the social and working environments of the staff camps were inseparable, and this led to an almost total exclusion of coloured personnel from staff positions in the industry. To understand and appreciate the nuances of this situation one must, as in the case of slavery and indentured labour, view it in the context of the times, and the social structure that pertained." As such, racial segregation both in the workplace and socially (O'Connor can hardly bring himself to mention it) was really not different from that of the Southern United States, South Africa, or in truth anywhere in the British Empire – an institution that was founded on the notion of the superiority of the 'white race', and in particular of the English.

Doctor Vincent Tothill, who worked for the oil companies, spoke more plainly in his book *Doctor's Office*: "Socially, life is much more pleasant with an agricultural company than with an oilfield. There is not so much snobbery, and there is more of a chance of meeting local people. The Oilfield clubs are, in my experience about the most snobbish places in the world, quite equal to



*King's Wharf and the Harbour Master's office, Port of Spain in the 1930s*



*The Club: the centre of social life all over the British Empire. It was the benchmark of acceptance, the pulpit of social snobbery and the place to go to meet everyone who was anyone*

anything in India. The staff of the Usine (sugar factory) is mostly local, and very delightful people they are. Also there is not so much colour prejudice, and there is an opportunity to meet the best of the coloured people on an equal footing. On the oilfields this is impossible. This being so, it stands to reason that there is little social intercourse between the oilfield clubs and those of the sugar estates. In fact I think they mutually dislike each other.”

Increasingly, however, security arrangements at the oil camps and the refineries had to be stringent, by the very nature of the work being undertaken there. This became more so as the work at these facilities became classified as ‘official secrets’ when the war broke out in 1939. In a sense, what was being undertaken at these facilities was, in a far more modest manner, our own ‘Manhattan Project.’ We were not building an A-bomb, but were involved in the development of high-grade aviation fuel at Pointe-a-Pierre that would power Great Britain and her allies in their effort to win the war that was looming. The refineries at Pointe-a-Pierre and Point Fortin were leading the way in the development of new and innovative refinery techniques. This bore fruit at the outbreak of World War II. During World War II, Trinidad Leaseholds, acting as agents for the British Government, designed, purchased, erected and subsequently operated a new refinery constructed for the purpose of producing the maximum possible quantity of 100-octane aviation spirit. The Pointe-a-Pierre refinery, owned and operated by TLL, was the only one in the British Empire that had a plant for producing 100-octane aviation spirit in commercial operation. This plant provided much of the fuel used in July, August and September of 1940, the period of the Battle of Britain, when Britain’s fighter-squadrons decisively defeated an attempt by the Luftwaffe to destroy the RAF’s airfields in south east England.

As a result of the work being undertaken it was not surprising that many people considered ‘not the right sort’, local and foreign, could never enter and see the manicured lawns, the world-

class lawn tennis facilities, golf courses, and swimming pools of the oil camps. The bungalows, screened against mosquitoes, galleried and jalousied, their tall doors curtained in lace, quiet but for birdsong, caught in decades past. A slight odour of vegetable soup on the boil, cultivated voices, Morris chairs. The neat gardens, lawns dotted with mango julie and king orange trees, all hybrids of course, and the gigantic samaan trees.

The last gentle decades of the colonial days, the asphyxiating all-pervasive oppression of a structured, segmented, over-ruled society, the delicious, now in hindsight, time of order and politeness, just the quiet of those times. The originality and quality of things make those of us now in our own twilight know that we were privy to an end of a past, of a world that no one would ever know again.

### **Project 1234: The Pointe-a-Pierre refinery, from Trinidad Leaseholds 1913 to Texaco 1956**

**The advent of the Second World War halted nearly all exploratory work in Trinidad.** The industry here was dependent on the United States for oilfield and drilling equipment, and now the companies concentrated on “obtaining the maximum number of barrels for the fewest tons of imported equipment and stores,” as Penny and L. Harris write.

On the other hand, the war accelerated the refining capacity of Trinidad, which had been so severely curtailed during the depression. Once before, in 1918, the refining capabilities of Trinidad had “contributed to the wave of oil on which the Allies floated to victory,” as an article in the Shell magazine of 1967 has it. But this time, its contribution was both more timely and more important. Even though in the planning stages since 1936, the start-up of these plants coincided with the commencement of hostilities between Germany and the United Kingdom, and as such the initiative constituted a valuable contribution to the war effort. ►

*By the very nature of their self-containment, the social and working environments of the staff camps were inseparable, and this led to an almost total exclusion of coloured personnel from staff positions in the industry*



*The refineries at Pointe-a-Pierre and Point Fortin were leading the way in the development of new and innovative refinery techniques. This bore fruit at the outbreak of World War II*

► Aviation spirit from the newly constructed iso-octane plant in Trinidad fuelled the Hurricanes and Spitfires of the Royal Air Force in the critical Battle of Britain in 1940. The accelerating war machine required supplies in much greater volume, and the Pointe-a-Pierre refinery in Trinidad was chosen to provide 100-octane aviation fuel for the air forces of the Allies.

“In 1940-41 what amounted to a new refinery was constructed by an American firm for the British Ministry of Aircraft Construction at Pointe-a-Pierre to produce aviation fuel for the Royal Air Force and the US Air Force,” remembers Dr Vernon Mulchansingh in his paper *Story of Our Oil*. “So important was the supply of products from Trinidad that some years after the war the *Petroleum Times* would comment that no company in the world, certainly no British company, did so much for the war effort in relation to its size as Trinidad Leaseholds Limited.”

The refinery at Pointe-a-Pierre made a major

advance in mid-1938 when No. 5 Dubbs and the hydrogen and iso-octane plants were commissioned, which increased cracking capacity and allowed for the manufacturing of aviation fuel.

The story of the building of the Eastern Refinery, referred to for security reasons at the time under the code name ‘Project 1234’, in the short space of 14 months and in the midst of acute wartime shortages and hazards, is an epic in itself. Most significantly, the facility made Trinidad an importer of crude oil for the first time since commercial oil exploration began here in 1908. At first, stocking up crude was a wartime emergency measure adopted to increase feedstocks to the utmost and to conserve shipping. But after the war, when the Eastern Refinery was reorganised for peacetime operations, imports continued under an agreement made with the Texas Petroleum Company for processing Texpet crude oil from Venezuela and Colombia.

A quick look back in time at the refinery’s founding years shows how much the installation

*Project 1234 at Pointe-a-Pierre was a top secret undertaking that was guarded by the Allied forces stationed in Trinidad during the Second World War*



had advanced. Founded in 1917, it had a throughput of some 1,200 bbl/day – a trickle compared to the 1940s and '50s. The No. 1 Refinery at Forest Reserve produced only gasoline, fuel oil, and white spirit, as compared to over 200 different types of petroleum products and grades fifty years later. Pointe-a-Pierre was initially an oil shipping port before it became the location of the refinery, selected mainly because the water of Stony Point was deeper than anywhere else in the south. Oil was first found in commercial quantities at Forest Reserve in 1914, and by 1916, the first 6-inch trunk pipeline had been laid. It is believed that the first shipment of crude oil was despatched on 16th August 1916, by Admiralty tanker 'Masconomo', starting a long and mutually beneficial association between the refinery and the British Admiralty.

The early years were not without their anxieties, what with the loading line from shore to ship being the last and weakest link in the chain of production. The original loading line ran along the bottom of the sea to an island jetty a mile offshore. But when No. 1 Refinery started up in 1917, the line was found to have developed so many leaks caused by marine molluscs that it had to be replaced. This replacement was run above water on a viaduct supported by piers. This link was broken twice, once by collision and then by a hurricane that swept away a third of its length. These problems were quickly solved, however, and many technical innovations made Pointe-a-Pierre refinery the largest in the British Empire at the time in complexity of design and in distillation capacity.

Shortly after the First World War ended, it was decided to invest in the first cracking plant. The age of kerosene was giving way to the age of gasoline as motor cars began to be mass-produced, and it became profitable for oil refiners to produce cracked gasoline (made by cracking heavy hydrocarbon molecules to produce light ones which can be made into gasoline). By this time, refinery throughput had increased to 5,600 bbl/day. The Greenstreet cracking plant was commissioned

in October of 1922 and stood where the Augustus Long Hospital is now located. But this cracking installation was soon converted into No. 2 Refinery. The next attempt at cracking was made in 1927, when throughput stood at 10,000 bbls/day, and the Dubbs cracking process was introduced, which proved a great success. Then followed the Great Depression and the Second World War, during which Pointe-a-Pierre became the major supplier of aviation fuel to the Allied effort as described above.

### **The 'Trinidad Sector'**

**It was just after 11.30pm.** The cool February night had laid the lightest of mists along South Quay. In 1942, Port of Spain was still a quiet, sleepy Caribbean town, very far removed from the noise and the fury of the world war that was plunging Europe into a maelstrom of mayhem, unsurpassed in all its war-torn history.

Suddenly, several very loud explosions shattered the quiet of the night. Flocks of pigeons took flight into the darkness from the railway station roofs as the echoes reverberated up the valleys. Screams of fright as the city's residents leaped from their beds, dogs barking as the great sound rolled away into the mountains like thunder, vanishing.

We were now at war; it had finally come to us. In the harbour, the cargo ship 'Mokihana' had been blown almost out of the water. 7,400 tonnes of iron ship had spun about and rolled over on its side, a 45ft by 30ft hole ripped out of its plating. Not too far away, the tanker 'British Council' was sending huge flames ranging into the night sky, throwing the lighthouse and the tower of the Harbour Master's office into grotesque silhouettes, while illuminating the surrounding water with a hellish light.

The circumstances that led to this had its origins in another time, just before another war, 29 years prior, in 1913. As previously related Winston Churchill, while serving the British Government as First Lord of the Admiralty, had listened to the advice coming from Admiral Fisher, First Sea Lord who, acting on information given to him by ►

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► Alexander Duckham with regard to the availability of oil in Trinidad, had decided to change the Royal Navy from burning coal to using oil to fire its furnaces. Trinidad became for all intents and purposes a gas station in the South Atlantic.

The Royal Navy had since that time made Trinidad's Brighton Pier its main fuel depot in



The port of Port of Spain in the 1940s was the busy hub of the convoys. Merchantmen would, under the escort of destroyers, make the dangerous crossing to England. The Trinidad Sector was in fact an enormous area of sea that stretched northward as far as Martinique and westward to include the Dutch island of Curaçao, whose oil refinery was vital to the war effort. Eastward, the sector included most of the South Atlantic, reaching to the Argentine



HMS Exeter at anchor in Port of Spain harbour in 1938. In December of 1939, along with HMS Ajax and Achilles, she engaged the German pocket battleship, the Admiral Graf Spee, at the battle of the River Plate

the South Atlantic. Now, with another war on, the colony's oil refineries had become the main source of supply of aviation fuel for the Royal Air Force in Britain's historic battle for supremacy in the skies. In the early days of refining in Trinidad, the main process used was the simple distillation of the crude oil producing gasoline, kerosene, and heavy fuel oil for the British Navy. In the last years of the 1930s, however, significant strides were made in the standard of the product produced. This was due largely to the quality of the specialists who were attracted to the work being done in Trinidad. The historian Paul Johnson in his *Modern Times* notes: "The chemical and petrochemical industry expanded rapidly, with exports rising 18 per cent in 1930-1938. [That would be exports mainly from Trinidad]. Employment in the aircraft industry had risen from 21,000 in 1930 to 35,000 in 1935." The availability of refined products coming from Trinidad made an impact in what Johnson called key areas, "especially aero-engines...which was to prove of decisive importance both in air and sea power."

The refineries at Pointe-a-Pierre and Point Fortin were leading the way in the development of new and innovative refinery techniques. The 'heavy-handed' handling of the oilfield strikes of 1937, which saw some strikers shot by police and several arrested – including their leader, Tubal Uriah 'Buzz' Butler – had been preceded by the appointment of Colonel Arthur S. Mavrogordato as Inspector General of Constabulary and Commandant of local forces. The fact that this formidable character had been transferred from Palestine, where he had been the Chief of Police, to the relative backwater of Trinidad, speaks of the importance of the work that was taking place at Pointe-a-Pierre in the period leading up to the war.

Due to the very effective cooperation between all the oil companies in the Caribbean area, it was found possible to exceed the design capacity of the Pointe-a-Pierre refinery by the purchase of raw materials or blending components, and thus to make a very





Colonel Arthur S. Mavrogordato In Jerusalem, 1922. Before taking up his position in Trinidad as Commandant of Police and Commander of local forces in 1937, Colonel Mavrogordato had been appointed the first Commissioner of Police to Sierra Leone in 1913. He was transferred to Palestine as Commissioner of Police in 1921, after the British mandate had been established, and to Trinidad in 1934. After completing his tenure in Trinidad in 1939 he was appointed Commissioner of Police in Nigeria. At the outbreak of WWII he was seconded to the British security mission in Beirut and promoted to the rank of Brigadier. He served with the 9th Army in Syria and in Lebanon. After the war he returned to Trinidad, where he made his home until his death in 1964

substantial contribution to the winning of the war. Trinidad, with its secure approaches, the Serpent's Mouth in the south and the Dragon's Mouths in the north, and its commodious Gulf of Paria, possessed a vast and ideal harbour. In the Second World War it became a vital rallying point for merchant shipping, which arrived daily to form convoys to ship precious cargoes across the Atlantic to an extremely hard-pressed England. Cargo ships came to Trinidad from Australia, New Zealand, the South African Cape, Argentina and Brazil. Their holds were packed with copper, rubber, meat, wheat, flour and iron ore. Some were to take on aviation fuel, oil and pitch, sugar and cocoa, others were to ferry men and women across the cold Atlantic to join the massive war effort.

The garrisoning of the island had already begun. Detachments of young Americans were encamped in the forested heartlands of the island and at a significant naval base at Chaguaramas. Experienced British naval commanders had established HMS

Benbow as the Trinidad sector headquarters, a designated royal ship housed on dry land just opposite to where the power plant is on Wrightson Road today.

The overall preparedness to defend the convoys was well under way. The vital importance of these convoys to the survival of England cannot be overstated. The German high command was well aware of the strategic importance of the Gulf of Paria and the Point Fortin and Pointe-a-Pierre refineries. The creation of a submarine fleet to deal with the convoys coming out of Trinidad waters was a first priority status for the German 'Kriegsmarine'. The U-boat offensive, unleashed in formations known as 'wolfpacks', was to become the nemesis of seafarers in Caribbean waters.

The midnight action in February 1942 that had sent flames towering into the night, grotesquely illuminating the sleeping city, had had its genesis in U161 under the command of Kapitänleutnant Albrecht Achilles. Free from its origins at ►

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► Bremerhaven, U161 had silently crossed the Atlantic to surface off Trinidad's north coast, just a little west of Maracas. The treacherous waters and swirling currents of the Dragon's Mouth were not alien to Albrecht Achilles. At another time, he had sailed these waters as crew of the famous Hamburg-Amerika line.

At 9.30am on February 18th, U161 slipped through the Grand Bocas, just under the surface at periscope depth in the bright morning light. Achilles did this confident that the lookouts at Stauble's Bay would be far less vigilant in the morning than they might be at night. He was not entirely right. He was spotted and a report from the Stauble's watch ultimately alerted No. 1 bombardment squadron at Wallerfield to carry out an anti-submarine search.

Some miles off the Grand Bocas, U161 dropped beneath the surface into the 100-fathom deep water and vanished. Topside, the aircraft circled in vain.

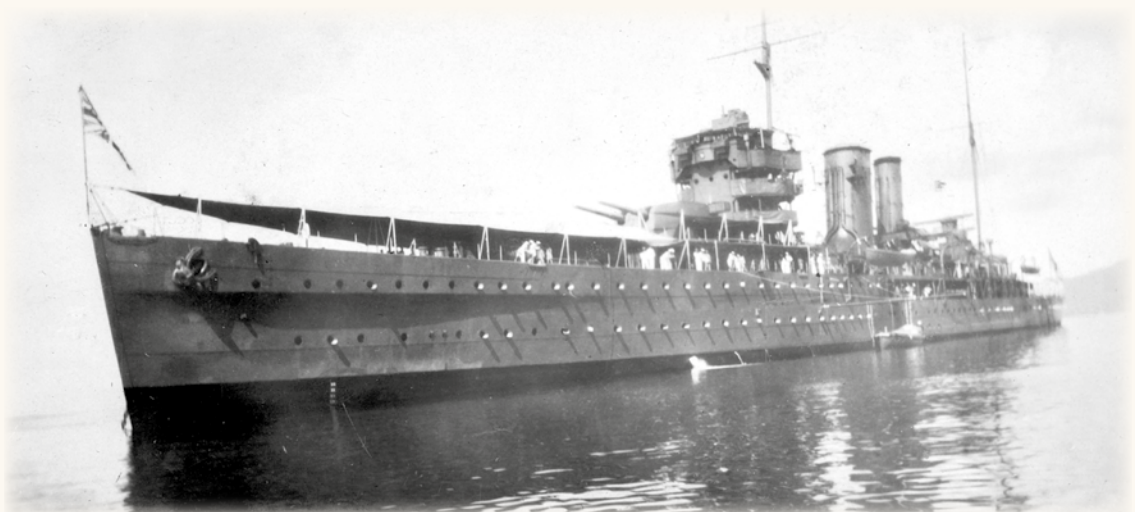
Now inside the Gulf, Achilles took U161 to the shallow water southeast of Chaguaramas. A soft muddy cloud rose about the submarine craft as she settled on the seabed to wait out the day.

As the night fell, Achilles brought up U161 to periscope depth and silently swept the horizon. With no patrols in sight, he brought his boat to

the surface. Dark, sinister, streaming water from her hull, this totally alien shape headed in the direction of a brilliantly-lit Port of Spain. Slowly, the boat moved through the fishing boats, heading out, their dim lanterns held above their sterns. Few marked her passage. None noticed the white horse of the 2nd U-boat flotilla painted on the side of her conning tower. For a moment made invisible by the rugged outline of the five islands, U161 was now in the channel. With care her commander picked his targets, brought the boat about and fired two torpedoes that not only shattered the night but also something of our innocence.

All pandemonium broke loose, as U161 slowly left the scene. Alarm bells ringing, sirens wailing, the search for the submarine was on. Calmly, Kapitänleutnant Achilles brought his boat almost to the surface, put on his port and starboard lights, put his officers on deck in white tropicals, adjusted the boat's speed to those of the search boats. He switched on his running lights and began crossing the entrance to the great bay. He knew that hardly any of the men looking for him had ever seen a U-boat. His men, stationed on deck in gleaming white, scanned the sea ahead as he joined the search, and quietly, quietly U161 left the scene...

*HMS Rodney at anchor in Port of Spain harbour in 1939. A Nelson class battleship, she saw action against the Bismarck in the Battle of the Denmark Straits in 1941*



“The declaration of war in 1939 had been a signal for the Germans to unleash their submarine fleet to prey on the vital shipping that plied the waters around the British Isles. This initial thrust later developed into the famous Battle of the Atlantic,” Commander Gaylord Kelshall (retired) of the Trinidad and Tobago Coast Guard wrote about the German submarines that were in action in the South Atlantic. That, in all its drama, was reminiscent of the First World War, when German U-boats had almost brought Britain to her knees. Hitler’s Kriegsmarine had set out to emulate and better their forebears.

The British, once more under siege, resorted to the formula that had frustrated the Germans in 1917 and established a convoy system. By October of 1940, the German U-boats answered with a wolfpack concept and the battle at sea entered a new and grimmer phase. The end of 1940 marked a period when more than one thousand ships had been sunk, despite the efforts that had been put into protecting them. The Churchill-Roosevelt arrangements that were put in to place, whereby Britain received much needed military assistance and America gained long-term leases to set up Naval and Air Force bases in the British Caribbean so as to protect its western

coastline, involved Trinidad and Tobago directly. Because of Trinidad’s oilfields and its refining capacity, the island became a place of rendezvous; understandably so, as the island lies just off the South American coast opposite Venezuela, its northern and southern peninsulas extending westwards almost to the Venezuelan coast. The 2,000 square miles of water within the peninsulas is called the Gulf of Paria. When the entrances to this area are properly protected, it becomes the finest natural harbour in the Western Hemisphere.

The island’s oil refineries, other refineries in Venezuela and Curaçao (opened in 1918), and its proximity to the Panama Canal caused it to be seen as significant, a possible target for a German invasion. In time it became one of the largest naval bases in the world and a major convoy centre. It was later used as a US Navy training area of considerable importance as well as a major tactical base for the prosecution of the war against the U-boats in the Caribbean. In the last years of the war it would be the site of one of the largest US airbases in the world.

Every word said by oil pioneer Randolph Rust almost 30 years before, at the Royal Victoria Institute in 1910, was to be proven true, when he remarked that he expected Trinidad to become the chief source ►

*The island’s oil refineries and its proximity to the Panama Canal caused it to be seen as significant, a possible target for a German invasion. In time it became one of the largest naval bases in the world and a major convoy centre*



Left: The Royal Air Force, stationed at Piarco Airport on patrol over Trinidad in the 1940s. A German attack was anticipated as Trinidad was the source of the fuel that kept the Hurricanes and Spitfires flying in the Battle of Britain. Right: an airman signals to another aircraft



*The creation of a submarine fleet to deal with the convoys coming out of Trinidad waters was a first priority status for the German 'Kriegsmarine'. The launch of the U-boat offensive was the nemesis of seafarers in Caribbean waters*

► of supply of oil fuel and one of the Empire's most important naval bases – in short, one of the Empire's "most valuable possessions." It has been estimated that at various times there were as many as 50,000 Allied forces on the island, mostly US personnel.

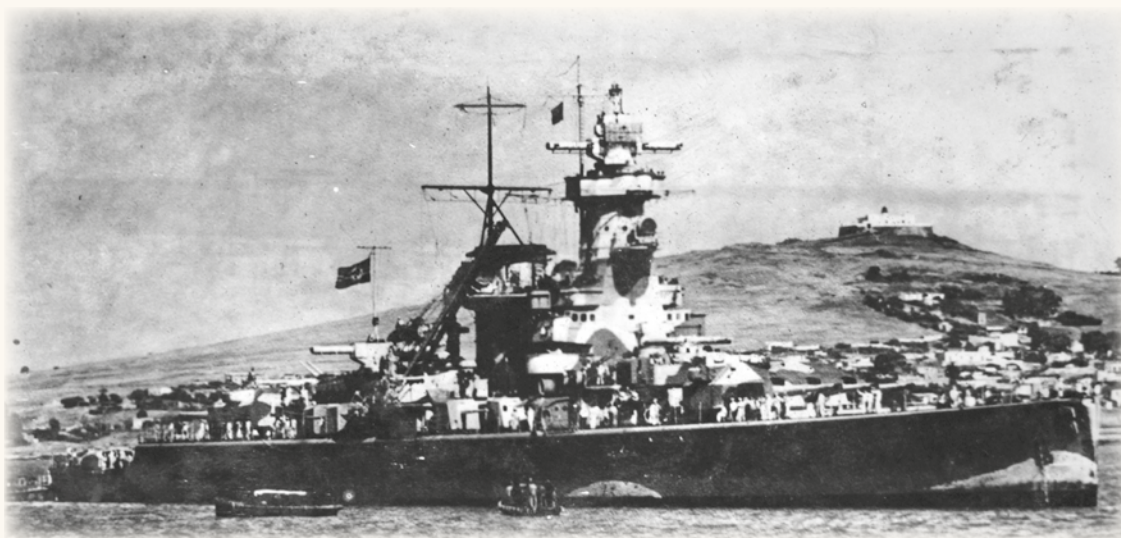
For those who worked 'in the oil,' news of the war came via the BBC, who reported that the Simon Bolivar, the pride of the Royal Netherlands Steam Ship Company, had been sunk. She had run regularly between Rotterdam and the Caribbean. Luckily there was little loss of life, although some Trinidadians did mourn the loss of their loved ones. Soon there was news of another engagement, the first of the war perhaps, and one with a special interest for us, as it concerned the cruisers HMS Exeter, Ajax and Achilles, whose marines had landed in Trinidad in 1937 during the time of the oilfields strikes. They had fought an epic battle on the River Plate and had sunk the German battleship, the Admiral Graf Spee.

In 1938, the two refineries owned by UBOT and Trinidad Leaseholds actually installed two 6-inch guns to defend the refineries from attack by sea. These guns had been built in 1911-12, and a volunteer group among the engineers were

trained by military personnel in their use. After the declaration of war in 1939, several anti-aircraft guns were also installed in the area of the refineries. The Graf Spee, on its way into the South Atlantic, was actually expected to enter the Gulf of Paria and attack the Pointe-a-Pierre refinery one day at 5 pm, and a frantic preparation to protect the installation ensued. However, the Graf Spee changed course and by 7 pm it was clear she would not execute the expected attack.

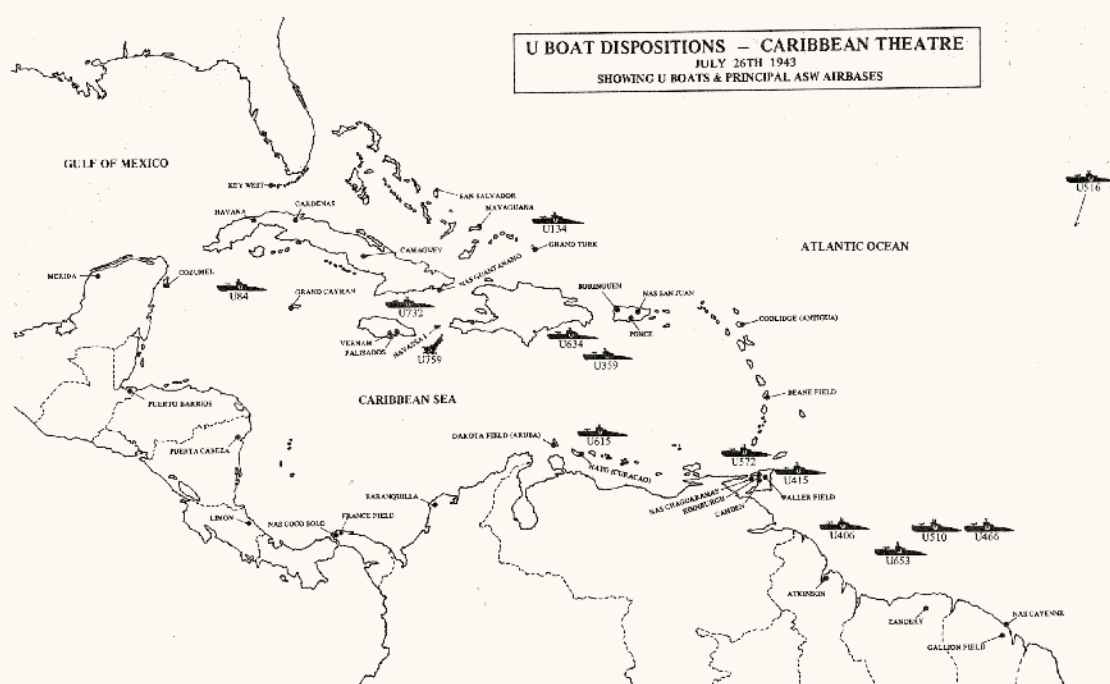
P.E.T. O'Connor recalls in his memoirs: "The importance of our oil industry was supposed to make us vulnerable to enemy raids. There was, perhaps, the possibility that an enemy submarine could lob a few shells into Pointe-a-Pierre, or that a raiding party might attempt to blow up a tank or two, so we had our Home Guard and our air-raid shelters. Every oil company had its platoon or company of the Home Guard, depending on its size. Whether or not we could have held an enemy at bay is highly problematical, but we took ourselves very seriously as we were instructed in the art of jungle warfare on Sunday mornings and learnt to dismantle and reassemble the odd sten-gun which was placed at our disposal. We had mock raids on ►

*The German Battle Ship the Admiral Graf Spee at the River Plate in 1939. She posed a serious threat to the merchant shipping that would form convoys at Port of Spain. Left free in the South Atlantic she would have caused heavy losses and perhaps destroyed the facilities at Point-a-Pierre*





The convoys were the lifeline of Great Britain during the war years. Trinidad was the source of oil for the Royal Navy ships in the South Atlantic that guarded the convoys as they crossed the Atlantic, carrying high octane aviation fuel for the Battle of Britain. From: "U-Boat War in the Caribbean" by G. Kelshall



German U-boats, in 'wolfpack' formations, made a concerted effort to stop the convoys from gathering in the Gulf of Paria, where they took on fuel oil for the Royal Navy and high octane aviation fuel produced by the refinery at Pointe-a-Pierre. Although inflicting great losses, several U-boats were sunk in Trinidad's waters by the US and the British Forces stationed at bases in Trinidad. From: "U-Boat War in the Caribbean" by G. Kelshall

*It was the Second World War that brought the establishment of an airline, which would become synonymous with modern Trinidad. This would not have happened had it not been for those developments taking place at Pointe-a-Pierre*



Allied airmen and friends in London, in 1944. On right, Trinidadian Ulric Cross, who received a DSO, the second-highest British military decoration, for gallantry. In all, Trinidadian airmen received three DSOS, six DFCS, one AFC, one Order of the Leopard and one DFM. Trinidadian airmen received more aviation wartime decorations than the rest of the Caribbean combined. Once again, as in the previous war, they had proved that Trinidad and Tobago aviators were among the best, and they were coming home to breathe life into the silent airfields

► each other's oil installations, which generally ended up with the capture of the club house, for these raids were a thirsty business. There was the occasion on which we set out to attack Forest Reserve. We borrowed one of our company's trucks to transport our platoon to a suitable point from which we would organise our attack, but the Forest Reserve Camp cheated on us. They staged an ambush half a mile outside their camp and as we drove peacefully along we were greeted by a hail of blank rifle fire from the bushes. The driver of our truck, not a member of the Home Guard, was so terrified that he promptly ran his truck into the ditch and the exercise was over." So much for the hot war in the tropics!

### **Flying on Trinidad oil**

**From the infancy of aviation**, Trinidad had attracted the flying pioneers and had in fact contributed to this industry, not only in the quality of its refined petroleum products but in the gallantry of the men

who served in the Royal Air Force in both world wars. The availability of fuel and the pursuit of audiences had attracted the first intercontinental flyers, the 'barn stormers', they certainly served to enliven the imagination of a generation of young men who would later see service over the Western Front in the Great War. The establishment of the airmail routes brought some of the larger carriers to our skies and turned us in to a major hub, linking North and South America. Out of this interest, and because aviation fuel was available and not expensive a pilot training school was started at Piarco aerodrome, where a new generation of flyers was trained, some of whom would serve with distinction in the conflict to come.

It was the Second World War that brought the establishment of an airline, which would become synonymous with modern Trinidad. This would not have happened had it not been for those developments taking place at Pointe-a-Pierre.

Trinidad's oil, and the remarkable men who had created the industry and who were the driving force



behind it, and the young flyers whose aircraft were powered by it, would become the silent heroes of a deadly world war in the years ahead, and on their return create an institution. Lowell Yerex, in starting British West Indian International Airlines (BWIA) towards the end of 1940, created a national institution.

BWIA's second-hand Lockheed Lodestar was registered VP-TAE and was the island's fifth aeroplane. Its first flight was of course bound for Tobago. It became the first airliner to land on the grassy runway at Crown Point. This was followed by another proving flight, this time to Barbados' Seawell Airport, which had been pioneered by KLM some years before. Crown Point was shortly after declared a customs aerodrome, joining Piarco and Cocorite where the seaplanes came ashore.

By January of the following year, Piarco, the windy little aerodrome on the plain beneath the Northern Range, was about to experience a significant change of status. Captain R.H. Burton RMR (A) took command of what was to be now known as the Piarco Naval Air Station. The US Air Force had already established themselves at Waller Field; in fact there were four Air Force bases in operation on the island by 1943. This had come about as the result of the increase in U-boat activity in the Atlantic.

BWIA pilots in 1943-44 literally held the islands together. The war in the South Atlantic, just off Mayaro, Toco and Maracas, forced all but the navy and the merchant marine to take to the sky. New air hostesses joined the crew: Helen Scharf, Margarete Bolton and Dolores Gibb. The post of Director of Civil Aviation was handed over to Wing Commander Maurice Banks in 1944. After the war was won, Banks guided the fortunes of BWIA.

The young men who had attended the ATC, the flying school at Piarco, left their jobs in Port of Spain where they had worked as clerks or just enjoyed the good times. Now they were fighting for their very lives. In 1943, 12 men from Trinidad died for liberty in the air war over London and Continental Europe. They were flying a variety of aircraft from Avenger Torpedo Bombers to Spitfires, Hurricanes and

Lancaster Bombers over the Hamburg docks. Some who were to survive were pleased to join BWIA; among them was Fernand Farfan, who had flown Spitfires in the Middle East and had been trained at Piarco. Having joined up in 1941, Farfan took part in that famous battle at the Falaise Gap. He returned home as the first local pilot to fly for BWIA.

Philip Kelshall had flown Mosquito fighters on night missions over London, so as to surprise the intruders – which was considered as dangerous. He was awarded the Distinguished Service Order. Kelshall also served with the 29th Nightfighter Squadron. When his official 'tour' was over, he returned to Trinidad in July 1946 to become the second local pilot for BWIA.

Esmond Farfan returned to Trinidad at the end of the war. He had served as Captain of a mighty Lancaster bomber in the shrapnel-filled sky over Berlin. He had seen the fires of Stuttgart and Darmstadt and was awarded the Distinguished Flying Cross. Esmond was to become BWIA's third local pilot and served the airline for 33 years.

Before the end of the war Waller Field, a US Air Force base at Cumuto in central Trinidad, became for a time one of the largest and busiest in the ►

*BWIA pilots in 1943-44 literally held the islands together. The war in the South Atlantic forced all but the navy and the merchant marine to take to the sky. In 1943, 12 men from Trinidad died for liberty in the air war over London and Continental Europe*



*Pearl Marshal, the first black BWIA Stewardess*

*The US Air Force base at Waller Field became for a time one of the largest and busiest in the world. Having access to aviation fuel from the nearby refineries, it was involved in the transatlantic operation that moved tens of thousands of soldiers from Europe on to the Pacific theatre in the war's closing years*

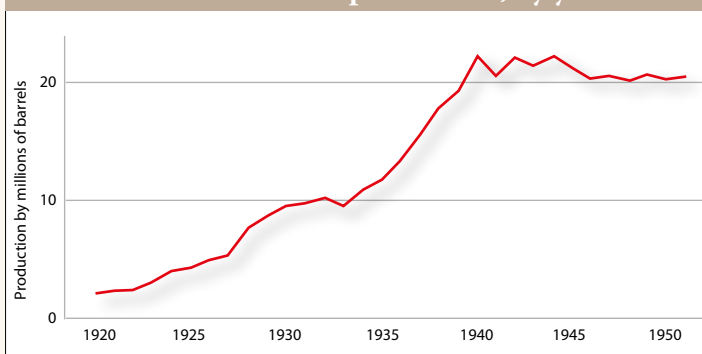
► world. This field, having access to aviation fuel from the nearby refineries, was involved in the transatlantic operation that moved tens of thousands of soldiers from Europe on to the Pacific theatre in the war's closing years. This operation was to serve as the model for the Berlin airlift in the period at the start of the Cold War.

As the Trinidadian airmen came home, some found jobs with the airline as navigators, engineers and mechanics. These young men and women set the tone for generations to come.

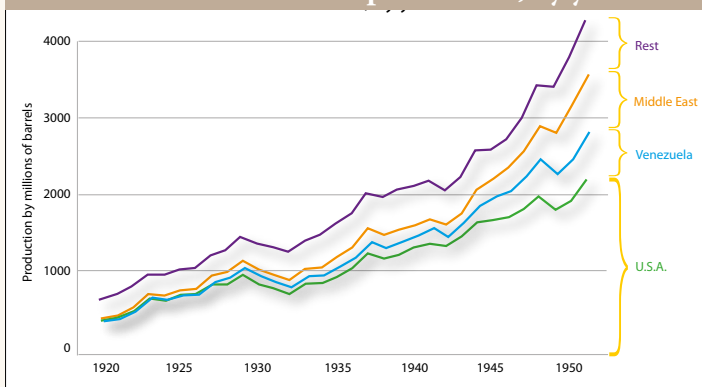
The European staff of technicians and scientists, together with local skill and labour, had developed at Trinidad Leaseholds in the Pointe-a-Pierre refinery the high octane fuel that had attracted the air pioneers who in turn had caught the imagination of a generation of young men. These, after serving in the RAF, returned to build what was for a while an institution that made us all proud. This was the core from which the airline's 'esprit de corps' came: BWIA was born out of the patriotic fervour that had won the Second World War.

A different future would now take shape, both in the wider world and in Trinidad and Tobago. One that would usher in new technologies and a different world view, in fact a new interpretation of history. A new narrative for the new nations that would come into existence as the old order came to a close and colonialism ended. ■

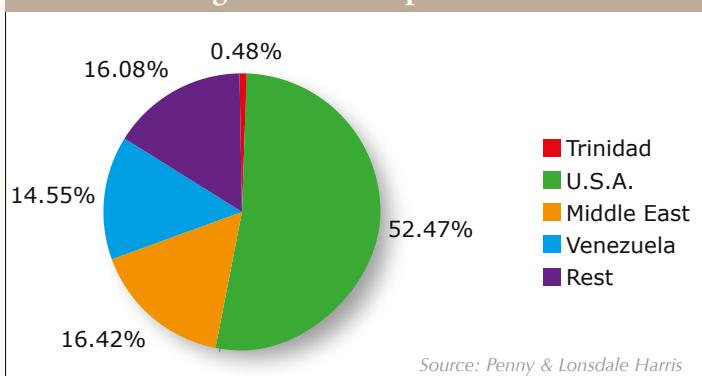
Trinidad crude oil production, by years



Total world crude oil production, by years



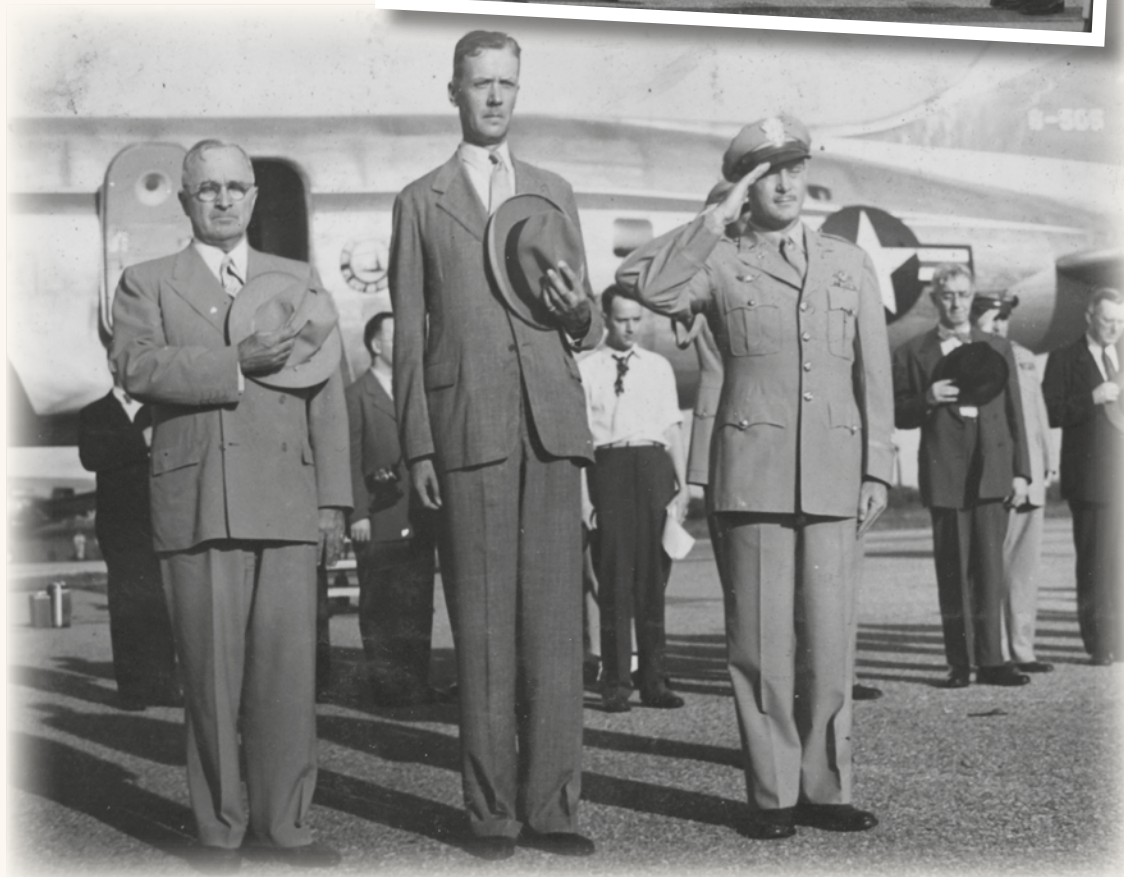
Percentage of world oil production 1951



## All the President's men

*Right: Inspecting the Honour Guard*

*Below: President Harry S. Truman, left, at Piarco Airport in 1948, Sir John Shaw kcmg, middle, known in Trinidad as 'Governor Tall'. President Truman was on his way to Buenos Aires*



*A different future would now take shape, both in the wider world and in Trinidad and Tobago. One that would usher in new technologies and a different world view, in fact a new interpretation of history*