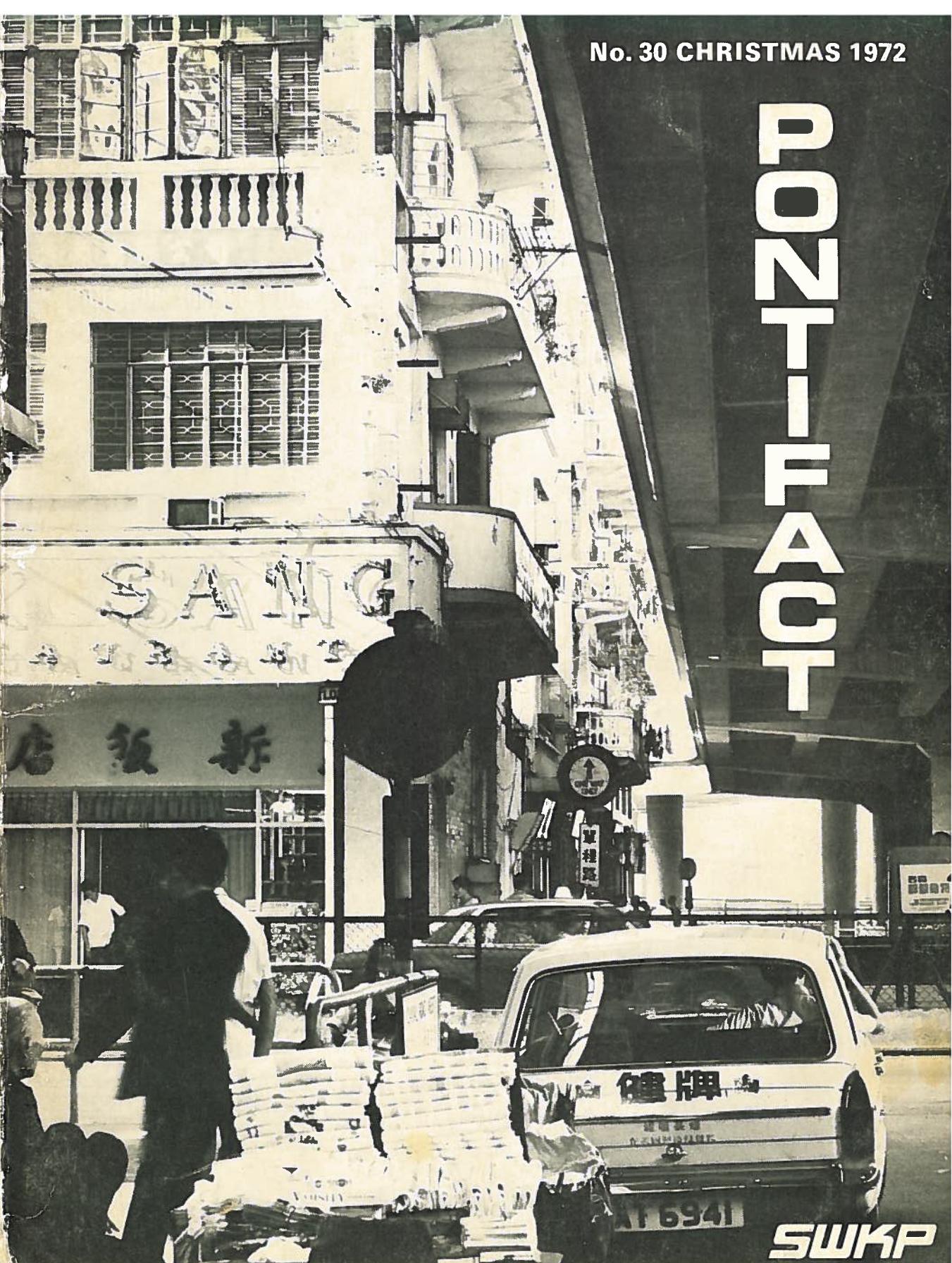


POINT-FACT



SWKP

**The House Magazine of
SCOTT WILSON KIRKPATRICK & PARTNERS**

Hong Kong 20th Anniversary Commemorative Issue

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Her Royal Highness The Princess Alexandra unveiling the plaque commemorating the completion of the Cross-Harbour Tunnel. HRH The Princess Alexandra is seen accompanied by Mr. John Marden, Chairman and Managing Director of Wheelock Marden

Partners' Panorama

The question of a road crossing of Hong Kong harbour was raised with the late Dr. Guthlac Wilson and Mr. Grace during their first visit to the Colony in September, 1952. Our interest and subsequent participation in the crossing therefore spans the twenty years of our presence in the Colony, and the opening of the tunnel is a splendid and fitting event to mark the anniversary. A great deal happened in those twenty years.

Pre-war Hong Kong was a picturesque, easy-going Colony of the traditional type, living on the entrepot trade of the second port on the China coast, and moving at the pace of the coolie, sampan, junk and rickshaw; a life sheltered from the extreme heat by thick stone walls, arcaded verandahs and high ceiling fans, enjoying a peace and quiet that mingled after sundown with the distant clatter of mah-jong and the weird strains of eastern music. In 1948-49, a sudden influx of refugees from the new Communist China triggered off a truly remarkable change that was to turn the Colony into a modern bustling city on the western pattern with intense over-crowding, extensive industry, tall air-conditioned buildings, traffic jams, jet aircraft and the other attributes of modern city life. The population rose from 2½ million in 1952 to 4 million in 1971, yet the growth of local industry was such as to produce a fourfold increase in trade and create a labour shortage! It is of topical interest to note that while wages have doubled over the past decade, consumer prices have only risen 50%. Standards of living have improved, home ownership has trebled since 1961, and 70% of households have television! Adequate holidays are now mandatory, and recreational facilities are being extensively developed. Tourism has risen from 220,000 in 1961 to a million in 1971. In the last 15 years

road vehicles have increased six times, ships' cargoes two-and-a-half times, aircraft movements six-and-a-half times and air passengers and freight 13 and 25 times respectively. The only forms of transport to have decreased are junks, rickshaws and pedicabs, while another loss to tradition is the gradual replacement of the tailored cheong sam, by the cheaper off-the-peg mini-skirt.

This astounding growth and activity made extraordinary demands on physical development in both the public and private sectors. The Public Works Department's capital expenditure grew from £2 million in 1954 to almost £35 million in 1971.

Such is a broad picture of the Colony's growth over the post-war years. Let us now turn to the part we played in it.

We were invited to Hong Kong to engineer the Colony's new airport—an appointment which we owed to the late Theodore Bowring, Director of Public Works, who had previously been our DPW in Malawi. Mr. Grace and I were engaged in airport work in Hong Kong immediately after the war, and it was a coincidence that we should return together to a similar task in civilian life. Mr. Guilford's article on Kai Tak is of great interest to me, and I would only add that the substitution of a single runway with one curved approach in place of two dead-end runways raised many gloomy forebodings about the limitations the curve would impose on aircraft types and night flying at the airport. Tests with a Comet in England on a mock-up of the curve found it acceptable—a judgment that has been amply confirmed in practice. It is indeed gratifying that the curved approach is no bar to the current extension of the runway to take more demanding aircraft of the future. Before leaving Kai Tak, I should like to mention that the

contract documents were prepared in London, receiving a final scrutiny by a QC and a New York contractor described them as the finest documents he had ever seen. They enabled Mr. Hawkey to settle the claims in the course of a fortnight's visit!

As time passed and figures for actual and estimated future population grew, the Government realised that development to accommodate the increase would have to extend beyond the harbour area. In 1957, they appointed us to report on five land development schemes in the New Territories and three roads. Mr. Lindsay's article describes how the scheme at Kwai Chung was implemented and subsequently extended to accommodate container berths—an important development which together with the tanker terminal for Esso is our contribution to the betterment of the harbour. Industry was at first slow to move to Kwai Chung, but the tempo has increased recently, and the Government are proceeding with limited developments at Castle Peak and Sha Tin, two of the other sites on which we reported.

When Binnie & Partners asked us to work with them on Plover Cove, I remember being amused to see the water engineers poring over the Admiralty charts in search of a dam site in the sea, in much the same way as we a few years previously had searched the charts for an alternative development of the airport. Such are the pressures of land-hungry Hong Kong! I often think that for a variety of reasons Plover Cove is the most outstanding job that any of our firms have undertaken. What appeals to me is that the visible finished product of a thin strip of land rising just above the water looks so unpretentious and yet fulfils such a vital function—and this surely is the essence of good engineering.

Our last main sphere of activity has been in road and rail communications. Pride of place goes, of course, to the Cross-Harbour Tunnel. Derek Verran's article covers the story, but I cannot refrain from saying what a thrill it was to see this brilliant scheme virtually in its finished state. It is remarkable how well the tunnel and its connections fit the topography and street layouts on both sides of the harbour; the site seems to have been made for the scheme.

Being now something of a road man, I am delighted with our share in the roads and bridges stakes which Andrew Maslowicz describes. It contains such a variety of urban and rural work, with extensive bridging and, to say the least, an unusual tunnel scheme! The Castle Peak road

will surely be the most dramatic and scenic of highways, and I have no doubt that future bridging will follow the attractive lines of our past bridgework in the Colony.

Switching from road to rail, we prepared various outline designs and estimates for the Mass Transit Study submitted by Freeman Fox & Partners, and Government's decision on the implementation of this report is due shortly.

With so much work in Hong Kong, the Resident Partners could be excused for resting on the laurels of their many successes in the Colony. But no, their policy has been to carry their expansion outside Hong Kong, and branch offices were established in Brunei and Thailand in 1966 and 1972 respectively. The airport and roads in Brunei are very sizeable jobs and the Thai roads potentially so.

No catalogue of jobs can depict the variety and technical interest of the work undertaken by our Hong Kong firm. Hong Kong itself is a veritable engineering 'Mecca', while the branch offices have added yet further variety. We are proud to have played an important part in the miraculous expansion of Hong Kong, and are grateful to have been entrusted with work in so many different fields of its development. A graph reproduced in this issue illustrates how the practice has grown in size. It has also grown in complexity with a variety of clients, associations with other consultants and dealings with contractors of many nationalities. A great measure of our success is due to the loyalty, talents and sheer hard work of our Chinese staff, while our expatriate staff have accepted the total involvement that work in Hong Kong demands and have given us first-class service. Having experienced the stresses and strains of resident partnership, I can appreciate better than most the successes that Mr. Lindsay and Mr. Elliott have in their turn achieved, and the value of the backing given by Mr. Phillips and Mr. Guilford, which deservedly led to their own partnerships. The size and diversity of the practice not only warrants three Resident Partners but calls for quite extensive collaboration with London. There is no doubt that our firms at home and overseas are mutually beneficial and, with improved communications, we foresee a trend towards closer collaboration between them. One thing is certain: at the end of its first twenty years the Hong Kong firm is sounder and stronger than ever before.

My visit to Hong Kong last March followed an absence of six years and as my Jumbo let

down over the South China Sea I sat wondering how the Colony would have changed, and whether I would be a stranger in a new environment. I need not have worried since as we lost height over Lema and I picked out the islands of Lantau and Cheung Chau with junks plying between them, the whole atmosphere of Hong Kong came back to me. As we passed Tsing Yi, Kwai Chung, Lai Chi Kok, the Foothills Road—barely discernible between new buildings—rounded the curved approach and touched down on my beloved Kai Tak, I knew that I was back in my 'second home'. My visit, though short, was sufficient to confirm that despite many changes the Colony is still the same wonderful place!

Turning to home affairs, it is very gratifying that we have won a second Structural Steel Design Award, this time for the BEA Servicing Hangar at Heathrow—congratulations to all directly concerned. We have recently had our

appointments confirmed for some very worthwhile jobs, including a major redevelopment in Bishopgate for Baring Brothers and Banque Belge, the 700 ft high Orchard Square Development in Singapore, for which the first stage is estimated to cost £35 million, and the Manchester-Sheffield (Longdendale) New Route—another 'Lancaster-Penrith'.

The past year has been saddened by Bob Moodie's death, but this does not prevent us from extending a very warm welcome to his successor, Mr. Bond. The level of activity of our various partnerships and companies continues to rise and the Secretary can be assured of a busy life.

As you know, tenders for our new Basingstoke office are due in soon, and we will keep you posted with further bulletins as the project develops.

May I, on behalf of the Partners, wish you all a very happy Christmas and New Year.

J.K.M.H.

**PARTNER HONOURED
BY
ROSE SOCIETY**

The Royal National Rose Society has announced recently that it has awarded the Dean Hole Medal to Mr. Bowen in recognition of his voluntary work over many years and his outstanding contributions to international relationships and collaboration.

The Dean Hole Medal is the supreme accolade of the Society and may be bestowed on amateurs or professionals of any nationality in any country 'for service to the Society and/or the Rose'. Yet, its status has been so jealously preserved that only fifty-five awards have been made in the last 64 years and no distinction is more highly regarded by rosarians the world over.

Hong Kong Newsletter

by Jim Blake

O ur Chinese friends always relegate time to its rightful place, as something which can be used but which is never allowed to control the needs of its master. Two years or twenty or two hundred or two thousand years is but a continuum, and the emphasis that we of the outside world place upon such artificial divisions is seldom, if ever, given significance in the central kingdom.

Progress depends upon the needs of the moment and the interest of those involved. This often conflicts with the time-orientated values of newcomers to Hong Kong, resulting in many frustrating experiences during shopping or working and energy expended in chasing up delivery promises. But those of you who would criticise such apparent laxity in matters of time, should recall, as was done during the past week by the Hon. Director of Public Works, the energy which can be directed to produce 'instant' results if urgency is the prime need. He was referring to the early 1960's, at which time a water-supply scheme was installed by the Chinese authorities, including crossing a mountain range, within a seemingly impossible short time to meet the urgent needs of Hong Kong at that time.

These remarks are in explanation to our local friends, who may consider it strange that we should concern ourselves with reviewing a mere twenty years of association with Hong Kong.

From the time of passing through the airport, driving over roads and flyovers, crossing the harbour without taking to the water, until turning on the tap in one's home or hotel, the end results of works undertaken by SWKP in Hong Kong are never far away. These results have been achieved only by the hard work and co-operation of local and expatriate staff, many of whom are now elsewhere, but whose names have been captured in print during previous newsletters.

Of those who remain, congratulations are due

to the following twenty-year termers:

S. G. Elliott	Leung Yue Kai
K. A. Phillips	Henry Lo
C. M. Guilford	Norman Liu
Cheung Kam Chiu	Chin Koy San

There is insufficient space to mention by name all those who have served ten-years and upwards, but their loyalty and hard-work is nevertheless fully recognised whether they are 'inside' or 'outside' staff.

But what of the present? Since, in Hong Kong jargonese, the dollar coming in is more important than what has been or might be. Witness our crazy stock market, where scenes of daily gambling are surpassing anything at Happy Valley race track. Those taking part range from tai pans (or their wives) with tens of thousands to place, or the local cleaner with hundreds. Investment for long- or short-term return has no meaning, all that matters is the number of shares changing hands daily since this determines the share price, and whilst the merry-go-round keeps turning the prices go up. Those who point out that even the best of fair-ground machines must stop, are refuted by those who believe that fair-grounds will never lose their attraction; and the majority believe that in any case they will always jump off before the merry-go-round stops.

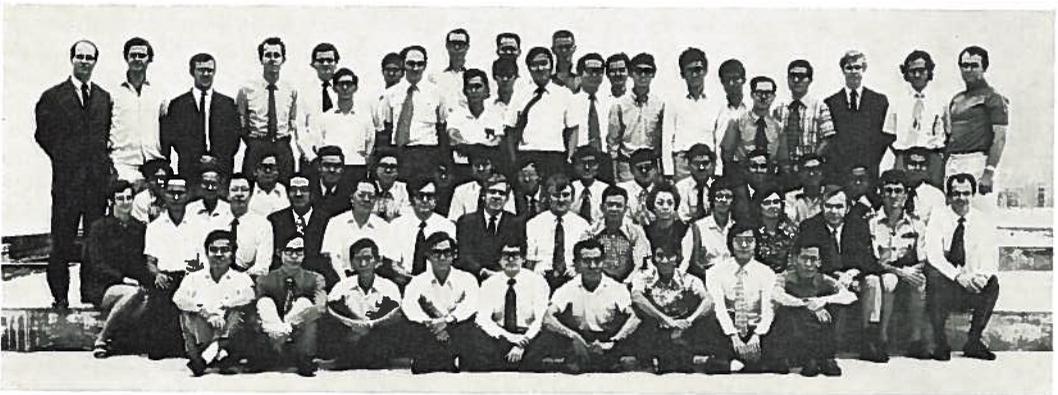
Against this background, the size and scope of civil engineering projects in Hong Kong continues to grow. Current optimistic pronouncements concerning Mass Transit, coupled with the improvement in relations between Peking and London, suggest that the growth rate will be sustained. If this happens, the next twenty years could find us exhausted or exhilarated or, perhaps, listening to our Chinese friends and just making money.

*** . . . where is that office boy! I must ask his advice on Dairy Farm, or was it Green Island shares the amah recommended?

Hong Kong Office Staff



April, 1959 (Resident Partner then was Mr. J. K. M. Henry)



November 1972 (Resident Partners: Mr. S. G. Elliott, Mr. K. A. Phillips and Mr. C. M. Guilford)

Hong Kong Panorama

(or, *The View from Star House*)

by S. G. Elliott

Having seen the list of Hong Kong contributors to this issue of *Pontifact*, I recognise that I am not the best equipped to talk about the firm's earliest days here. Recent news about the proposed move to Basingstoke, however, has reminded me that I alone have worked in all the design (as opposed to site) offices that the firm has occupied during twenty years in Hong Kong. Almost all that is, as I was not in at the very start when work began, first in a room at the RAF quarters and then in a disused airport building near the old control tower.

Quite early on, the firm moved into a Nissen hut close to the then Airport Police Station which was to be our home for a number of years. Entry involved presenting your pass to an armed policeman at the gate and fitting a suppressor to your car's distributor to prevent interference with airport radio communications. A brick ante-room was built on to one end of the Nissen hut to provide a reception area and an office for the Resident Partner.

When I first encountered this, the firm's first 'permanent' Hong Kong Office, it was air-conditioned and this provided relief against two major scourges, the summer heat and the noise of aircraft engines. Previously a combination of noise, heat, humidity, wind and rain had on occasions created conditions of complete bedlam.

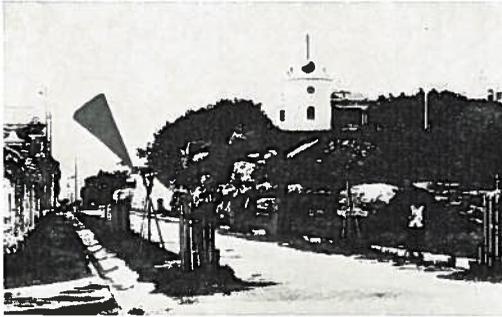
After a very brief spell in the Nissen hut, I moved out to take charge of a 'branch office' in one of the most scenic locations overlooking Tolo Harbour in the rural New Territories. The office consisted of a bungalow named 'Killary' after the magnificent Irish fiord and formerly occupied by the then Resident Partner, Mr. Henry, and his family. (It has since regrettably been re-named 'Killarney' by some Philistine.) The establishment was complete with a cook who prepared appetising lunches and a gardener and we had free access to a kidney-shaped swimming pool in the landlord's garden next door. This

idyllic existence lasted for only six months so that we barely had time to tire of the half-hour drive to and from Kowloon morning and evening. The only snag that we encountered was the indifferent telephone service but, because we were there only in the winter months, we never shared Mr. Henry's experience of having to barricade the picture window in the lounge against typhoon wind and rain.

In April 1958, the staff from both the Airport and New Territories Offices moved together into the fifth floor of Manson House, a new block housing shops, restaurants, offices and flats on bustling Nathan Road near the tip of the Kowloon Peninsula. It was at this time claimed that we were the only firm of Consulting Engineers to have not only one but two nightclubs on the premises. There is no truth whatever in the rumour that this led to extensive burning of the midnight oil although I can remember one occasion when engineers and tracers worked all through the night to meet a pressing deadline.

Although Mr. Henry signed the three-year lease for the Manson House offices with some misgivings at entering into such a long-term commitment, they were to be our place of business for no less than eleven years. The year after moving into Manson House (named by the way after the famous doctor and anti-malaria pioneer, Sir Patrick Manson) we expanded down to the fourth floor—and nearer to the nightclubs—to accommodate the Joint Office with Binnie & Partners for the Plover Cove Scheme. When we eventually moved to Star House, we carried the Joint Office with us and Binnie's Hong Kong Office joined us in a convenient and mutually beneficial arrangement; subsequently, Freeman Fox & Partners followed suit when they, too, set up a local firm. Manson House saw us through several cycles of expansion and contraction during which we overflowed into various flats on the upper floors only to recede to our starting place on the fifth floor. The only real

snag about our long sojourn on Nathan Road was that the standard of maintenance of the entrance and communal areas deteriorated and the odours, or should I say malodours, of cooking and food handling and preparation (the latter frequently on the stairways) were many, varied and all but inescapable. We cannot leave Manson House without a reference to Harry Pooley, whose period of administration roughly covered our stay there.



The Site of Star House (arrowed) c. 1908

Star House was built in 1967–68 by a local property and business tycoon with the alleged help of Communist Chinese finance. During the unrest in Hong Kong in the backwash of the Cultural Revolution, it is rumoured that the gentleman concerned was importuned by his erstwhile collaborators for a HK\$200,000 ‘contribution’ to the ‘Anti-Imperialist’ struggle. Having paid up he soon found that the ante had been raised and that he was expected to fork out a further HK\$2,000,000. At this stage, he decided that discretion was the better part of valour and abruptly disappeared, together with his family. Reports filtered back to Hong Kong that they were in Switzerland and later Canada but it was a good year or more before they saw fit to reappear in Hong Kong. In the meantime, a canny Scottish ‘hong’ (trading house) had bought Star House for a song and were offering leases at minimal rents in order to fill it with least delay.

With its ideal location, right alongside the Star Ferry terminal and only a seven minute ferry ride from the business centre of Hong Kong Island, we could hardly afford not to go there. Our previous lease was just running out and so it was that in the spring of 1969 we made the move. It was not like the slick professional job that Bob Moodie made of the Victoria

Street/Winsley Street transfer because delays in settling the details with Binnies meant that the new offices were not nearly ready when we had to vacate the old. For a time, I had an office the size of a ballroom all to myself but made up for it soon after when I had to sit through showers of plaster while partitions grew around my desk. With commendable speed, order was created out of chaos in a manner reminiscent of the last four days before the opening of an exhibition.



Star House. View of Harbour

We soon settled in and the new offices seemed to meet with general approval, particularly from those of us lucky enough to have a view over the Western Harbour past the Ocean Terminal to the anchorage beyond. It is a scene never without interest with container and general cargo ships, junks and ferries, hydrofoils and walla-wallas (water taxis) not to mention passenger liners, LASH ships and warships ever on the move. At night, the view is no less compelling with myriads of lights of every hue reflected in the water and it often involves real effort of will to concentrate on the latest client’s complaint or contractor’s claim.

Our time in Star House has been a period of steady expansion but we have always been lucky enough to find new rooms adjoining our existing space before coming apart at the seams. No-one can tell what the future will bring but, judging by the past, we can probably look forward to cyclic growth and recession, never, we trust, going beyond the limit in either direction.

Since 1966 we have had a branch office in Brunei and, from the beginning of this year, another in Bangkok. The office in Bangkok consists of a modern two-storey Thai house in a secluded soi (residential side street) right alongside the super-highway leading to the airport. The landlord’s daughter lives in an adjoining house and the garden is fenced to form a little

compound about the two buildings. The ground floor is the drawing office and the engineers work in the upstairs bedrooms with the added convenience of two bathrooms with baths and showers. The wooden floors upstairs are so highly polished that it is the done thing, and the common usage in Thailand, to divest yourself of your shoes before mounting the stairs.

By comparison, the Brunei office with its concrete floors is quite mundane, but, also being a converted flat, the establishment enjoys the amenity of showers on the premises.

The Brunei office is in Bandar Seri Begawan, the new name given to Brunei Town two years ago in honour of the previous Sultan. He abdicated in 1967 in favour of his son, but is still the dominant influence in the State. The office was established to design and supervise construction of a state-wide road network, only the first phase of which has been built. It has also administered the creation of an international airport with a 12,000 ft runway out of a swampy jungle. The partly completed runway accepted Brunei's first jet service when the infant Singapore International Airlines landed one of its Boeing 737's there on 1st November, 1972. This daily service is particularly opportune as Brunei has been cut off since 1st October from all other scheduled air services as a result of a dispute over reciprocal landing rights between Britain (representing Brunei) and Malaysia.

Work in the 'outstations', perhaps Brunei in particular, has more than its fair share of frustrations with a seemingly endless succession of obstacles, both natural and artificial, to getting anything done. Thus it would be unthinkable to end without mentioning at least some of the stalwarts who have carried the flag into these parts. Barry Paget, now in charge in Bangkok, previously performed the same function in Brunei for over 4½ years. He is ably assisted by Terry Ottway (ex London) and by 'Vic' Peralta and Direck, locally engaged Filipino and Thai

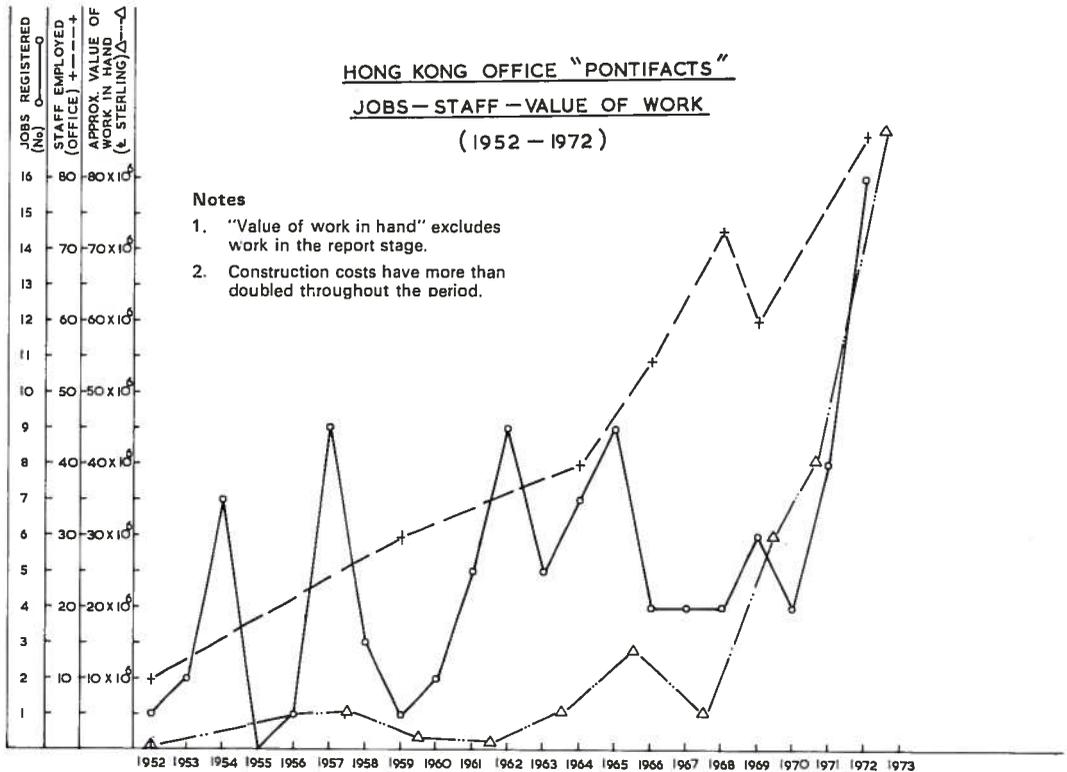
engineers, respectively. Uriwan and Nibha, ever smilingly efficient, attend to the clerical side. A contingent of specialists from the London and Kenya offices gave the Bangkok office its initial launch but have all since returned home. Four Resident Engineers, one for each of the current feeder roads, are straining at the leash to get to Thailand. They are 'Mac' Mackinlay (who with his wife Elsie presided over the Bangar colony during construction of the roads in Brunei), Des Boon and Mike Earwaker (both ex Brunei, the former having rejoined after several years of sampling the farther hills) and Jim Parkin from the Cross-Harbour Tunnel.

Managing the Brunei Office is Vic Lawley (who came from Lagos) and his deputy Mike Earwaker, also originally from Nigeria, although he and his wife Rose have been staunch members of the Brunei team for so long that we have almost forgotten his earlier affiliations. Chief Resident Engineer for the Airport is John Eddison whose wife appears to have a monopoly on all travel into and out of the State and somehow always manages to keep track of all the last-minute changes of plan that seem to be a part of visits to Brunei. Other members of the Airport resident staff are John's deputy, Paul Christopher, Lew Jardine, Paul Croney, Mahen Coomaraswamy, Job (pronounced as in job number) Lim, on detachment from PWD, and, on temporary assignment from Hong Kong, 'Van' van Aswegan. Many others, too numerous to mention here, made unstinting contributions towards the successful outcome of the Brunei projects. They came mainly from Hong Kong, London, Malaysia, Taiwan and Ceylon but most have returned home now that our work is drawing to a close.

In conclusion I should like, on behalf of all the Partners, to thank all staff, past and present, local and expatriate of the Hong Kong Partnership, in Hong Kong, Brunei and Thailand, for their unselfish efforts and their loyal support.

PRIVATEERING ENTERPRISE

Three owners of berths at Kwai Chung
 Each want to cash in on the boom.
 They drive us distracted
 With arguments protracted
 As to who pays for what and to whom.



Early Flights in Hong Kong

In the year 1891, Captain Baldwin said that he would make an aerial ascent by balloon and descent by parachute. The Colony's 14,000 Europeans knew enough about the dangers of ballooning to be intrigued; most of the quarter of a million Chinese residents refused to believe such a flight possible.

Unlike today, leisure was an art to be assiduously cultivated by every European in the Hong Kong of 1891 and most of the 'foreign community' went to watch the Captain risk his

life. As take-off time approached, people unable to go to the launching field kept a sharp lookout from all parts of the Island. The 14,000 residents of Kowloon were told that they also would easily be able to see the balloon. Those who had prophesied disaster for Captain Baldwin and his balloon were quickly proved wrong. The launching was smooth and the parachute descent uneventful. The first flight in the history of Hong Kong was a success.

In the years following the turn of the century

other balloonists (usually billed as 'intrepid') came to Hong Kong and at least one had a narrow escape. Remembered only as Senor Hernandez, he had just stepped into his gondola when the balloon above him exploded in a sheet of flames. In the words of a contemporary report, Senor Hernandez emerged 'burned and blackened'.

Like the rest of the world, Hong Kong had been astounded by the feat of the Wright brothers and the coming of the first heavier-than-air machine was eagerly awaited. An unconfirmed report states that the first aeroplane to fly in Hong Kong took off at Sha Tin in 1910 and made a circuit of the bay. However, the first officially recorded flight in Hong Kong took place at Sha Tin on 18th March, 1911. The Governor and

practically everybody else of importance made the long journey from the Island to watch, most only to be disappointed. The wind rose and the pilot, a Belgian named van de Born, dared not risk a take-off. However, after many of the visitors had gone away, he was able to get aloft in his Farman. The next demonstration did not take place until 1915 when Captain Tom Gunn flew a seaplane at Sha Tin. Four years later, an aircraft piloted by a certain Mr. Lim took off from the centre of the race course at Happy Valley and unfortunately crashed into a timber yard. It was not until 1924 that flying activities in the Colony were centred at Kai Tak on a permanent basis. That is another story . . . (Information from *Hong Kong Airport*, Hong Kong Government Information Services).

The Kai Tak Airport Story

by C. M. Guilford

“Henceforth Hong Kong will not only be noted for its fine natural harbour but also for its imaginatively planned runway. As with our harbour in the past, so will this runway help us in this modern air age to develop the trade on which Hong Kong's prosperity was founded.”

Thus spoke the then Governor of Hong Kong, Sir Robert Black, on 12th September, 1958 when Kai Tak's new 8,350 ft long runway (on an 800 ft wide, 1½ mile long reclaimed promontory jutting out into Kowloon Bay) was formally opened.

It was a grand occasion. The Governor and Lady Black were flown by helicopter to Kai Tak, breaking a red-white-and-blue silk ribbon stretched across the width of the runway as the aircraft came in to land. Obliging a rainbow appeared and arched over the runway just after the Governor had finished his opening speech. This polychrome curve, considered by the Chinese as a sign of good luck, brightened the afternoon marked by continuous rain. Despite the bad weather, it was a day when all Hong Kong, in particular, those SWKP engineers

closely associated with the project, felt proud of having achieved world recognition.

Just over a third of a century before, in 1924, the first aircraft landed at Kai Tak when it was a small grass area about 400 yards by 300 yards, quite big enough for the small planes of those days. It is this area which grew into what today is Hong Kong International Airport. In that year a Flying Club and School were started and the small airfield was soon to be used by a number of flyers who came to Hong Kong in the course of long-distance pioneer flights. In May 1924, Captain Doisy landed in the Colony in the course of a flight from Paris to Tokyo. The next month saw the arrival of some American flyers, Brock and Shlee flying the 'Pride of Detroit', in the course of a round-the-world flight. Other pioneering flights included those of F. R. Loring (Madrid to Manila), Fraulein von Erzdorf (Japan to Surabaya), von Gronau (round the world), Captain Dickson (Shanghai to South Africa) and Colonel Nogues, who carried the first air-mail from Hong Kong to Paris (mail in those days was considered more important than



The runways at Kai Tak showing new extension

passengers who were carried at their own risk).

In 1927 the Government took over Kai Tak and the Royal Air Force established itself there. Meanwhile the Hong Kong Harbour Office took responsibility for the civil airfield, the Harbour-Master becoming also the Director of Air Services.

It was some years before the field was to rejoice in the name 'airport' and, by 1932 when the airport area had grown and covered just over 400 acres, it was still an all-grass aerodrome. The airport at that time had a small collection of terminal buildings where the passengers were 'processed' and their baggage checked, a hangar for aircraft and such basic aerodrome equipment as trucks and fire engines. Landing fees were introduced and airport revenue jumped to more than HK \$14,000 a year!

Though pioneers continued to land in Hong Kong in the course of long-distance flights,

there do not appear to have been any regular air services until, in 1935, experimental flights were made between Hong Kong and Penang by Imperial Airways (the predecessor of BOAC).

In 1936, Imperial Airways began a weekly service between Hong Kong and Penang to connect with the England-Australia flights, the journey to England taking about 9½ days. Later the same year, a thrice-weekly mail and passenger service was started by China National Aviation Corporation between Hong Kong, Canton and Shanghai. The following year brought the first trans-Pacific passenger flights to Hong Kong, operated by Pan American Airways using 'Clipper' flying-boats which landed in Kowloon Bay.

By 1938 the airport was seeing increasing traffic, in that year almost 10,000 passengers being handled, and two years later a simple lighting system was installed for night flying

operations. Soon afterwards, in December 1941, the Japanese without warning attacked British and USA possessions in the Pacific areas and, after a fierce struggle, Hong Kong surrendered on Christmas Day.

During the occupation, the Japanese turned Kai Tak into a strategic air base and extended the airfield considerably by incorporating further land to the north and west, the latter involving the demolition of an appreciable area of Kowloon City and part of the Hill of Sung and reclamation of some thirty acres. The Japanese also built the large intercepting nullah that bordered the northern and western boundaries of the airport and the two crossing paved runways, each rather over 4,500 ft long. These would have been of greater value to Hong Kong after the war had they not been very poorly built. They were, in the main, the work of forced prisoner-of-war labour, including many local members of the Hong Kong Volunteer Defence Force who, apart from being unskilled in such work, took every opportunity for sabotage. It is alleged that in many places they made the surface of the runways so thin that it collapsed under the weight of a bicycle!

After the Japanese capitulation, engineers had a lot of work to do before Kai Tak was fit again for civil air traffic and it was not until 1947 that the airport was really considered suitable to take its place in international air operations. The runways were already known to be inadequate for the four-engined aircraft that would be operating to Hong Kong in future. After some thought, the authorities decided that, if Hong Kong was to remain on the world's air routes, it would have to build another airport. This proved quite a problem as the only two sites studied for a new airport, namely at Deep Bay and Stanley Bay, were rejected, the former because of its nearness to the Communist Chinese border and the latter because of constructional difficulties and the high costs that these would entail.

Subsequently in 1951, the Ministry of Civil Aviation prepared a report on redevelopment plans for Kai Tak airport and recommended that the services of consulting engineers be employed to implement extension of one of the existing runways by some 2,000 ft and the construction of a new 8,850 ft long runway which would protrude about a mile into Kowloon Bay. Both runways would be 'dead-end', terminating at the foot of mountains with only one usable approach. The firm were duly approached and on 28th August, 1952 the appointment was

recorded in the *South China Morning Post* as follows:

"London—A British firm on consulting inquiries has now been appointed to advise the Hong Kong Government on the technical aspects of the development of Kai Tak airport. It is Messrs Scott and Wilson, of London. One question the consulting inquiries will be asked to consider is whether Kai Tak airport can be adapted for the use of Comet jet airliner."

Mr. Grace arrived in Hong Kong on 3rd November, 1952 (the journey time was by then reduced to about 2½ days) to set up the Scott & Wilson office complete with soils laboratory. Over the next two and a half months his expatriate engineering staff comprising Messrs G. M. J. Williams, J. K. M. Henry, Roger Whiting, Ken Phillips, Peter Lumb, David Coffey and Michael Guilford arrived to be followed a little later by John Sutton. To complete the technical staff three Hong Kong university graduates, Ho Chung, T. M. Yuen and C. C. Wong, three laboratory assistants Norman Liu, Chin Koy Shan and Freeman Liu and a tracer, Miss Toni Whitehouse were employed. The administrative section included Mrs. Diana Moore (secretary), Cheung Kam Chiu (messenger) and two drivers, Leung Yue Kai and Henley Lo. Of the original nine local staff no less than six are still with us today.

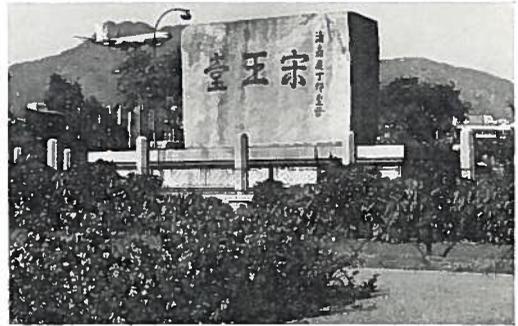
During the following five years, when the office was situated in a Nissen hut on the airport, local staff who joined then and still remain with SWKP include Cheung Kam Sing (chainman), Harry Ha and Cheuk Ping Kwan (draughtsmen) and Fung Kui Fun (accountant); Man Chuen Chung (chainman) only left in August 1972 to become a Partner in a private business. Expats who joined during this period included John Gandy, Jack Parker, Jack Wiseman and John Holt.

For the young engineers, the early days of the investigation and design work were filled with interest. It soon became apparent to us that the two 'dead-end' runway layout was not the best solution, and after investigating a number of alternatives we suggested a single runway with a curved approach to one end. This was accepted by Government. Most of us at one time or other were involved in the extensive marine and land investigations, laboratory testing, comprehensive marine, current and land surveys (including the roof-tops over Kowloon City), the curved approach over the Kowloon Tsai foothills to be

removed, schemes to move three blocks of 10-storied flats, investigations of existing and forecasts of future passenger and traffic movements, innumerable schematic layout plans and estimates and finally the detailed design of seawalls (3½ miles), reclamation (180 acres), pavements (80 acres), drainage, lighting dolphins, piers, bridges (the earliest being SWKP's first in Hong Kong, a three-span 84 ft long concrete/steel structure across the old nullah, designed, built and commissioned in 23 days), terminal and freight buildings and other associated works. Our project report was submitted in August 1953 and it was not until two years later that the principal contract was awarded.

We were all fascinated by our first flavour of the East, its old Colonial style of architecture, its smells, the traditional Chinese customs, the clatter of mahjong, its spirits (both evil and imported!), the contrast between the extreme wealth and poverty, its transport facilities (for instance, the sedan chairs to be found parked in Wyndham Street), its varied restaurants, its multiplicity of shops packed with curios, 'cheap' cameras and electrical goods, inexpensive shellfish and plentiful food (a vivid contrast to the austerity of UK rationing) and, above all, its cosmopolitan atmosphere.

In view of the somewhat delicate situation with China at the time (the Korean war was still in progress) and the uncertainty regarding the financing of the project, many of us stayed about a year in the Peninsula Hotel. One of us, when suffering from 'Hong Kong dog' (unfortunate as his bathroom had been turned into a dark room) was visited whilst bed-ridden by the acting Director of Public Works for the purpose of obtaining new estimates for one of the many revised schemes, another went to sleep in his bath (fortunately empty) and a third climbed into his room via the bamboo scaffolding when repairs were in progress. We were enthusiastic in other outside activities and made our presence felt in the sporting world, in particular on the cricket, tennis and hockey fields, at yachting, mountain walking, squash, amateur dramatics and varying other indoor sports. Many of us were directed into the local auxiliary services including the Hong Kong Defence Force, Special Constabulary and Essential Service Corps (considered a 'skive'). Highlights included the annual camps which involved living in pretty primitive conditions, various Governor's military and police annual reviews, exercises in Kowloon and the New Territories, walking the beat with



Sung Wong Toi Boulder—1972

loaded revolvers (on occasions calling in at the cricket club or one's own flat for refreshment) and raids on opium dives and other places of low repute.

The airport development involved us in a small way with the past. At one point a detailed survey was made of an historic 1,000 ton granite boulder which used to be perched at the top of a small hillock overlooking Kowloon Bay and had to be removed; during adjacent excavation works in the war it had rolled to the bottom. On one face of the boulder were inscribed more than 600 years ago the Chinese characters 'Sung Wong Toi', or 'Terrace of the Sung Dynasty Emperor'. According to legend, the last Emperor of the Sung Dynasty took refuge near the boulder when fleeing from the Mongols. However, in interests of economy, a decision was made to split the section bearing the characters, rather than move the boulder bodily, and to re-erect it in a specially laid-out garden.

Along the Kowloon Tsai foothills stood the sole remaining section of the original Kowloon City wall with one old gateway still in existence in a saddle surrounded by squatter huts. However, these relics were soon to disappear once excavation started.

Hopes were high when the marine dredging began. There was a chance that the riddle of the overlaid Japanese plane, which local gossip alleged took off with bullion just before the end of the war and crashed into Kowloon Bay, would be solved. However there was no such luck—the only interesting item found was an old 3-catty-er (4-pounder) cast iron cannon which was then proudly mounted outside the CRE's office and now stands near the site of the old fort above Battery Path on Hong Kong Island. The cannon was cast in 1649, being the fourth year of the Wing Uk reign of the Ming

Gin Drinker's Bay

by J. F. Lindsay

Those who have never been to Hong Kong may be forgiven for wondering why soulless engineers were permitted to eradicate for ever a stretch of water with the evocative name of Gin Drinker's Bay. What were the local pressure groups doing about such desecration of the environment? Why no irate correspondence in the *South China Morning Post* or even from peppery retired Old China Hands in *The Times*? Alas, while a rose by any other name may smell as sweet the converse equally applies and Gin Drinker's Bay, which gained its name in balmy days when it was a popular spot for launch picnics, in latter years was much more aptly

known in Chinese as Lap Sap Wan (rubbish bay). So there were no protests and the bay has been almost entirely filled in and forms part of the area now called Kwai Chung, but the old name will always be remembered by military historians—the first defence against the Japanese invasion of Hong Kong in December, 1941, was the Gin Drinker's Bay Line.

In 1957 we were commissioned by the Hong Kong Government to report on the feasibility of economic reclamation of several sea inlets, among them Gin Drinker's Bay (later irreverently nicknamed 'Haw Kei Haven'), and two years later were appointed to design and supervise the



Outer part of Gin Drinker's Bay, 1963. Note the small island

Then . . .

construction of the first stages of a comprehensive reclamation of the bay as part of what had by then become the Kwai Chung Development Scheme. At this time the bay was being used chiefly for shipbreaking (the *Arundel Castle* was among the vessels broken up there), for storing timber afloat and for rubbish-dumping. All in their turn presented problems during construction, the shipbreakers and the timber merchants because they were reluctant to leave and the rubbish by its distinctive and pervasive aroma and its propensity for breeding flies.

The contractors for the main stage of the reclamation were Japanese. We have had Japanese contractors working for us before and since but one is always surprised anew by the size of the team they assemble for even the most routine discussion and the patience needed to achieve results. Gordon Wilson, the Resident Engineer, suggested an apparently simple innovation which he reckoned would save time and effort in a concreting operation only to be told that it was quite impracticable. Some three weeks later a beaming deputation arrived at his office

to announce that they had had a brilliant idea . . .

It was on this job that Syd Drury made his famous remark, previously recorded in *Pontifact* but which bears repetition, "My horoscope says I mustn't lose my temper today, so I'll have to wait until tomorrow to say what I think of this reinforcement."

The rubbish dump (sorry to keep referring to it, but it somehow featured large in everyone's thoughts at the time) created even more trouble by starting to disintegrate under tidal action. It was decided to contain it within an earth bund and our contractor rather rashly stepped in where others had failed. Initially all went well but in deeper water the soft mud on the seabed began to win and perhaps a hundred feet of newly placed bund would disappear overnight. The technique of bottom-dumping material to blanket the mud, used for part of the Kai Tak runway construction and in the general Kwai Chung reclamation, saved the day and the rubbish was eventually confined, though the smell and the flies remained.

One lesson spelled out yet again at Kwai



. . . and now

Similar view, 1972. The former island (now levelled) lies near the centre of the Container Terminal

Chung was the difficulty of predicting subsoil conditions in Hong Kong's terrain. An extremely comprehensive site investigation indicated a large surplus of rock but in the event it was a struggle to obtain sufficient good rock to complete the sea wall at the mouth of the bay and the protection of the coastal road and the typhoon shelter which were included in the contract.

An interesting example of the power of typhoon winds followed a fairly severe one in 1964; the site office windows were peppered with tiny neat holes caused by blown sand.

One of the main features of the work was the construction of a storm water 'nullah' or culvert through the reclamation to take the run-off from it and from a long valley inland. When it rains in Hong Kong it really does so in earnest (the yearly rainfall of London can occur in a couple of days) and the nullah was designed to carry 6,500 cubic feet a second. It is some 50 ft wide and 12 ft deep and looks so impressive internally that someone suggested that it was wasted as a mere drain and should really be incorporated in the proposed underground railway system. A dual carriageway road runs on its roof.

When our part of the reclamation was finished in 1966 our interest in Gin Drinker's Bay waned for a few years, although we extended the coastal road towards Kowloon by building Lai Chi Kok Bridge and reported on extending it in the other direction towards Castle Peak. The area was also considered as a possible casting basin for tunnel units. The Government and private enterprise built a small city of multi-storey blocks and factories on the 200 or so acres we had provided by reclamation and by hillside terracing, and the area as yet unreclaimed continued to be filled in gradually.

Then in 1970 the Hong Kong Government produced its long-awaited proposals for a container terminal complex at Kwai Chung and we were retained to advise two of the potential developers and operators of the berths. The proposed method of award of lots by Government was unusual; shipping lines and wharfingers could offer either to operate berths provided by Government or to construct them themselves and then operate them. In the event three of the originally intended four berths were awarded on the construct, develop and operate basis to American, Japanese and basically British operators. There followed an intriguing period of political and financial wheeling and dealing among these operators in an attempt to combine for construction purposes and thus gain

the benefits of a single contract. We inevitably became greatly involved in all this and, although it was only partially successful in its prime objective, we were eventually appointed as engineers by all three operators though our sphere of responsibility varied in each case. We soon found ourselves not only with our three clients of different nationalities but with two main contractors (one Japanese and the other a consortium of French and Hong Kong firms with a leavening of Swedes), numerous Chinese sub-contractors and, for good measure, two quay walls of such widely differing character as to be almost incompatible, yet which had to marry into each other both in design and during construction. Small wonder that Robin Osborn was observed one day in the office, Bible open at the Tower of Babel story, shaking his head sadly as he muttered "We never learn."

The Resident Engineers supervising each contractor, Ian Donald (now succeeded by Chris Wright) and Lance Dodd, have at times felt that they needed passports to visit each other's site, so rigid has been the demarcation between them. Nor have the supposedly inscrutable Japanese been immune from the difficulties of the situation; at one site meeting on boundary problems a long impassioned outburst by one of their engineers was, probably tactfully, translated as "Mr. X says that life isn't worth living."

Work started on site in February, 1971 and, when complete by spring 1973, will have involved 3,000 ft of quay wall construction, 3 million cubic yards of dredging and more than 8 million cubic yards of excavation and filling, together with paving, drainage, water supply, flood-lighting and the wide variety of buildings which container operations demand. The new reclamation straddles the sea wall which had been built under the earlier scheme and totals 94 acres. Hong Kong is used to getting two jobs for the price of one and the filling material excavated from neighbouring hillsides will produce a bonus to Government of 80 acres of terraces for subsequent development.

The quay wall designs required the filling immediately behind them to be sandy but, as we might have guessed, the material available proved to be mainly clayey so selection was of prime importance. Recalling one of the difficulties at Plover Cove, where clayey soil was needed for the core of the dam but only sandy soil was readily available, the writer wonders whether a major error in location wasn't made—perhaps we should have built the Plover Cove Dam at

Kwai Chung and the container terminal in Plover Cove? Or even carried things a stage further like the character in one of P. C. Wren's books, a clergyman in a drought-ridden territory whose bishop said "Let's build a dam and pray for rain" and who was unfrocked for replying "Why not wait for rain and then pray for a dam?"

Two sad things have occurred so far during construction. The sea wall, faced so painstakingly with massive granite blocks during the original reclamation scheme, had to be ignominiously beheaded and buried in the new work, though it tries to fight back by remaining a hard spot and creating problems of differential settlement. The other tragic event was the burning and capsizing of the former *Queen Elizabeth* which had been moored a mile off the terminal sites. She still remains partly submerged, a twisted and rusty hulk, looking at dusk for all the world like a chain of small islands. Even this tragedy had its lighter moment. Soon after the fire broke out a fire engine, with bells ringing and sirens screaming, raced onto our partly completed reclamation. The crew jumped off brandishing axes, all set for action. When they realised that a wide stretch of water still separated them from the blaze they stood around sheepishly for a few minutes and then quietly drove away.

The first container ship, the 60,000 ton *Tokyo Bay* tied up at one of the new terminal berths early in September last, less than 19 months after construction started. When one realises that this vessel, one of the new generation of container ships, is 950 ft long and comparable in size to the *QE2*, can carry more than 2,000 containers and load or discharge in two days cargo which it would take several conventional vessels weeks to handle, one appreciates to some extent the impact and the possibilities of containerisation. Early reports indicate that the terminal is operating even more efficiently than had been expected and one can only hope that Hong Kong will be spared the problems that have beset the introduction of full containerisation elsewhere. All those in the Hong Kong and London firms who have been involved in this exciting job will watch the outcome with more than usual interest and pride.

We still have other commitments in the area, notably the approaches to the bridge across Rambler Channel which will link Tsing Yi Island to the mainland. Further container developments are mooted and we have already reported to yet another client on possible future berths. Perhaps our long association with Gin Drinker's Bay is not yet at an end.

Kwai Chung Newsletter

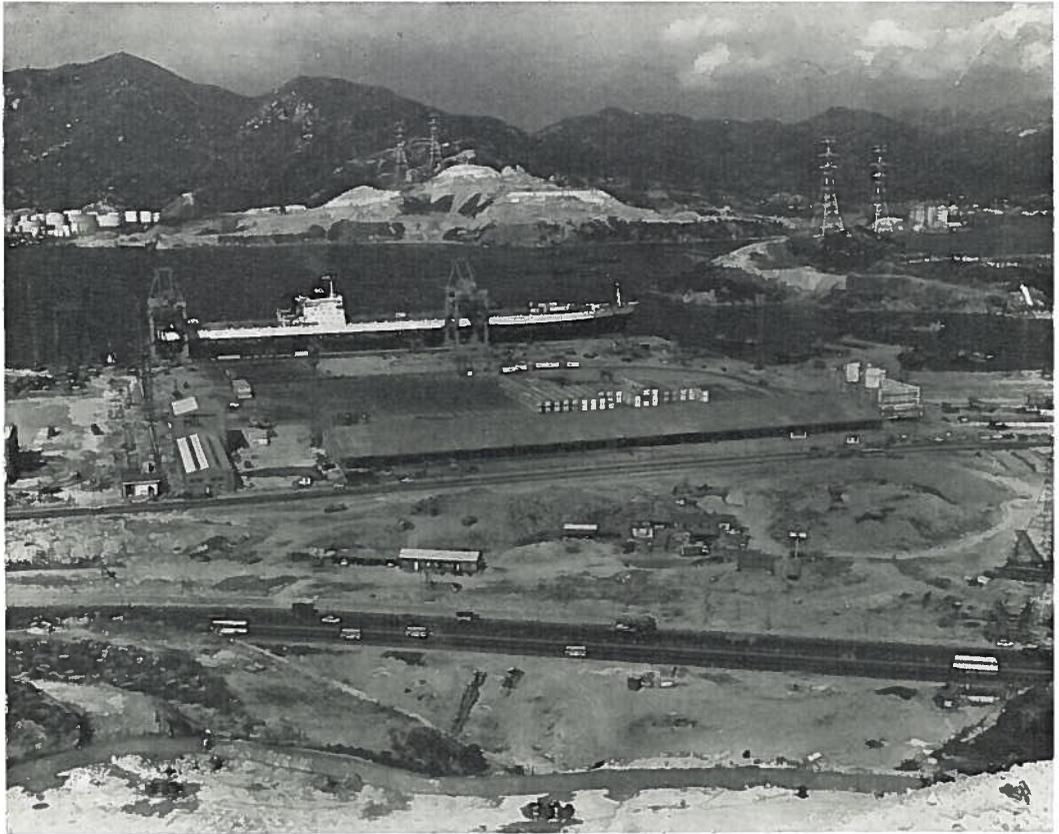
Berth One

by Chris Wright

There have been many changes at Kwai Chung Berth One since the beginning of the year. And I didn't just mean the disappearance of quaintly named Gin Drinker's Bay under the sheds and offices of the new container terminal, these buildings now standing 250 yards from the quay's edge. Along that quay stand gargantuan cranes; with big, yellow, science-fiction 'straddle carriers' bleeping their way across and through a giants playground of toy bricks spread out and piled up within neatly yellow painted lines on the black asphalt.

Nor was I referring to the change of scenery behind, with the rapid carving out of the hills across the road. Here the 'have-your-cake-and-eat-it' Hong Kong Government have kindly leased a barren hill to Modern Terminals Ltd giving them the privilege of forming valuable building terraces to hand back as a free gift to Government again.

No, I was really referring to the old and new and changing faces around the site and offices. Sparring partners at the top, setting the pace and achieving the date although impossible, were



60,000-ton containership *Tokyo Bay* at Berth No. 1, Kwai Chung Container Terminal, September 1972

Resident Engineer Ian Donald and, from Sweden, Contractor's Project Manager Sven Bauge, steering their respective teams to the historic first berthing of third generation container ship *Tokyo Bay* on 5th September. Although now back in harness at Kai Tak, Ian modestly dodged the plaudits by taking a well earned leave from the end of August, handing over to Chris Wright fresh (?) from arduous months on the Cross-Harbour Tunnel.

Highlander SARE Tom Muir, key man of the outfit, co-ordinating, instructing, organising, and quietly insisting on the highest standards was there throughout—until at the end of October he too decided a month away was needed. At the time of writing he is perhaps luring trout and salmon to the fly in true highland style—but Down Under. Meantime Des Boon, awaiting a return to roadworks in Thailand, is helping out in Tom's absence. Soon after

the berth had properly emerged from its muddy depths, came Jack Collins of Preece Cardew & Rider to help us with our electrics, and without him we would have been floundering indeed. He is now performing a similar service for the adjoining Berth Two. A visitor for two months, extended to four, was Gordon Trigg, from London Office, doing vital work in chasing and keeping tabs on progress and a varied network of services, and telling of building a city from scratch in British Honduras. Cracking the whip was Cyril Hudson, inspector of works from Yorkshire, swapping yarns with Ian Donald of bygone days at Port of Tema, Ghana. Fellow inspectors were Frank Nelson who has looked after the buildings, and Alec Thomson from Dundee who fitted in a brief six weeks between harbour tunnel and airport extension to tide us over the period when Cyril took a month's leave intending to marry off his daughter, but without succeeding!

Among the ARE's, James Ng can tell us newcomers all about the early days of the project; Shen Jui Ming knows all the intricacies, both structurally and electrically, of all the buildings; and Ng Chiu Choi from April to October looked after pavements and borrow areas before deciding to find pastures new with the Singapore PWD. The latter was replaced in turn by Eddie Ho, recently from Kai Tak Runway and a spell in Star House, who quickly settled in and picked up the threads of history.

At the time of writing, fourteen others complete the team: surveyors T. K. Yeung, K. W. Ho, Robert Chan, and K. M. Tsang; lab technician David Wong Man; assistant inspectors and foremen Paul Wong, William Fung, Peter Lam, P. K. Chan, N. Y. Wong and W. N. Chan; and last but not far from least the inside team keeping the drawings and paperwork in order, draftsman P. K. Chuck, secretary Shirley Wong, and clerk Raymond Yeung.

Berths Two and Three

by Lance Dodd

We have been engaged for the last few months in a civil engineering equivalent of a Monte Carlo Rally with crane delivery dates, arrivals of container ships, etc. as check points; to date loss of points has been avoided but the future is not optimistic. However on the site we are now at full strength with Richard Denton-Cox in charge of the berths and Choy Tak Yan the borrow areas respectively, ably supported by ARE's Lau Yuk Leung, Wong Siu Fan and Tang Wai Wan. David Cheng left us after his year on site for the placid pastures of Star House but it is believed he still hankers after the excitement of container berth construction. David was married whilst with us, an example other suitable candidates might follow.

Morale is high, however we were rather depressed to hear that the location in which we work has been classified by Government as a 'Noxious Trades Area'. We have no illusions of the image civil engineering holds in the lay mind, but we didn't realise we had sunk so low.

This year, that of the 'Rat', is according to Chinese classification one of uncertainty; this has been borne out by the weather which has been more than usually eccentric; the heavy rains of June which caused so much damage and loss of life in Hong Kong fortunately let us off lightly with some minor flooding but we were embarrassed when in November typhoon 'Pamela' after jiving in the South China Sea suddenly embraced Hong Kong.

Berth Three nearby became operational early in November when one of the myriad fly-by-night container handling companies, which have sprung up on every available bare patch of land in the vicinity, decided that our eastern sea wall made an excellent lighter berth for loading containers. They were persuaded however, that squatters rights do not extend to sites under our supervision! One by-product of our little brother's operational status is that a stout wire fence now prevents the minor raids and counter raids that formerly took place on the frontier.

WHAT AM I?

British?	Briton?	
Hong Kongish?	Hong Kongon?	Hong Kong Belonger?
Hongish Kong?	Hongon Kong?	Honger Konger Belong?
Hongish Kongish?	Hongon Kongon?	Honger Kong Belish?
	Hongon Kongish?	Hongish Kongon Beler?
	Hongish Kongon?	

PONTIFACTS GLOSSARY OF OFFICE TERMS**A PROGRAMME:**

Any assignment that can't be completed by one 'phone call.

CHANNELS:

The trail left by an inter-office memo.

STATUS QUO:

The mess we're in.

TO EXPEDITE:

To confound confusion with commotion.

CRITERIA:

Measures which the other person uses to underestimate what you have already over estimated the job to be worth.

UNDER CONSIDERATION:

Never heard of it.

UNDER ACTIVE CONSIDERATION:

We're looking in the file for it.

IN TRANSMITTAL:

We're sending it to you because we're tired of holding the bag.

A MODIFICATION OF POLICY:

A complete reversal which nobody admits.

SYNTHESIS:

A compounding of detailed bewilderment into a vast and comfortable confusion which offends no one.

A SURVEY IS BEING MADE ON THIS:

We need more time to think of an answer.

FURTHER SUBSTANTIAL DATA NECESSARY:

We've lost your stuff. Send it again.

READ & INITIAL:

Lets spread the responsibility for this.

SEE ME RE THIS:

Come down to my office, I'm lonesome.

LETS GET TOGETHER ON THIS:

I'm assuming you're as confused as I am.

LETS HAVE YOUR THOUGHTS ON THIS MATTER:

We'll listen to what you have to say as long as it doesn't interfere with what we have already decided to do.

RESEARCH WORK:

Hunting for the person who has removed the file.

FUNCTIONAL CONTROL:

You tell him what to do and he'll tell you where to go.

TABULATING DATA:

Dragging information out of an inaccessible place, listing it and then filing it in an equally inaccessible place.

CONFERENCE:

A conference is a group of people who individually can do nothing, but who meet collectively and agree that nothing can be done.

Plover Cove Marine Dam

by D. A. Wainwright and C. M. Guilford

SWKP's chief contribution to the Plover Cove Water Scheme, which was undertaken jointly with Binnie & Partners, has been the 1½ mile long, 125 ft high, main marine dam at Plover Cove which cost over £12 million and for this anniversary issue, it was thought it may be of interest to review the history of this project.

Much of the Colony's land area of 398½ square miles is spread over 236 islands and islets, many of which are uninhabited. Whilst it has a healthy, though erratic, average rainfall (86 in./year), there are no sizeable lakes or rivers. Population and land have been at the root of the problem, too many people and not enough land and water restrictions have been the rule rather than the exception. After the Pacific war, as the Colony prospered with increasing population and industrialisation, the problem of water supply became even more acute. The Tai Lam Chung and Shek Pik Schemes were completed in 1957 and 1963 respectively by B&P, the latter reservoir being connected to Hong Kong by a twin-submarine pipeline, some 8 miles in length. However, these schemes barely restored the balance between supply and demand and Hong Kong still lacked the storage capacity needed to give a more balanced yield over dry years. Sites where large conventional impounding reservoirs could be exploited without interfering to any great extent with the Colony's rural communities and agricultural development had already been utilised.

Thus in 1958 the Hong Kong Government had no option but to consider whether large reservoirs could be created in coastal inlets. Two locations were investigated jointly with B&P, one being the 3½ mile long by 1½ mile wide Plover Cove bay, at that time a remote and scenic part of the New Territories where at one time pearl oysters were cultivated, and the other the smaller inlet at Hebe Haven. Soon after the feasibility report had been submitted, a full site

investigation and office study on all aspects of the scheme was carried out. The reservoir to be formed at Plover Cove by the main marine dam and two smaller subsidiary dams would store 37,000 million gallons, more than trebling the Colony's water storage capacity.

The site investigation included drilling, boring (mainly from rigs mounted on two modified cargo-barges), *in situ* vane, penetration, permeability and salinity testing and laboratory testing. A Swedish foil sampler was used successfully for the first time in the British Commonwealth for obtaining continuous samples (up to 40 ft in length) of the sea-bed mud. In all, there was nearly two miles of drilling, boring and continuous sampling in the Plover Cove reservoir area. A vital part of the investigation was an extensive search (involving a further two-thirds of a mile of boring, drilling and pit excavation) to find suitable natural materials for building the dams. The land borrow areas finally selected were all near the sea to facilitate the use of barges.

The investigations at the dam site revealed a 30 to 50 ft thickness of soft marine mud lying in 30 to 40 ft of water along the whole line of the dam. In places at the bottom of the mud were sometimes found clumps of reeds in a completely preserved state. Under the mud stratum were mixed sand and clay deposits strong enough to support an earth-rockfill type of dam but too compressible to support any rigid construction, e.g. a concrete dam.

An important part of these early investigations was the construction of a fully-instrumented test mound adjacent to the main dam site (costing about £100,000) using decomposed granite as the principal embanking material. Successful completion of the mound proved that it was possible to form under water an adequately stable and impermeable embankment without any unduly complicated techniques of selection or placing.

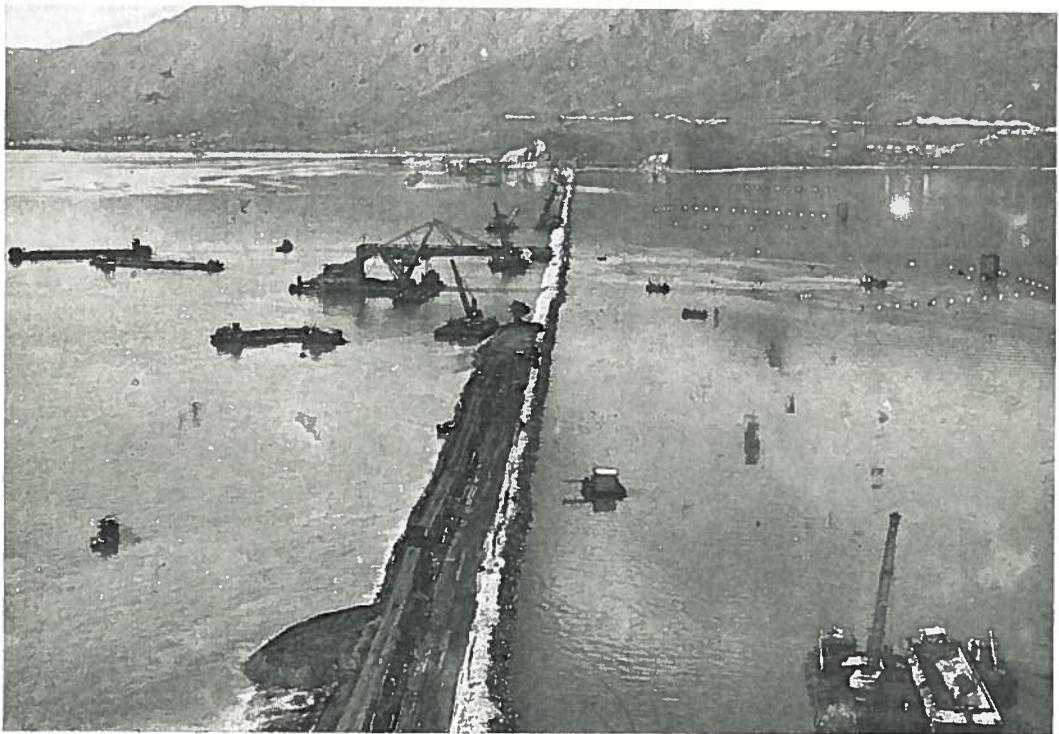
The detailed design and preparation of documents to be used for the calling of tenders was undertaken in London. A foundation trench, 600 ft wide, was to be dredged across the sea-bed and the $1\frac{1}{4}$ mile long dam raised by dumping decomposed rock and sand on either side of the carefully selected and placed soil which formed the impervious core. Rip-rap overlying filter rock and sand was to be placed on the outside to provide the necessary protection from wave action.

Being on the south coast of the Chinese mainland, Hong Kong lies within the belt affected by typhoons which frequently form in summer over the Pacific Ocean and South China Sea. One typhoon a year on average passes close enough to the Colony to produce gale force or greater winds. More rarely, severe typhoons pass directly over Hong Kong, usually causing widespread destruction. In the Plover Cove area, these severe typhoons can induce a quick rise in sea level above the usual tide level and this has reached a proven 14 ft. Thus, the spillway had to be sufficiently high to safeguard any stored freshwater from typhoon seas. This also ensured

that, on balance, overall seepage would be of stored water outwards rather than salt water inwards, the long-term mean level of the impounded water exceeding that of the sea.

The reservoir works attracted world wide interest and tenders from many countries were received. The French firm, Societe Francaise d'Entreprise de Dragages et de Travaux Publics, builders of the original Kai Tak Airport and Shek Pik Dam, was awarded the contract at the end of 1963 which was, at that time, the largest civil engineering contract ever to be let in Hong Kong. The narrow road to Plover Cove, which wound along the northern shore of Tolo Harbour serving a few isolated farming and fishing communities, was reconstructed and extended. Around the coastline of Tolo Harbour work sites were established to obtain the necessary decomposed rock, sand and rock filling materials. One of the larger land 'borrow areas', Ma Liu Shui, was partly formed as a future campus for the Chinese University of Hong Kong, since nearly fully developed.

Due regard had to be paid to local superstition, in particular 'Fung Shui'. For instance, when a



Main dam after closure

road cutting was being formed in the local red soil near Plover Cove, the dragon which that hill represented was clearly hurt and bled, which resulted it was claimed, in sickness in the nearby village. As a temporary measure until the slope could be treated with green-coloured mortar, a bamboo/rush mat screen was erected at the request of the village elders to shield the cutting from the villagers. Another complication arising from Fung Shui was the re-siting of ancestors' graves. These, usually comprising neatly stacked bones in large earthenware urns, are positioned on carefully chosen sites where even the height of the hill exerts a good or bad influence; the Blue Dragon guards the deceased's left and the White Tiger his right so the latter, being the stronger, must be the higher of the two. Furthermore, there should be a hillock in front of the grave and flowing water nearby. All these factors must be seriously considered to avoid invoking displeasure from the gods if the grave is to be removed and the affected villagers appropriately compensated.

When work started in earnest on the dam, seven million cubic yards of marine mud was

removed from the foundation trench by bucket and grab dredgers and dumped in the sea some $1\frac{1}{2}$ miles away. Filling materials were carried to the mouth of Plover Cove in a fleet of barges and deposited in a methodical manner. In all, some 10 million cubic yards of sand (dredged by suction dredgers) and decomposed rock (excavated by face and wheel shovels and traxcavators) and $1\frac{1}{2}$ million cubic yards of rock was put in the dam, mainly by bottom-opening barges and grabs.

One of the floating grab placing/dredging pontoons employed on the project was the world's largest unit of its type with electronically actuated, semi-automated control. Specially designed in Holland and assembled in Hong Kong for the Plover Cove scheme, she bore the name of the French resort, *Biarritz*. The trolleys on her two 200 ft tracks each carried grabs capable of lifting up to 24 cubic yards of material at one bite.

In order to check the stability of the dam at all stages of construction and during subsequent pumping out and refilling, a large number of instruments were inserted in the dam to measure pore-water pressures, settlements and horizontal



Plover Cove marine dam—1968

movements. In all about 400 instruments were placed below sea level.

Before the reservoir could be closed off from the sea a very important operation was necessary, namely, the resettlement of the inhabitants of six villages around Plover Cove, whose homes and agricultural land would be flooded when the reservoir filled. As these villagers had no road access they had to be taken by sea through the final closure gap in the dam. They were rehoused in specially constructed blocks of flats in nearby Tai Po and given generous compensation for their very abrupt transition from isolated fishing communities into a busy urban environment.

Final sealing off of Plover Cove from the sea posed an interesting problem. Two means of closure were studied; the first envisaged using large floating caissons with built-in sluices (used in many closures on the Delta scheme in Holland) and the second involved uniform raising of a wide horizontal rock mound. Comparatively cheap and readily accessible rock favoured the selection of the latter method. The closure operation was carried out in December 1966 across a 3,000 ft wide gap and the maximum velocities measured (over 9 ft/second) corresponded closely with those predicted from model tests. In their keenness to obtain these readings three of the senior site staff overloaded the cantilever of the measuring pontoon, thus causing instability of the unit and finished up in the water! An hour or so later, in a motley selection of clothes, these three gentlemen, somewhat sheepishly, joined the contractor's staff in their New Year's Eve celebration.

With the gap closed it became popular to undertake the 10-mile walk around the newly-formed reservoir and to collect coral and shells from the old beaches. The deserted villages had an air of sadness as exploration of the little stone houses revealed many discarded articles of everyday rural life there.

Within a month of closure the pumping out of sea water commenced. It was originally planned to extract only to a depth some 30 ft below mean sea level so that the water remaining in the reservoir would act as a buffer to prevent disturbance of the saline sea-bed mud by incoming fresh flood water from the main tunnel system and natural catchment. However, because of a prolonged drought this plan was abandoned and pumping was continued, leaving the reservoir virtually empty by May 1967. In all some 18,000 million gallons of salt water was extracted by means of the floating temporary pumping



Picking up fish after pumping out

station. Tons of fish were promptly removed by the delighted fisherfolk, the last survivors being 5 ft long conger eels hiding in the mud, and sold in the nearby market. Meanwhile the 'boffin', Alvin Smith (B&P), was busy contriving ways and means of restocking the reservoir with fresh-water fish in order to achieve the favourable ecological balance needed to check insect and algae growths.

Impounding began next month and by October, the start of the normal dry season, the reservoir held almost 11,000 million gallons of somewhat brackish water. Water from the reservoir had first to be blended with fresh water from other sources and put into supply at a time when the civil disturbances resulting from activities of Mao's Red Guards in China were near their height. The resulting water had a noticeable salinity although below the internationally accepted maximum. The subsequent land-based operations to complete the dam to its full height presented rather an anticlimax to the more glamorous marine orientated pre-closure works.

The Plover Cove Water Scheme has been a product of international teamwork. The consultants were British and construction was carried out by French, Swedish, Japanese and local Hong Kong enterprises. The work force employed on the Scheme in its various stages, in addition to the above nationalities, included Americans, Australians, Dutch, Germans and Norwegians and at one time totalled some 4,500 men.

There was also a cosmopolitan flavour at the Plover Cove club, built specially to cater for this multi-racial community. Church services, including numerous christenings were held at the club-house as well as special festivities for such events as the Summer Equinox, Bastille Day,

Halloween Night, the St Lucia Festival, New Year's Eve, the start of pumping out and a great number of farewells. The Swedish contingent even constructed a sauna bath on the shores of Plover Cove and opened it to all-comers.

Members of our staff contributed many years of service to this Scheme which created great interest around the world and has paved the way to a new approach to building dams—under water. In the office those principally involved on the dam works were Stanley Elliott, Stanley Ford (B&P), Michael Guilford, Michael La Touche (B&P), David Wainwright, Bill Lamb, Li U. King and Paul Ng. Some of those working on site included Lance Dodd (subsequently Michael Guilford) and Michael Townsend (B&P) in over-all charge, Jim Gordon, David Coffey, John Holt, Arnold Graham (B&P), Steve Cotterell, Robin Osborn, Basil Bressler (B&P), Peter Ferguson, Mike Owen, John Dunicliff (B&P), Vincent Chan, Ed Ha (B&P), Choi Tak Yan, Ho Yui-kwan, Shi Man-fai, Raymond Wai, Yong Kong-weng, Yeung Wood-kow, Jackie Chan, Michael Li, George Brown (B&P), Leon Callaghan, Les Doe, John Grindlay, Bill Lloyd, John McCabe, Bill Middlemiss, Len Porter (B&P), Lew Turner (B&P) and Fred Tyndall (B&P). The intermingling of names from both firms is indicative of a harmonious partnership over the years which is still continuing.

Although since 1968 the Colony has enjoyed a full unrationed supply of water, further increases of population and water consumption have led to the uprating and extension of the original Scheme. The reservoir raising works, comprising

the heightening of the dams by 12 ft and the building of 64 large air-regulated reinforced concrete siphons across the old spillway, are nearing completion. These works will increase the storage water level in Plover Cove by 17 ft, so enlarging the capacity of the reservoir from 37,000 to 50,000 million gallons. In the office, Steve Cotterell, David Wainwright, Richard Gamlen (principally Tai Po Tau pumping station and ancillary works), Patrick Tjoehardi, Raymond Wai and others have all assisted on the dam raising works and, on site, Tom Dockerty has had Fong Lee-ming, John Grindlay and support staff to help him.

Although the £12 million raising and extension works were still incomplete, on the sunny afternoon of 20th January, 1969, inauguration of the Plover Cove Water Scheme by the then Governor, Sir David Trench, took place on the spillway. After Stanley Elliott, Stanley Ford (B&P), Michael Guilford and Paul Molyneux (B&P) as well as Hon. A. M. J. Wright (Director of Public Works), Teddy Wilmot-Morgan (Director of Water Supplies) and representatives from the principal contractors engaged on the scheme, had been introduced to His Excellency, the two Stanleys mounted the dais to take their seats beside the Governor. In his speech, after unveiling the commemorative plaque, His Excellency paid a fitting tribute to the firms with the words:

"The engineering problems associated with forming a barrage in the sea have been overcome by the imagination of the Consulting Engineers, coupled with ingenuity in design and thoroughness in execution."

A TRUE STORY

An enterprising engineer hit upon a bright idea for supplementing his salary by free supplies of biscuits and toilet requisites. Playing upon the human susceptibility to flattery he picked items of which he was in short supply and wrote to the manufacturers extolling the virtues of the product. In many cases the manufacturer responded with complimentary boxes of biscuits and toothpaste etc. He met his match in a well

established firm of razor blade manufacturers. He wrote to them in praise of their razor blades which were so good that one had lasted a whole year. They could, of course use his letter in any future advertising. The firm, which is most likely run by another engineer, replied with a letter full of thanks and enclosing a whole year's supply of razor blades in appreciation. He has kept it to show to friends.

Plover Cove Site Newsletter

“Who put all this . . . water here!”, said the Hong Kong Auxiliary Air Force CO, as his helicopter crashed into a brimming Plover Cove Reservoir last month. Prolonged summer rainfall has kept the water level lapping up and up, against the new siphon bases above the old spillway horizon level and has kept the stifling summer air resounding to the laying of bets for and against overflow. The contractor has showed traditional Chinese ability to adapt by stripping off and wading about for the weekly tub whilst continuing to erect formwork. Progress has been adequate and if ingenuity for running repairs can balance reluctance to execute maintenance, all work should be completed on schedule by next April. The main dam raising plods along and a fair number of the old wave-wall blocks have been repositioned at the final crest level.

There is odd scepticism that the siphons will

never function and were described by one cynical Lancastrian student of nature, as being as much use as a chocolate tea pot!

Plover Cove must have undergone a radical and permanent change since those early halcyon days of sauna baths and boating. The Tai Po road is now a weekend ‘autostrada del undertaker’ and attempting to join the throng is akin to starring in a road safety horror film.

All the quarters except for those three occupied by SWKP staff, are occupied by general Government families and are in great demand. Lee-ming Fong is hoping to return to the guessing stick game in Star House shortly. The John Grindlay and Tom Dockerty families return to UK early next summer. Everyone here was disappointed that David Coffey’s office ball and chain wouldn’t allow him to visit us during his recent industrious trip, but those who saw him swear that British pie, pickles and pints have gained a little ground.

by TOM DOCKERTY



Site Staff Plover Cove

Our Share in the 'Roads and Bridges' Stakes

by Andrew Maslowicz

With the rising living standards during the last decade or so, the car, hitherto available to few, has become a status symbol with increasingly larger numbers of people being able to afford it. Since 1961 vehicle registrations in Hong Kong have increased more than threefold, with the result that there are now 266 vehicles for each mile of road. Whatever traffic problems prevail in

London, Paris, Tokyo, etc., they also exist here and furthermore are compounded by lack of land and population density in the urban areas unmatched elsewhere.

Government expenditure on roads and bridges rose from some HK\$16 million per annum in 1959 to HK\$40 million in 1967. In 1968 the Hong Kong Long-Term Road Study Report was produced which, if fully implemented, would

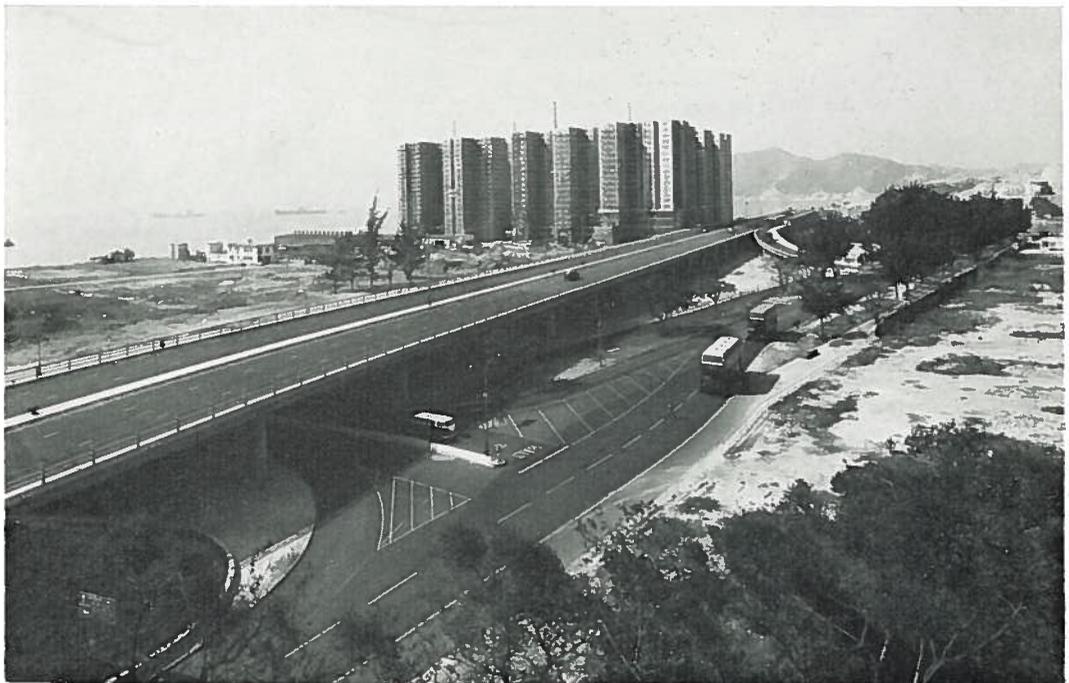


Approach roads to tunnel

call for an annual expenditure of HK\$100 million in 1975 and HK\$150 million in 1980.

The Firm entered the 'Roads and Bridges' Stakes on a walkover in 1959 with the construction of Kowloon Foothills Road—2.5 miles of mainly two-lane road, a flyover and a footbridge. The flyover was the first prestressed concrete structure built in the Colony. This project was completed in 1961 at a cost of about HK\$4.2 million. At about the same time there was another job—Lo Wu Classification Range Road—a mile or so of an access road which was no sooner completed than its surface was churned up by army tanks. Fortunately, however, an undetected error in the estimates provided sufficient funds in the vote and in the end most of the money was spent—so perhaps it was foresight after all! In 1963 work started on the Kwai Chung Development Scheme and by the end of 1965 the 2.7 miles long Coastal Road was completed. The road, dual three-lane carriageway for 2.2 miles, reducing to dual two-lane carriageway on top of the Kwai Chung Culvert, was designed for a speed of 70 mph and is by far the fastest stretch of road in the Colony. Speed enthusiasts keep using this road just to see how fast their cars can go! The recently

opened Cross-Harbour Tunnel is becoming a serious rival in this pastime. In 1966 construction of the Lai Chi Kok Bridge began and on completion provided the last link in the new route between Kowloon and Tsuen Wan. Concurrently design work was proceeding on the Cross-Harbour Tunnel Road Connections and Lai Chi Kok Interchange. The successful completion of these three basically bridgework projects amounting to some HK\$56 million in value, added a new dimension to the Firm's activities and enabled us to acquire some expertise in the simple form of bridge construction. Sites for these works included a marine bay, new and old reclamations, original hill sides and narrow streets fronted by dilapidated buildings with markets in the middle. A parapet of the Canal Road Flyover passes two feet outside a building, and an enterprising tenant has since found the structure's drainage very useful for household waste disposal! Markets have since been built under Lai Chi Kok Bridge and Canal Road Flyover. Beams and columns have been found tasks that could not reasonably have been foreseen at the design stage. Nevertheless the structures perform adequately and cope smoothly with the traffic.



Lai Chi Kok expressway and bridge

The field for the 'Roads and Bridges' Stakes increased when Government decided to implement, if not perhaps in full, then in great measure, the Long-Term Road Study Report of 1968. Thus early in 1969 two other London-based firms of consultants were appointed for various projects together with three local firms for minor assignments. The new arrivals made fast starts and their various reports were well received. However, they soon discovered that invariably there was a considerable gap between submission of reports and being able to start work on sites. Also with the increased demand it is becoming more difficult to recruit suitably qualified and experienced local staff. No doubt these problems will be overcome in time but one gets the impression that the edge of the initial dash has been somewhat blunted in the hot and humid climate of Hong Kong!

Since being in competition with others we have been appointed for the Airport Tunnel Road, Tsing Yi Approach Roads and Tsuen Wan—Castle Peak Road. The four-lane vehicular tunnel, some 2,800 ft long, together with its connections will provide a relief road between central Kowloon and Kwun Tong to the east of the peninsula. The tunnel is being built by the cut-and-cover method of construction and is due to be completed in 1975. Tsing Yi Approach Roads are to be finished by the end of 1974 and call for the construction of some three miles of roads and a five-span flyover. The first stage of Tsuen Wan—Castle Peak Road, comprising some 10 miles of a single three-lane carriageway on a new alignment on the hillsides above the existing two-lane road, is due to be completed in 1976. The combined cost of these three projects is about HK\$300 million, ensuring busy times for those concerned in the next few years.

The field is now closely bunched on the far side of the track. It will be a while yet before heads are turned for the home stretch. We are confident that with continuous help and encouragement from our parent Firm we shall hold our own to the winning post.

Tuen Mun; and a lot of little holes

The Tsuen Wan to Castle Peak Road scheme came to life again after spending five years in limbo awaiting the green light from the Public Works Department. A very tight programme has

been set with the object of completing the construction of the new road by 1976, by which time the new town of Tuen Mun will rapidly be taking shape on a large reclamation area in Castle Peak Bay.

At present all the industrial and commercial traffic to this part of the New Territories has to use the one narrow and tortuous coastal road. This road leads to many of Hong Kong's fine beaches and in summer it is even more congested by our favourite hobby here of being roasted inside cars collected together in thousands into enormous traffic jams. We plan (hope?) that the new road will end all this. It will take to the hills: at first a single carriageway; finally a dual three-lane road about 15 kilometres long (yes, even HK is going metric) will give travellers magnificent views over the sea to the outlying islands. The design period is extremely short but we have been helped considerably by the commendable decision to reduce the eight-word title for the scheme to one of three words—the 'Tuen Mun Road'. (Someone please calculate the saving in ink and typewriter ribbon!)

Wong Hung Chuck, who has been with the team from the outset, Yuen Wai To and David Butler (who arrived from Kendal in April to look after the project) saw the Report completed on time in June. Design has now started and the team has been strengthened by Raphael Cheng and by the welcome arrival of newcomers to the firm, Tam Man Shui, Felix Leung, Tai Kong and Garry Sun. The design is already proving a most challenging and rewarding experience to all those concerned with it.

At present out on the hills (somewhere) Leung Cheuk Tong and Yu Ki Lam are guiding a comprehensive ground investigation along the proposed route. The idea is not primarily to worry the designers stiff but to give them a little idea of the problems they will be asking the contractor to face when construction starts.

Elsewhere, spread all over Hong Kong, we have little yellow machines banging away making holes in the ground: all the way up Nathan Road; on the terminal platform of the Kowloon Canton Railway; high up on mid-levels; in amongst squatter huts. Investigations for the Mass Transit Railway; probing the causes of landslides. This work is being dealt with by Christian Buchli, who joined the firm earlier this year, Peter Wong, on secondment from Freeman Fox & Partners, and Peter Storry who enlisted only very recently.

DAVID BUTLER

Extra-Curricular

or a Bachelor's Lament
by The Maestro

(TO BE READ AS IT WAS WRITTEN—FAST)

*"'Ah! Say that again' she murmured
'Your voice is music'*

*'I don't know anything about music' he replied
'But I know what I like'."* (ANON)

So this is Hong Kong and we're twenty and you know what we've done are doing and might do and how hard we work, etc., and its all true and more but what about our spare time. Spare time and social life and there's a thing and staff services don't employ bachelors to get the real facts and that's rough and I know after three years and a bit or no bit as you like. We've done a survey subjecting traditional sampling techniques to rigorous mathematical analysis and the result's not nice. Ten male expats to two point eight of the female equivalent so there are droughts, bad ones. They've always had a stable of eligible bachelors in the firm here and just now's no exception though I say it myself so what goes on then? Well there's cricket, hockey, tennis, swimming, sailing, judo or drinking for the rough types but those of us who are more refined, like, subject a discerning section of the local populace to our outstanding musical and dramatic skills and thats what I'm detailed to tell you about and they're breathing down my neck.

*"The horn, the horn, the lusty horn
Is not a thing to laugh or scorn."*

Richard Gamlen is our office triton 'blowing loud his (wreathed) horn' in the Hong Kong

Philharmonic or any other outfit not fussed about when people turn up to rehearsals and some of us are but don't be offended as we need you and you can continue to smoke during the rests as long as its not that foul stuff. The Philharmonic is a highly assorted bunch who give concerts every six weeks or so which would not set London standards on fire but its all we've got and they try and its worth the couple of bucks to get into the air-conditioning and Richard is good but not co-operative and won't give me a photograph to eke this lot out a bit. Anyway they're smarter than me in the East and had only to give him a fill to his pipe and slip him a couple of gins and tonic and before he knew it he was Philharmonic treasurer and that's not funny in this part of the world where cash goes fast no matter whose is in your pocket and I know and sympathise. But more to come.

*"There is a delight in singing, tho' no one hears
Beside the singer."*

Singers are vain and John Bruce is no exception and I'm not offended and you'll get a photograph like it or not if we can get something flattering enough sent to London in time and they had better. We're all big fish and the

standard's ropey except for one choir which is good but they're mostly married and that doesn't solve any problems and the Hong Kong singers who are sometimes married but don't mind too much anyway and are sometimes too much fun and sometimes good but stick around and I'll tell you when they're best. They produce a Gilbert and Sullivan opera and some other light thing (Strauss, Offenbach) alternately every six months or so and the subject of this section has been in the chorus, sang tenor parts and conducted the last two and is known as a proper whatsit in the latter role but thinks he gets results and hasn't had an all-out rebellion yet but there's time and anything can happen in these far flung corners. In a similar manner to friend Gamlen, minus pipe boost plus ego boost, became treasurer of the organisation and subsequently and concurrently chairman and musical director and there's a powerful position involving auditioning new members which helps to solve the problems outlined in paragraph one above and explains the bags under his eyes on Wednesday mornings.

Vivienne and Peter Knowles were stalwart singers and always knew their parts which was just as well with one conductor and we're sorry to see them go especially since Peter was good at farce which isn't surprising and we've had plenty of practice haven't we.

One show boasted five of our number which isn't bad for a bunch of plumbers and I'll bet the Partners lost a bomb that week. Bruce conducted an orchestra of twenty give or take one or two in which Gamlen horned, David Wainwright celloed Basil Bressler from Binnies played second fiddle and on the stage Peter Moody from joint engineers, Plover Cove drew spontaneous applause from the audience as a fearsome/fearless pirate/policeman and there's no prizes for guessing the show. David Wainwright plays intermittently with the Phil, in quartets and at soirées which is a good word my grandmother used to use and she couldn't play the cello but David can and well and all this flattery is because he's about to be conned by his conducting colleague into his next show for which he is already flexing his arm, This therefore serves as notice on both the Wainwright family and the Partners for the last week in May.

Expat drama is kept going by two clubs and when they're good they're very and when they're bad they're really plummet but not when Penny Came's around. Penny's espoused to Paul of the same name of airport fame himself featuring to great critical acclaim in a two-word, thirty-

second part and we're all looking forward to the next one so come on. In the most recent of a line of successes Penny was dead on an open stage all interval and never looked up to see that everyone had gone off boozing and she was



'The Maestros: Messrs. Wainwright, Gamlin, Bruce, Breslaw and Moody'

great until they dragged her out at the start of the second half and she had to wait for Paul's two words before she could go home.

In February/March 1973 we've a Festival of the Arts sponsored by BOAC *et al.* which shouldn't be confused with El Al and you'll have an easier time getting tickets in London, Nigeria or Bangkok than we will as they're giving away airline tickets with them and they've nearly all gone and not on sale here yet which is tough but not surprising and there's a bit of acid around about that and I'm bitter. Anyway we're forming a choir to sing with Menuhin's Festival Orchestra or the LPO or Schwarzkopf or someone and Fonteyn is coming so I'll solve the ticket problem and slip in at the back as a ballet dancer since I've always wanted to check up on them chaps anyway.

So that's about it. There's a pantomime or similar approved at Christmas, local singing groups, Chinese opera, Cantonese drama and the office and there's plenty of drama there but that's another story and probably a better one than this too you'll say but I was conned.

*"The singers went before
The players on instruments followed after;
Amongst them were damsels playing with
timbrels."*

These lads had their priorities right.

The Hong Kong Cross-Harbour Tunnel

by Derek Verran

1972 sees the completion of a project with which the firm has been concerned for the past twenty years. The Harbour Tunnel was opened to traffic in August, 1972, and HRH The Princess Alexandra unveiled a commemorative plaque at an inauguration ceremony on the 21st October, 1972.

The Hong Kong Cross-Harbour Tunnel has been built to meet the needs of the ever-growing traffic between the twin cities of Victoria, on the island of Hong Kong, and Kowloon on the mainland. Over the years, this traffic has been carried by numerous ferry services which, in 1970, carried a daily average of 16,700 vehicles and 655,000 pedestrians. The new tunnel is currently carrying 25,000 vehicles per day and has an ultimate daily traffic capacity of about 80,000 vehicles.

The firm first started work on this project when in 1952 Dr. Guthlac Wilson, a founder partner of Scott & Wilson, suggested to Mr. K. B. Allport, manager of the Harriman Realty Company (a subsidiary of Wheelock, Marden & Company Limited), that a fixed crossing of Hong Kong Harbour might be a commercial proposition and at that time Scott & Wilson prepared an outline design for a long-span bridge. In the mid-fifties the Hong Kong Government, after investigating the provision of a road link, decided against constructing this themselves but proposed that commercial firms should be permitted to promote such a scheme if they so wished.

In 1959 Wheelock Marden & Company Limited, Hutchinson International Limited, Kwong Wan Limited and Sir Elly Kadoorie Successors Limited, with the support of the Hong Kong Government, founded the Victoria City Development Company Limited to study the possibility of providing a road crossing of the harbour and commissioned the firm in association with Freeman Fox & Partners as consulting engineers to undertake a feasibility report and to prepare outline designs and estimates of cost.

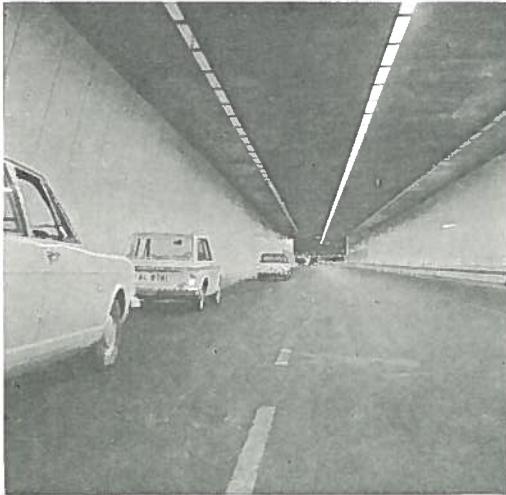
During the study and throughout construction of the tunnel, Robert Matthew, Johnson-Marshall & Partners have advised on architectural matters.

The studies for the feasibility report included an origin-and-destination traffic survey which was undertaken on behalf of the Consulting Engineers by the Road Research Laboratory. This survey was used as a basis for estimating future cross-harbour traffic and hence toll revenue. The report concluded that the construction of either a bridge or a tunnel was feasible and financially viable. There were, however, strong objections to the bridge proposals from both marine and aviation interests and hence the Hong Kong Government favoured the proposal for a tunnel to be constructed by the immersed-tube method.

It was in August, 1965, when the Government granted a franchise to the Cross-Harbour Tunnel Company Limited (successors to the Victoria City Development Company)* to pro-

*In 1969, when construction was started, shares were also taken up by the Hong Kong Government and by the Hong Kong and Shanghai Banking Corporation.

mote and operate a dual two-lane carriageway toll tunnel sited between Hung Hom on the mainland and Causeway Bay on the island, that work on the project started in earnest. Scott Wilson Kirkpatrick & Partners, again in association with Freeman Fox & Partners, were commissioned to continue as the Consulting Engineers, and design drawings and contract drawings were prepared throughout the first six months of 1966. After abortive attempts to negotiate a contract in August and September, competitive tenders were invited in October, 1966, from appropriately qualified contractors and consortia of international repute for return by February, 1967.



One of the tunnel carriageways

Negotiations with the successful tenderer, a consortium led by Costain International Limited, proceeded but failed in the middle of 1967 due to the financial uncertainties which followed the riots in the Colony at that time. Negotiations were, however, renewed in 1969, and a loan of £14.75 million was offered by Lloyds Bank of London, backed by the Export Credits Guarantee Department and repayable within seven years of completion of the tunnel. The contract was signed on 26th June, 1969, and work began on site on 3rd September, 1969. While construction plant and equipment to the value of £2 million was being mobilised, work on a bored-pile wall for the north approach was commenced. Simultaneously, the contractors began the design and construction of major temporary works costing in excess of £2 million

including a slipway and jetty for fabricating, launching and fitting-out the tunnel units, and a barge for handling and placing the screed and tunnel units; a steel caisson for the north ventilation building; and the 1,800 ft long earth and rock-fill bund in 60 ft of water for the construction of the south approach. The first tunnel unit was laid on 29th December, 1970, and the last unit placed in February, 1972. Within a few weeks of placing the last unit it was possible to make an underwater crossing of the harbour on foot. The tunnel was opened to traffic in August, 1972, the work thus being completed in two years eleven months, one month shorter than the contract period. This is a notable achieve-



Tunnel entrance

ment bearing in mind that the tunnel is one of the longest immersed-tube tunnels in the world, and the longest underwater road tunnel in Asia. During the pre-contract design work many other tunnels in the world were visited and various methods of construction studied. Special investigations were also put in hand on hydraulic studies, ventilation problems and such matters as the effects of ships' anchors on the rockfill protection over the immersed-tube tunnel.

The tunnel, 6,088 ft long between portals, has dual two-lane carriageways, each 22 ft wide, with traffic headroom of 16 ft. On the mainland side the carriageways widen out to a toll plaza where there are 14 toll lanes with collection booths, six of which are reversible to allow for tidal flow conditions. The ventilation buildings, each containing ten axial flow fans, are sited at

the ends of the submerged tunnel. Beyond each portal there is a louvred section 300 ft long, designed to provide a gradual transition between tunnel lighting and the light outside.

Both the approaches to the tunnel and the ventilation buildings were constructed in reinforced concrete. On the Kowloon side, excavation for the approach ramp was made within bored pile retaining walls supported by temporary steel and permanent concrete struts and beams. On the island side, the ramp and ventilation building were constructed behind an earth and rockfill bund.

The northern ventilation building was constructed as a steel and reinforced concrete caisson which was floated into position and sunk onto a prepared foundation of crushed stone. It was built in Taikoo Dockyard and part of its internal structure was completed after launching but prior to sinking. After it had been founded on the stone bed, the remainder of the substructure was built, followed by the superstructure.

The immersed tunnel was built in 15 units, between 325 ft and 371 ft long, and 73 ft wide. Each unit comprised two 34 ft diameter steel tubes welded from $\frac{3}{8}$ in. stiffened steel plate,

with a concrete keel, sprayed concrete exterior and a concrete lining. The supply of the steelwork and its fabrication into twin tubes was let by the consortium to Redpath Dorman Long (Contracting) Limited, a subsidiary company of the British Steel Corporation. Plain material delivered from the UK was fabricated on the site, using local labour supervised by UK personnel. Additionally, the company was responsible for fixing the reinforcing steel and wire mesh in the tunnel unit for subsequent concreting by the main contractor, and for breaking through between the units after they had been joined together on the harbour bed. The units, fitted with temporary end dam plates, were fabricated and assembled on shore and launched sideways into the harbour. At this stage they had a deadweight of about 6,000 tons and floated well above the water with a high freeboard. They were then taken to the fitting-out jetty where the internal concrete was placed, after which the units were only just buoyant and had a deadweight of about 30,000 tons. They were then ready to be towed, one at a time, to the screed-and-lay barge prior to placing in position on the harbour bed.



Screed and lay barge 'The Severn River'



Ferry Boat

Before each unit was moved into position, the bottom was dredged to allow a screed of crushed stone at least 2 ft thick to be laid. Preparation of the bottom and laying of the tunnel units were carried out from the purpose-built screed-and-lay barge, a twin pontoon structure that could be accurately set to level above the harbour bed; alignment was maintained using a laser beam directed across the harbour. The barge, developed specifically for handling and placing the screed and tunnel units, was designed and constructed within a period of 14 months at a cost of approximately £500,000.

With the screed prepared, the units, with only a small freeboard, were floated into position within the pontoon. Tremie concrete was placed between the shoulders of the tubes to eliminate the buoyancy so that the units could be sunk onto the prepared bed. For much of the length of the tunnel the depth of water in the harbour was in excess of 70 ft. Detailed checks on the relative density of the water and of the concrete in the tunnel units were made regularly. The screed-and-lay barge operated independently of the tide level which had a range of about 8 ft. The actual sinking took one to two hours and was done at slack water. The units were laid in sequence working from the mainland ventilation building to the island.

The method of connecting each new unit to the previous one was simple, well-proven and worked well. The projecting plates or hoods at the end of the new unit were offered up to the matching plates of the unit already in place and attached by inserting tapered pins through register plates on both units. The gap between the overlapping plates was caulked and curved closure plates driven to form a cofferdam around

the junction. The space between the steel tubes and around them was then filled with tremie concrete. Working from inside the completed section of the tunnel, the space between the dam plates was then drained and the plates cut away. Curved steel plates were welded in to make the steel tubes continuous and any cavity behind the closing rings grouted. Finally, reinforcement was fixed across the gap and the internal concrete completed.

With each tunnel unit in place, the space between the unit wall and the sides of the trench was back-filled and the positioned unit covered with a coarse stone blanket, primarily to give protection against scour and anchor dragging.

The ceiling of the tunnel is generally formed of precast concrete panels with a matt black sprayed finish. The walls are again spray finished in off-white and have a slightly matt texture to avoid specular reflection but ensure easy cleaning.

An administration building containing offices, control room, staff messing facilities, company vehicle garage, etc. has also been constructed under the contract. The provision and installation of all the tunnel services and control systems was combined in one nominated sub-contract. The successful tenderer was N. V. Philips' Gloeilampenfabrieken of Eindhoven, who, in turn, sub-contracted various parts of this work to specialist firms, some within their own organisation. These sub-contractors, with one exception, were British and the British export content of the sub-contract was about 84%. The power supply is shared between the two Hong Kong power companies. The two supplies are totally independent, and interruption of one supply will still leave half the lighting and ventilation intact for the few minutes necessary for full load to be switched onto the alternative supply. Should both supplies fail, an automatic 25 kw diesel generator system will provide power for essential services.

The ventilation system was designed in the light of model tests and full-scale tests on the Maas Tunnel in Rotterdam. A semi-transverse system was adopted in which fresh air is directed into each vehicle duct and exhausted via the portals. To supply the fresh air, 16 two-speed fixed-bladed axial-flow fans of 78 in. diameter have been installed.

Lighting through the tunnel is by fluorescent tubes placed longitudinally in fittings mounted in the ceiling end-to-end throughout the whole length. The level of illumination throughout is automatically adjusted to the level of illumination outside the tunnel. The plaza is lit from 65 ft

high masts carrying special lanterns using high pressure sodium lamps.

The drainage system is designed to deal with the very severe rainfall that can occur in Hong Kong. There are two main pump-houses, one at each portal of the tunnel each containing three main pumps together with one dewatering pump and also a pump-house at the centre of the tunnel.

Traffic surveillance within the tunnel area is by closed-circuit television with cameras at about 1,000 ft intervals along the facility—19 cameras in all. Traffic control is effected by special high intensity traffic lights, using halogen lamps, at 700 ft intervals above each lane.

In the case of accidents, a heavy duty recovery vehicle has been provided, as also have a number of Landrovers as patrol and light recovery vehicles. Special precautions have been taken against fire, and alarms and emergency telephones have been installed at close intervals along the tunnel and fire mains run the whole length of the tunnel with frequent hydrants. Fire extinguishers

and other equipment have been provided both along the tunnel and on the patrol and recovery vehicles.

A radio-telephone system provides communication between the control room and the patrol vehicles and portable sets inside or outside the tunnel. Toll equipment of the most advanced type has been installed to ensure that traffic is not delayed by the collection of money and that there is a maximum security surrounding the collection and accounting of revenues. The toll registration and recording equipment includes a small general-purpose computer that cross-checks and records every toll movement.

Simultaneously with the construction of the tunnel itself, the Hong Kong Government constructed extensive approach roads on both the island and the mainland to give access to the tunnel. The designs for these approaches were prepared in our Hong Kong office by the Consulting Engineers and the roads were built by local Hong Kong contractors.

Hong Kong Office and the Tunnel

by Ken Phillips

Having given numerous talks with the aid of two baked-bean tins, on the 'engineering' of the tunnel the writer will on this occasion leave the technicalities to others. By the way, it is important to eat the beans before tunnelling with the tins!

I will confine myself to those human touches that stick in the memory such as when I refrained from submitting to *Pontifact* a photograph of an illustrious engineer from London basking seal-like on the sands of one of the beaches along Castle Peak Road—"My God, it is hard out in the East!" But to our muttens—

People had chuntered on and off about a tunnel for half-a-century before we arrived. My

first memory of a cross-harbour link was during the visit to Hong Kong of Dr. Guthlac Wilson in February/March 1953 when someone (Ho Chung?) prepared sketches of a bridge between Chatham Road and Morison Hill. I remember when I was back in London in the fifties seeing Peter Wefring doing some work on the bridge. I am afraid that I did not experience the early days of the tunnel in Hong Kong from 1959 to 1963 and my only memories are of Doug Thorp battling at the London end. I can only take everyone's word for the fact that in Hong Kong they were stirring times!

When I returned to Hong Kong in early 1963 Joe Lindsay was holding the fort. This was the time of the long pause between submission of the

report in 1961 and the granting of the franchise to the Tunnel Company in 1965. It was a time of skirmishing when the basic parameters of the cross-harbour link were hammered out. I started to read the files in August 1964 until in summer 1965 Joe left Hong Kong and the baby, to a great extent, was mine. During 1965 the tunnel gelled and the road connections began to take shape and in the late autumn of that year engineers from London and Montreal zeroed in on Hong Kong (who also fielded one or two engineers of their own!) After sixty years of talk this was the beginning of the end for the tunnel.

During the next eighteen months there was unflinching effort towards letting a contract. Particularly outstanding was the way in which Bill Lamb (now with Aeres in Niagara) produced design and documents for a casting basin in next-to-no-time. Another event, outstanding in other ways, was the week-long negotiation in Japan just before tenders were invited. Everyone worked exceedingly hard but I remember clearly seeing august engineers playing musical bumps after dinner in a geisha house! This was truly an innocuous evening out and apart from already-mentioned 'dancing' included a serious dramatic recitation by our host—partners please note! During the same week there was a visit to a bath house followed by a night club where someone swapped visiting cards with the hostesses. Did his wife ever wonder who sent the Christmas card from Tokyo? These were harmless diversions and I trust that wives and sweethearts were kept fully informed!

Apart from this, work continued unabated and tenders were received in February 1967. However before a contract could be awarded the riots of that year were upon us and frustrated our efforts. Everyone set about popping the tunnel in the 'fridge' to await better times whilst in Hong Kong we also sorted out the road connections into 'tunnel-related' and 'non-tunnel-related' segments and continued with such 'non-tunnel-related' items as Bowrington Canal Extension, Chatham Road Flyover and Canal Road Flyover.

By late 1968 interest was reawakening in the possibility of investing in Hong Kong and before long the tunnel was underway again. By March 1969 the tempo was once again frenetic and after superhuman efforts the contract was signed on 26th June. Whilst the major effort of dismantling the almost-ready contract of 1967 and re-assembling it as a 1969 contract fell on the London Office, my memories are of the last few days before signing with last-minute redrafts,

long telexes and even longer working days (nights!)

It was at this stage that the Hong Kong Partnership relinquished to London the position of 'Engineer' in order to assist the client to boost their financing arrangements in the UK.

In September 1969 HE The Governor symbolically turned the first soil and the contractor swung into action on site. The Hong Kong office have been fortunate to be 'on-the-job' and see all the action at first hand. I clearly remember the abortive launch of Unit No. 1. As it appeared to be running smoothly down the slipways I walked off to photograph the operation from the fitting out jetty where, as I looked through my viewfinder, I saw it come to a halt. Running back to the launching bay I entered into six weeks of frustration and achievement. The sight of 6,000 tons of unyielding tunnel unit was frustrating in the extreme whereas the sense of achievement gained in retrieving the situation was acute. We all knew how Brunel must have felt when he finally shoved the *Great Eastern* into the Thames. Another 'event' was the sinking of Unit No. 10 in typhoon 'Rose'. I managed to miss this event by being on leave and only arriving back in time to see the unit break surface. The previous fortnight had been particularly difficult for Mike Guilford and John Bruce.

This article is personal to the Hong Kong Office but, of course, the brunt of the work at this time was borne by the contractors (Trans-Harbour Constructors Ltd) whose efforts, for example, in the above two mishaps were herculean. Their efforts are best reflected by the fact that the tunnel was opened to traffic one month ahead of schedule.

After an indescribable weekend sorting out last minute hitches the tunnel was certified complete in the early hours of 1st-2nd August to the accompaniment of champagne. On the 2nd August the tunnel was inaugurated by HE The Governor which included a very hot ceremony in the centre of the tunnel and some more champagne to follow.

Before concluding I wish to apologise to the engineers of Freeman Fox & Partners for this personal account of SWKP and the tunnel but I am sure that they will understand as this is for consumption by *Pontifact* readers. For those who do not know, Freeman Fox & Partners have been associated with the Firm on the project since 1959 and together we have engineered this tunnel which certainly is a credit to both firms.

Tunnel Site Newsletter

By Peter Knowles

W

e have nearly reached the end of the story on the Hong Kong Cross-Harbour Tunnel, for in October, a plane-load of distinguished visitors arrived from London for the Opening Ceremony and on the 21st of that month Her Royal Highness, The Princess Alexandra duly unveiled the ceremonial plaque.

The last newsletter was written in November 1971 when only twelve out of the fifteen tunnel units had been placed. The closing unit, No. 14, was placed on 27th January 1972 and on 20th February the 'holing through' ceremony was performed by the Deputy Chairman of the Cross-Harbour Tunnel Co. and was suitably celebrated by a champagne party in Unit No. 15.

The target date for early opening was 1st July but it was not until 2nd August that His Excellency the Governor formally opened the Tunnel, and the first traffic to pay tolls entered the tunnel just before midnight on 3rd August. The first day's count of vehicles exceeded 40,000, but, when the novelty wore off for the people of Hong Kong and Kowloon, the daily average settled down to about 25,000 vehicles per day.

Remaining work on the tunnel and ramps, principally finishings and services, had to be completed by nightshifts in one bore at a time.

The amount of grime generated by this volume of traffic in an enclosed space has been astonishing and the Company have now instituted a nightly washing-down programme which will allow the whole of the tunnel to be washed once per fortnight.

Traffic behaviour during the early stages left much to be desired, but lane discipline has now improved with the enforcement of the by-laws and there have been few accidents although these unfortunately gave rise to one fatality.

There has been a rapid run-down of staff since early opening and it has been sad to see the departure of so many familiar faces; Tom Stott and Jim Parkin in July; Chris Wright, Gordon Tolson, Bob Neill, Reg Prince, Alec Thomson, John McCabe and H.C. Ho in August. By the end of October, the civil staff under James Luk had been reduced to three, Leon Callaghan and two assistant inspectors, although most of John Morison's E & M staff will be carrying on manfully until the end of the year.

This will be the last newsletter on the Cross-Harbour Tunnel and I should like to take this opportunity of thanking all staff for their support and hard work during the last three years. I am sure that we are all proud to have been associated with such a massive project, which is already having a profound effect on the life of Hong Kong.

THE IMPOSSIBLE ACHIEVED

A representative from the gas board was quite overawed by the bustle of activity in the office of one engineers representative. Never before had he seen, even in the close confines of the industry's own offices, such haste and efficiency. "It was" he said, "faster than high speed gas!"

Up the Lee Garden Path . . .

or Don't Cross your Harbour
until you come to it

Do you remember the story of the primitive tribe which had so few jokes that each was given a number? A man only had to call out a particular number for all his companions to burst into laughter. We found the story of the Prof's nocturnal encounter over Afghanistan on the charter flight to Hong Kong so amusing that we agreed it would only be necessary, when we got back to Winsley Street, to call one of our colleagues on the internal telephone and say the single word 'Clore' to produce instant relief from Monday morning blues.

We had our first trip through the tunnel on the way from the airport to the hotel. The courier on the coach kept up a running commentary all the way. Having extolled the virtues of our hotel, he started on the tunnel, but soon dismissed the engineering achievement to launch into an attack on the toll system. He dwelt particularly on the fares we should have to pay if ever we dared take a taxi through the tunnel. The courier quoted a string of rates at us in American dollars, but judging from the other residents we encountered at the hotel throughout the week he was, no doubt, equally versatile in yen.

Once installed at the Lee Gardens each of us was confronted with a stack of fan mail—invitations to functions almost every night—and a sort of treble chance coupon on which one indicated one's preference for various excursions organised by our hosts. Having marked eight draws before dinner, at last one could relax.

The programme for the second afternoon gave the option of a visit to the job, or, more specifically, an introduction to the administration and ventilation of the tunnel—the two bits that stick up in the air at the north end, or Kowloon side as the natives would say. For the purpose of the inspection the company was divided into three patrols, each under a patrol leader (three

stripes) and a second (two stripes). As the tour progressed our appreciation of the technicalities diminished in our concern for the safety of the party, because it soon became obvious that three stripes was something of a fanatic and was not going to spare us any of the physical hazards. Of course, most members of the patrol were not bothered by this but we were rather anxious about an old dear in her seventies. As it turned out we need not have worried because it became increasingly evident that, despite her appearance, this small woman had been cast in the same mould as Gladys Aylward and would have thought nothing of crossing China on foot forty years ago.

To return to our ordeal, we began with a brain-washing session in the so-called control room. This place looked exactly like the familiar set in which the plot for each episode of *Star Trek* is hatched, with its battery of closed-circuit TV screens and panels with flashing lights, only it was much noisier, with every telephone being shouted into simultaneously and, just as we were there, the practice fire alarm for that particular shift. After that there was a period of relative tranquillity spent going up and down the staircases to get us into shape for the going down the hole. When the big moment came we set off in single file, three stripes leading, along the narrow walkway with traffic screaming past at arms length. A few minutes later our leader suddenly jumped out into the middle of the highway and brought the traffic to a shuddering halt whilst we all hurried over (that's the truth—scout's honour—cross my harbour!) We could not have been more surprised than if we had seen the white rabbit looking at his watch—it was, in fact, the only time that the old lady had to take someone's arm for support. The finale of the exercise was a rapid progression through ventilation ducts (like doubled-up human models in an aerodynamic experiment)

and plantrooms which resembled enormous ships' engine-rooms and were just as hot.

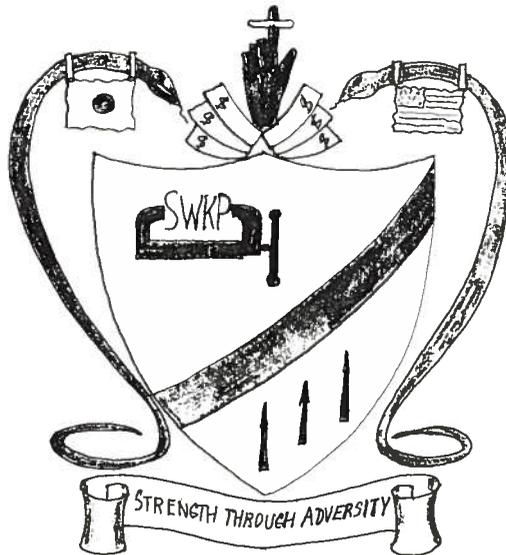
On the Thursday, the majority took a day trip by hydrofoil to Macau, but the writer, not being a gambler, decided to rest from high society and sample the peace of Plover Cove. The first-class return fare to Tai Po Market on the Kowloon-Canton Railway was four dollars, equivalent to two luncheon vouchers. This was money well spent, because thence only a short Landrover ride away was what must be one of the most magnificent situations for a construction site in the world.

The end of the week saw the climax, with the

unveiling of a plaque by Princess Alexandra to commemorate the opening of Cross-Harbour Tunnel, a handshake from Her Royal Highness at the official reception and, in the evening, a splendid Chinese dinner given by the Tunnel Company at which each male guest was presented with a Company tie.

It all amounted to a great and memorable experience. So, here's to the next time in Hong Kong. Bottoms up! . . . and thereby hangs a tail (as Shakespeare never said), but we had better stop lest we reveal a clue to crossword puzzlers like our mentor on one particular night out in Kowloon.

W.M.H.



Engineers armorial proposal for shield or banner, to be carried by those involved in the 'Container Berths Campaign'

Hong Kong Commemorative Stamp and First Day Cover

by Derek Verran

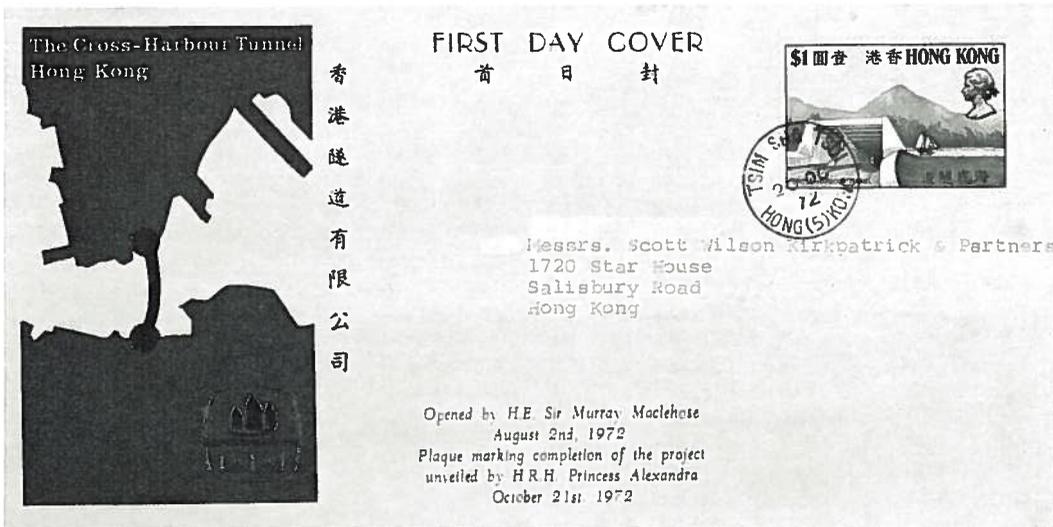
The medium of the post is used in many countries to commemorate events of national importance. The Cross-Harbour Tunnel Company suggested to the Hong Kong postal authorities that the opening of the Hong Kong Tunnel, in uniting, for the first time by a direct road crossing of the harbour, the two halves of Hong Kong, would be just such an event worthy of the issue of a commemorative stamp.

The Post Office, having agreed in principle, asked the Tunnel Company to submit a design. Our architectural advisors for the tunnel project, Robert Matthew, Johnson-Marshall & Partners were approached to develop a design. Several sketches were produced and following discussions with us, three designs were submitted to the Tunnel Company. The finally selected design, an illustration of the northern entrance of the tunnel on a background of the harbour, was submitted to the Post Office for approval and the subsequent incorporation of textual matter.

In the philatelic world the issue of such commemorative stamps, indeed the first day of issue of any stamp, is recorded by the printing

and issue of first day covers. It was considered that, for this project, two other matters were worthy of recognition, namely the formal opening ceremony by the Governor, HE Sir Murray Maclehoze when the first toll paying traffic passed through, and recently the unveiling of a plaque on the Administration Building to commemorate the completion of the construction work. Robert Matthew, Johnson-Marshall & Partners also produced, on behalf of the Tunnel Company, designs for such a cover. The design on the front of the envelope is a simplified Hong Kong motif showing the new tunnel linking the twin cities of Kowloon and Victoria. As many parties, including consulting engineers, architects, contractors, clients, etc. were to make use of this cover, all reference to the sender was omitted from the envelope and an insert designed incorporating photographs, a brief description and vital statistics of the facility and a list of the principal parties concerned in the construction.

The stamp and first day cover, while commemorating both the opening and unveiling, were issued to coincide with the latter ceremony.



Newsletter from Thailand

by Beau Thai

Looking through the 'Newsletters' section of the previous edition of *Pontifact*, you may have noticed a photograph of the staff of the newly formed Bangkok office and wondered where the accompanying newsletter was. Well somebody, somewhere, forgot to write one. But we have turned over a new banana leaf and have at last put pen to paper to bring you the exclusive story of the first nine months of this, the newest addition to Hong Kong's empire.

The office was opened in January this year in a private house half way up a soi (small side road) on the northern edge of Bangkok, after much searching for premises by Mr. Elliott, Barry Paget and Bertie Lawrence (ex AIT site). It was then left to Barry, Terry Ottway and Karuna (Thai secretary) to convert the house into something resembling an office. The downstairs dining area and lounge became the general drawing office with the appearance of benches and drafting tables and, appropriately, the bedrooms upstairs were transformed into offices for the engineers, by exchanging beds and dressing tables for desks and filing cabinets.

The task of appointing local staff was found to be comparatively easy as there was no shortage of applications for the various posts. This is because Bangkok, like London, acts as a magnet for people looking for employment, so that when a new company sets up an office in this city the applications come flooding in. We have well over one hundred on our files at the present moment and more are coming in each week.

One such enthusiastic application started off, "My name is C . . . S . . . , profession engineer, registered no. 796, feel interest in your firm very much. I'll telling you, I'm thirsty to work under so much. Tender see my qualifications as below please."

The letter ended with following sentence, "My position need with you should be consulting

engineer, chief soil inspector or soil engineer, up to you sir." Lucky that he left the choice up to us as we didn't have any vacancies for consulting engineers.

At the present time it would be difficult to recognise the office as it was nine months ago. The original staff of three now stands at twenty, all local with the exception of Barry Paget and Terry Ottway. We have also managed somehow to fit into the premises a soils laboratory fully equipped to carry out the classification, compaction and CBR tests required for the investigation of road construction materials and every day the dull thud of the compaction hammer can be heard as it pounds into the soils samples.

However during these nine months there have been a number of staff arrivals and departures. To help us through the difficult initial review stages of the project, reinforcements were sent out from London and Kenya in the shape of Zach Matthews, Steve Hobden, Chris Wright (all London), and Peter Erridge (Kenya). Although life was very hectic for the first few months, everybody appeared to enjoy working in this, the friendliest of countries.

Zach distinguished himself by giving a successful talk to the Astrological Society of Thailand and kept everybody interested (and amused) by telling us all what we were really like according to our astrological charts. In this connection, star prize must go to Steve Hobden for possessing, as Zach put it, a 'saucy Venus' and in Bangkok that's a very useful thing to have. We would also like to thank Steve for taking the photograph of the staff which appeared in the previous issue of *Pontifact*.

Lastly we mustn't forget Goh Bok Yen (now back in London office) who joined us on a temporary basis for a few months, during his vacation. As well as making friends with everybody in the office, he established himself as the bartering king of Bangkok, arranging printing

and obtaining office and soils laboratory equipment at rock bottom prices.

We have also had to say good-bye to two of our local staff. Ekarin, our office boy, was called up for the army and has been replaced by Suntorn, our new office girl whose cups of tea every day are most welcome. Also no longer with us is our secretary Karuna, who left in July to get married. A sad loss this as Karuna had been with us from the very start of the office and over the months had become Bangkok's answer to Maureen Preston. However we all wish Karuna and her husband Wichit, every happiness in their married life.

By this time you are probably all wondering what we have been doing in the last nine months so I had better give a brief description of the project. It consists of the review, design revision and supervision of construction of four feeder roads totalling 386 km in length and located in various parts of Thailand. Two are situated near Chiangmai, 750 km north of Bangkok and the

principal city in north Thailand. These are the two most difficult roads as both wind part of their way through mountainous terrain necessitating design grades of up to 12%. At the moment one of them is little more than a track for a third of its length crossing the same river more than twenty times and climbing over 700 m to a maximum height of 1,030 m.

The third road is situated in the central plains about 200 km north of Bangkok and the fourth is located on a sand spit on Thailand's east coast near Songkhla, over 1,000 km south of Bangkok. These are existing gravel roads, both in reasonable condition and both more or less flat. Neither poses the difficult problems encountered in the two northern roads and both are relatively straightforward.

Drawings and tender documents had already been prepared for the Highways Department by another firm of consulting engineers. However, their designs were considered to be too costly and SWKP were appointed to review the designs



with a view to effecting substantial savings in costs and improving alignments where considered desirable, and to carry out the necessary revision to the drawings and tender documents.

This has involved the detailed checking of over 700 drawings (not including 1,300 cross sections), amending four sets of contract documents and travelling thousands of back-breaking kilometres in the field, studying and surveying potential realignments and collecting soil samples.

The review and revision is now almost complete and we are hoping that all four contracts will be let in the near future.

As for Thailand itself, it is a country of some

33 m people and about the size of France, although nowhere near the same shape. Bordered on two sides by Laos and Cambodia and a little more than 100 km from North Vietnam at one point, it might not seem the safest of places to be. But apart from the daily reports and articles on the war in the local press, nobody here seems particularly worried. In fact the atmosphere throughout Thailand could be described generally as relaxed. The people are friendly, happy and easy to get along with. Certainly both of us enjoy working here and I am sure that all the other members of SWKP who have worked here share these sentiments.

SWKP Brunei Newsletter

Vic Lawley

Since our last newsletter the Temburong Road Project has been completed and, with the exception of a few surveyors and inspectors who were transferred to the Airport Project, the rest of the staff have left Brunei. Harold Insley was the last of the Temburong staff to leave in August and Brunei does not seem the same now, as we all miss the trips made by boat along the narrow rivers hedged by tall nipa palm on the one and a half hour journey to Bangar Town.

Work has thus been concentrated on the completion of the airport project, where the words 'swamp' and 'wobbly hills' have become synonymous with this project. No sooner was one swamp or wobbly hill disposed of when another was found. Despite all the problems, we are pleased to report that 7,500 ft of the total 12,000 ft of runway were completed, together with the control tower, ready for flight operations during November with the event of the first jet plane touch-down in Brunei. Effort is now being applied to complete the remainder of the runway.

The split of MSA into Singapore International Airlines and Malaysian Airlines System on 1st October brought problems to Brunei as MAS serving the north Borneo towns stopped landing in Brunei, incidentally leaving stranded

in Kota Kinabalu, Vic Lawley who was returning on that day from a visit to Hong Kong office. A boat from Labuan was the answer. Mr. Elliott's visit in October was completed by charter flight and Mr. Sterling came direct by SIA from Singapore.

The rundown of SWKP staff and that of the contractors, Costain, has been replaced by the build-up of the staff for the electrical and mechanical services. Contractors IAL for the navigational aids and GEC for the airfield lighting.

We were also pleased to welcome to Brunei Ron Gomersall of Murray Ward & Partners as resident architect for the terminal buildings and Colin Thompson of Preece Cardew & Rider as ARE (E&M) together with their wives. The structural work on the buildings is nearing completion and we anticipate that they will be ready for use by the middle of 1973. The control tower was completed at the end of October.

Many important officials have visited the project now that it is nearing completion, including the Mentri Besar (Prime Minister) and the State Secretary. The British High Commissioner also made an informal visit to the site during September. We had visits from Mr. Elliott during June and October. Mr.

Spencer was also a very welcome visitor during June, as well as Mr. Buzuk, partner of Murray Ward & Partners, and Mr. Daniel, partner of Preece Cardew & Rider. We were also pleased to have a visit from Mr. Sterling during October.

The occasion of Mr. Spencer's visit gave rise to a cocktail party being held at one of the staff bungalows, at which the staff and wives of the airport consultants were able to meet the visiting partners. About sixty in all gathered for a very enjoyable and informal evening.

We were all sorry to see the breaking up of our team in Brunei, as the works started to near completion. The departing staff and families include Elsie and 'Mac' Mackinlay, Harold Insley, Bill and Mary Murray, David Abbott the hero of three years stay in Ang's Hotel, John and Brenda Nicholas, Cyril Rabel, Asokan, Mrs. Jardine and children leaving Lew here to finish his tour on a bachelor basis, Robert Chan Wai Man, Tsang Kar Ming and secretaries Veronica Yap and Rohini Kumara.

Of great loss was the sudden death of our senior inspector of works, Ray Taylor, during September. Ray had been with the firm a large number of years and had been associated with our CRE, John Eddison, previously on an airport project in British Honduras. He was truly one of the airport builders and his passing away in Brunei peacefully during his sleep was a great shock to all of us. All of the Brunei staff offer their sympathy to his wife and family.

On loan to us from Hong Kong for three months to reinforce our inspector supervision on the airport project is Van Aswegen. We are very pleased to welcome him and his wife to Brunei. We also welcome back Vic Lawley's wife Pat after three months at home in the UK.

Congratulations are due to Dharmarajah on his marriage in April. Nothing deterred he formed the nucleus of a very successful cricket team which shocked the regular Brunei teams by nearly winning the State's annual six-a-side cricket competition for the Haslam Trophy played in Seria during September. The first match against a Brunei Yacht Club 'B' team was won easily; in the quarter-final SWKP thrashed Malaysians 'B' and in the semi-final convincingly beat the 1971 winners, Panaga 'A'. (In the Malaysians match, SWKP scored 102 in the five overs batting time; this is believed to be the only time in the history of the competition that 100 has been scored). In the final SWKP played well below form, but still lost by only seven runs to the Yacht Club 'A' team, this year's State League Champions. SWKP team: A. Dharmarajah (captain), M. Coomaraswamy, J. Eddison, L. Jardine, S. Joseph and W. Leo.

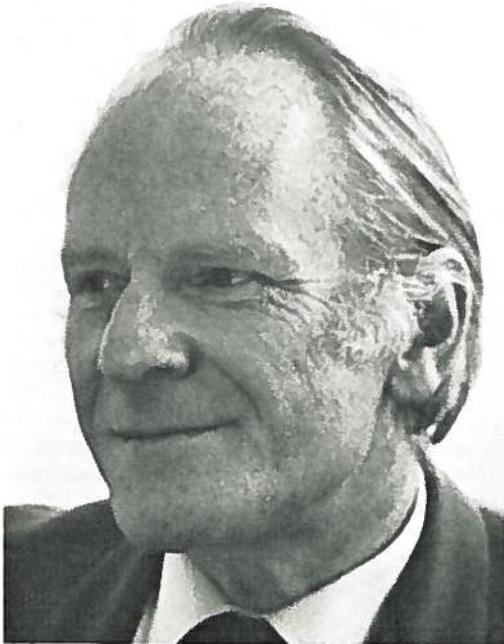
Our town office has been kept busy by the preparation of the contract documents for the aircraft maintenance area contract but by the time of the next newsletter, we shall be reduced to very few staff in Brunei.

F. W. Spencer



People in Profile

A. S. McDermott



R. H. Bond

F. W. SPENCER, BEng, FICE

Bill Spencer began his professional career in 1936 when he joined the Civil Engineer-in-Chief's Department of HM Admiralty, London, and was mainly engaged in duties connected with the design of underground and surface oil fuel installations. He was later with Sir Robert McAlpine & Sons Ltd, as a site engineer on the construction of Cosford RAF airfield.

From 1939 to 1950 he was employed, first as an assistant engineer and later as a civil engineer in the Air Ministry Works Directorate. During this period he was associated with the construction of a number of RAF airfields both in the United Kingdom and in East Africa, Madagascar and Egypt.

In 1950 he transferred from the Air Ministry to the Colonial Engineering Service and served in the Public Works Department, Federation of Malaya, where, in 1957, he was appointed Assistant Director of Public Works (Roads and Airfields).

He retired from the Colonial Engineering Service in 1958 and early in 1959 joined Scott & Wilson, Kirkpatrick & Partners as a senior engineer in charge of the Airports Section. He was made an Associate of the firm in January 1963 and two of the many projects with which he has been associated are Kota Kinabalu Airport and a new international airport in Brunei, which had its first passenger landing on 1st November, 1972. He was made a Partner of the firm in May of this year.

He is married with two sons and two daughters and lives at Sedgwick, near Horsham. He is a keen gardener and is interested in photography.

A. S. McDERMOTT, MA, FICE, MInstHE

After leaving school Alfred McDermott was called up and joined the Royal Engineers. He saw commissioned service in the UK, India, Ceylon and Singapore.

On release from the army he read for Parts I and II of the Mechanical Science Tripos at Emmanuel College, Cambridge.

He joined Scott & Wilson as an AUA under Dr. Guthlac Wilson in 1952, became a senior engineer in 1959 and an Associate in January, 1966. He was made a Partner of the firm in May of this year.

His professional interest is in bridges and he has been associated with the design and supervision of a number of urban motorway schemes and over 400 bridges and culverts with many more at present in the 'pipe line'. In his earlier days with the Firm, however, he worked on the design of office blocks, water towers and a power station. He was resident engineer on the New Liverpool Corn Exchange. For seven months he worked in Nyasaland (now Malawi) on the survey and design of a road and an airfield.

R. BOND, AACA, FCIS

Roland Bond was appointed Secretary of the Partnership and the Company on 9th October. He is new to civil engineering, previous appointments having been in such diversified industries as road haulage, print and packaging, leather, adhesives and plastics, and brewing. During the war he served with the RAF in the UK and the Middle East. He is married with twin daughters aged eleven, is interested in dinghy sailing, fly-fishing, squash and ski-ing, and also enjoys a game of bridge.

Mr. and Mrs. R. W. Hawkey

would like to wish everyone

both home and overseas

a Very Happy Christmas and a Successful New Year

Within the company a number of sporting sections flourish. All of these activities are sponsored by the Partners and any club secretary who requires funds to pursue his chosen sport needs only to go to the sixth floor and join the queue.....



Excuse me mate - is this the National Assistance office?

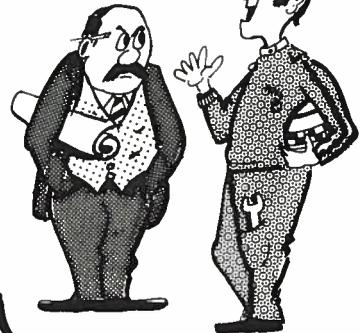
YOU CAN OF COURSE START YOUR OWN SECTION.



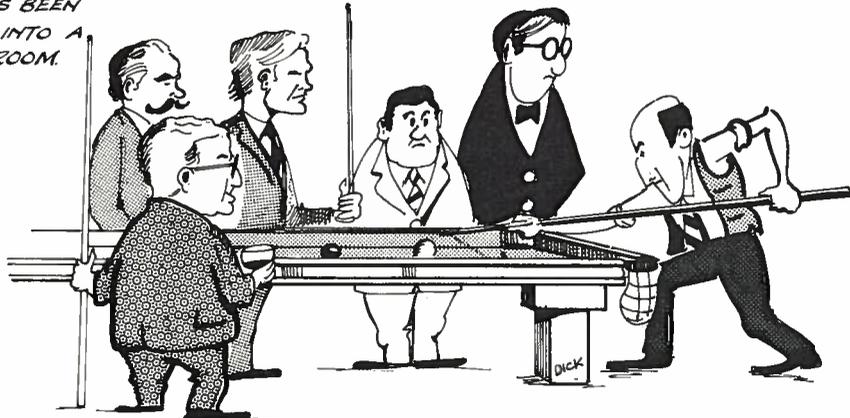
TIME OFF IS ALLOWED AT THE DISCRETION OF YOUR SENIOR ENGINEER

"I would like next thursday off sir...to drive the S.W.K. entry in the Grand Prix"

"He says if we hire Windsor Great Park & supply the ponies - they have their own mallets"



WHILST IT IS A FACT THAT THE DARTS SECTION HAS TAKEN OVER A ROOM ON THE 4TH FLOOR - THERE IS NO TRUTH IN THE RUMOUR THAT A SENIOR ENGRS. OFFICE HAS BEEN CONVERTED INTO A BILLIARD ROOM.



Structural Steel Design Awards 1972

We are pleased to announce that the new servicing hangar for British European Airways at Heathrow Airport has received an award in the Structural Steel Design Awards 1972. The awards are sponsored by the British Steel Corporation and the British Constructional Steelwork Association and administered by Constrado. The purpose of the awards is to recognise the high standards of design attainable in the use of structural steel and its potential in terms of efficiency, economy, aesthetics and innovation.

The judges comments on the servicing hangar quoted in the awards brochure are:

“Servicing modern aircraft requires a very extensive clear floor area and considerable

headroom. These were provided in a classic latticed girder design with the advantage that the 3,200 ton roof structure was assembled at ground level including cladding and services and then accurately raised by jacks to corner columns some 70 ft high. This is a courageous and effective engineering solution to this problem.”

The award takes the form of an engraving of the hangar on a stainless steel plaque (as illustrated) and a certificate.

This is the second occasion on which we have received an award, the first being a special award for the Commercial Union Building in 1970.

The servicing hangar was described and illustrated in the 28th issue of *Pontifac*.

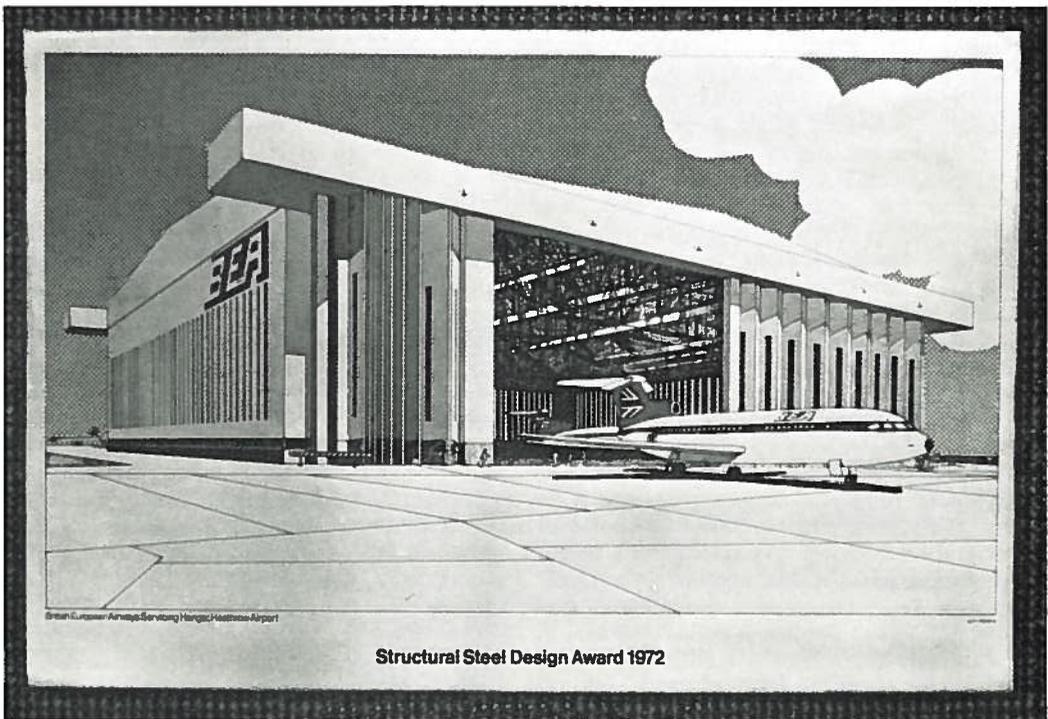


Photo by Colin Smith

The Financial Times Industrial Architectural Award, 1972

In addition, the new Servicing Hangar was one of six buildings which received a Commendation in the Financial Times' Industrial Architecture Award, 1972. Bearing in mind that over 100 entries were submitted for the Award, it is gratifying to have obtained this honour.

The Panel of Assessors reported on the hangar as follows:—

"The concept of supporting so vast a roof on four immense corner columns has succeeded splendidly, and the hangar is as

handsome inside as it is from a distance. The roof form is itself elegant in spite of its necessarily complicated engineering. Unfortunately the detailing and the way in which the hangar is connected with the earlier buildings beside it, are not to the same standard of design. The general effect remains, however, magnificent".

For one project to receive two such distinctions in national competitions is remarkable and our congratulations and thanks are due to all members of the Staff who worked on it.—F.M.B.

Newsletters

Kota Kinabalu

A Beach Hut called Pontifacto

Since the end of May the town of Kota Kinabalu in Sabah, East Malaysia (turn right 1,000 miles past Singapore) has been experiencing the birth and youth of another SWKP outpost.

Following a three year association with the development of Kota Kinabalu International Airport the present phase requires the taming of a swamp site (did I feel a shudder from a neighbouring state) and the design of a new terminal complex. The germinal force from London consists of Vodek Prylinski and Peter Smith, joined in early November by Kim Hawkey (that name sounds familiar) from Robert Matthew Johnson-Marshall & Partners. The consultant team on the project also includes Preece Cardew

& Rider from Brighton and Kuala Lumpur, Franklin & Andrews of London and Yusoff Ibrahim Sehu Berakan, Jurubena Bertiga & Pakatan Juru-Ukor Bahan the well known Malaysian engineers, architects and quantity surveyors.

Local staff on the project are seconded either from the associated Malaysian consultants listed above or from the Public Works Department and these include Malays, Chinese Malays, Indonesians, an Indian and a Japanese Peace Corps volunteer.

The Public Works Department of Sabah is concurrently carrying out a substantial programme of work on the airport including runway extensions, taxiway construction and drainage works designed under phase I of the project. Very close collaboration is therefore required with various Public Works Departments especially their airport project team.

The man with overall responsibility for the airport is the Regional Director of Civil Aviation whom, I add as a side note, is of Sinhalese origin.

This then is a truly multi-disciplinary, multi-firm, multi-racial team drawn together to create a new gateway (or interface as architects insist on calling it) to a remarkable multi-cultural community. Future job circulars may include that essential requirements are a good working knowledge of Oxford English, Bahasa Malay, Hakka Chinese and preferably a smattering of Polish, Sinhalese, Indian, Japanese, Cockney and miscellaneous Chinese dialects.

Various senior members of the design team have visited Sabah officially during the first six months including Messrs. Spencer, Edwards, Sterling and Powter (of SWKP), Feakes (of RMJM Pouhi fame), Daniels, Choules and Morris (of PCR Brighton), Sehu (of YISB Kuala Lumpur) and Suckling (of PJUB Singapore) and miscellaneous Brunei transits including Elliot, Lawley and Earwaker have dropped in. Nobody is trying to suggest that the length of the above list is a function of the superb recreational facilities in Kota Kinabalu. Of the residents Vodek has swung so vigorously into the golfing community that he has frequently been cautioned for infringing the airport approach path. Sailing in the local GP14 races in *Ayer Madu* (Water Mistress), Peter only just failed to win the clay spoon by being one before last in the wooden spoon race. Kim is thought to be weighing up the power boat/water ski-ing situation.

The Kota Kinabalu offices are worthy of special note being situated within one hundred feet of the high water line of a long stretch of tree-lined white sand beach. Out to sea are several small coral islands which daily frame spectacular tropical sunsets (seen all too often from inside the offices).

Standing with back to the South China Sea on a clear day the majestic peaks of Mount Kinabalu can be seen. This mountain, the highest in South East Asia at 13,455 ft, is surrounded by 265 square miles of national park lands which contain an amazing variety of flora, fauna, scenery (and insects) due to the range of altitudes encompassed and also rare features such as hot springs.

Indeed our early impressions of Sabah are those of close contrasts. Whilst much of Sabah is still undeveloped, largely inaccessible and sparsely inhabited by native tribes seemingly little affected as yet by the technical cultures,

the main towns are congested with private cars and all the trappings of a consumer society (television sets, nightclubs and souvenirs). The wealth has, in the past, come largely from hardwood timber exploitation and rubber but the future may well hold greater bounties from oil, minerals and tourism.

We conclude by wishing you all a Happy Christmas, Hari Raya, Chinese or Gregorian New Year (delete as applicable).

PETER SMITH

Glasgow

Since we last wrote, Glasgow has now got one main pedestrian shopping stretch with another to follow by Christmas. This is the direct result of the motorway programme and a highly desirable by-product. We expect that further streets will become traffic free in due course as the construction continues. Our influence has been extended to other towns of the Glasgow conurbation. In particular Rutherglen, with a main road diversion in progress, and Motherwell, where the construction of a 'mini' ring road is about to start. Both these schemes are associated with pedestrian shopping precincts. The Motherwell shopping centre, with which we are involved, is to be covered and air conditioned and will be one of the first of its type in Scotland.

But enough of this shop talk.

The annual golf outing to Troon in June was this year an unqualified success thanks to the brilliant organisation of Willard Dougall. To give everyone a fair chance, handicaps were allotted by handicap secretary, Willard Dougall, and thanks to the rapid results service provided by the resourceful Willard Dougall, the news was soon on its way to Fleet Street that the surprise winner of this all time classic was—you've guessed it—Willard Dougall. The serious business of the day was transacted in the Links Hotel where everyone received a major prize ranging from golf balls to Delsey, and by popular acclaim the excess green fees were transferred to the hospitality fund.

The other golfing occasion was the Nidger Trophy match at Pollok on 18th October when the home anchor team of Hodgen-Breakey, by adding their 24 points to the previous total of 72 amassed by the teams of Wood-Dougall and Cullen-Walker, snatched a strategic victory from the jaws of tactical defeat by allowing the City Engineer's team to win with the measly total of 108 points.

It should not be supposed that our sporting achievements are limited to the 19 holes—far from it. There has been some quite remarkable football since we last reported to you. We fielded our 'A' XI in the first of two games on Glasgow Green against Elliott Sime. Our team was full of spirit being only 2-1 down at half time and just out of the pub. Early in the second half one of the opposition had the misfortune to collide with our rugger full-back, Jim McLean, and minutes later was on his way to hospital with a broken arm. This drama so upset our side that the final scoreline read 2-12 against. Nothing daunted and with experience of one game behind them, our team played Glasgow Corporation Highways Section to a tactful 1-1 draw. Special mention and credit must be given to Dave Davidson and Willard Dougall for touch-line support, to Harry Mitchell for his imitation of Hadrian's Wall and to skipper Ronnie Henderson.

There are those for whom the tranquil pleasure of wind and sail are paramount. Chris Ford and Billy Holmes have, as usual, organised the good ship *Wow*—now sailed from Balmaha and Loch Lomond.

We sent our Managing Director on a sailing course on the Isle of Arran so that he would be less likely to come to grief in rock strewn Loch Lomond. Rumour has it that he was not tested to any great extent due to a total absence of wind and has therefore decided to stay shore-bound until we can afford a more stable craft. We note that *Blood Hound* is up for sale at present.

And now for something completely different.

We welcome Betsy Sinclair as secretary to Roy Hodgen and Denise Brown to the Highway Design Group. John Cullen, founder member of the Glasgow Office in 1960, has rejoined the company from Canada to lead the Highway Design Team. Hamish Grant, Gordon Grossett, Roy Irwin, Lawrence Gordon, Salim Salmo and John McDonald have also joined the company.

Good-bye and good luck to Alex Dixon, Bill Bar, Steve Hunt, Neil Stevenson, Jim Brown, Ian Hutchison and Chris Thom. It's not just money we're turning over folks!

Anne Armstrong has become Anne Bridges, Peter Mortimore, Hamish Leitch and Ronnie Henderson have also got married. Ian Mackenzie has added a new dimension to the company by becoming an M1StructE. On this happy note we say 'Tarrarranoo'!

CLYDESIDER

Nigeria

By the time that these notes appear in *Pontifact*, with any luck the design of the Lagos/Ibadan Expressway will be complete and the documents for Contract No. 1 put to bed. Yes, we all know that the work was programmed to be completed by June 1972, but, as so often happens on major civil engineering works, things kept cropping up—and the most carefully drawn bar charts cannot forecast what, in fact, does happen. First of all, 1972 was well advanced before we got the final decision that the Expressway would have twin carriageways throughout its length. Then there were the additions of the Idi-Ayunre Link and the Shagamu Link, which were not made any easier by having to do the surveys in the wet season. But, in designing a tropical expressway, we now know that the most critical path is that which has to be hacked out of the forest by the surveyors, since without this facility there can be no tentative finished surface levels, no balanced cuts and fills, and no accurate site investigation to establish what kind of muck will have to be shifted.

It was just one of those things which added the Olowoira Viaduct to our list of bridges. Three miles from the Lagos end of the Expressway our proposed alignment crossed what, on the map, appeared to be a small stream, possibly 10 ft wide. But cutting the trace showed that while the stream was in the right place and of about the right width, the approaches for about 400 yards on either side were a veritable slough of despond. Soundings with the Mackintosh probe were illuminating. The rods went down virtually under their own weight through peaty, clayey silt to a depth of 57 ft without encountering any firm stratum whatsoever. At that depth our stock of rods was exhausted, and, clearly, an alternative crossing site must be sought. The area formed part of a steep-sided incised valley, which had been cut through pleistocene formations and had subsequently become filled with silt and decaying vegetable matter.

Casts were made up- and down-stream, and luck was with us. Half a mile up-stream from our abortive crossing point, the valley narrowed to between 400 and 500 ft before again widening out. Between the two promontories thus formed, the maximum depth of the peat proved to be 50 ft. Elsewhere on the new centre line it was considerably less than this and, in addition, the promontories would give us a firm anchorage for the abutments. However, a lateral shift of half a

mile of the centre line meant that around three miles of new trace had to be cleared if our standards of curvature were to be maintained. Until this trace was cut and levelled, we could only estimate the gradients which the revised alignment would involve. And then there was the delicate task of explaining just why, at this late stage, we have to have another major bridge designed, costed and approved. Why didn't we use air survey? We did: but in these parts the forest cover is so dense that 10 ft streams are invisible from the air, and, alas, tree-tops do not accurately reflect the topography of the ground beneath. The name of the Olowoira Viaduct is entirely appropriate. It means the 'Village which the Rich Man built in the Swamp'.

However well designed the Expressway itself may be, traffic has still to get to the points at which it starts and terminates. At the southern end, the Expressway Chainage 0+00 is a point on the existing road from Lagos to Ikorodu, situated eight miles from the centre of Lagos. The northern terminal point is four miles from the centre of Ibadan. We have now been commissioned to design additional urban highway improvements. At the Lagos end, the existing Ikorodu Road is to be dualled and extended into Lagos as far as the Yaba Bus Terminal. This latter is to be re-sited, and designed so as to operate on two levels. In addition, there will be a direct connection from Ikeja Airport to the Ikorodu Road and hence to the Expressway. The Ikorodu Road project involves another major swamp crossing—this time 1,500 ft wide—and we have been told that no settlement on this section of the road will be acceptable. So it looks as if we have to design another major viaduct over peat 50 ft thick.

At the Ibadan end we have been commissioned to design the Ibadan By-pass, to which the Expressway will be joined. This project will be about 12 miles long and will include three interchanges, seven road bridges and one road-over-rail bridge. While access in general will be easier than on the Expressway, obtaining permission to enter upon sites adjacent to built areas is liable to involve protracted negotiations, particularly when boring and drilling are involved and our fingers are metaphorically crossed.

Since last we wrote there have been several personnel movements. Mike Shalders (ex-London and Jordan) arrived to take charge of the design of the Ikorodu Road and related projects, on which he is assisted by Bob Parsons. Ken Caswill (ex-Malawi) spent a hectic 60 days with

us bashing out designs and quantities for the Apapa Truck Terminal. (Haven't you heard? Its all been changed. They want it inside out, with the entrance where the exit was!) Matthew Sobanjo (ex-Kaduna) joined the Soils Section to supervise the direct labour gangs and the site investigation contractors; and we have also had Peter Regan on loan from Kaduna, busily locating sources of sub-base and shoulder materials. Matthew is contemplating becoming a mature student at Lagos University, so as to complete his interrupted course at Ahmadu Bello University. We admire his pertinacity, and wish him the best of luck. We also enjoyed the cheerful presence of Timothy Odubanjo, who, before returning to Nigeria, was for eight years at the Road Research Laboratory, Crowthorne. He called on us by chance, on seeing large areas of the compound covered by soil samples in plastic bags, and stayed to join us on a temporary basis. Stuart McNee left in September to take charge of the Renfrew By-pass, and Mervyn Johnston has moved down from Kaduna to take over from him. Robin Colquhoun left to go on leave at the end of August. Ted Purver is now the Project Engineer for the Ibadan By-pass.

In the last news from Nigeria we wrote about the Ogun River crossing, and this site can still produce its farcical moments. Initially this was to have been a single span bridge, but in March we learned that there were to be three spans. This would necessitate additional boreholes in the river bed, so we set about finding a contractor who was suitably equipped, able and willing to undertake this work. Personal visits to all the Lagos site investigation contractors showed that only one possessed a drilling barge, and that was fully committed for the next three months. Two others with one accord asked to be excused, as they had had no experience in this work. The last one to be approached, while readily admitting his lack of experience of drilling under water, nevertheless volunteered that he had some 18 in. diameter steel pipes in his yard. From these he proposed to make a series of unit pontoons, which he would link up to form a drilling platform. He estimated that it would take a month to build the pontoons, and a further month to complete the bore-holes. As this appeared to provide a better time-scale than waiting for the drilling barge to become free, an offer was made and accepted. But at the same time a warning was giving that the finished platform would not only have to take the drilling rig, rods, casing and crew, but must also have sufficient buoyancy



Pontoon Unit on the River Ogun

to permit the withdrawal of the casings after sampling each bore-hole. Yes, that was quite understood, and had been incorporated in the design of the unit pontoons.

Progress was slow, and it was not until the third week in June that the first pontoon unit was completed. For reasons about which we are still not clear, this pontoon was launched nearly a mile downstream of the bridge site, and then moored to the bank. It was pointed out that if all the pontoons were assembled to make the drilling platform at this point, the resulting craft would be somewhat awkward to pole or tow against the wet-season current of the Ogun River. Wouldn't it be easier if the pontoons were first assembled upstream of the bridge site, and then floated down into position? And, by the way, wasn't that first pontoon sitting a bit low in the water? The first suggestion was readily accepted, but the second was brushed aside. A natural embayment upstream of the bridge site provided a ready-made fitting-out basin, and there all the pontoon units were assembled to form the drilling platform. All went well until the arrival of the drilling rig. This was skidded onto the platform on a timber cradle. As the manoeuvre proceeded, the river end of the platform rose as the shoreward end submerged. But not too far. The pontoon unit immediately below the drilling rig was by now fully grounded, and any thoughts of floating gently out into mid-stream were abandoned. Further delays, while two 3 ft diameter 'Camels' were fabricated and attached, and at last the loaded platform floated freely. Drilling the mid-river boreholes could then proceed, and the last bore-hole log was completed at the beginning of August. While much valuable experience was undoubtedly

obtained by the contractor, we sometimes wonder whether it was really necessary to carry out an extensive experiment at full scale to prove that, after all, Archimedes was right.

ROBIN COLQUHOUN

London

The rumours surrounding the moving of the London office were settled with the announcement on 15th August that the chosen place was to be Basingstoke, and planning is proceeding on the basis of the move to the Eastrop Estate in Basingstoke taking place in 18 months to two years' time. Amongst other assumptions, this assumes that the new office building, at present being designed in Reg Ready's section, will have been constructed and completed.

Meantime it was the turn of the railwaymen to create industrial chaos. Having disposed of the (now, annual) power-workers go-slow/strike, the tube trains and British Rail independently threatened strikes at the same time. As it happened only British Rail was affected, and then only a go-slow and not a strike (but the difference was hard to find).

Despite/because of this, life continued much as normal, and we are delighted to record the engagements of Chris Wright to Catherine Oates, Mike Wood to Hannah-Mary Downing, Norman Brent to Mary Holt, and John Nutt to Clare Dryland. Rod Hockin and David Farthing were married on the same day, to (I hasten to add) Shirley Simons and Janet Martin respectively, and Janet Cardozo was married to Maurice Poole (a photograph and congratulatory letter are shown on another page). Congratulations are due to—Malcolm and Patricia Bourner on the arrival of a daughter, Joanna; Ian and Penny Wilkinson, a daughter Sarah; Maureen and Eddie Beadle, a son Paul.

* * *

We bid a temporary farewell to the following who have disappeared to various parts of the globe in search of MSc's. Nick Finn (University of Calgary), Peter Whatling (Imperial College, London), William Kemp (University of Leeds), Harold Insley (University of Salford). Our congratulations to the latter three who were awarded scholarships by the firm, and also congratulations to Nick Finn who was awarded a scholarship by his university, and left the country in a hurry.

* * *

The different things to different people dept:

We've been told of an occurrence which befell an intrepid SWKP engineer who had ventured from London into the depths of Thailand. Whilst driving a survey vehicle with 'SWKP' emblazoned on the side he chanced to stop at a village store. On entering the store he was approached by a ravishing Eastern maiden who, towering above him, pointed to the survey vehicle and said:

"SWKP"

"Yes", said our intrepid engineer, wondering how to begin to explain the SWKP empire builders.

"Ah", the maiden smiled, "Sealed With a Kiss Please?"

* * *

We've been reminded of a strange event that took place one July evening in nearby Regent's Park. No description has yet been found to encompass the range of skills and malpractices performed that night, but a blow by breath account is included in this issue. The event masqueraded under the title of 'The Mixed Football Match'. Screenplay was by Disney Studios, and dialogue and production (?) by J. Rank ARTHUR. I cannot add to the comment from a certain young man (anon) who was submerged under a writhing mass of females. When one young lady (also anon) shouted "Get his shorts off" the referee gave a foul (if you shout you must give a name—football rules) and the submerged lad was heard to say "No! I'm enjoying it! If this is football I'm coming every week".

* * *

We are pleased to note the presence on programme committees for the Annual PTRC Meeting of both R. J. G. Edwards (Detailed Road Design) and J. M. Stamper (Highway Planning). The conference has been divided into thirteen subject areas, each with its own programme committee responsible for choosing the papers to be presented to the people attending that subject.

* * *

The range of technical subjects on which advice is available in the firm has been extended by means of a series of lunchtime seminars on astrology given by Zach Matthews.

* * *

As we write, the newly formed darts team are top or close in the Central London Darts League beating (almost) all-comers, the soccer team are unbeaten in four games, and the rugger team are unbeaten in none (but they're trying).

* * *

Finally, there is the mystery left over from the last issue who is Richer Navel? Keen scrutineers of the staff lists could find no trace of such a person and indeed keen scrutineers of his critical appraisal of the London office could find no trace of sense. We're not going to spoil it now. It's Christmas and we've got to go out onto Oxford Street to do the shopping for presents. Remember, this newsletter was published posthumously.

LONDON LIGHTS

RURAL ENGLAND AT ITS BEST

The firm was complimented recently by a farmer despite the planning of a motorway which took one-third of his land and left the remainder in two equal portions. He remarked how unusual it was for the person bringing such news to have any idea of farming methods "Usually" he said, "the Ministry send along some bloke who doesn't know t'difference between a boar and a ewe." The ER aiming to impress came back immediately with, "Oh that's

easy, a bore is the size of a shotgun and they make bows out of yew." He later related this tale to his ancient assistant, a senior inspector of works grown old in the firm's service and was treated to a roar of laughter. "Ee lad, you young uns will show your ignorance. A bore is the effect of a tidal surge in a narrowing river channel and a ewe is like a ram, what they used to use in my young days for pumping water up to t'squires house."

Job Numbers

Allocated by the London Partnership

- 72081 M180 Motorway—Brigg-Riby Section
- 72084 Whitgift Centre—Unit 50
- 72086 31 Dover Street—Alterations
- 72087 Bristol/Southampton Feasibility Study
- 72090 Berkeley Square House—Staircase Ground to First
- 72092 Bradley & Foster, Ltd, New Weighbridge
- 72093 Walthamstow & Leyton Marshes
- 72094 Dashwood House—Foundation Instrumentation
- 72096 New Hospital at Fulham—Conversion of Existing Block A
- 72097 Delta Power Station—Arbitration
- 72100 Hirwaun Flats Investigation (continued)
- 72104 Malaysian Highway Specialist
- 72106 Camden Street—Alterations to existing Building
- 72107 Whitgift Centre—Block D Access Doors
- 72108 Royal Festival Hall site—Flood Protection
- 72109 Margate—New Car Park
- 72110 17 and 19 Dacre Street
- 72112 M23/M25 Motorway—Computing for Harris and Sutherland
- 72114 21/23 Victoria Street—Basement Strengthening
- 72116 Pearls Airport—Grenada—Runway Strengthening
- 72118 BEA Airtours Hangar—Gatwick—Roof Modifications
- 72119 Department of Health and Social Security—Harness Cladding
- 72120 Doncaster Royal Infirmary—Pathology Laboratory Extension
- 72122 Singapore—Orchard Square Development
- 72124 Hunterston Project
- 72125 Brigg Enquiry
- 72129 Baring Brothers—New Offices
- 72130 Banque Belge—New Offices
- 72131 New Hospital at Fulham—Radiotherapy Workshop and Radium Store
- 72132 Cosbod and Fisbod—Computing
- 72133 Constrado—Metric Angle Tables
- 72134 New Hospital at Fulham—Clinics Block/Pilot Building Link
- 72136 Porthcawl—Sandy Bay Sea Defence Works
- 72137 Claridges Traffic Study
- 72138 Manchester-Sheffield (Longdendale) New Route

Club Notes

Camera Club

By now the 1972-73 season is well under way and we hope the lunchtime programme is providing interesting entertainment to the London staff.

Our major competition, the annual 'Bernard Ranger Trophy' was judged in November. The competition which attracted 228 entries from 25 entrants, comprised of 124 in the 'Open Section', 71 for 'Churches' and 33 for 'Fun and Games'. The judge was Mr. M. Smithson from the Bexleyheath Photographic Society.

The full results of the 'Bernard Ranger Trophy' are:

Trophy winner		D. Lee
Open	First	D. Lee
	Second	L. C. Hayler
	Third	N. Clemson
Fun and Games	First	L. C. Hayler
	Second	G. Lobb
	Third	D. Lyon
Churches	First	F. Fernandez
	Second	D. King
	Third	S. Hobden

You will have noticed we have been displaying black and white prints by members of the Club in the fourth and sixth floor reception areas and we shall be having an exhibition of prints at the Dorchester reception on 18th December.

Our programme of lectures for the new year are:

January

- 10 *My Way of Photography* by Jon Phillips, Bexleyheath Photographic Society

- 17 *Portraits* by Kodak, slides and script
 22 *Entries* in for colour slide competition, subjects *Christmas* and *Open*
 24 *Holidaying in Austria* by Miss De Bell
 31 *Summer in Spitzbergen* by Alan Lamb

February

- 7 *Colour Slide Competition*, showing of entrants' slides and judging
 12 *Entries* for black and white print competition, subjects *Portraits* and *Open*
 14 *Use of Available Light* by Kodak, slides and script
 21 *Royal Photographic Society 1969 Exhibition*, slides with commentary
 28 *A Taste of Madeira* by David King

March

- 5 *Entries* in for colour print competition, subject *Open*
 7 *Close-ups* by Tony Seppings, Orpington Photographic Society
 14 *Black and White* print results with judge's comments
 21 *The Versatile Miniature Camera* by Kodak, slides and script
 28 *Colour Print* results and judge's comments

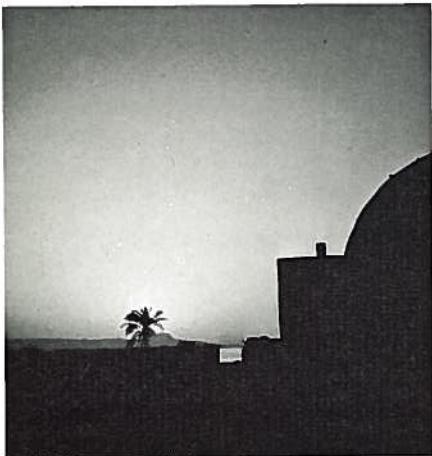
April

- 4 *A Random Selection* by George Lobb
 11 *Colour Slide* informal entries, showing of entrants' slides and judging
 18 *Annual General Meeting*

We hope you will give your support to our lecturers and thus help make this a successful season for the Club.

LES HAYLER

Bernard Ranger Trophy winning slide also first place in Open Section, by D. Lee (Belfast Office)



First place in Churches Section, by F. Fernandez

First place in Fun and Games Section, by L. C. Hayler



Cricket

The 1972 season proved to be successful as well as enjoyable, no games were cancelled due to inclement weather and the only disappointment which occurred, when Richard Costain failed to raise a side, was overcome by members of the club playing a single wicket competition. Ron Chapman who had been the skipper for a

number of seasons left the firm early in the summer and his role was ably taken over by Peter Eckert under whose leadership the cricket teams enjoyed a very rewarding season with a total of six wins which included a very good victory over our old rivals Nyasaland Leopards. The highlight of the season was undoubtedly the President's Match and although the evening was cloudy a large number of people turned up

BATTING AVERAGES

Name	No. of Innings	Total Runs	Highest Score	Times Not Out	Average
D. Weller	4	103	94*	1	34.33
N. Finn	5	91	29	1	22.75
A. Clarke	10	173	45	2	21.62
P. Green	7	108	43*	2	21.60
D. Hitchings	8	148	62	0	18.50
B. Shorter	7	122	50	0	17.42
M. Hayman	7	60	20*	3	15.00
P. Eckert	7	80	24	0	11.42
D. Hight	4	32	25	1	10.66
P. Fulcher	5	42	29*	1	10.50
M. Wood	7	32	11*	3	8.00
C. Campbell	6	23	9*	3	7.66
P. Battley	3	15	12	1	7.50
R. Edwards	8	54	19	0	6.75
P. Margesson	4	23	15	0	5.75
G. Buck	3	8	5	1	4.00

ALSO BATTED

D. Lyon	K. Hackney	R. Clifton	N. Bokil	M. Kennedy	P. Wyatt
	P. Whatling	R. Chapman	P. Disney	M. Boone	

*Indicates not out

BOWLING AVERAGES

Name	Overs	No. of Maidens	No. of Runs	No. of Wickets	Average
D. Hight	31	3	163	16	10.20
D. Weller	38	5	132	11	12.00
B. Shorter	14	2	63	5	12.60
A. Clarke	6	1	29	2	14.50
C. Campbell	48	3	197	11	17.90
P. Fulcher	13	0	79	4	19.80
M. Wood	42	4	186	8	23.20
R. Edwards	24	0	147	5	29.40
P. Margesson	32	2	168	5	33.60

ALSO BOWLED

P. Battley	K. Hackney	R. Clifton	N. Bokil	D. Lyon	R. Chapman
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We batted first and with a number of batsmen scoring double figures accumulated a reasonable total. Our bowlers also played well and although the opposition were not dismissed their rate of scoring was well contained.

Sir Alexander Gibb &

Pts	v. SWKP
66 for 8	71 for 1
P. Fulcher 2 for 12	A. Clarke 38 n.o.
	N. Finn 20 n.o.

Our bowling and fielding were excellent on this occasion and the opposition had to work hard for their total. We lost a wicket early but A. Clark and N. Finn with a 60 wicket partnership saw us safely home to victory.

Charing Cross Hospital v. SWKP

69 for 8	72 for 5
	M. Hayman 18
	A. Clarke 17 n.o.

The Charing Cross side batted first and were well contained by all six of our bowlers who took at least one wicket each. Four of our batsmen reached double figures but no one was able to dominate the bowling and eighteen overs passed before we obtained the requisite total.

Howard Humphries v. SWKP

99 for 4	109 for 7
	B. Shorter 50
	N. Finn 29

N. Finn and B. Shorter were in good batting form and helped us to obtain a reasonable total. Opening bowlers C. Campbell and P. Margesson bowled extremely tightly and did well to keep the scoring rate low in the early overs. Although the opposition pushed hard for runs later in the match they had left it too late and we won by 10 runs.

Binnie & Pts v. SWKP

87 for 5	88 for 8
	P. Eckert 24

Binnie & Pts opened the batting but good bowling and fielding by our side kept their score at a reasonable level. A good innings by skipper P. Eckert help to bolster our score and we passed the opposition's total in the fifteenth over.

Robert Matthew Johnson & Marshall v. SWKP

99 for 2	94
	A. Clarke 28

We batted first in this match, and with the score at 50 for 2 appeared to be coasting to a large total. Suddenly, however, we collapsed to 59 for 7 and it was left to P. Green and M. Hayman to help us obtain a reasonable score. When our opponents lost two wickets with only 25 on the board we thought we had a good chance but the two batsmen who came together never faltered and passed our total in the twenty-first over.

Long Ditton v. SWKP

153 for 5	90 for 8
	B. Shorter 30
	P. Green 30 n.o.

Long Ditton turned out in strength for this match and hit 153 off the twenty overs allocated. Our batsmen could not emulate this sort of form and P. Green and B. Shorter did well to score two thirds of our total between them.

Tennis

As the met. office records show, this has been a summer of somewhat apathetic though dry weather. The result was that despite the fitness of courts for all matches and socials, there were few of the balmy summer evenings that entice people in great numbers to Roehampton and Maida Vale.

The team was a varied of rather unsuccessful one over the season. Nick Finn and Mike Heddon provided a backbone and others came and went, some fitting a few lightning matches into their busy schedules notably Mike Slinn, Tony Williams and Geoff French. The first of these showed his pure joy for tennis itself above such mercenary incentives as Roehampton suppers, in rushing away after matches! Others notable for remembering their kit on Thursdays included Ken Weir, Rod Clifton and Tony Strongman.

The two drawn matches were played at the end of the season when darkness stopped play; next season we hope to introduce tennis balls with coloured lights to avoid the necessity for draws.

Three social evenings occurred and the Red Lion, now under new management, soon fathomed our tastes in cakes and ale. On these occasions, it must be admitted, our consistent stars were Maureen Preston, Lyn Moore and Jane Williams who set an example to us all in racquet conduct.

The Intersection Cup was well subscribed to,

TENNIS CLUB

RESULTS

Versus	Home	Away
Sir William Halcrow & Partners	Won 10-8	Lost 6-12
Binnie & Partners	Lost 4-14	Lost 7-11
Ove Arup & Partners	Drawn —	Lost 4-14
Sir Robert McAlpine	Drawn —	Won 12-6
Sir Alexander Gibb & Partners	Lost 6-12	Lost 5-13

to the extent of having six pairs from Planning. Due to the absence on holiday of many players during the contest, certain leagues were a bit thin on the court. The final was precluded by the sudden departure of Nick Finn for Canada and a draw declared between Nick Finn and Mike Slinn of the Planning section and Brian Shorter and Alan Lamb of the Civil section. We trust that this success, though less than the outright stardom of last year's cup will give Nick every confidence in his life in Calgary.

Our thanks go to the Partners for their continuing generosity and support in providing for a successful tennis season and finally to Miss Lishmund for showing such interest and patience.

A. P. M. LAMB

Badminton

With the season being only some three weeks old at the time of writing there is very little club news to fill this column, but I am pleased to be able to report that a number of new faces have been appearing at our sessions so far this year and to express the hope that more do so in the coming weeks.

Perhaps therefore, this is an appropriate time to remind established members of the firm and introduce newer members to the activities of the Club. We meet regularly every Monday evening from 6 p.m. to 8 p.m. at Swiss Cottage Baths from the end of October right through to the end of March. The facilities offered at Swiss Cottage are excellent and the Club possesses a couple of raquets so that it is not essential to have your own. Three courts are available for the first hour and two for the second so that there is plenty of exercise for everyone during the course of the evening (overweight engineers please note).

DAVE WELLER

Golf

On paper we do not appear to have had a very happy season when the result sheet reads played 6, won 1, drawn 1 and lost 4, but don't let that fool you for they are only results. What really matters is the answer to the question did we enjoy getting thrashed four times out of six! Of course we did, for it is all good sport, but it just makes it all a little more enjoyable if you win once in a while, and that is just what we did, win once! Maybe we should cheat a little, who knows, with a little organisation like lunch-time seminars on 'Bent Golf' it could pay dividends. However, we will be back in there pitching and putting again next season, but unfortunately without the support of some of our hard-core players who have left the firm recently, namely, John Holt, Nick Finn, Peter Clark, Clive Burton and last but by no means least, Colin Holmes.

Far be it for me to bring politics into sport but do you know that within a 15 mile radius of Basingstoke, apart from there being an abundance of nothing, there are nine golf courses and within a similar radius of the Welsh Chapel in Eastcastle Street there are nearly four times that number. So—unless the population of the aforementioned town explodes to one-quarter that of the Welsh Chapel the firm's golfers are on a winner!

The 'Measor Mashie' competition was a great success again this year attracting a field of 21 including, for the first time for many a year, a female competitor in the shape of Mrs. J. Maidment who together with any other golfing wives will be welcomed again next year.

However, the winner who amassed the greatest number of Stableford points over the RAC Country Club course at Epsom was Nick Finn with 41 followed by two players with 37, namely

GOLF CLUB

RESULTS 1972

9th May	at Tyrells Wood G.C.	v.	Sir Alexander Gibb & Partners	Drawn 2-2
16th May	at Wilderness G.C.	v.	Higgs & Hill	Lost 2-1
14th June	at Betchworth Park G.C.	v.	Preece, Cardew & Rider	Won 2-1
13th July	at Cuddington G.C.	v.	Binnie & Partners	Lost 3-0
27th July	at Selsdon Park G.C.	v.	Mott Hay & Anderson	Lost 2-1
20th September	at Tyrells Wood G.C.	v.	Richard Costain	Lost 3-1

FIXTURES 1973

10th May	at Selsdon Park G.C.	v.	Mott Hay & Anderson
29th May	at Wilderness G.C.	v.	Higgs & Hill
28th June	at RAC Club		The 'Measor Mashie'
19th July	at Betchworth Park G.C.	v.	Sir Alexander Gibb & Partners
26th September	at Kingswood G.C.	v.	Richard Costain

John Pascoe and Don Dudeney. At this juncture I would like to thank Don who over the last few years has helped me check the cards in the 19th, always a hectic task and his support is appreciated. The ladies prize went to, of course, Mrs. J. Maidment and the booby prizes to M. Wood for the largest gross score and A. Barber for the largest score at two nominated holes.

There were only four entries for the 'Pontifact Putter' competition this year so you overseas golfers will have to pull your socks up. The winner was R. G. R. Evans in Kenya with 40 points followed by John Holt with 35 who played his round during a visit to Nigeria. In third spot was Pat Vulliamy, a regular competitor and past winner, also in Nigeria and fourth was M. Le Gouais in Kenya.

Above are summaries of the matches played this year and the fixtures already arranged for next season.

The matches with Preece Cardew & Rider and Binnie & Partners have still to be arranged.

Finally, a reminder for our overseas golfers, do not forget the 'Pontifact Putter' competition. Cards for a round played from 1st January, 1973 onwards should be sent to me, at the London Office, to arrive not later than 25th June, 1973. A copy of the rules will be forwarded on request.

GRAHAM WALKER

Soccer Notes

I always wanted to be literary, you know, to write stories. I don't mean just any old stories, I mean classics. You can keep your children's stories; 'Muscles Bartlett meets Stan the Bat' is all very well but so ephemeral. Actually I always wondered if I could ever make it as a philosopher. Imagine the status—

"What do you do then?"

"I'm a philosopher"

"What's that?"

"It means I'm on the dole."

It's an inspirational thing; how about 'arrogance is ugly', I mean, that's a fair enough start for an amateur. And that's as far as I'm allowed to get. What am I landed with instead? The soccer notes. Oh well. Here goes.

I thought of taking revenge on life by doing some sycophantic pen-pictures of the SWKP football team. I also thought of doing some insulting pen-pictures. Then I thought about some truthful ones. Then I decided to forget it. If it's my lot in life to demonstrate my England manager potential I'll have to live with the inscrut-ability.

v. Sir William Halcrow Drawn 3-3 (HT 2-2)
Battle was struck once more with an old foe

(please note the literary tone that this report has already taken). With the noble captain donning the keeper's jersey and the one and only Abbott, R. keeping the left touchline company, goals were scored by Brian Shorter (wearing his red and black stripes horizontally), Tom Davern and Chris Beers. Unfortunately the noble captain playing in goal, was left fumbling for his monocle and kid gloves on three occasions.

v. Sir William Halcrow Won 4-1 (HT 1-0)
After the reintroduction of old bruises, SWKP gave one of their best footballing exhibitions in living memory. In Pete Eckert's case this is approximately, Oooh at least 30 seconds, but he did score the only goal of the first half and another in the second half along with Brian Crutterden and Brian Southwood. The game was well refereed by Dave Weller (Sir).

v. Activated Sludge Limited Won 5-0 (HT 2-0)
A fine Saturday morning enticed such veteran notables as Jeff Tetlow, Chris Wright, Mike Slinn, and Keith Hackney (No! No! stand back please!) to come forth for their seasonal debut. The first half produced some sparkling football and goals from Mike Kennedy and the noble captain—his first for the firm. The second half was notable only in the octopus impersonation by the opposing goalkeeper and the completion of a hat-trick by the noble captain, his third goal coming from a penalty awarded to Mike Kennedy by referee John Surridge (we made him an offer he COULDN'T refuse). Pete Eckert tried very hard, and eventually scored. Well done Pete. I must say, it was nice to see Keith Hackney in football gear again. It's always nice to know what the well dressed footballer of 1955 is wearing, and on this occasion the crowd were also treated to a delicious display of dramatic petulant hypochondria. An unsurpassable exhibition.

v. Tower Hamlets—Child Care Department Drawn 2-2 (HT 1-2)
Played on a cold wet afternoon, several late tactical substitutions were made in the SWKP team when players failed to arrive. John Surridge went in goal. Nic Clemson went to left back, Stewart Mawer to centre half, and Mike Slinn's brother-in-law learnt a few more words of wise English advice on the left wing. David Dent took on the opposing team from inside forward, and John Stamper used his weight effectively at

centre forward. Although SWKP were 2-0 down after 15 minutes, the turning point of the match came when referee Disney allowed a controversial goal by Brian Southwood, with the opposition claiming offside. The equaliser came in the second half from a fine run and shot by Mike Kennedy, and some athletic goalkeeping by John Surridge kept the scores level.

Right. That's it. I'm off to sign on at the Labour Exchange as a philosopher. To be . . .

P.S.D.

THE MIXED FOOTBALL MATCH

Venue: REGENT'S PARK Date: 24TH JULY, 1972

It was a fine evening—a little damp perhaps—when ten girls of varying shapes and sizes were struggling into outlandish sports attire. Red socks predominated the scene. What were these girls doing?

A man sat under a nearby tree reading a book. He glanced towards the girls, now in various stages of undress, and continued to read his book.

A dog barked as eleven men smoothly changed from the typically immaculate civil engineering pin stripes to even more outrageous sports wear. A Scott Wilson man, hardly recognisable, but bearing a strange uncanny resemblance to a lost 'diddy man' from Thames House, rather than a representation of the formidable Pete, wandered onto the pitch. What were these men doing?

Was it a mixed football match? No one will ever know! The only thing missing to complete the picture was a few bars from the signature tune of *Match of the Day*.

Warm-up time, and so the men tripped onto the pitch manipulating their lithe, muscular bodies in contortive rippling movements, whilst the ball was being dribbled expertly by the girls who stormed onto the pitch, chewing gum, competently determined to put these men through their paces.

It was nearing kick-off time and unfortunately the girls were one *man* short! As a number of lecherous spectators assembled on the side lines, Paul Disney blew the whistle, risking life and limb to referee—the game?

A commotion arose as a dapper woman, complete with varicose veins and handbag containing cryptic messages, ran onto the pitch rendering several short sharp blasts on a whistle.

The real referee had arrived miraculously from

nowhere with a rosette reading 'Up the Girls' pinned to her voluptuous contours. These voluptuous contours were later discovered as being the artificial protuberances of Arthur Melton in drag!

A lady player retrieving a loose ball from the back line was hotly pursued by a large black dog wishing to participate in this serious activity.

Triumphantly the ladies scored their first goal; a cheer from the crowd as the girls administered congratulatory slaps on the back of the goal scorer who collapsed to the ground and remained inactive.

As eleven lady players descended onto one poor man, they were unable to gain possession of the ball, and play continued with a threat from the men who were now fighting for an equaliser.

John Stamper, an infamous player of great strength, grabbed Janet (Peter Osgood) Newman by the elbows and kept her in an elevated position to miss a neat cross ball from Lyn (Bobby) Moore. Pedalling the air Janet was unperturbed and went on to play a magnificent game.

Isabell McDowall, *one* of the casualties, hobbled around courageously after a rough tackle as a high ball was aimed straight for the delicate parts of Pat Mason's anatomy which required immediate first aid attention. Many male volunteers gathered round the injured player who nobly declined all offers and went on to score yet another goal for the ladies—a penalty shot taken whilst Mike Kennedy the goalie lay prostrate on the cool Regent's Park sod.

Bella Stein, a star player, was nearly sent off for concussing Jimmy Martin, the serious centre forward, but Trish (of lovely leg fame) executed a quiet kiss of life on the referee who instantly allowed Bella to remain in the game.

The men of Scott Wilson had met their Waterloo in this agile team of keen opponents.

The camera lens of Anthony Armstrong Jones (alias Jane Etherington's boyfriend) zoomed in on some thrilling action as Rose Tylka, an American secretary, lost her shoe as she made a fierce attack on the ball.

The ladies victoriously won the match 5-3 with a little help from one or two men players, i.e. the goalkeeper, Arthur the referee who put a few balls at the feet of the ladies, and one player who shall remain nameless (because I've forgotten) who played half his game for the ladies, and alas, half his game for the men!

SUE MASON



LADIES (in team order)

- 1 Sue Mason (captain)
- 2 Janet Newman
- 3 Wendy Louis
- 4 Pat Ferguson (lovely legs)
- 5 Pat Mason
- 6 Bella Stein
- 7 Jane Etherington
- 8 Isabell McDowell
- 9 Rose Tylka
- 10 Lyn Moore
- 11 Maureen Edwards



GENTLEMEN? (in team order)

- 1 Mike Kennedy (captain)
- 2 Charles Campbell
- 3 Jimmy Martin
- 4 Roger Abbott
- 5 Brian Shorter
- 6 Jim Davis
- 7 John Stamper
- 8 Brian Cruttenden
- 9 Simon Hollington Sawyer
- 10 Paul Disney
- 11 John Surrige

Darts

Proudly carrying the banner of SWKP into the Central London Darts League, the team which represents the firm met with initial success. At the present time, however, there are indications that opposition is becoming increasingly tough.

This particular League has been established for ten years and amongst the membership are such notable organisations as The Automobile Association, The Abbey National Building Society, The Clerical Medical & General Assurance Company, British Steel Corporation, British Petroleum, Burmah Castrol Oil Company, Esso Petroleum and The National Coal Board.

So far the results affecting the SWKP team are as follows:

Automobile Association 2; SWKP 5

SWKP 6; National Coal Board 1

SWKP 5; Abbey National 2

Burmah Castrol 3; SWKP 4

SWKP 3; Clerical Medical & General Assurance 4

Esso 4; SWKP 3

Apart from normal League games, The Central League has a Knock-out Cup Competition and in the first round SWKP defeated the current holders of this trophy—British Steel, by two games to one.

Through the courtesy of 'mine host' at 'Ye Olde King's Arms', 23 Poland Street, the SWKP team have the use of a private room in this cosy establishment to play 'home' matches. This enables us to entertain visiting teams from other companies who have been quick to acknowledge the general arrangements and no less, the manner of their reception.

Of course, we cannot predict what our League position will be at the close of the season. What we can say is that we have already established some firm friendships and as newcomers to the League we consider this to be of primary importance.

THE HAWKEY DARTS SHIELD

Mention of this fine trophy will recall for many the enjoyable competition of 1972. Those who participated will be pleased to learn that arrangements will shortly be in operation for the 1973 contest. In view of the wide support, friendly

rivalry and not least, the happy spirit which was the hallmark of this lunch-break series, it is hoped that the 86 entries of 1972 will top the hundred mark in 1973.

The basic rules will apply as hitherto, i.e. that pairs entries will be invited from all sections. The Darts Committee will ensure that all entrants will have an equal chance in getting through to the final rounds inasmuch as they intend to keep 'known' darts players zoned within a specific section of the draw. Lady entrants will also receive full consideration as will those who do not habitually play this game.

The 'Hawkey' Shield matches will be played on the fourth floor in Room No. 446, which has kindly been allocated for the purpose of this friendly inter-section competition.

We hope that you will enter and not only enjoy the series but also endeavour to wrest the Shield from the present holders—Bridges Section.

DARTS COMMITTEE

Squash Notes

A feature of the club's results this season, has been the absence of the mighty Finn. Fleeing to Canada (who is Fifi anyhow?), he has left us without a win in the number one position. However in the Cementation Cup League we have won three matches out of six, and, with the return of David Farthing, the arrival of Keith Barnett and Ian Wilson, not to mention the continuing service of Dick Brown, Chris Wright, Geoff French, Rod Hockin *et al.* we probably have a stronger team than last year.

Two ("I didn't realise I was so unfit", "where's the bar") socials have been held this season, the total attendance being 26 people. For the remaining three socials more court time is being organised, so there should be no repeat of the man who staggered off the court, at the last social, thrashing wildly at thin air with his racket, saying "five more minutes and I would have . . ." before collapsing into a pool of perspiration!

The dates of the remaining socials are as follows:

Tuesday, 13th February, 1973, and

Tuesday, 13th March, 1973.

ROD CLIFTON

SQUASH SECTION NOTES

RESULTS

Positioned played	1		2		3		4		5		Totals		
	W	L	W	L	W	L	W	L	W	L	Pl	W	L
D. Farthing	4		1	1							6	1	5
K. Barnett	2		2	1	1						6	3	3
I. Wilson	1		1			1					3	1	2
R. Brown				1	1	3					5	1	4
G. French					1		1		2		4	3	1
C. Wright							3	2			5	3	2
R. Hockin							1		1		2	1	1
R. Clifton									2	2	4	2	2

Staff Notes

New Appointments

London Office

K. A. Barnett
 R. A. Bond
 P. W. Brigly
 C. G. Campbell
 D. G. M. Dent
 Miss J. C. Dowson
 J. R. Elliott
 J. D. Ferguson
 A. Fernandez
 G. J. Fowlds
 M. G. Gidwani
 B. G. Goddard
 Miss P. M. Gosling
 P. E. M. Gray (rejoined)
 Miss S. L. Green
 Miss L. C. F. Gregory
 F. R. Hoyes
 T. Hunt
 A. Hunter
 C. F. Inman
 L. R. Jardine
 C. R. C. Jones
 D. P. Jordan
 G. F. Kneebone
 H. K. C. Lok
 R. S. Mansfield
 P. J. Maranian
 Miss C. A. McPherson
 M. A. Melnyk
 Miss L. A. Moore
 J. Murphy
 J. L. Nutt
 Miss R. L. Orton

R. C. Parsons
 D. C. K. Perryman
 D. Peters
 R. J. Robson
 R. Romei
 R. W. Simms
 P. Sliper
 R. C. Smith
 B. R. Southwood
 Miss N. J. Stafford
 Miss A. M. Stein
 P. Stenning
 G. P. Turner
 J. A. Weller
 I. G. Wilson (on secondment from John Laings)

Scottish Company, Glasgow Office

Mrs. D. E. Brown
 J. M. Cullen (rejoined)
 L. R. R. Gordon
 H. H. Grosset
 H. H. Grant
 R. M. Irwin
 H. Leitch
 J. McDonald
 S. H. Salmo
 A. N. White

Kendal Office

Mrs. S. Shephard

Brigg Office

H. G. Honca

Site

J. C. Kershaw—IOW Renfrew Outfall Sewer
 Mrs. M. Lockhart—Clerk-Typist (part-time) Renfrew Outfall Sewer
 G. Sim—rejoined—RE Dashwood House site

Overseas

D. F. Boon—rejoined the Hong Kong Firm as SARE on Container Terminal site
 J. R. Ewer—ARE Kenya Tea Roads.
 B. Gudka—ARE Kenya Tea Roads
 H. J. Merchant—Soils Engineer, Nairobi Office, Kenya
 J. J. J. Mushet—IOW Lilongwe New Capital site, Malawi (rejoined)
 J. V. Parkin—seconded to Govt. as Engineer's Rep. Kai Tak Airport Tunnel Road
 A. C. Payne—RE Sultan's Armed Forces HQ at Risail, Oman
 R. Sheasby—ARE Kenya Tea Roads
 C. Sim—RE Kai Tak Airport Tunnel Road
 P. G. Storry—Geologist, Hong Kong Office
 T. M. Stott—IOW Kai Tak Airport Tunnel Road
 A. J. Thomson—IOW Kwai Chung Container Terminal site

Staff Returning to UK from Overseas

D. R. Abbott—AE London Office (ex Brunei Airport)
 C. D. Barclay—AUA Glasgow Office (ex Sultan's Armed Forces HQ, Risail, Oman)
 G. D. Gosling—AE (C) London Office (ex Hong Kong Office)
 C. P. Harding—AE (C) London Office (ex Nigeria)
 H. T. M. Insley—post-graduate course at Salford University (ex Brunei Roads)
 P. D. Knowles—SE London Office (ex Hong Kong Cross Harbour Tunnel)
 J. S. McNee—RE Renfrew Outfall Sewer (ex Nigeria)
 G. E. Trigg—AE London Office (ex Hong Kong)
 K. W. Wigmore—SE London Office (ex India Study of Substitution of Labour for Equipment)

Movements of Staff Overseas

C. D. Barclay—ARE Sultan's Armed Forces HQ, Risail, Oman (ex Glasgow Office)
 P. G. Berry—RE Sultan's Armed Forces HQ, Risail, Oman (ex Cyprus) and subsequently to Bangladesh as General Engineer on the Transport Study
 K. E. Caswell—3 mths. in Lagos Office on structural design (ex Lilongwe Office) and subsequently to Malawi again as RE on the New Capital site
 T. P. Conway—AE (C) Nairobi Office, Kenya (ex Lilongwe Office)
 R. A. Cooper—Highways Engineer Malawi Roads Feasibility Study (ex Nairobi Office)
 N. Finn—post-graduate course in Canada (ex London Office)
 J. M. Henley—Deputy Project Director Bangladesh Transport Study (ex Nigeria)
 C. W. Holmes—ARE Makullah Naval Base (now a member of SWKP staff instead of on secondment from Mowlems) (ex London Office)
 M. S. Kopp—IOW Sultan's Armed Forces HQ, Risail, Oman (ex Gwent site)
 K. B. Locke—Superintendent of Works Nanyuki Airport (ex Malawi)
 D. H. Newell—SE Kaduna Office, Nigeria (ex Lilongwe Office, Malawi)
 R. H. North—Transportation Engineer Malawi Roads Feasibility Study (ex London Office)
 W. Prylinski—Project Manager, Final Design Kota Kinabalu Airport, Sabah (ex London Office)
 N. D. Robinson—Soils Technician Malawi Roads Feasibility Study (ex Nairobi Office)
 W. Scott—Sen. Highways Engineer Malawi Roads Feasibility Study (ex Nairobi Office)
 P. D. Smith—Airport Engineer, Final Design Kota Kinabalu Airport, Sabah (ex London Office)
 G. E. Trigg—AE Hong Kong Office (ex English Language Centre, Bangkok)
 O. J. Van Aswegen—IOW Brunei Airport for about 3 mths. (ex Kai Tak Airport)
 R. J. K. Viapree—Project Manager Malawi Roads Feasibility Study (ex Lagos)
 G. Wilson—RE Nanyuki Airport, Kenya (ex Brunei Airport)

Movements Within the UK

	<i>From</i>	<i>To</i>
J. Corr	Antrim Office	M2 site
J. P. D. Cotton	M6 site	Kendal Office
J. O. M. Craig	Antrim Office	M2 site
D. W. Farthing	Post-graduate course at Salford University	London Office
R. M. Hockin	Secondment to Costains	London Office
M. J. Leathers	M6 site	Kendal Office
W. H. D. Lee	Antrim Office	M2 site
M. E. L. Lloyd	Prestatyn Drainage site	Gwent County Hall site
R. F. T. McDowell	Antrim Office	M2 site
D. J. Milne	London Office	Secondment to Costains
M. G. H. Stevens	BEA Engineering Base site	London Office

Since the last issue of *Pontifact* the following have been elected to Membership status of the Institution of Civil Engineers:

C. P. Davis (London Office)
 G. D. Gosling (London Office)
 G. I. Mackenzie (Glasgow Office)
 G. D. Taylor (Brigg Office)
 G. E. Tedbury (London Office)
 J. H. Tetlow (London Office)
 M. E. Trigg (London Office)

The following have been elected to Membership status of the Institution of Structural Engineers:

D. F. Lyon (London Office)
 G. I. Mackenzie (Glasgow Office)
 M. E. Trigg (London Office)

R. D. Burley (London Office) has been awarded the Higher Technicians Certificate and G. N. Pendse (London Office) has been awarded the Technicians Certificate of the Scheme for the Training of Civil Engineering Technicians.

K. J. Self (London Office) has been awarded the Institution Structural Engineering Technicians Certificate.

Post-graduate Fellowships

The following fellowships have been awarded for the academic year 1972-73:

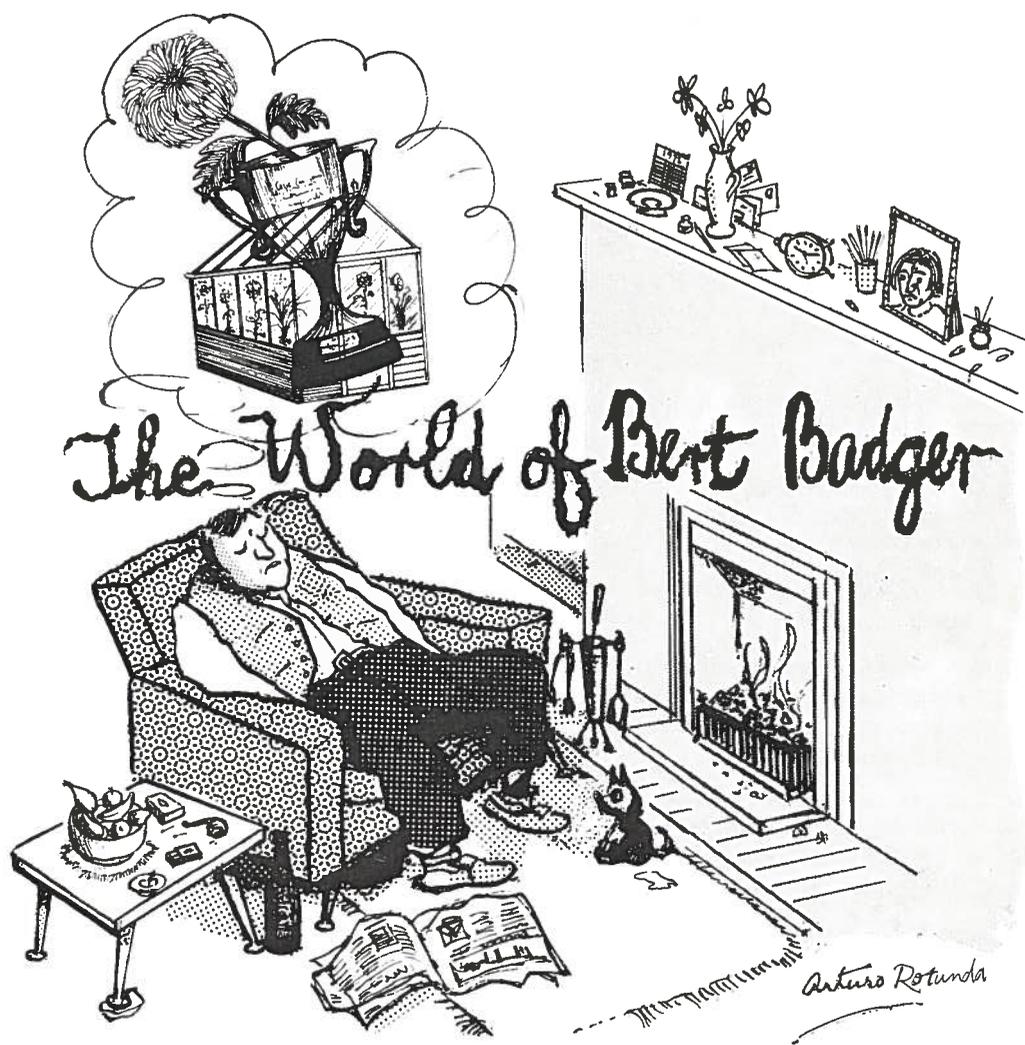
H. T. M. Insley—to study Highway Engineering at Salford University
 W. R. Kemp—to study Transportation Engineering at Leeds University
 P. F. Whatling—to study Concrete Structures and Technology at Imperial College.

EXTRACT FROM ONE OF THE LETTERS FROM OUR CONSULTANTS

"Our view is that the existing aerial farm will not affect the integrity of the ILS azimuth guidance signal at any significant point along the approach path to the runway. This situation at the airport viz-a-viz the presence of many extraneous objects will probably require a wide aperture localiser array which will contain most of the energy say $\pm 10^\circ$ either side of the runway

and thus a very small amount will arrive at the aerials for subsequent reradiation and also such reradiation will probably be of a spectral nature and it will occur, if at all, upwind of the displaced threshold. One can therefore pose the question is it necessary to relocate the aerials?"

Being a structural engineer I was wondering if my answer should be yes or no, but finally I have answered simply "indubiously."



Number 17 Scragg Street, E.2, is a neat little drum. It wasn't always so. As a matter of fact when Mr. Bert Badger and Lil, his wife—you know, Lily Stephens as was, had returned from their weekend honeymoon at Southend . . . well, nearer Westcliff really—the posh end, they'd collected the keys off Estate Agent Hymie Greenberg and had gone round to view No. 17. Despite Hymie's inevitable whining routine . . . "I'm giving away such a lovely property . . . my life, I must be mad or somtin' . . . such an

open hearted moisha, I shall be dead in stook at such prices" . . . did nothing to alleviate the shock which awaited Mr. and Mrs. Bert Badger. Perhaps the scene is best described in the words of Bert himself . . . "We opens the front door and wot did we see?—filff! pure unadulterated filff! You'd 'av fort a load of Mongolian gypos 'ad moved aht I tell yer . . . free inches of dirt on the floor, scummy ceilings and vermin—Wot? never see'd the like of it . . . cockroaches like miniature Chieftain tanks, fleas wot could out-jump Lyn

Davies and mice so big that the cats went around in pairs. Fact was that the local 'moggies' were so scared of 'em that the only 'Tabs' they was on were 5 grm. Librium".

But now, 25 years and 10 gallons of assorted 'Dulux' later, plus a load of honest toil and Lil's constant scrubbing brush, 'Handy Andy', 'Zamo' and dusters of 'Johnson's Wax', No. 17 certainly is a neat little drum. Neat . . . clean . . . but homely.

The same goes for the garden. All the old bricks, twisted rabbit netting, used car tyres and rusted remnants of an Anderson shelter have long since been dumped at the Council tip.

Everything in the garden is lovely. Freshly hoed borders, coloured crazy-paved paths and a trim weed free lawn plucked straight out of Wimbledon's Centre Court.

Down the bottom on the left is the tongued and grooved tool shed, affectionately known to Lil as 'Bert's sulk 'ole' and opposite is the small greenhouse which is the venue for the start of this month's episode of . . .

The Exhibitor

Mr. Bert Badger, his corduroy seat drooping well over the edges of an upturned orange crate, gazed intently ahead.

All that could be heard in the tiny greenhouse was the wheezy rhythm of his autumnal bronchitis.

A pallid sun dodged the clouds like an excited kid and with occulting irregularity its fitful beam danced a staccato polka on the forehead of Mr. Badger.

The gaze of the greenhouse inmate did not waver.

An autumn breeze stole gently across the smooth carpet of lawn and paused to test the pile before breathing upwards to evict the remaining withered leaves from the nearby pear tree. For a moment they clung in a last despairing embrace before their final fluttering journey to the earth which first gave them life and now, in death, reclaimed them.

In the greenhouse Bert gazed on. Transfixed would be a better description and yet the object of his fixation was barely two feet away. Sentinel stemmed the firm leaves were complementary to the golden lusted head of a fine 8 in. chrysanthemum bloom.

A tiny microphone placed close to the chin cleft might have amplified the faint soliloquy of admiration which slipped so softly through the quivering lips of Mr. Badger.

"You darlin' . . . you little smasher . . . you're

the best yet . . . the finest I ever growed . . . there'll be nuffink to touch yer up the Civic Centre Show on Sat'day . . . nuffink! . . . they can poke their 'Bronze Supremes', 'Ambassadors' and their 'Connie Mahews', there'll be nuffink to compete wiv you, me little 'Golden Glory'."

Bert's mind backpedalled with almost parental nostalgia to that day in the early spring when this 'ere little golden beauty, a mere snippet then, had arrived from a Surrey nursery, moss an' all.

Then had come all the ol' paraphernalia, the John Innes compost, the bonemeal, 'oof and 'orn compounds and the nicotine spray to prepare. Bert did a mental chuckle. Talk abart larf . . . told Lil of the nicotine spray and wot did she do? . . . saved up all me ol' shag fag ends and mixed up a brew which would 'av blistered the barnacles orf a barge bottom . . . gawd luv 'er. And wot abart the time we 'ad that late frawst and in the morning I fahnd four winders of me greenhouse caved in, all the 'eat gorn an' me little 'Golden Glory' looking sick to death. Nearly lorst 'er I did . . . they was rough ol' days they was. Nursed you frew it though, didn't I? You little golden beauty. 'Course I knows 'oo dun me winders doan' I—'Bugsy' Cackett's grotty nosed kid up at No. 29 . . . a right little tearaway called Stevie. Got all the makings to finish up a fully fledged bover boy. 'Air frizzed up all over 'is 'head like a perishin' Robertson's jam gollywog, cod fish eyes—jus' like his ol' man—a mean beaky 'ooter an' a loose wet mouf, always arf open wiv his bottom lip 'anging dahn like a letter box wiv a busted flap.

Despite the best efforts of the teachers at Bog Lane Secondary Modern, Stevie was due to be launched into the shirking world educationally equipped with the ability to sign his name with a cross.

Bert had seen 'Bugsy' Cackett in the Public up at the 'Baker's Arms' and told him about Stevie throwing bricks and busting the greenhouse windows.

"Leave orf Bert", said Bugsy, "he only did it fer a giggle". "A wot?" snarled Bert. "Well, you know wot I mean—he did it fer kicks". "Oh . . . kicks is it", said Bert "Well if that's all 'e wants I'll give 'im a coupla good uns right up the centre of those rotten tatty Lee Coopers 'e wears and he wont be able to sit on 'is bottle fer a week—tell 'im that from me Bugsy!" and Bert had slammed out the public bar.

Anyway it hadn't happened again and Bert jerked back to the present continuing to gaze and mutter endearments to his chrysanth. Lil

caught sight of her ol' man when in the gathering twilight she took him a cup of tea. Of course she didn't laugh. But as she told Mrs. Harris next door, "I could have died, Maisie, seeing him sitting on that old orange box, he looked like a Toby jug with legs".

Come the Saturday, it was all hustle and bustle for the Town Show up at the Civic Centre. Bert had popped his beloved 'Golden Glory' in a special carrying box, thoroughly protected against any possible damage. He wouldn't chance the bus but walked all the way carrying his bloom like it was packed in a canister of nitro glycerine.

Inside the hall he found the area allocated 'Chrysanthus (Late)', carefully set down his charge and began to unwrap. He tried his whistle on "She's my Lovely" but it's doubtful whether Jerome Kern would have recognised his melody.

Mr. Badger caught his breath as he slipped the plastic bag off the head of his bloom and his work-worn index finger stroked a petal into place with the tenderness of a mother caressing the cheek of her first born. In reality his heart was pounding fit to burst.

A coarse laugh nearby made Bert flush with anger. It was that 'Know-all' Nobby—him and his corny wisecracks "I' I' me ol' Bert . . . wot d'yer think you're goin' ter do up 'ere, eh?" Then, flicking a derisive finger perilously close to 'Golden Glory', he added "I see yor still going in for Dwarf blooms . . . wot is it?—a 'Tom Thumb' . . . get it mate? Tom Thumb—dwarf—midget—eh? Get my meaning? That's rich aint it? Dead funny, eh? Very comical that . . . very comical. Makes yer laugh, doan it", then he sloped off busting his sides at his own joke.

Bert was at boiling point. "Laugh the 'uvver side of yer clock when I gets the cup—won't yer Nobby" he growled. Then he caught sight of his bloom and in a twinkling his wrath evaporated . . . "You beaut . . .".

Of course, he should have been clear of the area before the judging began but somehow he couldn't bring himself to leave. "Wot?", he thought, "leave me 'Golden Glory' after all the months of bringing 'er up? . . . like me own flesh an' blood she is" and with that Bert shot quickly behind the shelter of a large clump of potted palms where, hidden from view, he could watch the proceedings. Well, it was more of a mere formality really, the cup was as good as his. Mr. Badger could almost feel the smooth silver handles of the trophy in his hands . . . could hear himself saying "Fank you Ladies an'

Gents . . . Hunaccustomed has I ham in public speechyfing an' 'at" . . . It was just then he saw the judge appear in the aisleway, accompanied by the Mayor.

Bert tingled with excitement as he recognised the judge. It was Mr. Brotherton who'd come and giv' a lecture in the summer to the 'Ackney Wick an' Beffnel Green Gardens an' Erlottments Association dahn at the Buffaloes Lodge. Smashing bloke—clever too, 'e spoke all Latin names for plants like centuria candidissima for silver leaf an' ichynops ryto an' all that. He was also a mate of that there BBC bloke, Professor Alan Gemmel, y'know—him as comes over every Sunday from that German University at Kiel just ter be in Gardeners Question Time, so 'e was a smashing bloke too.

Yes, everything seemed perfectly alright in Mr. Badger's world as he peeped through the sheltering leaves of his hide.

The judge had already given a couple of keen glances at 'Golden Glory' from twenty yards away and gawd knows that sent Bert's pulse rate up.

Now the judge had paused within six feet. He placed an arresting hand on the forearm of the Mayor and nodding with approval they stood in admiration of 'Golden Glory'.

Bert felt a thrill of pride race through him. "I've done it! . . . I've done it at last. I think I'll put the cup on top of me new tellee—look nice there" . . .

Bert's ecstasy was cut short as 'e saw Glory give a tiny shake of her golden head and a single petal detach itself from underneath and flutter gently to the floor. He felt as if a giant hand had suddenly squeezed his heart. The judge stared, the judge frowned and stepping forward he bent and peered upwards at the underside of the bloom.

As yet another petal fluttered down, Mr. Brotherton straightened and gently parting the crown of the bloom with the tip of his silver propelling pencil he peered in. Then he turned to the Mayor, gave a sympathetic smile and said "Well, what do you know? *Forficulidae Dermaptera* . . . some people call them earwigs . . . pity—nice bloom . . . would have been best in the Show". Shaking his head the judge moved on.

From the palm leaves Mr. Badger watched in stupefied horror as the petals of his beloved bloom cascaded down until that golden crown looked as ragged as a canteen sweeper's mop. "I . . . I . . . I'll give 'em fornicating dermatitis earwigs or whatever that latin name was. I . . .

I'll . . ." but the rest of his outburst was swallowed in a blubber of bitter frustration.

After all, he couldn't help the tear which zipped off the end of his nose and splashed onto the toe cap of his Cherry Blossomed shoe but he managed to cuff the second one.

As the shattering force of utter disappointment erupted in his brain, his chin sank lower onto his chest and with his eyelids shut tight, he choked back a sob and gulped . . . "Well, cor bli".

Arturo Rotunda

Wedding

*Wedding of Janet Cardozo and Maurice Poole on
16th September, 1972*

Rather than an eye witness report we thought that a letter to the 'Lovebirds' was more appropriate.

29th September, 1972

Dear Lovebirds,

We were delighted that you could find the time to write; and such a nice letter too. We knew that that card from Poole (the place) was a blind; we knew that you had retired to your love nest straight away, and we don't blame you.

Bella says that the wedding was lovely, and why shouldn't it be? You deserve the best! The photograph of you two standing alone, cooing to each other is delightful and it will of course take its due place in *Pontifact* when we have written the twenty page article to go with it.

The group photo is quite nice too but you are so much smaller and the photographer looks as if he was drunk (which would surprise us knowing Madam's views on the subject) or is it that the ground is sloping. Anyway it looks nice and exciting and we even got a glimpse of Bella's latest (what we could see of him under the hair).

We are alarmed that Janet is not exercising her proper control. Fancy Maurice rattling the cans (or was it pans?) Doesn't he know how to use a tin opener? You've got to start early and be firm with this woman's lib business, or he will degenerate into a lazy, slovenly, all demanding, chauvinist pig like the rest of us. And you know how difficult they are to live with, don't you Janet!

Well we must finish now and give Bella some more work to do, for a moment then we thought she was going to find time to breathe; we've got to get all this filing done before you-know-who returns.



Once again we return to the wedding. It's a pity we couldn't all have been there. Janet looked so pretty and Maurice so handsome! We hope you will have a very happy life together. You appear to have had a lovely wedding which pleases us. Well, as they say "All's well that starts well."

Lots of love,
THE FAMILY PLANNERS

HARE RAISING

Tim and Pat have been working together on a boring rig for so long that speech is no more necessary between them than between your right and left hand. The work just gets done. One day the ER arrived on his rounds and found two large hares hanging by the rig. This caused enquiry and Pat told the ER "Well, sorr, its loike this. I sees the haare coming along his ron across the field and I knows the haare loikes apple. So I cuts him a piece and leaves it by the ron, then when he smells it he stops to sniff it and then I grab and kill him, then eat me bit of apple." "Ah" said the ER, "but have you tried pepper?" "No! And how would you be using that sorr?"

"Use three bricks to make a doorway of two uprights and a lintel over his run, then put down a pinch of pepper. When he comes along the pepper makes him sneeze and he bangs his head on the top brick and bashes his brains out". Tim split his sides laughing at the brilliant riposte which showed that consulting engineers can have the last word.

The drilling crews would use the setting out pegs for packing the rig legs (or something) but anyway after the rig had gone and the ER had complained about the state of the site and the clearing up party had made a few attempts to tidy the area to the desired condition, there was no longer any indication of where the hole was. Finally it was pointed out to 'Mr. Agent' that the contract required him to protect and preserve all pegs.

"Yes" said the Agent "do you prefer Cuprinol or Creosote."

The score is now tied. The match continues, probably on the next contract.

In remote parts of the world and in fact some parts of Europe itself, there still prevails the practice of making a doll as the representative of some person disliked and transfixing with pins, melting or burning it, in the belief that the person concerned will suffer the torments of his effigy.

One ER in the depths of the English countryside carries a gun with him which we are assured is for offence only against the small fauna and avia of the district, a concession granted by the local landlords and tenants and, he says, reflects the regard in which the locals hold the engineer's representative. Could it be that in retaliation for threatened spoliation of their amenities, they hope the engineer's representative will shoot his bloody self.

Back in the 1920's a young lad lived with his grandmother on a farm in the North Riding of Yorkshire, and in the late autumn when the

tattie howkers came he played all day in the field, a picture of wide eyed innocence constantly fussed over by the crowd of girls. But whilst playing he kept his eyes open, and about the field and behind the hedgerows he spotted many things going on—and coming off in those days of the permissive agricultural society—and especially that some of the women would empty potatoes out of their knickers when they went behind a bush.

At the end of the day the girls gathered to collect their pay of a few shillings, a turnip and a few pounds of potatoes and the little lad was there to nudge grandma at the appropriate times when she would say to the picker "Here's your money and your turnip, you've had your tatties—unless we can get there before you."

The little innocent was never twigged and his training in observation, noting and reporting stand him in good stead in his present career as Inspector of Works.

Editorial

In this issue we have attempted in conjunction with the Hong Kong office to bring together many contributions with this special edition commemorating the twentieth anniversary of SWKP in Hong Kong. We think it is the most ambitious *Pontifact* yet produced and, we hope, presents an exciting panorama of the Hong Kong scene and the effect that SWKP have had on the development of the area over the past twenty years.

A great deal of the material used has come direct from Hong Kong. A special thankyou to Jim Blake for all the hard work he has done in gathering together so many contributions in such a short time. A lot of hard work has also been done in the London office with Mavis Johnson co-ordinating the production this end.

It is impossible to thank all contributors, newsgatherers, proof readers, correctors, typists, messengers, etc. individually by name—there are

so many. Without them, of course, there would be no magazine. Thankyou all very much.

We welcome the arrival of the younger brother of *Pontifact* which has just been published. We understand that it will be produced more frequently (without a 'Panorama' to contend with!) and should therefore present more up-to-date information than *Pontifact*. We hope that not too many of our stories will be 'scooped' or that any of our regular contributors defect!

It only remains for us to wish everyone a very Happy Christmas and a Prosperous New Year, and we look forward to receiving your contributions early in 1973 in time for a bumper Spring edition.

Paul Disney
Geoffrey Moore

Mavis Johnson
Stephen Oliver
Roland Pilcher

