The Double Sunrise Flight

Note
It should be noted that not all the photos are from my own collection. Regrettably time and loss have reduced my own collection, so that I have used photos from various sources to display the appropriate scenes.

Prologue.
I was trained as an RAAF pilot on number one course of the Empire Air Training scheme, my number being 407010, and graduated from Point Cook as a Pilot Officer in December of 1940. Following a period in England, where as a member of 10 Squadron I had been flying Sunderland flying boats, I returned to Australia in 1942 and was posted to the RAAF astro-navigation training station at Nhill as a Flight Lieutenant. Our flying duties at that station involved night time triangular courses to various turning points, while the students practiced their navigation skills. As the top flight commander I had the ability to largely please myself as to what I chose to do and, having become interested in the training, was able to second myself to one of these courses, subsequently qualifying as an astro-navigator.

Early in 1943 the Australian Government became aware of the need to support aviation in this Country and in February Air Board posted a notice at various units, inviting applications from pilots willing to transfer to Civil Aviation, ostensibly for a period of 12 months. With a group of other pilots I accepted this opportunity, and because of my experience on the Sunderland flying boats, was assigned to Qantas Empire Airways, which I joined on 9th March, 1943.

The next day Captain Bill Crowther flew us to Townsville where Qantas crews were using Short Empire Flying boats, (the civil version with the Sunderland), to transport supplies to Port Moresby, Milne Bay, Groote Eysland and Darwin, while returning wounded to hospital on the mainland. Our accommodation was in the USA Air Force Officer’s mess, then occupying the principal Townsville Hotel. Japanese forces were attacking our destination ports on virtually a daily basis, while our planes, as civil aircraft, were unarmored, so that we quickly felt “back in the war”.
As a result of the Japanese occupation of Singapore the Qantas and BOAC air route to England had been disrupted, with the cessation of the flow of VIP passengers and diplomatic mail between the two countries, so Hudson Fysh, C.E.O. of Qantas, was invited by the Australian Government to investigate a means of re-establishing this service. Following much discussion it was decided that BOAC would conduct a service from the UK to Karachi, in Pakistan, while Qantas would complete the route from Ceylon to Australia, with these two terminals joined by an overland transport. While these plans were being formalised our service from Townsville continued operation, with virtually daily flights to the ports, flying in and out with some considerable disregard for the dangers of enemy attacks. In mid 1943 agreement between their Governments allowed BOAC and Qantas to commence organisation of the routes, with the decision by Qantas to use Catalina flying boats, despite an original desire to use Liberator bombers. The Swan River in Perth was nominated as the Australian base, with the RAF facility on Lake Koggala, near Galle, planned as the destination site in Ceylon. This terminal, about 80 miles south of Colombo, had been an RAF flying boat base for several years and was therefore well equipped for Qantas requirements. Back in Perth the US Air Force had a well established base at Crawley Bay on the Swan River, however with the heavy American service requirements this was very fully occupied, so that Qantas was given an almost virgin riverside site at Nedlands, about three miles distant. By early June a team of engineers, led by Colin Sigley and Norm Roberts, had been dispatched to establish the site for Qantas, but with some degree of opposition from the Australian Civil Aviation Department, to what they considered a badly planned operation, the engineers had much original difficulty in setting up their unit. Several trips by the RAF squadron, from their base at Koggala, had helped in planning the route and Captain Crowther had meanwhile been to Ceylon, organising and finalising details related to the proposed operation. Meanwhile I had continued in Townsville, operating with Captain Russell Tapp, with whom I flew fairly regularly, and Captain Lew Ambrose with whom I flew less frequently. Early in June a small group, including Captains Russell Tapp and Lew Ambrose, John Solley and myself, were informed that we were to transfer to Perth in order to commence a new service, and in mid June, 1943 I was given a short leave, with instruction to report to the RAAF base at Rathmines on the 23rd, for conversion to the Catalina. Although there had been changes to the station since 1940, when I had done my initial seaplane training, it was easy to recognise the base and with instructors F/Lt. Robertson and F/Lt Fader I completed training in the next two days. The Catalina, somewhat smaller than the Empire boats, was a most reliable aircraft and type conversion was simply a matter of becoming accustomed to the instrument layout and the different flying characteristics of the plane.
Conversion completed Captain Tapp and I flew to Perth on the 25th, travelling with the then Australian National Airways, where we rejoined Glen Mumford, our radio operator, together with flight engineer Frank Furniss.

I do not know where John Solley did his conversion to type, he was not with us at Rathmines, and it is probable that his conversion was done in Perth during the period in which our crew was away in Ceylon.

Meanwhile Captain Crowther had set up our Qantas office in Yorkshire House, a building in St. Georges Terrace, while our accommodation was in one of the premier hotels on the Perth Esplanade. The first Catalina aircraft, hurriedly renamed the “Altair Star”, was flown down to Perth from Lake Koggala by RAF Squadron Leader Rumbold and his crew, and delivered to Qantas on the 25th.

At this time I was promoted to Senior First Officer, and our crew now commenced a very short familiarization period of test flights with the intention of departing on the 28th for the return trip to Ceylon.

The weather condition on that day was so unsuitable that our departure was delayed until the next, the 29th June 1943.

Captain Ambrose and John Solley were also arriving at this time, and John was similarly promoted to senior rank and for the first few months we were the only two crews on the route, until in about September several more arrived.

Because of the danger associated with our flight through Japanese controlled water we dressed in civilian clothes except while on duty, and on occasions this caused unnecessary annoyance. Following several weeks in the Hotel I obtained accommodation at a guest house just above Kings Park, and from there enjoyed the walk down to our Office.

On one such occasion I stopped to buy a packet of cigarettes from the Park kiosk, only to be told in very harsh tones to “go and join up, there are no cigarettes for bludgers”, while on another occasion I was the recipient of a white feather carefully enclosed in an envelope. Secrecy of operation certainly had a price to be paid!

It is appropriate at this point to record the conditions at the Nedlands base, and the manner in which the Catalina aircraft were adapted for the long flights across the Indian Ocean.

**NEDLANDS BASE**

Our operations base in W.A. was near Crawley Bay at Nedlands on the Swan River, Colin Sigley, Qantas chief engineer for the Catalina service, together with Norm Roberts, had been transferred to Perth in early June,
Presented with a vacant area of riverside land on which to establish an aircraft servicing, refuelling and maintenance unit our Qantas Engineers were faced with an enormous task. With such a bare riverside site they started with only a small shed for servicing the planes, while a long water taxi to the USA flying boat base at Crawley Bay, several miles away, was required for each aircraft refuelling. For a while in 1943 many of the tools required for the servicing of the aircraft were unavailable, but Norm Roberts was able to develop such good relations with the USA personnel that with their assistance many of these critical deficiencies were overcome.
In the very early days there was not even a launching ramp available, and it was only as a result of Norm’s hard work that an unsurfaced one was rapidly constructed, but it was quite a few months before this was finally cemented. During those first months engine maintenance was done almost in the open, while the launch of a Catalina was achieved by manhandling the aircraft from the sandy beach into the water.

I am not certain, but I believe the figure standing on the side of the Catalina, while it was being launched, was that of Hudson Fysh. He was certainly present at that time, as I can verify. On my return from England I had joined the RSL, and very proudly wore that organisation’s badge. During our test flying of the new Catalina, I was with Russell Tapp when he introduced me to Mr Fysh, who immediately blasted me for wearing the badge, with a demand to know with what right I did so. Captain Tapp promptly came to my aid, explaining that I had every right to do so, having been at 10 Squadron in Plymouth throughout all its bombing. Until several more crew members arrived late in August John Solly and I were the only First Officers with Captains Tapp and Ambrose. A small, somewhat unstable boarding ramp was first established, and for a time this was the only means of entering the aircraft except from a launch; while the hangar consisted of little more than two sides and a roof, so that maintenance took place almost in the open.
Qantas had been promised the construction of a proper launching ramp, but it appeared our operation was so poorly rated by DCA that their cooperation was almost negligible, and it took a number of months before this was completed, while by about the middle of December the proper maintenance hangar was finally constructed, giving the engineering staff both comfortable and safe working facilities.

THE ROUTE

The planned service, between Nedlands in Western Australia and Koggala Lake, near Galle in Ceylon, was the world’s longest non-stop commercial air service, spanning both hemispheres and covering 3580 nautical miles with times ranging from approximately 27 hours, as the shortest trip, to nearly 33 hours for the longest. This long flight necessitated an enormous fuel load, and extremely careful monitoring of both engine and fuel usage was required. Originally it was planned that our route would leave Perth, fly parallel to the coast up to Cape Inscription near Exmouth Gulf, and then follow a Great Circle track across the Indian Ocean to Lake Koggala, 80 miles south of Colombo. With the spherical shape of the world, and the track passing across several lines of longitude and latitude, the Great Circle track were necessary. Over time, as we became familiar with the conditions, this route changed until we often flew directly from the western end of Rottnest Island to Koggala; however on our return trip a landfall was always made at Exmouth Gulf as this provided the safety of the coastal route for the last leg. Departure times were adjusted in order to transit the potentially dangerous Japanese controlled territory during darkness. On the northern route we left Perth very early in the morning, so that night had fallen by the time we were in danger, and although the route passed very close to Coccus Island during the night no attempt was normally made to locate this tiny atoll, while on the return trip a later departure was indicated.
The original expectation, with only two crews available, was that there would be just one return trip every two weeks, but the flight turned out to be much easier than originally thought and rapidly developed into a weekly service, requiring more crews who began to arrive about late August, relieving the pressure on both Russell Tapp and Lew Ambrose as well as on John Solley and myself. The slow overland trip for the passengers from Galle to Karachi had also begun to create problems, and in September the route was extended by 1400 nautical miles, to finish at the port city of Karachi. Captain Bill Crowther, with John Solly as his First Officer, made the original trip north, followed a week latter by Russell Tapp and myself. The meteorological information prior to departure was originally very limited, primarily presenting only the conditions at each end of the route, amended at around midnight by a short broadcast from the Perth base. Due to the danger of interception by the Japanese these broadcasts were short and unrepeated, so the radio operator had to be very much on the ball at the time of transmission.

THE FUEL
To carry the required fuel a large inboard tank, consisting of eight segments, was installed in the cabin of the Catalina and we were then able to carry a total of 1,988 gallons, weighing about 7 tons. This extremely large fuel load made the aircraft grossly over-weight for take-off and, after a few months of lucky flying, a dump valve was installed in late October, making it possible to lighten the aircraft in an emergency and allow a safe landing. When fully loaded the Catalina, now had an all up weight of between 35,100 to 35,300 lbs, meaning that at take off we had an over-weight of 4 tons.
This official figure had some minor variation, depending on the personal equipment carried by each of the crew, as on return flights small items purchased in Ceylon often went without being recorded.

Cruise on the trip was done at a comparatively low airspeed, usually 99 knots indicated, with the manifold pressure adjusted as the weight lightened, so that we were able to set a fuel burn of 22 gallons per hour for each engine.

The flight engineer had a very responsible job, not only supervising the engines, but also monitoring the fuel, and ensuring that as the fuel was burned from the main tanks and replaced from the inboard auxiliaries the balance of the Catalina was maintained.

FOOD

The average time for the route was about 28 hours (it varied between 27 hr 15 m and 32 hr 10m) it was therefore necessary to carry our food and drink and this consisted primarily of cold cooked chicken, together with sandwiches and small cakes while the fluid was carried in a thermos as tea or coffee as well as cold bottles of soft drink.

These items were carried in wicker hampers and supervised by the crew, but while the food supplied was more than adequate in quantity there was considerable room for improvement in quality!!

THE CATALINA

In order to maximise our fuel and freight capability the Catalina was stripped of all unessential (and some essential) fittings, so that all unessential interior fittings were withdrawn, the de-icing equipment removed from the wings, the cladding from the interior of the hull, and no oxygen was carried.
The lack of insulation in the planes made them very cold and crew members were provided with RAAF type flying suits for temperature control.
On the northbound route it was usual to leave Perth in summer attire, then as the night began to fall we changed into the RAAF suits, while on the return southbound trips, flying at around 10 to 12000 feet, the night time chill required not only the thick suit but also fur lined flying boots, and with the lack of an oxygen supply care was needed to ensure that the high altitude and low oxygen level did not create hazard for the crew.
The planes were powered by Pratt and Whitney Twin Wasp engines, developing 1,250 h.p., and with their reliability these quickly became the love of the crews. Our standard comment was that, “as long as you give them fuel they just go and go”.

ACCOMMODATION
Two bunks were fitted in the cabin and these were primarily to enable rest period for the off duty crew members. Occasionally a passenger would occupy one of the bunks, and usually this was quietly accepted.
Three chairs were installed in the blister compartment to provide passenger accommodation and a small toilet was fastened to the rear wall, regrettably with little privacy available.
The blisters were used for navigation purposes, when flares would be dropped from the open hatch or sextant sighting taken through the Perspex.

**PASSENGERS AND FREIGHT**
The reason for the service was to allow passengers, (invariably VIP’s,) and diplomatic mail to be transferred between England and Australia, and on each flight we carried up to three passengers, as well as a small quantity of mail. Throughout the service some 271 crossings were made, with 860 passengers carried as well as about 1000 lbs of mail. Several of the VIP’s carried were from Mr. Churchill’s war cabinet, including Edith Summerskill.

**CREW**
For the first few months the Double Sunrise crew consisted of the Captain, First Officer, Radio operator and Engineer, and as such were Captain Bill Crowther as Route Captain, then Captains Russell Tapp and Lew Ambrose, with myself and John Solley as First Officers. This was the situation until August when several second officers arrived in Perth to join our crews.

**RADIO**
Even when not broadcasting, a radio transmits a carrier wave; therefore during our flights the radio was un-powered, except for a few minutes around midnight, when a short weather forecast was transmitted in Morse code from Perth. This meant that the radio operator had to be most alert and on duty at the precise time of the transmission, while otherwise his radio was turned off. Having flown together on the Townsville operation we had developed a team spirit, where each member had great confidence in his crew, and I remember how often Glen Mumford seemed to be the radio operator on my flight.

**NAVIGATION**
As a result of the long distance involved the track had to transverse several longitudes and latitudes, and due to the curvature of the earth this required a Great Circle heading, unlike the straight line which is the shortest line on a map. This was calculated with the use of Norries Air Tables where, knowing the exact longitude and latitude of both departure and arrival points, both the distance and the varying track could be calculated. The distance between the lines of longitude varies according to the latitude, making it essential for the navigator to adjust his plot to the area of concern, and a map would be totally useless for such a purpose, so that we used pre-printed charts, which could be adapted for any position on the route, in plotting our flight navigation. Two methods were used to know our position over the featureless ocean, either dead reckoning, where the navigator follows a compass heading and, knowing the airspeed and time elapsed, can then calculate his position after observing the aircraft drift, or by sextant reading of an astronomical object. To find our drift, (or movement of the plane as a result of the wind) we used smoke or flame flares which were packed in metal tubes, about four or five inches in diameter and some eighteen inches long and stored in a bin under the navigator’s table. These were dropped from the aircraft and on their impact with the water burst into either smoke during the day or flame at night; with the use of a bearing compass we measured the drift and it was then easy to find the wind speed and direction using a drift/speed calculator.
Position plots were taken frequently, my normal being about every half hour. As part of the student’s training in Astro-navigation he is taught to recognise the principal stars and by the end of his training he is able to accurately identify a star even when seen through a largely cloud covered sky.

One of the interesting things about navigating on this route was that it was necessary not only to know the stars of the Southern Hemisphere, but also of the Northern, as we flew across the Equator on our trip to Ceylon.

Sextant, readings, taken on sun, moon or stars by a Mark IX Bubble sextant, together with a chronometer set to Greenwich mean time, allowed for a "cocked hat" group of lines to be plotted. The taking of astro-navigation shots with the sextant was dependant upon the weather, although at that time I was sufficiently experienced to be able to identify a star, even if seen through a hole in the cloud cover.

Sextant navigation can be described by imagining a line drawn from the star, moon or sun, directly to the centre of the earth. By keeping the observed object in the sextant bubble a series of readings were automatically taken, indicating the height above the horizon of the observed body. With this reading, together with the time from a chronometer set to very precise GMT, the position of a part circle on the earth’s surface is calculated, with the use of Norries Air Tables.
Two or three readings of different objects then enable a small triangle to be drawn, called a “cocked hat”, where each of the circles overlaps, indicating the position at the time of the readings.

My knowledge of the appearance of each of the stars was sufficiently accurate for navigation to be both easy and interesting, and passing from the Southern Hemisphere to the Northern gave an extra interest as a new set of stars had to be known.

During the early period of the service I was the navigator on many of the flights, until, after some months, Qantas enlisted a small group of ex RAAF navigators, holding only that rating.

Our various navigational techniques enabled landfall to be made with a maximum error of about five miles, our Ceylon landings being made on Koggala Lake, near Galle, about eighty miles south of Colombo.

There was a lot of beauty to be enjoyed on these long flights, with the clearness of the atmosphere far out in the Indian Ocean creating a clarity of the stars, far unlike that seen from the land, and I vividly recall watching Venus one night as it rose from the horizon, when its light rivalled that of the Moon.

To take advantage of the prevailing southerly wind our trip north from Perth was flown at a low altitude, commencing at about a thousand feet and followed by a slow climb as our fuel was used, to settle at fifteen hundred or two thousand, while on the return trip we slowly climbed to ten or twelve thousand feet, again to take advantage of the northerly tropical air streams.

To conserve fuel on this long route, cruise was done at an indicated 99 knots giving a true airspeed of 110 knots rising, as the fuel burn lightened the plane, to 115, with the manifold pressure adjusted to achieve a fuel burn of 22 gals per hour for each engine.

Since joining Qantas I had flown predominantly with Russell Tapp who excelled as a pilot, and I had been taught to carefully adjust the angle of attack of the wing, to where the slight decrease in air resistance made a difference to fuel consumption.

Knowing that the Japanese were aware of our service, departure time was scheduled to enable us to transit their zone of activity during the night, hopefully making interception much more difficult.

Initially our route was from Crawley Bay out over Rottenest Island and up the Western Australian coast to Cape Inscription, followed by a ‘Great Circle’ track directly across the Indian Ocean to Ceylon.

Evening and nightfall occurred on this coastal leg, and I have memories of watching the ocean slowly darken as the sun began to set, the water first becoming grey and then slowly turning to ink with night fall. I never ceased to enjoy the beauty of the evening and nightfall along the route.

Towards the end of 1943 Russell Tapp, then in local command of the service, gave me the job of preparing a range of tracks, on various headings, wind directions and speeds, to be made into a readily accessible chart for use in establishing easy changes of course headings.

I recall sitting for hours with my navigation calculator, reading off headings and speed, while Norma, then my wife, acted as scribe writing down the figures.

Regrettably I never learnt whether these tables were ever employed.

By that time Qantas had given permission for our wives to join us, and after a short period of living in hotels, we had established a home on the Fremantle highway opposite Peppermint Grove.

I remember how both of us declared that when the war was over we intended returning to the West to live in that delightful environment.

There was always a naval overlay with crew status in Qantas which had, for a number of years, been flying the Empire Flying boats and the Captain was known only as “Captain or “Skipper”, never by his first name, while the First Officer was “Mister” to the Captain.
THE PREPERATION

Our Catalina, renamed the “Altair Star” had been delivered to Qantas on the 25th of July by an RAF crew, under the command of Sqd./Ldr. Rumbold, who flew the plane down from Koggala to Nedlands.

With their arrival a short and very hectic period of organisation commenced, with serviceability and equipment checked, as we conducted local flights around the Perth area preparing for our first service.

Our crew consisted of Captain Russell Tapp, myself as First Officer, Flight Engineer Frank Furniss and Radio Operator Glen Mumford, and as we had been operating together while on the Townsville operations this familiarisation simplified our new duties.

THE FIRST TRIP

Our flight was originally scheduled to depart on June 28th but due to the weather conditions on that day it was postponed.

Carrying its enormous fuel load, and with our Catalina nearly four tons overload, we departed from the very primitive Nedlands loading ramp at four thirty in the morning on the 29th, and slowly taxied out, turned into wind facing down the Swan River, and with the controls held as fully back as possible opened the throttles to full power.

Take off in this condition required an extremely long run, with the weight pushing our hull deep into the water and slowing the ability to get up on the planning hull...

As we gathered speed the wing floats were retracted and the plane lifted up onto the planning hull, then with a clear run of nearly four miles down the water to Fremantle Bridge, we slowly gained enough lift for the plane to become airborne and commenced our climb out over Rottenest Island where we began a gradual turn to the right to take up our heading along the coast towards Exmouth Gulf.

On a very calm day it was sometimes necessary to have a launch running ahead of the Catalina in order to create small ripples, assisting the hull to “unstick”, and passage over the Fremantle Bridge was often so low I wondered what the residents of that city thought of the low flying Catalina as it passed over their bridge!
With no dump vales fitted to our aircraft an emergency landing in this condition was impossible, and it was with considerable relief that several months later we saw these fitted. In addition to our own crew we carried Flight engineer C. W. Clark who was going to take up his position of Ceylon Chief Engineer for Qantas and, as passengers, the returning R.A.F. members, who provided both help and advice, with their navigation officer particularly assisting us.

As we slowly climbed to our cruise height and settled on course along the Western Australian coast the knowledge that we were commencing the first and longest non-stop passenger service in the world, travelling 3580 nautical miles across the lonely water of the Indian Ocean, gave us all a considerable thrill. We were very alert and conscious of the route and service we were initiating and, I think, a little apprehensive of the unknown that we were challenging.

Cruising up the coast at 1000 ft, not far offshore, gave us the opportunity to familiarise ourselves with the coastal area, at that time largely undeveloped, and to settle into the routine of flying the Catalina.

With the automatic pilot engaged we carefully adjusting the trim and power to maintain our 99 knot airspeed and low fuel consumption, and both Russell Tapp and I were too conscious of the significance of our flight to take time off duty.

It was fairly late in the day when we approached Exmouth Gulf, our turning point for the ocean crossing, and began the long overseas section of the track to Ceylon.

My training in astro-navigation was now very useful, and it was here that I appreciated the effort I had expended doing the course at Nhill.

I had made the effort to practice even on the Townsville to Moresby route, and on one occasion I had become unpopular with Lew Ambrose, dropping his chronometer as I was taking a sextant reading.

I vividly remember being told that “Man and boy I have had that Chronometer for twenty years, Mister, and now you have broken it.”

The cost of repair taught me to be more careful in the future!!!

As noted above, we plotted our track not on a map but on charts, where, until filled in by the navigator, the longitude and latitude were unspecified.

I have read that a bearing compass was used from the bomb aimers compartment in the nose, but I have no knowledge of this, nor do I understand how one can take a drift angle forward of the aircraft. Only a back bearing seems to me to be logical.

Evening began to fall not long after we turned at Cape Inscription and with it the weather deteriorated a little, but my memory of the trip is of a comparatively comfortable journey. At night, as we neared the area controlled by the Japanese, the aircraft was blacked out but smoking was permitted in the cockpit as the flow of air through the Catalina swept all fumes out.

There was much to enjoy during on this trip, even while the busy work of flying the aircraft was carried out. Although the controls were on automatic pilot care in holding a good angle of attack and maintaining constant 99 knot airspeed kept the pilot busy, while flight logs also had to be filled in.

With the Indonesian and surrounding territory occupied by the Japanese our radio was turned off and as a result Glen’s function was basically to listen out at scheduled times, when very short transmissions gave an estimated weather forecast.

And so we flew on into the night.

Passing through the region of the tropical fronts there were occasional periods of rain and much cloud cover, while from time to time flashes of lightening lit the clouds.

We all took small periods of rest but, aware as we were of the significance of the flight, I do not think any one of the crew had much thought of sleep.
When dawn broke we were still some three to four hundred miles away from our destination and with the thought of the Japanese occupation our lookout became most alert. During this flight I acted as navigator for seven hours, taking turns with Captain Tapp and the RAF navigator. Sextant sightings late in the night had shown that we were well on track, and soon after eight o’clock land began to show up on the horizon Lake Koggala, separated from the sea by only a narrow band of low sand, passed beneath us and at eight fifty five the skipper landed on its smooth waters and we taxied to the RAF terminal.

This initial “Double Sunrise” flight took twenty-eight hours and ten minutes from departure at the Swan River to arrival at the R.A.F. flying boat base on the Southern coast of Ceylon. Koggala Lake is a large expanse of fairly shallow water and, although this was adequate for the aircraft, the surface of the lake was often so flat and the wind so light that a speedboat had to be used to break the surface and assist in unsticking the hull for takeoff.

Koggala Lake from the air

From this base the Royal Air Force patrolled the Indian Ocean and attacked Japanese targets in Asia and Indonesia, while their service provided us with excellent facilities, and an invariable kindly welcome.

Ceylon was a Buddhist state and surrounding the lake were a number of temples whose interior walls were filled with paintings showing the terrors the sinner would experience in Hell.

The area around Koggala Lake had been evacuated when the RAF set up their base, and I have very vivid memories of a visit I made to one of the many temples, where I saw painted snakes and demons on the walls of the temple, traumatizing the sinner.

Our accommodation in the early days was at the New Orient Hotel, in Galle, then a small tropical township, the air rancid with the smell of burning cow dung, being used as a fuel. The actual township was encircled by a wall, through which a gateway providing entry from the surrounding village, made up of many small houses and open fronted shops selling a multitude of wares, from star sapphires to tropical fruit.

Transport was by bicycle or man powered rickshaw.

Galle was a very interesting township and I took pleasure in learning some of its early history. Apparently many centuries before Ceylon became established as a nation Galle was the centre of trade between the Indian and Singhalese people.

In those remote times the locals would leave their products for trade on the beach and then depart, following which the Indians would come and place their barter against each item, allowing a slow trade to be made.

Ceylon has an ancient history of gem mining and star sapphires, rubies and emeralds were common and low in price.

I have since regretted that I was too young to appreciate the opportunities that were then available.
While staying in the hotel I became very friendly with the owner, a Scotsman, by name Harry Lauder, and his wife, a Singhalese girl. On a number of occasions I was invited to their private quarters to share a curry, and I have a vivid memory of the first occasion when, with a mouthful of the curry, all I could think of was the necessity to quell the fire in my mouth!

The New Orient Hotel, Galle

For the first months of the service we stayed in this accommodation, until in November Qantas obtained a most comfortable house on the beach, several miles south of the township. Our first return trip was delayed for just over a week while Qantas and the Government arranged for future services, and during this time Glen Mumford and I were sent on leave to stay at the Galle Face Hotel in Colombo, and travelled there by road viewing with interest the countryside of Ceylon. We found much interest looking at the city of Colombo, a tropical experience new to both of us. To our fascination we found that there was a very extensive lawn opposite the front of the Hotel on which, as a wartime necessity, a squadron of Spitfire aircraft had been based.

Flying over Galle
We set off for the return to Perth on July 7th, carrying Captain Bill Crowther as supernummary, and all went well for several hours until, in order to take a position plot, we hunted for the sextant and found that this piece of essential equipment had been left in the Operations room back at Koggala.

I do not know who was responsible, as I am unsure which of us was held responsible as navigator. Probably me, as I usually managed to provide some diversion!

However about three hours out we had to return to the base, resulting in a seven hour wasted effort.

Following this first aborted attempt we again departed Koggala two days later, on 10th July, only to be involved in further disaster.

Several hours after take-off the crew, Glen, Frank and I, with the exception of Captains Tapp and Crowther, suddenly became ill with severe food poisoning and a rapid decision had to be made as to whether to continue or again return to Koggala.

With Captain Crowther available to fill in, it was decided to continue, and while the rest of us, as a very sick crew, spent several hours suffering with diarrhoea, the two skippers flew the plane.

The Qantas reports of this flight, indicate our total incapacitation, but this is very incorrect. Despite our severe diarrhoea each of us continued to perform our duties to the best of our limited abilities, and as well as some hours on duty as pilot my log book shows that I spent seven hours and fifteen minutes as navigator on the trip.

The Catalina was fitted with a small toilet in the blister compartment at the back of the plane, and on one occasion, with Glen seated , I recall telling him to “get of that thing fast, or I’ll sit on your lap!!”.

Further problems then arose, with a sextant fix at about midnight showing our groundspeed to be a disastrous 80 knots, threatening our fuel endurance.

Knowing that on the southerly route there was a predominantly northerly wind we climbed several thousand feet and managed to find it, increasing our groundspeed to an adequate 130knots, so that eventually, after a 27 hour 40 min. flight we returned to our Nedlands base.

With the Catalina stripped of all internal cladding, and having no ducted heating provided, the necessity for our warm RAAF flying suits was obvious, and lack of oxygen with the high altitude on the return flight required great attention to prevent sleepiness or loss of attention.

The schedule of flights in the early period was for one return trip each week and John Solley, as First Officer, accompanied Russell Tapp on July 22nd for the second service, followed by Captain Bill Crowther and myself on July 29th.

With a straight 28 hour flight time it was necessary to allow crew breaks, and we generally rostered to work with a four hour on and two hour off duty. Two bunks were fitted in the restricted cabin area for use in rest periods, and these proved essential in maintaining efficiency.

Late October saw the first of the aircraft fitted with dump valves and I remember our departure from Perth on Nov. 8th 1943 when, with an engine overheating as we cleared the western end of Rottnest Island, the emergency necessitated our return to base.

While I stood in the blister with a small fire extinguisher at the ready, Russell Tapp dumped the fuel by means of the newly installed valve.

It was a terrifying experience while I watched hundreds of gallons of aviation fuel pour from beneath the wings, expecting any moment to be engulfed in a fireball as the engine exhaust ignited the fuel.
COCOS

On August 29th 1943 with Lew Ambrose as Captain, myself as navigator, Ivan Pierce as second officer, Dick Jackson radio and Bill Wilcox as flight engineer we departed Koggala for a landing at Cocos Island on the way back to Perth.

On this trip I was assigned the job of Navigator, with Captain Lew Ambrose and Ivan Pierce as second pilot.
This, to my knowledge, was the first time that an aircraft had navigated into Cocos Island without the use of radio and I was very proud of myself.
The only previous aircraft trip into Cocos had been by P. G. Taylor, pre-war, when he had used radio assistance.
We left Koggala at 6pm in the afternoon and as the fuel was consumed slowly climbed to about 10,000 ft, with multiple drift and sextant checks.
Our ETA was about 8am and some 20 minutes or so prior to this the skipper turned to me from the cockpit and demanded “When are we due, Mister?”
I took a quick astro fix, and plotted the wrong longitude, before telling him we were about sixty miles away, whereupon he demanded “Well, what’s that down there, Mister” and I looked out to find the aircraft spot on.
My haste had got me into trouble again!!!

In the early days, with my dual rating of both pilot and navigator, I served as often in one capacity as the other, but as Jim Cowan and the other single rated navigators arrived late in 1943 I spent more time acting solely as First Officer.
One exception to this was on February 15th, 1944 when, with Russell Tapp as Captain, I made a second trip into Cocos and again acted as the navigator.
On this trip we departed Perth late in the day in order to arrive at Cocos early in the morning and all went according to plan.
Our job was to recover a naval Officer who had been on the Island and this went to plan, with an intended departure late in the day to arrive in Koggala soon after dawn next day.
To achieve this we needed to refuel while on the Island and, while Russell Tapp was checking with the meteorologists, the rest of us were stripped off and on the wing of the Catalina, loaded from tip to tip with four gallon drums of fuel, which we were pouring into the tanks. Suddenly there was the sound of an aircraft approaching and for a moment none of us took any notice, then simultaneously we realized the only other plane in the area had to be the enemy.
Sure enough a twin engine Japanese “Betty” bomber was commencing an attack run.
We all dived for the boat to get away from our plane, while the bomber continued its run in on the target.
A number of bombs were dropped, but not a hit was recorded.
As the bombs were dropped and the plane approach I tipped us into the water, hoping that this would prevent injury, and became very unpopular with the second officer. Thankfully no injury to either the plane or personnel occurred.
As a civilian aircraft we had no armament, and I can only think that the Japanese Pilot must have believed we were an Air force plane with access to weapons. With enormous relief we watched him disappear in the distance and resumed our refuelling, glad to be able to depart from the isolated islands.
The purpose of the Indian Ocean crossing was to maintain an air route to England, and in the beginning B.O.A.C. flew their passengers and freight down to Karachi, from where these were transported overland to Ceylon, from there our continued service took them on to Perth. In November 1943 it was decided that our route should continue up the East coast of India, to meet up with the BOAC service in Karachi, adding a further 1490 nautical miles to the route, and Captain Crowther, with John Solley as First Officer, did the initial trip.

My first flight over the additional route followed on Nov. 14th, 1943, and for safety we flew the route during the dark, leaving Koggala at about dusk.

On this occasion we had a magnificent experience.

There was a tropical storm at the time and, as we flew out of Ceylon, our aircraft was bathed in static electricity, with great streamers of electrical flame flowing off every external surface of the plane. Nose, windshield and wings were bathed in the sheets of flame, dancing and swaying in the movement of the air.

It was an awe inspiring experience, even though we knew that there was no danger from the electricity.

For hundreds of miles as we flew up the side of India there was a maze of estuaries and marshlands, with the lights of villages, towns and cities scattered along the coast.

We landed at the RAF base in the Karangi Creek, adjacent to Karachi harbour, and spent four days in that city and while the new experience was full of interest, the filth, dirt and squaller of the area appalled me.

Our accommodation was in a beautifully building that had been the Japanese embassy, but immediately outside there was poverty such as I had never imagined. Beggars were everywhere in the streets, displayed diseased and malformed bodies, each accompanied by a request for “Buckshee”

On a future visit to the area in February 1944, I had one of the most inexplicable experiences of my life.

The navigator on this trip was Dolf Nuske, Qantas having by then decided to have a specific navigator rating. Dolf and I had become very good friends, and we were walking down one of the Karachi streets when approached by a little Pakistani, who offered to “tell your fortune Master”.

As this cost about the equivalent of two shillings we both produced our money. I was told what has turned out to be almost a text book report of my life, but when Dolf held out his hand the little man returned his money with the statement “no tell, Master.”

Several months later Dolf was dead, killed with Capt. Thomas in the loss of their aircraft. I have neither understanding nor ever been able to explain this episode.

Back in Perth I was living in a house at Cottesloe with Norma and during the Xmas 1943 period there was much commotion when an attack warning was broadcast on the radio, warning the population that two enemy vessels, believed to be German, were reported to be cruising down the Western Australian coastline to attack the City. With the attack believed to be imminent there was great excitement and frequent warnings to the population.

Fortunately the enemy vessels were engaged and the attack prevented, but it represented one of the major episodes in Western Australia.

The Perth beaches were all closed during this period, barbed wire protected and mined, so that even during the hot summer entry to the sea was denied.

At about this time, following a scratch in Ceylon, I returned with a tropical ulcer on my left knee. I have often been surprised that when I visited a local Peppermint Grove surgery the Doctor was totally ignorant of the tropical ulcer, never having heard of such a thing, and I was not willing to tell him how or where it had occurred. For our own safety we did not discuss the service.
CROWTHER CROSS
Because the Australian Government believed that, as civilian pilots, we had no entitlement to service recognition, Bill Crowther devised an award for each crew member who completed four crossings.
This became, somewhat unceremoniously, called the “Crowther Cross”, and consisted of a small brass star which was worn beneath the Company wings on our uniforms.

CLOSENBERG
Late in 1943 Qantas either rented or purchased a house on the beach front at Closenburg, three miles south of Galle, and our accommodation there became very pleasant, with mess type living and a very excellent chef in charge of the food.
By this time, following the Karachi extension, crews changed at Galle, so that we all spent several days there before taking the next service on in either direction.
As a result the beach and surf became a daily ritual, with evenings often spent watching the off-shore display of tropical lightening. There was a tiny island in the mouth of the small bay and the waves raced in with wonderful surf for our enjoyment.
It was an idyllic rest area for the crews, but true to form early in December of 1943, I was unfortunate enough to develop a series of boils, first on my arms and legs and then in my nose, culminating in the development of an abscess in my left nostril.
In those days of early antibiotics this was an extremely dangerous condition with the possibility of its extension into my brain and I was quickly placed in the RAF hospital at Galle, being treated with the early form of antibiotic.
Fortunately the infection slowly responded to this medication but, quite debilitated from the episode, I was sent on a week’s leave to the tea-growing zone in the mountain area of Kandi.
I recovered fairly quickly, but the episode had left its impact and in March 1944 I lost consciousness at 12000 ft. while acting as pilot during a return from Ceylon, to the great consternation of Captain Tapp, and was transferred from the tropics back to Sydney and onto the Sydney, Townsville, Cairns and Darwin service.

Our “Mess” at Closenberg near Galle

END
The war by this time was obviously drawing to a successful conclusion and while I had thoroughly enjoyed my flying I began to think in long time terms of my future.
I had always wanted to study medicine and with this in mind approached the Sydney Education Dept. to apply for an aptitude test and I.Q. This was arranged and I was assured that I had more than adequate ability to complete a medical degree, so in order to matriculate I returned to Adelaide in February, 1945. As the first Australian ex-serviceman to do so, I returned to Woodville High School at the commencement of the school year, where with very great tact and kindness I was welcomed back, and then in 1946 enrolled in the medical faculty at the University of Adelaide to begin the most enjoyable life work I could imagine.

In 1983 Bert Ritchie, who had been one of the Second Officers when I was with Qantas in Perth, and subsequently progressed to become a Captain and then CEO of Qantas, gave a memorial dinner at the time of his retirement and we all met again in Sydney where this, and other, photos were taken.

In 1993, after I had retired to allow my eldest son to take over my practice at Robe, I spent a most enjoyable six months acting as Locum at Kellerberrin in Western Australia and one day, in the paper, found that next day the Qantas Flight memorial at Nedlands was to be consecrated. With pleasure I drove down to Perth and met again many of the crew from the Double Sunrise days.
Memorial at Nedlands, Perth

CATALINA CLUB OF WESTERN AUSTRALIA

This Memorial commemorates the 50th anniversary of the arrival of CATALINA FLYING BOATS in this area in March 1943.

The R.A.A.F. and Catalinas operated from the Crawley Mediterranean area during World War II.

Men of the Fleet, Excellence the late Sir Francis Burt, C.G.M., K.C.M.G., D.C., Governor of Western Australia.

26 March 1993

Plaque donated by the City of Subiaco.

Installation of Qantas Memorial at Nedlands 1993
This certificate was presented to

REX C. SENIOR

to commemorate the unveiling of a Memorial at the site of the Original

‘QANTAS EMPIRE AIRWAYS, NEDLANDS FLYING BOAT BASE’

on the

40th ANNIVERSARY OF

‘CATALINA INDIAN OCEAN OPERATIONS’

in the presence of Members and Commanders

of the Fleet

‘SECRET ORDER OF THE DOUBLE SUNRISE’

Wednesday 29 June 1983

MAYOR OF SYDNEY

DEPUTY CHIEF EXECUTIVE

QANTAS AIRWAYS LIMITED

This is to certify that

[Signature]

has spent more than 24 hours continuously in the air on a regular air service, thus entitling him to membership of the rare and...

SECRET ORDER OF THE DOUBLE SUNRISE

Date taken on journey: [Date]

Month, Year: [Month, Year]

Qantas Empire Airways, Log Book� Commander