

K4579, the seventh Short Singapore III. This fine flying view shows the four engines mounted in two tandem pairs with the two horizontal bracing struts between them which were later proved to be unnecessary, but retained as it would have been too much trouble to convince the Air Ministry that it was safe to remove them. \Box Shorts

by Bill Mortimer

Getting a flying boat from the UK to the Far East in the mid-thirties was no lightweight task — especially for the stalwart non-commissioned members of the crew. But it had its rewards.

IN the summer of 1935 MAEE Felixstowe was tasked with the delivery of Short Singapore III K4581 to Seletar, Singapore, to replace a 205 Squadron 'boat which had crashed with the loss of all nine crew near Messina the previous January. Command of the operation was in the experienced hands of Squadron Leader W M Plenderlieth, who flew the new aircraft to Felixstowe from Short Brothers' Rochester works on 27 June.

Selected to act as Flight Engineer/Crew Chief — terms not then in use — was Flight Sergeant R J B Jackson; a tower of strength in the classic mould of the RAF Senior NCO Aircraft Fitter. He was to record in detail what was to become a 40-day adventure.

Preparation and modification of K4581, which included the installation of an auto-pilot and auxiliary power unit, occupied three weeks, during which 'Jacko' Jackson planned and supervised the engineering

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requirements of the flight. As no auxiliary fuel tanks were fitted weight conservation was one of his major concerns, especially as a considerable inventory of spares and tools were prudent. Rolls-Royce Kestrels were prone to consume valve springs at a high rate, and all routine maintenance en-route was to be carried out by the crew. By 18 July K4581 was 'in all respects ready for sea'; but delayed for 24 hours when LAC Evans, the Engine Fitter, put his foot through the fabric of the top mainplane. What Jackson said at the time is best left to the imagination.

On the morning of 20 July the Singapore roared off the waves of Harwich harbour against a half gale and headed for Plymouth (Mountbatten) her first port of call. The overall plan was to make the flight in ten stages without the use of 'foreign' ports. Quite possible when the red-marked nations of the British Empire stretched around the globe, but it was the first time an 'all-Red' route to Singapore had been attempted. It was also decreed by the Air Staff that experience should be gained of the trans-India route during the violent monsoon period - a daunting prospect when flying at 85 knots around 5,000 feet. The presence of a host of intrusive pressmen at Mountbatten was not welcome by the crew, who were yet to settle into a routine of living aboard, and had inspections and refuelling to carry out. The 'media' — 'Flick-merchants' Jackson called them, were not satisfied until the skipper had taxied the Singapore at high speed past their camera boat. He contrived to drench them; and succeeded.

Bad weather delayed departure for Gibraltar until 0430 on 23 July when K4581 lifted off a glassy sea at Plymouth on the leg of 1,070 miles, about the limit of the Singapore's range. To the crew's chagrin Squadron Leader Plenderlieth was under orders to divert to nominated points if, whatever fuel remained, flight time exceeded 7½ hours. Jackson knew that the still-air range could be stretched and had squeezed in an extra 50 gallons whilst refuelling by tipping the boat on to each float in turn, but with a headwind over the Bay of Biscay the 7½ hours expired. Leading Aircraftman Moore, the W/T operator, who had had great difficulty with his radio (quaintly termed a 'buzz-box') since leaving base, could not contact Mountbatten to get clearance to fly on, and reluctantly the skipper landed on the Taqus at Lisbon.

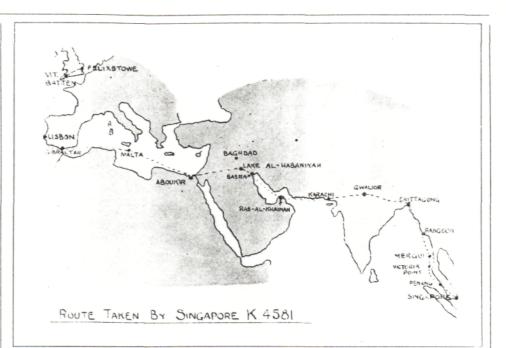
Hand-pumping 300 gallons on board, with the help of the Portuguese Navy, they were airborne again within two hours. After 11½ hours in the air K4581 touched down at Gibraltar to a resounding welcome from the sirens of the ships of the Royal Navy; and hospitality which extended to the inclusion of the crew on to the books of HMS *Devonshire* for rum issue during their stay, a rare privilege. The Singapore proved a great attraction to the resident servicemen, with Jackson spending much of his time showing relays of visitors over the aircraft, whose collapsible dinghy especially amused the naval types.

With constant small-craft traffic around the Singapore it was not surprising that some damage would occur, and Sergeant Jewiss, the Airframe Fitter, found himself suspended under the port lower wingtip repairing the fabric torn by the stem of the Admiral's barge. Flying Officer Hobbs, the co-pilot, proved adept at diving, actually recovering a dropped needle during its watery descent to much applause from the onlookers.

'The old lady'

Bad weather delayed the start for the run to Malta but K4581, now being referred to as 'The Old Lady', swept off in ideal conditions in the early morning of 26 July. The four Kestrels, throttled back to an easy cruise and consuming 93 gallons an hour, instilled confidence. Sergeant Jewiss was demonstrating prowess in the galley, and even LAC Evans the normally thoroughly airsick engine fitter was in better form. Only the failure of the auto-pilot, and further problems with the radio, marred a smooth 10½ hour flight.

At Malta 202 Squadron (Supermarine Scapas) made available their expert assistance in repairing the auto-pilot, and the crew were able to sample the liquid comforts of the Messes ashore. The following day, nearing the end of a thorough inspection of airframe and engines, Evans discovered a broken valve-spring in one of the Kestrels. Removing a camshaft and replacing the spring kept Jackson and Evans busy well into the night but the 'Old Lady' was fully serviceable and on her way again by 0530, heading for Egypt 920 miles away. In Malta it had become apparent that their troubles with the 'buzz-box' were due to Moore's inexperience rather than the equipment and a replacement from 202 Squadron, LAC Cordon, was found. Jackson noted, "Poor Moore felt this very keenly and we were all downright sorry for him, for he was a damned hard tryer." Of the new man Cordon he was to say, "No matter what job turned up he was on" the spot ready to assist --- without being told." A boon indeed.



Sketch map of K4581's route drawn by Flight Sergeant Jackson and published in Felixstowe's station magazine 'Foghorn' in 1936.

A pleasant and smooth 8½ hours brought them along the North African coast to RAF Depot Aboukir where, much to Jackson's disgust, facilities for flying-boat servicing were primitive. Fuel was transported to them by rowing boat in 65-gallon drums, each one containing a good quantity of 'silt'. Wisely Jackson persuaded the skipper and co-pilot to look after re-fuelling whilst he pressed on with a 10-hour inspection but it was nightfall before the tanks were full.

Aboukir did at least provide welcome domestic facilities in the form of laundering their clothing by a contingent of local labour; leaving Jackson and the skipper to entertain Aboukir's Commanding Officer's family to tea on board whilst the remainder of the crew took in the sights of Alexandria.

The plan to fly a 'boat' 1,070 miles over land direct to Basra amazed the local RAF

personnel, but Lake Habbaniva near Baghdad, at 830 miles, offered an alternative landing place before following the Euphrates down to the head of the Persian Gulf. First light on 30 July, and a favourable forecast, encouraged them to be on their way Turbulence at 6,000 ft spoiled Sergeant Jewiss's culinary expertise when the breakfast sausages had to be recovered from the bilges as the 'Old Lady' flew along the oil pipeline marking the Cairo-Baghdad air mail route. The only break in the monotony of the desert terrain being sight of a 70 Squadron Victoria, shortly followed by an Imperial Airways Hannibal, lumbering along in the opposite direction.

With only 300 miles to go a signal from HQ RAF Baghdad warned that dust storms were

continued . . .

Short Singapore, serial and Squadron unknown, shows the partially opened radiator shutters Jackson removed for tropical flight. Note also the opened portlights for crew cooling!

John Evans



A SINGAPORE TO SINGAPORE

... continued

expected at Basra and, with the sky rapidly thickening, the skipper decided to return to Lake Habbaniya only recently passed. It was some consolation to find that fuel, albeit in 4gallon tins, awaited them on a pontoon craft in the charge of an RAF officer. Short work was made of sucking in 300 gallons via the APU just before the storm enveloped them. Using the only material to hand, their clothing, they rapidly covered the engine air intakes and sat naked in the dust filled hull until the storm passed as night fell. Morale was boosted by the skipper's return from a sortie ashore to re-stock depleted supplies of cigarettes and beer whilst the rest of the crew thankfully cleaned themselves and the boat as best they could. A fine dawn allowed their escape from the weed-infested lake and a short two hours and 50 minutes later they were warping in to the RAF flying-boat basin at Basra.

40-hour inspection

The ability to be able to walk ashore via a gang-plank at 203 Squadron's base was an asset in carrying out a 40-hour inspection, a task which included plug-changing and tappet adjustments on the four Kestrels. Plagued by frequent dust storms, and in a shade temperature of 104F, it was late evening before Jackson and Jewiss could join the members of the Sergeants Mess in their nightly entertainment of shark fishing from the veranda of the bar. The celebration on landing a 105 lb man-eater on the end of a 25 cwt control cable made up for the discomforts of the day.

In a yellow gloom at 4,500 ft, the aftermath of the dust storms, K4581 headed down the Persian Gulf shortly after dawn. With an air temperature of 85F at 5,000 ft Jackson was glad he had decided to carry out an unauthorised modification, by removing the engine radiator shutters, which kept the temperatures down to an acceptable level. Whilst Flying Officer Hobbs navigated a course to avoid the mountains of Persia, Cordon kept him supplied with frequent bearings on Bahrain and Sharjah and when the haze cleared after four hours blind flying. they were dead on track over the island of Sheik Sharaib. Ninety minutes later the skipper slid the 'Old Lady' on to the Ras al Kiamah lagoon on the western edge of the Strait of Hormuz.

A village, under an impressive mountain backdrop, had been equipped as a refuelling base for 203 Squadron's patrolling Rangoons, and it was not long before the local headman had mustered his men to bring out to the anchored Singapore a dhow full of 4gallon tins. Jackson had devised an ingenious method of hand-pumping from tins direct into the aircraft fuel system to save laborious humping to the upper mainplane. In one of the hottest places on earth it was appreciated; as was his device of using the APU to pump sea water into a perforated tin suspended from the upper centre section to make a 95F shower. A visit from the bejewelled local Sheik, who arrived alongside unannounced in a superbly handled dhow, passed a pleasant evening and disposed of their complete coffee ration, before the crew spent the night under the stars stretched out on the fuselage and centre section with an inspection lamp as a riding light.

SHORT S.10 SINGAPORE III TECHNICAL DATA

Dimensions Span: Upper mainplane, 90 ft; Lower mainplane, 76 ft. Length overall: 64 ft 2 in. Height: 23 ft 7 in. Wing area: 1,834 sq ft. Weights Empty 18,420 lb. Fuel and oil 6,275 lb. Max AUW (take-off) 31,500 lb. Performance Max speed at 2,000 ft 145 mph. Min speed 65 mph. Initial rate of climb 700 ft/ min ceiling 15,000 ft. Min time to take-off (fiat calm) 22 secs. Still air range at 105 mph 1,000 miles.

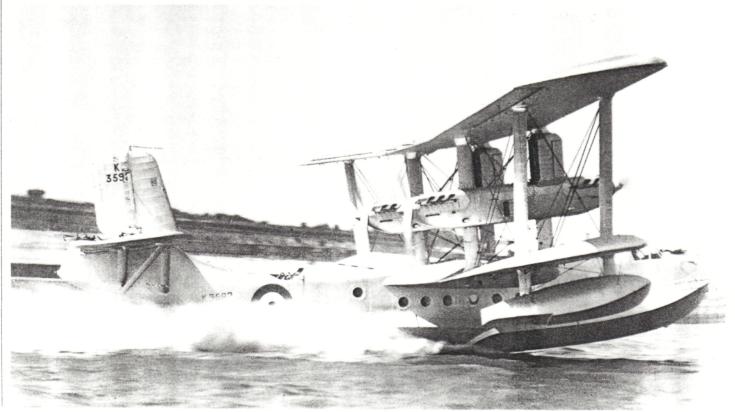
Power Plants Two 560 hp Rolls-Royce Kestrel IIIMS tractor. Two 560 hp Rolls-Royce Kestrel IIMS pusher.

Just after dawn the next morning, and following the Persian coast at 2,000 ft the 'O. Lady' met the South West monsoon. For $4\frac{1}{2}$ hours the skipper battled to maintain an accurate course for Karachi through violent turbulence, the only break in the monotony a brief exchange of greetings with a passing Imperial Airways Atalanta. Touchdown in India came as a blessed relief.

The RAF Depot at Drigh Road, seven miles from Karachi, had been Jackson's home for five years in previous times, and he had numerous friends still serving there. A visit with the skipper the morning after their arrival, provided him with a supply of minor repair items, cleaning of a spare set of plugs and a good tiffin (lunch) in the Sergeants' Mess. Inspection had revealed problems with two boost control units and a contact breaker fault and, after stripping and cleaning the units, it was dark before he could declare K4581 serviceable for engine runs. Refuelling by the local Shell agent had been, in his words, 'pathetic to say the least' and their hopes of getting away the next morning, 6

This photograph captures the thrilling sight of a flying boat 'on the step' and about to forsake one element for another. K3592 was the prototype all-metal Singapore III which first flew on 15 June 1934 at Rochester.

Shorts



ugust, were dashed when an order from HQ RAF directed a 24-hour delay for no apparent reason.

Plenderlieth had received an invitation from the Maharajah of Jophpuh to land the Singapore on his private lake near Jodphur during their next leg, so that he might personally greet the crew. As their delays were building up the invitation was graciously declined, with the rider that they would indeed land if the need arose, would overfly, and fire Very lights if landing. Another dawn take-off on 7 August saw them on their way to Gwalior, half way across the Indian subcontinent.

Tropical rainstorms intense enough to penetrate the normally watertight hull, causing continual discomfort, set the pattern for the next two days. Scattering flocks of

irds and cattle in her path the 'Old Lady' Dattled across India at almost zero feet over countryside denuded of landmarks by vast floods. An overnight stop at exotic alligatorinfested Lake Tigarah near Gwalior brought little relief as five hours were spent transferring fuel from shore on primitive rafts. Jewiss's prowess in the galley and an amusing but unnerving encounter by Hobbs with a, hickily somnambulant, tiger whilst visiting the cal British Resident, boosted morale.

Refuse to start

Brilliant airmanship on the part of the Captain brought them through appalling weather the following day, to Chittagong at the mouth of the Ganges, after eight hours of buffeting. Conditions on their mooring were equally bad. Continuous tropical rain and a ix-knot current which brought uprooted tree runks swirling dangerously round the hull made the demands of a 40-hour inspection a heroic task. It was not surprising under the circumstances that Evans should accidentally lose a fuel filter body overboard. With no replacement available Jackson went ashore and borrowed the use of a lathe in the Harbourmaster's workshop to manufacture an daptor to short circuit fuel filtration on one

ear engine. Another day was lost; but the sindness of the Harbourmaster's wife, with the gift of a steaming Irish stew, brought welcome relief in a depressing interlude.

On the morning of 11 August the trusty Kestrels, for the first time, refused to start. A torrential downpour when the magnetos were uncovered had saturated the distributors and

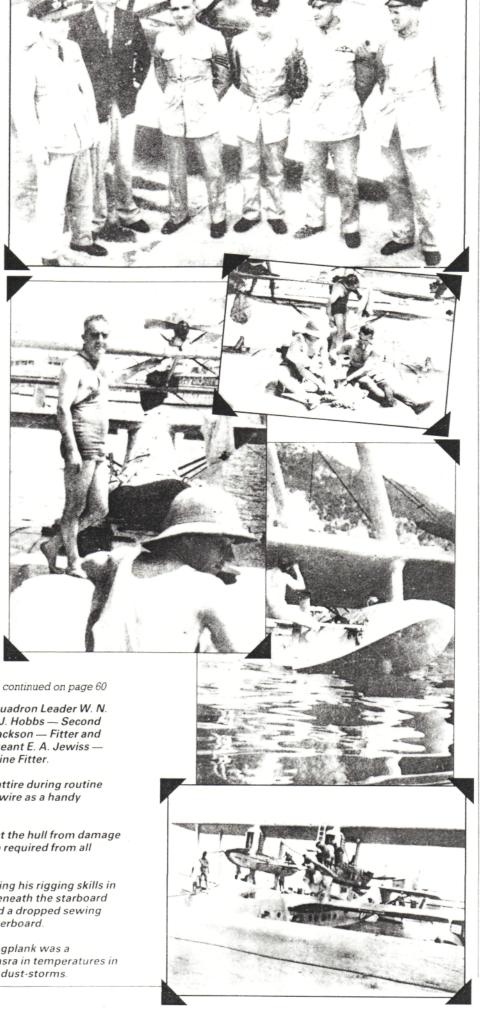
^Top right: The crew of K4581. Left to right: Squadron Leader W. N. ^Plenderlieth — In command; Flying Officer H. J. Hobbs — Second Pilot and Navigator; Flight Sergeant R. J. B. Jackson — Fitter and NCO i/c; LAC R. Moore — W/T Operator; Sergeant E. A. Jewiss — Rigger, Pilot and Chef; LAC S. A. Evans — Engine Fitter.

Middle (left): The skipper in elegant working attire during routine servicing at Gibraltar. Note the use of rigging wire as a handy clothesline.

Middle (right): Making a rope fender to protect the hull from damage by craft alongside was part of the seamanship required from all flying-boat riggers.

Picture behind: Gibralatar. Sgt Jewiis employing his rigging skills in repairing damaged fabric whilst suspended beneath the starboard lower mainplane. Flying Officer Hobbs rescued a dropped sewing needle in mid-descent in a spectacular dive overboard.

Bottom: The ability to walk ashore from a gangplank was a onsiderable advantage during servicing at Basra in temperatures in excess of 100F and the frequent discomfort of dust-storms.



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several hours were lost whilst they were dried out in the cooker oven. Anxious to get away from the discomforts of Chittagong the skipper decided to try and make Rangoon before nightfall. Two hours into the flight, in the worst turbulence yet encountered, the Singapore suddenly swung badly to starboard, requiring 31/2 degrees offset on the fin trim to keep a straight course. As the controls otherwise functioned normally the skipper decided to press on and, with the bright illuminated Shwe Dagon pagoda acting as a beacon, skimmed the 'Old Lady' on to the Irrawaddy delta in darkness. Severe drag to starboard as they taxied behind the Harbourmaster's launch to a mooring was soon explained when Evans noticed that two of the three starboard tailplane support struts were trailing in the water. As nothing could be done in the pitch darkness they turned in to their bunks after a meal for a desperately needed rest

At first light it became evident that. although repairs were within the capability of Jackson and Jewiss, manufacturer's spares would be needed. The Irrawaddy Flotilla Company, a British-run organisation operating a Puss Moth seaplane, offered every assistance. K4581 was towed to a comfortable berth only a few yards from shore, Jackson was given free use of the workshop, and a pontoon was secured under the tailplane as a working platform. The River Police arranged to keep sightseers at bay and the crew were elected honorary members of the plush Marine Club for the duration of their stay. With no monsoon to contend with life took on a more rosy glow.

The skipper's signals to UK stirred immediate action, and within a few days spares, and a Short Brothers engineer, were on their way by air. Despite the exotic

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attractions of Rangoon the crew used the waiting time to throughly clean and service the 'Old Lady' and it was whilst doing this that Jackson broke two ribs in a fall. Although encased in plaster at the local hospital, he insisted on carrying on as normal.

Two weeks passed before Jackson and the skipper were able to meet the incoming Imperial Airways AW Atalanta carrying their spares. To Jackson's delight the package was more than complete although Mr Bell, of Shorts, had unaccountably been off-loaded en-route. Within hours the two SNCOs were hard at it in the workshop manufacturing new struts from the basic materials supplied. Two 18-hour days rendered K4581 serviceable, only to be delayed another two days by a signal instructing that they await the arrival of the missing Mr Bell and take him to Singapore.

Fearful that the port tailplane struts had been similarly weakened, and with an additional passenger, Plenderlieth replanned to fly a coast-hugging track in lowlevel short legs needing less fuel. At last, on 28 August, K4581 was cruising at 500 ft along the picturesque coast of Burma towards Mergui, a short 350 miles on. Continuing unserviceability of 'George', the auto-pilot, which had persisted in spasms throughout, gave plenty of opportunity for Jewiss to use his pilot qualification in relieving the skipper and Hobbs for meals. After he had cheerfully prepared them.

Leaving Mergui, where the whole crew had been royally entertained in the normally ultrasnob European Club, and climbing through heavy overcast, the Kestrels for the first time, misbehaved. Both port engines began to misfire, and then stopped; followed by the stopping of the starboard front. During the ensuing rapid descent all three re-started, only to be followed by the failure of the starboard rear, which mercifully came back to life at 500 ft. Returning to Mergui, an inspection of fuel and ignition systems followed by a full-bore run revealed no faults, so the skipper decided to press on to Port Victoria on the border between Burma and Malaya. Anchoring 20 yards from dense jungle, which came down to the waters' edge, they were greeted from a dug-out cance by the colourful character Bill Russell who claimed uncrowned kingship of the area; and who sent out four small, but live, chickens for the crew's supper.

Needing no re-fuelling, the 'Old Lady' left the jungle wildlife cacophony at dawn, following the coast of the Malay peninsula south towards Singapore. The natural beauty below them, and excitement at the thought of ending their long haul that day sent spirits soaring. Jewiss even allowed Bell the use of 'his' galley to brew the tea which washed down a breakfast of marble-sized hardboiled eggs.

The island of Penang provided the last of many re-fuellings, this time fast and efficient as the boat lay off the agent's wharf. Taking on 500 gallons in 40 minutes left ample time to make their destination before nightfall. But the final 340 miles was to be the most turbulent encountered, leaving Evans prostrate again with the worst bout of sickness he had experienced in the whole flight. It was left to their civilian passenger to brew the final pot of tea as the travel-stained crew spruced themselves up as best they could to face the reception committee of senior officers.

On the evening of 30 August 1935, after 40 days, 91 flying hours and 8,730 miles, K4581 touched down on the Johore Strait. She had used just over one gallon to the mile.