

The Official Log of the late Lt.-Cmdr. Glen Kidston's Flight

TO THE CAPE IN 6 $\frac{1}{2}$ DAYS

Written in the Air by

Lt. O. Cathcart-Jones

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By courtesy of Lt. Cathcart-Jones we are privileged to publish the first complete and authoritative account of the recent record flight from England to the Cape by the late Lt.-Comdr. Glen Kidston and Lt. Cathcart-Jones. The 7,500 miles' journey was completed in 6 days 11 hours at an average speed of 131 m.p.h. The fastest mail-boat service between England and the Cape takes 17 days for the journey.

The following account is a summary of the actual log kept during the flight by Lt. Cathcart-Jones, the assistant pilot and navigator of the flight. The machine used was a Lockheed *Vega* cabin monoplane with a 425-h.p. *Wasp* air-cooled engine. Mr. T. A. Vallette, of the Marconi Co., was lent as radio operator on the stage from London to Cairo where his place was taken by Mr. G. W. Hills, an engineer, for the remainder of the flight to the Cape.

This official record of a flight which will not easily be beaten is of historic interest and in presenting it as an example of the wonderful possibilities of Empire air communication it is felt that honour can best be paid to the memory of that gallant pioneer and sportsman, the late Lt.-Cmdr. Glen Kidston.—EDITOR'S NOTE.

March 31st, 1931.

NETHERAVON TO NAPLES

It was intended to start the flight at 05.00 hours and to be airborne at this time steering direct for Bexhill. Owing to arrangements mis-carrying at the hotel in Salisbury, the Boots forgot to shake us until 5.30, and by the time the aerodrome at Netheravon was reached it was approaching 6 o'clock. However, it was just as well that this unforeseen delay occurred, as by the time everything was ready to commence the flight the conditions of light were such to enable us to get a very good view for our take-off run with a full load. These conditions were welcome as we had doubts as to whether we should get off at all.

G.M.T.

06.05.—Airborne from Netheravon, steering 127 deg. M. Speed 135 m.p.h. Wind 15 to 20 miles an hour from 135 deg.; the take-off was excellent considering that the load on board was 6,400 lb. Time of take off was 40 seconds and run 800 yds. The ship lifted easily and all on board were greatly relieved. The course was shaped to take us over Tidworth Camp which was fully lighted and was an excellent point of departure from which to obtain our drift. When over Tidworth, Vallette unwound the wireless and got into communication with Royal Air Force, Netheravon, who acquainted us of the time and distance of run in taking-off and wished us good luck for the rest of the flight.

06.49.—Over Bexhill; signal was sent to Air Ministry acquainting them point of departure British Isles. This was our last view of England, which quickly disappeared in the morning mist.

07.35.—Sighted French coast near Routhiaville, steering 150 deg. M. Height 1,200 ft., speed 130 m.p.h.



The arrival at Capetown: the late Lt.-Cmdr. Glen Kidston is in the centre with Lt. Cathcart-Jones on the right and Mr. Hill on the left

09.10.—Passed Bouilly. Soon after passing Bouilly, Vallette was able to obtain radio communication with Marseilles, Milan and Genoa. These meteorological reports were satisfactory, and it was decided not to proceed with our original intention of crossing the Alps at their highest part south of Lausanne and the Simplon Pass, but to alter our course to take us down Rhone Valley to Lyon, and then, if cloud height permitted, cross the Alpes Maritimes south of Grenoble. A few minutes after making this decision we arrived in the vicinity of Dijon and skirted round the Beacon on Mount Afrique, where we altered course for Lyon.

10.30.—Over Lyon, steering 165 deg., speed 125 m.p.h., climbing to get sufficient height to pass over the Alps south of Grenoble. Great activity was

noticed amongst French fighter machines flying in formation near the aerodrome.

10.32.—First sight of the Alps which were covered in snow and free of cloud; climbed to 4,000 ft., and speed reduced while climbing to 125 m.p.h.

11.15.—Reached our maximum height 10,500 ft., at which altitude the machine would not climb any more at full throttle, and speed down to our minimum of 90 m.p.h. We had to wind in our wireless aerial in order to avoid hitting the top of one of the mountains which loomed up in front of us with its peak just showing through the tops of the clouds. At this moment we experienced our first set-back in realising that the load of petrol on board, which had not been expended as quickly as we had originally estimated, confined our ceiling to very little over 11,000 ft. However, fortune was with us and we managed to get above the high layer of cloud which now entirely covered all mountains in one even wide sea. From this moment until 55 minutes later we were above the moun-

tains and clouds flying blind to any ground observation. The course was then shaped to cut over the high peaks between the Italian Riviera and Grenoble, and at an elapsed time of 1 hour we decided to come down through the clouds hoping for the best that we had a good margin of safety in being well out to sea on coming down through the clouds. Luck was again with us and as we throttled back to come down through the clouds we had a glimpse of the blue sea on the Italian coast between a small crack in the clouds which suddenly appeared down below us on our starboard hand.

12.35.—Over Genoa, Vallette made every endeavour to get weather reports from Rome and Naples, as to conditions along the west and east Italian coasts. Nothing coherent could be made from the very mutilated wireless reports we were able to get. Eventually a report in Italian was obtained from Leghorn and from what we could glean it looked as if we were likely to run into dirty weather ahead.

14.18.—Calculations showed that our petrol consumption since leaving Netheravon was at the rate of 19 gallons per hour, which was considerably under our estimate.

14.30.—Rome was crossed at a height of under 1,000 ft. due to continual lowering of the clouds which looked extremely bad ahead. It was decided that in order to reach Brindisi we should have to go down the coast as far as Naples and attempt the crossing of the mountains from the latter place. When over Rome, Croydon could still be heard on the wireless.

15.25.—Commenced climbing to get over the high mountains between Naples and Foggia. Mount Vesuvius was covered in cloud, but the cone of the volcano was projecting through the clouds and was in a state of eruption. The indication of the upper winds as shown by the smoke from Vesuvius gave us a good indication as to our drift when flying blind over the mountains between Naples and Foggia.

15.50.—Conditions were no better and in view of the impending sunset we decided to alter the course back to the coast off Naples, allowing a sufficient margin of flight to come down through the clouds when well out to sea over the Italian coast.

16.05.—Circling down over Naples aerodrome and landed 16.06. The size of this aerodrome is particularly small and the approach is bad. However a good landing was made, and we were immediately surrounded by excited Italians, who examined every inch of the aeroplane, engine, spare parts and luggage and even examined the insides of the petrol tanks. Great excitement was caused by the fact that we carried wireless and photographic apparatus, which was immediately made a subject of great importance in the eyes of the Italian authorities. However, a letter of explanation from the Italian Air Attaché in London (Colonel Bitosi) was of the greatest assistance in calming down the aerodrome officials who got into telephonic communication with their Headquarters in Rome to obtain further instructions. It was necessary to give all films, whether exposed or not to the Italian officials who took them away for development and seized our cameras. The amount of petrol left in the tanks on arrival at Naples was 104 gallons which meant that we had expended 203 gallons in a flight of approximately 1,200 miles at high altitude.

April 1st.

NAPLES TO MALTA

G.M.T.

06.55.—Airborne from Naples aerodrome. Steering 154 deg. speed 140 m.p.h., height 600 ft., weather conditions very bad, rain, low visibility, cloud 700/1,000 ft. Visibility in patches as low as 400 yds. It was obvious that no attempt could be made to cross the mountain direct from Naples to Brindisi and we decided to go down the coast to Malta where we would refuel before continuing the flight to Cairo.

07.38.—Passed Cape Palinura. At this moment the clouds were so low and the visibility had decreased to such an extent

that we were forced down within a few feet of the water. Vallette was unable to wind in his aerial in time and the weight hit the water and was carried away. This finished all radio communication on 900 and 600 metres, and we had to rely on short wave only with Malta.

10.00.—Sighted Malta dead ahead and shaped course to pass over the Grand Harbour, Valletta, over which we arrived at 10.02. No ship of any importance was in the Harbour due to the Mediterranean Fleet being out on their annual spring cruise.

10.04.—Landed Halfar aerodrome and commenced filling up. We had been able to order our supplies of petrol and oil when well over the Italian coast with out short-wave wireless. The wireless was put to good use, and proved indispensable in saving time for refilling which was essential if we were to reach Cairo that evening before sundown. Great assistance was rendered at Halfar aerodrome by all ranks of the Royal Air Force, who greatly facilitated refueling arrangements, and carried out minor repairs to woodwork inside the cabin, and provided Vallette with the necessary weight for his wireless aerial.

April 1st.

MALTA TO CAIRO

Good weather report was obtained for the route Malta-Benghazi and it was decided to make the long sea crossing of 425 miles direct in order to save time which was very precious to us.

G.M.T.

11.10.—Left Malta steering 136 deg., climb to 3,000 ft., air speed 130 m.p.h., sky clear, but poor horizon due to haze. No direction finding wireless available, no sign of any ships. Altered course 137 deg. on reaching 5,000 ft., and took a drift sight on back bearing of Malta. Flying entirely by altimeter and Sperry artificial horizon. For the whole 425 miles across sea no shipping was ever seen.

12.30.—Changed over pilots at 5,000 ft. Conditions very good, fine clear sky, temperature getting very much warmer, sea quite calm.

12.43.—Sighted land ahead at a distance of approximately 70 to 80 miles, and altered course to 122 deg. M. to cut off a large area of land between Benghazi and Tobruk.

17.04.—First sighted the pyramids ahead. At 6,000 ft. in a perfectly still and calm air. Sun rapidly disappearing over the horizon.

17.37.—Dispatched radio signal to Cairo giving estimated time of arrival 18.00. At this moment we could plainly see the Nile directly ahead of us.

17.55.—Crossed the Nile. Nose of machine put down until we reached 165 m.p.h., and came down to under 1,000 ft., took several camera shots of the Nile and Cairo, before landing at Heliopolis aerodrome.

18.00.—Landed on the aerodrome and taxied up to Imperial Airways' hangar where we arrived on the stroke of our estimated time of arrival. Immediately on arrival Hills removed the cowling and commenced taking off the radio for the subsequent stages of our flight. The stores were removed and gear sorted out which we did not want to take with us on the continuation of the flight. All heavy clothing, life belts, radio and accessories were dumped out here and the ship prepared for tropical conditions. Pressure was let out of both tyres to allow for increase in temperature, oil was drained out of the engine and fresh oil put in, battery was removed and new battery replaced, and all oil cooling muffs removed in preparation for the hot conditions in which the engine would be required to work on the subsequent stages. It was intended on arrival at Cairo that we should continue our flight to Khartoum by night; leaving Heliopolis aerodrome at 21.30 hours the same evening and instructions were given for the work to be carried out with the utmost speed in order to depart at that time.

However, it was found impossible to get all the work done on the motor and on the aircraft until 05.05 hours. It was a great disappointment to us that we were unable to carry out our intention of flying from Cairo to Khartoum at night.



The Lockheed "Vega" monoplane which flew from England to the Cape at an average speed of 131 m.p.h.

as we could never expect such good weather conditions and light conditions as they were on that particular night. We got into the machine and commenced our flight at 05.20 hours after having worked on the engine throughout the night.

April 2nd.

CAIRO TO MALAKAL

G.M.T.

05.25.—Took off from Heliopolis aerodrome with a load of 6,400 lb. Tail took a long time to get up and our run must have been well in the neighbourhood of 1,200 yds. before becoming airborne. Shaped course to 196 deg. M., air speed 125 m.p.h. following course of the Nile, visibility excellent, moon still giving an excellent amount of light and dawn rapidly showing in the east.

06.55.—Passed over Assuit, altered course 124 deg. M., air speed 125 m.p.h., height 3,300 ft., cabin temperature 90 deg. F. It was at this stage that the air gradually changed from being quite calm to bumpy, hot and disturbed air which made flying particularly tiring, and exhausting, especially after a sleepless night spent working on the motor.

07.57.—Passed the first dam across the Nile, south of Luxor. Changed over pilots and Glen Kidston went to sleep in the cabin.

11.05.—Passed Station No. 10. Average ground speed 150 m.p.h. from Wady Halfa. Climbed to 6,000 ft. in order to avoid bumps but met with no success and air continued to be very disturbed. This height we did not want to change for fear of losing the strong tail wind which we experienced between 5 and 6,000 ft. Engine temperature by this time was going up rapidly and cabin temperature in the shade at 6,000 ft. was just under 100 deg. F.

11.13.—Decided not to stop at Khartoum because we estimated that we had enough margin of petrol to arrive at Juba, 30 miles south of Mongalla, also the take-off at Khartoum with a heavy load would be extremely difficult in the middle of the day with the rarified atmosphere.

12.50.—Khartoum sighted ahead. Cathcart-Jones still at the controls, it being impossible to change pilots due to very bumpy conditions not permitting controls to be left for one moment.

13.00.—Throttled down over Khartoum, came down to 200 ft. and dropped a message acquainting Royal Air Force that we were proceeding Juba. Conditions were extremely bumpy and the heat in the cabin went up to 110 deg. F.

13.22.—Decided to land at Kosti and course was shaped to cut off the corners of the Nile in an endeavour to pick up time to allow refuelling at Kosti and proceeding to Juba the same evening.

14.20.—Arrived over Kosti and flew low round the village in an endeavour to attract attention of the D.C. and Shell petrol company officials. Landed on the aerodrome in a very calm and extremely rarified air which seemed to render breathing difficult. All on board exhausted and thirsty as the only food consumed since 7 o'clock the previous evening had been 3 oranges each. On stopping the motor by a small hut on the side of Kosti aerodrome it was like opening an oven door on emerging from the cabin of the aircraft, whose internal temperature immediately went up to 120 deg. F. in the shade. Within a few minutes of our arrival the D.C. arrived on horseback accompanied by a few native officials, who had several drums of petrol stored under the shed of the hut, but who were very reluctant in allowing us to make use of the petrol under any conditions whatsoever. It was practically necessary to seize the petrol and roll the drums under the wing of the aeroplane ourselves before we could get any change from the natives in charge. Everybody was particularly short-tempered and the excessive heat did not make refuelling at all a pleasant task for us. An hour's delay was necessary before we had completed our fuelling arrangements and started the motor for the continuation of our flight to Juba. Two attempts were made to take off from Kosti aerodrome before we were finally airborne owing to the extremely short run, the rarified air and the trees at the extremities of the aerodrome which it was necessary to clear when using the longest run available along the aerodrome.

16.54.—Passed Kodok. It was at this stage we realised that it would be impossible to make Juba that evening before dark and in order to risk landing at a strange aerodrome after nightfall we very reluctantly decided that we should have to stop at Melut for the night.

17.37.—Landed on Malakal aerodrome which was extremely small in width, but had good low approach and a landing run of approximately 900 yds. On landing here, we were immediately met by the European in charge of Shell petrol who got his boys to fill the aircraft straight away. All gear was removed and the night spent in the rest house at Malakal after a supper of dry bread and bloater-paste sandwiches which were not particularly succulent after 24 hours without food, and very little to drink.

April 3rd.

MALAKAL TO KISUMU

G.M.T.

06.05.—Left Malakal for Kisumu. Take-off was good on stretch of aerodrome parallel to the river—surface excellent, steering 184 deg. M., speed 125 m.p.h.

07.20.—Altered course to 166 deg. M., leaving the Nile on our starboard hand, steering a course to hit the river again at Bor. Navigation extremely difficult on this section of the route, due to flat country, no prominent landmarks, and absence of tracks on the ground.

07.53.—Passed Bor on our starboard beam. It was a few minutes before reaching Bor that we had our first sight of big game since leaving England, and we caught sight of several giraffe galloping away disturbed by the noise of our engine.

11.30.—Sighted Lake Victoria, round Kisumu, and flew down low over the town prior to landing. Landing at this aerodrome was excellent—a large, flat surface of short grass, with excellent approaches, and a run-in nearly all directions of something in the neighbourhood of 1,300 yards.

We were astonished to find that at this aerodrome, although the height was something in the nature of 4,000 ft., we experienced no dropping of the aircraft as we expected on coming in to land, but that the tendency was to float, although our speed over the ground was considerably less than the normal speed at which we had been accustomed to make our approaches on other occasions.

Petrol was immediately put in, in the hope of getting to M'Beya that evening; but it was found that, in order to change some plugs in the engine, the removal of the cowling was necessary, and the delay thereby caused prevented us from departing that day. However, a thorough overhaul was given to the engine, plugs were changed and the oil drained out and fresh oil put in.

Mr. Drury, who is supervising the construction of the aerodrome, prepared a special runway, giving an overall take-off dimension of very nearly one mile in length.

After work was completed that evening the aircraft was taxied to the extreme limit of the take-off run, and everything prepared for an early start the following morning. All the personnel of the flight were accommodated that evening in the hotel in Kisumu, the first occasion on which we lived under more or less civilised conditions since our departure from England.

April 4th.

KISUMU TO SALISBURY

06.00.—Take-off from Kisumu was full of excitement, owing to the fact that, with the tail of the machine on the ground, the view from the pilot's cockpit is not very good, and Commander Kidston was unable to get the correct line of the specially prepared runway, with the result that it was not until about 400 yds. from the commencement of the take-off that the tail lifted, and he was able to see that there were several boys standing in the direct line of the aircraft. This necessitated a quick deviation to the right, and caused the aircraft to run on the rough ground to the right of the runway. However, the ship lifted well, and after a run of something like 1,100 yds. we were airborne and safely on our course.

A direct compass course was steered for M'Beya, over the Serengetta Plains. Very few game were seen on this stage of the flight, and a large lake marked on the map as being directly on our course was actually non-existent, owing to the dry season having dried all the water up from the river beds and marshes over an area of about 200 to 300 miles.

11.25.—Changed over pilots. Course set for Salisbury. Height 4,000 ft., air speed 135 m.p.h.

11.40.—Encountered several rain storms and thick wall of rain was visible immediately ahead of us, about 20 to 30 miles distant.

Since leaving M'Beya the country traversed was a dense forest, with hardly an open space, for 400 to 500 miles, in which any aircraft could have made a forced landing. Navigation on this part of the route is rendered very difficult, by the absence of definite landmarks, caused by the abundance of high cone mountains, all closely resembling each other.

16.05.—Changed pilots, and altered course to cross high mountains to the west of Salisbury, which were now immediately ahead. Look-out was kept for the railway line, which was not crossed at the time we estimated, and, after flying for a further ten minutes, we could not definitely establish our position with reference to Salisbury.

As we had no time to spare if we were to get to Bulawayo that evening before sunset, we decided to drop a message on the next house we sighted which showed any likelihood of being inhabited by a European settler, and not to waste time sweeping to the left or right in an endeavour to definitely locate our position.

16.08.—We sighted a house and circled low down to attract the attention of the occupant, who came out on the lawn in front of his house. A message was dropped in a A.A. message streamer, asking him to point in the direction of Salisbury. Fortunately the message was received by an Englishman, who directed us with the utmost assurance, by pointing in the direction of Salisbury, and after flying on his directions for twelve minutes, we arrived dead over Salisbury aerodrome.

It is an interesting point to note that the country round Salisbury, as viewed from the air, has no comparison with the contours as shown by the latest maps for this district. We expected to find Salisbury in the hollow of the high hills, as shown on the map, but in reality we found it to be on a large plateau, quite free from any high mountains whatsoever.

16.20.—Arrived Salisbury. Good landing on the aerodrome—hard surface, very long grass. Petrol was quickly put in the tanks, and within twenty minutes of arrival we were off again on our course for Bulawayo.

18.05.—On arrival at Bulawayo work was immediately started on the engine. Cowling was removed, and Hills, with the assistance of a local mechanic, worked on the engine until 03.30 the following morning.

April 5th.

BULAWAYO TO FORCED LANDING AT LICHTENBURG

G.M.T.

07.40.—Airborne from Bulawayo after an exceptional take-off. The height of this aerodrome was 4,500 ft., and, with the load of petrol which we were obliged to carry in order to make the 1,200 mile flight to Capetown, the take-off was extremely difficult and required a long run. On this particular occasion the wind was light, and after running 900 yds the ship gave no indication of lifting from the ground, and we were reaching the extreme end of the aerodrome, which was bounded with a three-rung wire fence. We flew straight through this, with our wheels still on the ground, and only just managed to lift the ship over some high-tension wires by a few inches. Apparently no damage was done, after flying straight through the wire fence, and the course was shaped for Palpye Road.

10.08.—Crossed the railway at Rondavel. Soon after passing the railway Commander Kidston passed back a note to the cabin to say that the country over which we were now flying looked like one large aerodrome—rolling plains in all directions. No sooner had the note been received in the cabin than, with a few intermittent pops, the engine ceased firing altogether, and a forced landing was commenced.

10.30.—In an endeavour to check the direction of the surface wind for landing, several Armour smoke indicators were thrown overboard, but, owing to the high speed, these were out of sight before we could use them for indication of the direction of the ground wind. However, a lucky estimation of the wind direction was made, and the ship landed amongst ant heaps, on about the only clear spot of country for miles.

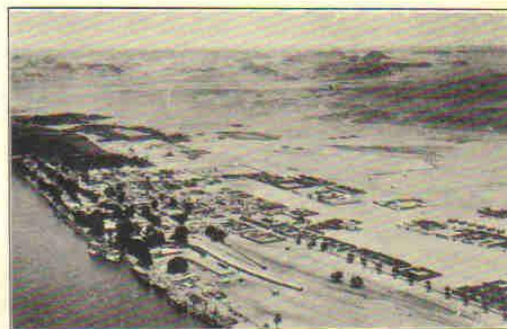
Soon after the wheel touched the ground it became apparent that we were to shortly encounter our second experience of flying through a wire fence, which, however, caused us no fear after our episode on Bulawayo aerodrome.

On flying through this second fence we removed all three wires and snapped the upright iron post clean in two. The aircraft came to rest up a slight incline only 60 yds. short of a large bush surrounded with ant heaps.

On landing a quick inspection was made of the aircraft and engine, and to our great relief it was discovered that the only damage caused was two leaking petrol tanks, a cut and twisted propeller and several scratches and cuts on the undercarriage.

THE FLIGHT IN BRIEF

Date	Flight	Distance miles	Time hrs. mins.
1st day..	Netheravon to Naples ..	1,105	10 00
2nd	Naples to Malta	440	3 5
"	Malta to Cairo	860	7 0
3rd	Cairo to Kosti	1,270	9 0
"	Kosti to Malakal	330	2 15
4th	Malakal to Kisumu	740	5 30
5th	Kisumu to Salisbury ..	1,240	10 20
"	Salisbury to Bulawayo ..	240	1 45
6th	Bulawayo to Lichtenburg	420	3 10
"	Lichtenburg to Pretoria..	130	1 0
7th	Pretoria to Capetown ..	840	6 0



An aerial view of Wady Halfa, Sudan

caused by the wire. All hands immediately set to to remedy the cause of the engine trouble, and the cowling was removed and work commenced by Hills, and Cathcart-Jones, while Commander Kidston, with the aid of the local Dutch farmers, prepared a runway of some 1,000 yds. in length, by knocking down all the ant heaps and removing the big boulders. This work commenced at 10.30 in the morning, and continued until 4 o'clock that afternoon, without one moment's rest. We were able to run up the engine at 15.50, which just gave enough revolutions to warrant an attempt to take-off from the unpleasant surroundings.

16.00.—Took off from the field at Lichtenburg, for Roberts Heights aerodrome, Pretoria, where we had decided to make for in order to carry out more extensive repairs to the engine and aircraft before proceeding on our next and final stage to Capetown the following day.

17.00.—On arrival at Pretoria great assistance was rendered by all ranks of the South African Air Force, who opened their workshops and hangars, and came in to work on the Sunday afternoon, and continued to work until 11.30 that evening, when the motor was run up and everything appeared quite satisfactory.

April 6th.

PRETORIA TO CAPETOWN

On arrival at the aerodrome at 7 o'clock, the aircraft was prepared for an immediate take-off and the motor started. It was found, however, that on running the motor up sufficient revolutions could not be obtained on the right magneto only, and the cowling had to be removed in order to locate the source of the trouble. It was not, however, until after about two hours' work that we discovered a faulty earth wire



The District Commissioner's House at Abercorn seen from the air

from the right magneto was the cause of the trouble, and the aircraft was not ready for take-off until 10.50 that morning.

L.M.T.

11.00.—Airborne from Pretoria aerodrome, after a take-off which was made downwind, in order to obtain the maximum run and low approaches offered in this particular direction.

12.50.—Over Bloemfontein. All going well.

15.15.—Beaufort West! Circled round the aerodrome, and shaped course direct for Capetown.

16.55.—Sighted Capetown, and altered course to take us over Maitland aerodrome.

17.00.—Landed Maitland aerodrome. Completion of flight.

Total Time : 6 days 11 hours.

Average speed for 7,500 miles : 131 m.p.h.

All on board quite fit.

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HOW THE AIRCRAFT WAS LOADED

Weight of ship less fuel but with special equipment, radio, starting handles, extra instruments, battery, log books and tool kit	3,076 lb.
Weight of 300 galls. petrol and 20 galls. oil (oil at 10 els. and petrol 8 els).	2,600 ..
Weight of crew: (1) G.K., 170 lb.; (2) C. J., 140 lb.; (3) Hills, 160 lb.. .. .	470 ..
Weight of luggage and special equipment, newspapers, personal baggage, cameras..	300 ..
Netheravon take-off load	6,446 ..
Load allowed normally	4,500 lb.
Overload	1,946 ..
At Cairo following articles were removed :— Radio transmitter and receiver, with tapping key and valve spares, life-belts	300 lb.
Following gear added :— 1 Rifle and ammunition, emergency rations, cinema film, tyre and inner tube, engine spares, tail spares	120 ..
For subsequent stages of flight the load was reduced by.. .. .	180 ..