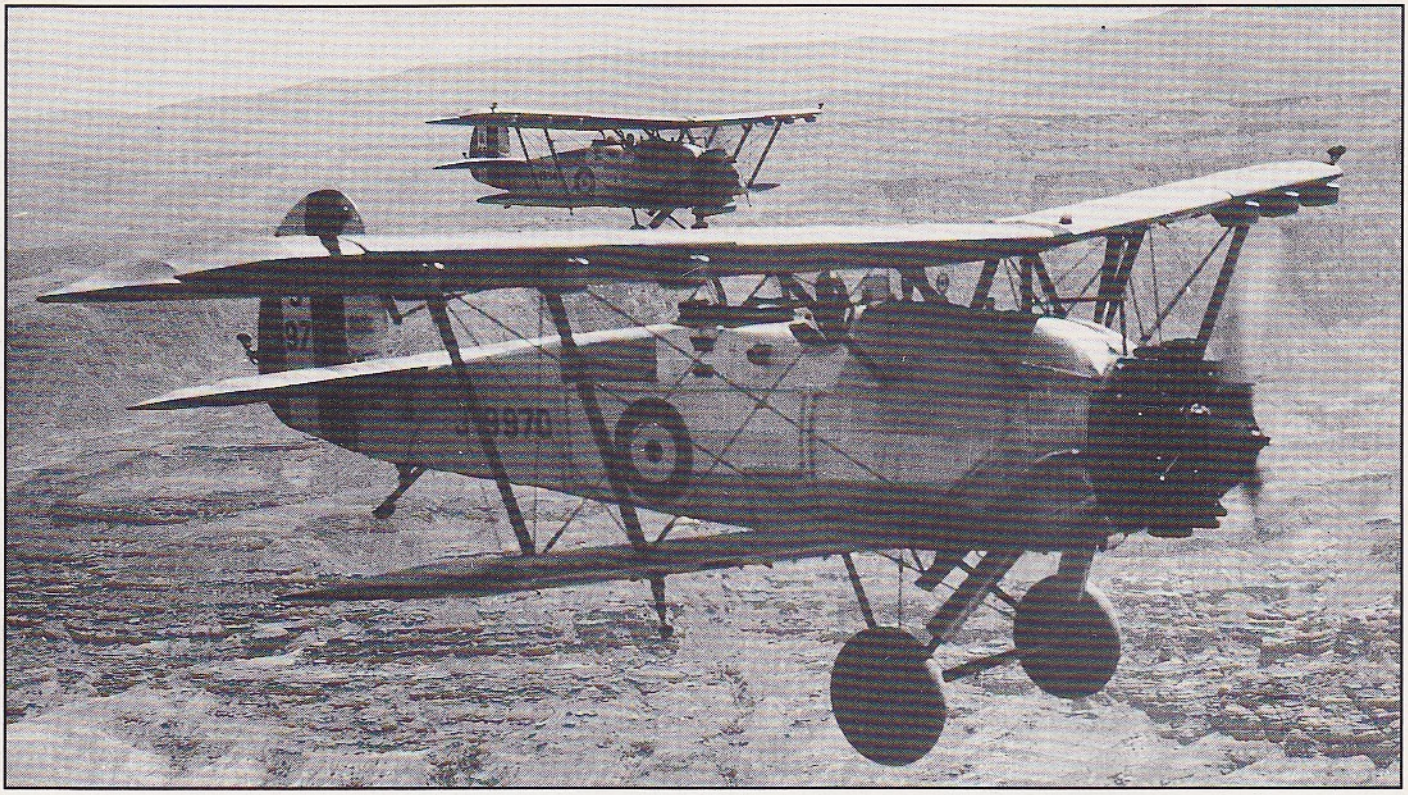


THE FLYING SHUFTIS

SQUADRON LEADER W. H. H. SMITH RAF (Retd) recalls his experiences with the Armstrong Whitworth Atlas in the Thirties, during his service with No 208 Squadron — whose badge earned it the nickname "The Flying Shuftis"

On Sunday March 5, 1932 I disembarked from *HMT Dorsetshire* on to the quay at Port Said. It was a pleasant change from the rough weather we had endured since leaving Malta but, although the sky was incredibly blue and the sun still not high enough to cause discomfort, I felt far from cheerful.

Before the disembarkation I had learnt that my destination was 208 Squadron at Heliopolis. Now this was in no way a criticism of that excellent squadron, but I was concerned because of the unfortunate reputation that the Armstrong Whitworth Atlas had been given as the result of the incidence of flying accidents over the past year. As readers will see, though, my misgivings were quite unfounded. Having previously been a member of No 10 Squadron, which was equipped with the Handley Page Hyderabad (and subsequently the Hinaidi), I found the Atlas a very different environment. However, in spite of my earlier misgivings I very quickly adapted and enjoyed the change.

The aerodrome at Heliopolis at that time was virtually a piece of desert bounded to the north, east and west by barbed wire fencing, but to the south it was open to the desert which went right down to the Sudanese border and beyond. The landing surface was stony sand, runways and other airfield refinements being unknown in those days. It speaks well for the rugged nature of the Jaguar engines and the Atlas airframe that they performed so well.

My duties as a wireless operator/mechanic/air gunner involved the fitting, maintenance and operation of the three types of radio equipment which could be installed in the Atlas. These were MF CW Telegraphy, Radio Telephony and ICW Transmitter.

The MF CW equipment was installed on a frame fitted to the back of the rear cockpit. The sets were suspended on shock-absorbing rubber cords mounted on aluminium brackets. The R/T equipment was mounted on a tray which slid on runners behind the main cockpit and was enclosed under a cover held in place by four sliding bolts. The ICW transmitter was mounted in the same way.

The power supply for all these three types of transmitter came from an LT/HT generator mounted on the port wing and driven by a wooden propeller through a centrifugally controlled clutch.

Left, *Armstrong Whitworth Atlases of 208 Squadron over rocky country in Egypt — 1933.*

Right, *a No 2 Squadron Atlas picking up a message by means of a retractable hook carried beneath the fuselage. The message was slung between two short posts on the ground. The system worked well, provided that the message was caught on the hook and not on any other part of the aircraft.*

Below, *a 208 Squadron Atlas flying over Egypt in 1933.*

Opposite page, bottom, *installing an LB-type plate-camera in the fuselage of a 2 Squadron Atlas. On the ground can be seen the simple wireless set then in use. It was fitted to a detachable tray and the whole set could be removed in a matter of seconds.*

The CW equipment had a range of 100–150 miles depending on atmospheric conditions — which were often very bad in the Middle East. The R/T equipment was capable of being operated by the pilot through two flexible controls enabling him to switch the transmitter on and off and so tune the receiver. The luxury of pushbutton, crystal-controlled equipment was away in the future.

One other means of passing information air-to-ground and ground-to-air was by dropping and picking up messages. The dropping was quite simple: the message, hand written, was put into a pocket in the end of a 6ft-long coloured streamer and thrown out by the rear gunner as near as possible to the recipient. Picking up was by means of a hook on the end of a wooden pole pivoted on the undercarriage axle. This was operated by means of a cord through the floor of the rear cockpit. Anyone who has not undertaken this operation has no idea of the entanglements which can result from catching the message on anything but the hook!

Some six weeks after my arrival in the squadron, C Flight, under the command of the Squadron Signals Officer, was detailed to fly to Aswan to take over from 47 Sqn as escort to HM King Leopold of the Belgians on his return flight from his annual visit to the Belgian Congo.

As the King was flying in a three-engined Avro Ten which had superior range and speed to the Atlas, we planned to take off ahead of the royal party, land to refuel at Assiut and then hopefully keep station with the Avro till it landed at Heliopolis.

We breakfasted at 0330hr and were driven down to the airfield hoping for a quick getaway. In spite of all our efforts, not one engine would start. We had quite overlooked the low temperature and dampness of the atmosphere. In retrospect, it was asking a lot for the engines to be started by hand under those conditions.

Normally, at least the first start of the day was made using a Hucks starter. This comprised a hollow shaft supported on a tripod of metal rods mounted on a Model T Ford chassis. The shaft was chain-driven through a Ford gearbox and at its outer end had a claw fitting, which was pulled out against a spring in the tube and engaged in a similar fitting on the propeller boss. As soon as the aero engine had fired, the two claws disengaged and the one in the starter was withdrawn by the spring.

Needless to say, the King survived without his escort and we did not get a rocket.

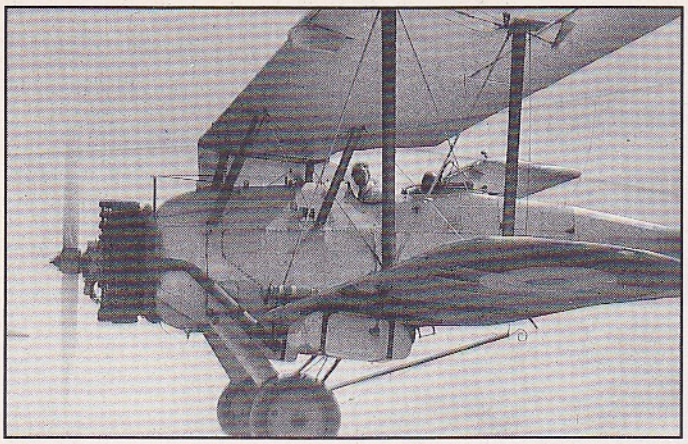
Early in May 1932 we were detailed to liaise with a military convoy carrying out an exercise in cross-desert operation. Leaving Cairo from its Western side, the route to be followed was first to Mersa Matruh, then on to Sollum, southwards to the Siwa oasis and back to base. To provide servicing and refuelling facilities for our aircraft, a party of fitters and riggers accompanied the convoy travelling in our medium-sized vehicles, Morris Commercial six-wheeled lorries. These had the ability to convert into semi-tracked vehicles by fitting a flexible track over each pair of rear wheels. The Army transport was fitted with conventional tyres and found it very difficult to traverse some of the areas of soft sand and the salt flats east of Siwa. By offloading portions of their equipment onto our semi-tracked lorry, the bad patches were safely negotiated. The whole exercise took nearly ten days.

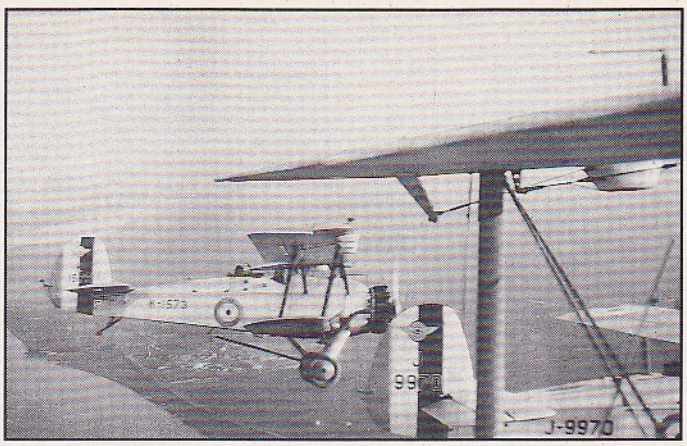
On June 6 I flew with Fg Off Loverseed to inspect the emergency landing grounds sited alongside the "road" to Suez. The procedure was first to fly over to check for any major hazard; then the surface was tested by firing a Very cartridge onto it — if it bounced, it was considered safe to carry out a touch-and-go. Unfortunately on our approach we hit a sand dune which pushed the starboard undercarriage strut into the fuselage. As the pilot opened up to climb away he found that the aileron controls were jammed! We climbed to about 100ft and made a *very* wide flat turn, landing with no damage to either crew member — although JR9971 was very bent. It was repaired at the main depot at Aboukir and was back in service in June 1935.

Working with the Army

As our Army Co-operation designation implies, a large proportion of our flying was to provide reconnaissance and support services to the Army units based in the Cairo area. In Army Co-operation squadrons all pilots were officers, as it was considered infra dig for an NCO pilot to have to give instructions to an Army unit commanded by an officer.

Our contacts with the Army were mainly on the sports field apart from





these liaison exercises. Following an incident which involved the provision of water and fuel to an RCT scout car marooned in the "blue", we were invited down to sample the delights of travel in their tanks. They were still using World War One lozenge-shaped vehicles and I cannot remember a more uncomfortable experience than a ride in one of those monsters. "Sitting in a water tank being heated over a large fire while strong men beat on it with sledgehammers" was how one of us described it afterwards.

After Christmas had been successfully negotiated, the squadron made a formation flight to Luxor and Aswan to show the flag. We stayed in Luxor for two nights and took the opportunity to view the temple of Karnak. The sheer size and elaborateness of the monuments was most impressive.

Above left, *208 Sqn Atlases in tight formation over Hinaidi on March 12, 1934.* **Above right,** *208 Sqn's C Flight over the River Nile returning from the flypast on February 3, 1933. Seen here are aircraft J9970 and K1573. The eye motif may just be discerned on the rudders.*

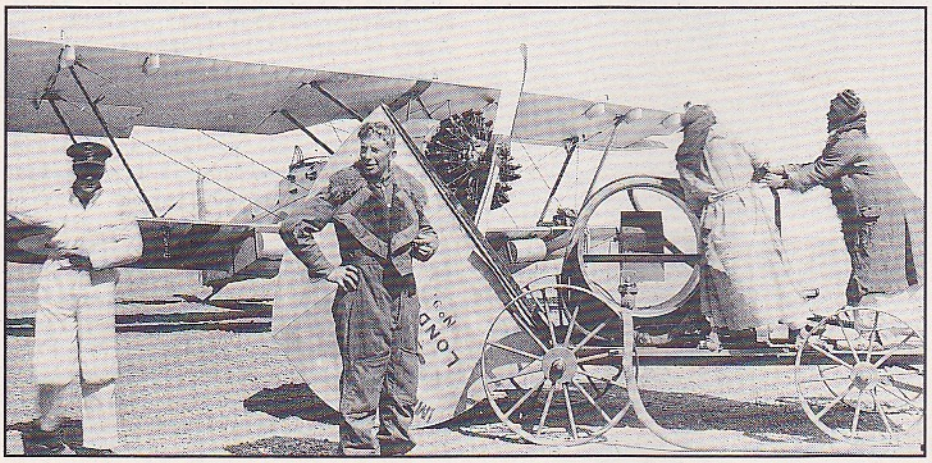
During the flight from Luxor to Aswan I took a series of photographs using my pilot's Kodak camera. By holding the camera on its side so that the baseplate, on which the bellows was attached, was protecting it from the slipstream, I obtained some good pictures of Karnak, the Aswan dam and the Temple of Philae.

On our return to Heliopolis it was time to begin rehearsals for the annual air display, in which all units of Middle East Command took part.

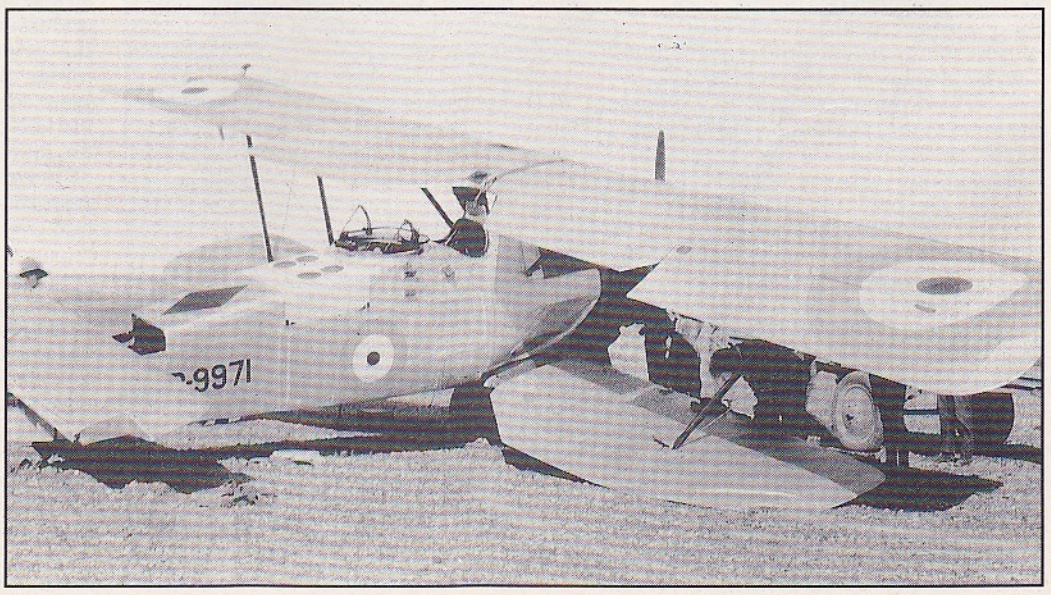
No 208 Sqn's contribution to the display involved dive-bombing an "enemy" stronghold built in the centre of the aerodrome. We bombed in formations of three aircraft, with bombs being released at the bottom of the dive. Unfortunately on one dive my bomb failed to release cleanly and was carried forward as we pulled out. Had it happened on the day, rather than at a rehearsal, the results could have been disastrous. The bomb struck the VIP tent and spread stannic gas among the workers. Fortunately no-one was hurt, but as a result all dives on the actual day were directed away from the enclosures!

The commanding officer of 208 Sqn at this time was Sqn Ldr M. Moore OBE, a disciplinarian of the old school, and under his tutelage the squadron earned a reputation throughout Egypt for "spit and polish". Nevertheless, morale within the squadron was high, and our performance in the air, on parade and on the sports field showed that there was something more than superficial show about us. In that year, although we were one of the smallest units to compete, we won the Inter Unit Rugby Cup, the Command Athletic Trophy and the station Athletic Trophy. I was a member of both the athletic and rugby teams.

Sqn Ldr Moore was responsible for having our aircraft marked with the flying eye insignia. This consisted of an eye enclosed in a pair of wings and with



Above, *refuelling Atlases from an Imperial Airways refueller at Rutbah en route for Hinaidi, March 9, 1934.*



Right, *Atlas JR9971 at No 4 Landing Ground beside the Suez Road on June 6, 1932, following the accident described by the author. This rebuilt Atlas remained with 208 Squadron until June 1934.*

the caption "Vigilant" underneath. This earned the squadron another nickname, the "Flying Shuftis".

Unfortunately this did not find favour with authority at HQME, and we had to remove these artistic markings on the grounds that they upset the balance of the rudder on which they were painted. We were not entirely convinced by this explanation.

Mention of Mersa Matruh will produce a wide range of reactions among readers who have experienced it, depending on when they were there. In the early 1930s it was a jewel of a place, with dazzling white sands and the sea so clear that the bottom was visible several hundred yards from the shore. Our visits at this time were ostensibly to photograph the bay area so that Imperial Airways could assess its suitability as a flying-boat staging post.

In April 1933 Sqn Ldr Moore was posted to HQME and Sqn Ldr J. Whitworth-Jones became CO. He was quite a different sort of person from his predecessor, always planning different activities to keep us on our toes. From time to time one or two flights would go out into the desert to a place called Wadi Natrun, about 50 miles west of Cairo, and operate there for three or four days.

The detachment included a small convoy of vehicles to provide catering, servicing and communications. The experience gained in these excursions was to stand us in good stead in 1935.

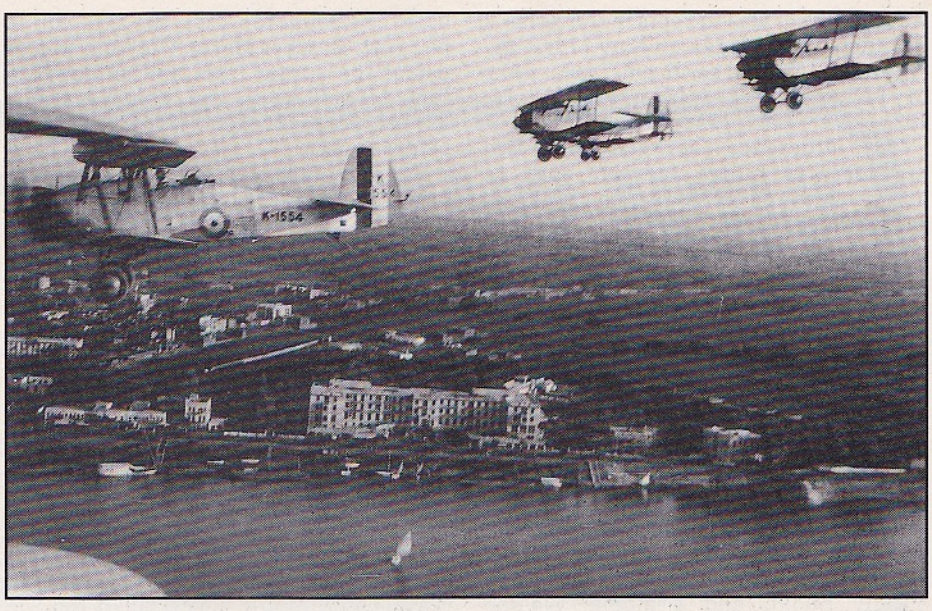
On one of these sorties three A Flight aircraft were caught in a sandstorm of such intensity that they had to make forced landings. Since they were unable to inform Heliopolis where the landings had occurred, a full-scale search was laid on early next morning. We found the party safe and well but bitterly cold. In fact their aircraft's wings were covered with frost and the crews had pulled their parachutes to keep themselves warm!

Landing in the open desert is quite a hazardous business at the best of times, because of areas of soft sand and clumps of camel thorn bushes. The latter may appear insignificant from 100ft, but to hit them at 60 m.p.h. is a different matter.

In Egypt at that time the Cairo City Police were having difficulty in controlling drug running, and we were given the task of taking mosaic photographs from 10,000ft of several of the larger towns. This enabled the police to plan detailed examination of suspected areas of drug activity.

In November of that year Sqn Ldr Whitworth-Jones led a formation of nine aircraft in a flight to Khartoum and back. I would have taken part but, owing to an unfortunate incident involving a member of 216 Sqn being shot and killed by some Arab "muggers" in which I became involved, after the shooting, I had to remain in Heliopolis to take part in the trial of the murderers.

In February 1934, during rehearsals for the annual air display, another incident occurred which could have had fatal consequences. We were diving in squadron formation when to our horror both outer rear wing struts on the CO's aircraft buckled in the centre. The formation broke up and we followed the damaged aeroplane back to base where it landed safely. The cause of the trouble was vibration set up by the CO's insignia panels, consisting of aluminium plates which were bolted on to the two damaged struts.



Atlases of 208 Squadron flying past the Winter Palace Hotel, Luxor on December 12, 1932. K1554 may be seen at left.

Early in March three aircraft of C Flight flew to Baghdad via Ismailia, Amman and Rutbah Wells. I found it a most impressive experience because although the area surrounding Heliopolis in all directions except the north was sandy desert, it was positively inviting compared with the awesome wilderness between Amman and Hinaidi. How the bedouin managed to traverse these tracts of waterless wasteland is amazing.

In June my career with the RAF nearly came to an abrupt end by my becoming involved with a propeller.

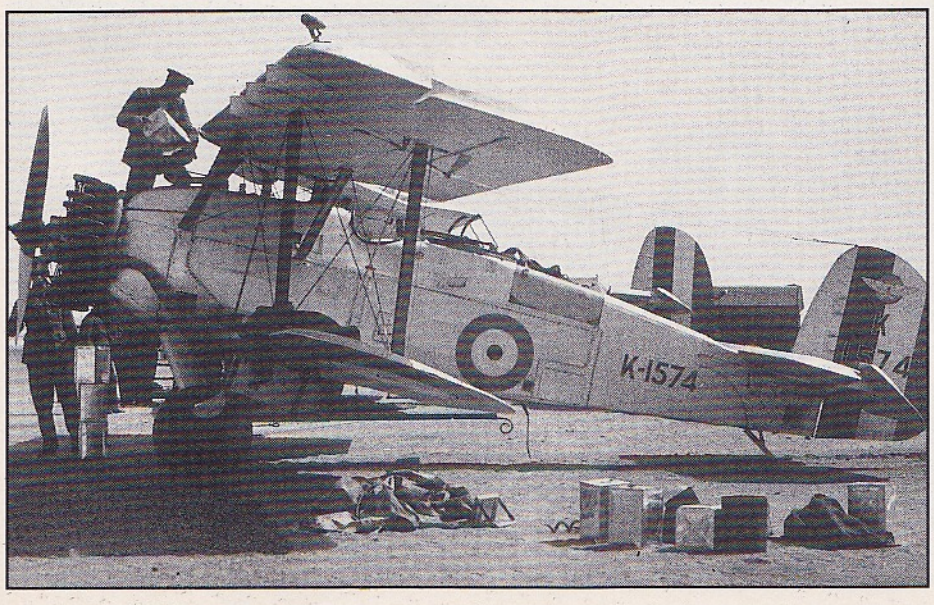
The squadron was on detachment to the air firing range at Ismailia, which was sited quite near the airship mooring mast intended for the ill-fated airship service to India.

Our flight commander had landed some 200yd from the dispersal area and stalled his engine. We were faced with either manhandling the aircraft or restarting the engine so that it could be taxied in; we chose the latter. I was turning the propeller to bring the engine on to compression when it fired and I was hit by the prop. It missed my head by a fraction of an inch and broke my arm about 3in down from the shoulder joint. This happened at midday and it was not till 1700hr that I was moved to the Army hospital at Moasker for X-rays and treatment. By this time my arm looked more like a thigh than an arm.

Egypt is a notoriously difficult place for bone growth and that, together with the difficulty of getting the two ends of the bone aligned, meant that I was not able to return to duty until the end of September.

In May 1935 the 25th anniversary of King George V's accession to the throne was marked by parades of troops in Cairo and formation flights by the squadron over Cairo and Alexandria. This month also saw the arrival of the first Hawker

Below, *Atlas K1574 of 208 Squadron snapped in 1933. It was from a batch of 96 Atlases delivered to the RAF between November 1930 and August 1931. Note the message hook just below the fuselage roundel.*



Audax, which was to replace the Atlas. I first flew in an Audax on May 17 but the Atlas continued in service for some time. My last flight in an Atlas was on July 26, 1935.

The difference between the two aircraft was quite striking, both in appearance and performance. Whereas the Atlas was hard put to achieve 13,000ft, the Audax reached 20,000ft without any fuss.

At about this time rumblings of political trouble between Italy and Ethiopia began to be noticed. An event which put everyone on high alert resulted from the crashing of an Italian military aircraft some 30 miles south of Heliopolis. The aircraft had taken off from the civilian airfield at Almaza, some three miles south of Heliopolis, intending to fly non-stop to Eritrea. It was a misty morning and the aeroplane must have been very much overloaded by fuel to allow it to overfly Sudan and Ethiopia. No-one knows what actually happened, because no signals were exchanged with Almaza or any of the other stations on the route. By late afternoon it was assumed that it had forced-landed and we were detailed to carry out an air search. Shortly before dusk the burnt-out wreckage was found 30 miles south of Almaza. Amid the wreckage were found documents and a large quantity of gold coin, giving clear evidence of the Italian intentions to create trouble in Ethiopia.

As a result, in October 1935 C Flight was detached to Mersa Matruh with full supporting ground staff and equipment to provide early warning of any hostile activity along the Egyptian/Libyan border.

We soon became established in tents and, using our engine-driven generator in the workshop lorry, we had electric light in the bell tents and in the marquee which served as a mess hall and canteen. For the first few weeks life was most pleasant, the weather ideal and the sea very inviting.

Early in November we were reinforced by No 33 Squadron from the UK, equipped with Hawker Harts. Our role was to patrol the border from Sollum down to Fort Madellena in the morning and a quick survey of the Sollum area just before sunset.

On one of these sorties we were surprised to find ourselves in company with two Fiat CR.28 aircraft. They kept to their side of the border and kept station with us both on the outward and inward flight. They landed at Fort Capuccio, the Italian airfield on the Libyan side, and we landed at Sollum to refuel.

Had the Italians had any hostile intent, we would have been at some disadvantage — our only "offensive" weapon was a Very pistol.

Refuelling away from base involved manhandling 4gal tins of petrol and pouring the contents through a chamois leather filter and funnel into the tank. The 4gal cans were packed in wooden crates containing 4 × 4gal and it was the exception rather than the rule to find all four tins intact when the crates were opened.

As a by-product of the fuel containers we were able to provide ourselves with some very rudimentary beds. These articles of furniture were useful in keeping us clear of the creepy crawlies, which included scorpions, to be found on the tent floor. I learned from a TV programme a few years ago that the white ones, which we thought harmless and dealt with accordingly, were in fact the dangerous ones, while the black ones which we greatly feared were of little risk. No-one was stung so we did not find out our error!

Early in December our very pleasant environment was shattered by the arrival of sandstorms which occurred every two or three days for the remainder of the time I spent at Mersah. Life was most unpleasant while the storms raged, and sometimes they lasted all day. Visibility was comparable to an old-fashioned London pea-souper, and its effects on the food and living conditions was most depressing.

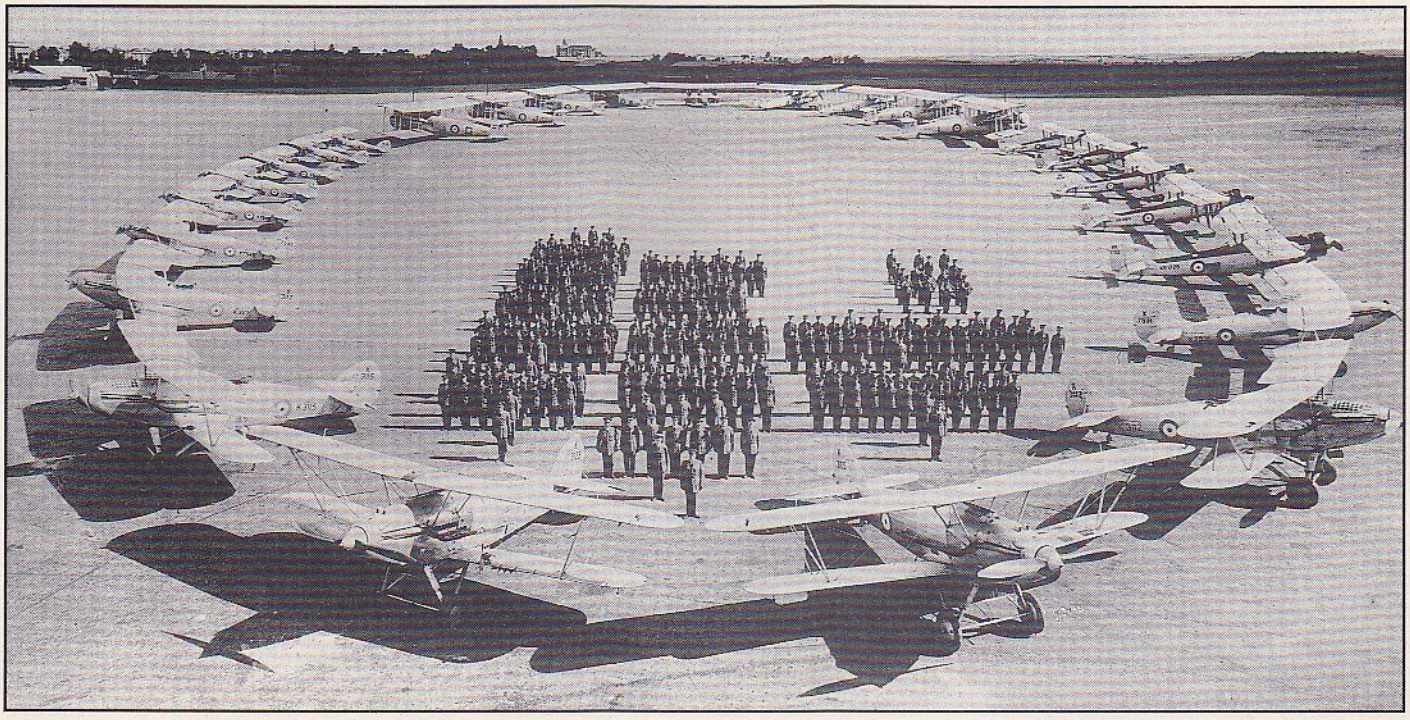
A more serious issue was the effect it had on the 33 Sqn aircraft. Unlike the Audax, which had long exhaust pipes, the Hart had short pipes open to the elements. As a result sand found its way into the cylinders with disastrous effects on the engines.

Early in 1936 the Italians commenced the construction of a pipeline from Bardia, just north-west of Sollum, to Fort Capuccio to enable fuel to be pumped directly to the airfield and so avoid the wasteful manhandling that I have described above.

To keep this construction under surveillance without encroaching on their territory we had to fly at 20,000ft along the coastline taking a photographic record of the work being carried out. We used a 36in focal length oblique camera mounted on the floor of the rear cockpit, with the lens protruding on the port side of the aircraft.

These flights were carried out without oxygen and with no ill-effects on the crews. I carried out three of these sorties over a period of 22 days. In fact my last flight with the squadron, which took place on February 26, was one of these high-altitude photo reconnaissances.

Early in March 1936 I was posted to Amman for ground station duties and in November of the same year I arrived back in the UK to commence one of the first Observer Training Courses at North Coates Fitties. I had spent exactly 4yr with 208 Sqn, mostly at Heliopolis, and it was without doubt the most interesting and enjoyable period of my service in the RAF. It marked the end of flying with one's head in the slipstream. Within 18 months of leaving 208 I was flying in Battles with their Perspex-covered cockpits. But that is another story.



An impressive line-up of 208 Squadron Audaxes, Fairey Gordons and Vickers Valentias at RAF Heliopolis in early 1939. Atlases had been phased out of service with 208 Squadron by the end of 1935, superseded by the Audax.