

VINTAGE WORDS OF WISDOM

Sky Roads of the World

By

Amy Johnson



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DEDICATION

This book is dedicated to all those who fell by the airwayside, for nothing is wasted, and every apparent failure is but a challenge to others

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PUBLISHER'S FOREWORD

In 1939, when this *Vintage Words of Wisdom* title was first published, only 36 years had elapsed since the Wright brothers had made the first flight in a powered aeroplane. Yet in these few years, as Amy Johnson explains, the world had become a smaller place, shrunk by the achievements of pioneer aviators who established air routes connecting cities and peoples across the globe.

Amy Johnson was one of these pioneers, achieving remarkable fame for her many record-breaking flights during her short life – she died aged just 37 piloting an aircraft on behalf of the Air Transport Auxiliary in 1941. In May 1930 she became the first woman to fly from Great Britain to Australia and even today her name is recognised although, for many, her achievements are perhaps less familiar.

Sky Roads of the World is her autobiography. It provides details of Amy's own flights but is also a rich source of information about the various men, and women, who throughout the 1920s and '30s risked their lives to extend the possibilities of aviation and achieve fame and glory setting records for speed and distance by air. She captures the thrill and anxiety faced by these pilots as they flew, often alone, with few instruments and no ground support. The tales are enhanced by her personal experience and she provides much background colour with her insights into the places and people encountered around the world.

The First World War provided a massive impetus to the development of aviation so that aircraft were soon achieving speeds, altitudes and distances unthinkable only a few years before. When the Royal Flying Corps flew to France in August 1914 crossing the Channel was still regarded as a major challenge and for most of those military pilots it was their first sea crossing. The flight from Dover to Amiens took around two hours. By contrast, within 20 years, Scott and Campbell-Black had flown from England to Australia in 71 hours, while participating in the 1934 England-Australia Race in which Amy Johnson and her husband Jim Mollison were competitors.

Amy Johnson made numerous long-distance flights but it was her 1930 journey to Australia that captured the public's imagination and brought her instant fame. The route led from London across Europe via Vienna to Istanbul. Then on to Iran, skirting the Persian Gulf, India, Rangoon, Malaysia and Indonesia. She arrived in Darwin, Australia, 19½ days after leaving Croydon – quite an achievement for a comparatively inexperienced 27 year-old flier.

In 1933 she flew across the Atlantic east to west and in 1936 she regained her record time for the England-South Africa route she had first established in 1932. On this flight she travelled from Cape Town, up the east side of Africa and across Europe to London. She explored the two main routes to South Africa – east and west – but was definitely in favour of the former that took in the sights of the Nile, the Pyramids and the great plains of Kenya and Tanzania.

As well as the solo journeys she describes in this book, she had a job, briefly, as an airline pilot flying passengers daily between London and Paris for Hillman Airways, and a one-off role as co-pilot for TWA in the USA flying across the North American continent.

Amy and her fellow women pilots also challenged the expectation of the time that aeroplanes and flying were a man's world. For example, in this book Amy Johnson writes of finding a

refreshing attitude in the USA where, 'I was in the land of opportunities, a country where a woman is given a job according to her qualifications and not her sex'. She also highlights the prejudice she often encountered throughout her career despite her success and achievements.

For anyone interested in the growth of civilian aviation between the two World Wars this book provides much detail on emerging routes, airlines, aircraft and the numerous individuals responsible for their development. Amy Johnson flew to and across many countries and writes of aviation in all continents in a manner that evokes much period charm. However, the reader should realise that some of her comments and observations reflect commonly accepted modes of speech and attitudes of the time so we have left these in the text even though they may conflict with modern sensibilities.

Amy Johnson is worthy of her place among British heroes and this delightful book will introduce her to new readers who will gain a better understanding of Amy, the woman and pilot, and also of an early twentieth-century world experiencing considerable social and technological change.

A BRIEF BIOGRAPHY OF AMY JOHNSON

(1 July 1903 – 5 January 1941)

Amy Johnson was born in Hull on 1 July 1903. She was awarded a BA in Economics from the University of Sheffield and in 1929 received her pilot's licence after training at the London Aeroplane Club. She trained also as an aeronautical Ground Engineer and was the first woman to receive this qualification.

With little experience and only 75 hours flying time she determined to break the existing record for a flight from England to Australia. Her father and Lord Wakefield were persuaded to purchase her first aeroplane, a de Havilland Gipsy Moth, which she named *Jason* after the brand name of her father's fish merchant business.

She left Croydon on 5 May 1930 and landed at Darwin in Australia 19½ days later, becoming the first woman to fly solo from England to Australia. She did not beat the record but her achievement was recognised around the world and she gained instant fame. She was awarded a CBE and the *Daily Mail* presented her with a prize of £10,000 in recognition of what she had achieved.

The following year she married Jim Mollison, a fellow pilot and record-breaker, and in 1932 Amy Johnson established a new record time for a flight from London to Cape Town reducing the previous record, held by her husband, by some 11 hours.

In 1934 the MacRobertson Air Race took place to commemorate the centenary of the founding of the city of Melbourne. Competitors would fly from Mildenhall in Suffolk to Melbourne. The Mollisons entered with one of the purpose-built de Havilland DH88 Comets, which they named *Black Magic*. They got as far as India before withdrawing after they encountered fuel problems. A similar Comet, called *Grosvenor House*, won the race outright in a time of 71 hours.

Amy Johnson's final record-breaking flight was in 1936 when she flew from South Africa to England in a Percival Gull and regained her earlier record.

She and Jim Mollison divorced in 1938 and, upon the outbreak of war, she joined the Air Transport Auxiliary to ferry aircraft between airfields in the UK. Her duties were mainly flying new aircraft from the factory to their operational RAF base.

In January 1941 she was flying an Airspeed Oxford from Blackpool to Kidlington when, off course in bad weather, she crashed into the Thames estuary. It is thought that she bailed out but her body was never recovered and the precise circumstances of her death have remained a mystery.

Throughout her life Amy Johnson was a keen advocate of women's rights and took opportunities to demonstrate that women were as capable as men in what many considered masculine activities. This was exemplified by her career and her record-breaking achievements.



Amy Johnson and Jim Mollison in 1932

VINTAGE WORDS OF WISDOM

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CHAPTER I

THE DAWN OF THE AIR AGE

It is generally admitted as an axiom that civilisation develops in proportion as transport facilities improve. Countries which today still use donkey transport occupy the same status in the world that we ourselves occupied over a thousand years ago. Fast transport means facilities for trading, for travelling and getting to know our neighbours, for the interchange of ideas and customs, for the exchange of goods, raw materials, and foodstuffs. In this hurrying modern world it is very evident that the slow-thinking, slow-acting countries will be left behind in the race for power and precedence.

We are living today in the Air Age, and ours is one of the leading nations in our present civilisation because we have realised – slowly, but none the less surely – that to neglect this new, swift, vital means of transport would be the first quick step to our downfall.

For centuries man has felt an urge to fly, without quite knowing why. Certain it is that he cannot have visualised flying as a means of commercial transport, carrying loads of passengers and goods at incredible speeds over all the wide earth. It is far more likely that he merely envied the birds their freedom and wanted to be able, like them, to shake off the fetters of gravity and soar far afield, adventuring into space.

The earliest attempts to fly were all based on efforts to copy the movements of birds. Flapping wings, and even feathers, played their part in the very earliest contraptions, but never was man able to fly like a bird, and his struggles led only to failure and death.

Balloons, of course, flew more than a century ago, but the principle was simple, and the mere act of rising into the air with a hot-air balloon was no extraordinary achievement. The harder part, indeed, was to come down again! Nor could balloons, however successful at going up and coming down, ever be of any commercial use, drifted hither and thither as they were at the mercy of the elements.

What was wanted was a machine that would take off by its own power within a reasonable distance, fly straight to a predetermined destination, and glide down to land safely, also in a reasonable distance.

At the end of the nineteenth and the beginning of the twentieth century, many active brains were puzzling over the problems of flight. A German, Otto Lilienthal, made a glider which flew through the air and glided down to land, but, without an engine, it was powerless to take itself off or to stay up. He then built an engine and fitted it into his glider, but he had tried the Fates too far, and they mercilessly sent him crashing to his death on his first trial flight.

About the same time were a few enthusiastic Englishmen working on similar lines, and two or three Americans. Each had his own ideas, and it was a curious coincidence that experiments reached approximately the same degree of success in more than one country almost simultaneously, although everyone was working independently. There is, of course, only one theory of flight, and the laws of aero-dynamics must follow their marked-out path.

One of these inventors, however, was bound actually to fly before the rest, and it was to the

Wright Brothers, working secretly in a remote part of America, that the honour finally fell. They will go down in history as the men who first flew in a heavier-than-air machine. It is significant that these two, Wilbur and Orville, are always referred to as the Wright Brothers, and are given equal credit for their great achievement. They worked together in close harmony, and one did as much as the other to attain success. Actually it was Wilbur who, on a bitterly cold day, 17th December 1903, *really and truly flew*. His flight lasted only twelve seconds, and was followed by a slightly longer one by Orville. Taking it in turns, they made two more flights, the fourth one lasting 59 seconds, covering a distance of 852 feet over the ground against a twenty-mile-an-hour wind, their speed a bare 36 m.p.h. After the fourth flight, a gust of wind blew the plane over, and it had to be dismantled and taken home.

Improving on their original design, they continued their experiments until, two years later, they were able to cover a distance of $24\frac{1}{4}$ miles.

Meanwhile, the news that the Wrights had flown had filtered through to other countries, and was barely believed. Their experiments had been carried out mostly at Kitty Hawk, a place far from reporters and crowds: It was not so much secrecy that they desired as to be left in peace, but this made it difficult for them to prove their claim that they were the first men in the world to fly. Long and painful was the litigation that necessarily followed their efforts to prove it and to patent their designs. America, their own country, refused to recognise their claim, and it was Great Britain that finally came forward to give them their due.

Eventually, Orville Wright agreed to sell his patents to the British Government for the nominal sum of £15,000. They also bought the original plane, and it was given an honoured place in the South Kensington Science Museum, where it still is today. Meantime, Wilbur Wright had died of typhoid in 1912, worn out with the anxiety and distress the litigation had caused him.

It seems incredible that in the short space of thirty-five years the aeroplane has made such progress that speeds have gone up from 35 to nearly 500 m.p.h., distances covered non-stop from a few hundred yards to over 7,000 miles, and heights from a few feet to the stratosphere, more than ten miles high. Most civilised countries are now a network of airlines, practically every town has its airport, and there are ever fewer people who still will own that they dare not fly.

Orville Wright I met in the States some four years ago. I gazed with awe and respect at this quiet, retiring, grey-haired man who was in truth the first conqueror of the air.

Rivalling him in modesty is AV Roe, one of the first of the English contingent to fly. A ship's engineer by trade, he began his experiments with model aircraft, basing his ideas about form and the theory of flight on seagulls, which he used to watch by the hour soaring in the wake of his ship. At last he succeeded in making a model which flew tolerably well, so he set to work to convert it into a man-size machine. Working at Brooklands, with no finance behind him, he encountered opposition, ridicule, and difficulties which would have deterred a less determined man. Taking no notice, he persevered. When the plane was built, he could not find an engine suitable for it, so made his first flying experiments with the machine as a glider, being towed into the air by a car. He then found a French Antoinette engine of 24 h.p. that seemed to be what he wanted. When he had fitted it into his plane, his machine flew. Only a few feet, but it was off the ground, and really airborne.

This was in June 1908, and at the same time Colonel Moore-Brabazon was also making his first

flight. For many years it was an accepted fact that AV Roe was actually the first man to fly in England, but a Commission was set up recently to examine the rival claims of the two men, and it was decided that as Roe's flights were not officially observed, the honour must be accorded to Colonel Moore-Brabazon.

In France, Santos Dumont was the first to fly, his flight preceding AV Roe's by seven months. Although we cannot claim to have led the world so far as the actual practical flying was concerned, yet we should be proud of our countryman, Sir George Cayley, who worked out the science of flight a whole century before the rest of the world.

Amongst the famous names of the early pioneer days was Claude Grahame-White. With cap pulled down on his head and turned back to front, he was a well-known figure in those days of experiment and broken machines. He is one of the few who were lucky enough to make a financial success out of the beginnings of aviation. The owner of land which is now Hendon Aerodrome, he sold it to the Government just before the War for a reputed fortune.

A short time ago I saw him at Hanworth air-park, where several pilots had been invited to try out a tiny ultra-light plane with a motor-cycle engine. Those of us who were used to hundreds of horse-power to drag us through the air could not get used to the fragile thing, and we did not particularly enjoy our experience. Grahame-White, however, pulling on his cap back to front, stepped into the cockpit, took off, and flew the plane perfectly, although it was the first time he had flown since the War. His remark was: 'Why, flying hasn't changed any since my day!' Hasn't it?

No sooner had the first step been taken of actually getting machines to fly than, naturally, their inventors quickly became more ambitious and tried to fly farther afield. Also, once the miracle of flight was believed and accepted, more people came forward with the necessary finance, and newspapers began to offer big prizes for the best flights. Aviation Meetings were arranged, the first in France in 1909, when Farman (one of the best-known French pioneers) flew for 120 miles non-stop, and Blériot attained a speed of 50 m.p.h. in a flight round the course.

It was Louis Blériot who won the great honour of being the first man to cross the Channel in a heavier-than-air machine. In 1909 the *Daily Mail* offered a prize of £1,000 for the first man to fly the Channel. What an incentive to those for the most part penniless inventors, quite apart from the glory! Two Frenchmen, Hubert Latham and Louis Blériot, were first in the field and were rivals for the honour. Latham was flying a little Antoinette monoplane of Voisin, which he could manage to keep in the air for an hour - enough almost to cross the Channel and back - whilst Blériot worked hard on his own design of a monoplane smaller than the Antoinette and using less power. Fitted into it was only a tiny 22 h. p. Anzani engine.

On 19th July 1909, Latham took off from Calais, but a few miles out his engine spluttered and failed, and he had to come down in the Channel, where he was rescued by a French torpedo-boat. Blériot seized his chance, and rushed to get his plane ready. At dawn on 25th July he started off, and thirty-five minutes later had landed on the English coast, with one solitary photographer to welcome him.

The next big prize was for a London to Manchester flight, for which in 1910 the *Daily Mail* offered £10,000 to the first man to complete the distance within 24 hours with not more than two stops. In these days it is difficult to imagine that such a flight was regarded as almost impossible, and the prize-money, tempting though it was, as pretty safe. Even the enthusiastic

inventors themselves knew that winning would not be easy.

The two principal rivals in this race for £10,000 were Claude Grahame-White, flying a Farman plane he had bought in France, and Louis Paulhan, a Frenchman. Grahame-White had had the field to himself to begin with, and had set off one day early in April. After covering 117 miles he came down for petrol, and his machine was blown over on the ground by a sudden gust of wind, ruining his hopes for the time being. Repairs were feverishly rushed through, but in the meantime Paulhan had brought his machine across from France and was hurrying to start.

On 27th April at five o'clock in the evening, he set off. As soon as he learned his rival had gone, Grahame-White hastened to start his plane, and followed Paulhan into the air about an hour later. Unfortunately, he had lost a valuable hour of daylight and was forced to land behind Paulhan. However, so keen was he to catch up on the Frenchman that he was in the air again at 2.50 in the morning, and was only twenty miles behind when Paulhan took off at 4 o'clock from Lichfield, where he had landed the night before.

Grahame-White was unable to make up on Paulhan, who went on to win a fortune, Grahame-White sportingly giving him all the credit and praise he deserved.

The impossible was accomplished, and Lord Northcliffe racked his brains for a new impossible. £10,000 was then offered for the first flight across the Atlantic. As well say to the Moon! How fantastic such a flight seemed in those days, and yet this far-seeing man knew that some day his prize must be won. But it was not until after the War that his promise was to be redeemed.

The War came at a time when the aeroplane was barely being taken seriously as a means of transport, far less as a powerful weapon of attack, but it did not take military technicians long to realise what possibilities the aeroplane held as an instrument of war. On the advice of experts, the Governments of all countries poured money into the aeroplane industry, and, for once, the days of stinting and contriving were over. There is no doubt that the Great War, terrible as it was for most things, was the best stimulus aviation could have had.

The War commenced only eleven years after an aeroplane flew at all, and only four years after the historic flight from London to Manchester, which had been a world sensation. Yet, within a couple of years of the outbreak of war, planes were carrying four and five men and a load of bombs at speeds up to 100 m.p.h., whilst at the end of the War in 1918, the Air Force was playing a part as important as that of any of the other fighting Services.

Engines and planes had become much more efficient and reliable and pilots more skilful, though many of the best were lost. Names like McCudden, Bishop, Ball, Mannock, René Fonck, Guynemer, and Rickenbacker will remain ever green in our memories, though almost all paid the price of their bravery.

After the War ended, there began an era in aviation which became packed with romance, adventure, and glamour - the era of long-distance record flying. Famous names and large fortunes were made overnight; newspapers splashed vivid headlines and ran startling stories of daring and endurance; aeroplanes and engines became ever more efficient and reliable as exorbitant demands were made on them. The period must be one of the most exciting and fascinating of any this usually dull old world has produced. In twenty years we almost reached

the stage where we could really believe in flights to the Moon, the only deterrent being that it would be pretty cold and cheerless when we got there.

I had my fun in this exciting era, and, although one has to be glad that the days of solid, regular commercial transport have succeeded the thrilling pioneer days, I cannot help feeling a little sadness that those days are over. To me now an aeroplane is just another means of transport, and a rather monotonous one at that.

From the moment when Blériot and Latham vied with each other to be the first to cross water in an aeroplane, the spirit of friendly rivalry and competition was born. After the War the time was ripe for it to be indulged to the full in long distance flights, altitude and speed records. There were hundreds of war machines, reliable and capable of carrying heavy loads, even if they were clumsy and ugly, which were admirable for long flights, and the pilots to man them had experience to add to their efficiency.

Moreover, it was suddenly remembered that there was a prize to be won for the first flight across the Atlantic. £10,000 and fame were awaiting the man who had the courage to take the risk. Planes were in existence which could just make the crossing, with luck and following winds, and petrol in place of bombs.

John Alcock and Arthur Whitten Brown took the chance in 1919, flying a War-time Vickers Vimy with two 350 h.p. Rolls-Royce Eagle engines. Others before them had tried and failed. So tempting a prize was bound to provoke intense rivalry and the taking of chances.

Alcock and Brown flew from Newfoundland to Ireland on 13th June 1919. The coast-to-coast crossing took them 15 hours 57 minutes. Alcock piloted and Brown navigated, so accurately that they struck the Irish coast-line only three miles off their course. Their average speed was 122½ m.p.h.

What bare statements to describe such a stupendous feat! It was almost too great to be really appreciated, and War days had made everyone used to the unexpected. Lacking as it was, too, in spectacular adventures, there was little story beyond the astounding fact that the Atlantic had been flown, and a war-worn people are hard to rouse to enthusiasm. The fliers were knighted by the King and received their reward of £10,000, but today how few people, except historians and pilots, remember who first flew the Atlantic.

There then broke out a veritable epidemic of long-distance flying. War pilots without jobs found this was a way in which they could use their knowledge and experience to a most profitable end, if successful, and if unsuccessful - well, it was only one more risk added to the countless ones they had been taking every day for four years.

Newspapers offered large sums for the stories of flights; the more adventures, the higher the profit. And in those days there was plenty of opportunity for adventure. Engines were always failing, pilots constantly losing their way because of inferior maps and lack of weather reports and adequate equipment, and courses taken were as often as not over barren, wild country. Newspapers found grand material for front-page stories. The lone fight of human endurance against Nature's overwhelming odds was the favourite. Setting off unknown to face the unknown, against parental opposition, with no money, friends, or influence, ran it a close second. Clichés like 'blazing trails,' flying over 'shark-infested seas,' 'battling with monsoons,' and 'forced landings amongst savage tribes' became familiar diet for breakfast.

Unknown names became household words, whilst others, those of the failures, were forgotten utterly except by kith and kin. Oceans were crossed, impenetrable jungles safely passed, and remote mountain ranges drawn intimately near. Flights to distant parts of the Empire, once proved possible, quickly became popular. Sir Alan Cobham pioneered the route to Australia and opened up Africa, until then the 'Dark Continent.' Kingsford-Smith braved the unknown dangers of the Pacific; Bert Hinkler started the race for records with his flight to Australia in 15½ days, proving not only that it was possible to get there by air, but that this could be the quickest way of doing so.

Women came into the picture when it was found that flying needed not so much physical strength as endurance, patience, and resource, all qualities possessed by women in great measure ever since the world began. Names like Lady Heath, Lady Bailey, the Duchess of Bedford, and Amelia Earhart became as familiar as those of Roe and Grahame-White.

At home the Schneider Trophy Race was held annually, until Great Britain won it outright in 1931, and speeds soared under its stimulus. Altitude records were won and lost and won again, until British engines achieved their reputation of being second to none in the world.

The Air Circus, largely through Sir Alan Cobham, came into being, and machines toured the country, taking hundreds of thousands of people up for their first ride and thrilling them with incredible manoeuvres.

Today there are still one or two sporadic record flights, an occasional plane may be seen taking people up for joy-rides, but there is no doubt that this era is over. Huge airliners, with their load of passengers and mail, are thronging the aerial roads paved by lonely pioneers.

Regular services go thrice weekly to Australia, using comfortable four-engined flying-boats, whilst your letters can go there in nine days at the cost of only 1½d. per half-ounce. Flying-boats take you three times a week to Africa and eight times a week to Egypt and India. You can fly from end to end of Europe, and will soon be able to cross every ocean.

It has become an axiom that the record flight of yesterday is the ordinary airline performance of today, but, although we have gone far, we have yet farther to go to realise this truth to the full. The record to Australia, for example, stands at 71 hrs. 18 secs. and belongs to Charles Scott and Tom Campbell Black, who established it in 1934. It is not beaten yet, although young Alex Henshaw, the latest recruit to long distance record-breaking, has his eye on it. Airline times today are still far from equalling this record time of yesterday, and Flying Officer Clouston's record time of three hours under the eleven days to New Zealand and back, and Alex Henshaw's to Cape Town of 39 hrs. 23 mins. for the outward journey, 39 hrs. 36 mins. for the homeward flight, are likely to stay as record times for some long while yet.

Today is the era of commercial transport, when the hard work of the pioneers is being reaped in solid gain. Too rarely, unfortunately, does the man who has sown the seed reap it, but perhaps all those who were in at the start will have their reward in the remembrance of the adventures they have had, and be able to gaze, with some share of pride, at aviation as they have helped to make it.

So important is the aeroplane today in commerce and, alas in war, that it is often forgotten that there can be any fun or sport in flying.