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A PETROL TANK ON FIRE AT HULL

Airdays

By
John F. Leeming



George G. Harrap and Co. Ltd.

London : Bombay : Sydney

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Foreword

One of my nicest enemies once said that the most detestable thing about me was a trick of keeping letters and producing them years afterwards. He suggested that as the possessor of a diabolically efficient filing system I was able to prove the most honest people to be liars by showing letters they had once written but long since had forgotten all about.

I mention this comment here in case there may be readers who doubt the accuracy of my memory regarding some of the incidents I narrate. Such unpleasant people, I regret to say, may exist, and I should like to assure them that in the compiling of this book my filing cabinet was used regularly: I still have those letters. And in most cases where dialogue is used the speech is an actual quota-

tion from some letter or from notes.

I am indebted to Allied Newspapers, Ltd., The Daily Mail, The Manchester Evening News, and The Manchester Guardian for permission to use the photographs from which the illustrations are reproduced.

J. F. L.

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THE BACKGROUND

In the years that followed immediately upon the War Britain's interest in aviation declined and almost died. It was as if most people, weary of danger and uncertainty, wanted to forget everything that had played a part in the slaughter. Aeroplanes, like machine-guns, tanks, and the rest of the paraphernalia, became things that no longer concerned one personally. The public, surfeited with the feverish activity of flying during the War, was indifferent to what airmen might try to accomplish in the days of peace.

Flights far surpassing those which in later years were to arouse the wildest enthusiasm passed almost unnoticed. Think of the reception accorded to Alcock and Whitten Brown when they flew across the Atlantic in 1919, and compare it with the hysterical demonstrations when others achieved the same thing a few years later.

The aircraft trade itself was disorganized and in a state of upheaval. Firms which had been forced to extend to meet the unnatural demands of War-time suddenly found themselves with enormous factories and no one to absorb their output. The Government, their only customer, cut orders by telegram and cancelled contracts by letter the next morning. Some of the factories tried desperately to change their nature and to turn out motorcar bodies, furniture, billiard-tables, or any other substitute they could possibly produce. But such changes could not be made quickly. To obtain the new machinery

necessary was then almost impossible, and even where this was done salesmen found it difficult to persuade buyers that the new products were superior to those made at lower prices by firms long established in the trade. Meanwhile the aircraft manufacturer endeavoured to hold up a huge factory in which rates, overheads, and swollen War-time ideas gradually but surely absorbed what credit balance he had accumulated.

One by one the factories closed down. Who cared? Very few aeroplanes would be wanted now; just a few commercial machines—if flying did turn out to be really safe and worth while. World peace was going to make fighting-machines almost unnecessary. Aircraft people had had a profitable time during the War; it was nobody's business what happened to them now.

No one was interested, and silently, one by one, air-craft manufacturers ceased to be. A few managed to adapt themselves, and, eking out their trade with an occasional Government order for 'reconditioning' and a few orders from abroad for new machines, did continue to hang on. It was a process of 'weeding out.'

For nearly three years aviation counted for little in the public mind. R.A.F. aerodromes closed down, and had it not been for jealousy between the two Services—each unwilling to see the other absorb it—the R.A.F. might have been merged into the Navy or the Army.

Then very gradually a change began to come about. Politicians on their numerous trips to conferences abroad could not help noticing that foreign air forces had not lapsed; in many cases they even seemed to have expanded; while Germany, who was forbidden by the Versailles Treaty to have any type of fighting aircraft,

THE BACKGROUND

had in consequence turned her entire attention to the development of civil aviation, and was making enormous progress in this direction. Surrounded by countries who were ever building more formidable air fleets, Germany naturally kept her aircraft factories alive—on civil aviation. Had other countries allowed their fleets to decline as Great Britain had allowed hers, no doubt Germany would never have developed as she did; but three years from the War's ending we had not only clearly lost our position as the greatest air fighting Power, but had been left far behind in civil air transport. The position became so obvious that it was difficult to ignore it, and reluctantly our politicians began to take an interest—a very mild, a sort of non-committal, goodwill, don't-expect-me-to-help kind of interest—in British aviation.

Manufacturers who had become accustomed to neglect found themselves receiving inquiries and even a little encouragement. The Press began to take an interest in aviation; aircraft and their pilots became 'news.' Long-distance flights attracted public attention, and those who carried them out discovered that such efforts could be made profitable. Slowly—oh, so slowly—people's attitude changed; no longer was flying an eccentric experiment or a rash feat of daring; it was something that a normal person might do. 'Motor-gliders' and 'light' aeroplanes seemed to offer a way into the air; the man—and the woman—in the street began to become 'air-minded.'

CHAPTER I

THE GLIDER

In 1922 I started to build a glider. Long before that, in the days when no one seriously expected an aeroplane to fly, I had built four others, but these—as was then customary—had all crashed after the briefest 'hops,' and my memory of motorless flight was not a reassuring one.

Of course, what I really wanted to do was to build a machine with an engine in it. But the more I puzzled over estimates the more convinced I became that if I was ever to get into the air again it would have to be a glider that would take me there. A power machine seemed far beyond my reach.

My enthusiasm was increased by accounts which appeared in the Press from time to time of the amazing feats achieved with gliders in Germany. One story, I remember, related to a Herr Hentzen, who, it was stated, had remained aloft for three hours and ten minutes. To me, accustomed as I was to the old glider records of two or three minutes, the thing seemed almost impossible; however, as this flight had been officially timed, and full names of the people and places concerned were given, it did look as if there might be some truth in the story.

I set to work, then, to design another glider.

Weeks passed while I drew numerous plans and calculated stresses and loadings. One of my biggest difficulties was that the glider must be easily and rapidly dismantled. I had no large workshop in which to build the ''plane'

inished units would be pushed for erection elsewhere—while the only place available for storing the glider was an ordinary wooden garage already occupied by a two-seater car.

Eventually I worked out details for a monoplane glider, a machine with a light wire-braced fuselage from which the wings and tail-plane would be easily detachable, the idea being that the fuselage could be hoisted with ropes and pulleys into the roof of the garage, while the two separate wings would be stored up flat against the walls. It seems almost needless to mention that the measurements of that garage seriously affected the size of the aircraft.

At this stage I decided to get in touch with an aircraft manufacturer. Most of the firms surviving had, I knew, vast quantities of scrap material and parts, and I felt that if one of these firms could be induced to let me wander over their scrap-heap I might find many things that would be serviceable for the glider.

As I look back the whole scheme seems fantastic: to try to build an aeroplane with the tools and storage space available was ridiculous, to attempt it on the sum of money I could then afford absurd, and to expect any manufacturer to allow me to . . .

In the end I telephoned A. V. Roe and Co., Ltd. Possibly they misunderstood my request; it was an awkward thing to explain on the telephone; but the conversation ended with an invitation from their sales manager to visit the works and talk things over.

In due course I presented myself at Newton Heath, and if they were disappointed when they learned the real

position they were kind enough not to show it. Mr John Lord, then sales manager, gave permission for me to have the run of the scrap-heap, and agreed to charge only nominal prices for the things I believed might be useful, while his assistant, a young man named Clement Wood, even offered to help me in the search.

Clement Wood's interest was, I believe, the reason why I received such kindly treatment. Hearing of the project first, he had brought it to the notice of Mr Lord, and it was only because of his assuming responsibility and sponsoring the proposal that it was ever considered at all.

Wood proved to be a tower of strength in those early days. He entered fully into the plans for the glider, suggested modifications, checked figures, found suitable parts, and generally became an active participator in the project. Several times he visited the cellar and helped with the construction, and then another member of Avro's staff, hearing of the work, came along with him.

This third member of the band was a certain Tom Prince, a foreman at the Newton Heath works. Not content with spending all his day-time hours working on aircraft, he volunteered to come at nights to show me how to proceed. Prince was a master at his job, and under his direction the construction progressed steadily—not quickly, for Prince went forward unhurried and unmoved by my impatience.

Two evenings a week and every Saturday afternoon we worked. First we would push the car out of the garage and put up the car hood in case it rained; then the fuselage was lowered from the roof and work proceeded. Ever so gradually the glider began to take shape.

I remember so clearly those long evenings in the tiny wooden garage: Tom Prince showing me how to make the best use of tools, explaining why every fitting must be absolutely correct, examining a job and scrapping ruthlessly anything not exactly right. "A man's life may depend on the way you put in a bolt," he would murmur. "Nothing's 'good enough'; it's either quite right or it's wrong."

Before I worked with Tom Prince I fancied I understood how to do sound work, believed I was a reasonably capable mechanic. He changed all such ideas; he set a new standard in my mind, a degree of accuracy that I

have tried to live up to ever since.

Towards the end of the year *The Daily Mail* organized a competition for gliders at Ilford, and, although none of us could attend this, the published accounts aroused an enthusiasm that seriously impeded the work. As Tom Prince described it, "Nothing but talking and talking. No one doing any work at all."

All sorts of well-known people produced gliders at Ilford, among them Gordon England, Olley, Raynham, and Fokker, and it seemed to us that if pilots of this class were attempting to glide, our own efforts might not

be altogether wasted.

Finally, on the last day of the Ilford meeting, a Frenchman, Maneyrol, made a flight lasting three hours twenty minutes—a world's record—and the authenticity of the thing was beyond doubt. The flight had been carried out in England, observed and vouched for by responsible people. Amazing as it seemed, a glider could really remain in the air not for a few minutes but for hours. To cap everything, the newspapers related that a

Squadron-Leader Gray had also stayed up for more than an hour, and this in a home-made contraption that had cost little more than twenty shillings to build—a glider made out of a discarded Bristol Fighter fuselage and an old Fokker top plane.

Enthusiasm in the little garage reached fever-pitch. What others could do . . . Lacayo, a new recruit to our band, became quite ill with excitement, and had to retire home early.

All through the winter of 1922–23 we worked on that glider. The two wings were completed and covered; the tail-planes and rudder followed; the fuselage received its final adjustments; only the undercarriage and controls remained to be finished. We had left the undercarriage to the last because the wheels were an expensive item—the most expensive item in the whole machine, in fact; for scrap wheels and tyres had proved to be unobtainable, and it was necessary to purchase new ones at a price that staggered us. In after days when the L.P.W. suffered damage my first question was always, "What's happened to the wheels? Are they all right?" After that I asked if the pilot was hurt.

Of course, people began to hear of this "aeroplane being built in a garage," and out of curiosity—for aeroplanes were still a novelty in those days—acquaintances dropped in to see the work. Occasionally one of these would become interested and offer to help; sometimes he came again, bringing one or two of his own friends with him. In this way the little band of workers slowly increased, very gradually, one by one, until on a Wednesday evening there were often seven or eight enthusiasts congesting the tiny garage.

This overcrowding led to the formation of a club. Mark Lacayo, one of the keenest of the workers, pro-

posed the idea.

"I'm not much good at putting things up," he said, addressing me, "but what I mean is, we're all hoping to fly this thing, and when it comes to getting a field and a shed for it we ought to all club together; each pay our share, I mean. Of course, I know it's your glider—"

"It isn't," I interrupted. "It belongs to the three of

us-L.P.W., Leeming-Prince-Wood."

Lacayo considered the point for a few moments.

"Well, anyway," he went on, "we'll have to get a field soon to fly it in, and we all want to have a shot, so why not let us each pay our share of the field rent? If each of us contributed a few shillings it would do the trick."

That was how the club came into existence: a glider being built in a cellar, moved into a garage, and later on into a greenhouse, a few enthusiasts helping with the work of building, clubbing together to pay the rent of a field. Some years later Sir Sefton Brancker told me that it was hearing of our glider club that gave him the idea of the 'approved light-aeroplane clubs.' He reasoned that if people were so keen as to do all this work without support or encouragement, a little help from the Air Ministry might develop the idea into a really useful movement.

II

Things moved rapidly from the time Lacayo made his suggestion. There was an old greenhouse at the back of my garden. Into this greenhouse, after patching up the

roof and cutting another and wider doorway at one end, we took the L.P.W. for the finishing stages of its erection. Clement Wood, who had ever shown an ability for precise organization—" getting it down properly on paper" he called it—drew up a set of rules for the club. A meeting was held in the greenhouse, and the enthusiasts, now ten in number, elected themselves the first committee of the Lancashire Aero Club.

I remember the title caused us considerable argument. The name most favoured at first was "the Lancashire Flying Club," and it took all Tom Prince's eloquence to convince us that 'Flying' was usually applied to pigeon clubs, and was quite unsuitable for an organization such as ours. Again, the word 'Lancashire' seemed most inappropriate. Prince, Wood, Lacayo, and myself all lived in Cheshire; only one of the ten could claim the title of Lancashire man. But Manchester was in Lancashire, and it was to Manchester that we looked for our development.

While the glider was being built and the club, such as it was, struggled through the first months of existence tremendous excitement was caused by the first light-aeroplane trials at Lympne. As a result of the glider meeting in the previous year, the idea of a motor-glider had occurred to certain designers. They had seen a 'plane remain in the air for more than three hours, and knew that sustained flight was possible—as long as the glider patrolled the ridge of a hill where rising air currents kept it up. Now, if a glider were fitted with a tiny engine, they reasoned, an engine just sufficiently powerful to prolong its flight a little once it was in the air, then the glider would not be tied to one ridge of hills. It could cross to another rising current, gain height again,

and repeat the manœuvre. Long cross-country flights would be possible.

The Press took up the idea enthusiastically. Motor-gliders became news, and to the man in the street it must have seemed that the motor-cycle of the air was a reality. The wildest nonsense was written, and, as hardly anyone knew anything about the subject, the designers' hopes—then only at the drawing-office stage—were hailed as actual and proved facts. "Fly for petrol's cost," "Baby 'planes for all," shouted the headlines.

At last The Daily Mail put the thing to the test. It offered a prize of a thousand pounds for the motor-glider that gave the best performance under certain specified conditions, and called upon the Royal Aero Club to organize official trials where these tests might be carried out.

Aircraft manufacturers who had jibbed at risking their meagre capital on the motor-gliders when there was no chance of a recompense now began to view the matter in a more friendly light. The Air Ministry approved of the proposal, but made it clear that they had no money to disburse. After numerous conferences rules were drawn up and designers allowed to get to work, but, as the year was already well advanced and the trials were fixed for October—the latest date at which reasonable weather was considered probable—there was little time for construction, and no time at all for preliminary test or experiment. Many of the motor-gliders were actually finished on the aerodrome at Lympne, and nearly all of them attempted to take the air there for the first time. Unkind people even suggested that their makers dared not risk a trial flight before the competition in case they should have no machine to bring to Lympne.

As a social affair the first Lympne trials were a huge success. It was the first real gathering of the clans since the War, and almost every one connected with aviation—not a very large number in 1923—managed to attend on one pretext or another. Pilots who had not met since War days made the night hideous with the revelry of their reunions.

Again, the very nature of the 'planes at Lympne caused the old happy spirit to predominate. Almost all the machines were experimental; no one was sure if his machine would fly at all, or what would happen to him if he did get into the air. The untried motor-cycle engines refused to start and gave endless trouble; no one understood them. It was like the merry days of pre-War uncertainty back again, and the flying people enjoyed every minute.

While all this was going on one of the newspapers published a brief three-line paragraph stating that in Madrid a young Spaniard was experimenting with a novel machine that rose and descended vertically. The Spaniard's name was given as Juan de Cierva, and his machine described as "auto-giro."

In the December following the Lympne trials a comparatively unknown pilot, a Mr Alan Cobham, astonished the world by flying a motor-glider—a De Havilland 53—from Croydon to Brussels.

III

All these startling events had their repercussions in the little garage near Manchester, and in the early part of 1924 our glider was moved to a shed at Alexandra

Park Aerodrome. This was an old War-time 'drome with huge hangars and every possible convenience, and in these ideal surroundings the members put the last touches to the L.P.W.

The Government had ceased using Alexandra Park Aerodrome at the end of the War, and as the site was within a mile and a half of the Manchester Town Hall, and would have made one of the finest municipal airports in Europe, efforts were made to persuade the Corporation to acquire it. The Air Ministry had powers under which the ground might have been retained for a civil airport, but indecision and procrastination lost the opportunity, and in due course Alexandra Park hangars were pulled down, and the genuinely magnificent aerodrome ceased to be.

However, in 1924 these misfortunes had not yet come about, and in absolute luxury, with the sole use of a colossal hangar, for which we paid—or, rather, failed to pay—the Government one pound five shillings a month, the ten enthusiasts built work-benches, began work on two other gliders, and generally proceeded to enjoy themselves.

The need for more supporters very soon became apparent. The projects we had embarked upon cost money, and the regular monthly reminders of rent worried Clement Wood considerably. Wood had a nice orderly brain, and it disturbed him to know that, while only three of the members had paid their annual subscription of ten and six, the club was buying tools, timber, stationery, and brushes. Besides, he was undoubtedly the official secretary, and the way in which his remonstrances were greeted—"Never mind; if the worst comes



THE GLIDER IN THE GREENHOUSE



THE L.P.W. OUTSIDE THE HANGARS AT ALEXANDRA PARK AERODROME, MANCHESTER

to the worst old Clement can do six months "—did little to reassure him. Uncertain of the legal position, he protested—and hung on.

Largely through Wood's efforts a recruiting meeting was arranged in Manchester. The local newspapers helped by inserting notes in their journals giving the date, time, and place of the meeting. Various friends of mine on the Press persuaded their editors to allow them to put in chatty little 'pars' on the subject. Lacayo toiled laboriously, and produced several posters which he endeavoured to persuade shopkeepers to display on their premises. One member had a thousand handbills printed at his own expense, and these we all distributed by pushing them under front doors. Lacayo, I remember, took a hundred or so and, setting off with a pocket full of coppers and two boxes of drawing-pins, refused to explain his intentions. Later it came out—to the great distress of Wood—that Lacayo had visited many of the public lavatories in Manchester, and in each cubicle pinned up a handbill.

Lacayo's offended retort when Wood learned the truth will ever remain in my memory: "Well, damn it all, you said we must get more members, and you told me to let

people know about the rotten meeting!"

The evening of the great assembly arrived. It was perhaps unfortunate that Wood had arranged for this to be held in a religious institute in Deansgate, for, although the institute possessed a large hall with adequate accommodation, it lacked, I think, that cosy air so necessary for a friendly meeting of the kind we contemplated.

When the ten club members mounted the platform there were, perhaps, twelve other people in the great hall.

Of these, two left as soon as the proceedings started, finding that they had made a mistake and come to the wrong place; and of the others one slept soundly throughout the discussion. Efforts to arouse him failed com-

pletely.

Wood made an eloquent speech explaining in detail the constitution of the club. I followed with an optimistic and altogether untruthful picture of our present position and future programme. The rest of the members supported us in principle, but took the attitude summed up by Lacayo when he said, "Me stand up there on a platform and make speeches? Not damned likely!"

Fortunately, several of the audience gave their views, and a general discussion resulted. When the meeting closed the club was the stronger for six new members, and these were members who quickly proved themselves to be the right sort—really keen, as willing to take tyres off the L.P.W. and mend punctures as to get into the seat and try to fly the thing.

IV

The L.P.W. flew for the first time on May 24, 1924; Lacayo was the pilot. Our method of launching was the one usually adopted to-day. A car—familiarly known as *Bold Alfred*—towed the glider to the far side of the aerodrome, where it was turned and faced into wind. A long tow rope of perhaps two hundred feet was then fixed between the car and the glider, and the car driven as rapidly as possible into wind. In theory the glider then rose into the air after a short run, and flew

along until the other side of the aerodrome was reached, where it cast off the tow rope and glided in to land. What happened in reality was: (a) the tow rope usually broke, (b) the glider stood on its nose, (c) a wheel came off. The fun we had was immense, and on every evening when sufficient of us could get to the 'drome and the weather allowed the machine to be brought out of its hangar we tried to make that L.P.W. fly. One of our troubles at this time was the length of the grass, really hay—at least three feet long. The hay wrapped round the wheels of the car, and it became necessary to pause after each attempted flight while two of us crawled under the car and tugged away the entanglements.

But, as I said, the L.P.W. did eventually fly—a long, steady glide, about six feet above the ground, of perhaps a hundred yards or more. I was driving the car at the time, and, while I kept control of myself sufficiently to go on driving, the elation at first seeing my design airborne had serious effects.

After that many flights were made, some much longer, some a great deal higher. All through the summer we flew whenever the weather and other circumstances allowed. And the club membership increased—an odd one here, another there. They were happy, informal days. When Wood insisted we had a committee meeting, usually sitting round in a circle on the grass. With a real sense of the fitness of things, Wood used always to provide me, as chairman, with a soap-box to sit upon, but the irresponsibility of the members must have been a sore trial to that worthy secretary.

I remember one occasion when, after considerable

trouble, he had at last gathered the party together and proceeded to read the minutes of the last meeting. Suddenly there came an interruption from one of the committee men reclining on the grass.

"Here, I say, laddie," the committee man inter-

"Here, I say, laddie," the committee man intervened; "we've had all this before. I remember it distinctly. That bit about old John and the tyres.

Really, I do."

It was with the greatest difficulty that the resulting

argument was hushed.

"It's a rum thing," the discontented one murmured, as Wood started again to read the minutes, "a very rum thing. Going all over that rot again. I don't understand what he's playing at."

 \mathbf{v}

In September the L.P.W. suffered a bad crash, which necessitated its being almost entirely rebuilt. It happened this way.

Almost every time one of the newspapers mentioned the club a new member would join. Sometimes, after an especially good 'write up' or a photograph, we got as many as two new members, and in this way I became a firm and ardent believer in the power of the Press. Now, 'pars' in the newspapers were not always easy to obtain. Lord Northcliffe's remark that what people want you to put in is advertisement, and what they want you to leave out is news, was very true about our publicity. Anyway, in September I arranged with certain newspapers that photographers should be sent down to the 'drome, and promised them a photograph of the glider actually

in the air. The appointment was fixed for a Thursday afternoon at five o'clock. Not many of the members could get down at that time, but the photographers did not wish to leave it any later in case the light failed; and so, with one member to drive the car and no one to steady the tail, I took the pilot's seat in the L.P.W. The photographers were spread out a hundred yards or so ahead.

That Thursday there was half a gale blowing. The machine should really never have left the hangar; it was only with the greatest difficulty and the assistance of all the Pressmen that we got it out on to the aerodrome without having the 'plane blown right over. As I sat waiting for the tow rope to tighten the wings rocked over, touching the ground, and the whole machine swayed and bucked in the strong wind.

Almost as soon as the rope went taut the L.P.W. leaped into the air. She was stiff and slow on the controls, and for perhaps a minute I was too busy trying to straighten her and hold her level to bother about anything else. Then, in the first lull, I suddenly realized the horrible truth. She had soared up in the wind like a kite. Far below lay the hangars, like tiny boxes. The tow rope was almost vertical.

I looked down again. I don't think I have ever seemed so high above the ground in my whole life.

A moment or two later the driver of the car suddenly glanced round, saw no glider, glanced up; right above him soared the L.P.W. With a terrified yell he switched off the engine, jumped from the car, and ran madly from the spot where at any moment the thing might dive upon him. Once the car ceased to pull, once the

rope slackened, it was all over. The L.P.W. simply stalled.

I remember thinking as they pulled me out of the wreckage how like a spilled box of matches that glider looked. In the newspaper photographs the next morning it looked just like that.

CHAPTER II

THE TRIALS

By the middle of 1924 the Air Ministry, having considered the question from all angles, decided that light-aeroplane clubs would be a useful means of extending this 'air-mindedness' which the interfering newspapers talked so much about. Possibly this decision was expedited by the fact that a new Director of Civil Aviation had recently been appointed, a man who cut across all sacred traditions by urging a hurry-and-get-things-done policy. Anyway, the Treasury having been interviewed and all the necessary wires well and truly pulled in the correct and proper order—but perhaps a little more rapidly than was usual—a statement was issued that the Government would give awards amounting to two thousand pounds to light aeroplanes which performed best at trials to be held at Lympne in September.

Of course, the object of these awards was to encourage manufacturers to produce a low-powered aeroplane that would be suitable for use by the clubs. And it was generally understood that the firm whose machine behaved most satisfactorily at Lympne would get the club orders.

The Ministry called to the manufacturers to rally round, and, although hardly any time had been left to them between the date of the announcement and the date of the trials in which to design and build such aircraft, the manufacturers jumped to it.

The arrangement and control of the trials was, as in the previous year, put in the hands of the Royal Aero Club, who managed to induce several private individuals to offer, as an additional incentive, further prizes. Rules and regulations were drawn up. The stage was all set for another merry party, and once again most of the

performers prepared to enjoy themselves hugely.

Nearly every firm of note built machines for the Lympne competitions, and the pilots selected were the pick of Britain's best airmen. Avros put in a baby biplane, known as the Avro Avis, Bert Hinkler, their test pilot, of course, flying it. The Hawker Company produced two Hawker Cygnets, flown by Longton and Raynham. Broad flew the 53 for De Havillands. Short Brothers entered a Short Satellite, George Parnall a Parnall Pixi, William Beardmores a Wee Bee. There were also many others. Some of the youths at Cranwell, the R.A.F. training college, even banded together and built a baby 'plane of their own, designed and flown by "Nick" Comper. This amateur effort pleased every one by later on winning one of the prizes.

There were three Lympne meetings; they were unique. Nothing like them has ever happened since, nor is it possible to reproduce the same spirit that animated those strange gatherings. We tried to do so at Bournemouth a few years later, the meeting at which poor Longton was killed, but the idea failed badly.

In 1924 few of the manufacturers were wealthy; they were the old pioneers, a little less youthful and now owning factories which, if lucky, turned out a few dozen aeroplanes a year, but still the same irrepressible adventurers who had built box-kites under railway arches and

THE TRIALS

risked their lives in weird contraptions of bamboo and wire. From light aeroplanes they had certainly little to hope for in the way of financial recompense, and, as in 1923, what they revelled in was the return of the old experimental days, the glorious uncertainty back again for a brief space. The pilots were the best of their type—without jealousy of each other, eager to try to fly the new 'planes, keen as the designers to see if the things would get off the ground at all.

And so in due course almost every one connected with British aviation gathered at Lympne. Every one knew every one else, every one was full out to help, and the result was a lot of pleasant people getting in each other's

way.

There is something rather sad in looking back at these Lympne meetings, the last of the old pioneer days, the final flare-up before ambitious newcomers saw the opportunities aviation offered and began to stifle it with their unsentimental control—the swan song of the old crowd.

II

The 1924 meeting started with a bang. Many of us who had been the previous year brought friends with us, friends who, having heard tales of last year's gaiety, were expectant of a hectic time and came prepared for anything.

Commander Perrin, the secretary of the Royal Aero Club, arrived in a suit of plus-fours of a vivid orange colour that stood out on the aerodrome like a beacon. His explanation, that he thought they helped officials

to find him easily, was obviously a truthful description of the situation, and one well received by all.

A. V. Roe brought with him his latest invention, a two-wheeled cycle-car, in which the driver balanced precariously in a body of canvas and celluloid. A trick cyclist of no mean ability, he flashed about the place, causing Air Ministry officials, as he skimmed by them, to leap frantically into the air. Finally, when he began demonstrating the controllability of the cycle-car by doing figure eights among the spectators, the police intervened, and one of the brightest entertainments of the meeting was stopped.

Everything combined to make one feel that the old days were back again. As in the first year, the motorcycle engines with which most of the machines were fitted usually refused to start, and when they were at last coaxe'd into action often behaved in the most erratic manner. 'Boosted' to give more power than they were ever intended to give, pushed to higher 'revs.' than the designers had contemplated, tuned by mechanics who were unaccustomed to such power units, these little engines did surprisingly well to last as long as they did.

Forced landings were so common that hardly anyone worried about them at all. A pilot would disappear behind some tree-tops, his engine missing badly, and fail to rise into view again. Then, without fuss or surprise, some one would get a car out and drive off to tow the aeroplane back to the aerodrome by road. If an aeroplane managed to complete more than a few circuits of the course it was a subject for comment.

Every one was happy; no one worried—not even about the fact that these fragile little machines with tempera-

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mental engines were the types it was proposed to hand over to amateur clubs to teach the unskilled how to fly. In the hands of expert pilots the numerous forced landings were frequently made without damage, but imagination quails at the idea of how a pupil would have fared.

With so many, each day as long as daylight lasted, working to get the best out of uncertain machines, with everybody spending the long hours in the open, the clear sea breeze freshening in from the English Channel, friends meeting for the first time since War days, it was inevitable that the reunions in the evenings should be merry, that jokes should be played that to an outsider seemed childish. Perhaps that was the explanation. Aviation was still a child; in those days it could still romp and laugh.

The last night of the meeting was perhaps the most hectic of all, but even then the merrymaking remained harmless and injured nobody. Certain episodes of that evening deserve mention.

One well-known aircraft manufacturer arranged with the head waiter to have two large jellies delivered to his bedroom. These jellies he proceeded to cut up into thin slabs, after which, assisted by the works manager of the firm, he went to the top floor of the hotel.

Now, the lounge of this hotel had no immediate ceiling of its own—that is, the stairs rose from the hall, of which the lounge was an extension, continuing round past each separate floor, so that the lounge itself was in a kind of well. The landing of the top floor formed a balcony from which one looked down on to the guests below. The aircraft manufacturer stationed himself on

this balcony, and, after carefully selecting his victim and taking the most elaborate precautions to ensure accuracy of aim, he began, as he described it, "bombing" the seated guests. Several of the pieces of jelly reached their intended marks—one in particular, which fell into the trousers of an Air Ministry official and melted before it could be extracted, causing considerable confusion.

Then there was the case of the lost key and "the Unfortunate Mistake." That started when one of the party was giving an imitation of fishing. He had seated himself on the bank of the hotel drive, and, with a long bamboo plucked from a garden bed, was proceeding to give a silent show of a man fishing beside the bank of a stream. After the first few bursts of laughter—for the man was an excellent actor—some one hung a bedroom key on the end of the bamboo. A few minutes later the actor 'caught a fish,' and as he swung the stick swiftly upward the key flew off, away into a bed of bracken.

The key happened to belong to a girl in the party, the wife of a certain pilot, and, of course, all of us started to search for the lost key. It was a hopeless task—thick bracken, no moon to lighten the darkness, only the vaguest idea in which direction the key had flown.

"There's no hope," the fisherman said at last. "We'll

ask the hotel people to open the door."

Several suggestions were made and argued upon; then

the girl intervened.

"It's no good talking. The chambermaid will have gone off duty now, and you're not going to make me look foolish by asking the manager to let me in. One of you will have to climb in through the window and unlock the door from the inside."

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"Let's all have another look for that key," said the

fisherman promptly.

They did have another search, but it was, of course, fruitless. As a matter of fact, I had found the key in the first few moments of the hunt, and had slipped it unobserved into my pocket. Eventually it was decided that the fisherman, as loser of the key, must climb through the bedroom window.

Acting on advice, the girl pointed out the window of her room. We gave the fisherman a leg up, and he, in due course, after a brief struggle with the window, pushed it up and started to climb inside. Now here luck helped us. When I had advised the girl on the room she should point out I had, of course, no idea whose room it might be; the fact that we hit upon one occupied by an old lady who had nothing to do with the flying party was sheer good luck.

The fisherman half disappeared inside. Suddenly there was a shriek like a locomotive whistle. The elderly lady had awakened, and, seeing a man climbing into her bedroom, was announcing her fear of rape and burglars

in a series of terrified screams.

For nearly an hour after that, while the guests and the hotel staff discussed the strange incident, we were compelled to mingle with the questioners, and it must have been well after two o'clock before we began to make the fisherman realize that his task still lay before him. Only the strongest representations from the girl induced him at last to say he would have another try.

"I suppose you are absolutely certain this time?" he

questioned, as we prepared to hoist him up again.

"Of course I am! Hurry up!"

"Well, I'm going to be jolly careful. I'm shaking still."

Silently he climbed, manœuvred with the window, and at last disappeared slowly inside.

"Is it really your room?" I whispered.

The girl nodded.

"Sure?" I persisted.

"Certain. I'm tired. I want to go to bed."

For a few moments there was silence; we saw the glimmer of a match up in the room, then the electric light flood on for an instant. Two seconds later the fisherman was with us once again.

"Oh, b—blazes!" he stuttered. "There was some one in the bed! I'm through! I tell you I saw them all lumped up under the bedclothes!"

Nothing we could say would persuade him to have another try. He was quite sure that there was some one in bed in that room, and the girl was equally sure that there could not be, that quite certainly it was her room. In the end, as the girl was becoming impatient, I thought it advisable to have a final look in the bracken, after which I produced the lost key.

The explanation of the figure the fisherman had seen under the bedclothes proved to be simple and quite unexciting. It was the girl's room, but earlier in the evening some joyous souls had made up a dummy and put it into the bed; that was the sleeper the fisherman had seen.

I wish to make it quite clear that personally I was involved in these pranks only as a spectator, and did much useful work restraining the over-jubilant. In fact, my services and suggestions were so much appreciated

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that I was appointed as a 'vigilance committee,' and on one occasion when the management did make a desperate attempt to intervene it was I who reassured them. The manager's foolish misunderstanding of the situation I attribute to his being a foreigner, but his unjust remarks rankle still.

"Eet ees not all right," he said. "You say all right, but I say no! At once cease thees vigilance. Without eet I preefer to be. Eet ees you that put into their minds the annoyances."

In one case, however, I do consider that the joking went a little too far. That was in the matter of the hotwater bottles. The weather was cold, and the management provided nearly all the guests with hot-water bottles—the rubber kind. On the last night some miserable soul with a distorted sense of humour went round all the rooms armed with a hat-pin and punctured each hot-water bottle—two neat holes, through which the liquid gradually oozed.

There happened to be a bottle in my own bed that night. Some people have a strange idea of what is funny.

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The Lympne trials finished; the Air Ministry prizes were won by Piercy on the Beardmore Wee Bee and by Uwins on a Bristol Brownie, with Hawkers, Parnall, Comper, and Westlands dividing the remainder of the prizes among them. After which all returned to their normal occupations.

Bert Hinkler, on the Avro Avis, distinguished himself by flying his machine home from Lympne to

Hamble, and *Flight* published an account of this, stating that "he had not the slightest trouble of any sort throughout the trip."

That comment on Hinkler's effort is perhaps the most significant summary of the 1924 light-aeroplane trials. When the tests had ended—tests intended to discover which was the most suitable 'baby' training 'plane for the new clubs—Flight thus considered it worth reporting that an expert had flown less than a hundred miles without trouble. In other words, it looked as if the clubs were going to wait a little for their machines.

C. G. Grey, the editor of that plain-spoken journal The Aeroplane, made no bones about the matter. He described the "consternation" at Lympne when out of eighteen entries only eight passed the eliminating trials. He suggested that manufacturers had not been allowed sufficient time to design, and referred to "the practice of building machines on the aerodrome while the trials were in progress." C. G. Grey annoyed nearly every one—the Royal Aero Club officials, the Air Ministry, the manufacturers, and the engine-makers—by simply pointing out with cold common sense the obvious truth.

The Aeroplane held a unique position in the flying world in 1924. If an idea was impracticable, if a man made a fool of himself, C. G. G. pointed it out. When a new machine or a new engine was tested C. G. G. told the plain truth about it. No fear of losing advertising revenue could shake him; no personal influence saved anyone from that correcting rod. Nearly every one of the early flying crowd writhed under it at some time or other. But on looking back I think that all of us are



THE L.P.W. JUST BEFORE A FLIGHT



"VISIBILITY IMPROVING"

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inclined to regard C. G. G. as a kindly old schoolmaster whose sharp insight, while painful at the time, had a beneficial effect upon us in the end. In a crowd of inventors, cranks, enthusiasts, pioneers, and pompous asses his common sense and ridicule tended to keep us sane.

After Lympne 1924, however, the Air Ministry lost no time—remember, the new Director of Civil Aviation, Sir Sefton Brancker, was now in charge. The trials ended on October 4; on October 16 an official statement was issued: "Valuable results" had been achieved and these results "warranted the formation of a small number of clubs." However, a "considerable delay was inevitable." It had been "found necessary to run engines at high speeds."

Unofficially we were told to go ahead forming our clubs, and that some suitable training machine would eventually be found. Inspired by Major Scott, who toured the country on behalf of the official powers, little bands of enthusiasts in Newcastle, Leeds, Birmingham, and London started work . . . But in Manchester we had already formed the Lancashire Aero Club, we had already flown; we had gone further—we had already crashed.

IV

There was an announcement in the Press at this time that is interesting to look back upon to-day. It stated: "A real start with airships at last. Tuesday, November 18, is likely to go down in history as one of the most important dates in the progress of aviation." Sir Samuel Hoare and Sir Philip Sassoon had just been appointed

Secretary of State for Air and Under-Secretary of State for Air. Their first official act was to visit a village named Cardington and to announce their decision to proceed with the construction of two airships. These airships would be known as the R100 and the R101.

CHAPTER III

THE START

On the same day that the Secretary of State for Air made his momentous announcement at Cardington it happened that the Lancashire Club held a meeting in Manchester. A recruiting meeting it was, with the object of adding more members to our band. Although we did not know it we also were making history—launching the movement that was to grow into the light-aeroplane clubs.

To be candid, at the time of that meeting our organization was in a precarious state, and if there was ever a moment when it was unwise to discuss the position and reveal facts about the club it was then.

There were, however, a few bright spots peeping through the storm. A solicitor from Bolton, a J. P. Hall, had recently joined the club, and had come to Wood's assistance in working out proper rules and a formal constitution. Between them they produced an organization which, at least on paper, worked, and satisfied the Air Ministry that we were responsible people. Hall was quite unlike any other solicitor I have ever met; keen and clear-sighted, able to see the best way out of most difficulties, he gave his services free. Only when the club grew and newcomers with axes to grind began to use it for their own advantage did Hall lose interest.

At the recruiting meeting Wood and Hall described our constitution and the Air Ministry scheme for

assistance. So eloquent were they that our practical difficulties seemed to be lost in the rhetoric. Sir William Kay, a prominent man in the city, presided, and spoke encouragingly, if vaguely, of our objects. Then I was put up to arouse the necessary enthusiasm to secure the enrolment of members.

With a complete disregard of truth I soared up into a picturesque description of the club and its activities. Those present received the impression that the L.P.W. was something like a Handley-Page bomber which leaped into the air many times each day. The lack of a suitable training machine was ignored; I fancy I suggested that one might be forthcoming about Christmas. The aerodrome difficulty I dismissed as unimportant. Finally a telegram was read from a friend of mine, a Colonel Darby, who was offering to give a second-hand War Avro to the club.

The next morning *The Manchester Guardian* stated that "Virtually every person present was enrolled a member." About 50 per cent. of these failed ever to pay a subscription, but still, the first fence had been cleared. There was jubilation among the *élite*.

Our next problem was how to keep with us those we had gathered in until such time as the club actually obtained its aeroplanes and became active. Various means of doing this were tried, and on the whole they proved surprisingly successful.

For instance, one member started a club library. He bought a few books on aviation, borrowed some others, and ordered *Flight* and *The Aeroplane*. Then he engaged a room for every Thursday evening from six to nine at the Nag's Head, and announced that members

wishing to borrow volumes or read the weekly journals would find the club librarian in attendance between the hours stated. It is some indication of Dyson's keenness that he kept up this duty for nearly nine months, although during this period only four members visited him. Of these four, two did not come to borrow books, but to ask him to join them in a drink.

Another member, Rex Williams, conceived the idea of a club magazine, a monthly journal that would give notice to the members of activities, and keep them interested by its witty and instructive articles. His plans somewhat restricted by the cold necessity of capital—or, rather, by the lack of it—the magazine eventually came out as a collection of duplicated typed sheets. But it was published nearly every month, and although Williams was forced to write most of the copy himself, literary talent being scarce among the members, his magazine did achieve its object.

The Elevator, as Williams named his journal, attained to more than local fame, and many distant aerodromes came to know of the club through its pages. Every one read it. Annoyed they might be, but still they read it, and when the remarks were not about themselves they chuckled. In after years, as the club grew, The Elevator passed into the control of other hands and became dignified, as was only fitting when the organization it catered for had become established and important. Unfortunately, the enthusiasm it had once created ceased to exist, and in due course, on the ground of unnecessary expense, publication was stopped. A pity, but perhaps by then The Elevator had served its purpose.

Sir Sefton Brancker once summed up the journal's

history. "It used to be something like La Vie Parisienne," he said. "Now it's like a cross between C. G. Grey in a bad temper, telling every one what they've done wrong, and an editorial in a parish magazine."

Another means we tried of keeping members together during this period of inaction was by the arrangement of informal evening lectures. One of these will ever stay in my memory—a lecture on "Gliding in Germany."

Of course, our greatest trouble was to find anyone who could lecture at all. Those who knew much about flying were usually inarticulate or so embarrassed by the idea of speaking in public that nothing could be done with them. Those who could speak knew little of aviation. One day, when I was wondering how I could possibly find a speaker for the next lecture, a friend of mine mentioned that on a recent visit to Germany he had seen a glider there. I am of opinion that I asked him if he would lecture on the subject "Gliding in Germany"—at any rate, I am sure I intended to do so-and his statement that the first he knew of the matter was seeing his name billed as the speaker of the evening is possibly incorrect. Anyway, I was desperate for a speaker, and if he was incautious enough to mention to me that he had seen a glider in Germany-well, it seems to me that he had no one to blame but himself.

However, Meade was not the sort to let anyone down, and, in spite of many threats and considerable grumblings, when the appointed evening came he stood up on the platform and spoke to the assembled multitude. With a vague idea of helping him out Williams, who had discovered a limelight, played the beam from this

upon the speaker—at least, he did so whenever he could manage to focus the thing. It was perhaps unfortunate that, knowing little about the control of limelights, Williams from time to time flashed vivid green or blue beams from his machine, and that in the end the lamp became hot, and began to fizz so loudly that talk became impossible for more than five minutes.

But the sequel always amused me. The lecture was reported in Flight, guardedly—simply the speaker's name and a general statement that he had lectured on gliding. Shortly afterwards Meade went again to Germany, and while there visited one of the famous gliding schools. He had an introduction to the principal. Now, the principal was thorough; he read the British technical journals. He remembered reading of Meade's lecture; he was delighted to meet the great English expert. I believe that before he properly understood what was happening Meade—who had never been in a glider in his life—found himself about to be catapulted off over the edge of a great hill, and it was only by considerable agility that he avoided this unpleasant experience.

By methods such as these we managed to keep the members together, and by early spring things began to be a little less difficult.

The Avro Company, who had purchased ground for an aerodrome at Woodford, Cheshire, and built a hangar there, offered the club the use of this at a nominal rent. Of course, we had no machine to fly there, but the assurance of the Air Ministry that a suitable training aeroplane would shortly be forthcoming gave us hope, and our 'possession' of an aerodrome seemed to bring us one step nearer the reality of flying.

Mr Parnall offered to give the club the engine and propeller from his Parnall Pixi, which had won a prize at Lympne. What was more, he sent them to us carriage paid, and, to cap everything, posted on also a cheque for fifty pounds—" to help to pay the cost of fitting the

engine."

Thus finding ourselves in possession of a small engine, we naturally decided to fit it into the L.P.W. and start the club's fleet with a 'motor-glider.' A workshop was obtained at Didsbury, and members were invited to come down on Saturday afternoons to help with the work. But somehow it seemed impossible to recapture the old spirit that had once built the glider in a cellar. Most of the new members had joined to fly, not to work at building motor-gliders. Their hesitation seemed to affect the enthusiasm of the original band, and at last, finding that the work was making little progress, I offered to cart the L.P.W. back to my house again, rebuild it there, and fit the engine. Once completed, with the consent of Prince and Wood I presented the machine to the club.

As a power machine the L.P.W. never flew; it was too heavy for the tiny engine; but for some time it served a useful purpose as a 'penguin'—that is, members would drive it about the aerodrome under its own power, and in this way accustom themselves to the noise and wind of an aeroplane and the general movements of the controls.

It has always seemed to me a pity that this first 'baby,' the building of which had to some extent inspired the light-aeroplane-club movement, was neglected and eventually allowed to fall to pieces. It had a history, and might have been interesting in days to come. Some years

ago I offered to buy what remained of the L.P.W. to rebuild it in its original state, and then present it as a memento to be kept by the club. But the committee did not accept the offer, and in the end all that was left of the machine was, I believe, smashed up for firewood.

II

The position of the Air Ministry had by this time become somewhat difficult. In a fit of enthusiasm they had offered two thousand pounds of the taxpayers' money as prizes, and had sponsored trials to decide which was the most suitable light aeroplane for club training. They were definitely committed to a scheme of 'assistance.'

Now, these trials had produced no machine that was really suitable. True, in the hands of expert pilots the baby machines had put up a remarkable performance, and a few of them had flown for quite considerable periods, but it had become obvious that the necessity of running the tiny engines at far higher speeds than they were ever designed for led to trouble. Even when they were nursed and coaxed by experts their behaviour was erratic; in the hands of amateurs . . .

Again, owing to the low engine-power, every ounce of weight was a serious consideration, and in order to produce a machine that would get into the air at all designers had been compelled to lighten and reduce every fitting. As a result of this cutting down the finished machines seemed hardly strong enough to stand up to the heavy handling they would inevitably receive from unskilled pupils.

To put it quite bluntly, no ideal training machine had

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appeared as a result of the trials, and C. G. Grey in The Aeroplane said so plainly, and asked the Ministry what

they were going to do about it.

The five light-aeroplane clubs were also asking the question somewhat impatiently. On every possible occasion they impressed upon the unhappy Ministry the necessity for action. Members could not be held together on promises only, they said, and if the clubs did not get some sort of machine during the coming summer there might be no members left. The Scottish club had already retired from the scheme.

The Air Ministry found themselves in a particularly unpleasant position. They had asked—or at least encouraged—manufacturers to spend large sums of money designing and building a special type of aircraft. That these aircraft proved unsuitable for the purpose they were intended for was no fault of the manufacturers. The Air Ministry technical experts had suggested the nature of the tests at Lympne, machines had been built to comply with these tests, and as far as this went the manufacturers had done what had been asked of them. The fault lay in the rules, which had demanded a super-light low-powered baby aeroplane instead of a sturdy, cheap training machine.

The situation was further complicated by another development. When the rules had been first announced one designer, Geoffrey de Havilland, had expressed his doubts as to their usefulness. He had even gone as far as to suggest that the type of machine desired could not be produced if it were to comply with these regulations. His firm built no new machine for Lympne in 1924, and he maintained that if an ideal training machine was

to be designed a start must be made on entirely different lines. Two months after the meeting ended De Havillands announced that they were at work on a light aeroplane. It conformed to none of the Air Ministry Lympne rules, but it had folding wings for easy storage, was cheap to build and repair, easy to fly, and strongly built. It was fitted with a moderately powerful engine that would be sufficiently over its work to fly the machine at half-throttle. The name of this new aeroplane, De Havillands announced, was to be the Moth.

In February 1925 D. H.'s advertised that two Moths were in "an advanced stage of construction," and on March 2 GEBKT, the first of the type, was exhibited to the Press at Stag Lane, Edgware. After it had been examined and its purpose explained Captain Broad took it up and stunted the Moth as if it were a fighting aeroplane. Later he took up several passengers, and proved conclusively that here was a sturdy light aeroplane that could take off quickly, land slowly, and be controlled perfectly in the air.

The news spread rapidly. Every one in aviation had been waiting to see if Geoffrey de Havilland could justify his rebellious attitude, and within a week, while the Moth was arousing discussion and argument, the Air Ministry and the clubs were invited to visit Stag Lane and see for themselves. Williams and myself went along on behalf of the Lancashire Club, and after we had flown with Broad in KT we were like all other club representatives—clamouring that here was the machine we wanted.

The clubs now began to make themselves unpleasant to the Air Ministry: they must have training aeroplanes

quickly or the members could not be held together; the Ministry were committed to provide such machines. With one voice and with varying degrees of impoliteness, the clubs stood round and yelled, "Moma, buy me that!"

The editorials in *The Aeroplane* became more pointed than ever. Meanwhile Broad continued to fly the Moth about the country, and to emphasize that here was a practical aircraft. Of course, the Air Ministry were in a horrible position. They could not deny that Geoffrey de Havilland had produced an excellent machine or that it would suit the requirements of the clubs. But if they were to order Moths what would the rest of the aircraft trade say? Manufacturers had designed machines to comply with Ministry requirements; they had spent much money and time following Ministry suggestions; if now orders were given to a firm that had worked independently altogether . . .

How this knot was cut I am not supposed to know, but on April 16 it was announced officially that the Government would order two complete Moths and one spare engine for the Lancashire, London, and Newcastle clubs. A similar order would be placed later for the Midland and Yorkshire clubs.

"It's no good talking like a lot of old women," Sir Sefton Brancker said to me about this time; "what we've got to do is to get on with the flying."

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With the official announcement on April 16 our position cleared considerably.

We had an aerodrome to go to at Woodford, the loan of a hangar in which to put any machines that might come to us, the L.P.W. was making good progress, and Wood and Hall were getting the secretarial side of the club on to a proper basis. We began to take quite a firm attitude with the members who did not pay their subscriptions, and some of the creditors who had been pressing for payment of their accounts received some pretty nasty letters from our secretary.

Salthouse summed the new position up. "You want to tell 'em, laddie," he instructed Wood, "that we've got bags of aeroplanes and that we're a sort of Government show now. They can't expect a Government to bother with every twopence-halfpenny account that comes in. You want to be firm with 'em, laddie."

It was about this time that the Air Ministry began to show some concern about the machines they had ordered for us. It had occurred to some one that if these were handed over to a crowd of amateurs, who would promptly try to take them into the air and teach themselves to fly, the machines might not last very long. Possibly the clubs might come to a premature end in a blaze of unwelcome publicity—publicity mingled with criticism of those who had given the aeroplanes and therefore been the cause of the untimely demise.

A conference was called, and various precautions were insisted upon. Each club was to employ at least one qualified ground engineer, and no machine was to fly until this ground engineer, who would be responsible to the Ministry, had certified it as in a safe and airworthy condition. The voluntary instructors—full-time paid instructors were unthought of in those days—were to be

qualified pilots holding a 'B' licence; and, as the newly formed clubs had among their members hardly a single pilot so qualified, the Ministry offered to take two persons from each club and give them a month's intensive training at Central Flying School. People so trained were to agree to act as voluntary instructors, giving a reasonable amount of time to teaching others.

In the case of the Lancashire Club two worthy souls volunteered to help; both had been pilots in the War, and both were still members of the Reserve. It is not easy to find two men able and willing to devote a considerable portion of their time to the nerve-racking job of teaching others to fly, and I believe we were lucky in obtaining the services of Scholes and Cantrill. It was their help at this critical juncture that enabled us to start.

It is true that one of them confided to me afterwards that he never remembered volunteering, and that on receiving an official note from the Air Ministry instructing him where to report he concluded that another war had broken out and that he was being recalled to the Reserve. I gathered that, having shown the note to his employers and said good-bye to his relations, he departed, entirely unaware of the real purpose of his training.

Anyway, we got our two instructors, and in due course

they did some exceptionally useful work.

The weeks slipped by while all the various details for starting the club at Woodford were being completed. There were hundreds of difficulties to be overcome, dozens of complicated arrangements which required tactful handling. Let it suffice that a great deal of hard work was put in and that two or three members provided the necessary cash out of their own pockets.

Then at last the great day came when the club's first Moth was to be delivered. It was to fly from Stag Lane to Woodford, and arrangements were made to give it a great reception when it landed. All the members were urged to bring as many friends as possible; notices were put in the Press inviting the public. As hardly anyone in the north had then seen a light aeroplane, a large crowd was expected. The landing and reception were timed for seven o'clock in the evening.

It had been decided that, as chairman of the club, I should go to London and fly with De Havillands' pilot in the machine to Woodford. So on the evening of June 27—after considerable argument with the insurance company who 'covered' my life, an argument in which neither side succeeded in convincing the other—I departed for town, and the following day presented myself at Stag Lane. Incidentally, on the way through London I had called at the Air Ministry, and Sir Sefton Brancker had handed me a letter to carry in the machine and read aloud to the waiting crowds on our arrival at Woodford—a letter pointing out the reliability and usefulness of the new light aeroplanes and the desirability of joining our club.

The first thing that greeted me when I arrived at Stag Lane was the news that the engine of our machine had suddenly developed some trouble. Broad had taken the machine up for a test flight during the morning, and as soon as he landed mechanics had been set to work to discover what was causing a mysterious loss of 'revs.'

All through that hot afternoon the mechanics searched, and I waited anxiously. I knew that far away at Manchester, as seven o'clock drew near, people would be

streaming out towards Woodford to see the first appearance in public of the much-talked-of Lancashire Aero Club. The closing down of Alexandra Park and the various delays in the Air Ministry scheme had caused a number of people to become suspicious, to wonder if bluff was not our chief asset. If for any reason we now failed to arrive as advertised I had no illusions as to what would happen. We were not strong enough to take such a setback; it would be the end of the Lancashire Club, for ridicule would kill it.

De Havillands had no other machine that they could send. There were only three Moths in existence at that time, and their own test Moth, KT, had gone that morning to Coventry; it was uncertain when this would be back. The afternoon dragged on.

At five o'clock, two hours before we were due at Woodford, the mechanics discovered the trouble. It was serious; it would take two days to put right.

Then did the fields of Edgware ring with my cries and lamentations. To telegraph Woodford that I could not keep the appointment arranged meant the failure of all our work. Almost weeping, and certainly swearing most wickedly, I implored the gods to avert this disaster.

Broad endeavoured to soothe me; St Barbe, De Havillands' sales manager, spoke assurances of a delivery within a couple of days at the most. I refused to be comforted; what they couldn't understand was the harm even one day's delay was going to cause.

At 5.25, just as I had accepted the inevitable and was about to wire Woodford, an aeroplane roared over Stag Lane.

"There's one!" I shouted. "Get him down! Make him go with me!"

Broad peered at the machine that was coming in to land.

"It's KT," he said suddenly. "It's Cobham back."

We did some very hurried talking and arranging the next few minutes. If KT was not our proper machine it was at least a Moth. Probably few at Woodford would realize that a change had been made, and once more bluff might save the situation. If KT was flown there, formally accepted, and then flown quietly back again the next day, our own Moth could be delivered without fuss as soon as it was ready.

St Barbe explained the situation to the pilot who had

just landed, and introduced me to him.

"You'll have heard of him, I expect," he said. "He flew Brancker to India, and he's going to try a long-distance flight. Alan Cobham's his name."

Cobham was tired after a double journey, to Coventry and back, and a busy day there arranging an engine for his proposed long-distance flight, but as soon as he understood the position he agreed to fly to Woodford.

"I just want to telephone home," he said. "Then

we'll be off."

He had his own personal worries I discovered later; for that night the news came through that while we were in the air on our way to Woodford his son had been born.

IV

That trip on June 28 was the beginning of a long friendship, a friendship that needs no frequent meetings

to keep it alive. We meet only occasionally now, but when we do it is as if we had left each other only a day or two before.

It has always seemed to me that the publicity given to his flights has created an untrue impression of Cobham's real personality. Reading in the newspapers the numerous accounts of his doings, some people are inclined to believe that here is only a showman seeking the limelight. Lord Northcliffe is supposed to have once remarked that a man who said he despised publicity was either a liar or a fool. Cobham is neither. He knows that publicity can be useful to him in his work for aviation, and, not being a hypocrite, does not pretend to dislike it.

The real "A. J." is entirely devoid of conceit, straightforward, and quite unaffected by the success of his achievements. An organizer with an exceptional capacity for detail, he has a brain and constitution that enable him to go on working while others fall down exhausted. On one occasion I was with him when he flew to Liverpool, spoke at a 'civic' lunch, gave two lectures in the afternoon, motored to Manchester, broadcast on the wireless, gave another lecture, and was filmed in a 'talkie.' Then, when we reached my home somewhere after midnight, he wanted to discuss a long and complicated business deal with me.

When Sir Sefton Brancker was killed there was talk of making Cobham his successor. What an opportunity missed! A pilot with exceptional experience of Empire routes, an organizer who knew every aerodrome and person in aviation. Imagination cannot suggest what might have been the position to-day if Alan Cobham had

become Director of Civil Aviation. But the politicians feared his restless energy; they had already had experience with one D.C.A. who disregarded red tape and went ahead with his job, and this time they were taking no chances. They played safe, and the energetic Ministry of Brancker's days slipped back into a typical Government department.

V

We landed at Woodford at 7.30 in the evening, after an uneventful flight in perfect weather. There was quite a large crowd to see the first Moth arrive, and Wood was able to secure several new members.

Only Tom Prince gave any trouble.

"Have you signed for this machine?" he demanded. I nodded.

"Then we've been done. I knew it would happen. They've framed us. They've palmed off an old machine on you. I tell you it's one painted up. It's been used and——"

"Hush!" I implored. "I'll explain later."

"It's not new!" he shouted. "We mustn't take delivery. I'll talk to that pilot!"

I managed to hush him in the end, and the next day the local Press reported and applauded the safe arrival of the club's first Moth. The same day Cobham, after returning the pyjamas and razor I had lent him, flew the machine back to Stag Lane.

That evening my telephone rang, and at the other end was a much-concerned and very worried member of the club.

"I went down," he stuttered, "thought I'd just have another look at it, and the Moth's gone! It's gone! Just isn't there! The farmer says two men came about eleven o'clock this morning, and one of them flew it away."

I was reluctant to explain the matter fully. The editor of a certain newspaper happened to be visiting us that evening, and was sitting within a yard of the telephone.

I tried guarded hints and vague assurances.

"But it's gone!" the member kept repeating.

Then at last: "Aren't you going to get the police?"

My refusal lost me for ever the respect and support of that member. He was never quite the same with me again.

CHAPTER IV

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A FURTHER period of waiting followed. The two voluntary instructors were still away at Upavon receiving instructions in the art of teaching others to fly, while the second Moth was not ready for delivery until the end of August. A few events enlivened the period of inaction.

On July 19 the London Aeroplane Club had an official opening. The Aeroplane published a photograph of this ceremony with the caption

WHAT LANCASHIRE DID YESTERDAY

SIR PHILIP SASSOON OPENING THE LONDON AEROPLANE CLUB

From left to right: Mr Perrin, Colonel McClean, Sir Philip Sassoon, Major Mayo, Sir Sefton Brancker, the Master of Sempill. Entirely unsung, the Lancashire Club has been open for months.

Sir Philip was then Under-Secretary of State for Air, and *The Manchester Guardian* and *The Daily Dispatch* published dignified protests at the shadow he had cast over the older club by assuming that London led the way.

Although controversy such as this may seem trivial, in reality it served a very useful purpose. And although our indignation was genuine and resentment strong, the club benefited, for it had its name brought once more before the public. People read of us, and very

gradually—oh, so gradually—began to realize we were in existence.

Only those who were intimately connected with our early struggles can appreciate how much the Press helped us. From the first day we started at Alexandra Park their repeated reference to our doings brought us to the notice of thousands. It is not an exaggeration to say that without the help of the Press we could never have survived. A dozen times they saved us from an untimely and ignominious end.

I have no illusions about a newspaper. I realize that it is a commercial concern, that it must make profits and keep up circulation, and that it cannot afford to offend advertisers' susceptibilities. I realize that its proprietor, who dictates policy, may be eccentric or erratic, so that the organization can be a soulless machine, grinding even its own supporters to destruction. But I also know that in the darkest hours of my aviation life it has always been my journalistic friends who have rallied round, who have said, "I think he's having a bad time. Can't we give him a bit of a lift?"

II

The last Lympne trials were held early in August 1925. Quite a large party from our club went down to watch them.

With the success of the De Havilland Moths and the ordering of these machines for the clubs the real purpose of the trials had apparently disappeared, and it was not expected that manufacturers would put in any new types of light aeroplanes. In consequence the Royal Aero Club

THE LANDING ON A MAIN ROAD

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arranged for a meeting lasting only three days, and for competitions not restricted solely to baby aircraft.

Circumstances considered, there was a surprising collection of small machines. Hinkler was there with his Avro Avis; Courtney, with the Parnall Pixi. Beardmores' Wee Bee was flown by their test pilot A. N. Kingwill, while the old D.H. 53 that Cobham had 'glided' to Brussels also came along, in charge of Sholto Douglas. "Johnny" Chick and "Nick" Comper were among the pilots with machines, and Blackburns arrived with their Bluebird—a machine in which the pilot and the pupil sat side by side, and which looked like being a serious rival to the Moth.

The explanation of this array of baby 'planes is perhaps that the manufacturers had got the machines on their hands, and, having had nearly a year in which to adjust them and learn their peculiarities, felt a natural desire to show that their babies really could fly well. They knew that no financial gain would come to them as a result of Lympne, but they were too good sportsmen to give up on that account, and for three glorious days the babies sang their swan song as they careered about the sky.

Cobham and the Master of Sempill arrived with Moths—one of these the famous KT—and, although they were not eligible for competition with the babies, "great fun," as some one put it, "was enjoyed by all."

The social side proved to be better than ever. Most of us had the feeling that this would be the last of the Lympne meetings. And some had a faint foreboding that this was a farewell to the old days of flying, that

another chapter was about to open, a chapter introducing new characters and a new way of doing things. In consequence every one was determined that the meeting should be remembered as a really good party.

There was one manufacturer who on the last evening acquired one of those long brass nozzles off the end of a fire-hose, a great tapering tube about three feet long, and with this under his arm became convinced that he was the late Admiral Nelson. Efforts to assure him that he was mistaken proved useless. Lifting the tube to what he assured every one was his "blind eye," he kept repeating that he could "see nothing." A passer-by who heard the remark, but did not quite understand the circumstances, said he was not surprised: a man in that state couldn't be expected to see anything.

Then there was the inventive designer who discovered that the rubber balloons with which the ballroom was decorated might be filled with water instead of air. By holding it to a water-tap one could expand the balloon in the same way as with air. Several of these balloons he placed among the others, and the scene when a certain pilot's wife kicked at one and burst it will remain long in my memory.

III

At the end of August, then, the club took delivery of its second Moth, and celebrated the event by inviting the public to witness another flying display at Woodford. The L.P.W. careered about the aerodrome under its own power—until the magneto ceased to function. Early in the afternoon a wheel came off one of the Moths while it was in the air; on landing, this machine was carried

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quickly into the hangar. About tea-time the engine of the second Moth developed valve trouble, and this also stopped work. Fortunately, Bert Hinkler was at Woodford with an Avro 504N, and the knowledge I then gained of running a flying display with only one machine bore fruit at a later date.

It was in connexion with this display that I had my first meeting with that formidable personage now Lord Trenchard—an encounter amid somewhat embarrassing circumstances.

At that time Air Chief Marshal Sir Hugh Trenchard was busy reorganizing the R.A.F., and making those changes which in due course produced the very efficient force we have to-day. Rumours of ruthless action and drastic orders floated about aerodromes, and caused the name of Trenchard to be breathed with even greater dread and respect than usual.

Now it happened that for our display we needed some loud bangs and plenty of smoke, something rather better than ordinary fireworks, something that would sound and look as if three or four large bombs had actually exploded. I immediately thought of my friends in the R.A.F., and impetuously, without waiting to telephone, I jumped into a car and drove to a certain aerodrome. This station, I knew, had large stores of dummy bombs; I had once seen them in use, and felt sure that the C.O. could provide all the realistic effects needed for our display.

I was a frequent visitor at this R.A.F. station, and on this occasion it surprised me when the sentry at the gate made an effort to stop my car. However, concluding that he must be a newcomer, I steered the car past him, waved an explanation, and drove rapidly on towards the officers'

6

E

mess. Just in front of the mess a little party of officers in uniform were standing, and, recognizing the C.O. among these, I steered straight for them, stopping the car a yard or so from the party.

"Hello!" I called. "Just come to ask a favour;

want to borrow a few bombs."

The unsmiling faces of my friends and the formality of their bearing seemed unusual; and then suddenly I realized that there were strangers among them, distinguished strangers of high rank. Some one came across to me and spoke. I had interrupted an inspection of the station by Air Chief Marshal, Sir Hugh Trenchard, G.C.B., D.S.O., LL.D.

A few moments of confused apologies and explanations ensued. The Inspecting Officer demanded to be told what was the meaning of my remark about bombs, and, fearing I might make difficulties for my friend the C.O., I tried to think of some plausible story. Unfortunately, my brain seemed incapable of invention just then, and I stammered out the truth.

There was a pause when Trenchard understood the position; then he chuckled.

When our display took place it was distinguished by most impressive explosions, great clouds of smoke.

As the C.O. said, "Of course, I couldn't have put up a show like this on my own responsibility. He told me to do all I could to help you."

IV

Instruction started in earnest the following week. The two voluntary instructors, now back from their course at

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Central Flying School, divided the members into two groups, and each began teaching his particular section. Almost at once a friendly—and at times not so friendly—rivalry sprang up between the two parties. Which would have the honour of sending the first pupil solo? Which would have the first pupil to obtain a licence? Which would turn out the most pilots? Even the machines came to be recognized as belonging to one particular party. Scholes taught on LV, Cantrill on LR. Competition became keen and excitement tense.

Two pupils were considered to be running neck and neck for the honour of 'first solo': Mark Lacayo from the Cantrill side, and myself from the Scholes

party.

Lacayo and I crammed in all the time we could, and other members of our respective sides gave up their bookings so that we, the most likely ones in our teams, might have extra practice. It was a vain sacrifice as far as my side was concerned. On Sunday, September 20, Cantrill got out his Moth and left Lacayo to carry on alone. The first solo in a club Moth was made, and Lacayo landed without incident.

Flushed with his success, Cantrill sent up another pupil, Alan Goodfellow, and when evening came the score was: Cantrill 2, Scholes *nil*.

The Sunday following the Cantrill triumph the Scholes side scored its first try when, after three hours and thirty-five minutes' instruction, I departed alone into the atmosphere. Determined to redeem to some extent the reputation of our team, at two thousand feet I caused the Moth to perform what I believed were two 'stalled turns.' The anxious instructor, watching from the

ground, called them something very different, and received such a shock that he had to be assisted into the hangar.

In the next few weeks all sorts of things began to happen to the club. Sir Charles Wakefield, as he then was, accepted the position of president. The idea of inviting him occurred to Williams.

"If we could get him," said Williams, "he'd be no

end of use. He gives money away like water."

That settled it. I was entrusted with the task of persuading Sir Charles that the club deserved and needed

his support.

Having obtained a president such as Sir Charles, the committee decided that it would enhance the prestige of the club if we could gather together some of the influential people in the city and show them our new president at our head. I talked the idea over with Sir Sefton Brancker, and as a result of his prompting a luncheon was arranged at the Midland Hotel, Manchester.

"I'll come myself," Sir Sefton offered, "and if you talk nicely to Wakefield I expect he'll come along too, and probably Letts as well, but you want some one else—some one who'll attract everybody. I'll see what I can do."

It was a great luncheon that one on November 6—incidentally, as the club had hardly any funds, two members paid for it—it brought all sorts of prominent Manchester people into touch with our effort. People who in the ordinary way never seemed to know that the club existed stood up and assured us of their keen interest; some even went so far as to promise assistance. Sir Samuel Hoare, then Secretary of State for Air, was the

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guest of honour; Sir Charles Wakefield, Sir William Letts, and Sir Sefton Brancker sat with him.

The net result of the affair was the gift of a Moth from Sir Charles and the gift of an Avro from Sir William Letts. In one brief hour the club's fleet had doubled!

It might have been thought that with all these gifts and all this support from influential personages the club was now safely established and that our serious worries were behind us. Unfortunately, this proved far from being the case, and the next few months were perhaps the most critical in the club's existence. In fact, we came very near to closing down altogether.

The trouble was largely caused by the small number of flying hours it was possible to put in. There were not very many flying members, and most of these had to limit their time in the air when it was costing them thirty shillings an hour. Again, the two voluntary instructors had their own businesses to consider; they could not be always at Woodford; and when it happened that instructors were at the aerodrome and pupils had money to pay for flying, then often the weather made aviation impossible. The weather was dead against us, and the optimistic assurance "It will be all right when spring comes" did little to help the immediate crisis. Some of us could not help wondering if the club would ever see the spring. Looking back, I am amazed that we ever struggled through.

It occurred to some one that if we had a club house and sold drinks it might bring some money in. Visions of the great profits made by breweries encouraged us. The trouble was that the club had no money to buy even

a hut for the pupils to shelter in, much less lay in a stock of liquid refreshment. Twice we tried to make money by running dances, and each time we came out worse off than when we had gone in. By the early part of 1926 the position had become desperate, and in February the committee met with the threat of failure right in front of them.

Debts had accumulated, debts were accumulating. Sympathetic and helpful as creditors had been they were bound to take action soon, if not to demand payment of the money owing, at least to refuse further supplies. In fact, it was only by pointing out that with our supplies cut off the club would come to an end, in which case the whole of the debt owing would be inevitably lost, that we had persuaded some firms to keep us going so long.

There seemed to be only one possible way in which we might pull through: that was by increasing the flying hours. More flying meant more income, more pilots' licences, and therefore more payments from the Air Ministry, who awarded the club fifty pounds for every pupil who obtained his licence, provided that the pupil

had been taught exclusively by the club.

It was at this point that we decided to engage a full-time salaried instructor. With bankruptcy just round the corner this addition to our expenses must have seemed pure madness to any reasonable person—but then we were anything but reasonable people. Only incurable optimists out of touch with reality would ever have dared to get the club going in the first place.

The club offered the post of instructor to Neville Stack. The desperate position we were in was made clear

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to him. It was explained that unless income went up the club would quickly end; that members must be 'encouraged'—a polite synonym for 'bullied'—to·fly; that more new members must be found; that the next few months would be a struggle and a fight, with the possibility of defeat always present.

Stack was Irish; he accepted the post gleefully, and two days later was sitting in the tiny hut at Woodford

astonishing members with his ukulele.

That ukulele is the thing by which most of us still remember Stack. He took it everywhere he went. Some years later when he flew a Moth to India that 'uke,' a toothbrush, and a razor were his only baggage. On desert aerodromes in Asia Stack sang songs and banged his 'uke' while Arabs marvelled and shook their heads. On almost every R.A.F. aerodrome his music came to be known, and many a Mess President has lied and manœuvred to detain Stack for just one more 'guest night.'

I can see him now, sitting on an upturned box in the hangar at Woodford, the yellow light from a single candle lighting the grinning faces around him while he sang Leehigh Valley, Better than Love, Persian Kitten—breaking off in the middle of a song to laugh so infectiously that we all joined in the interruption too. I can still hear the murmur of, "Go on! Don't stop!

Sing Country Vicarage."

An amazing character, temperamental, quick-tempered, a clever composer and musician, a brilliant pilot, a competent if plain-spoken instructor, he pulled the club through its most critical time. Blarneying the reluctant, chaffing the timid, restraining the over-pushful, laughing

over the worst of failures, he sent the flying hours up and saved the club. Like all powerful personalities, he made some enemies and some fervently loyal friends. Class or influence meant nothing to Stack. The man who arrived at the aerodrome in a Rolls-Royce received exactly the same treatment as the man who walked from Prestbury Station. The Lancashire Club owes a great deal to Neville Stack.

And so the club struggled on, persuading creditors to wait just a little longer, staving off disaster, until at length flying hours began to increase.

A certain energetic member named Caldicot proved to have a genius for finance, and, taking over our complicated and muddled money affairs, established a sound and workable system in place of the chaos that had existed. Under his direction proper book-keeping methods were introduced, accurate costings became available. Caldicot told the committee just how much they might spend, and saw to it that his limit was not exceeded. Pilots do not take kindly to restriction, and Caldicot's path was not an easy one. "A soulless blighter who thinks of nothing but saving and cutting down. Wait until I get him up in the air some day!" was one indignant comment. But, fortunately, Caldicot stuck firmly to his principles, and at last the club's finances were on a sound basis.

All sorts of things happened in those years of building up. We ran three air pageants, and blocked all the roads for miles round. We engaged a full-time secretary, a Mr Atherton, to be at Woodford and assist in clearing up the muddle. We built a club house and furnished it—a gift from certain members—only to find that it was

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inadequate for our growing needs. Following some intermittent efforts on the part of members to keep the building clean and provide teas—efforts that usually stopped when it came to the washing-up stage—a stewardess was engaged. For three long years this worthy woman contrived to meet the erratic demands of the members, and I for one, knowing the difficulties surrounding her work, have sympathetic recollections of Mrs Holland.

I see them now, those early workers for the club: Atherton, harassed yet polite, trying to convince some member that he must pay cash for his flying; Mrs Holland struggling to provide lunches while the oil-stove refused to work and the water-pump would not function; Bartrum, our amazing ground engineer, who contrived to keep the machines serviceable under conditions that would have discouraged Lenin himself—Bartrum, who worked all the week to get a machine flying, and then saw it, after a few minutes in the air, crashed by some over-eager pupil. Times have changed, and Woodford knows not this band to-day, yet there are still some of us who look back and remember the time when, with the future uncertain and failure very near, a little company of workers strove to keep the club from disaster.

V

A thing I first noticed about this time, and a thing that has never ceased to puzzle me ever since, was the way in which those connected with aviation seem to achieve military rank. Any civilian aerodrome seems to be full of captains and majors, and the moment a man acts as a pilot of an aeroplane he appears to be

automatically 'gazetted.' I have even suffered from this form of promotion myself, and, while it is the Press who seem especially liable to honour one in this manner, it was an elderly alderman who caused me the greatest confusion.

This dear old soul invariably referred to me as "Captain," and when the evening arrived on which I knew he was to propose my health at a dinner, I took him aside and spoke gently but firmly.

"Now, you will remember, won't you—no 'Captain'?" I concluded.

"Indeed I will," he answered remorsefully. "You've mentioned it before, I recollect. Yes, quite so. Not 'Captain.' I'll remember. Not 'Captain.'"

At the conclusion of that dinner he stood up and proposed the health of "Colonel Leeming."

CHAPTER V

CRASHES

While the struggle for survival was at its peak I added to the general excitement by indulging in two crashes. The first was merely a peaceful turning over of a Moth when landing, and the damage done was not extensive, but the second crash was much more serious, and for a little while it seemed that the machine was beyond repair.

The first crash happened in this way. One afternoon in November, about six weeks after my first solo in the Moth, I made an appointment with one of the voluntary instructors, and after a brief test flight departed into the atmosphere alone. It was one of those pleasant days we sometimes get in November, a slight mist blotting out the horizon, but otherwise perfect for a pilot anxious to 'pile up' flying time for his licence.

After twenty minutes or so in the air I decided to practise some landings. Now, practising landings is not a thing one does willingly in front of watchful eyes—such eyes are apt to be critical—so I selected a spot right away at the far end of the aerodrome, a spot hidden from the hangar by the slope of a hill. The ground just here was flat, and, although I did not know, it had recently been ploughed, rolled, and sown with grass seed. The young grass had covered the newly turned earth. In short, this part of the aerodrome was soft and not intended for use.

At two hundred feet I switched off the engine. The

Moth glided down, flattened out, and skimmed the surface of the grass. As the machine began to lose speed the wheels touched earth. For perhaps ten yards they ran along the ground, then, while the machine was still doing about thirty miles an hour, the wheels sank, buried themselves in the soft ground. There was a sudden stop. The tail rose swiftly up, and the Moth came to rest upside-down. Having forgotten to fasten the belt which held me to the fuselage, I dropped in a heap out on to the soft earth.

The whole thing happened in a few seconds: at one moment I was gliding in to land, the next the Moth was lying on its back with the petrol pouring out from the inverted tank. Only the flop of my body as it fell to earth had disturbed the afternoon's silence.

About a hundred yards away, in a field beyond the hedge, a farmer was ploughing, two great cart-horses drawing the plough—a picture of true rustic beauty. As I was skimming the grass I had seen the man pull on the long rope reins; I think I heard him call "Whoa!" to the horses as he drew them up and turned to watch the landing. When I scrambled from underneath the fuselage and began wiping the mud from my face the farmer was still standing staring placidly at the overturned Moth. The horses' breath steamed in the cool of the winter's afternoon as they turned their heads and gazed about incuriously.

"I'm all right," I called to the farmer.

"Ay, I see that," he agreed.

Then, jerking the reins again, and shouting "Sted-up!" to the horses, he started on his way—ploughing. The thing had nothing to do with him. The aeroplane

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had been flying and was now on the ground; possibly it may have seemed strange that a pilot should fall out violently at the end of a flight, but then aeroplanes were

funny things, anyway.

I stood disconsolately by the broken Moth, wondering what was the extent of the damage, wondering about the cost of repairs, wondering how to inform the mechanic that a damaged machine awaited his attention. For the Moth, hidden from the hangar by the rise in the ground, left the aerodrome staff happily oblivious of the situation.

In the distance a cow mooed, a flock of rooks on their way home passed overhead. It was one of those peaceful, pastoral scenes upon which so many of our poets have dilated with feeling.

"Goin' to be a change in the weather," the farmer called as, completing another furrow, he passed near by.

It seemed impossible to suggest that he might take word to the hangar of my predicament. The man was busy with his own concerns.

I walked to the road, where a small boy stood beside a bicycle. "I wonder if you would mind cycling down to the hangar and asking some one to come up here? " I asked him.

The boy looked disappointed.

"Ain't you going up again, mister?"

I tried to explain the position.

"Tell them there's been a crash," I said.

Obviously the boy regarded this as a fairy-tale.

"I'm delivering milk, like," he countered.
"Look here," I said firmly, "I'll give you sixpence if you'll cycle down and tell them at the hangar to come here."

Fifteen minutes later a breathless mechanic and an agitated instructor appeared over the skyline. No longer might the scene be described as 'pastoral.'

However, if my first crashed Moth attracted little attention, the next performance certainly took place be-

fore a large and excited audience.

On December 26 many members of the club decided to spend the whole day at Woodford. Both voluntary instructors were in attendance, and one of those clear winter days, with the ground frozen hard, promised plenty of opportunity for flying. The Christmas-holiday spirit still lingered, and, as I had arranged with the village inn for a goose to be cooked for our lunch, at about one o'clock the entire party moved up to 'Mrs Hooley's.'

A jovial party it was, invigorated by the sharp, frosty air, full of rude health, and made hungry by the appetizing smell of roasting goose. A cocktail was suggested. Mrs Hooley admitted that she did not know how to mix one, and some one went into the bar and produced a drink which he assured us was a cocktail of his own invention and known as a "Bunsen Burner." I learned afterwards that this "Bunsen Burner" was made by the simple process of pouring something from every bottle in the bar into one big jug and stirring with a spoon. The result was served in tumblers filled almost to the brim.

Who first suggested a landing competition I am uncertain, but I know that the proposal was welcomed enthusiastically, and that, finishing our lunch as quickly as possible, we rushed off back to the aerodrome. While our solitary Moth was being got ready—the other Moth was being repaired—a bucket of whitewash was found in a near-by cowshed and a large 'target' painted on the

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grass in the middle of the aerodrome. The rules of this landing competition were simple. Pilots were to go up to five hundred feet, throttle back the engine, and land as near as possible to the 'bull's-eye' of the target. We drew lots as to the order of our going, and I won first try.

Off into the air I swept. What a lunch that had been! What a perfect day for flying! All that snow on the hills over Buxton way. What a jolly, happy crowd! Five hundred feet! Back came the throttle; the roar of the engine died away. Now, where's that darned target? I fancy I sang with good feeling as I turned and glided back towards the aerodrome.

The members stood, a little crowd of black dots beside the white circle of the target. Down towards them I pointed the nose of the machine. Must not overshoot; I essayed a side slip to lose height. About right now; there was the white circle. Steadily I glided down. The target grew bigger as the Moth rushed towards it. There was the white centre, there was the place for me to land—a direct bull's-eye. Only one thought occupied my brain: there was the centre; there was the one spot for me to stop. My eyes fixed upon the middle splash of whitewash; I thought of nothing else. Rapidly it grew bigger; I could see the blades of grass...

A horrible tearing sound, the cracks of wooden spars breaking into a hundred pieces. The Moth, its nose buried in the ground, its broken 'prop.' in the centre of the whitewashed inner circle, had stopped dead. As the excited onlookers pulled me from the wreckage I remembered I had forgotten to flatten out; I had flown the Moth straight into the ground.

II

In April 1926, encouraged by a visit of Sir Geoffrey Salmond, that most pleasant of 'aviation personalities,' we ran an air pageant. We had only three 'professional' pilots to carry out the display, but, as two of these were Broad and Hinkler, the day proved a great success. Many thousands of people visited the aerodrome, and, what was vitally important, contributed nearly two hundred pounds of life-saving cash.

A fort garrisoned by Arabs—Boy Scouts dressed in bath-robes and turbans—was bombed with flour-bags from the air, and at the correct moment, amid loud bangs from concealed fireworks, the whole building collapsed in flames. Incidentally a sharp shower of rain in the early afternoon had damped the framework of the fort, and the final débâcle was somewhat marred by urgent shouts for petrol. But, apart from this and the fact that one firework exploded before it was expected to do so, the whole afternoon went most entertainingly.

One incident in connexion with the upside-down flying at this pageant deserves mention. Upside-down flying was in those days a novelty, and its announcement in the Press—we could not afford to pay for advertising, and were compelled to rely entirely upon a news story—had done much to attract the public. Hinkler was to do the inverted flying in an Avro Gosport, and to add a little spice to the event he was to take with him a 'victim.'

Flight reported the event as follows:

The programme stated that the 'victim' in this display was Mr John Leeming—and 'victim' he was! In the first



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place Mr Hinkler's stunts were quite hair-raising, but, secondly, Mr Leeming's shoulder straps failed to function, so that the L.A.C. almost required a new chairman. Fortunately, the seat was strong and held firmly in place (as did Mr Leeming).

The eyewitness account is this: At the very last moment, just as I was about to strap myself into the machine, a flaw was noticed in the buckle of the harness. A rapid consultation, and it was decided not to risk the buckle's holding. In the emergency some one suddenly thought of some canvas webbing that happened to be lying about in the hangar, the sort of broad tape one sees on the bottom of chairs. The webbing was produced, and in a few moments I was tied on to the seat of the aeroplane. Like a trussed fowl I crouched, tied by innumerable loops of webbing.

Everything went splendidly until Hinkler turned upside-down at about two thousand feet; then, with the weight of my body hanging on them, the loops of webbing began to stretch. As the knots and canvas gave I found my movements less restricted. No longer was I tied firmly to the seat. Back we came to the normal position; then after a few seconds the machine turned over once more. There was a jerk as I fell six inches or so into the slackened webbing; a moment later, dangling head downward, I felt the loops begin to slip off my shoulders.

People tell you that in moments such as these frenzy and panic fill the mind, but nothing like that happened to me. I was too completely scared to bother with frenzy or panic; I was far too busy with the serious work of holding on. A thousand feet below was the earth, hard and

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uninviting—a drop at ever-increasing speed between myself and that aerodrome grass. The webbing would not hold me; I was nearly a foot out of the machine, swinging like a pendulum. The words of the Prime Minister during the War came to me—"Hold fast!" What sensible, delightful words—music of the sweetest kind! "Hold fast!" Efficiently, and with both eyebrows doing their share, I held. Cold fear made my mind and body work as they had never done before—and as they have never done since.

Some castor oil from the engine had got on to the struts my hands were gripping. Believe me, there are numerous parts of the body which can be used for unusual purposes in times of crisis. With toe, hair, and ears I held until Hinkler, realizing the position, managed to turn slowly upright again.

To-day the sight of an upholsterer at work causes me

to look quickly elsewhere.

And so the weeks slipped past, and the club began to struggle into a sound position. Two more air pageants—almost as successful as the first—brought in cash to the funds. We were able at last to pay the bills owing, and to manage without lengthy credits. As the club became better known more new members came along, and Stack continued to pile up flying hours. Better still, he caused many members to pass their 'A' Licence tests, and so obtained for the club the fifty pounds paid by the Air Ministry for each pilot trained.

It became necessary to have an 'official observer' for these tests, one who lived near Woodford, and who could dash down to the aerodrome whenever the weather and the state of a pupil's nerves allowed a test to be attempted.

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In due course I was appointed, and, having an inclination to do a job thoroughly, spent a week in London learning the correct form of observing and certifying pilots' tests. Armed with a height-recording barograph which the pupil carried to show that he had attained the required height—an instrument that worked intermittently, and usually necessitated the would-be pilot's making several trips—I returned to Woodford, and for a week or so became disgustingly official. Lacayo was the first pilot I passed, and I am sure that no aviator ever complied more exactly with all the regulations and amendments thereto. Later the finance committee of the club complained that my insistence that every detail should be carried out correctly in its precise order was delaying the fifty-pound grants, and, having by then become rather tired of the official business myself, the tests started to be far less exacting.

Now, in order to obtain a pilot's certificate it is necessary to answer certain technical questions—disturbing questions as to international law, rules of lights on shipping, and so on. The information required for the answering of such questions is scattered about in various official publications, the Air Navigation Act with its nine amendments, Orders in Council, Carriage by Air Act, and so on; in all, about eighteen separate publications. Finding that it was almost impossible for pupils to search through all this intricate and voluminous literature, I set to work myself, and after a month's seclusion extracted the various paragraphs which applied to the questions asked by one examiner. These paragraphs, with explanations making them intelligible to the normal sane mind, I had typed and duplicated; the duplicated sheets I

passed to pupils a week or so before they presented them-

selves for questioning.

One of these duplicated sheets came into the hands of a member of a firm of publishers, and one day I received a letter from this firm, suggesting that they should publish the sheets in book form. Reluctant to allow such kindly yet obviously misguided folk to lose their money, I replied (a) that such a book would appeal only to a very limited number of people, (b) that it was bound to be a complete failure. Still those publishers persisted. They mentioned that if the book lost money theirs would be the sole responsibility, and pressed me to accept a contract on a royalty basis. Having done my best to save them from their mistaken ways, I eventually signed the contract.

That book is now in its seventh edition, and the regular royalty cheque is a pleasant reminder of one of

my few profitable adventures in aviation.

III

In the early part of the year I found that my nerves were giving me trouble. Possibly as a result of the two crashes, coming so close together, I lost all confidence in myself as a pilot, and for some weeks even doubted if I should ever fly solo again. It seemed to me that I had lost the trick of flying, and fear of doing further damage to the delicate finances of the club just terrified me.

Dual instruction with the two voluntary instructors failed to provide any cure, and a visit to Stag Lane, where I had some lengthy flights with Charles Barnard and

White, left me in the same state of depression—I had entirely lost confidence in my ability to handle a machine.

I continued in this miserable state until in March Hinkler arrived at Woodford to test machines for Avros. Hinkler and I were already good friends, and I was able to explain my trouble to him without reserve. He said little, and made no attempt to encourage me.

"It's no good trying to make yourself do it," he said. "Just forget you want to pilot yourself and come up

with me as much as possible—as a passenger."

"But do you think——"

"I've a lot of machines to test, and you can come with me as much as you like. Don't bother about flying yourself."

And so we started flying regularly together. Whenever Hinkler had a new machine to test he would let me know, and then out to Woodford I would dash to spend an hour or so with him in the air. The new machines he tested thoroughly, stunting and diving them, and gradually I came to understand his ways—to realize just how he sought to discover any trace of weakness. Without realizing it I came to understand the symptoms of imperfect adjustment, to know instinctively if a new machine was right.

It was a sort of intensive instruction course in test flying, and the most awkward jobs came my way. For instance, I have crouched in the cabin of a Bison, watching a certain fitting, and on landing been expected to give Hinkler an accurate account of just how that fitting behaved while the machine was upside-down or looping and spinning.

One day it happened that Hinkler was to test an

Aldershot—a huge machine in those days—with a total of nearly a thousand horse-power. In the Aldershot there were seats for two pilots, who sat side by side, each being provided with a complete set of controls. Behind the pilots was a cabin in which the bomb controls, sighting instruments, and wireless set reposed; behind this was the gunners' compartment, complete with guns for firing both below the fuselage and above it. Altogether it was an impressive and expensive aircraft.

Unconscious of Hinkler's intention, I sat placidly in the second pilot's seat, while he took the machine off, flew about, dived, and performed all the usual manœuvres; then at fifteen hundred feet or so Hinkler

spoke.

"Just hang on to your controls for a moment. Keep her straight. I'm just going into the cabin for a moment."

"Here! No! I say—"

"Just keep her straight. I want to have a look at something inside."

Before I could protest further Hinkler started to climb out of his seat, and instinctively I gripped the wheel which controlled the huge bomber. For perhaps five minutes we zigzagged about the sky, then gradually, as I learned the feel of the machine, the path became smooth and peaceful. Happily I sat there sweeping in circles above the aerodrome.

"Nice to handle, isn't she?" murmured Hinkler, appearing at my back.

"Beautiful."

"We haven't too much petrol. Better come in to land now."

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"All right," I said. "You get back."

Hinkler peered at the numerous instruments which clustered in front of us.

"I'm not getting back," he said softly. "You're

going to bring her in-yourself."

I don't know how long we argued, I have only the vaguest idea of what was said, but in the end I found myself with the engine throttled back, hanging on desperately to the control wheel and gliding the enormous machine on to the aerodrome. Hinkler at the back of me murmured warnings.

"Not so steep. Too fast. That's better. Burst of engine—you'll undershoot. Keep her like that. Watch

your drift. More into wind."

Visions of piling up that costly machine filled my mind. Pictures of a super crash shrieked at me. The thing was madness.

The bomber skimmed ten feet or so above the grass,

began to lose speed.

"Gently," came Hinkler's voice. "Hold her off—parallel to the ground. Now tail down! Wheel back!"

With hardly a bump we touched, ran along, and came to a stop.

"I'll taxi her in," said Hinkler, climbing back into his seat.

A great exultation filled me. I had landed an Alder-shot—a 1000-h.p. bomber—and I had brought it down undamaged, in one piece. I could have shouted aloud.

The next day, when I flew a Moth, I found that my trouble had disappeared. Confidence was back again: I know I could five

knew I could fly.

, IV

About this time the Avro which Colonel Darby had presented to the club arrived at Woodford. It had been completely overhauled by Avros and fitted with an 80-h.p. Renault engine, and Mr Dobson, the works manager at Newton Heath, had made a really good job of this reconditioning. But for some mysterious reason the machine failed to become popular with the members.

Both the voluntary instructors flew it a little, and reported it 'heavy' on the controls. "Like driving a five-ton lorry," was one comment. The pupils followed the fashion, and for a long time the Renault-Avro reposed in the hangar, hardly used at all. A rumour spread that it could not be looped or spun, and that any form of stunting was almost impossible with this 'bus.' It was the Cinderella of the fleet; no one willingly took it out.

Then one day in July I wanted rather badly to go into the air, and, as all three Moths were engaged, I went aloft in the Renault-Avro. That was the beginning of a long and happy friendship. From the start I liked the machine. To me it seemed to answer every touch of the controls, and we understood each other perfectly. I liked the solid construction, the sturdy build of all the fittings, and long, happy hours I piled up flying GEBOK.

All the little technical tricks of the machine I came to know intimately, and one evening—having first of all patted the 'joy-stick' encouragingly and told OK just what was expected of her—I pushed the nose down and looped. The grim prophecies made about her proved quite unfounded. With only the slightest of bumps she

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came over and met her own slipstream after a perfect loop. Several more times we tried it—even essayed a few stalled turns—and then, with a muttered "Now, you watch what you're doing, old girl," I jerked her into a spin. Never for a moment did she fail me, and at five hundred feet or so came out level at the merest touch of the rudder bar.

Others tried to fly her after that, but she never took kindly to their ways. Jealously I watched any attempts others made, pacing the tarmac anxiously and full of resentment at the ill-treatment I felt sure my beloved OK was receiving. Together we went on various cross-country trips. I had a feeling that when she was away from Woodford she was safe from unsympathetic hands, and so I took her off as much as I possibly could.

Only once in our long association did I believe that she had let me down. Flying one evening, with a passenger in the back seat, I came in to land, and suddenly—about thirty feet from the ground—the controls jammed. The joy-stick stuck as I tried to glide her in; OK refused to answer. In a panic I pushed open the throttle. To land with jammed controls seemed to mean a certain crash; my only hope was to get into the sky again and see if I could shake the stick free. The engine roared its response to the opened throttle, the big four-bladed 'prop.' spun faster, OK began to climb. As we gained height I realized that the controls had become free again.

Ever so carefully I turned the machine in a wide circle, and made for the aerodrome once more. I believed that some rod in the control system when pushed too far jammed against something, and that my only chance of keeping the controls free was to use them with as little

movement as possible. With the gentlest and smoothest

of touches I edged in to land.

Twenty feet from the ground the joy-stick jammed. There was no help for it. I dared not chance climbing again. I switched off the engine and, heaving at the unresponsive stick, risked the landing. There were some horrid bumps as we touched wheels first, our tail still well up; then, undamaged, the Avro, saved by her long front skid, settled down safely on to the ground.

I wiped the perspiration off my forehead, and as I did so suspicion came over me in full force. The machine

was fitted with dual controls . . .

"Did you touch that joy-stick in your place?" I demanded of the passenger.

He nodded casually.

"I'm afraid I did," he admitted. "When you came low I felt I must hold on to something. I entirely forgot you said that rod was some vital part. However, it does not seem to have affected things in any way."

I turned quickly to make my apologies to OK, for I

had misjudged her, and felt ashamed.

CHAPTER VI

CIVIC WEEK

In October 1926 Manchester organized a 'Civic Week.' The precise advantage it was hoped to achieve by this Civic Week for the moment escapes me, but no doubt there was some very good reason to justify the arrangements. Possibly Liverpool was proposing to run a similar function.

For some time before the event I had noticed in the Press accounts of the various arrangements. I read such notes—when I read them at all—casually and without interest. It never occurred to me that I could become involved in any way with these celebrations. And if anyone had then suggested to me that this Civic Week would not only cause me a lot of anxiety and work, but finally compel me to make a triumphal progress through the streets of the city, I should have laughed at the idea as the wildest of fancies.

The first intimation I received of the approaching storm was a telegram which arrived about six o'clock on Tuesday evening, the second day of the Week. The telegram was headed "O.H.M.S. London," and ran:

Cobham visits Manchester by air Thursday. I have told Town Clerk that you will assist in every way regarding selection of landing-ground for him as near city as possible. Hope visit will result in airport for Manchester. Brancker.

While I was still reading the telegram a further message arrived stating that the Town Clerk had left

Euston on the 6.5, would ring me up as soon as he reached Manchester, and that it was most important that he should speak to me that evening.

At about ten o'clock the Town Clerk, the late Mr P. M. Heath, telephoned. He explained that he had been to the Air Ministry with a view to securing their aid in making the Civic Week a success. As it was then, as I say, Tuesday evening, and the Week had already been in full swing for a clear two days, such application may seem somewhat belated, but I gathered that Sir Sefton Brancker had been anxious to assist. Apparently, after some discussion, he had got in touch with Sir Alan Cobham, who had eventually agreed to fly to Manchester on the Thursday. A civic reception was to be given the famous airman, who had just been knighted for his Empire flights, a luncheon held from which Sir Alan's speech on civil aviation was to be broadcast, and so on. It was felt that such proceedings would do much to encourage the spirit of civic pride among the citizens of Manchester.

During the discussion at the Air Ministry the question of a landing-ground for Sir Alan's aircraft had arisen. Woodford was considered too far away; besides, it was outside the city boundaries, in Cheshire, and it was felt that a temporary ground must be found at which the Lord Mayor could more fittingly receive the famous airman. At this stage of the discussion the Director of Civil Aviation had informed the Town Clerk that he would instruct me to discover and make ready an appropriate aerodrome and the telegram before-mentioned had been dispatched.

As it had been arranged for Sir Alan to land on Thursday morning that left me just one short October day in

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which to find, mark, and generally prepare a suitable landing-ground. However, the Town Clerk assured me that the entire resources of the Town Hall were at my disposal, and, having no alternative, I took on the job. An appointment was made for the following morning.

The promise of assistance proved to be no idle boast, and the next morning I set off in a car, supported by the Parks' Superintendent and the late Sir Robert Peacock, Chief Constable of Manchester, to inspect certain possible sites suggested by the City Surveyor. The first two open spaces were little larger than a football pitch, the third was surrounded by tall chimneys, and the fourth had a deep ditch running right across it. To add to my depression, it began to rain heavily. If ever a man had a plain warning from the gods to abandon an enterprise! If only I had retreated then and firmly refused to have anything more to do with the project!

Somewhere about three o'clock, tired, wet, and completely discouraged, having toured almost the entire outskirts of Manchester, we reached a site near Old Hall Farm, Withington. This was a field, almost flat, surface level along one side, but uneven and bumpy elsewhere. It was just about large enough to allow an aeroplane to land in safety, if the wind was in the right direction so that one could come down on the level strip. In a crosswind a landing would be very difficult, if not impossible.

I strode about that field and tried to decide which way I should get out of the dilemma. Time was passing, there were not many hours of daylight left, other sites might be hopeless, and if I wasted time going on to see them . . . Would the wind to-morrow be kind and be in the right direction? If so, would it be really possible to

land without over-running that level strip? Should I take a chance?

Finally I decided to risk it.

"But," I said, "I want rolls of white cloth. Any cheap material will do. I want about three hundred yards: two strips pegged down one on each side of this level runway, and two other pieces across the top and bottom."

These rolls of white cloth were to mark out the only place on the field on which it was safe to land, and silently I prayed for a strong wind on the morrow that would allow a descent upon this one place.

Back at the Town Hall Sir Robert Peacock proved reassuringly adequate. He quickly arranged for the use of the field. Rolls of white cloth were obtained, pegs ordered, and twelve labourers detailed to lay out the markings in the proper place early the next morning. Sir Robert even arranged for a 'smudge' fire to be lit when Cobham's aeroplane was sighted, to indicate to the pilot the direction of the wind. Finally he drew up plans by which squads of foot and mounted police would control the vast crowds of spectators who were expected. A great man was Sir Robert, and his kindly efficiency did much to minimize my anxiety.

One little diversion from my main story is, I feel, justified here. Outlining my plans at the Town Hall, I explained that Sir Alan would land—I hoped—at the top of the runway, and then taxi down to meet the mayoral party. 'Taxi' is, of course, an expression in the aviation world meaning to run an aeroplane slowly along the ground, to manœuvre it under its own power when it is no longer in the air.

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"So he'll land here and then taxi down," I said.

A certain alderman took from me the plan we were studying.

"We won't have him using no taxis," he reproved

me. "We'll send a Corporation car."

But alone, on my way home, my worries broke out afresh. Would the wind be in the right direction? Was the field big enough, anyway? Suppose Cobham saw it and refused to land? If such a thing happened the Air Ministry, the Town Hall, the Press, and the public would blame the chooser of the site. It seemed too much to expect that if an accident happened Cobham would say, "The ground was all right. It was I who made a mistake!" No one would believe him if he did. No, if a crash occurred, mine and only mine would be the responsibility.

Horrible doubts continued to torment me. At last, unable to stand it any longer, I managed—not without considerable difficulty—to get Cobham on the telephone, and told him plainly just what sort of landing-ground he

was expected to come down upon.

"Now, what I want you to do is this," I said. "You come to Woodford first. Don't go straight to Manchester; land at Woodford. You can pick me up there, and I'll come over with you in the machine. I know exactly where the bad spots are, and between us—"

"Don't you trouble," he laughed. "I'll go straight to the field. No good wasting time going round by

Woodford."

I can be as firm as anyone when I am frightened, and I was very frightened just then.

"Never mind what you think. I'm responsible. If

anything happens I'm the one that gets it in the neck. You come to Woodford."

After the operator had twice said, "'Nother three

minutes," Cobham agreed to do as I wished.

"I'll be waiting for you at Woodford," I said. "The Lord Mayor expects you to meet him at a quarter-past twelve, so we ought to leave together prompt at twelve."

"I'll be with you by half-past eleven," he assured me, "but it would be quite all right if I went straight through to the field."

"I know, but suppose something did go wrong?" I

concluded.

Wrong! Anyway, it is always the unexpected that happens.

H

To some extent relieved of worry, committed to a definite plan of operations, I began to wonder how the visit of the famous airman to Manchester might help the Aero Club. Surely there must be some way in which the event could be turned to the advantage of the club! If only I could link the two together it would add to the prestige of our struggling concern at Woodford. Cobham, I knew, was far too decent to begrudge the little reflected glory we might capture, and the Town Hall, I felt, would not object. After all the work and worry I had put in I felt that the club which meant so much to me deserved some consideration.

To cut the story short, eventually I rang up the Town Clerk and asked his permission for an escort of two aeroplanes to accompany Sir Alan from Woodford to the field at Withington. The permission was given most gladly

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and the idea described as excellent, so the next hour I spent arranging for two of the club's Moths to be in flying trim for the next morning, and for our two voluntary instructors, Cantrill and Scholes, to be at Woodford to pilot them across. My plan was a formation flight from Woodford to the landing-ground, Cobham and I in the first machine, Cantrill and Scholes in the Moths on each side.

All this was not quite as easy to arrange as it sounds. In those days machines were not entirely reliable—especially machines knocked about as were club aircraft—and voluntary instructors sometimes found it difficult to take a day off from their business to go flying. However, after much talk the matter was arranged.

The next morning almost before it was daylight I was out in the garden in my pyjamas. Was the wind in the right direction? Was it going to be possible to land? And the answer? Well, there was not any wind at all; it was an absolutely calm morning, just a faint haze; even the lightest branchlets of the trees remained still. I was not altogether happy about this, because the space available for landing was small, and no wind meant a fast landing. Suppose Cobham overshot the level runway and turned over on the uneven ground just beyond?

I got out the car, and by nine o'clock was down at the field superintending the pegging out of the marking cloths. Somehow the space seemed smaller than ever; there were moments when I despaired and felt that Cobham would never attempt to come down in such a place, but would turn indignantly away. Also, there were bumps and hillocks that I could have sworn had not been there the previous afternoon.

G

To cap everything, I discovered that hundreds of stout square pegs had been driven into the ground all over the field. Apparently the ground had been carefully surveyed for building purposes, and these pegs marked the intended roads and building plots. Although I had not noticed them the day before, the pegs were everywhere, and as they marked the levels of the future roads they were, of course, at different heights, some standing six inches or more from the level of the grass—great massive pegs firmly driven in.

Not long after my discovery of the pegs the police began to arrive, and the Chief Superintendent sensed my anxiety. "Now, if there is anything my men can do..."

he said.

"It's those posts I am most worried about," I told him. "If a wheel hits one of those the aeroplane will probably turn over."

He chuckled and waved my anxiety aside. "That's all

right. My men'll have those out in no time."

Five minutes later the ground was dotted with policemen, rapidly pulling up the offending stumps. What we did not know was that all this taking of levels and pegging out of roads was a long and delicate process, and that it had taken an expensive staff, armed with theodolites and other complicated instruments, many weeks to put each peg in its precise position.

At about a quarter to eleven I got into the car, and, after a few final instructions as to the lighting of the 'smudge' fire when the formation of aeroplanes appeared, drove over to Woodford. Here I found everything going exactly as planned. The engine in each of the Moths was running perfectly; both machines had been

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tested in the air and had behaved correctly; the two voluntary instructors stood by, happy and confident. To make doubly sure of things we got out one of the club's Avros and tested this also, so that if at the last moment any trouble developed with either of the Moths there would be a third machine in reserve.

Several of the members had come to Woodford to see the formation off, and it was arranged that two of them, Lacayo and Williams, should accompany the instructors in the Moths as passengers.

Time slipped by: twenty-five to, twenty to, a quarter to, twelve. I began to feel anxious. In half an hour the mayoral party would be waiting to welcome us at Withington.

"Something's gone wrong with something," a mechanic remarked as the clock struck noon.

By ten-past twelve I was in a panic. Over at Withington huge crowds would be waiting, marshalled by great forces of police. The Lord Mayor and numerous dignitaries would be arriving. And here was the formation still at Woodford, with no sign of its absent leader. A horrible doubt began to attack me. Suppose Cobham had decided after all to go straight on to the landing-ground, missing out Woodford altogether? Suppose that even now he was gliding down to land while we waited for him at Woodford?

Just when I had worked myself into such a state that the doubts seemed almost certainties there was an uproar from the club house. One of the selected passengers, unable to stand the strain of waiting, had gone into the club house to fortify himself with a drink. He now galloped out, making uncouth noises.

"Telephone!" he gasped. "It just rang. Cobham's made a forced landing at Nuneaton. I've spoken to him. He can't be here before three o'clock."

Every word proved to be true. Cobham had experienced engine trouble, and was down in a field near Nuneaton. He had telephoned to London for another machine to be flown out to him, and would come on in this to Manchester during the afternoon.

It was now a quarter-past twelve. Over at Withington the Lord Mayor and party, among elaborate preparations, would be waiting to accord a civic reception. Crowds would be waiting to cheer, hundreds of cameras ready to click, dozens of Press notebooks cleared to record the mayoral welcoming words.

Never realizing what I was letting myself in for, and believing that I was showing prompt common sense, I jumped into the Avro, and a minute later was in the air, flying fast towards Withington. Dimly I realized that the two Moths had also taken off, and were coming along half a mile behind.

I had expected a large crowd to be at the field, but when I saw its extent it amazed me. From the air the roads around looked black with the congestion of motorcars; solid lines of people ringed the field itself, and far away on the road towards Manchester I could see people three and four deep lining the route along which the mayoral party would drive.

I shut off the engine and glided down; then, once safely on the ground, taxied rapidly towards the official party at the other end of the runway. Even then it did not occur to me what might happen. My one thought was to let the Lord Mayor know that Cobham was not

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coming. I stopped the aeroplane about fifty yards away, and, jumping out, began walking towards the officials.

Up to then the roar of the engine had prevented me from hearing anything that arose from the ground, but, the engine switched off, I suddenly realized that terrific cheers were coming from the waiting crowds. So much had happened in the last few hours that even then the significance of the thing failed to penetrate my stupidity. For a moment or two I continued walking onward.

I could see that the mounted police were having difficulty in keeping back the enthusiastic crowds which kept surging forward towards the runway. Enthusiastic? Good Lord! Did they *mistake*...

The mayoral party now began to move slowly towards me. Stunned, staggered, petrified, I stood still, literally unable to move. Dimly I realized that a voice was addressing me. Vaguely I heard, "Greetings from our city. Welcome."

I simply stood there and gobbled. At first I think they believed that my attitude was Sir Alan's delightful modesty being carried a little too far; then some one in the party recognized me—and the next few moments are blurred and indistinct in my memory.

If ever a Lord Mayor behaved decently it was that one, Mr—afterwards Sir—Miles Mitchell. Once the situation had been made clear to him he refused to see anything but the humorous side of it, persuaded the Press representatives to make the best of the story, and soothed the annoyance of the rest of his party. Finally he took pity on my embarrassment.

"Well, there is an excellent lunch, I believe, waiting for us all at the Town Hall," he said. "Now we'll all

go and eat it. You must, of course, come with me in

my car."

The procession of cars formed up, a police car in front, then the Lord Mayor's car, and about eight other cars in the rear. Slowly we began to drive along the lane made by the police through the crowds.

It was, of course, impossible to make the crowds understand that Sir Alan had not come. Every effort was made to do so, but they had seen an aeroplane land; any attempt to convince them of the truth failed before it started. They regarded such assurances as obvious fairy-tales told to minimize their enthusiasm and make the passage of the cars more easy.

All along the route, lined with police, the public

cheered and shouted as we drove along.

"You'd better smile and wave to them," I was told. "It'll look better and be safer."

Twice I implored the Lord Mayor to let me lie down out of sight on the floor of the car.

"They won't—see me—there," I stammered. "Only the ones in the windows will."

Apparently it was undignified for a Lord Mayor to drive through his city with a guest crouching on the floor. Anyway, I was not allowed to lie down, and in a state of collapse I was propped up in full view.

The average Lancashire people are plain-speaking folk; their remarks are usually pertinent and vivid. As we drove along I was conscious of numerous observations.

"You wouldn't think as a chap like yon could do owt!"

"'E don't look much, do 'e?"

"Arm disappointed now I 'ave seen 'im!"



LANDING FOR A CIVIC RECEPTION Note the police, both foot and mounted.

CIVIC WEEK

Ш

There is little more to tell. Just as we had reached the fish course of the luncheon a message came that compelled me to get up and go to the telephone. Sir Alan Cobham had arrived at Woodford. I did some hurried telephoning, persuaded Sir Alan to remain where he was for the time being, arranged with the Lord Mayor that he and the official party would return to the field at Withington at four o'clock, collected the two pilots of the escort Moths, and set off as fast as possible to reclaim the aeroplanes.

At the landing-ground it was settled that the two Moths should take off first and fly separately back to Woodford, I following last in the Avro. The first Moth went away all right, and disappeared over the trees on its proper course; but the second one got too near to the side of the runway, and as the machine took the air I saw, hanging from the tail-skid, streaming out behind, a fiftyyard strip of white cloth. The tail-skid had become entangled with one of the markings. There was nothing to be done; one of the precious markings had left us, and the Moth, the weight and resistance of the cloth pulling down its tail, was staggering along nose up towards Woodford. I learned afterwards that the pilot, unable to see what was trailing behind him, concluded that the controls had jammed and struggled on, praying that he would be able to land the machine at the end of the journey.

At Woodford we found Sir Alan waiting in the club house. He had not had any lunch, and, as it happened, all that could be found at the club was some stale bread

and cheese. So while he sat munching this unappetizing fare we showed him the menu some one had collected at the Town Hall luncheon, and explained just how good the food had appeared to us—before we were forced to rush away at the end of the second course.

At ten to four the formation again took off, this time Sir Alan Cobham and myself in the first machine. On landing I was careful to keep discreetly in the background, and the reception accorded the famous airman went according to plan in every detail. A 'Civic Tea' was given at the Town Hall, following a triumphant drive through the city, and the speeches expressed all the most correct and appropriate sentiments. That concluded the official part of the programme.

As I saw Sir Alan off on the midnight train for London he said, "I'll be coming to Manchester again soon. I'll let you know when, so that you can arrange things."

I wonder if he understood my reply.

CHAPTER VII

BEFORE HELVELLYN

I THINK that one of the things I enjoyed most about the Helvellyn flights was meeting an acquaintance a day or so before the first attempt and listening to his uncensored comments upon the project. This acquaintance did not know my name. We frequented the same restaurant, and all he knew about me was that I had "something to do with flying." Almost strangers, we were in the process of slipping into what afterwards became a very pleasant friendship.

A few days, then, before the first attempt I went into the restaurant and found my acquaintance just starting his soup, and while I was studying the menu he began to talk of flying matters—" All this fuss in the papers about some one trying to land an aeroplane on a mountain."

"Helvellyn!" he snorted. "Now, I know Helvellyn well. I've climbed it a dozen times, and let me tell you

the idea of landing an aeroplane on it . . ."

Then, before I could stop him, he burst out into a complete and detailed denunciation of the proposal. In a masterly summing up he demanded that the flight should be prohibited, finishing with some really clever sarcasm about the pilot "who was silly enough to attempt such a thing." He was interrupted by the arrival of two other men at the table, two men who knew me well, called me by name, and asked how the plans for my proposed flight were progressing.

II

Of course, to many people the project must have appeared senseless and extravagant. Let me explain exactly how the idea arose.

It was first suggested at a party at Chez Victor's, that pleasant club off Bond Street. The party was given by Sir Sefton Brancker, and therefore it was a very good party indeed. The evening had started with dinner at "the Rag" (the Army and Navy Club), which we followed by a visit to a theatre, and by the time the mountain flight was mentioned in Chez Victor's we had reached the coffee and brandy stage of an excellent

"What you want to do," said Sir Sefton, addressing

me, "is to land on a mountain."

"What mountain?" I asked.

"It is quite immaterial; any mountain."

To be candid, I was in that vague, dreamy state when Alice in Wonderland things seem natural. It did not seem strange that the Director of Civil Aviation should be inviting me to do such a thing.

"Do you mean just go and crash a machine on a mountain? "I asked.

Sir Sefton adjusted his eyeglass.

"Propaganda. That's what aviation needs. Now, suppose you were to take an aeroplane and land it in some impossible place—say, on the top of some skyscraper-stay a little while, and then take off again and fly back to your home aerodrome. The papers would be full of a stunt like that. People would realize modern aircraft can land almost anywhere."

"But they can't."

Sir Sefton ignored the point. "That's a remarkably nice tune. I'm going to dance," he said, and left me.

I have since learned that on March 11, 1925, The Aeroplane published a photograph of the summit of Snowdon, with the following comment printed below it: "When an aeroplane can alight by the hotel and start thence we may consider that we have achieved safety in aviation." Probably Sir Sefton had seen the photograph. So the praise or blame for inspiring the flight to a mountain-top should perhaps be divided equally between "the General," as Sir Sefton liked to be called, and Mr C. G. Grey.

The next day, to my great surprise, Sir Sefton brought

up the subject again. .

"That idea of mine, about landing on a mountain, I believe it could be worked up into something really useful. You see, we've got to keep aviation before the public. Half the people never see an aeroplane, and the only way to reach them is by propaganda. Get them talking. Cobham's journeys have been invaluable because they cause people to talk about flying."

He rose from his chair and began walking rapidly

about the room.

"Of course, officially, we can't help you at all. But if you like to plan out a spectacular flight to the top of some place where it is just possible to land a machine and then get it safely off again, I'll do all I can, personally, to make it easy."

I mentioned the difficulty there might be in persuading a manufacturer to lend me a machine for such a purpose. Sir Sefton waved the objection aside.

"I can help you there. But you'll have to organize the whole thing properly yourself. Plan every detail. If you bring it off it will be most useful propaganda, and I'll be grateful. Besides, it will be splendid publicity for your club. Think it over, and let me know to-night."

As I was going from the room he called out, "You want to choose the best-known mountain in the British Isles—somewhere that every one knows. Wait a moment—Snowdon. Yes, Snowdon will be the place for you."

A week later I was deeply involved. At first I regarded the project as a bit of fun, and by the time I had realized how troublesome and serious the thing was likely to be I was too entangled with arrangements to back out. To be quite honest, in the beginning I did not understand what I had taken on.

The first thing to be decided was the type of machine required; the next step was to interview the manufacturers about the idea. Of course, I chose an Avro, and Mr Hubble, then manager of the firm at Newton Heath, was helpful and sympathetic. Avros had been for some time experimenting with a new type of radial engine which they had named the Alpha, and it seemed an excellent thing to make this new engine known by first using it on a flight such as was contemplated. The firm's technical experts were brought into the discussion, and we eventually all agreed upon a standard Avro Gosport, lightened and modified in certain respects, and fitted with one of the latest Oleo undercarriages. This would give us a strong machine—the Gosport was designed for training work—while the modifications would

cut down weight and improve the performance. The Alpha engine, being still in the experimental stage, we accepted untried, but, if it did anything like it was supposed to do on paper, the ultimate result promised to be very good indeed. It was finally arranged that the proposals as to the engine and the machine with details of the intended flight should be put before the directors at their next meeting.

I was in London when this directors' meeting took place. Sir Sefton had suggested that I should meet a certain expert who would direct the publicity, for I found that the propaganda campaign work was to be done for me, and in the midst of complicated discussions on publicity and weather conditions the news came that the directors of Avros had turned the proposal down. Apparently the Managing Director lived quite near Snowdon; he had even climbed it once in a motor-car—the first and, as far as I know, the only motor-car ever to have performed this feat. In short, he knew all about Snowdon, and knew quite well that it was impossible for an aeroplane to land on the summit. I gathered that he had immediately dismissed the whole proposal.

The very afternoon I heard this news I received detailed Air Ministry weather reports on the conditions which had prevailed in the past around Snowdon. At the same time I met somebody who knew the mountain well, and in fifteen minutes' conversation he convinced me that a landing on Snowdon was impossible. At the summit there was no flat ground at all; it was simply a peak covered with jagged rocks.

"We shall have to find you another mountain, that's all," I was told.

Two days later I was informed that such a summit had been discovered: Helvellyn, in Cumberland, 3118 feet above sea-level.

"Tableland," I was assured, "just like a billiard-table at the top."

Let me here intervene and say that later I found that these reports had been compiled from the records of a society of mountain-climbers, that no air pilot had actually inspected the summit of Helvellyn on my behalf, and that when I did see it myself I agreed entirely that it was "like a billiard-table"—and just about the same size.

All the time that these discussions and altercations were going on numerous arrangements were proceeding. No one who has not undertaken the organization of a 'flight' can have any idea of the hundreds of small details that demand attention. I once heard Cobham say that when he was actually in the air, beginning one of his big flights, he felt exhausted, but knew that all the real work was done. I understand exactly what he meant.

At this stage of the negotiations I rushed back to Manchester to interview Avros about their refusal to provide a machine. I believed that when it was explained to them that Snowdon was now out of the matter, and a perfectly suitable mountain was suggested in its place, there would be no more difficulty. Five minutes after entering their works I learned that I was mistaken. The Managing Director had dismissed the project as soon as he heard of it. Now he was far off on his way to America. It seemed an impossible task to argue with this gentleman by wireless at elevenpence a word.

What happened then I am not supposed to know, but

in due course the matter was reopened. The directors were, of course, in an extremely difficult position: the Managing Director had forbidden the project; they could not reach him, or at least in a way that would be satisfactory. If they now agreed and a crash occurred—a fifteen-hundred-pound aeroplane written off—he would be justified in almost any action he might take. If, on the other hand, they refused . . .

Finally it was decided that I should have the machine.

"It seems to me," one of the directors said miserably, "we lose any way. If there's an accident and the machine's lost you can imagine what Sir William will be like. If we obey his orders and refuse to lend you the machine, well——"

"It might come off all right," I suggested. "I might be successful."

"That's our only chance, but it's too unlikely to com-

fort me. Anyway . . . "

Once definitely committed, the firm went full out to help the flight in every way. Mr Hubble gave the technical staff a free hand, and supported them in all they asked for. Mr Dobson, the works' manager, kept the best of his mechanics at work tuning and adjusting the machine and its engine. Finally Bert Hinkler was brought to Woodford to test the aircraft in flight. For days this testing went on, Hinkler making dozens of short flights, reporting, advising adjustments, testing again. The work was, of course, much greater than might have been the case, because we were using an entirely new type of engine, the Alpha, which, as I have already said, was as yet in the experimental stage, and which had not yet been developed sufficiently to be in

production. It was still suffering from 'teething' troubles at that time, and had not even passed its Air

Ministry type tests.

In the midst of all these worries and delays something went wrong with the Press arrangements, and an announcement was made prematurely. Worse still, the mountain was stated to be Snowdon. Most of the papers printed a photograph of Snowdon summit beside the announcement, and I was forced to do some very energetic work refuting the report and reassuring certain people. There were those who concluded that the Press notices indicated that I was going to doublecross them, and intended to try for the Welsh mountain after all.

At this stage I decided to go up to Cumberland by car, climb the mountain, and actually inspect the "natural aerodrome, just like a billiard-table" at the summit; for, however good this place might be, it was obviously a sensible thing to have a look at it before the

actual landing.

The city of Manchester draws its water supplies from Thirlmere, a lake situated at the foot of Helvellyn, and the ground all round there—including the mountain itself—is the property of the Corporation. I approached the Manchester civic authorities, and found them willing to assist. At Thirlmere they had a man in charge who had been there for many years and knew every foot of the country. It was arranged that I should go to Cumberland the following week-end.

I will pass rapidly over that terrible week-end. Quite honestly, I believe I then suffered more actual pain, more physical misery, than I have ever done in the whole of the rest of my life. Perhaps I should explain here that I

am no walker; I do not like walking; it makes me feel ill; and in my opinion Providence never gave mankind legs to be misused in this way. I am not ashamed to say that I am the kind of person who if he walks from Charing Cross to Piccadilly Circus sinks down in a chair and speaks feelingly of the effects of exercise.

A friend of mine named Heys accompanied me to Cumberland. Sandham, who was in charge at Thirlmere, welcomed us, and suggested that as it was then nearly one o'clock in the afternoon, and it would be dark in another three hours, we should hurry up Helvellyn at once. He was—although I did not realize it then—an experienced and hardened mountain-climber who was anxious to get us up and down again before night came on.

I will not attempt to describe that afternoon of agony. For the last mile to the summit there was ice in places along the path, and at every patch of ice Heys and I fell, hurting ourselves excruciatingly. Twice on the way down I implored Sandham to leave me. I really meant it, and his retort as he pulled me to my feet that I should "die of exposure" I regarded as heartless and irrelevant. Let me make it quite clear that both Heys and I must have been almost unconscious on the way down, our exhausted brains numbed and out of action. I can prove this statement quite simply. At one point Heys fell down a small cliff—perhaps ten feet through the air. He walked straight off the edge blindly, and as he fell his legs still continued walking. I saw this incident distinctly.

I wish to say that if any credit is due to me in connexion with Helvellyn it is for that climb on foot, and not for the flying part of the affair. Had monuments been erected to this climb, had honours been showered

H

upon me for this feat of endurance, I know I should have

deserved every one of them.

Sandham's remark that he often went up for a walk after church on a Sunday might possibly have been insulting if it had not been so palpably absurd—like some one meeting Scott after his struggle to the Pole and saying, "Ah, yes, I often stroll out there too. Nice spot in the evening."

The morning after the ordeal Heys and I talked the position over, for in spite of our exhaustion we had managed to glimpse something of the summit, and its suitability for use as a landing-ground required no deep

consideration.

"How are you going to get out of it?," asked Heys.

"I can't get out of it."

Heys thought this over.

"But you can't land an aeroplane up there!" he said.

"Why, even a first-class pilot couldn't do it!"

- "I've thought it all over," I told him. "I worked it out last night in bed, and there just isn't any way of calling the damned thing off now. It's too late—I'm committed. I simply daren't back out now."
 - "But what I don't see—"

"How can I go back after what's been in the papers? What would Brancker and Avros and every one say?"

"I know what I should say to them," Heys replied.

"Tell 'em all to go to hell."

For perhaps five minutes we discussed the problem.

"It comes to this, then," Heys summed up: "you're scared to say straight out that the thing's impossible. You're frightened of what people are going to say."

An excellent judge of human nature is Heys, with a pithy way of expressing himself. At that point I explained the plan I had evolved. The actual summit itself seemed to be definitely out of the question, but about half a mile away, a little lower down, was a strip on which it might just be possible to bring off a landing. Sandham was enthusiastic; he was obviously most willing to help. If he were to engage three or four men to go up to this place and roll away a few of the worst boulders a track of sorts might be made. Three men up there for, say, three days would obviously make a considerable difference, and with a really suitable wind a landing might be brought off without accident. Really, everything would depend on choosing a day when the wind was exactly right. Accurate weather reports were going to be vitally important.

"With some of the rocks rolled away, and a right

wind, I believe the thing can just be managed."

The next day, having completed various arrangements for the reception of the aircraft on Helvellyn, we returned to Manchester.

III

The days that followed were a nightmare. Apart from the practice flights with Hinkler and the usual troubles always experienced with a new machine and an experimental engine, every possible difficulty arose to worry my already harassed nerves. The insurance people suddenly became nervous—I refer, of course, to the insurance of the aircraft on this particular flight—and Avros naturally refused to risk their machine uninsured. Who could blame them? Imagination jibs at the vision of that

ATRDAYS

Managing Director being informed that a flight against his orders had resulted in a crash, but to be forced to add that the insurance company had declined the risk . . .

My trouble in those days was that, if for any reason the flight had to be abandoned, I was the one—the only one—on whom ridicule would fall. The Press, as I have said, had already given extensive publicity to the project, and the public regarded it only as my own particular scheme; they had been told that I would land on a mountain; the possibilities of success had been argued at length. If the effort was cancelled it was I who would appear ridiculous—I who had said, and then never tried.

After considerable discussion, when a complete dead-lock seemed to have been reached and I could almost hear the jeering laughter of the multitude, the insurance company at last gave way. Possibly Sir Sefton Brancker helped once more. I do not know, but the manager of the company wrote me: "The sigh of relief which will be heaved from my gentle breast when the show is all over will doubtless be heard even in Manchester."

Another difficulty that arose was that as the engine was experimental and had not passed type tests the machine could not be granted a Certificate of Airworthiness. Without a C. of A. no machine is allowed to fly beyond three miles of a licensed aerodrome, and so, of course, the machine prepared for the flight was—technically—unable to leave the district of Woodford. This necessitated the issue of a special official permit. The permit is on my desk as I write:

... hereby grant special permission for the following aircraft —viz., Avro Gosport two-seater landplane GEBPH (Constructors' No. R₃/R/70000), fitted with Avro five-cylinder

radial engine of 100 h.p., belonging to A. V. Roe and Co., Ltd., of Newton Heath, Manchester—to be flown without having been certified as airworthy as required by the said order, and without carrying the documents prescribed thereby. This permission is subject to the following conditions and limitations: (1) It is valid only for the purpose of a flight from Woodford Aerodrome to the summit of Helvellyn and a return flight to the said aerodrome . . .

While all these various troubles were being settled Sandham was constantly warning me that at any time there might be a heavy fall of snow—the permit was not issued until December 8—and that once the summit of Helvellyn was covered the snow might possibly lie there until the following May or June.

At last some order began to form out of the chaos: the machine definitely promised, the insurance and the official permit arranged, the Press campaign going smoothly, and I beginning to learn and master the unexpected tricks of the experimental engine. The way began to clear. Only the flight remained to be made, a detail which, after what I had gone through, seemed the merest trifle.

IV

At last the day actually came when the telephone rang with the first of the early-morning weather reports. Believing that the success or failure of the venture might depend upon our foreknowledge of the conditions prevailing ahead, we had made the most careful arrangements about these weather reports. At three points along the route from Woodford to Helvellyn—at Preston, Grasmere, and Wythburn (Wythburn is at the foot of

the mountain)—reliable persons willing to help had been selected. These persons had been given brief instructions as to the kind of information required, and a method had been worked out by which they might judge the conditions to some degree of uniformity. The observations were to be taken at a quarter to eight each morning, and timed telephone calls arranged, so that by eight o'clock I had received three independent reports of the conditions prevailing. It was also arranged that at 8.2 a full and detailed forecast should come through from the Air Ministry Meteorological Station at Sealand; while at 8.5 Woodford rang up to know if a start were to be made that day.

I give below a copy of the complete report made out, on the morning on which we did eventually start:

PLACE	Wind			
	DIRECTION	Strength	Visibility	Prospect
Preston	North	Strong	Good	Fair
Grasmere	North	Strong	Clear	Good
Wythburn	North	Strong	Perfect	Good
Sealand	Fair to cloudy, risk of passing showers. Lowest cloud two thousand feet to three thousand feet above sea-level. Some clear intervals. Visibility six to ten miles, eventually decreasing. Wind north, twenty to thirty m.p.h. at sea-level. Wind north, thirty-five at two thousand feet. Decreasing later. Sharp frost; local fog. Advice: Proceed. Good opportunity if machine can be landed in thirty-mile-an-hour wind.			

It was on that report that the first attempt on Helvellyn was started, but before this one came days went

by when conditions were reported hopeless and the trial of 'waiting for weather' seemed almost unbearable. There was always the fear that snow would put an end to the whole affair; and the strain of waiting for which would come first, a heavy fall of snow or a clear day, began to have a serious effect upon every one's nerves.

Hinkler sensed the deterioration that was taking place in myself, and rallied round like the good friend he was. He was always urging me to take the machine up and practise landings at Woodford, persuading me to join him in some stunt flying over the aerodrome. "Just keep flying," he kept advising. He would peg down a newspaper on the aerodrome, and then challenge me to a competition. Which of us could land the nearer to the newspaper? On a dual-controlled machine, he doing one landing and I the next, such practice was, of course, invaluable to me. Bert Hinkler had a natural gift for flying. He did not seem to 'fly' the machine, but rather to be actually part of it. Just as the legs of a trained athlete obey his brain, so the wings of an aeroplane answered Hinkler's instinctive control. He was a master one could not hope to copy, but to fly with him as I did gave an insight into the ways of a pilot who was undoubtedly a genius. I remember how he once said, "Every landing is a forced landing. Every time I land I pretend I haven't got an engine."

Bert Hinkler, who could put a machine down almost on a dinner-plate, and who died in the end by flying through clouds into the side of a mountain . . .

On the morning of December 15 the weather report given above came through, and by nine o'clock I was at

Woodford, waiting to be off. But, in the usual cussedness of things, the engine, which had been running perfectly the night before, now refused to start. Mechanics laboured and adjusted, while time went quickly by, and I raged about the tarmac, praying that the weather would not change.

During the last few days the Press had been working themselves up into a frenzy over the projected flight, and one enterprising newspaper, The Manchester Guardian, had engaged Hinkler to take a photographer in his machine and to accompany my machine towards Helvellyn. Their idea was that if I made a successful landing excellent photographs might be taken from the air and flown rapidly back to Manchester; while if anything unfortunate happened en route the following machine would be able to land and be the first with the pictures of the débâcle. Hinkler had entered into this scheme most enthusiastically; we had talked so much together about the problem of Helvellyn that he had become really keen about the venture, and this opportunity of being in at the death appealed to him. Naturally I welcomed the company of Hinkler, even though he would be some distance away in another 'plane, and as the photographer from the newspaper happened to be a friend of mine the idea was doubly acceptable.

It was after eleven o'clock before the mechanics finally expressed themselves satisfied with the engine—two precious hours had been lost—and when, after a brief flight to test the machine in the air, I set off towards Cumberland it was nearly noon. For a time everything went perfectly. The weather seemed to be holding up, and apart from the mist, in patches near the towns, the

conditions were excellent. It was bitterly cold, of course. Below, the ground was white with frost and as hard as granite, but upon me at two thousand feet the winter sun

shone brilliantly from a clear blue sky.

From Woodford I steered a compass course due northwest, until at Wigan I picked out the main Crewe-Carlisle railway track, which runs almost in a straight line northward. Once over this I turned, and, following the railway, headed for the north. From this point weather conditions began to deteriorate. The patches of mist below turned to fog in wide stretches, and by the time Preston was reached the sun had disappeared and the sky had changed to a dull browny grey. Just past Preston the visibility became so bad that I had to come down to about three hundred feet, and I throttled back the engine with the idea of allowing Hinkler's machine to close up. He was flying two or three miles behind, and I felt that if we were going to run into a mist it was best to have the two machines in sight of each other. Besides, it had been arranged that we should land for petrol at Lancaster, and Hinkler did not know the location of the field in which the supplies were waiting.

Before he could close up, however, a storm came on, and for five minutes the ground disappeared under a cloud of driving hailstones. Fortunately the engine remained unaffected, and when things cleared the railway line was still in sight, and Hinkler appeared about a mile away on the left.

After the storm conditions were better for a short time, and over Morecambe Bay the other machine came up close, while Doughty, the photographer, hung out of the back seat, trying to secure a photograph of my 'plane

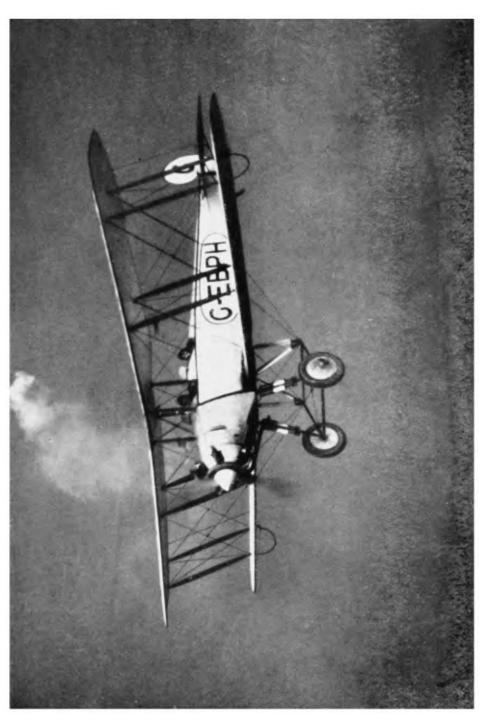
with the sea as a background. But the improvement was only temporary. Near Lancaster mist and rain began to blot out the ground, and it was with some difficulty that I located the field where the petrol supplies were.

Once safely down in the field, Hinkler, Doughty, and I held an anxious consultation. Should we try to go on? Ahead the weather looked definitely bad; the sky was the colour of lentil soup, thick and sluggish, as if a heavy snowstorm was coming on. On the other hand, both machines were running perfectly; after leaving Lancaster we should have full petrol-tanks, and there might be a chance that we could get round the storm and find the summit of Helvellyn in clear sunshine.

Bennion, who was superintending the supplies of petrol, urged that the chances of getting through were too small to be worth the risk, and his chief assistant, chilled and miserable in the bitter cold, expressed his feelings even more plainly. Against this it was argued that the flight had aroused considerable interest locally, and that several people would have climbed the mountain on hearing we had left Woodford; if they were still waiting for us up on the summit, if there it were clear and sunny . . .

It was decided that we should try to get through. About half-past one I took off and circled round, until Hinkler, with the irrepressible Doughty, joined me in the air; then the two machines set off side by side in the direction of Cumberland. It was raining as we left.

After careful consideration I do not hesitate to say that in the next hour I experienced one of the worst frights of my life. Once among the hills we encountered bumps—sheer vertical drops of three hundred feet. An



expert once explained to me that an 'air-pocket' is a vacuum—a sort of hole in the air—and that a pocket can only occur momentarily because the atmosphere is rushing in from all directions to fill the vacuum. In this way a 'plane dropping in an air-pocket is falling not only because it has no air to support it, but, sometimes, because the atmosphere rushing in forces it down also. I believe every word of it after that flight from Lancaster. Hinkler, who had flown many hours round the Alps, said afterwards that the bumps we met that day were exceptional in his experience.

The machine tossed and tipped: a wing forced down as if a great weight had suddenly been dropped upon it, the machine falling sideways a hundred feet or more. Like blows from some gigantic monster were those buffets on the edge of the storm among the mountains.

The rain kept on, and, to add to the difficulties, hail began to beat down heavily. Unable to see anything of the ground, we were compelled at times to climb upward through the storm.

This 'losing the ground' in bad weather is perhaps one of the most trying problems that ever confront a pilot's judgment. If he comes down lower and lower to keep the earth in sight he may end by flying straight into a hillside. Imagine a motorist whose accelerator has jammed so that he cannot travel at less than eighty miles an hour, a motorist with a strip of muslin across his eyes so that he can see no farther ahead than twenty or thirty yards, and you have some idea of a pilot's feelings when following the ground in bad weather.

There are countless records of deaths from flying into hillsides. Even if a pilot knew exactly where he was,

and the precise height of every hill around him, it would be little help. The barometer which tells a pilot his height from sea-level is affected by weather conditions—it is, in fact, a 'weather glass'—also, it is hardly accurate to fifty feet or so; and, finally, there is a time lag before the instrument registers. Near the ground, therefore, a pilot is compelled to rely entirely on his own senses. And when he cannot see more than a few yards ahead, and is hurtling through the air at nearly a hundred miles an hour, even the youngest of pilots doubts his ability to avoid a crash in the split second that may be allowed him.

If, on the other hand, a pilot climbs up above the clouds, he has eventually got to come down again. Sooner or later he will have to find his way through the clouds until he is in touch with the earth again, and the risk of not seeing the ground in time, and of flying straight into it, is a very real risk indeed.

Half an hour after we left Lancaster Hinkler's machine was in front, leading by perhaps twenty yards or so. We were still trying to find a way through under the storm, and were skimming along quite close to the almost invisible ground. In the brief intervals between tugging the machine on to a level keel I could see Doughty hanging on in the tossing 'plane, and occasionally peering back to see that I was still behind them.

Suddenly, without the slightest warning, Hinkler's machine shot violently upward in a stalled turn. It was so sudden, so drastic, as to be almost a loop. Without waiting to see the cause, panic-stricken, I pulled my 'plane over in the opposite direction, and as I shot upward I glimpsed Hinkler disappearing away to the left,

while in front—in the direction we had been flying in—the side of a mountain showed through the mist.

That was enough for me—quite enough. Whether there was a way through or not seemed of no importance. I was going home.

For three thousand feet I climbed. Once above the mountains I was safe from shocks such as this, and J.F.L. went upward, praising the Avro for its excellent climbing qualities, and praying that the engine would continue to function. At three thousand feet the storm clouds were below, a rolling mass of foul, greeny scum, and, turning back, I headed for home. Where Hinkler had got to I knew not.

A line from one of W. W. Jacobs's stories occurred to me: "What I say is this, if every one in a wreck saved himself, there'd be far less people drowned."

For perhaps fifteen minutes I flew along above the clouds, then, believing that I must be clear of the mountains and not far from the sea, I began to edge cautiously down through the mist again. The gloom was somewhat lifted here, and, while during the frequent hailstorms I was forced to maintain height, at each brief interval between the storms I managed to come a little lower. Finally, just as I was beginning to worry and think the ground would never show, through the fog came a glimpse of water, like a silver plate on a brown cloth. For the moment I thought that something had gone wrong, that I had entirely lost direction and had headed back north among the Lakes. Then I realized that this shining streak was the sea.

Five minutes later I was flying along the coastline about ten feet above the sands of Morecambe Bay, and

a mile or so beyond I came up with another aeroplane— Hinkler and Doughty, also heading for Lancaster.

We landed at the field where the petrol supplies were, and after filling up the tanks again and assurring various Press representatives that the project had failed for the time being, but that both Hinkler and I intended to come again at the first opportunity, we took off and headed for Woodford.

The disappointment was keen; the difficulty of arranging satisfactory weather reports between Helvellyn and Woodford had become apparent, for at Lancaster they had told us that, while at eleven o'clock conditions were almost perfect on the mountain, by noon it was impossible to see more than twenty yards, and a gale was raging. The watchers had been driven off the summit, so bad had the weather become.

The job was going to be far more difficult than anyone had believed; a horrid little devil of doubt even kept whispering that it was impossible.

It was after three when we took off from Lancaster, and within half an hour the stormy December afternoon had changed to semi-darkness. Not far from Preston lights had begun to twinkle in the houses below, and the cotton-mills made great square blocks of yellow light. I closed in behind Hinkler, expecting him to land before it became properly dark. Left to myself I should have landed some time before, but as long as he kept on it seemed safest to follow.

I have only the vaguest idea of the route he took. I realized that he was not heading for Wigan along the way we had come that morning, and until we picked up the Ship Canal near Manchester I was completely lost.

The Ship Canal stood out clearly, a glistening landmark in the darkness, and here Hinkler came down low to find out his position. Apparently we were near Irlam, and after one or two circuits, when I thought—and hoped—he was about to land, the other machine turned away towards the south.

Ten minutes later we were gliding in to land at Woodford.

CHAPTER VIII

THE FLIGHT TO HELVELLYN

For six long miserable days we waited. Reports had come through that, while snow had fallen on Helvellyn, the gales had driven most of it from the summit, and that unless there was a heavy fall it was still possible to land.

The Press treated the failure of the first attempt very generously. The Manchester Guardian 'splashed' the story in three columns on the main page. They gave a fair and perfectly truthful account of our experiences, and printed some excellent photographs which Doughty—the true journalist, who put his paper before all else—had somehow managed to secure. The other newspapers followed the lead of this great 'Daily,' and while the publicity was extensive, and entangled me more firmly than ever in the project, it was, on the whole, kindly and fair.

During the time of waiting my greatest worry was that one of the important backers might change his mind, and a further attempt would have to be cancelled. It needed very little to cause this. The insurance people had ever looked upon the project with disfavour, and, as I have said, only with considerable reluctance had they agreed to cover the risk.

The makers of the machine were in a difficult position owing to the attitude of their Managing Director, and I knew that they would gladly have seen the whole affair

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concluded. They had little to gain and a good deal to lose.

Unfortunately for me, Sir Sefton Brancker had left for India on December 15, the day we made the first attempt, and, in case another attempt was forbidden, I had now no court of appeal. However, Hinkler had become as interested in the business as I was; he wanted to see if it could be done, and with his assurances, and the loyal support of Dobson, we stemmed off any actual ban on the flight. But I felt that the next effort would be the last one; either it succeeded or the mountain flight would be cancelled.

For six days, then, we waited, and I began to wonder if the dread and worry were going to hang over me during Christmas; then on the morning of December 2 1 the weather reports that came through were excellent. Fate had offered another opportunity.

The watchers at Wythburn who were to meet us on the summit were advised that an attempt would be made, and once again I dashed off to Woodford. Here a totally unexpected trouble arose. The engine of Hinkler's machine would not give its full 'revs.'; some defect had developed. The undaunted Doughty was waiting to go off with Hinkler again, and while mechanics worked frantically on the engine the three of us consulted together.

To go on alone without Hinkler never occurred to me. At this stage, as I have said, he was as interested in the project as I myself, and as much a part of it, and had he been left behind would have been bitterly disappointed. I could no more have gone on without him than he could have left me behind.

Time slipped by. At ten minutes to twelve the mechanics, after numerous tests and adjustments, discovered that the trouble was serious, and that the only thing to do was to install a new engine altogether in Hinkler's 'plane. Such a job would take the best part of a day, and it was obvious that as far as the second machine was concerned the thing was finished. Meanwhile the excellent weather conditions were being wasted.

There was a heated argument on the tarmac. Without Hinkler I would not go; if we waited until his machine was ready the one opportunity might be lost; yet if we went together in the same machine he urged it would spoil my 'show.' The argument became bitter and abusive.

At twelve o'clock Hinkler put on his helmet and goggles, and a few minutes later we took off together in the Avro Gosport. One thing that will always haunt me is the look of reproach on Doughty's face. A real sportsman, he hated being left behind, and, while it was impossible to take him also in the one machine, I have always felt that my action was selfish and unsporting.

Once again I steered by compass to the railway line at Wigan, and then followed this north to Lancaster. Here we took on supplies of petrol, and then set off again towards the mountains.

Even at Lancaster our chances of succeeding seemed small; a strong, gusty wind had arisen during the time that had been lost, and it was freezing so hard that ice formed upon the wings, but once we were among the mountains it was perfectly obvious that for this day at least there was no hope. The weather remained quite clear, and we did actually get to within a mile of the

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summit of Helvellyn, but at three thousand feet the gale was so strong that the aeroplane almost remained stationary, and to have attempted to land would have meant certain disaster. The machine would have blown over before it came to rest. After a flight of about an hour and a half we returned to the field at Lancaster.

While the petrol-tank was being filled up again, I urged Hinkler to agree to our staying in Lancaster and making another attempt on Helvellyn at the first opportunity.

"If we wait here we can slip off the moment the weather is decent; it's the time we lose getting to Woodford and getting up here that does us every time. Besides, if we go back I don't feel they will let us start again."

But Hinkler would not listen to the proposal. He said it was December and the weather might do anything; we might have to wait a month, and a gale could easily wreck the machine if it were left in a field. He was adamant; the aeroplane must be properly housed at Woodford. Shortly afterwards we took off once more.

The most fortunate thing about that take-off was that Hinkler happened to be flying the machine. Had I been in charge there is not the slightest doubt that Avros would have lost a perfectly good aircraft, for I have never known a more hopeless position for an engine to splutter and stop dead in. We were just about to clear the boundary of the field, about twenty feet up-climbing, and had as yet hardly gained flying speed. In front ran a massive line of main telephone wires. Had I been flying the machine I should probably have attempted to get under the wires and have crashed in the road beyond, or, worse still, I might have pulled the nose up in an

effort to clear the wires, in which case a 'stall' would have been inevitable.

Hinkler acted instantly. As the first splutter came from the engine he had the nose of the aeroplane down—remember, we were climbing out of the field and had little flying speed—and at the same time he swung round in an absolutely vertical turn back to wind. It was a chance in a thousand, and according to all laws of reason should have failed badly. A fraction of a second's hesitation, the slightest misjudgment of speed, would have sent us into the ground.

I saw the left wing brush the grass as we twisted round, and the next moment Hinkler had flattened out, was skimming across-wind a foot or so above the field ready to land. He pulled up, the machine undamaged, a few yards from the hedge.

Sediment in the carburettor proved to be the trouble with the engine, and after we had taken the filters down twice, cleaned them out, and still failed to get full 'revs.' it became obvious that there would be no further flying that day.

"It'll be dark in another ten minutes," Hinkler said at last. "I can hardly see as it is. There's nothing for it but to tie the machine down by the hedge and clean all the plugs and the filters properly to-morrow morning. We'll have to stay the night here after all."

Rope, some sacks, a few large wooden pegs, and a hammer were borrowed from the near-by farm. The nose of the aircraft was pushed into the hedge, and after the engine had been covered with the sacks, which we tied on with string, we set to work and fastened the wings and tail down firmly, roping them to the pegs driven into

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the ground. It was quite dark when we finished, and, the petrol people having left us, Hinkler and I set off to walk the three miles into the town.

I have already explained that I am no walker. It was bitterly cold, freezing hard, with a forty-mile-an-hour wind blowing. Neither of us had had any food since a hurried makeshift breakfast early that morning, and, to add to our misery, dirt and oil from repairs to the engine seemed to be sticking to every part of our bodies. To complete the discomfort, both of us had lost our handker-chiefs, and we had no cigarettes.

At the farm where we had borrowed the pegs and rope they said that a bus would overtake us along the road, but no such vehicle appeared. Three times we tried to stop passing cars and ask for a lift, but these just drove past unheeding. Possibly tiredness made the meaning of our signals confusing; more probably our appearance suggested to the drivers that it would be wiser to keep moving. Anyway, we trudged those weary miles into Lancaster.

All the way along my mind gibbered over the mess we were in. There seemed no chance whatever of landing on Helvellyn. Weather conditions changed so rapidly at this time of the year, but then probably it was impossible at any time. There was hardly any level ground at the top, and what there was, was covered with loose rocks. Even if we did manage to land undamaged we should most likely fail to stop, and shoot over that precipice.

All the hateful publicity saying that I would land on Helvellyn was pictured clear before me; I saw every boastful headline, every bragging photograph. And now

I had failed. The thing was impossible. It could not be done.

Already I had seen some indications of the attitude this failure would bring. The petrol men had deserted us; even the solitary journalist had almost smiled at my explanation of to-day's attempt; the farm people had seemed offhand. The ridicule, the amused glances, the sarcastic remarks, when it became known that the project was definitely abandoned, were all clear to me then as I trudged miserably towards Lancaster that bitter December evening.

Only one remark of Hinkler's remains in my memory: "What's the industry in this town? What keeps it going?" he asked.

"Asylum," I muttered; "Lancaster Lunatic Asylum."

H

It was just as we were sitting down to a meal in the hotel we had found, both of us refreshed after a hot bath, that Hinkler spoke to me about money.

"In the rush," he said, "I came away without my wallet. I've got just two shillings in silver. I suppose you've got plenty?"

I picked up my fork, and waited until I saw him put a

piece of steak into his mouth before I replied.

"Do you know," I whispered, "I've done just the same. I've got four shillings and a penny."

Somehow the thing worried Hinkler more than anything else had done. He calculated the hotel prices, worked out what our bill was likely to be, and generally fretted himself about the position. When I pointed out

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that the two dinners alone cost more than we had between us, and that after that we still owed for the two baths, the two bedrooms, and presumably two breakfasts the next morning, he became quite terse, and if I had not argued strongly would, I believe, have gone then and there to the manager and confessed to the position.

"We can't do anything," I urged. "Leave it until the morning; then after breakfast we'll explain. Tell 'em there's a fifteen-hundred-pound aeroplane in a field,

give our address, and they'll understand."

Hinkler refused to be comforted.

"To-morrow we must have money," he said. "There'll be oil to pay for and lots of odd things: tips here, for instance, and telephone calls. We're in a mess, I tell you."

"And there'll be a taxi out to the field. I'm not

walking again," I concluded.

All the evening he worried about that financial situation, and when I wanted to go to a second house at the pictures he became almost panic-stricken. In vain I pointed out that we could go in the ninepenny seats, and that one shilling and sixpence would make no difference anyway. Hinkler talked as if I were some reckless spendthrift rushing us to ruin, and at his earnest request we both went to bed at ten o'clock. I think he felt that only there would my extravagant ideas be harmless.

The next morning he seemed more worried than ever, and while I was dressing kept wandering into my room whispering advice on the best way to approach the manager of the hotel. All through breakfast he continued to fuss, and efforts to interest him in the brief newspaper accounts of our second failure were useless.

The newspapers seemed suddenly to have become tired of the project. Every paper—I had sent Hinkler into a frenzy by buying a copy of every journal obtainable—had dismal statements about our adventures of yesterday. The headings were all depressingly alike: "Project abandoned for this year," "Airman fails a second time," "Air landing on Helvellyn impracticable."

"It's a mess," said Hinkler.

"It doesn't matter a damn," I retorted. "We will do it in the end."

"I'm not worrying about that infernal mountain; I'm thinking of what you're going to say to the hotel

manager.''

To my great surprise, when eventually we did interview the manager he proved far from helpful. Hinkler intervened with a long, incoherent account of our position, a wandering explanation that would have caused Rothschild himself to be regarded with suspicion. The manager interrupted, and pointed out that we had known all this last night; we knew then that we had no money to pay the bill. Disreputable, in the oldest of clothes, without luggage of any sort, we must have appeared to him to be a bad risk. Hinkler's rambling story of an aeroplane did not sound reassuring, and when that manager finally understood that not only were we unable to pay the bill, but were endeavouring to borrow two pounds in cash from him—well, to put it politely, he laughed. A nasty, sarcastic laugh it was, too.

The position was still unsettled when we left the manager's office ten minutes later. I gathered that, while he did not propose to send for the police immediately, one of us would be expected to remain in the hotel; the

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other might go into the town and endeavour to secure the necessary money to get his companion out of pawn. The hall porter received his instructions.

At this unsatisfactory stage of the proceedings I did a thing which, as I look back, seems amazing. Why it was successful I have never understood; perhaps the sheer cheek of it...

With a display of offended dignity I inquired which was the best and largest garage in the town, then I rang this garage up and asked to speak to the proprietor. To him I explained our position, that our aeroplane was in a field outside the town, requiring oil and minor adjustments, that we required a car to take us out, a mechanic to help us, and, owing to a laughable mistake, a loan of three pounds in cash.

That proprietor was a sportsman of the best kind; he never hesitated. Ten minutes later he was round at the hotel in his own car. As the receipt for our bill was being made out I pointed out to the manager the absurdity of his suspicions, and mentioned that we should not patronize the hotel in future.

As we drove away in the car Hinkler mopped his forehead.

"That's the closest call I've had for years," he said. "I'm all shaking."

Fortunately the proprietor of Atkinson's garage continued to act the good fairy. He took us out to the 'plane, where we removed all the sparking-plugs and filters; then we went back with him to the garage to have them cleaned properly. For perhaps an hour we watched his mechanics perform all the necessary operations on the fittings, and then once more back in the car to the field

to prepare the aircraft for the air again. It was attention de luxe.

As one of the mechanics was putting in the last of the sparking-plugs I spoke to Hinkler about an idea that was simmering in my mind.

"The weather isn't bad," I said. "Now, if the engine is O.K. when we get it going, why not let us

have another try for that blasted mountain?"

Hinkler looked round. Visibility was good; a steady wind of perhaps thirty miles an hour was blowing.

"Don't you say anything," he murmured. "We're

going to have a look at it."

Then he bent over the 'plane again, whistling Brown

Eyes:

"Brown eyes, why are you blue?
Brown eyes, what shall I do?
Don't keep the sunshine out of your eyes.
If you are wise you'll stop your crying. . . ."

I hear that tune sometimes, and it never fails to bring back a picture of those days before Helvellyn—and Bert Hinkler: Bert, the best pilot I ever knew, the cheeriest of sportsmen, who went his way quietly getting on with his job, unassuming and unafraid.

III

Having said good-bye to our friend from the garage, and promising to send a cheque in repayment of the loan and to cover workshop expenses—an assurance which seemed to concern him but little—Hinkler and I took off.

It was an unusual morning for December. Patches of deep blue sky showed in places above the banks of white woolly clouds—clouds far too high up to trouble us.

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Visibility was excellent—so good, in fact, that we could see Morecambe Bay, a glistening sheet of beaten silver, and away over the brown and purple hill-tops the outline of the Lakes. A strong wind was blowing, but a wind so steady as to be almost an advantage.

The 'plane answered the lightest touch of the controls, and the engine seemed to be running perfectly. gether it appeared as if Fate had repented, and was giving us one more chance, and under ideal conditions. We climbed steadily, and passed over Kendal at about three thousand feet. Below, the country stretched like a vividly coloured map: the silver of the rivers, the dark of the pine-woods against the lighter greens, the fawn of the faded bracken on the hill-tops, and in the distance the mountains tipped with snow.

Near Newby Bridge there came a sudden sound that for the moment caused me to choke. The engine spluttered. For perhaps five seconds it 'coughed' and ran unevenly; then it settled down again into a steady roar. Hinkler looked back at me anxiously, and I saw his lips frame a question. For the next five minutes everything continued to go smoothly, and I tried to tell myself that the splutter had been little more than a fancy. But somehow the fun had diminished; an anxiety fretted me that had not been there before.

Just over Bowness the engine spluttered again. There was no mistake this time. It banged, the 'revs.' dropped; before the engine ran evenly again we had lost five hundred feet.

We were following Lake Windermere, and ahead lay difficult country, steep mountain-sides, with the narrow wooded valleys where a forced landing would be

disastrous. Yet as far as I could see there was no field near the lake in which we could land safely. Before we started an expert had told me that once past Kendal there was nowhere for a forced landing along our route, and, peering over the side at Bowness, I heartily agreed with him.

"Shall I go on?" I yelled to Hinkler.

He shook his head, then stretched back to shout to me.

"Come down. That engine isn't right. It might stop again."

Once more I looked round anxiously for a possible field.

"That one there!" Hinkler shouted.

The patch of green he indicated seemed to me to be about the size of a pocket handkerchief, tall trees on two sides, the lake in front.

"I'll never get her down there."

Hinkler leaned over, and for a few moments surveyed the place, then the roar of the engine died away; only the whistling of the wind among the stay wires as we dived downward. Hinkler had shut the throttle.

"Leave it to me," he said calmly. "I believe I can just manage it. Anyway, we can't go on with the engine like this."

Gladly and willingly I left it to him. Of one thing I was perfectly certain: if I attempted to bring the Gosport down in that field we should crash good and well.

Almost over the field Hinkler manœuvred the machine, a long steady glide, until at a thousand feet we were almost over its edge, then violently and swiftly he began to make S turns—backward and forward, left, right, always keeping directly over the side of the field.

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Somehow I had ceased to worry. The thing was out of my hands. I could do nothing more. Vaguely I noticed a large sanatorium looming up among the trees; a small park this field seemed to be.

At about ten feet from the surface of the lake, just when I had decided that the next turn would bring us into the water, Hinkler flattened out and headed for the shore. I saw the edge of the water pass below us, grass take its place, then we were gliding a foot or so above the ground. The machine lost speed, there was a slight bump, and a moment later the 'plane had stopped undamaged at least a hundred yards from the nearest obstacle.

"Nothing to worry about," Hinkler remarked, as he climbed out. "Just some more dirt in the petrol-filters, I think, but I didn't dare let you go on into the hills; if the engine had packed up there . . ."

The field proved to be part of the grounds of a hospital known as Calgarth Park, a sanatorium for children, and the pleasure and entertainment we seemed to give the patients must, I feel certain, have caused many temperatures to rise considerably. The thing that astounded me was that one of the nurses dashed up and assured me that I had been mistaken for Father Christmas.

"Father who?" I asked.

"Father Christmas," she gushed. "The children, you know—they've all been talking about him coming, and when they saw you descend like that, of course they all thought you were Father Christmas. So sweet!"

all thought you were Father Christmas. So sweet!"

The misadventures of the last few days may have worried me, the effort had certainly been considerable,

and doubtless I had aged somewhat, but to be mistaken for a man with a long white beard, well . . .

The trouble with the engine turned out to be just what Hinkler had foreseen, a choked petrol-filter, and after a brief clean-out we went into the air again. Perhaps it is unnecessary to mention that I left it to Bert to do the take-off, and only took over the controls when we were a thousand feet up, heading in the direction of Helvellyn.

By this time the weather had begun to deteriorate. Ahead the puffy white clouds were changing rapidly to the unbroken grey of an approaching storm. I summed up the chances in my mind: probably the storm would not break for some time; possibly we had about half an hour before it was upon us. Of course, to be caught among the mountains would be bad, but then Helvellyn was only a few miles away, and if we were lucky and could bring off a quick landing the thing might just be managed. Heedless of the need for nursing the engine, I opened the throttle wide and pulled the nose of the machine up for a steady climb.

Over Grasmere we encountered our old enemy bumps—bumps that made the ones we had previously experienced seem like gentle zephyrs. There was one which stands out in my memory, and will long remain clear and vivid. We were flying level at about four thousand feet when the machine dropped vertically like a stone; in no time we had lost a good five hundred feet. I felt myself jerk upward as the machine was forced down, the belt which tied me to the seat cutting painfully into my flesh. Hinkler, who had been lifted violently upward, told me afterwards what his thought was in that moment:

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"Old John's gone this time. No belt could hold him," and that his hands went instinctively to the controls. It was typical of the man that on looking back and finding I was still in the 'plane he put his hands back in full view upon the front combing, and for the rest of the flight kept them there.

In one other bump the cushion on which Hinkler was sitting shot out of the machine. Hinkler, held by his belt, remained, but the cushion, which was not tied down, flew upward when his weight left it for the moment. Incidentally, this cushion was picked up some days later by Sandham, and retained by him as a memento of the incident. I was shown it when I visited Helvellyn House recently.

Near our goal, however, the bumps eased considerably. If they had not done so a landing would have been out of the question. At last the great moment came. In comparative peace I circled the summit of Helvellyn.

One minor difficulty had been worrying me subconsciously all morning. We had told no one that we were going to attempt the flight that day. Sandham and the other watchers, who were to light a smudge fire and generally help us on the ground, did not know we were coming. Suppose we landed safely, and in due course took off again, how could we prove afterwards that we had done so? Without any witnesses . . .

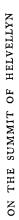
Then, as we circled round, I realized that Fate, somewhat belatedly, was indeed being kind. There on the summit, sheltering behind a cairn of stones, was a man. For good or evil, there was a witness to the landing.

The actual landing was not difficult; in fact, it was so

easy that, instead of coming down on the strip from which the rocks had been cleared, I aimed for the very summit, and dropped the machine not far from the highest point. A strong, steady wind brought our landing speed down to little more than fifteen miles an hour ground speed, and the steep slope of the mountain pulled us up almost at once. So steep was this slope that once on the ground the machine had a tendency to run backward, and it became necessary to hold her by opening up the engine a little, Hinkler remaining in the front seat while I jumped out and piled stones under the wheels to hold her.

By this time the solitary witness had run across to us and was helping me with the stones. While we worked we both shouted explanations at each other. Apparently he had heard nothing of our intended landing—presumably he did not read newspapers—he was staying with some friends for Christmas, and, mountaineering being one of his hobbies, he had climbed Helvellyn alone that winter's day. His surprise on seeing the aeroplane must have been considerable, and when we landed beside him his astonishment was obvious.

Determined not to return to civilization and have my story doubted, I asked this witness if he would sign a note to say that he had actually seen us descend upon the mountain. Trouble then arose to find pencil and paper. Neither Hinkler nor I had any paper with us, but after much fumbling in his clothing the mountaineer produced a bill and a stub of pencil. It was then that I realized how lucky we were in finding a witness of indisputable integrity; for the solitary climber was a Professor of Greek at Birmingham University—Professor E. R. Dodds.





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Hastily I scribbled out a certificate on the back of that bill:

I hereby certify that an aeroplane, GEBPH, pilots Bert Hinkler and John Leeming, has landed on the summit of Helvellyn on Dec. 22, 1926.

Holding it against the wing, our witness signed the scrap of paper. After which we took a few snaps with a

pocket Kodak, to produce as additional evidence.

Hinkler then got out of the machine, and, while I took his place, walked over the ground we must traverse in our take-off. He walked slowly, carefully noting every detail, and then came back to where I was endeavouring to engage the Professor in light conversation.

"You'd better have a good look at it," Hinkler said.

"It isn't going to be easy."

I climbed out and went on. The ground, as I have said, sloped steeply; although the surface was good, I realized that the machine would not gain flying speed quickly up that slope. We had stopped about thirty yards from the edge of the precipice. I went back to Hinkler in a thoughtful mood. He summed up the position briefly:

"We can't gain any more run by pushing her back, because she might start to roll backward downhill, and if she once started we'd never stop her. You'll just have to open her full out, and trust to our getting into the air before we go over the edge."

The situation, then, was: We had thirty yards in which to get the machine air-borne. The strong wind would help us, but, against this, the slope of the hill would slow us down. If we reached the edge of the

precipice before the 'plane was flying we should simply roll over and over down that thousand-feet cliff.

"I don't like it," said Hinkler.

"I like it a lot less," I replied. "Just pray that the

engine gives its full revs."

We said good-bye to the Professor, climbed in, settled our belts and goggles, and then, at a nod from Hinkler, I pressed the throttle wide open. The engine roared; slowly, ever so slowly, we began to move, then more quickly, faster, faster. Five yards from the edge the wheels were still on the ground. Just for an instant the nose seemed to drop as we shot away into space. The next moment we were away, flying, dipping down to gain speed.

CHAPTER IX

ECLIPSE

The club was now rapidly consolidating its position. The regular publicity in the newspapers kept people aware of our existence, and new members came in steadily. The flying hours continued to increase, more club-trained pilots obtained their pilots' tickets,' and so our financial difficulties became less and less dangerous. True, minor crises occurred from time to time, but each seemed a little less terrible than the last one—possibly familiarity bred contempt.

It was a time of experiment and discovery, of errors and corrections—corrections made by the light of dearly bought experience. It was still necessary for one or two members to come to the club's support in times of sudden stress; for a few members of the committee to put in long hours of work each week, to take entire responsibility and sacrifice their own interests; but each month saw us a little more clear of our difficulties—a little nearer to the time when a new crowd, who knew nothing of the early struggle, would shoulder us aside.

As far as I was concerned I was able to get all the flying I wanted. The club had plenty of aircraft, and there was usually one of these available, while the success of the Helvellyn flight had made it possible for me to borrow a machine from Avros whenever they had one to spare. For instance, in the February following the mountain flight I borrowed PH one morning and set off with

a friend to keep a luncheon appointment at the R.A.F. aerodrome at Sealand. It was on this occasion that I made the much-criticized landing on a main road to fill up with

petrol at a wayside garage.

I should love to tell the whole story of that affair. Even after twice starting to do so, and twice tearing the pages up, I am still tempted sorely. But it is better to refrain. The true story is complicated, and it is almost certain that it would be misunderstood. Indiscreet as I can be, I feel that the tale must not be told here; yet it

is a pity, because it was decidedly amusing.

In brief, the facts that may be stated are these. The Air Ministry did issue a special permit authorizing me to fly PH to Sealand that day. I have the permit from the Secretary of State for Air on my desk as I write. My friend and I did fly to Sealand and have lunch there. The R.A.F. are famous for their hospitality. It was my first visit there since the Helvellyn episode; as pilots would say, that lunch was "a good show." The C.O. and various prominent members of the staff saw us off, and offered much advice about the return journey. Near Northwich we did actually run short of petrol—a miscalculation, I admit—and I did land on the road near Bucklow Hill, taxi to a garage, and say, "Twelve gallons of Shell, please." Afterwards I took off and flew back to Woodford. These are the facts that may be told. I should love to tell the whole story.

II

A little later in the year—April, to be precise—I attended the flying meeting at Bournemouth. This was

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an effort to repeat the informal happiness of the Lympne meetings, and as such it seemed to me to be a complete failure. For one reason, most of the flying crowd were divided up among five or six hotels, and the previous family-party feeling never got going. Again, strangers were among us, and there was a new seriousness—an earnestness—about the Bournemouth meetings that had been unknown at Lympne. Politicians and financiers were beginning to sow seeds of discord by becoming interested in aviation. Then there was a series of unfortunate crashes which clouded the meeting right from the start.

I shall always remember the appalling din, the loudest noise I ever heard, when a certain pilot flew his machine on the first day into a corrugated-iron fence. The fence, six feet high, erected to keep unpaying spectators from seeing much of the proceedings, collapsed—a whole hundred yards or so of the iron sheeting. The bang as the machine flew full into it, and the crash as the fence went down!

One other incident at Bournemouth is also still vivid to me—the 'fly past' along the promenade.

With an idea of making an impressive show and advertising the flying meeting to the public, we arranged that all available machines should take off one morning at 10.30, form a long line, and fly along the promenade from one end of the town to the other. Accordingly, at the appointed time, machine after machine climbed into the air and circled round, waiting for the remainder to join them before setting off for the great formation.

Now it happened that Scholes, one of the voluntary instructors, was flying a Moth from Lancashire, and, as

he had a friend he wanted to take as passenger, I had arranged to go in another machine. At 10.30 the engine in this other machine refused to start. All efforts to induce it to fire failed, and I realized that I was likely to miss my flight along the promenade. Most of the machines were already in the air, and, keen to go, I looked eagerly at the few still remaining on the aerodrome. Twenty yards away stood a Moth, its propeller ticking over, no passenger in the front seat. I ran quickly towards it. It was obviously a private-owned Moth; the pilot—presumably the owner—sat goggled and muffled up in the back seat.

"Have you got a passenger?" I shouted.

The pilot shook his head.

"My machine's conked," I explained hurriedly. "D'you mind if I join you?"

He started to say something, seemed to hesitate; but, determined not to be refused, I started to climb into the front seat.

There were no controls fitted in front. I slipped in quickly and strapped myself in.

"O.K.," I called, turning round to smile my thanks. For a moment the pilot seemed to wish to argue, as if he were reluctant to start; then, with a glance overhead to where the machines had already formed into line and were disappearing towards the town, he opened the throttle, and we began to bounce rapidly across the aerodrome.

Before the machine became unstuck I had decided that the take-off was somewhat unusual. The pilot seemed careless, and allowed the machine to swing about on its wheels most alarmingly. Once I thought he would tip the machine right over on its nose, and only at the last possible second did he haul it straight again and bounce it off into the air.

For the next three minutes I sat there, uncomfortable and undecided. It seemed to be unpardonably rude to cadge a ride with a private owner in his machine and then question the way he flew it; yet—the proximity of another Moth, which I felt certain my pilot had failed to observe, caused me to speak hurriedly. He accepted the warning with a gracious wave of his hand, and signalled me to clip on the telephones which dangled in the passenger's cockpit.

"I think I'm all right," he called, when conversation

became possible between us.

"All right?"

"I wanted to tell you before we left the ground. I don't mind you coming, but I haven't flown with a passenger before."

I stared hard at the speed-indicator, which was waver-

ing at sixty, and then he continued:

"You see, I'm not supposed to carry passengers. I haven't got my licence yet."

"How long have you done?" I asked weakly.

"Oh, about ten hours, quite ten hours—dual, of course. I did my first solo on Thursday."

And he pulled the nose up so that the speed-indicator

fell back to fifty.

"Just listen to me!" I shouted. "Keep that nose down. Keep about seventy on the clock. And don't turn!" I added urgently, as he began to put rudder on in a perfectly flat turn.

It was very awkward. Here I was a guest—an

uninvited guest who had thrust himself upon the man...

In a fashion we did make one of that formation—that is, about a mile behind the nearest machine and a thousand feet above it, we flew along the promenade.

"Don't try to land until every one else is down," I called, when eventually we returned to the vicinity of the aerodrome. "Just float about—keep that nose down!—until the ground's clear."

Below us one machine after another glided down to land in close formation.

"I think I can manage it now," said the pilot, ten minutes later.

Anxiously I peered over the side. The landing-ground was fairly clear.

Only once did he speak again. That was when, seeing he was undershooting, I yelled for him to put on his engine.

"I think I can clear those trees. I'm all right."

At the very last second—in answer to my heated pleading—he did open the throttle again.

At the second attempt we landed safely.

Ш

Looking back, I am inclined to think that my experience on the eclipse flight impressed me more than anything else in my whole life. I am sure that I am not unduly susceptible; there is nothing of the poet or the artist in my temperament; but the most flippant of men, I believe, would have been hushed and awed by the sight of the eclipse as I was privileged to see it.

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The trouble I now face in trying to recount the experience is that no words can paint the picture. The sight was literally indescribable.

The total eclipse of the sun occurred on June 29, 1927. An eclipse such as this had not been seen in Britain for nearly two hundred years, and was not calculated to be visible again until well after the year 2000.

Early in June I received a note from a friend of mine, a Mr Booth, Managing Editor of a large group of newspapers, asking me to call and discuss with him an enterprise which for the time being he wished treated as confidential. I went to see Booth in due course, and he explained to me various matters about this coming

eclipse.

The rare phenomena would occur along a belt of country stretching approximately from Southport in Lancashire to Richmond in Yorkshire. Somewhere along this line—probably about Giggleswick—a perfect view should be obtained at the moment of total eclipse. There would be twenty-four seconds of complete darkness, with some minutes of deep twilight on each side of the actual darkness. There was considerable risk that mist or clouds would spoil the view from the earth, and Booth wanted to know if it were possible for an aeroplane to go well up above any clouds there might be and fly along the path of totality. He felt that in order to make certain of viewing the phenomena it was necessary to be in an aeroplane, and wished to arrange for a special correspondent to see it in this way.

We talked the matter over very fully. The difficulties of working exactly to a time-table and of flying through the darkness were carefully considered. The next day I

approached the Avro Company, who, when the idea was explained and details of the proposal were made clear, agreed to lend me a machine. An Avro Lynx was selected as being most suitable for our purpose. Certain special instruments were fitted to assist the machine in the darkness, and small electric lights were installed in both passenger's and pilot's cockpits. The machine was specially tuned up and adjusted at Woodford, and as soon as she was ready, in order to accustom myself thoroughly to the 'plane, I spent every available minute in the air, flying her.

The special correspondent and myself left Woodford Aerodrome in the afternoon of June 28, and landed on the shore at Southport, near the Pleasure Ground, forty minutes later. It was an entirely uneventful trip, and only the knowledge that there were quicksands somewhere on the shore near where we were to land marred my pleasure. If the wheels sank into one of these patches of quicksand . . . However, I brought her in with plenty of speed—she was not a standard Avro Lynx, but had 'sawn-off' wings of a peculiar section—and we missed any soft sand if it was there.

The special correspondent was one Calvert, an experienced journalist who had been selected for the job owing to an exceptional ability for descriptive writing. Incidentally, he was an amiable companion who entered into the spirit of the enterprise in the most helpful way.

Southport was a city of carnival that night. Every hotel, dance-hall, and restaurant kept open; even the cinemas continued, and when their second performance ended, patrons filled them again for the midnight show. Thousands of cars streamed into the town throughout

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the night, and special trains from every part of the country poured in a multitude of visitors. Everywhere was brightly lit, and the tinkle of a dance band came from a hundred windows. No one thought of going to bed. It was a scene unique.

Calvert and I joined a party on the Pleasure Beach somewhere round ten o'clock, and for a couple of hours or so whizzed about on helter-skelters, water-chutes, scenic railways, and similar stomach-disturbing contrivances. Towards midnight the whole party, with several acquaintances recruited that evening, adjourned to a large hotel at Birkdale, where about fifteen hundred more people than the building had ever been designed to hold were attempting to dance, dine, and otherwise make merry.

One little incident of that evening lingers in my memory. Alone at our table, the others in the party having gone away to dance, I sat thoughtfully sipping the Veuve Clicquot which some one had provided, and gazed tolerantly at the animated gaiety around. Suddenly I realized that a girl was standing in front of the table and

saying something to me.

"I beg your pardon?" I shouted.

She looked an extremely nice girl, too.

"I said, 'Do you mind if I kiss you?'"

What with the music, the roar of conversation, and the Veuve Clicquot I was a little confused.

"Do what?" I yelled back.

"Kiss you," she said, sitting down on the chair opposite. "You see, it's a bet. My party said I daren't go up to a strange man and kiss him. I took the bet, and they chose you. Do you mind?,"

And then she leaned across the table towards me.

"There!" she exclaimed, glancing triumphantly at a table near by, the occupants of which promptly raised their glasses in salute. "There, I've won the bet!"

"Glad to have been of use," I murmured, as she rose

to return to her party.

"Thanks. They thought I daren't. They chose you because you looked so stodgy. Thanks a lot."

Five minutes later my own party returned.

"I want to ask you something," I began. "Do I look stodgy?"

Calvert considered the question.

"A little, I think," he said, "but possibly it's only the champagne that makes you appear that way."

Another friend added his comment.

"He always looks like that after a glass or two. What's the fuss about?"

I hope the look I gave them was as dignified and disdainful as it was intended to be.

At about two o'clock Calvert and I left the others, and were both lucky enough to secure a bath before changing into loose easy clothes for the morning's adventure. At half-past three we were on the beach unpegging and uncovering the Avro in the dim light of the approaching dawn.

Even at that hour the shore was crowded with people. Cars were parked for miles along the sands—long stretches of cars parked three and four deep. Each car had its party: some huddled together trying to snatch an hour or so of sleep; some already breakfasting by the light of the head-lamps; some still keeping up the night of merrymaking, playing gramophones or singing to a ukulele. It was the

strangest of sights, a daybreak so bizarre that it seemed like part of some fantastic dream.

I was rather worried in case the runway which the police had so far kept clear for the aeroplane to rise from should become invaded; for, seeing us preparing the aeroplane, more and more people drifted towards us, and it became clear that the take-off would have to be made along a narrow lane through the crowd. An engine-failure at the take-off might mean a calamity.

I had some minor trouble in starting the engine, which had become 'starved' during its long night in the open, but I got it going at last, and leaving it to warm up, ticking over slowly, I busied myself examining various details in the machine. Wrapping myself in the numerous coats and scarves I had brought, for it promised to be cold indeed at ten thousand feet, I climbed into the front seat. Calvert jumped in behind. A minute later the machine was rushing along the sand between the lines of people.

It was quite light as we headed out to sea, and, with the nose well up and the throttle nearly full open, climbed steadily. Up to about three thousand feet we climbed; then, after circling until the town was directly beneath, I set the machine on the calculated compass course and headed north-east.

Near Lytham I noticed that the wind was drifting us perceptibly eastward, and corrected the course to allow for this. Preston, the town a sprawling black spider beside the silver streak of the river Ribble, was also passed too much to the east, and, adding yet a little more north to the course, I continued to climb.

At five thousand feet we came into the beginning of the clouds—those first wraith-like streaks of vapour which

blot out everything from a pilot's view, and which on a normal flight one avoids so carefully. For some miles we flew along, trying to edge upward. Occasionally there would be gaps in the mist, and where these holes occurred I tried to slip through, always struggling to attain more altitude. Nearly forty minutes went by while we dodged and twisted in this way, and then, realizing that the time of eclipse was not far off, and that it was essential that we should get above the clouds before this occurred, I fixed my eyes firmly on the instruments, and pulled the nose up into a straight, steady climb. All around became grey as we rushed upward through the wet mist. The world and sky hidden, we roared blindly on. Anxiously I watched those instruments.

Six thousand feet. The minutes dragged slowly by. Seven thousand. How deep was this darned belt of cloud? The 'rev.'-counter showed that the engine was almost full out. Sixty-five on the clock; we must be climbing steeply. Eight thousand. The bubble in the spirit sagged away to the left, so, although I could not feel it myself, we were not flying level. Gently I pressed on the joy-stick, until one wing lifted and the bubble came to the centre again. Nine thousand . . . There was a sudden lightening of the mist around us, and we shot clear out of it into brilliant sunshine.

I turned round and grinned at Calvert. He waved his hand in reply. A few hundred feet below us were the clouds, a rolling ocean of white. Above was a sky deep blue, a blue so pure and clear as to seem unreal; and on to us shone the glorious, vivid sunlight.

Just a few more hundred feet we climbed, then, easing back the throttle, I settled the machine on to a level course.

ECLIPSE

There was no means of checking drift now that the earth was far out of sight beneath that sea of cloud, so, bringing her on to the compass course that had been found correct near Preston, I kept the machine cruising steadily northnorth-east.

A few minutes later it began to grow darker. A round disk had appeared at one side of the sun, and was eating its way across. Noticeably the light began to fade.

I despair of making the reader realize the picture we saw. Let me say that, with the machine to occupy me, with the subconscious worry of being out of sight of earth, with the knowledge of a flight in complete darkness just ahead, I gazed at the wonder of the sight and was entranced.

As the light faded, the rolling valleys of the clouds below filled with purpling colour. The whites faded to faint blues, to deep violets, to black. Great streaks of orange and mauve splashed the rounded hill-tops of the clouds.

The sky became a deeper and ever deeper blue. A few stars twinkled into visibility—then, quite suddenly, it was night.

I switched on the lights over the instruments, and sat watching the flickering fingers on the various dials: eighty on the speed-indicator, one thousand one hundred 'revs.,' oil working O.K., north-north-east on the compass. Fourteen minutes since we had come up through the clouds. The machine was flying perfectly, as steady as a railway train, rushing forward through the darkness.

Then I noticed that the instrument lights seemed to be weaker, to be more yellow, and gradually a grey visibility seemed to fill the cockpit. It was growing light again.

All the strange play of colours followed once more, but

reversely. The sky lightened from black velvet to a deep, faintly transparent blue, to the clear blue of a summer morning. The clouds showed their outlines in gold and violet, shaded through orange to blues, and finally to white.

I twisted round in my seat to see how Calvert had responded to the wonders, and gathered from his gestures and the few shouted words I managed to catch that he felt as I did; then I set to work to consider the best way of returning to earth. We had petrol for about just one more hour's flying; below us was a belt of clouds, possibly two or three thousand feet thick. For all I knew the clouds might have come lower while we were above them, and be nearly touching the mountain-tops. There might be rain now between the clouds and the earth. But all this was surmise. The one thing that was certain was that we had to find our way down again, and spot the earth before we flew straight into it.

I had not the slightest idea of our real position. I believed we were somewhere over the Pennines or over Yorkshire. I swung the machine round in a half-circle, and started flying back along the opposite compass course—south-south-west. It was just seventeen minutes twenty seconds since we had come out of the clouds. For seventeen minutes exactly I kept steadily on that compass course; then, deciding that within a few miles or so I should be over the spot where we had climbed through the clouds, I started to spiral down.

Into the damp mist again, into the blanketing clouds that shut off all vision beyond our wing-tips. Gingerly and, oh, so carefully, I brought the machine lower and lower. At two thousand feet the earth was still invisible, and I

had become definitely worried. I was not sure what heights mountains were along the Pennines, but I felt sure some of them were more than two thousand. The height-indicator had been set at Southport—at sea-level. At a thousand feet I was peering frantically over the side and expecting a heather-covered hillside to appear out of the mist any second. At five hundred I decided to open the engine again and go upward while I collected my scattered nerves for another try. Then, just at that moment, as my hand pressed on the throttle, I saw the ground—comfortable, reassuring fields about three hundred feet below. Carefully, and ever watchful for the suspected mountain, I came lower.

I did not recognize the country: fields, an occasional road, a village. It appeared to be a flat sort of district, without distinctive landmarks of any kind.

Suddenly I saw a railway, and could have shouted with pleasure. Railways led to stations, stations usually had their names in large letters—letters easy to read. I came down quickly to about fifty feet, and turned to follow the line.

It was still misty and raining slightly, and as we roared along that railway line at some eighty miles an hour I suppose I had a visibility of about a hundred yards or so.

I wish there was some word that expressed immediate action more truly than 'suddenly' or 'instantly,' some word that suggested sight, realization, and action all in one fraction of a second, because such a word is just what I need to tell what happened next. At the beginning of one second we were roaring along through the mist; a twenty-fifth later I had seen the chimney, the joy-stick was back, full rudder on, and the machine was swinging upward and round in an absolute vertical turn. As our wheels passed a

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yard or so from the side of that great mill chimney, I remember noticing the name of the mill—"Tulketh"—

in white-tile letters upon the bricks.

Shaken and disillusioned with railways, I climbed a little higher, looking about anxiously for some suitable field to land in. To be quite candid, I had had enough. The weather seemed to be clearing, but what I wanted more than anything else was to feel those wheels touch level grass, to feel the tail-skid dig into the earth, and to know that the machine was safely down with a good two hundred yards or so of field to bring her to a stop in.

A few minutes later there was a river—a wide river with ships and sandbanks. Entirely lost and thinking only of my field, I flew on. Then, a little way ahead, I saw a most unusual sight—a windmill. For the moment so badly lost was I that Holland suggested itself in my mind. A windmill? Why—I almost shouted—a windmill, Lytham in Lancashire; the old white windmill retained on the promenade as a curiosity. We had come down almost in the place we started from. The Tulketh Mill was at Preston. Southport lay a few miles across that river.

Five minutes later, with the petrol-gauge pointing to "Empty," I was trying to find a spot to land among that congested mass of cars on Southport beach. As the engine gave a warning cough, to show it was lacking the vital spirit, I found a place between a Morris and a Daimler, and glided down.

I think that landing was one of the pleasantest things I have ever experienced.

CHAPTER X

LOST

As the months slipped by I kept on flying at every possible opportunity—any type of machine that was available, all sorts of engines, in various states of efficiency—and, as a result of this indiscriminate experience, developed into a pilot of the thoroughly over-cautious type.

Somehow I always expected the engine to stop, or some fitting on the machine to come loose, and even to this day I marvel at those care-free souls who fly above a town and never give a thought to the possibility of failure. Always when I am in the air I can visualize all those slender valves popping up and down hundreds of times per minute, those pistons banging downward at the force of each explosion, the intricate electrical apparatus transmitting thousands of sparks. Even the tiny holes in the carburettor jets are visible in my mind—and also the infinitesimal fragment of dirt needed to block these holes up.

Some one who was an excellent judge of character once said I knew too much of the inside of an engine ever to make a good pilot.

Numerous trips about the country taught me a lot about weather. Its deceptive way of changing in a few miles, reasonable flying conditions giving place abruptly to absolute foulness, caused me to become wary and distrustful of this unstable element, and all sorts of little tricks for 'getting through' came to be stored away in my mind.

This over-careful attitude towards the weather once almost brought me into conflict with the Director of Civil Aviation, and, although the incident is amusing to look back upon, at the time Sir Sefton Brancker was a very angry man.

Early in July 1927 Sir Sefton wrote that he intended to make an inspection at Woodford on a certain Saturday, after which he wished me to fly him southward. Arrangements were made for a machine to be available—the Avro

Lynx I had flown at the eclipse.

"I wouldn't take the job on," remarked one experienced pilot. "You've nothing to gain and a lot to lose." "Suppose," another suggested, "the engine 'conks'?

"Suppose," another suggested, "the engine 'conks'? Crashing a Director of Civil Aviation will cause a nice old row. Publicity and lots of it."

I argued that the engine was a particularly good one,

and that weather was usually reasonable in July.

"It's just at a time like that that something happens," some one retorted. "If you don't get him to Birmingham—well..."

And then quite seriously I did begin to worry. I realized I should be glad when the whole thing was over.

On July 27 I awoke early, saw the rain, low clouds, felt the gusty wind, and could eat no breakfast at all. At the aerodrome I learned that an important air race, which included Woodford as one of the stopping points, had been abandoned owing to the weather. Pilots such as Hinkler and Barnard had considered it too bad to go on. Of course, that seemed to let me out, and when Sir Sefton arrived by car just before lunch I at once expressed my regret that our flight together was off. He hardly appeared to hear me.



OVER MORECAMBE BAY, ON THE WAY TO HELVELLYN

"Weather?" he said vaguely, while I clutched at my soaking mackintosh, which was in danger of being torn away by the wind. "Weather? Yes, it isn't too good. Anyway, you'll have to get me there. I've an important

appointment in Birmingham this afternoon."

Just after lunch Hinkler appeared out of the driving rain, and on landing reported that conditions farther south were very bad indeed. He had managed to scrape through, but on parts of the journey visibility had been almost *nil*. At my pressing request he mentioned the matter to Sir Sefton, who seemed oblivious of the suggestion we were trying to make.

"Over Uttoxeter I was down to fifty feet," said

Hinkler.

Sir Sefton nodded casually.

"I expect we shall have a bad trip too," he said. "I have to get to Birmingham by four-thirty at the latest, so we'll start a little earlier."

For the next two hours I walked about Woodford in a kind of dream. At three o'clock Sir Sefton began to say good-bye to various people, and asked for his leather flying-coat to be brought.

"I'm ready to start now," he told me.

And a few minutes later I found myself sitting in the front seat of the Avro Lynx, the engine ticking over, two maps gripped firmly in my hand, and the Director of Civil Aviation sitting in the back seat, waiting complacently to be taken into the atmosphere. Hinkler came to the side of the fuselage and climbed on to the wing.

"I've just been on the telephone," he shouted. "It's much better now in Birmingham. Improved a lot. You'll get it clearer as you go south. Stick to the railway line, and

look out for those gasometers near Castle Bromwich. Good luck! "

In the strong wind the machine bounced into the air almost as soon as the mechanics let go of the wing-tips. With the throttle open we shot up like a lift.

For the first few miles it was not very bad. True, the wind slapped us about most uncomfortably, and the visibility was poor, but I knew the country near Woodford so intimately that I was able to check the course by familiar landmarks. Over the town of Macclesfield we shot—then that outstanding guide Rudyard Lake. Keeping the railway always in sight, we skimmed southward.

I was grateful for that railway line, which happened to run the same way as we desired to travel. With the line to follow it was easy to keep on the right course, and I blessed the L.M.S., who were making things so simple. It almost seemed as if the difficulties of the trip had been overestimated.

Then a tiny seed of anxiety began to germinate in my mind, and, as I looked at the map, began to grow rapidly. The more I looked at the map and the nearer we came to Uttoxeter, the more this worry oppressed me. Up to Uttoxeter the railway ran parallel to our course, and could be followed without difficulty; as long as I had this as a guide it was probable that the Director of Civil Aviation would continue to travel in the correct direction, but—at Uttoxeter the railway divided—branched, one line to Burton-on-Trent, the other to Stafford. Past Uttoxeter lay country with no distinctive landmarks—just a conglomeration of lines, roads, canals.

The situation as I saw it was this: Visibility was about half a mile between the rainstorms, and less than half of

that when the rain blinded down. As long as I stuck to the railway I could manage to keep going in the right direction, but once abandon that invaluable guide and any-

thing might happen.

If I had been alone, or if the passenger had been some one of less importance, I should undoubtedly have gone straight ahead and trusted to the compass, but with Air Vice-Marshal Sir Sefton Brancker, Director of Civil Aviation, intending to keep an important appointment, the position seemed to require different treatment. I could take no chances. The D.C.A. had instructed me to take him to Birmingham; very well, I would make perfectly sure of doing so.

At Uttoxeter, where that railway line branched, one of the lines led to Birmingham. True, it wandered through Stafford, Wolverhampton, and many other places entirely off our course, but eventually it *did* come to Birmingham; it even ran right beside Castle Bromwich Aerodrome.

At Uttoxeter I turned sharp right. Three minutes later Sir Sefton spoke.

"Here, where are you going to? You're off the course."

In an aeroplane with a seven-cylinder air-cooled engine a few feet away it is easy to pretend you have not heard. Sir Sefton spent nearly five minutes trying to attract my attention.

"It's all right," I assured him at last.

"It's not all right! D'you know I've an important engagement at four-thirty?"

I opened the throttle slightly and nodded pleasantly

to him.

"What do you think you're trying to do?" he demanded. "Are you lost?"

For some minutes I was able to attribute my non-comprehension to the roar of the engine.

"Blast you!" he shouted. "You're going all round

the damned country!"

That, of course, was perfectly true. Fifty feet above the railway we skimmed; where the line curved so did we; where it wandered away through some little town so did we. One thing was clear and distinct in my mind: that railway eventually led to Castle Bromwich; follow it, and in due course I should deliver the D.C.A. at his destination.

For ten minutes more Sir Sefton tried to make his orders reach me, banging on the side of the fuselage to attract my attention, climbing half out of his cockpit in an effort to make his voice heard above the engine.

At precisely five minutes past five we glided down to land on Castle Bromwich Aerodrome.

It is typical of Sir Sefton that two days later he wrote me a letter expressing his regret at some of the comments he had made. "You were quite right, and, anyway, you handled the machine beautifully," the letter concluded.

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So much of this book seems to be devoted to stories of flying in bad weather, of clouds and mist that nearly caused disaster, that I fear I give the impression that a pilot's time is spent in one continuous struggle with the elements. This is very far from being true.

The weather is, of course, a big factor in flight. When

conditions are bad the pilot has a difficult time, and often the story of his struggle to 'get through' is interesting. When the weather is good flying is usually uneventful, and there is no story in it at all. The peaceful trips where everything goes well fade from memory; the troublesome trips remain vivid because of the hindrances that marked them. The many journeys completed without difficulty are not mentioned here simply because they were completed without difficulty.

A hundred times on summer evenings or on clear winter afternoons I have enjoyed the peace of flying in perfect conditions—happy trips when rolls of white puffy clouds dotted the clear sky, for it has always seemed to me that there is no fun so good as cloud-chasing; it has all the thrill of 'hedge-hopping' without the criminal risk to other people which that sport entails. It was Hinkler who

introduced me to the joys of landing on a cloud.

"You find a level bit and pretend it's solid ground," he said. "Then you throttle back the engine and glide down to land upon it. The rules are that you must get on to the cloud before it changes, while it is still fairly level—they change shape in a few seconds—and you must come down as if you were going to make a proper landing."

Hinkler and I spent many hours playing in this way, and he never seemed to tire of the sport. It was as if some spirit of impishness entered into him when he soared above the clouds; the careful, serious pilot disappeared, and a wild being, who tossed the aircraft about, exultantly took his place. I can see him now turning round to grin triumphantly as he dived straight for some solid bank of cloud, and at the last second pulling the machine hard

back so that we shot upward vertically, the wheels of the machine brushing the edges of the vapour cliffs. I have known him follow a cloud that pleased him for twenty miles or so, playing in and about its hills and valleys. And once he showed me how to pick clouds that would travel over a certain destination and remain in them—hidden from observers on the ground—until that destination was reached.

A strange mixture, Bert Hinkler—a mixture of cool, practical efficiency and frivolous irresponsibility. John Lord, who knew him so well, once summed him up: "On the ground he's a quiet, unassuming little man who seems absolutely ordinary, but once he gets into the air his whole nature seems to change. He's two entirely different persons."

That was Bert Hinkler—two entirely different persons.

Apart from the thrill of cloud-chasing and stunting round Woodford—I had developed into an inveterate stunter—there were cross-country trips that were delightful, trips when a steady breeze and clear visibility made the control of a machine answering the slightest touch a delight. The shades of the pasture fields edged with the sombre lines of their hedges, the glitter of the pools and rivers, the darker greens of the woodlands! The astonishing orderliness of the towns, the roads so unbelievably symmetrical that it seemed hard to realize that this was the ill-planned earth of everyday!

Hinkler once wrote:

I think every one who flies should feel privileged. I don't mean because they are doing something man has striven to do for generations, that emperors would have given their empires to achieve; I mean because they are able to see the earth in the way they do. You never realize the beauty of the country until you fly over it. You see lakes and mountains from an angle they have never been seen from before; the flaws are blotted out; only the grandeur shows . . .

Especially do I remember some of the summer evening trips to Sealand and Hooton. Hooton Aerodrome was then the headquarters of the Liverpool Club, and as I had been interested in that lively club from its inception, and had many good friends at Hooton, I went there often.

The Liverpool Club opened officially on September 24, 1927, when a large number of aircraft gathered at Hooton for air races and a flying display. Prizes of considerable value were offered by some of the wealthy supporters who abounded in the city of Liverpool. Indeed, magnate seemed to vie with magnate as to who should give the largest cup or trophy, and in consequence flying people—who were, of course, in their usual state of financial difficulty—arrived from all directions. When I mention that I succeeded in winning twenty pounds by coming in third in an air race in which there were only three starters, some idea of the extent of the opportunity will be gathered.

Unfortunately, the worst possible weather did its best to mar the proceedings. Rain such as I have rarely experienced poured down all day continuously; a grey sea mist blotted out everything more than three hundred yards away; and flying was a difficult and even dangerous proceeding. However, pilots carried on somehow, civic dignitaries slopped through the mud in gum boots, and the club was well and truly opened.

In the evening an impressive dinner and dance were

given at one of the largest hotels, and this was attended by many of the most distinguished personalities in aviation and in Liverpool. True, the affair reached a somewhat hectic climax, but then things like that were inclined to happen when flying people were gathered together especially when pilots had been flying in the foulest weather, and had been, for once, paid for doing it. Like all the events organized by Liverpool, the opening of their club was a cheerful and generous ceremony.

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There is just one more story of an airman who lost himself which should be mentioned—the story of an instructor

and a pupil.

When the Yorkshire Club started it organized an air pageant at its headquarters at Sherburn-in-Elmet. It was customary for a new club to arrange a display of this kind; for one reason the 'gate money' helped the club's finances, and, for another, it showed the local people some flying, and advertised the fact that the new club had really commenced business. It was also customary for the other clubs to help by sending a machine to swell the meagre fleet of aircraft. In most cases these 'visitors' made the air pageant. In short, as there were only five clubs functioning—or, rather, struggling—in those early days, each relied upon the other four to help.

When the Yorkshire Club opened, the Lancashire Club sent its Renault-Avro, in charge of one of the voluntary instructors. Unfortunately, the Avro was damaged during the display while standing on the ground, another machine taxying into it, and in consequence the instructor

had to return to Manchester by train, leaving the damaged

Avro to be repaired at Sherburn.

In due course we received word that the damage had been rectified, and that the Avro was ready to be flown back to Woodford. There was a little difficulty about arranging for a pilot to collect the machine. As it happened, one of the instructors was away, the other busy with his own affairs, and, of course, Stack could not be spared away from his income-producing duties at Woodford. After some discussion the busy voluntary instructor agreed to spare an afternoon from his business, to fly over to Sherburn in a Moth, taking another pilot with him. He would then bring the Avro back, the other pilot the Moth.

This arrangement appeared to be satisfactory, but when the day came on which the Avro was to be collected a further difficulty arose. There was no experienced pilot available to accompany the instructor and fly the Moth back again. Telephone calls failed to discover any pilot who was disengaged. In this emergency the most unlikely people were considered.

Now, while the problem was being considered, a pupil arrived at the aerodrome. He was a man, therefore, who could not be described as 'experienced.' He had never been cross-country, and had, in fact, only just obtained his licence. In desperation, some one suggested that this pupil

might be able to bring the Moth back.
"Damn' silly idea!" commented Stack.

"I don't know," the instructor interposed. "I should fly him over; he'd have an hour in the machine, and could handle the controls a bit on the way there. Then all he'd have to do would be to wait until I was in the air

with the Avro and follow me with the Moth. After all, he's only got to take off, stick near me, and land here on his own aerodrome."

Stack hesitated.

"He should be able to take off and land, and he'd be all right in the air as long as he stuck close on your tail."

"It's the only thing to do, anyway. I can't spare another afternoon, and there isn't anyone else to send. If we tell him to follow me whatever happens, I don't see there's much risk."

And so it was settled. The pupil accepted the chance gleefully, and after many reminders as to keeping close—but not too close—to the instructor the two of them departed.

About six o'clock that evening a telephone message came through from Sherburn. The Moth and the Avro had left thirty minutes before; both had taken off without incident, and they had flown away together in the direction of Woodford.

Time went by. It was a perfect evening, quite clear, little wind, an ideal time for flying. Sherburn is a few miles from Leeds; the two machines might be expected at Woodford at about half-past six.

At 7.30 we were becoming anxious, at eight o'clock definitely worried, and at 8.30 panic was setting in. All sorts of horrible pictures arose to dismay us: an engine-failure in the Moth; the pupil trying to bring off a forced landing among the hills; the instructor landing near by to sort out the wreckage. Or possibly the instructor had made a forced landing, and the pupil was flying about wildly in a vain attempt to find an aerodrome.

At 8.40 a machine bearing the Lancashire Club colours

appeared from the south, and after the briefest of circles

landed perfectly in front of the hangar.

"There you are!" Stack exploded. "The fool's gone and lost himself! We told him to stick to the other machine and . . ."

The pilot taxied his machine neatly up to the tarmac, switched off the engine, and pushed up his goggles. For a moment there was silence; then . . .

"What the— Where's—"

"I don't know," said the pupil blandly. "I got fed up. Besides, my petrol was nearly finished, so I came back here. I left 'Blank' somewhere down near Birmingham. I think he's lost his way."

The explanation is at least amusing.

Apparently the instructor lost himself almost as soon as he left Sherburn, while the pupil seems to have known exactly where he was all the time. After wandering about until his petrol was nearly done the instructor decided to land and ask where he was. At this point the pupil deserted his guide and returned to Woodford.

Now, there is a certain town in Staffordshire called Newcastle-under-Lyme, and it was near here that the much-worried instructor landed in a field.

- "Where am I?" he shouted to the first farm-labourer to arrive.
 - "Eh?" queried the labourer.
 - "What's the name of that town over there?"
 - "Newcastle."

The instructor thought rapidly.

Leeds to Woodford south-west, Leeds to Newcastle-upon-Tyne due north.

"Newcastle?"

"Ay, Newcastle," confirmed the labourer.
"Oh, good God!"

For to the bewildered instructor there was only one Newcastle--Newcastle-upon-Tyne.

CHAPTER XI

AIRPORT FOR MANCHESTER

By the middle of 1927 the club at Woodford was established on a secure basis. The dangerous days when an impatient creditor might have closed us up at any time were passed. True, at each monthly meeting it was still necessary to calculate just how many of our bills we could pay and how many must be 'left over,' but little by little

the position was becoming sounder.

Stack, who had left us to undertake his spectacular flight to India, had been followed by a Captain Baker, who in after years was to become famous for his skill as an instructor at Heston. When Baker left, his place was taken by a Captain H. Brown. Both Baker and Brown were skilful instructors, and each had a charm of manner that was invaluable to the club. With great good sense they steered clear of the petty jealousies that were beginning to spring up in the club, and avoided being drawn into any of the various cliques that were rapidly spoiling the old happy spirit of team-work.

I suppose it was inevitable that such cliques should arise. When we were few, putting up a struggle for survival, there was no time for ill-will or jealousy; only a united effort kept us in existence at all; but as the club became 'established' and the risk of failure receded, new members, who had never known the sacrifice demanded in early days, began to question and criticize. Perhaps it was that the original members who had built the club regarded

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it too much as their own; but, whatever the rights or wrongs of the case, dissensions began to arise.

One member summed up the position: "It reminds me of a South American republic—every one 'agin' the Government."

Of course, as the club strengthened, influential personages decided that it deserved their support, and quite a lot of prestige—and money—was given by well-known people who allowed their names to be used in connexion with our publicity. The club house was entirely rebuilt, on lines befitting the new prosperity, and the social side definitely improved—or deteriorated, according to the way one viewed the matter.

For my own part, I found myself becoming more and more involved in matters connected with aviation. Time I could ill afford was devoted to various organizations, and what had started as a hobby began to demand the greater portion of my energies.

Apart from the work as chairman of the club at Woodford and the numerous extra duties I had taken on there, I had become a 'representative' on the Council of Lightaeroplane Clubs. This was the body that was planning and organizing club flying in Great Britain—a body that hammered out a working scheme for the movement, conducted intricate negotiations, steered the various interests round difficulties, and arranged for concerted action among those of widely differing views.

I had also been appointed to the Racing Committee of the Royal Aero Club, the committee which drew up regulations and made arrangements for such things as the Schneider Cup Contest, the King's Cup Air Race, and, in fact, controlled all air racing in the kingdom. These

and many similar activities necessitated frequent journeys about the country, a considerable volume of correspondence, and much careful thought and considered planning. In short, I had become so entangled with the intricacies of various organizations that I found myself with less and less time for flying or my own concerns.

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Sir Sefton Brancker had been talking for some time.

"I'm telling you all this," he explained, "because I think Manchester is one of the most likely places to make a start, and because I think you are the most likely person

to get them moving."

He paused for a moment, and then continued. "The thing we've got to do is to get more aerodromes. Civil aviation can't spread until every town of any size has its own landing-ground. But you know all about that. Of course, Treasury has no money to spare, and if we're to have aerodromes, corporations will have to provide them—municipal airports. I've been up and down the country trying to get them to do something, but they all hang back—won't get started. Most of them talk a lot, agree that 'flying has to come,' but do nothing definite. Just a lot of hot air and bad food.

"Now, if we could get one to start they'd follow like a lot of sheep; they'd be afraid some other town was going to steal a march on them. At present they feel that no one else has a municipal airport, so they needn't bother; but once let some town get one going and the rest of them will fall over themselves to catch up. It's finding that first one that's the trouble."

"You mean they'd be jealous?" I asked.

"I mean, as long as no one else has a municipal airport they won't stir themselves, but if the corporation next door gets moving, then they'll feel they're being left behind—and we'll get our aerodromes. Take Manchester and Liverpool. If Manchester made an airport, do you mean to tell me Liverpool wouldn't start one too? And if those two towns went ahead, all the rest would follow."

For perhaps another five minutes Sir Sefton dealt with the psychology of municipalities; then he became explicit as to how it was to be exploited.

"What I want you to do is to work up a campaign to get an airport for Manchester. Get the thing talked about. Do anything you like, but make it seem that people are clamouring for an airport. I'll leave the details in your hands, and, of course, you must organize and manage the thing entirely yourself. Officially, I can't have anything to do with it, but if you do stir up enough noise and Manchester does get an airport, the rest of the country will follow quickly enough, and I'll be very grateful."

As I left Sir Sefton that evening he said, "You're

As I left Sir Sefton that evening he said, "You're going north to-morrow night, aren't you? Good, well, drop in to see me in the afternoon with some ideas for your campaign worked out. I may be able to suggest a

few things."

That was how it all started, and for the next two years I seemed to spend my entire time talking about an airport for Manchester. I wrote letters to the newspapers—some under my own name, some under the names of kindly friends who agreed to assist—stirring up controversy on the subject. Sometimes genuine outsiders wrote in on one

side or the other, and then the arguments became doubly valuable. Whenever I could persuade some friendly editor to accept an article I pointed out the deplorable lack of an airport at Manchester. In spite of many failures, some reference to the subject appeared in the Press each week.

The B.B.C. were also unconscious helpers in our plans. Sir Sefton Brancker, when visiting Manchester on one occasion, was asked to broadcast, and he managed to work in quite a number of thinly veiled suggestions about the need for an airport. Following his example, when I next broadcasted, I sailed as near to open propaganda as the authorities would permit. It was a delicate business, however.

In connexion with the 'broadcast' which Sir Sefton gave there was an incident which seems worth recounting. He was due to speak at ten o'clock, and on this particular evening the two of us attended an official dinner at the Town Hall. It was a very good dinner indeed, and when we left about 9.45, to rush to the broadcasting station, which was close by, both of us felt extremely satisfied with the world and every one in it. As Sir Sefton put it, "Some of those old boys are damned good sports, and they know how to do themselves well. That port was exceptionally good."

Now, in those early days the authorities in charge of broadcasting had not yet established themselves in palatial buildings, and the Northern Station operated from a cellar in Blackfriars Street, humble quarters consisting of two rooms far down below the level of the street.

Owing to some misunderstanding with the taxi-man—a stupid fellow—Sir Sefton and I arrived at Blackfriars

Street only a few minutes before ten o'clock, and as we hurried down the long flights of stone steps into the

depths "the General" began to grumble.

"You've made a mistake," he asserted. "Wireless people don't work right down in the earth like this. They hang out on roofs. You've made a mistake; you're always doing it. We're late and . . . "

At that moment we reached the door of the broadcasting office, and, missing his footing, Sir Sefton, with a loud and violent exclamation, fell heavily against the door. The next minute, somewhat breathless and disturbed by the fear of being late, we were inside, assuring the official in charge—obviously much relieved to see us—that there was nothing to worry about.

There was no large staff at the station that night—just an electrician, who seemed to be having trouble with some apparatus, and the harassed individual who had welcomed us.

- "If you will hang your coat up there . . ." he said quickly. "That's right. Now, Sir Sefton, have you your script? The script ought to have been submitted to us for approval some days ago; however, if I glance over it now just to make sure . .
- "Most interesting," commented "the General," wandering round the room; "and when that red lamp goes on I suppose they can hear me?"
- "Yes—but your script? It's three minutes to ten now,

Sir Sefton laughed merrily.

"Oh, I haven't written anything out. I never do," he said. "Just these notes on my cuff. I just say what comes into my head."



ABOVE THE CLOUDS



SIR SEFTON BRANCKER

"But you mustn't!" the official said hastily. "We

have to be most particular—most particular."

"Well, it's no good talking," Sir Sefton interrupted. "I haven't got a 'script,' as you call it. Either I go on in my usual way or-" He broke off, and started to peer at a strange contrivance which stood upon a table. "That was an excellent dinner. Remarkably fine port."

The official, obviously very worried, watched him with the deepest concern, then, after a pause, came quickly

over to where I was sitting upon the edge of a sofa. "This is most serious," he began. "I don't know what to do. If he says anything outrageous I'm responsible; his talk is to be relayed to other stations, and it is most irregular-

"He'll be all right," I murmured.

"Do you think so? Do you really think so? You see, I haven't anyone else I can put on. This is the last item before we go over to the Savoy Orpheans, and if he doesn't talk there will be a fifteen-minute wait." He turned and looked anxiously at "the General," who had begun to croon softly into the apparatus on the table. "It is very worrying. If he says anything he shouldn't I shall be held responsible. If I stop him there will be a gap in the programme, and probably he will feel insulted and cause trouble at headquarters. I don't know what to do. I suppose I had better risk it. Do you think he's all right? "
"Of course he is," I said.

At that moment "the General" turned to us, and with the pleasantest of smiles remarked casually, "You know, I've always had an ambition to be the first man on the wireless to say 'bloody.'"

The official started as if a pin had been stuck into him.

"I should switch you off-"

Just then the red lamp flickered, three rapid flashes, to indicate that the microphone would be alive in thirty seconds. Sir Sefton drew up a chair and settled himself, ready to speak. The official bounded to a switchboard, and hovered over it in a state of indecision.

"You won't say anything, will you?" he pleaded. "I should have to cut you off, and——"

The red lamp glowed. Sir Sefton, with a reassuring smile, began to talk into the microphone. It was one of the best and most innocent speeches I ever heard him make. But the official never left his switchboard; his eyes fixed on "the General's" face, he followed every word. It occurred to me that if "the General" had merely said but that cut-out switch would have been pressed.

There were numerous other ways in which we worked our propaganda for an airport—for instance, after-dinner speeches and lectures at various institutions. At that time I was often called upon to speak at the conclusion of some dinner, and whenever this happened listeners were always told of Manchester's sad default. Lectures were, of course, comparatively easy. Numerous societies welcome a speaker who will give his services—however inefficient that speaker may be—and, as flying was an attractive subject, I was able to arrange to put our views before different influential bodies and be thanked for doing so. More than forty lectures dealing directly or indirectly with the subject were given.

I believe it was Sir Sefton Brancker who first suggested that a public meeting should be arranged. Throughout the campaign he always urged that our best line of attack was to make a show of "aroused public feeling."

"The Corporation will jump to it once they think the idea is popular," he wrote.

You don't want to antagonize them or put them in opposition to the scheme. Just give the Corporation justification for going ahead. A well-attended public meeting which passed a unanimous resolution in support of an airport for Manchester would help a lot. They understand that sort of hot air. Talk to them in their own language—resolutions, amendments, and so on.

Therefore a hall in the centre of the city was engaged for one evening, and I set to work to organize a display of public feeling. Speakers were rather difficult to obtain. One or two prominent local people who had shown some sympathy with our efforts were approached, but all declined to identify themselves with a subject that was still controversial. They were kindly but firm, and refused to be persuaded to alter their decision.

"You see," one of them told me, "I can't afford to

identify myself with a failure."

"But we aren't going to fail."

"Probably not, but at this stage it would be unwise to be too sure of the ultimate result. You are busy pinpricking the authorities, and this must cause a certain amount of resentment. If they eventually fall into your way of thinking, well and good, but if not . . ."

At last, realizing the hopelessness of expecting local support, I turned to my friends in aviation, and found the speakers among these. Prominent people connected with aviation had been associated with 'failures' so long that they had become case-hardened to displeasure and ridicule. General Groves, then Secretary of the Air League, agreed to be the chief speaker; Harry Fildes—afterwards Sir

Harry Fildes, M.P.—consented to take the chair. John Lord, that jovial personality who has done so much to cause foreigners to buy British aircraft, gave his full support, and vigorous and entertaining speeches seemed assured.

John Lord even went further than just consenting to speak: he inquired how the cost of this meeting was to be defrayed. There were, of course, no funds for us to draw upon, and it was inadvisable to charge an admission fee. Hiring the hall, issuing invitations, and advertising had mounted up. John Lord realized the position and offered to help. In the end he and I divided the cost between us.

The night of the meeting came. I had arranged for four friends to act as stewards and to show the public the way to the seats reserved for them. The Press, helpful as usual, sent representatives. At five to eight—the meeting was advertised for eight—the first of the public arrived, two members of the staff at Avros who had helped me to build the L.P.W. in early days. The entire staff of four stewards showed them to their seats.

At 8.15 another three people entered the huge hall, and after I had made some apologies to the other speakers—I felt myself entirely responsible for the débâcle—we all trooped solemnly on to the platform.

Fildes made one of his delightfully witty speeches, General Groves dealt with the question of air transport so effectively that the newspaper men's pencils flicked rapidly over their notebooks, and I made a stammering statement intended to give the subject a local 'twist.' Finally, a resolution was proposed and seconded, urging the municipal authorities to obtain an airport for the city.

Four stewards, five of 'the public,' and we on the platform, all voted in favour. The resolution was carried unanimously.

A typical example of the good-natured way in which the Press always treated our scheme was shown the next morning. Any one of those newspaper men might have turned that 'meeting' into a really humorous story, and done our cause untold harm. What they did was to state that a meeting had been held, give the speakers' names, report some of their more exciting remarks, and conclude with a copy of the unanimous resolution.

Copies of the resolution I distributed to the Town Hall, the Chamber of Commerce, and all influential people likely to be useful. A discreet silence was maintained about the number of people who had actually voted, and the

resolution undoubtedly helped our cause.

Another line of attack which I found advantageous was personal interviews with prominent personalities in the city. I was able to arrange meetings with most of those I thought would be useful, and to put the case for an airport before them. Usually those who discussed the position with me were sympathetic. I was careful to make each interview seem a consultation, as if I were appealing for guidance, and in most cases the interviewee seemed to be flattered, and gave advice at great length. Occasionally a suggestion was made which proved really helpful, and then it was immediately incorporated in the campaign. But my real object in seeking these meetings was to minimize opposition of importance. I wanted no great men popping up to wreck my schemes; if not in favour, I needed them to be at least neutral, and these interviews did much to secure such a frame of mind. Having talked the

idea over with me, and even offered advice, men did not care to be in open opposition at a later date.

There were two men in the city who responded so kindly to my appeal that I felt compelled to disclose to them something of the true position. To them I spoke frankly, explaining the difficulties, hiding nothing, and quite honestly asking for their guidance. We met several times, and before very long they were nearly as anxious for the success of the venture as I was myself. Both were experienced in municipal affairs, both had great influence and tact. With allies such as these it seemed certain that an airport would come quickly. Sir Sefton, when I reported the attitude of these two men, rejoiced greatly, and for a few weeks we believed the matter to be as good as settled. One of these men was Sir Edward Holt, an ex-Lord Mayor with a real power in the city. The other was Mr P. M. Heath, the Town Clerk of Manchester.

Mr Heath was one of the most delightful personalities I have ever met. Entirely without conceit—indeed, one of the most humble of men—he was absolutely sure of himself. Confident that he was right, and convinced that he knew the best way to handle a situation, he never hesitated or stooped to prevarication. Sure of his ability, he was plain and open. A wide understanding of human nature made him sympathetic and tolerant.

Then, just when plans for a definite move were nearly completed, when it seemed certain that victory was round the corner, Sir Edward Holt died—died without warning in a few hours. Mr Heath caught pneumonia attending the funeral, and within a week I saw my two supporters buried, and all our careful plans smashed to atoms. All the ground gained by months of work was lost.

Early in 1928 Sir Sefton suggested that the time was ripe to advance openly, and to ask the Town Hall to meet

us and discuss the provision of an airport.

"Go to them," he said, "and arrange an opportunity to talk it over. Fix it so that they can't refuse to meet us, and then bring up every possible gun. Force the issue."

After much talk it was decided that a formal luncheon would provide the best opportunity, and this I proceeded

to arrange.

"It must be a really good luncheon," Sir Sefton advised, "the best that the Midland can put on, and give them a free hand with the wines. I don't know how you'll

pay for it, but I'll help, myself."

The Lord Mayor of Manchester agreed to attend. So did certain influential aldermen. Then we roped in the President and Secretary of the Chamber of Commerce and various prominent people who were likely to be sympathetic to our project. Sir Sefton Brancker and General Groves were to state the case for an airport.

Let me confess at once that the luncheon did not result in any definite action. It was useful, it brought various interests together, and guarded references to the possibility of support were made. Sir Sefton told Manchester it should have an airport, and the Lord Mayor replied that the municipality were prepared to provide one if—oh, those 'ifs'!—the traders of the city demanded one. The President of the Chamber of Commerce acquiesced that an airport was desirable, but sat down, having committed his party to nothing. It was a perfect example of clever speakers putting the responsibility on to some one else—a masterpiece of the art of non-committal.

But out of that luncheon came the incident that was to bring the city its airport—a tiny incident that appeared of no importance at the time it happened. I had arranged to have dinner one evening with a friend of mine, a Mr West, at his house in Hale. When I learned that Sir Sefton and General Groves would be in Manchester, and that, of course, I was expected to be in attendance, I telephoned my friend and explained that I should have to cancel the engagement. Mr West expressed his disappointment, and urged me to bring Sir Sefton and General Groves to his house that evening. This was arranged; instead of staying in Manchester we all went out to Hale.

One of the other guests happened to be a director of a large group of newspapers. The dinner was an especially good one; the atmosphere became informal and friendly. The newspaper magnate told some stories, General Groves capped them, the magnate went a few better, and so on. Sir Sefton told the host that his port was the best he had ever tasted. Finally the conversation turned to an airport for Manchester.

When we parted it was arranged that I should call upon that newspaper magnate at eleven o'clock the next morning.

"He's a useful man," said Sir Sefton, ruminating, and, properly handled, might help a lot. Of course, he's as hard as nails and as keen as a razor; you won't touch him with sentiment or the usual propaganda. What you'll have to do is to show him that an airport would actually benefit his firm."

"I don't see how I can show him that," I said.

Sir Sefton nodded cheerfully.

"Neither do I," he said, "but you've got to think of

something if you're to get that man to help—something with no tricks in it, too; that man's no fool."

The newspaper magnate seemed a totally different man when I met him in his spacious office next morning. The genial story-teller of the night before had disappeared, and in his place was a silent individual who listened as if impatient for me to finish and be gone. It almost seemed at times as if he were hardly heeding what was said, and only the occasional questions he suddenly shot out encouraged me to persist.

I wasted no time pleading for an airport. Briefly I outlined some of the advantages such a facility should bring to the city's trade, and stressed the suggestion that other

towns were considering the matter.

"An airport is bound to come. There may be delay, and then Manchester will be passed by other towns, but sooner or later an aerodrome will have to be made. The thing is inevitable. Some day the city will have a municipal airport——"

"I agree with that," he interrupted.

"Then, if you agree that an airport will come in time, surely it is in your own interest to back the proposal now? If you start a campaign in *The Blank* pressing for an aerodrome, when one is started every one will say how farsighted and powerful is *The Blank*. You'd be backing a certainty. An aerodrome is bound to come; you advocate it hard in your paper."

A week later the scheme was being backed by a powerful newspaper. An experienced journalist had been detailed to co-operate with me in organizing the campaign, and together we planned innumerable ways of bringing the city's need before the public. Prominent local people

were interviewed on the subject; every possible opportunity of stressing the advantages of air transport was seized upon. Let me say plainly that I think the newspaper director and his colleagues acted from the purest of motives. They truly believed that an airport would be of benefit to the district, and, thinking so, flung their power in support of the proposal. They were not deceived. They were clever, clear-sighted men who came to our assistance with their eyes wide open.

From that moment the pace of the campaign quickened considerably. The wide appeal we were able to make gave the agitation a definite standing. People who had previously regarded my arguments with amused contempt now began to listen. What had once been only the cries of a lone enthusiast had changed into a matter of public concern. I was kept busy lecturing, planning, and writing propaganda, interviewing influential persons.

Some one suggested that a small book should be written—a book setting out the case for an airport and giving details of what air transport could offer to the city. I agreed to produce such a pamphlet, and set to work.

The Chamber of Commerce—or, at least, their President and Secretary—commended the idea, and gave me some guidance as to which points were likely to appeal to local business interests. I even received the impression that the Chamber would assist, possibly, with the cost of printing, and certainly with official approval and distribution to its members. However, I must have misunderstood, for when the matter of an airport came before the Board on April 16, 1928, they confined themselves to a resolution on the subject.

The resolution, after expressing the opinion "that

Manchester will need an aerodrome in future years," concluded as follows:

At the present moment, however, the Board feels that reductions in municipal rates are of such importance to the commercial community that they could not support suggestions that the Corporation should shoulder any financial responsibility which is not of pressing urgency.

If those interested in aviation can show that arrangements can be made to secure a Manchester aerodrome without undue additions to the city's rates, the Chamber will give its

approval and sympathy to their suggestions.

So the book *Manchester and Aviation* was published and distributed at my own expense.

Ш

Mention has been made of certain prominent people in the city whom I interviewed in an effort to enlist their interest in the cause. Among these was a certain Councillor William Davy, who in 1928 was Lord Mayor of Manchester. Councillor Davy had had long experience in the ways of a municipality, and exerted a considerable influence, not only among his own party—which was Socialist—but also among other members of the Corporation. He was a man highly respected and popular in Manchester.

Councillor Davy listened to my arguments, made many cautious inquiries, and then, as time went by, it became apparent that he was coming more and more to favour the provision of an airport. Gradually, not committing himself, and examining carefully each step before he took it, he became a supporter of the proposal. While we were

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still at the campaign stage he was unable to help to any great extent—at least openly—but his suggestions, based on an intimate knowledge of Town Hall procedure and of the mentality of those who would eventually consider the matter, were invaluable, and provided a useful brake upon my own enthusiasm. When in due course the scheme reached the point where it must be steered through the rocks and currents of the Council I was glad to step back and leave the control in Councillor Davy's hands. For three difficult years he piloted the air schemes of Manchester: coaxing permission to build, launching the new craft, driving it ahead through treacherous storms. Councillor Davy received a knighthood for his work. I believe he well deserved it.

IV

On June 4, 1928, I was asked by the City Surveyorat the request of the Lord Mayor—to report on possible sites for an aerodrome. On June 14 I completed a brief report, with maps. Three sites were recommended, all three at Wythenshawe, a district about four miles south of the city.

Sir Sefton, on hearing how events had developed, wrote: "Well done! I congratulate you heartily. A great victory! "

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The battle was, however, far from won. True, we had advanced rapidly, but the new position we held precariously; an attack might drive us from it at any time. So, as swiftly as possible, yet considering every move, we toiled to strengthen and protect.

It was at this stage that the usefulness of those early interviews became apparent. Very little was needed to wreck our scheme, and a few important personalities in strong opposition might have been disastrous. However, a large number of influential persons had been approached, as I have said, our own case had been explained to them, and, if we had not their actual support, the majority were now content to remain neutral.

The Corporation as a body had not yet sanctioned an airport. The proposal was still at the 'inquiry' stage, and we dared not risk a discussion in the Council until a chance of success seemed probable. A defeat in the Council might have put us back some years. Therefore Councillor Davy manœuvred and persuaded, while I banged away with our Press campaign.

Eventually the Council appointed a small committee to investigate the question, and in due course, having supplied them with every possible bit of information which I considered helpful to our cause, I escorted this committee to Woodford. My idea in taking them to Woodford was to show them aircraft actually in the air, and to stimulate the interest with which they were beginning to view the subject.

It was a wonderful opportunity for aiding our plans. Here were the men who would advise the Council, the men who would recommend the provision of an airport—or turn the proposal down altogether. Convince them, and half the battle was won.

By the time we sat down to tea in the club house at Woodford I felt that the chances of success and failure were about equal. One member was openly in favour, one definitely against; the rest seemed still undecided;

they might jump either way. It appeared as if the slightest straw could sway the balance.

In desperation I sought vainly for this one straw that would turn the scale. Then some one mentioned Sir Sefton Brancker.

"If he'd come up again and talk it over, like. There are several things I want to ask him about. This flying on a Sunday, for instance. I don't hold with——"

"Say you'll get Brancker up here," whispered the

Councillor who was on my side.

"Of course," I said hurriedly. "If you want Sir Sefton to come, I'm perfectly sure that he will be only too pleased to do so."

The suggestion was well received. Enthusiasm seemed

a little nearer.

"Clinch it now," murmured my supporter. "Fix it now and you've got them."

"Let me telephone the Air Ministry," I said. "I can get Sir Sefton on the 'phone and find out when he will come."

There was a brief discussion. I realized that the position was critical. If Sir Sefton came to Manchester our fight was over; this committee would almost certainly recommend the Council to proceed.

Twenty minutes later I was at the telephone, the Councillors standing round me while I endeavoured to explain the situation to the Director of Civil Aviation.

I dislike speaking on the telephone at any time, and it is especially difficult asking a man to do something because it will be diplomatic and please some one else, when that some one is standing within a few feet of you. With the Councillors by me I dared not explain too plainly, dared

not let them think there was any reluctance on Sir Sefton's part. I knew that the slightest thing might upset all the delicate balance of the situation.

"I can't understand you!" barked Sir Sefton. "I'm not coming to Manchester! The thing's in your hands! I'm not coming!"

"So, of course, I said you would be delighted to come,

and if we could fix a date now-"

"I tell you I'm not coming!"

"Yes, they realize you're very busy, but-"

One of the Councillors broke into the conversation.

"Doesn't he want to come?" he demanded grimly. I tried to smile reassuringly.

"Oh, yes, he'll come. It's just arranging a date—"

"Attend to me! I don't know what you're getting at, but I'm not coming to Manchester! I'm tired of it! They've procrastinated and talked hot air until they don't know their own minds! I've been up to Manchester time after time; tell them to——"

Painfully I realized that the hard-won progress of months was now paralysed. Sir Sefton meant what he said: he would not come. To tell the Councillors this meant absolute failure; to them it would appear as rudeness and neglect. They would leave Woodford antagonized and disgruntled. I could almost have cried with vexation.

"Can I see you to-morrow?" I asked.

"You can't," Sir Sefton replied. "I'm leaving for Germany in the morning."

"Then I must see you before you go."

"You can't. I'm leaving Croydon at eight o'clock in the morning."

"Then where will you be to-night?"

"You can't get to London to-night."

It seemed as if he were correct. It was six o'clock; already the light was fading. Still . . .

"If I can get there, where will you be?"

- "I'm not coming to Manchester, so you're wasting your time trying to persuade me. I'm not discussing the matter further."
 - "Will you tell me where you will be to-night?"

"I'll be in Rules about eleven o'clock, but . . ."

Trying to appear unconcerned, I turned to the waiting Councillors.

"He is leaving for Germany at eight o'clock to-morrow morning, so he wants me to see him to-night and fix things up."

My statement was received with politely disguised suspicion; it was in vain that I tried to convince the company that all was well. As I have said, to admit straight out that Sir Sefton would not come meant certain disaster; the only shred of chance remaining lay in bluffing until I had seen the D.C.A. and proved him adamant.

To fly to London was impossible; long before I could reach the South it would be dark. There was a train at a quarter to seven, if I could manage to catch it.

The friendly Councillor was whispering to me again.

"I'll be at the Town Hall to-morrow morning. Let me know what happens. If he doesn't come we're sunk."

I nodded.

It was a miserable journey to London. There was no dining-car on the train, and stops were made at every way-side station. I had brought a suitcase with me, and managed to change into evening things in the guard's

van, but no journey I have ever taken seemed to be so tedious.

The train was late getting into Euston, and it was well after eleven when a taxi put me down outside Rules. There was no sign of Sir Sefton in the dining-room or bar. At a table by the door I waited anxiously.

Suppose he did not come? After all, there was no definite arrangement to meet. To have asked on the telephone for a firm appointment would have resulted in a refusal. He had just mentioned that he was coming to Rules that night about eleven, but anything might have stopped him. It seemed even chances if the D.C.A. would arrive at all.

"So you got here, did you?" said a well-known voice. "Now, how the devil did you manage it?"

As I sprang to my feet I saw that Sir Sefton was smiling.

- "Yes, I'll sit down," he continued. "I've got some friends coming at half-past, and when they come we'll have to join them."
- "My train back to Manchester is twelve-fifteen," I put in.

He turned to the waiters who were bowing round our table.

"Don't fuss," he commanded. "We'll be going over to my table in a few minutes. I'll have my usual port. What are you—oh, you've got yours."

The D.C.A. settled himself beside me, and puffed contentedly at his cigar. I started to explain, but he interrupted me immediately.

"I'll talk first. I'll hear anything you want to say afterwards. Now, understand once and for all, I am not coming to Manchester. I have been down there time after time;

more work has been put into that town than in any other, and they simply hesitate and consider. I'm not coming again to plead and persuade. There are other towns nearly ready to start, and it will be Manchester's loss if they go on hanging back. I mean what I say; I'm not coming."

For ten minutes we talked. I explained the urgency of this final visit; I pleaded with my whole soul, and tried to make the D.C.A. agree to help just once more. It was quite useless. He was determined, and nothing I said seemed to affect him.

"I won't come," he said, "simply because I don't believe it would do any good, and because I'm thoroughly tired of being played with. I'm sorry, for your sake, because you seem to have set your mind on it, and I know how you've worked, and I'd like Manchester to be the first because of all that. But my advice to you is, cut it out, forget what's happened, and I'll find you something else to do."

I made one final appeal, then Sir Sefton's friends arrived, and we moved to join them at the other table. I knew I had failed. The next day the committee would know that the D.C.A. had refused to meet them, and the delicately balanced scale would fall against us.

For a few minutes I tried to keep my mind on the general conversation among the party; then I prepared to depart.

- "You're going back to-night?" Sir Sefton questioned.
- "I must catch the twelve-fifteen."
- "What time did you get here?"
- "The train was late—about five to eleven."

There was a brief pause. The D.C.A. stood up and came round the table to me.

"You rushed up here like this because you thought you could persuade me to do what you want. I know exactly what you thought. Understand me, I will not be persuaded! I'll come to Manchester! Yes, I'll come! Not because you have bullied me into it, and not because of your infernal Corporation! You can fix a date up with Jones."

He glared so frightfully that I am sure the waiters

thought we were about to start fighting.

"Don't think you have talked me over! You haven't. I'm coming because—well, if you don't get that airport it will be a bloody shame!"

Sir Sefton Brancker visited Manchester, made some excellent speeches, dined at the Town Hall, discussed the position with various influential people. A few weeks later the Council passed a resolution appointing a committee to decide upon a site and prepare estimates.

CHAPTER XII

AIR-TAXI

It was in October 1928—just when the matter of the airport was being definitely settled—that I decided to resign from the chairmanship of the club at Woodford.

During the past six years my time had been very fully occupied helping the club through its struggle for existence. In addition, there were the numerous other duties in which I had entangled myself. A man cannot help to organize such things as the King's Cup and the Schneider Contest, pass pilots for their licences, attend various flying meetings, and generally take a prominent part in aviation if he is also trying to interest himself in various commercial concerns. It seemed to me that with the club established and no longer dependent upon the feverish activity of a few, with the matter of the airport settled and out of the way, there was an excellent opportunity for me to devote my energies to my own affairs. I visualized a placid, happy life, in which I flew only for pleasure, just when I wanted to.

Almost my last official act as chairman of the club was to attend the Blackpool flying meeting. This was a pleasant affair, with an exceptionally merry social side, and some remarkably clever flying by the R.A.F. There was, of course, the unfortunate incident of the 'guest marshal' who took his duties too seriously, but the *contretemps* was smoothed over. These guest marshals had been appointed to meet distinguished visitors as they arrived, welcome

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them, escort them to their hotels, and make them comfortable. I admit that I urged the marshals to take special thought in the matter.

"Think of the things you would need if you came for four days at Blackpool," I instructed, "and see that each guest has not forgotten to bring any of them."

The guests arrived, and early in the evening one of them, a group captain of considerable importance, came to me in a fearful rage. He was a typical 'Indian colonel,' and he was simply frothing with anger. He had been insulted—unforgivably insulted. Horsewhips and the most drastic personal violence seemed to fill his mind. It was with considerable difficulty that I learned the story of the offence.

One of the marshals had accepted my instructions too literally; he had carried out his duties too well. There are things one does not offer to an elderly colonel who is sen-

sitive about his personal dignity.

It was at this Blackpool meeting that Sir Sefton Brancker received a request which must have surprised him considerably. Sir Sefton was very fond of dancing, and seized every opportunity of indulging in the art. He was a skilled performer, with a style his friends sometimes described as 'energetic.'

"Finest exercise there is," he would exclaim after the first few dances. "I'll be back in a few minutes; just

going to change my collar."

One evening during the Blackpool meeting Sir Sefton decided that it would be amusing to leave our hotel for an hour or so and pay a visit to one of the local dance halls—a visit incognito to one of the popular halls patronized by the multitude. He collected a small but—despite my own

presence-very select party, and in due course paid the shilling-per-head admission which allowed us to enter the place. A few minutes later he was dancing unrecognized among the hundreds of couples on the floor. I should add that he had for a partner a very charming lady who is famous as a producer of successful plays and films, and who is as well known in America as she is in England. Both "the General" and this lady had danced to all the best bands in the most exclusive clubs and restaurants in London and New York, but what was considered correct at the Embassy or the Waldorf failed to pass at Blackpool. They are very, very particular in the Lancashire Pleasure Resort, and any innovation in step or style is frowned upon. Indeed, so particular was the management that from time to time a commissionaire marched among those sitting out, crying, "Ladies must not sit on gentlemen's knees. Ladies must not sit on gentlemen's knees." Shortly after "the General" took his place among the dancers a representative of the management touched him upon the shoulder. There was a brief conversation. The management objected to "the General's" way of dancing; he was asked to leave the floor.

The little select party—among them some of the most famous people in the aviation world—returned to their hotel.

There was also another unfortunate occurrence in connexion with the Blackpool meeting—an experience so disturbing that even to this day I blush with embarrassment at the thought of it.

The British Broadcasting Corporation decided to devote forty minutes of their programme to a running commentary upon the meeting. For this broadcast a time was



AERIAL 'SKITTLES'

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selected when especially exciting things would be happening—an air race round points within sight of the aerodrome, the big spectacular event of the pageant. The broadcast was well advertised, and was to be from all stations.

I was engaged to provide the running commentary, and, knowing something of the machines and pilots entered for the race, I felt no doubt about there being plenty to describe. A hut was built upon the roof of the grandstand, a spot from which a perfect view of the aerodrome and course could be obtained, and for some days B.B.C. mechanics busied themselves erecting complicated apparatus inside the hut.

The broadcast was timed for three o'clock. At half-past two I was sitting in front of the microphone, prepared to comment upon what might happen to the competing aircraft.

At ten to three a heavy thunderstorm broke over the aerodrome: rain poured down as if a tap had been turned on, spectators rushed for shelter, pilots and mechanics flung covers over engines and departed in search of dry places. Visibility was about a hundred yards. A message arrived at the hut stating that all flying had been abandoned until the weather improved.

At precisely one minute past three the B.B.C. announcer, after a brief and well-phrased speech of introduction, switched over. The microphone was mine for forty minutes. 'All stations' were waiting for my 'running commentary.'

Outside the hut the rain still poured down. Upon the black, deserted area of grass which was the aerodrome the only things that showed were the sheeted-up aeroplanes.

Neither man nor machine gave any sign of movement—simply an empty field.

'Running commentary!'

II

In due course the Corporation passed formal resolutions as to the provision of an airport, and work upon a site at

Barton, near Chat Moss, was begun.

Personally, I still hankered after one of the sites I had recommended at Wythenshawe, but there were certain reasons which made any of these difficult to obtain, and it would have been unwise to press the matter. Apparently Wythenshawe had already been planned by the Corporation as a housing estate or model town; a considerable amount of work had been put into this planning, and any suggestion of upsetting the scheme—even one small part of it—would have aroused much opposition. Again, an aerodrome in a residential area was considered to be undesirable. The airport interests were not strong enough to risk antagonizing anyone in those days; and so the Wythenshawe sites were not mentioned in public.

In any case, the site at Barton was an excellent one. The ground, which already belonged to the Corporation, was flat, and there was plenty of room in which to extend if it were necessary to do so at a later date. As it was somewhat boggy or soft in places, vast quantities of cinders were rolled in on the landing runways, and these made a perfectly firm and solid surface. Nine months after work on the aerodrome had begun the Director of Civil Aviation described the site as "beyond reproach." As reported in

The Manchester Guardian, he went on to say that

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there had been a great deal of rain recently, and he had been particularly pleased to find that the surface of the aerodrome at Chat Moss was much drier than that at most aerodromes after heavy rain. He did not know much about atmospheric conditions at Chat Moss, but even when visibility was extremely bad the aerodrome would be easy to find owing to the proximity of the Ship Canal.

It was at the end of 1928, when, retired from the club, and with the campaign for an airport concluded, I was enjoying a pleasant period of leisure attending to my own affairs, that a casual remark set me working afresh. A prominent Air Ministry official had visited Manchester with regard to certain technical matters connected with the airport, and as we sat having one final drink before he caught the midnight' back to town he said, "The only thing that worries me is who is going to use the airport when it's finished. You know as well as I do that there isn't any firm likely to come to Manchester and start air services."

"But in a few years?" I suggested.
"Yes, possibly; well—probably. But what about today? As I see it, for some time you're going to have a huge hangar and a large aerodrome with only an occasional Moth ever landing there."

The conversation stayed in my mind. There did seem little chance of a firm's starting regular services from Barton in the near future. Even the provision of 'air-taxies' seemed unlikely. Gradually I began to visualize a magnificent aerodrome—entirely deserted.

The thing worried me more and more, for in a way I felt responsible. My name had been connected very prominently with the propaganda advocating an airport for

the city. I had persuaded and argued in its favour. You cannot spend two years shouting that a thing is urgently needed . . .

Sir Sefton, to whom I carried my troubles, showed little concern.

"The thing has served its purpose," he said. "Now that Manchester has commenced, lots of others are waking up. We have started the ball rolling."

"Yes, but what are the Corporation and every one else going to say when they find no one is using their precious

airport? You know we told them-"

"Manchester must realize it has built for the future; it has taken the long view. In time traffic will come, but for the present patience may be needed."

He placed his cigar upon the ash-tray, and glanced

round at the couples who danced by our table.

"There is no need for you to worry," he said. "All that propaganda did what it was intended to—and you know you thoroughly enjoyed the fun."

"Yes, I suppose in a way I did."

Sir Sefton stood up.

"We always have to pay for our thrills, but they're usually worth it," he murmured. "I'm going to dance."

In a cautious way I hinted of my fears about the airport to certain other people. It is difficult to go to people and tell them that the thing they have helped to obtain is likely to be a white elephant, but in one or two cases I did put the position quite plainly. To be candid, most of those I talked to showed little concern. The newspaper magnate said he would have to see what happened; a big business man promised to give the matter careful consideration; a city alderman remarked that it was no good meeting

trouble half-way. "Guarded and non-committal" their attitude might be described as.

Only Councillor Davy, now no longer Lord Mayor and shortly to be Alderman Sir William Davy, seemed to think as I did. Possibly the fact that he also had been prominently identified in the later stages with the crusade for an airport helped him to appreciate my concern. Anyway, we discussed the matter most seriously, and both felt that the situation was anything but a happy one.

With a view to finding if there was any firm likely to come to Manchester and start activities at the airport, I made various inquiries and visited different firms. It was all quite useless. The firms approached were all far too busy trying to keep themselves in a solvent state to risk launch-

ing out in a new and experimental direction.

At the end of 1928 British aviation was still dependent for its existence upon occasional orders from a parsimonious Government; it seemed very unlikely that any aircraft firm would open at Barton.

For some weeks I worried over the problem; then the glimmering of an idea began to develop. Suppose I started an air-taxi firm myself? A small firm—say, three machines, two pilots, and two mechanics—would meet any demand that was likely to arise for some time. Such a concern would not require much capital to start, and should be able to support itself—or very nearly so—after the first year. Profits were not to be expected. If there were any—well, they would have to be used to expand the activities of the firm. Gradually the firm would be built up; from air-taxies we might in time develop regular services; a small beginning might culminate in a great concern operating internal airways.

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The more I thought about the idea the more interested I became. It would be a great struggle. This sitting back and resting on one's laurels was all right, but—then I began working out details of costs and capital.

A week later I was making a series of calls upon prominent business men in the city. On the understanding that what I said should be treated as confidential I outlined my scheme and asked for criticism. Much of the advice I received was really useful, and as a result numerous modifications were made in the plan. At the end of each interview I asked straight out, "If such a firm is started, will your concern give it work? Will you use the air-taxies?"

In almost every case I was assured of support. A few refused to make any definite promise, and two told me plainly that they believed I should lose any money I put into the firm, but the majority of those I interviewed urged me onward.

It was at this stage that I received a letter from one F. J. V. Holmes. Holmes had for some years operated a very successful 'joy-ride' company, with headquarters at Shrewsbury. Starting with a dilapidated War-time Avro which he had reconditioned in a stable—Holmes was a clever and highly trained mechanic—he had gradually built up a fleet of aeroplanes. In winter he reconditioned his machines; in spring he toured the country, booking fields suitable for his purpose; and in summer the machines visited the fields, providing joy-rides at five shillings per passenger.

By careful management and desperately hard work he had survived where numerous others had failed, and the Berkshire Aviation Tours, Ltd., was the oldest and almost the only successful firm of its kind.

Holmes wrote to me and explained that the accommodation he rented at Shrewsbury was not entirely satisfactory for his purpose, and he wanted to know if there was any chance of obtaining the use of a hangar at the new Manchester airport. At first I could not see how a joy-ride firm would solve our problem at Barton. Such a firm would send all its aircraft away each summer; for at least five months of the year the airport would be deserted—or almost so.

I learned, however, that Holmes had developed a connexion in repair work. The insurance group—there was only one group in those days who covered aviation risks—sent him private machines for rebuilding after a crash, and he had also acquired some reputation for overhauls and tuning up. To cope with this repair side, and also the maintenance of his joy-ride fleet, he proposed to keep a small staff of mechanics at headquarters. I suggested that such mechanics could easily attend to some air-taxi aircraft. Holmes agreed that this was so, but said that if he were to extend in this direction additional capital would obviously be required.

Now, I was prepared to find some capital for the venture. In view of the assurances I had received it seemed reasonable to believe that air-taxi facilities at Manchester might soon become self-supporting. And with the overheads not charged solely to one activity, but split up among three departments, the proposal seemed almost attractive. Holmes would be an ideal manager. His ability had already been proved by the success of the Berkshire Aviation Tours, Ltd.

From Holmes's point of view the scheme had many advantages. He would obtain the better accommodation

which his firm needed, he would add another side to its activities, spreading the chances of success, while the larger firm, with its greater capital, would be able to expand the joy-ride and repair sections.

After some discussion we approached the Corporation, and found that they welcomed the idea. It had already become apparent to them that the new airport when finished might not be over-busy, and they were glad of something which helped to justify the expenditure they were committed to.

Holmes and I then got together in earnest. Chaperoned by a solicitor, who obviously regarded both of us as lunatics, and who seemed convinced that we were about to commit some tort or misdemeanour, we arranged details of capital. As a result of numerous meetings between us, held under the guidance of this pessimistic lawyer, two companies came into being—Northern Air Transport, Ltd., and Northern Air Lines, Ltd.

In the meantime circumstances had arisen which made it essential that the companies should make an immediate start. For one thing Holmes wanted to leave Shrewsbury as soon as possible, and for another—the vital reason—other towns were now copying Manchester's example and preparing to obtain municipal airports. As one alderman put it, "It makes me wild, it does so. No sooner do we get things fixed up than they must all start sneaking around and trying to pinch. I don't know whether I'm on my 'ead or my 'eels.'

The trouble was that Barton, the new Manchester airport, could not be made ready until the following autumn. Nine months at least must pass before the runways could be made sufficiently level and solid to receive aircraft, and

while this work was being done other towns, with sites more naturally suitable, were preparing to jump our claim. It seemed probable that if Manchester waited until Barton was ready it would not be the first municipality to obtain an airport, but a late third or fourth.

Now, the Corporation was very anxious to be the first, and, with a new company waiting to begin operations, it felt justified in taking a somewhat unusual step. A temporary site was found at Wythenshawe. This site—to be used until Barton was ready—consisted of two large fields on which part of a new housing estate would eventually be built. A hedge dividing the fields was ripped out, a ditch filled in, some trees were cut down, and finally a barn in which a farmer stored his hay was cleared and prepared to receive aircraft.

While this work was in progress Holmes became active, obtaining aircraft suitable for our purpose. A D.H. 9 was purchased and converted at Shrewsbury into a cabin machine capable of carrying two passengers and luggage; a Moth and two Avro Avians were also added to the fleet; and with these it was hoped to cope with any taxi work that might come our way. In addition we had Holmes's original fleet of Avro 504K's, which were suitable for joyriding.

Three pilots were engaged. As chief pilot of the new concern we were lucky enough to obtain the services of A. N. Kingwill. Looking back, I am inclined to think that Kingwill agreed to join the firm owing to a misunderstanding of our true position. He was a pilot of exceptional skill, one of the most careful and capable I have ever flown with—probably one of the best half-dozen pilots in the whole country. His abilities were well known, and

there is not the slightest doubt that he could have obtained a far better position than we could offer him. Possibly he accepted our forecasts too literally, regarded our hopes as more solid than they really were; possibly he became infected with our enthusiasm and it affected his judgment. Whatever the reason it is now of little moment; Kingwill came to us as chief pilot, and, having once started, refused to leave the ship even when it threatened to sink under him. At any time in our struggle for survival he could have stepped away to a far better job. He never did it, never complained, never ceased his efforts to pull us through.

Pilots and machines were ready—the little band that started out so hopefully, so trustfully relying on verbal assurances of support; the little firm that we believed might be built up into a strong concern, sending air-taxies all over the country, growing into regular 'air services.'

"Anywhere by air" was the slogan of our publicity.

III

In due course, then, Wythenshawe was granted an 'all-purpose' licence by the Air Ministry, and Manchester became the first municipality in Great Britain to have its own airport.

The actual presentation of the licence was a most dramatic affair, in every way a fitting final to the struggle that had gone before. It happened in this way.

Some one—I suspect it was one of my journalistic friends—suggested that it would be excellent publicity if the Lord Mayor flew to London, was presented with the licence for the airport, and then flew back with it to Man-

chester. Such a trip would attract a great deal of attention in the Press, and so advertise the two facts that Manchester had now a municipal airport and that Northern Air Lines, Ltd., was available to fly people "anywhere by air." The idea was received enthusiastically by almost every one. As one alderman remarked, "If this doesn't make Liverpool feel pretty silly, I don't know what will."

A date was selected on which Sir Samuel Hoare—then Secretary of State for Air—was free to present the licence. Then, in accordance with the best traditions, plans were made, modified, cancelled, remade, and altered. Eventually it was decided that members of the Airport Committee must travel by train, only the Chairman, Deputy

Chairman, and mayoral party going by air.

Even this arrangement caused Holmes and Kingwill some concern. The party from the Town Hall numbered six persons, and it was considered desirable that a representative of Northern Air Lines should accompany them seven persons in all. Our D.H. 9 could carry only two passengers, the rest of our machines only one, so that necessitated a formation of six machines. Personally, I was all for a formation on these lines. I argued that the Councillors could wave to each other while in the air, and that a mass landing at Croydon—assuming that all the machines managed to keep going as far as that-would certainly make an impressive function. However, other, and doubtless wiser, opinions overruled mine, and it was finally arranged to hire another machine, a cabin 'bus' carrying five passengers. Our D.H.9 would transport the remaining two persons.

Everything went well with our plans. The five-seater 'bus' was hired on satisfactory terms, and arrived at

Wythenshawe the night before the great trip. It is true that the refreshments intended to be served *en route*, coffee and sandwiches, also arrived the night before, but minor mistakes of this sort are bound to occur at times. The Press, who from the first mention of the matter had shown the greatest interest in the mayoral trip, became almost hysterical in their reports; and the free advertisement our company received surprised even myself. Nearly every newspaper referred to the two machines as "Giant Moths," and one account, which made well-meaning but somewhat confused reference to "Magic carpets," "Lord Mayors' coaches," "Pumpkins and Cinderellas," touched me deeply.

The morning of the great day arrived. Early as I was in arriving at the aerodrome, a small crowd had already gathered, and, although there were more than two hours to pass before the Lord Mayor was due to start, an air of excitement and expectation pervaded the place. Mechanics hurried hither and thither; petrol-tins clanged as tanks were filled up; only Holmes and Kingwill seemed to lack

the general spirit of delight.

"You'd better come and talk to the pilot from London," Holmes said abruptly; "his engine's giving trouble."

He cut short my questions.

"Yes, the machine we've hired. It was all right last night, although he thought he noticed a knock, flying up here, but this morning . . . Anyway, Ainsworth has taken the plugs out and gone over the tuning. He's trying the valves now."

The pilot, when I reached him, confirmed the bad news. 'Revs.' were down; there was a 'knock.'

"Unless we get it right I'm not starting," he ended.

To say I staggered is a mild description. The crowd was swelling all the time. In two hours the Lord Mayor and party would arrive to commence their much-advertised trip to London and back. At Croydon a luncheon was being prepared. The Secretary of State for Air . . . All the extensive publicity the Press had given to this inauguration of our company's service loomed up before me.

"But don't—you understand?" I stammered. "We've

got to go."

The pilot shook his head.

"If the engine's wrong we can't, can we?" Then, taking pity on my distress, he added, "Why not put it off until to-morrow?"

Without a word I left him and rushed over to Ainsworth, who was prodding the engine with a spanner.

Quite seriously, I think the next two hours were among the most uncomfortable I have ever spent. Time after time, as adjustment after adjustment was made, the engine was 'run up'; time after time the mysterious knock persisted. Only at the very last moment, just as the mayoral cars turned into the aerodrome, did the trouble seem to mend.

"We'll risk it," the pilot stated. "Anyway, we can't do any more here, and, of course, we may get to London."

As I turned to greet the mayoral party Holmes whispered, "Don't say anything. I think you may get through."

Ten minutes later I was sitting in the cabin of the hired machine. Near me sat the Lord Mayor, the Town Clerk, the Chairman of the Airport Committee. The last Press camera clicked, the last words of farewell had been said, the machine began to roll rapidly across the aerodrome. In

front stood a row of trees; swiftly the aeroplane gathered speed . . .

At about five hundred feet the Lord Mayor spoke.

"Very interesting," he shouted. "What's that town over there?"

I was too busy listening to that engine just then to do more than nod in reply. It was not that I feared a crash. The pilot of the hired machine was an extremely capable and experienced aviator, and, knowing that the engine might give trouble, he would be especially alert. I felt sure that if the engine did fail, the machine would be landed safely in some field. But what worried me was the complete disorganization of plans that would result from such a forced landing—the luncheon awaiting us at Croydon, the Secretary of State, the disastrous publicity which would inevitably follow a failure to deliver the Lord Mayor as advertised.

However, the machine continued to roar its way southward; and, keenly as I listened, I could hear nothing unusual in sound at the motor.

Two hundred yards away on the port side the D.H.9 flew along beside us. I could see Kingwill in the pilot's seat quite clearly, and at times even caught a glimpse of the deputy Chairman and Mr Hill, a Corporation official, in the tiny cabin. The weather was nearly perfect: a slight wind behind us, clouds at about three thousand feet, visibility several miles. Only over the larger towns was there any sign of mist, and, except for a few miles near the Potteries, where the smoke clouds hung rather heavily, we had an unobscured view of the countryside. Southward we flew.

Gradually my worry began to fade. Lulled by the steady

roar of the engine, the gentle swaying of the 'plane, fears of a chaotic breakdown in our arrangements died away. After all, we had been flying now for nearly an hour; we were well on our way. Soothed into a sense of security, I began to think about the reception awaiting us at Croydon. Then came that cough—a faint, almost unnoticeable sound, just a tiny, dull break in the regular beat of the rush and roar around us. Was it? Anxiously I waited, listening with every nerve in my body alert to catch the slightest tremor; but only the steady beat of the motor came to me. For a few minutes nothing interrupted, and I began to believe I had been mistaken. After all, my nerves were bad. Perhaps— Then it came again.

Panic-stricken, I sat up, gripping my knees. There had been no mistake that time. Faint and indistinct it might be, but the regular roar had been broken by a different note. All my fears rushed back with double force. We were going to have a forced landing. The mayoral party was going to be deposited in the wilds of the country; the carefully planned arrangements would go to pieces. I could almost hear the gibing laughs that would follow the breakdown of our plans. Startling newspaper headlines flashed before my dismayed eyes:

LORD MAYOR'S FIRST FLIGHT FAILS IN FIELD SECRETARY OF STATE FOR AIR WAITS IN VAIN

Grimly I realized that I must not let my companions discern my anxiety as yet. They appeared to be quite unconscious of the strange sound, to be entirely oblivious of any uncertainty in our programme.

For one long, miserable hour—an hour that seemed like twenty—I sat smiling pleasantly, from time to time even

shouting a few words of explanation about the country we were flying over. Inwardly stiff and tense, convinced that the engine was about to pack up at any moment, I did my

best to appear unconcerned and casual.

Periodically that terrifying 'thud' flickered in the cabin. Each time it did so, wincing and cringing inwardly, I stared straight ahead, fearful of drawing attention to the sound. Sometimes there would be long minutes of peace, five minutes or more when only the steady roar of the engine and the rushing of the wird against the side of the cabin walls were heard. But each time that I began to tell myself that things were now right, to wonder if the sound had not been just a figment of imagination, the thing came again—just a faint bark against the regular note of the noise.

Almost frantic, I saw the high ground at Hemel Hempstead pass below us. We were getting near now. If only the engine would hold out for another ten minutes—well, say, a quarter of an hour. Desperately I began to pray.

The gasometer at Heston showed up. Why didn't the pilot land at Heston, I stormed silently. From there we could get a car to Croydon. Why risk a complete failure in some difficult spot? Surely he had heard? He must know that the engine was coughing?

The silvery, winding Thames came into view, a glittering ribbon twisting ahead. A few minutes later we were over it, and then, almost at once, it lay behind us. Still

the aircraft sped on its way.

Croydon! The signal from the control tower to land. Damn it all! A circuit of the aerodrome at a time like this! Get down—that was the thing to do. Get down while we could do so. Obeying a damned silly regulation while . . .

The engine shut off—the machine took a steeper angle as it glided in—we were skimming the grass—the wheels touched. With only the faintest of bumps the aeroplane settled down its weight, supported once again by mother earth—at Croydon.

That reception is indistinct and blurred in my memory. I remember the Press cameras clicking, I remember the excitement caused by the Lord Mayor's tall hat—the first time anyone had thought to fly in a tall silk hat—I remember vaguely the words of formal welcome. Only as we marched towards the Airport Hotel to make ready for the luncheon—only at that does my memory become clear and vivid again.

As we walked I suddenly stopped dead in my stride. That sound had come again! Bewildered, I paused. The engine had stopped. The machine stood twenty yards or so behind us. Yet that sound—that strange, booming 'cough'—it was absolutely the same.

Delusion? Nerves? Was I going demented?

The Town Clerk was speaking.

"Yes," he said, "the air in that cabin has brought it on perhaps. On the way down I coughed . . . "

The licence for the first municipal airport in Great Britain was duly presented. The Secretary of State made one of those formal and inaccurate speeches which is expected on such occasions. In due course the Lord Mayor returned to Manchester alone in the D.H.9. The rest of the party followed some time later in another machine.

A large crowd assembled at Wythenshawe that evening to witness the Lord Mayor's return—complete with tall silk hat and the coveted airport licence. Unfortunately,

owing to some misunderstanding, the licence had been left behind in London, and the Chief Magistrate found himself descending from his aeroplane with Pressmen and public around him clamouring for a glimpse of the precious document, which he was, of course, unable to produce. With great presence of mind the Lord Mayor remembered an income-tax form which he happened to have in his pocket. Waving the form, he passed hurriedly through the cheering crowds.

An entirely satisfactory ending to a somewhat strenuous day.

CHAPTER XIII

CROSS-COUNTRY

Immediately after the official opening of the aerodrome it was decided to have an air pageant at Wythenshawe. We believed that a properly organized flying display, thoroughly well advertised, would attract some thousands of people to the airport; they would see for themselves that Northern Air Lines was a reality and could transport passengers and luggage "anywhere by air." Also, the admission fees and money for 'joy flights' would make a welcome addition to the resources of the firm.

I do not propose to dwell upon this pageant at Wythen-shawe; we ran so many in days to come, pageants so much more spectacular and exciting, that this first effort is rightly overshadowed by its successors. But the display has certain claims to a brief mention, if only for the fact that it marked the initial performance of two stunts which have been repeated at almost every air pageant held since—two stunts which are 'still running' to-day: "Bombing the Bride" and "the Man who had never flown before."

One of the greatest troubles that face the organizer of a flying display is the invention of stunts, or events in the programme that will attract the public inside the aerodrome. Somewhere about 1911, when the first air meeting was held at Blackpool, the public discovered that whatever strange evolutions an aeroplane performs, these can be seen quite as satisfactorily from the outside of an aerodrome as from the inside. As a result of this discovery

many people consider it superfluous to pay for admission, and at every air pageant long lines of cars may be seen parked along the roadsides round an aerodrome while their occupants enjoy an excellent view of all that goes on.

In consequence Holmes and I devoted much thought to the production of 'ground' events—events which, while aircraft performed and were the main actors in the piece, were definitely linked to something that was happening inside the aerodrome: in short, something that could not be understood properly unless one had paid for admission.

Holmes had arranged for long stretches of canvas to screen some of the view from the roadside, and the police had agreed to keep cars on the move as much as possible, but still we sought for stunts that would demand a closer view to be properly enjoyed.

Of course, we had the usual aerial marksman who shoots at bottles with a revolver from the air. The 'blanks' for his pistol were all ready, and the mechanic who stood behind the screen by the bottles and knocked one over as each shot was fired had been instructed in his duties. There was also to be a final set-piece, an attack on an oil-well, in which two hundred gallons of paraffin were to be set alight. But what were these two ground items in a long programme such as we contemplated?

It was a friend of mine, one Philip Heys—that brave soul who long ago had climbed Helvellyn on foot—who first suggested "Bombing the Bride." We were sitting in a café drinking coffee when he mentioned his idea, and I have always felt a sense of satisfaction in remembering that Heys was the first person to act the part of the

AIR PAGEANT

'Bridegroom.' Hundreds of people must have acted as 'Bridegroom' since then, at thousands of air pageants; it has aroused hearty laughs, but the credit for its invention belongs to Heys. It was he who for the first time jumped screaming from the blazing car while the 'Bride' fell face downward under a shower of flour-bags dropped by a disappointed rival.

Who suggested the second stunt, "the Man who had never flown before," I cannot remember, but the idea occurred to some one, and Kingwill worked it up into an uproariously funny show. Since then it has been copied extensively, and some pilots have become almost famous for this peculiar style of flying—McKie, for example, who taught himself to fly the machine with his knees, while he waved his arms above his head in mock despair. Incidentally, when McKie was eventually killed while performing this stunt it was a jammed control-stick that caused the disaster. He was still conscious when lifted from the wrecked machine, and, although in terrible pain, his only concern seemed to be to let the rescuers know that no "error of judgment" had caused this crash. He kept murmuring, "Look at the stick."

However, that is going ahead of the story. The first time it was performed the stunt undoubtedly caused a sensation. The item was not mentioned in the programme, and appeared to almost every one to be an unrehearsed and unforeseen incident. Towards the end of the pageant the loud-speakers announced that a spectator had expressed his disappointment, had stated that flying was simple, and that, in his opinion, anyone could do all that the pilots had performed that afternoon. The announcer put a considerable amount of irritation into his voice, and it seemed

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almost natural when he continued: "Northern Air Lines have therefore offered this gentleman a machine in which to test his theory that anyone can fly, and he has accepted the offer. We would assure our patrons that there is no danger, as there is very little chance that he will be able to get off the ground. The aircraft lent to him is an old one."

At this moment a perfectly ordinary-looking individual, complete with bowler hat and umbrella, stepped out from the crowd and was led to a waiting aeroplane. Mechanics helped him into the machine, and although he appeared awkward and endeavoured to take his umbrella with him, the part was not overacted. A pilot stood on one wing, explaining something of the controls.

So well did Kingwill act the part that Sir Sefton

Brancker hurried over to me.

"This," he began firmly, "has got to be stopped. That fool will kill himself."

"It's all right," I countered.

"It's not all right. He'll probably charge the crowd. You must have gone stark staring mad!"

So the true situation had to be revealed to Sir Sefton.

I shall never forget that first display: the machine beginning to move slowly across the 'drome, then suddenly rushing wildly forward, turning round, and coming to a stop almost where it had started from; the swerving, zigzag run on its second attempt, the howls of laughter from the crowd, changing into hushed dismay as the engine quickened and the machine bounced into the air; the staggering up-and-down rolling of the aeroplane above the aerodrome; "the Man who had never flown before," his bowler hat still wedged tightly on his head, waving

one arm imploringly and standing up as if intending to jump out. Even the confusion of the mechanics and officials added to the effect, and three or four attempts at landing were something that cannot be described.

My most delightful memory of the affair is of an elderly woman standing in the enclosure near where the aeroplane finally came to rest. As "the Man who had never flown before," apparently in a state of complete collapse, was lifted from the machine, her sympathies for the unhappy creature overcame her, and in a shrill Lancashire voice she cried, "Never mind, lad! You showed 'em!"

Incidentally, the attitude of the average Lancashire man or woman to aviation is something rather difficult to understand—a peculiar blend of phlegm and disregard, a refusal to be disturbed in any way.

There was one old lady who used to visit the aerodrome regularly. She always arrived in a large Daimler car driven by an expensive-looking chauffeur; the car would be stopped by the side of the runway, and there, for hours, the old lady would sit crocheting and nodding happily. On one occasion I ventured to approach her, for the regularity of her visits had intrigued us all.

"Yes," she said, in reply to my delicate inquiry, "I do come here whenever possible. You see, I find it sooth-

ing to watch the aeroplanes rise and fall."

There was one incident at Wythenshawe which I regard as typical of the Lancashire outlook, a perfect illustration of how the average Lancastrian reacts to an unexpected situation. It happened one Sunday afternoon. Two Avros stood out on the field, but, as the weather was overcast and it had been raining a little, we had been doing

very little business. Somewhere about three o'clock four people strolled across the field from the road, two women and two men, middle-aged, obviously married couples. The men were in neat blue suits set off by vivid ties; their black bowler hats were rammed well down upon their heads—typical Lancashire cotton operatives out for the day.

For some time they walked round the aeroplanes, inspecting them in silence; then, after thoroughly weighing the matter up, one of the men came over to where we were

standing.

"Anyone goin' oop, like?" the man demanded.

Lawson, who was the joy-ride pilot that afternoon, explained that we were waiting for passengers to come along.

"Only five shillings a flight," he concluded.

The Lancashire man considered the matter.

"'Ow farr d'yer take us fer that?"

Lawson waved his hand about the sky.

"Oh, all about—round the park and so on."

The man rejoined his party, and then, after a brief discussion, the two men came up to us.

"We're goin' oop."

Lawson donned his helmet and goggles, climbed into the machine, and the engine was started up. The two men—their five shillings collected—were shepherded into the back seats, and crouched, gripping their bowler hats in the draught of the propeller.

"You ought to 'ave more sense," one of the women

called out.

"Ay, yer'll look pretty if yer go an' kill yerself," said the other.

One of the men detached a hand from his bowler hat and waved. The next minute Lawson had opened the throttle, and the aeroplane was bouncing across the field -swifter and swifter, then into the air, nose up to clear the trees at the far end of the aerodrome.

Just over those trees the engine cut out, spluttered, stopped dead. Lawson had no chance of turning back into the aerodrome. If he had tried to do so, by the time the turn had been completed he would have been lower than the tree-tops, with the trees between the machine and the aerodrome. There was nothing to do but keep straight on -straight on into a field of wheat. The wheat was tall; it wrapped round the wheels of the machine, the wheels locked, and with a horrid tearing sound the machine stopped suddenly and turned over.

Lawson and one of the men fell out as the fuselage came upside-down-fell out shaken but unhurt into the wheat. Lawson picked himself up. He believed that the machine was about to catch fire; petrol was pouring out from the smashed tank. Then he saw that the second passenger was still in the machine, his legs showing below, his top part hidden in the upturned fuselage.

Lawson shouted to the other passenger, who was sitting up on the ground, staring at the wreck, "Come on, give me a hand! He's wedged in. The thing may catch fire." Together they sprang to the legs that showed below the wreckage, and began trying to pull the body clear. "You're all right!" Lawson shouted frantically.

"We'll get you out!"

An indignant voice replied from the inside of the wreck.

"You leave me alone, can't yer? I'm lookin' fer me bloody 'at.''

II

In those early days at Wythenshawe I managed to put in a good deal of flying—flying for the pleasure of the thing and thoroughly enjoying myself. That holiday at Grange, for example, is typical of the jolly trips of those amusing times.

Some friends of mine were staying at Grange, which is a small village beside Morecambe Bay, just on the fringe of the Lake District. They were the right sort of friends; the hotel they were staying at was reputed to be an excellent one, and so, having a free week-end, I arranged to join them. On the Friday evening I set off from Wythenshawe in GEBZU, the Northern Air Lines Moth, a machine we were all especially proud of and always kept in the very best condition.

It was a glorious evening, and once we were clear of the smoke belt which hung over the countryside as far north as Bolton conditions were almost ideal. It seemed as if there was hardly a bump in the sky, and the perfectly rigged Moth floated along, answering the lightest touch of the controls. A gentle wind gave a comfortable feeling of assurance that a forced landing would be brought off successfully, but the engine purred so steadily that such trouble seemed impossible. For sheer joy of living I tried to sing, and, instead of keeping on a level course, let the machine climb towards the clouds. It was the sort of evening when flying really did make one feel 'privileged.'

There was little difficulty about landing at Grange. Near the hotel stretched a golf course, and beside this were several flat fields of ample size and surrounded only by low stone walls. The place might have been made for Moths,

and, having glided down, slipped off the surplus height, and skimmed over one of the stone walls with a few feet to spare, I taxied the machine into a corner of the field, folded the wings, and pegged it down. The farmer who owned the ground readily agreed to let the machine remain there until the Monday, and, my friends having arrived to welcome me, the suitcase was removed from the back locker, and we all departed for the hotel.

It was a happy party that week-end, not a single jarring note—until the Sunday afternoon. On that Sunday afternoon I strolled down to the field just to make sure that the Moth was all right for the morrow. A friend of mine, one Jack Porrit, who had accepted an invitation to fly back with me on the Monday morning, strolled with me to inspect the machine.

At the gate of the field we paused, then galloped hastily towards the Moth, uttering wicked words of anger and dismay. Some one had let a herd of cows into the field. Judging from the state of the Moth, one would say the cows must have been there some time. Indeed, it appeared as if they had been there for several weeks.

In silence, our hasty words hushed by the sight before us, Porrit and I stood before the machine.

"It's—well, it's— I'm damned if I know what to say," Porrit managed at last.

It is the habit of cows to rub themselves against any solid object—or object which looks solid to the bovine mind—to lower their heads and then raise these slowly along a post or wall, scratching their horns along such surface. Apparently the reason for this strange action is to remove some tickling sensation from the base of the skull.

The cows had rubbed their horns along the aeroplane, apparently selecting the wings and rudder as the most suitable scratching-post available. The canvas on the machine lay in ribbons—long torn strips hanging down like those paper streamers used for decoration at Christmas.

"It's the devil," said Porrit.

For perhaps half an hour I inspected the damage and pondered over the situation. To send for mechanics from Wythenshawe would be useless. To make a satisfactory repair they would have to strip the canvas from the wings, patch and sew, and finally redope the covers. To do this would mean dismantling the whole machine, and proper doping requires a closed workshop maintained for some hours at a certain temperature. To take the Moth back to Wythenshawe by road would be expensive; the mechanics would have to come over; it would entail dismantling, packing, and so on. A return by road was to be avoided if possible.

After some thought Porrit and I pushed the Moth into the next field, and, having made it clear to the farmer that cows had a detrimental effect upon aircraft, we set off for the village in a car.

It was, as I say, Sunday, but they are broad-minded people in North Lancashire, and we had little trouble in persuading certain shopkeepers to supply our wants; somewhat mystified shopkeepers I fancy they were. A demand for six dozen linen handkerchiefs and a dozen tubes of seccotine cannot be usual, and Porrit's explanation about "mending an aeroplane" did little to enlighten the worthy dealers.

All that afternoon we toiled, tearing up the linen handkerchiefs, smearing the strips with seccotine, drawing the

torn canvas together as well as we could, patching, and joining. At last Porrit stood back and surveyed the finished job.

"It looks like one of those things—what d'you call them?" he said.

"Patchwork quilts?" I suggested.

"Yes, or some sort of camouflage in the War."

We gave the glue an hour to dry; then I decided to test the result in flight.

"I'll keep my eye on the patches," I explained, "and if they stick we'll probably be all right going home tomorrow. I suppose you still want to come?"

Porrit dismissed the question with the scorn it deserved.

"If you go I'm coming," he remarked briefly.

The patches stuck. On that test flight they showed no sign whatever of coming off; and, except for its strange appearance, the Moth seemed as good as ever. Delighted at the successful way in which we had solved the problem, and with a vague idea of inspiring confidence in the somewhat anxious spectators below, I decided to stunt a little. There was plenty of height—fifteen hundred feet or more.

Down went the nose, the throttle wide open, faster and faster. Ninety on the speed-indicator, ninety-five, a hundred—I eased back the stick, and the Moth leaped upward into the beginning of a tight loop. It was just when the machine was upside-down, when the sky lay in the direction of my feet and the earth hung somewhere below my head, that I realized one of the top wings was not fastened.

It is simply amazing how quickly the human mind thinks at times like that. To complete the top curve of

that loop cannot have taken more than one or two seconds, yet while this time was passing I reviewed the whole situation in detail. There was a gap between the centre section and the port wing, a V-shaped gap that very gently opened and closed. The wings had been folded down in the field; when we had opened them for this flight I had forgotten to bolt one of the top planes. Obviously the bottom bolt must be fastened or the wing would have folded back long since. Would the bottom bolt stand the entire strain? All this and a great deal more did I think in those few moments when the Moth was upside-down on the top of that loop. The human mind is a strange and wonderful thing, especially when it is crazy with sheer fright.

I do not believe that any aeroplane has ever been eased out of a loop as carefully as I brought that Moth into its normal attitude, nor any aeroplane handled so gently and gingerly as that one was when I glided it in to land. Pure funk—clear cold fear—gave me a skill that was surely superhuman—a degree of skill that I have never come within a thousand miles of since.

People are inclined to smile at me now for the way in which I inspect the locking devices on a machine with folding wings.

Porrit and I flew home the following morning. All the patches remained in place, and we experienced no trouble of any sort. I dropped Porrit at Hooton, and then went on alone to Wythenshawe. The comments which certain people saw fit to make when the firm's 'star' machine landed at Wythenshawe were both personal and uncalled for. I trust that these impetuous people have since deeply regretted their ill-temper, or, better still, that they have been eaten by bears.

III

There was another flight about this time which caused me considerable anxiety—a flight which, while it lasted, worried me into a resigned acceptance of inevitable disaster—a flight which, when by some astounding luck disaster was averted, left me bewildered and speechless.

A large and very important firm of American motor-car manufacturers decided to build aeroplanes. They did the job properly, and after much experiment produced an impressive and costly machine—a three-engined all-metal 'bus' carrying two pilots, twelve passengers, and much luggage. In due course one of these elaborate air-liners was shipped to Europe for the purpose of demonstrating its excellence to various air-transport companies in the Old World. Naturally, the shipping of this gigantic machine was both difficult and expensive.

The machine arrived at the London docks, and from there the conveyance of it to its destination proved even more formidable than had been the journey by sea. However, with the assistance of the police, special arrangements were made as to route and the diversion of other traffic, so that the huge wings and fuselage finally arrived at Croydon Aerodrome, where an enormous hangar had been reserved for the machine's erection. A staff of highly trained mechanics had been sent over from the U.S.A., and they, within a very short time, assembled the various units into a complete three-engined air-liner.

With Croydon as a base, it was intended that this aeroplane should fly to various European countries and give exhibitions of its excellence at certain airports. For

some reason that still remains obscure to me, the company decided to open their tour with a visit to Manchester. Northern Air Lines were informed that the visit would take place on a certain date, and that the Corporation proposed to give the liner an official reception when it landed at Wythenshawe.

We were not consulted in the matter, and whatever doubts may have arisen in our minds as to the suitability of Wythenshawe for the use of such a large machine seemed best unspoken. "Ours not to reason why . . ." So, merely giving the first-aid set an extra look-over, we waited placidly for the great day.

The liner was advertised to arrive on a Friday, and on the Thursday afternoon I received an urgent request by telephone from the firm of motor-car manufacturers who owned the machine to come at once to London. They were rather mysterious as to their reason for making this pressing request, but their manager—an acquaintance of mine—put it in such a way that it was impossible for me to refuse. I caught an evening train to town.

We met about half-past eleven on the Thursday evening at my club in Clifford Street, the manager and I and a silent individual introduced to me as "Our pilot."

"Well, to-morrow we're coming up to Manchester," said the manager boisterously.

The pilot scowled at him.

"Say, what I want to know is this," he interrupted: "what sort of a joint is this Wythenshawe?"

"As you know," the manager continued, "the Lord Mayor and other important people will be waiting to see the machine arrive, and naturally our pilot wishes to assure himself——"

"It's called an airport, but the British map I've got shows a plot of ground no bigger than a fowl-run."
"Well, it's all settled now," said the manager. "I've

told you the programme is all arranged."

For ten minutes or so I explained Wythenshawe to the pilot—explained the length of each runway, the surface, various obstacles. Several times he shot questions at meclear, pertinent questions that showed this American knew all that was necessary about flying and the safety of his aircraft.

At last he folded the map with the numerous pencilled notes and warnings scrawled across it, and put it away in his pocket.

'I can just do it," he stated. "If those trees aren't higher than you say, I'll get her in all right. You can

show me the soft spots, I guess."

The manager coughed warningly.

"You see, Mr Leeming," he began, "we wanted you to come to London so that we might invite you to join us in our journey north. If you will accept our invitation-

The pilot cut him short.

- "Let me give it straight. Can you take us up to this Manchester?"
- "I? I-why, I've never flown a three-engined machine."
- "I don't need you to fly the 'plane. What I want to know is, can you find the way—navigate us to this joint? I've not flown around Britain yet, and I guess it would be best to have some one beside me first time who knows the route."

With perfect sincerity I assured him that I could guide

the aeroplane to Manchester without difficulty. It seemed to be a reasonable promise to make. After all, I had flown between London and Manchester a good many times; I knew the landmarks well.

An understanding was come to. The American would fly his 'plane, but not trouble himself in any way with maps and suchlike; I would be responsible for directing the course to Wythenshawe. It was arranged that the manager should pick me up the next morning in his car and run me out to Croydon.

"There's quite a large party going north in the liner," he said cheerfully.

"Full load," added the pilot.

With the pleasantest of feelings we said 'good night' and parted.

It was one of those grey, stagnant days on the morrow, and from the hangar at Croydon the boundaries of the aerodrome showed up faintly through a curtain of mist—not a mist to worry one seriously perhaps, but, all the same, hardly a day on which one would describe the visibility as 'good.' The Meteorological Office reported a westerly wind at two thousand feet, and prophesied that conditions would improve later.

Shortly before the time arranged for departure the passengers arrived, and were escorted with due deference into the cabin. The engines had already been warmed up and tested, and a few minutes after the pilot and I had installed ourselves in the front seat the huge machine skimmed across the aerodrome and climbed into the atmosphere. After a circuit of the airport the pilot turned on to the course I had given him, and at a height of about twelve hundred feet we flew northward.

There seemed very little to worry about. True, the mist was rather unpleasant, and at times passed beneath us in belts so thick that the ground was momentarily obscured, but conditions were not bad enough to cause any serious concern. I had marked out a compass course by the simple process of drawing a line on my map from Croydon to Manchester, noting the compass angle of this, and making an allowance for estimated drift caused by the side-wind. There were many familiar landmarks which enabled me to check the amount of drift once we were in the air, and by the time we had crossed the Thames I had told the pilot the exact—calculated—course we must steer.

Towards Hemel Hempstead the mist became thicker. The pilot made no effort to come lower so that I might continue checking the position, but kept steadily onward. Expecting the mist to clear and hoping for the best, I made no suggestion that we should fly lower. For nearly half an hour the air-liner roared north, by which time the fog had become really bad and the ground had disappeared completely. The last thing I managed to see was the wireless mast at Rugby; after that only grey, smoking mist boiling and driving past us. Then it started to rain.

Still I made no suggestion about turning back. The course had been approximately right on the first few miles from Croydon, and, unless the strength of the wind had changed, we were probably still heading in the right direction. In another thirty minutes—if my calculation of the machine's speed was correct—we should be past the Potteries, and by then the weather might be better. We could come lower, and ascertain the exact position from landmarks I knew well.

"Say," the pilot shouted, "sure you know where we are?"

I nodded.

Ten minutes later he spoke again.

"This is fierce. If you weren't so sure, I'd turn back now while we can. If we go on any farther there won't be

enough gas to get us back to Croydon."

I glanced at the compass. For fifty-five minutes now we had been flying on the course I had set. The speedindicator showed a hundred and twenty. I checked my calculations again, and decided that it was time I had another look at the earth.

"Just ease her down a bit until I can see the ground," I shouted. "I want to check where we are."

With masterly skill, still roaring onward, the machine was brought lower. Down, down, but nothing showed below us except the impenetrable mist and rain. I pushed my window open and hung out, trying to catch a glimpse of the earth. The height-indicator showed less than two hundred feet.

All at once I felt the 'plane pulled sharply upward, and, as a startled exclamation came from the pilot, saw a stretch of heather not far from our wheels. Visibility, I decided, was definitely bad near the ground, and the pilot evidently thought so too, for he kept the machine climbing upward until the 'clock' showed seven hundred feet.

"Close call, that!" he yelled. "Did you see what you wanted? "

I did not reply. Heather—a hillside—I tried to think of any moorland in the Potteries. If my calculations were right we must be over North Staffordshire. Yet . . .

The door of the cabin opened behind us.

"Is everything all right?" asked the manager. "Surely we ought to be quite near Manchester now?"

I howled back an assurance to him, and the pilot scowled so resentfully that the manager shut the door hastily and disappeared into the cabin. Time went by, and then the pilot spoke. "Say, I don't like this. No one could find his way in this stuff."

I shouted back to him to let me have another glimpse of the ground. Ever so cautiously he edged downward through the fog. Before he pulled the machine upward

again I had seen two fields and a cottage.

It was at that moment, I think, that the conviction came to me that we were well and truly lost. The brief sights I could snatch of the countryside were unfamiliar, and meant nothing to me. There was not enough sighted of any one point to help us to trace our position from the map. Beyond the fact that we had been flying on a straight course from Croydon for one hour and twenty minutes I knew nothing.

To turn back to Croydon was out of the question; before we could reach there again the petrol would be exhausted. And completely lost as I felt us to be, with no idea whatever as to our position, it was impossible for me to guide the aeroplane to any other airport. Now, an airliner cannot be dropped down in a field—at least not in the kind of field we could hope to find in weather such as hung below us. On a clear day it might have been possible to discover a suitable emergency landing-ground. Or even in weather like this, if one had known exactly where the field was and had an intimate knowledge of the obstacles surrounding it, one might have guided the machine in safely, but with this fog, and . . .

A vivid realization of the ultimate result came clearly before my mind. For a little time longer we should fly onward; finally I should be forced to confess that I had not the slightest idea where we were. Then would come a period of frantic hunting for a possible field. Even if by some miracle we missed hitting a chimney or a church spire in our search, it seemed reasonable to suppose that the petrol would be exhausted before the field was found. There would be a pause while we glided helplessly down . . .

Behind me in the cabin sat the directors and officials of this great motor company, unconscious that their costly air-liner, which had been brought from America with so much difficulty, was shortly to become a heap of tangled metal. Fifteen thousand pounds that 'plane had cost. And, of course, it was extremely probable that some one would get hurt—almost a certainty, in fact.

"Say, I've had enough of this!" the pilot broke out.

"We're lost. Yes, sir—lost good and well."

With a vague idea of putting off the evil moment of admission as long as possible, I shook my head. At that instant the cabin door opened again.

"We are late for the reception," the manager stated. "The Lord Mayor will be waiting, and——"Something in the pilot's expression must have disturbed him, for he added quickly, "Is everything all right?"

"Just let me have another look at the ground," I said, not because I had any hope, but simply because I could

think of nothing else to say at the moment.

"You're lost!" yelled the pilot. "If we'd been on the right course we'd have seen this Manchester long since. We're in a fix—a red-hot fix. No one could get his

CROSS-COUNTRY

position in this. 'Nother half-hour and we'll likely be playing harps and learning to do stalled turns with our new wings.'

As he spoke he edged the machine towards the ground, and before he 'zoomed' up again I had seen a large grey building below us. It was only the briefest of glimpses, but it was enough for me. I knew that building all right. I could have shouted aloud—Macclesfield Infirmary! Macclesfield, a town near Woodford Aerodrome, in a belt of country where I had flown so much, where I knew almost every tree and shrubbery.

By the most astounding luck we were on our proper course, within ten miles of Wythenshawe, and by even more amazing luck I had been allowed a glimpse of a building so unusual yet so familiar. The wind must have been stronger and more in our teeth than had been calculated.

"No one could find his way in this!" wailed the pilot. "No one! We're lost—lost good and well!"

With studied calm I turned and spoke to him.

"If you'll stop getting the wind up," I said icily, "and do what I tell you, we'll be at Wythenshawe inside ten minutes."

Obviously distrustful, and making it clear that he regarded the assurance as idle boasting, he did, however, as I told him. Nearer the ground we came. Hanging far out of my window, I called instructions.

"Starboard a little—keep her at that—up a bit, there's a bleachworks somewhere here—not too much—port a little."

And so we progressed, skimming the tree-tops I knew so well.

A few minutes later I pointed downward. There, below us in the mist, lay the level turf of an aerodrome, a white marking circle, a small crowd of waiting spectators, the mayoral cars. To use a hackneyed expression in its literal sense, that pilot could not believe his eyes. He gave one long stare of pure astonishment. Then I realized that for ever in his mind British navigation had entered a class of its own. It was something apart.



THE TRIPLE-ENGINED MONOPLANE AT WYTHENSHAWE

CHAPTER XIV

JOY-RIDE

One thing that has always puzzled me is why aviation attracts such extraordinary cranks. It is no use being polite and pretending that flying people appear perfectly ordinary; they do not, and no fair-minded person would claim otherwise. Consider those present at any aviation function such as a week-end flying meeting, and you are forced to admit that many of the personalities are—to put it mildly—unusual. In fact, plain-speaking citizens, after experience of such assemblies, have even gone as far as to suggest that H.M. Lunacy Commissioners would find these gatherings a happy hunting-ground.

However, quite apart from any peculiarity on the part of the regular flying crowd, there seems to be a continuous stream of strange people at every aerodrome. In time one becomes used to walking into a hangar and meeting a gentleman who is under the impression that he is, say, Henry VIII, but in early days such incidents cause one some concern. There was an outstanding example of the thing I mean shortly after we started at Wythenshawe.

The Corporation received a letter, a well-typed, well-phrased letter, asking for permission to demonstrate a new type of aircraft at the airport. The letter explained that the writer and his assistant would bring the machine to the aerodrome one afternoon, assemble it, and demonstrate it in flight before any responsible persons who cared to be present. The aircraft was of entirely novel type, capable

of rising and descending almost vertically. After some consideration an appointment was made with the inventor.

On the selected date a prominent city alderman and certain officials from the Town Hall arrived to represent the civic interest, while Holmes and myself prepared to act as technical advisers on the matter. Some concern was caused by the late arrival of the inventor, but just as the alderman had become tired of waiting, and had decided to depart, a large car drew up outside the airport office. After brief apologies for unpunctuality the inventor and his assistant began to unload large packing-cases and to carry these into the office.

"Not in here!" I protested. "You can't fly in here! You'll have to go out on the aerodrome."

The man brushed my remarks aside.

"It does not make any difference to me," he said, with crushing dignity.

"But there's only a small room, and . . . "

Packing-cases continued to be carried into the office, and while the assistant began to unpack strange rods and levers of aluminium the civic party moved their chairs farther back to allow room for the growing pile of machinery.

Now, the appointment made for this demonstration had become known round the airport, and had aroused considerable interest among our small staff. The arrival of the car had been observed, and on one pretext or another pilots and mechanics wandered over to see what was going on. Having come, they lingered, and in ten minutes, what with the complicated mass of machinery and the host of spectators, as some one said, "one could hardly move hand, foot, or ear."

JOY-RIDE

Meanwhile the inventor hopped about, adjusting, explaining, until a state of complete confusion existed. At last he paused in front of Holmes, and said dramatically, "Death to gravity!"

"I beg your pardon?" said the bewildered Holmes. "Gravity quails before its coming doom."

Holmes flung an appealing look in my direction.

"Pardon me," cried the inventor, seizing hold of a chair from which the alderman had risen with surprising agility, "I will now proceed to defy gravity."

He whisked the chair forward and, springing upon it,

waved his arms rapidly.

"What is gravity?" he shouted. "Gravity is a force that causes bodies to return to earth—so."

The office shook with the violence of his jump.

"Gravity," he continued, leaping nimbly back on to the chair, "once a force, now of no importance, controlled, mastered by man-so."

The civic party, a pilot, and two mechanics began to

edge towards the door.

"Gravity, the chain that bound man so long, is no more! It writhes, it struggles, but I crush it—so.'

"He'll break his blinking neck if he does that again,"

murmured a mechanic.

- "Long live the air! Death to gravity! Unbounded, unlimited-
- "Manchester," began the alderman, now standing in the doorway, "Manchester has ever been ready to encourage new ideas. When the Ship Canal was first mooted it was greeted with ridicule, yet the City Council with foresight . . . " He paused, as the inventor plucked two of the aluminium rods from the machinery on the floor.

Two minutes later the civic party entered their car, a very proper dignity being perhaps somewhat spoiled by a natural haste to be gone.

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Before the new firm had been established long at Wythenshawe it became apparent that things were not going well. The whole trouble might be summed up in two words: no work.

In view of the extensive publicity the Press had given to the mayoral flight to London and our air pageant, it seemed incredible that people should be unaware of the air facilities available. Yet days and days went by when a machine never left the aerodrome—at least, a machine carrying a paying load. It seemed as if the millions of people in Manchester and district were oblivious of our existence. Of course, a certain amount of advertising was done. But you get surprisingly little space in the advertisement columns of a newspaper, or few posters on hoardings, for a hundred pounds, and, as our cash position became more difficult, less and less advertising space could be bought. Circular letters seemed to produce no result whatever, and appeals to the 'personalities' who had promised support brought only vague assurances of interest and intention to use our taxies "at the first opportunity."

I feel no resentment towards those who led us to think they would travel by air, and then did nothing of the kind. Between the dates on which I had been assured of their support and the date on which we opened at Wythenshawe certain changes had taken place. Trade was not good when I approached them, but by the following

summer a slump had occurred. A firm which in a normal year would willingly have spent a few hundreds helping air transport to become established in the city found itself forced to economize and curtail. I believe that the promises I received were honest ones, and that their givers had every intention of carrying them out, but that circumstances made it impossible for them to do so.

Northern Air Lines, Ltd., started just five years too soon.

There was one group in the city which did support us, however—the Press. Whenever a calamity occurred in any part of the country some enterprising newspaper wanted a photographer rushed to the scene as soon as possible. Or at big sporting events, such as the Grand National or the T.T. races, there were always journals which needed photographs of the start hurried to Manchester by air. But we could not continue to exist upon Press support alone. True, the newspapers paid generously, but the occasional calamity and the periodical 'big event' were not sufficient to keep us going.

Expenses were increased by the almost total lack of storage accommodation for machines at Wythenshawe. The only form of hangar was the large barn—open on two sides—and in such a place rapid deterioration of material was inevitable. Engine repairs had to be carried out in a pigsty. This is no figure of speech; a disused pigsty was the only place available, and so, it having been cleaned out and a rough bench erected in one corner, engines were overhauled in this shed where a full-grown man could not stand upright.

In neither barn nor pigsty was there any heat. And throughout the cold wet summer and autumn of that year,

right up to the following January, in fact, the machines were stored and repairs carried out almost in the open. The natural result of these conditions was that when, eventually, we were able to move over to Barton, with its enormous hangar and spacious workshops, the machines were in very bad condition. They had suffered, and many hundreds of pounds had to be spent to put them right.

Another result of this lack of workshop accommodation was the loss of the outside repair connexion which Holmes had previously built up at Shrewsbury. It was, of course, impossible for us to rebuild crashed machines at Wythenshawe for the insurance group, and very difficult to carry out overhauls. In consequence this work passed to other firms, and much of it was lost to us for good.

Our income from joy-riding also fell alarmingly, owing to the same cause. A joy-ride machine—at least, one that does sufficient flying to make a profit—is a very hardworked aeroplane. The frequent take-offs, with the engine full out to lift the machine off the ground, mean exceptional wear and strain to the power-unit. The repeated landings stress the aeroplane abnormally. To keep such a machine in good flying condition requires an adequate workshop. Maintenance is inevitably heavy.

In short, for the first year of the firm's existence, our income from outside repair work was *nil*, and that from joy-riding was severely restricted. Almost the only money that came in was from the occasional trips for the newspapers; of ordinary air-taxi work there was hardly any. Our liquid capital dwindled alarmingly.

The Corporation were aware of our position, but could do little to help at that stage. They hurried on the completion of Barton as rapidly as possible, gave all the assistance in their power, and were sympathetic about our troubles. But from the damage done in those first few months the firm never properly recovered.

We entered Barton, the new airport of Manchester, in the January. A review of our position at that time would have revealed:

A contract with the Corporation to act as managers of the new airport—a contract which assured us of a small regular monthly cheque.

An exceptionally capable—but costly—staff of pilots and mechanics; most of the machines and engines in need of extensive overhaul.

A considerable amount owing to the Corporation in respect of rent for use of Wythenshawe, and certain other sums owing to various good-natured people for petrol, materials, and tools.

The whole situation came down to this. If we could last out until the spring weather arrived and allowed some machines to be sent out joy-riding all would be well. Holmes, who knew nearly everything there was to know about joy-riding, had managed to book up some fields near certain towns, and was convinced that such flying would bring in money to Barton. We had the pilots and mechanics; the machines were being gradually prepared. If we could hold out until it were possible to use them . . .

About the beginning of March it became apparent that we could not. A simple calculation showed that the earliest we could expect relief from the joy-ride expedition would be mid-April, and it was obvious that before that date all the firm's cash would have come to an end. Holmes and I had already poured in all the capital we had

available at the time, and, helpful as the suppliers of material were, tolerant as our bankers had been, we were coming rapidly to a finish.

There was no possibility of getting the joy-ride machines away earlier than Easter. The weather was the controlling factor here, for the public would not pay five shillings a trip in cold wet winter, and to hurry machines out prematurely might result in an immediate loss which would put us promptly out of business.

It was at this stage that a friend of mine, a very well-known builder of flying-boats, came to our rescue. He was perfectly conversant with all the facts; he had no illusions as to our state or our immediate prospects. Learning just how we stood, knowing that if some new capital were not found immediately the firm would end, he put further funds at our disposal.

I think it is my greatest regret in connexion with Northern Air Lines that this sportsman did in due course lose his money. Never by look or word did he ever suggest disappointment. His only comment when the final crash came was, "It doesn't matter. I only did it because I I wanted them to have a chance."

Need I add that this gentleman was one of the pioneers of aviation, one of the old guard who struggled in early days under railway arches with flimsy contraptions of bamboo and wire?

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That money, coming at a time so critical, caused great jubilation among the staff. Encouraged, we faced the approaching season with confidence.

Many of the larger creditors received substantial

amounts on account, and all the smaller bills were paid off. We were able to continue paying wages and to obtain certain essential material whose makers had demanded "cash before delivery." Compared with the miserable anxiety of the past few months, the situation seemed safe and comfortable.

The weeks slipped by, rapidly now instead of dragging past hour by hour, and in due course four joy-riding Avro 504K's departed from Barton. Holmes, who went with them, had carefully planned every detail of their operations. He took with him four pilots, three mechanics, and two labourers, all first-class men experienced in the peculiar difficulties of joy-riding. He had booked fields along a definite route, and intended to 'work' two towns—towns not too far apart—simultaneously.

Though arrangements such as these seem simple to make, they are in reality intricate and difficult. Towns must be selected that have not been 'overflown'—that is, already visited frequently and recently by other joy-ride concerns. Fields must be found that are easy of access, that are not too far out, and have a bus or other service passing near them. The fields must be large and flat, so that a safe landing and take-off may be made whatever direction the wind may blow from, and there must be no obstructions round the fields such as high trees or houses. Having discovered such a ground, one must persuade the farmer to allow its use as a temporary aerodrome, and to postpone any ploughing or sowing of crop, which would render it useless for aircraft. Finally there is an Air Ministry licence to be obtained—certifying that the field is safe and conforming to certain stringent requirements.

When all this has been done it frequently happens that

on the day flying is to start some ground landlord objects, and orders the farmer to cancel the agreement. Time after time, after much work and money had been expended finding, hiring, and licensing the only possible field in a district, when fifty pounds or more had been spent in advertising, when machines and staff had arrived, some autocratic inhabitant of 'the Hall' stepped in and forbade the whole arrangement.

Then there are a hundred details to watch—little points all very liable to go wrong, but any one sufficient to stop flying for the time being: petrol and oil supplies at each field at the correct date and time; a supply of spare parts—the minor parts that give trouble so frequently on hardworked joy-ride machines—the erection of canvas screens along the hedge-sides to hamper the view of sightseers who consider it unnecessary to pay for admission; the printer who has made a mistake with the posters and printed the wrong date or place; or the billposter who has forgotten to put the advertising matter up: all these and a hundred others are things that arise and add to the general worry of flying at five shillings a trip.

Holmes and his fleet departed just before Easter, leaving Kingwill and myself to carry on at Barton, our job being to keep the workshops going with the mechanics he had left behind, to try to regain some of the lost connexion in outside repair and overhaul work, to organize a school of flying and teach pupils to fly, to carry out any newspaper

or air-taxi work that might arise.

In passing I may mention that while this was going on I was endeavouring to attend to various other commercial interests, and that in the slump period commercial interests demanded quite a lot of time and attention.

Those were worrying and, I may truthfully say, ex-

hausting days.

Now, as I have pointed out already, to keep a joy-ride fleet in action it is necessary to maintain an efficient workshop somewhere behind the lines. The machines, stored in the open, exposed to rain and weather, are flying almost continuously; not just straight flying at normal 'revs.,' but up and down the whole day-engine full out, switch off, landing. In consequence the aircraft suffer badly. Parts that the designer believed to be extraordinarily adequate smash and bend under these abnormal conditions. slightest weakness of material shows itself—and then a machine is out of action. With advertising, field rent, travelling expenses, and wages what they are, a firm cannot afford to have 'planes unserviceable. When the public wish to fly there must be a machine available to carry them, and so an efficient workshop behind the fleet is a vital necessity.

With four machines away it was considered necessary to have two spare engines and two complete machines always ready at Barton to replace breakdowns or smashes at the joy-ride centres. This was our plan, but in reality only very rarely did we manage to maintain this reserve. It seemed that as soon as one engine was completed, tested, and marked "O.K." a telegram came, "Dispatch new engine to-day. Urgent," while no sooner was a 504K built up and passed as airworthy than word came that it must leave for a joy-ride centre at once.

In addition to this work of keeping the outside machines in service the meagre staff at Barton had to maintain the aircraft left at home for school and taxi work.

Throughout the summer the weather was anything but good, and this seriously affected the joy-ride takings. There were several weeks when it rained so much that the outside machines did little flying, and had difficulty in covering their own expenses—weeks when they were able to send nothing back to Barton to help to pay rent and costs at headquarters. The newspapers continued to find us work when anything special occurred; and Kingwill, who had acquired a camera of impressive proportions, took a considerable number of aerial views which the firm sold profitably. The school of flying also began to grow and to bring in some cash; but of taxi work—the work we had believed would be the mainstay of the firm—there was little.

In the middle of October, when Holmes and his fleet returned, we made a careful review of the whole position. We did not owe a great deal, and we had a credit balance at the bank. But the winter was upon us, and until the following Easter little income might be expected. The short winter days would limit the opportunities for newspaper flights, and would reduce the school flying. Repair and overhaul work for the insurance group and private owners was still intermittent and on a small scale. Joyriding away from the home aerodrome had ceased. It seemed certain that for the six months of winter our income from all sources would be small.

It was necessary to maintain a comparatively large staff at Barton. As managers of the airport we had to give a service to the Corporation. This meant that skilled pilots and ground engineers must always be available, and apart from a natural reluctance to dismiss men at a time when employment in aviation elsewhere would be difficult to

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obtain—men who had worked hard for us throughout the summer—there was a very sound business reason for keeping them on. The machines that had come in from joyriding were in a bad way; they all needed completely overhauling, or, rather, rebuilding, and fresh engines would have to be built up for each of them.

Yet it was obvious that if we kept the staff and purchased material for the necessary work we should be hopelessly in debt by the middle of January. If we reduced the staff the outside repair work would suffer, the fleet at Barton could hardly be maintained, and there would be no joy-ride machines ready the next spring. To reduce the staff meant that we simply perished, passing out for lack of flying aircraft.

Now, a review of our sources of income showed one thing very clearly—that we were almost entirely dependent upon the joy-riding. Outside repair work, newspaper flights, and school flying hardly covered rent and overheads; it was obvious that the Barton side of the firm could not support itself. Barton might be built up in time, but for the present—the pressing, vital present—Barton was a dead loss, and if this loss were to be met, it must be from an outside source such as pleasure flights at distant towns.

Holmes pointed out that, although the weather had been unkind, he had been able to send back a total of several hundred pounds to headquarters. He argued that, as the previous summer had been wet and cold, the next one would be fine and warm; and I, always a great believer in the law of averages, agreed that the chances for a successful season the following year seemed good. We reasoned that joy-riding had proved profitable—there was Holmes's record, in years gone by, with the Berkshire

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Aviation Tours to confirm the contention—and that in concentrating upon this activity we were taking the only possible course for survival.

A great cry of "All for joy-riding" left our lips. It was decided to keep on all the staff, and to build up the largest fleet for pleasure flights that we could. If possible we would send out two fleets each of five machines, run air pageants two days in each town—operate this one profitable line to its full extent, Holmes controlling one fleet, Kingwill the other.

Both Holmes and I found more money for the venture, and with renewed hope for the future in our hearts set out to find some one willing to invest capital in the project.

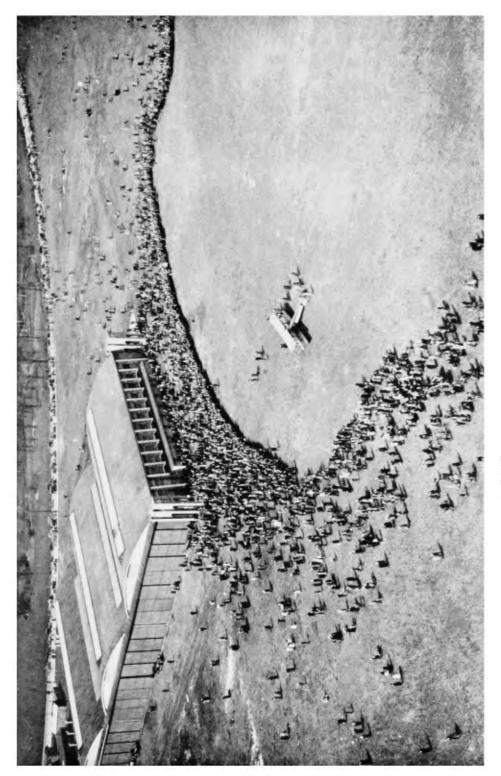
The search for fresh capital proved more difficult than we at first expected. The trade slump was in full swing, just approaching its peak, and most people were far too busy watching profits dwindle and investments crash to be eager to put money into a new proposal such as ours. By December the position was becoming serious. Under the pressure of the intensive building programme our bank balance had faded rapidly, and the new money Holmes and I had found disappeared as if it had never been.

There is no need to prolong the agony. Just at the critical moment, when it seemed doubtful if we could pay the next week's wages and overwhelming failure appeared to be certain, I met a friend of mine, a typical Lancashire man who had extensive interests in the cotton trade. The cotton trade was in a bad way, of course, but . . .

"Did you mean it when you once said to me you might put some money into aviation?" I asked.

"I always mean what I say," he replied briefly.

Quite plainly I told him of our position, our plans, the



A PAGEANT AS THE PILOT SEES IT

JOY-RIDE

half-built fleet, the coup we hoped to bring off the following summer.

Suddenly he interrupted me.

"I can't let you have it this afternoon!" he almost shouted. "These things take time. To-morrow morning at ten o'clock if you bring the share certificates along you can have a cheque. Twelve hundred and fifty. I expect I'll lose the lot, but I've told you till I'm tired . . ."

CHAPTER XV

CORK

Joy-RIDING, those pleasure flights at five shillings a trip, seems to be one of the most puzzling survivals in aviation. According to all natural reasoning, years ago the public should have tired of the thing. The appeal made by a brief joy-ride in the first year or two after the War, when flying was still something of a novelty and many thousands of people in Great Britain had never flown, is understandable. Some wandering pilot with a reconditioned War-time Avro visited a town, and people paid their money to be able to say afterwards that they had 'been up.' There was still a prestige attached to flying in those days.

But that the thing should have continued seems amazing. To-day almost every village has been visited; even the smallest hamlets have been 'flown,' not once but four or five times; yet joy-riding still goes on, the public still pay their money for a brief trip—and usually how brief it is!—a trip behind a deafening engine in a howling wind. True, the solitary pilot, wandering gipsy-fashion about the country, has given place to organized tours, five or six machines together styling themselves an 'air display,' but in reality little change has taken place. The solitary pilot stunted to attract his crowd; the air display—with perhaps a formation flight thrown in—does the same. It is still the joy-riding that pays for the petrol and oil, and brings in the field rent and wages.

That this strange continuance of interest has had an important effect upon aviation is, I think, undeniable. In the years following the War, when the R.A.F. was being 'axed,' reduced, and generally made to feel that it had no possible use in the world, when aircraft factories were trying to make furniture, motor-car bodies, or children's toys, when our one air line was struggling to convince the politicians that it really might serve a useful purpose, then joyriding was the refuge of those who knew no job but flying. The pilots, the mechanics, the odd men who understood little of business ways, but who knew just how to patch up an overworked aeroplane and keep it in the air—these found 'pleasure flying' their only refuge. It kept the little crowd of hard-pressed airmen together through long, weary years.

They were a strange crowd, these men who toured the country, flying obsolete aircraft from tiny fields—whimsical, inconsistent, almost childish in their angers and their

play, yet nearly all of them lovable and sincere.

The life they led was hard beyond belief. Almost always short of money, ever shadowed by a host of pressing bills, they struggled to accumulate sufficient cash to get them 'through the winter.' Working long hours to keep their crazy aircraft serviceable, working in the open fields without proper tools or protection; sleeping in leaky tents beside the 'planes, ready to plod out into the darkness when in the night an unexpected gale sprang up; often too tired to trouble to cook their scanty meals; continually facing disappointment, breakdowns, bad fields, impossible weather—that was the life of the men who wandered about the country calling, "Anyone else want to go up?"—the scattered band who for fifteen long years kept

aviation before the public, who took hundreds of thousands of Britons into the air for the first time.

The value of their work was never appreciated by the politicians. Even the Air Ministry were not helpful, and at times actually hampered them with insistence upon restrictive and unnecessary regulations. Only the public, that peculiar person 'the man in the street,' seemed to have affection for these gipsy pilots.

II

When Holmes and Kingwill left Barton with their fleet of Avros they always made it clear that, besides controlling the workshops that were to keep this fleet in action, I was expected to visit the joy-ride shows whenever possible. Of course, their reason for this request was that they knew such visits would be made by air. I should arrive at their field by Moth, and one more machine helped a show out considerably; it added not only strength but variety to an air pageant. Also, as I had never outgrown a childish love of stunting, and was always willing to perform loops and spins, my presence released a machine for the more important work of joy-riding.

For the most part the trips were uneventful: just a journey to a certain town, a search for the field from which the Avros were operating, a few flights, and then back to Barton again; but a tendency on the part of Holmes to be somewhat optimistic did at times add a spice of excitement to the visits.

Holmes always wanted that extra Moth at his shows, and in consequence was always reassuring about the size of the field.

"Bags of room," he would say; "enormous; flat as a plate."

Now, 504K Avros can take off and land in a very limited area. For this reason they are the ideal joy-riding machine. Also, the pilots, using the same machine all day, constantly up and down hour after hour, become very expert indeed. It is possible for them to use fields that make an ordinary pilot such as myself in a Moth grow pale and emit loud cries of dismay.

There was that field at Wrexham, for instance. It is true that Holmes did say diffidently that there was "a bit of a pond," and mention that care might be necessary about some trees. Anyway, after Wrexham I was much harder to convince, and regarded all statements on the suitability of landing-grounds with the deepest suspicion.

Out of the dozens of trips to 'shows' only three or four stand out in my memory. Among them was a trip to Driffield when bad weather forced me down in the grounds of a monastery, and I spent a most amusing and highly entertaining evening with the monks—a party that made me realize how misguided King Henry was in dissolving the monasteries.

On another occasion an engine-failure while I was on a flight to Martlesham necessitated a sudden descent upon the only open space in sight—a trim lawn in front of a house. At the moment the machine landed the owner of the house must have been having his lunch, enjoying a poached egg, and apparently, in the excitement of the moment, he had bobbed his head downward on to the plate, for when he appeared, shouting and protesting at the door of the dwelling, his face was covered with liquid yellow egg.

III

One journey that warrants more detailed description is a visit to Cork. Two of us went on this trip—another pilot, one Bill Leadlie, and myself. We went together in the firm's Moth. It was originally intended to make the journey there and back in one day, but various circumstances and an outburst of Irish hospitality which proved quite overwhelming caused the visit to occupy nearly a whole week.

Perhaps it should be mentioned that the firm had no joy-ride show in Ireland at that time. Our trip to Cork was to find out whether it was desirable to send one there.

Leadlie and I left Barton one morning, flying into a strong wind. It proved to be a very strong head-wind indeed, so that at times the machine seemed to be moving hardly at all. An hour after the start we were poised over the river Dee, having covered a little over twenty miles, and, as we followed the railway line along the Welsh coast, trains appeared to overtake us, whistle derisively, and roar ahead on their way. At one point I am convinced I saw some cyclists, pedalling furiously along a road, sweep past below us. Nearly three hours went by before we came near to Holyhead.

"I'm going to land," yelled Leadlie, who was piloting the 'plane. "Fill up with petrol before we go across."

Below was a river running among flat sandbanks, long stretches of hard, smooth sand, and on to this Leadlie glided the machine. We got out, stretched ourselves, lit cigarettes, and began to walk towards the houses a mile or so away. The river lay between us and the houses, and while from the air this river had seemed but a small stream

that would offer little obstacle to a good jumper, once we were down on its banks it seemed a much wider and more impressive feature. However, apart from the wind it was a glorious day, and, perfectly contented, we walked on, following the stream in the expectation of coming to a narrower part.

From the distant houses tiny figures had appeared, and were running towards us along the opposite bank of the river. From the enthusiastic way in which they waved

their arms our welcome seemed assured.

"We'll get petrol here all right," Leadlie remarked. Seem quite excited. Don't expect they often see an aeroplane."

Five minutes' walking brought us level with the welcoming crowd; the river, still too broad to cross, lay between us, and we signalled to them to follow downstream.

"I wish they'd stop shouting," said Leadlie. "We can't possibly hear what they are saying in this wind. I'm getting tired of waving. Damn it all, if they make a fuss like this over one Moth..."

From where we stood the wind was blowing towards the opposite bank of the river, so that the shouts of the excited Welshmen were blown away like feathers in the gale. Suddenly something in the natives' attitude disturbed me. A doubt about the welcome came into my mind.

"Wait a moment. I'm going to try to hear."

After we had made several vain efforts to catch it their meaning dawned upon us.

"Tide! See now! It is coming in," reached us. "That bank—it is covered quickly by the tide. You will be trapped indeed."

Leadlie and I waited to hear no more. We turned and raced back towards where we had left the aeroplane, a mile or so behind us. Once we were in sight of the machine the situation was obvious. Already the bank, which, when we landed, had been a flat expanse of sand, was surrounded by swiftly moving fingers of sea-water. The aeroplane stood upon an island—an island that was visibly growing smaller.

The last half-mile Leadlie and I, hampered with our heavy flying kit, did at record pace. There was some slopping through an embryo ocean, a hurried fumbling with an engine that remained exasperatingly slow to start, a frantic scramble into the machine, and then, with just enough solid sand to enable us to take off, we hauled the 'plane into the air. The wheels sent sheets of water upward as we skimmed away from that deceptive bank.

We landed again ten minutes later in a field near the golf links at Rhosneigr. A kindly soul went in his car to the nearest garage, and eventually, having filled the tank with petrol, we took off again, and set our course towards the lighthouse at Holyhead.

There is a custom or rite in connexion with this light-house which every aircraft intending to fly across the sea to Ireland must observe. The aircraft is required to circle the lighthouse, and to continue to do so until the keeper of the light comes out and flashes a lamp to indicate that he has observed and noted the registration letters on the machine.

At one time I believed that the object of this ritual was to provide a means of discovering if a machine became overdue. I visualized sturdy Trinity House men timing my departure, and imagined that in the event of some delay in arrival at the opposite coast a great organization of rescue would spring into action. Often in the early days, when skimming that sixty odd miles of desolate ocean, I consoled myself with the thoughts of the mighty wireless calls which would fly out if for any reason my arrival was delayed. I pictured the operators bending anxiously over their powerful transmitters.

"Call all shipping. Aircraft GEBOK, course Holyhead-Kingstown, overdue."

I visualized the great liners quickening their speed,

turning, searching.

Unfortunately for my peace of mind, in a moment of inquisitiveness I made some inquiries, and learned that the chief reason for official insistence on the circling of the lighthouse was to provide a means of warning the customs authorities that an aircraft—and therefore possibly contraband—was proceeding towards Ireland. That a pilot carrying contraband should be expected to be fool enough to go via Holyhead seems amazing. With miles and miles of coastline to choose from, anybody who wished his journey to remain secret would obviously cross anywhere but at the official point. He would slip across somewhere near Rhyl or Rhos, as so many of us did when running Irish Sweepstake tickets was a profitable undertaking. The very fact that a pilot did fly by the official route surely indicated that he was either entirely innocent of evil intent or was a perfect imbecile.

However, as Leadlie and I had—on this occasion—no reason to conceal our destination, we duly circled the lighthouse, and the keeper, finding that his lamp, which was apparently out of order, refused to flash, waved his arms to indicate that we were at liberty to proceed. Ten minutes

later we were well out over the sea, the Welsh coastline a thin blue smudge behind us.

One of the most curious things about over-sea flying is, I think, the way in which the sound of the engine changes when over the water. An engine may run perfectly up to the coast, with a reassuring, steady hum; even for the first few miles of ocean such conditions may continue; but once the coast drops out of sight astern, immediately shipping is absent and nothing but sea stretches below, then, invariably, strange sounds arise from the engine: a faint banging that was not there before, a sharp click as if some rod had fractured, peculiar cracks and tapping. I have noticed it dozens of times. Once land is out of sight, and where the water is void of shipping, when porpoises gambol below, the engine alters its sound.

Even more curious is the way in which the tone becomes normal again as one approaches the opposite coast. A psychologist once tried to explain the phenomenon to me; it is no good trying to reason with such people. Nerves, indeed!

Leadlie and I landed at Baldonel towards the middle of the afternoon, filled up with petrol again, ate some sandwiches, and waited impatiently for the customs authorities to arrive. Apparently the Dublin customs examiners spend their days in some distant and very secret resort; at any rate, no one at Baldonel seemed to know where to find them, and for more than two hours Leadlie and I waited. It may have been that this delay was an example of the Irishman's natural courtesy, arising from a desire to avoid embarrassing us if we carried contraband, to provide every opportunity of allowing disposal of the stuff before the

arrival of those who would have felt compelled to intervene. Whatever the reason, we waited, and when the official did eventually arrive he had forgotten to bring with him certain necessary papers.

"But I'll not be throublin' gintlemen like yerselves with a thrifle of that sort," he assured us pleasantly. "Sure, to-day we all do nothing but fill in forms and answer questions, until a man doesn't know if he's a Christian or a beast of the fields. And you goin' to Cork an' all. Why, I'm a Cork man meself!"

More than two hours' flying was needed to bring us to our destination, and it was late afternoon before we sighted the outskirts of Cork. But if the journey seemed long, any weariness was banished by the sheer beauty of the country.

I have said before that I am not easily impressed by beauty. I realize regretfully that my mind lacks a natural artistic perception, lacks a culture necessary for full appreciation of the beautiful, yet even I could not help realizing the soothing grace of that Irish countryside—the grandeur of the hills, their sweeping curves in line so satisfying; the mottled purple and fawn of the hillsides; the dark green—almost blue—of the vegetation in the valleys; the winding silver waters of the rivers growing into great pools, romantic lakes among the mountains. I have flown over more than twenty countries, but I think one of the most beautiful sights I have ever seen is that stretch of colour from Carlow to Cork. To remember such a picture makes one happy.

There was no aerodrome at Cork in those days, but we had been advised to seek a place named Ballincollig, a few miles out of the town. Here there had once been a military

landing-ground, and if ditches had not been dug and hedges planted the ground might still have been usable. Leadlie found the place without difficulty, and, after a few circuits to enable us to give it a thorough inspection, we glided down and landed safely.

From now on it is possible that my narrative may seem somewhat confused. I make no excuse, and confess that my memory of the next few days is indistinct and hazy. For from the moment we climbed out of the machine at Ballincollig it seemed that we were the guests of the Irish people, and a more hospitable and full-out crowd I have rarely met. Our machine was the first aeroplane to land near Cork since 1923.

"Sure they came here in the bad times, so they did, but divil a one has put its nose in since. It's a backward

sort of place maybe . . . "

I will not attempt to describe the crowd that gathered. Let me say that everybody seemed to regard our arrival as a personal favour, and that, in spite of the interest and enthusiasm, not the slightest damage was done to the 'plane. Neither souvenir-hunters—those curious persons with sharp penknives who remove strips of canvas from the wings—nor souvenir artists—who carve their initials on the struts—appear to inhabit Southern Ireland.

Among the first people to greet us was a party of police, or, as I believe they were styled, the Civic Guard. Apparently an important personage was making an inspection of the Guard when we arrived, and the entire force, inspecting officer, sergeants, and men, left this ceremony in a hurry. Our landing brought it to an abrupt conclusion.

I have no idea who the inspecting officer was; his name

has passed from my memory; but his impressive appearance in a uniform of dark green and much gold braid is clear and vivid to me to this day; while the efficient manner in which he posted guards round the 'plane and gave orders for men to remain on duty during the night earned my deepest respect.

In due course, having pegged the machine down safely and sheeted up the engine, Leadlie and I were escorted to the local inn. We were taken there as the guests of the inspecting officer—two sergeants, several policemen, and about a thousand of the spectators accompanying us.

The innate courtesy of these people amazed me. Of course, I realize that we were probably given exceptional treatment, that, as in some way we seemed to have been adopted as guests of the people, we saw the kindest side of Cork city, but—let me give you an example of what I mean.

The ground where we landed at Ballincollig had, as I have said, once been an aerodrome, and beside this had stood a large and well-laid-out barracks. The British forces had occupied these barracks in 'the bad times.' What exactly happened at Ballincollig I was never able to discover, but it must have been a battle well worth watching. The barracks had been strongly built; the fragments of solid stone walls still standing, walls three feet or more thick, indicated the strength of the place. Obviously it had been built for defence—a fort rather than soldiers' quarters. Yet only great heaps of blackened stones were left when we landed there, wide breaches in the few walls that still remained upright, and chasms in the earth where the shells had exploded.

I was interested, and tried several times to find out the

story of the battle, but in the most pleasant manner possible my hosts turned the inquiries aside. Apparently Ballincollig had been the scene of some really stiff fighting, at the conclusion of which the British forces had retreated, leaving their fort in the hands of the enemy. Now, I was British, but I was also a guest, and to mention such a thing as a British defeat . . .

"Sure, none of us want to remember what's gone and finished with long since. I wouldn't say but that the boys were a little wild at that time, so they were."

My hosts were clearly uncomfortable for my sake, reluctant to allow a memory of past friction to intrude upon our pleasant party. And in consequence I was hurried past the ruined barracks as if they were something obscene.

As I mentioned previously, soon after landing Leadlie and I were taken to the village inn. Everybody who could possibly do so crowded into the bar, and the party rapidly became noisy with expressions of goodwill. It was a strangely democratic party. The inspecting officer and one of the sergeants of police sat side by side; a couple of policemen had managed to wedge themselves in beside the former.

Some one mentioned poteen. The word 'poteen' intrigued me; beyond knowing that it was some form of drink—a drink distilled in defiance of the law—I knew nothing about it, and I said as much.

"Do you hear that now?" said the officer. "Sergeant, the gintleman, when he goes away beyond in his airship, must be taking some poteen with him."

There was a lengthy and technical discussion between the two, the details of which I could not follow. Sullivan produced the best poteen, but then—Sullivan would not be making again until the end of the month. Murphy had some by him, but Murphy was across the lake, and, being of a nervous disposition, was not easy to get in touch with. O'Reilly—but then—O'Reilly made poteen that was not fit for the pigs beyond in the bog to drink.

The officer finally concluded the discussion.

"Sergeant," he ordered, "take the gintleman's name and address, and send him on what he's wanting when Sullivan has it ready. It's a poor thing, so it is, if we can't find a little poteen when a man's come away over the sea in an airship, and him starved to death with being in the clouds so that his feet are fair falling off him."

From time to time the officer kept saying how sorry he was it would be impossible for him to have a trip in our aeroplane. He was leaving Cork early the following morning, and, with the machine now pegged down for the night, there seemed to be no opportunity for a flight. We gathered that he had never yet flown in an aeroplane, and feared the chance might never come his way. As the party continued, his regrets became more emphatic and more frequently expressed.

"It's meself that's always been wishful to dash about the air like a bird. If that airship was to be here now I'm not saying but what I'd leap into it and——"

At last Leadlie spoke.

"It won't be dark for half an hour yet. We can get back to the field in five minutes. Come on; I'll take you up now."

The suggestion was received enthusiastically; indeed, we all hustled out of the inn amid an uproar of approval, and ten minutes later, the machine unpegged, the wings

unfolded, we stood round while Leadlie warmed the engine up. It was then that I realized the officer had changed his mind.

"I'm thinking he looks tired, so he does, and why wouldn't he be, after flying all that way? "

"Step on here," I said, ignoring the suggestion.

"Mind you don't tread on the canvas."

"It's late to be flying about the countryside. Maybe it would be best if we were to try to-morrow after all."

I urged him upward into the passenger seat.

- "Sit here. Don't touch the controls—this stick and that rudder bar-they're coupled up. Let me fasten your belt."
 - "A belt, is it?"
- "Yes, a belt, to hold you in the machine when it's upside-down."

"Glory be to God!"

I jumped down quickly from the fuselage.

"O.K., Leadlie," I called.

The engine roared, and the machine sped swiftly away across the field. Leadlie may have done a lot of flying that day, he may have been tired, but the 'stunt show' he put up was worthy of the highest praise. It was a polished and perfect exhibition of aerobatics. The officer, when he landed, was loud in his comments upon the experience.

"Up five thousand feet one second, and down ten thousand feet the next! Glory be to God, it isn't a church I'll need to be going into for the next year, and it's the Holy Father himself who'd be saying the same thing!

Sure, I've prayed so much in the past hour . . . "

Then we returned to the inn.

As I look back, all our time in Cork seems to have been

spent in a series of parties—merry parties, at which the strangest things were suggested and done. For instance, at one gathering some bright individual proposed that I should kiss the Blarney Stone.

Now, I had only the vaguest idea as to what took place at this ceremony. What the Blarney Stone might be, or where it was kept, I knew not. Also, I was very tired, and longed for bed. However, the proposal was greeted with such an outburst of approval from every one at the party that it seemed churlish to refuse to co-operate. There was a hasty finishing of drinks, some excited argument, and then every one was packed into two cars. Incidentally, it was then about two in the morning, and raining heavily.

Somewhere on that mad dash across the Irish countryside I began to understand something of what kissing the Blarney Stone entailed—a hint, a mention of this, a word about that.

"Look here," I said firmly, "just you tell me exactly what happens. Straight, now."

It was then that I learned that I was being motored to Blarney Castle, some miles away, that the 'Stone' was built into a wall six or seven feet from the top, and that this wall was about forty or fifty feet high. Over the top of this battlement I was to be lowered, some of the party holding on to my legs while I stretched head downward in an effort to become affectionate with a stone.

Apart from the thought of the physical discomfort which obviously attended such a procedure, several other unpleasant factors immediately sprang into my mind. It was raining and very dark; suppose one of the party slipped? They were all in a state that might be described

as 'merry'; a slip seemed not only possible, but very probable. I voiced my protests.

The only effect of the protests was to remind some one of a British officer who was being lowered over the battlements one evening during 'the bad times.' At the critical moment, just as he was hanging almost within reach of his objective, there was a shout "Up the Rebels!" The lowering party sprang for their rifles—and the unfortunate officer dropped into the bushes at the foot of the wall.

Altogether a most disturbing evening, and the only recollection of discomfort on my visit to Cork.

Leadlie and I left Ballincollig two days later. The weather was perfect, and until we were over the Wicklow Mountains the journey was delightful. At this point part of a cylinder-head cracked and flew off, leaving us an engine working on only three cylinders. To land would have meant a certain crash. For many miles there was not a flat field of any size; the country was mountainous, heather-covered, and dotted with rocks.

I am aware that Moths are not supposed to remain in the air on three cylinders. I admit that we could not climb at all, and that when we came to a mountain it was necessary to fly round it. I admit that at times the heather was not more than six feet from our wheels. But I do know that in some way, following the valleys, dodging tall trees, and expecting to hit something at every moment, we scraped along the odd thirty miles to Dublin. We landed at Baldonnel Aerodrome, according to plan.

At Baldonnel, with the assistance of the Free State Air Force, we put on a new cylinder-head—a lengthy and dirty job which necessitated our staying the night in Dublin.

The next day, in perfect visibility and with a strong

CORK

following wind, we crossed the sea, circled the lighthouse at Holyhead as required by the regulations, and then followed the Welsh coast towards the Dee.

Only one incident on this stage of the journey deserves mention. Near Old Colwyn there is a line of quarries, the cliffs from which the rock is blasted rising a hundred and fifty feet or so above the sea at this point. Flying along the shore about a hundred feet up, we skimmed along just above the roofs of the quarry buildings. I remember seeing a little crowd of quarrymen waving energetically; I remember thinking, as I waved casually in response, how pleasant it was to arouse such kindly gestures. The next moment I knew perfectly well why those quarrymen had waved. There was an appalling bang, the machine flung upward and tried to turn turtle, pieces of rock flew up all around the 'plane. One small piece of rock tore a hole through the starboard wing.

We had flown over the quarry at the moment of blasting.

CHAPTER XVI

OUT OF CONTROL

As the summer drew slowly on the fortunes of the firm improved, and it began to seem as if the troubles which had nearly wrecked us in early days were being left behind.

The workshops at Barton had been reorganized, a small but carefully selected staff was turning out high-quality work at a rapid pace, and outside repair jobs began to come our way again. Also, we were doing quite a lot of instruction flying. The membership of the 'school' had increased, and there were several pupils who had taken their 'tickets,' and now hired machines from us for cross-country trips. True, the air-taxi work still hung back, hardly anyone but the newspapers hiring 'planes, but in view of the gains in other directions this was a disappointment we did not feel so keenly. Air-taxi work would build up gradually, we believed.

My friend in the cotton trade, with a deeper commercialism than we of 'the air minds' possessed, was of untold value in bringing about the reorganization. He became a director of the firm, and his cold common sense and direct way of expressing himself were invaluable in the difficult struggle to organize the practical side.

About this time I was also brought into touch with a professional accountant who, when our difficulties were explained, readily undertook the investigation of our affairs, made a report to us, followed by a complete reorganization of our records and finances. I am sure that

neither of my friends ever intended to become so deeply involved in our enterprise as they eventually became, but there is something in aviation, whatever connexion one has with it, that gets into the blood, and both these friends got the disease.

Of course, Barton was still in the state when it could not pay its way. More money went out each week in wages and materials than came in. We depended upon the cash the joy-ride shows sent to keep the firm in existence, and from this joy-ride cash it was necessary to accumulate a reserve to carry us through the winter, for from October to April this source of income would again cease.

Holmes and Kingwill did wonders with their travelling 'shows.' Luck had been dead against them; the weather had been exceptionally unkind—cold, rain, and gales. A few of the fields had proved unsuitable, and many of the towns visited had failed to show the interest expected. Also, they had been troubled with a run of mechanical breakdowns—breakdowns which entailed heavy demands upon the workshops at Barton. In spite of all this, Holmes and Kingwill managed to send back substantial sums to build up the funds. But theirs was a desperately hard struggle—long days of anxiety, worry, contrivance, and disappointment.

Those who knew of our difficulties were frequently sympathetic, and from several people we received indirect assistance that was really valuable. For instance, Sir William Davy, then Chairman of the Airport Committee, never ceased his efforts to encourage Manchester to use air transport. At every function at which he was called on to speak, functions as diverse as a flower show, a hospital opening, the starting up of a new power station, his speech

took the same line—an eloquent appeal for people to support the facilities offered by their airport. In other ways his interest also helped us a lot. He had a real knowledge of the practical difficulties, he was in close touch with our firm, and knew the way in which we were struggling to overcome the various obstacles, and so he was able to explain our actions to his committee.

Looking back, I am astonished at the solid goodwill shown towards our efforts. My diary seems a repetition of little kindly acts intended to help us.

Among the few prominent people who did use our airtaxies was Dr Henshaw, the Catholic Bishop of Salford. He visited the aerodrome one Sunday, and, on being invited to fly, accepted only on the condition that he paid full rates for the flight. I took him up myself, and as we neared the aerodrome again after a tour of certain places of interest which the Bishop wished to see, I called through the speaking-tube asking if he would care to stunt. To my great surprise the Bishop shouted back an eager acceptance, and for fifteen minutes we looped, rolled, spun, and otherwise twisted about the air in strange positions. Several times after that day Dr Henshaw engaged our aircraft to fly him about the country on urgent business, on one occasion making the sea crossing to Ireland in exceptionally bad weather.

By a coincidence, the only other clergyman who flew in the firm's machines was another Catholic priest. One afternoon the rector from a near-by church visited us, bringing his curate with him. He asked for a machine to be got ready, and while the 'bus' was being wheeled from the hangar I asked him if it was just a plain joy-ride he wanted or if any 'stunts' were to be included.



THE 'JOY-RIDE' FLEET AT BARTON



UPSIDE-DOWN FLYING AT AN AIR PAGEANT

"It's not myself that's going; it's my young man here," he said, nodding towards the curate. "Sure it's himself that isn't too pleased with the idea, but I say when the Bishop of the diocese sees fit to dash himself up and down like a seagull, it's only fitting that his priests should support him."

The young curate looked anything but happy, and as he was assisted into the machine hesitated, and made one

final appeal to his rector.

"Away with you!" the rector interrupted him. "Am I not after telling you that his lordship was up in one of these very contraptions this Sunday past? Would you put yourself above your own bishop? And the gentleman waiting there with the engine making a noise so you can't hear yourself speak! Away with Father—!"

And the unhappy curate had his first flight.

TŦ

There is, however, as I recall those days at Wythen-shawe and Barton, one name which stands far above all others—the name of a man who encouraged us in our most hopeless hours, one whose visits to the airport inspired the whole staff with renewed enthusiasm—Sir Sefton Brancker.

Brancker was an amazing personality. However long and hard the work, he never seemed to feel the slightest weariness. I know of no one who can say he ever saw Sir Sefton tired. Long days of excitement flying from town to town, making impromptu public speeches, studying a dozen problems, advising on matters of vital importance, guiding people in the path he believed they

should go—all this seemed to leave him unaffected. At the end of the final banquet, when those who had done but little of the work were almost collapsing with exhaustion, Brancker would glance round as fresh and alert as when he started.

"Now we've finished with all that hot air and bad food," he would say, "we'll go and find somewhere to dance."

In the early days of our friendship I used to try to keep up with him; many times I have sat over some supper table, ready to drop my head down among the plates from sheer weariness, while Brancker, unconscious of any fatigue, hummed lightly to the dance band. His only concern seemed to be to find some further activity to occupy his restless spirit. Not until the last couple had left the floor, not until the waiters began to dim the lights and it was obvious that all chance of further enjoyment had passed, would Brancker leave.

"They want to close up," he would murmur, screwing his eyeglass a little further in its place. "Perhaps we'd better go. I have some letters to do. I want to make an early start to-morrow. I'll call you at seven. If I don't

call you myself you'll never be up."

He worked hard, he played hard; he never seemed to rest. His was the energy of a genius.

Brancker was, I feel, a man who was frequently misunderstood. He possessed one of the kindest natures I have ever known; his rapidity of thought sometimes caused him to cut off a conversation, to seem impatient, and his mannerism undoubtedly hurt some people and annoyed others. Yet it was not that he intended to be rude; he did not disregard the points suggested; it was simply that his

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active brain had grasped the situation while others still groped; the matter was already decided in his mind. Any further talk seemed to him redundant.

Affectation was abhorrent to him. He could not understand why man or woman should wish to appear other than they really were. His friends ranged from taxidrivers to princes, and any effort to 'impress' bewildered and disgusted him. Especially did he hate that reserved manner some people adopt in an effort to appear more clever than they really are. "What I call the solicitor manner," he would say. "They believe they're impressing you, when you're simply irritated by their silly self-importance." Yet he was tolerant of the honest mistake, never harboured a grudge, and forgave an injury sincerely.

"I haven't time," he once told me, "to fill my brain

with hate. I want it for other things."

"The General," a name which fit him well, was, of course, a born leader: his clear insight and his energy inspired confidence; his unswerving sincerity turned confidence into loyalty, into devotion. A subordinate knew that whatever mistake he might make, as long as it was an honest, genuine error, Brancker would protect him. In consequence, under "the General" aviation made progress. Subordinates took risks. They knew that behind them was a strong man who feared neither politicians nor criticism; they did not abide strictly by the rule and regulation; they acted as it seemed to them best, and, as "the General" was a good judge of character, the ultimate result was often very good indeed.

In a dreary and uninspired 'life' he has been described as strong-willed and obstinate. It is possible that he may

have seemed obstinate on occasions: if he felt his course was the right one he adhered to it, uninfluenced by opposition. Yet he never resented fair criticism, would listen to argument, and, once shown that some better plan existed, never hesitated to change his views.

I remember how once his department issued an order relating to fireproof bulkheads. It was an order that had been carefully considered, and it had been published with full official backing. There was, however, one small flaw in this order which made it difficult to obey—a flaw which would have entailed hardship on the owners of certain types of machines. On the afternoon on which the order was issued I telephoned him, and in the briefest possible way explained the reasons which seemed to me to make that order a serious mistake.

"Let me be clear!" he snapped. "I passed it myself. I went over the details carefully. You say it's unworkable because . . ."

And he tabulated the points I had put forward.

"I'll look into it," he concluded.

Fifteen minutes later the telephone rang.

"Official cancellation will be sent out to-night. Proceed as if to-day's order on bulkheads had not been issued. Unfortunately, I find you're right."

I could fill a whole book with incidents showing his happy, kindly nature. Let it suffice, Sir Sefton Brancker was a very great man.

Ш

Of the various politicians who passed through the Air Ministry in an official capacity only one—Lord

Thomson—seemed to be of any practical assistance in aviation.

Those temporary heads knew little of the real difficulties. One or two, anxious to make a display with the department of which they were the nominal head, did evolve certain grandiose schemes, and even caused such schemes to function for a brief space. Some of the schemes actually proved a hindrance, absorbing as they did time and money that could have been employed elsewhere.

Lord Thomson was, however, quite different from the usual politician. Apart from the fact that he had an actual working knowledge of the subject, his long experience in the Army had sharpened a natural ability to understand men and to lead them. During the short time that he was Secretary of State for Air he aroused an activity and enthusiasm that might have done great things.

He was a leader who was never content to accept the official version presented to him, but one who always probed and sought for every aspect of the matter. On several occasions he invited me to have dinner with him—a private dinner à deux at some little-known restaurant. Up to the coffee the conversation would be general and unimportant; then, as we lit cigarettes, he would suddenly ask, "What about so and so?"

"But," he would retort, after listening to my comments, "I'm told that . . ."

And in this way, questioning various people, people who knew that their answers would not offend and that they might speak plainly, he learned the different opinions. He heard all sides before he gave his support to a proposal.

IV

At the end of the season the joy-ride machines came back to Barton, and we took careful stock of our

position.

The summer had been very wet and cold; disappointment after disappointment had dogged the outside shows. True, they had been able, as I have said, to send in considerable sums, and quite a substantial balance had accumulated, but the fleet had suffered badly, and much work would have to be put in during the winter if the same number of machines was to leave Barton in the spring. The necessary wage-bill and cost of materials would absorb all our reserve. Yet with the greatest of care and economy it seemed as if we might just be able to get through once again.

Unfortunately, the cost of reconditioning this large fleet—a fleet essential to our continuance—left no capital to be expended on new air-taxi machines. I had formed the opinion that until we obtained machines more suitable for air-taxi work, comfortable cabin aircraft, this side of the business would never grow. Machines suitable for air-taxi work had recently been put on to the market—the De Havilland Puss Moth, for instance—and I argued that until we had aircraft of this type the public would

not use us for aerial journeys.

My dream of working up the taxies into regular services seemed farther off than ever.

At this stage I learned that a friend of mine, one Glen Kidston, was considering investing much money in the operating side of the aircraft industry. Kidston and I met and talked the idea over.

Glen Kidston, I found, had certain very definite ideas. He believed that shortly the public would begin to use aircraft on a larger scale, that the railways would be forced to start air services, and that something like a boom was due within the next ten years. What he knew of our firm satisfied him, and he felt as I did, that new taxi aircraft would enable us to expand into regular daily services. Together we worked out details for a Manchester—Liverpool—Blackpool—Isle-of-Man service.

At last Glen Kidston decided to come in with us. He was prepared to take up a considerable number of new shares in our company, and to come on to the board of directors. It was agreed that for the next few years joyriding was necessary, for without the summer income from this the firm could hardly remain solvent, but that while continuing our air pageants—and even expanding the fleet for this purpose—we should endeavour to start a regular service.

Legalities had to be dealt with in regard to the further finance to be found by Kidston, and much delay was experienced. As the winter months sped by Kidston and I realized that the delay was causing us to miss opportunities. If a larger joy-ride fleet were to go out the next spring, now was the time to get it ready. Every one connected with the firm felt that after two such unseasonable summers we were almost sure to have a warm dry one in the coming year, and a desire to take the fullest advantage of such a summer egged us on. Joy-riding, we knew, could put the firm well on its feet, and while lawyers argued the chance was being missed.

"It's no good holding things up," said Kidston. "I am coming in. It's only these technical details that

are delaying things. You go ahead. You'll soon get the

money.'

There is little excuse for what we did. We did go ahead. Assured of the coming capital, we started work on more machines, pressed on with the joy-ride fleet, engaged more staff, booked fields, and finally bought a five-seater cabin taxi 'plane. In short, we ran into debt, and extended our credit as far as ever possible.

Still the legal delays continued.

Now, Kidston was about to make a flight to South Africa. He intended to make an attempt upon 'the record' London to the Cape, and while these legal delays continued the preparations for his flight went on rapidly.

"I'm all ready," he told me one day. "The machine's perfect. Cathcart Jones is quite satisfied with her. We're

only waiting for weather."

"But," I protested hastily, "you mustn't go until we've got that cheque. We need it. We've spent—"

Kidston laughed.

"I'm leaving it signed with the solicitors," he said. "As soon as the legal side's fixed up they'll hand it over. You needn't worry."

In due course he left for Capetown. The flight was

accomplished in record time.

A few days after this I had lunch with my accountant friend—incidentally, a very worried accountant at that time.

"You'll be glad to hear," he said, "that the legal formalities in regard to the further finance have been completed to-day. We're in a position now to issue the share certificates to Kidston as soon as we receive his cheque."

"And we need that cheque pretty badly," I remarked.

"We've spent and spent

"The statutory fees had to be paid," the accountant said, interrupting. "We couldn't get out of that, but, strictly speaking, you'd no business to buy those machines until the money was actually into bank."

I waved the unpleasant facts aside.

"Anyway, we've done it now, and, as you'll have his cheque in a day or so, it doesn't seem to matter much. If we hadn't gone ahead we'd have missed the chance of cleaning up this summer."

When I left my friend I turned down King Street. At the bottom of Deansgate a boy was selling evening papers.

I glanced at the poster he carried. It read:

GLEN KIDSTON KILLED

V

The rest was a nightmare. The wages and materials necessary for building up the larger joy-ride fleet had absorbed the hard-won balance accumulated during the previous summer. The booking of more fields and other expenses which were absolutely necessary if the fleet were to stay out on tour faced us, demanding immediate attention. The purchase of the cabin machine, and the costs connected with the proposed further finance, had put us into debt.

There were some terrible weeks while we juggled desperately, playing for time, trying to hold things together until the joy-ride machines could start earning money in real earnest. There was the fleet, perfect as skilled mechanics could make it — pilots, ground engineers,

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T

labourers, advance publicity men, all the thousand and one details of touring air pageants, an organization complete, ready to keep on the job for as long as public and weather allowed.

I will not prolong the agony. Once again in some way we managed to hold off attacks, to prevaricate and contrive until Holmes and Kingwill were sending back what cash they could.

They had left behind a staff at Barton to manage the airport and to run the workshop—a staff whose time promised to be very fully occupied keeping the extensive fleet in the field, doing as much outside repair work as possible, and maintaining the school and taxi machines.

Every one realized how desperate the position was. Even if the summer proved perfect and the best of luck favoured us the air pageants would have the greatest difficulty in clearing off our liabilities. We also knew that not only had the air pageants to discharge our accumulated debts and to a large extent subsidize Barton, but that they also had to build up a reserve fund to carry us through the next winter.

Anything that could possibly bring in money was attempted. And that brings me to one effort we made at Barton: "The Greatest Air Pageant."

- "The Greatest Air Pageant" was really my cotton friend's idea.
- "I've told you till I'm tired," he said, "you want to do something here. Holmes and Kingwill will do their best, but something more ought to be done."
- "Every one's worked to death as it is," I retorted. "Ainsworth was on last night until after eleven. We are doing an insurance repair job, and Holmes has sent back

two machines for new engines. Kingwill will be sending one back any day. We've got to keep their machines flying. Then there's the school maintenance, and——"

"We've run pageants here before—good ones, too—

and they brought in money."

"But then we had pilots—good stunt pilots and plenty

of machines. Things were different."

"You want to run an air pageant here. That's what you want to do. There's Whitsuntide coming; now, if you ran a pageant on the Saturday and Monday you'd get the gate money and joy-riding. I've told you till I'm tired . . ."

To cut it short, it was decided that I should run a pageant at Barton. I made a careful review of the

position.

Advertising—obviously such a show must be extensively advertised; yet the tiny sum that might be extracted from our credit was so small as to be useless. For two days I fidgeted and puzzled over the problem. A pageant without proper advertising would be impossible. We could not afford to pay.

Then an idea came to me—the Press, our ever-faithful friends the Press. The glimmerings of a scheme whereby

they might once again help us began to form.

I galloped off to the Town Hall, and informed them that I intended to run a pageant at the municipal airport. Would they allow me to put up posters on tram standards in the city—posters about the size of newspaper-contents bills? Indeed, we should probably use newspaper-contents bills; they seemed very suitable, and . . . After some deliberation the Town Hall—chiefly owing to the influence of Sir William Davy—gave permission.

From there I rushed to the office of a big national newspaper and interviewed a friendly editor. I had permission to erect posters on tram standards throughout the city. I had in mind flat cards tied round the posts about ten feet from the ground, with a poster on each side of each post. I visualized all the most important thoroughfares in Manchester with a poster on every tram standard. Now, if each poster had at the bottom the words *The Daily Blank* it would be an excellent advertisement for the paper. If their standard contents bills were used . . . The editor rang for his publicity manager. We discussed the scheme at length.

The printing of the bills was, of course, nothing to a great newspaper. The erection and taking down of the cards—the Town Hall had stipulated that we should take them down after one week's display—involved considerable labour. The publicity manager thought he could

manage to put up about three hundred bills.

"And, of course, we'll help you with some editorial publicity," said the editor. "Photographs of aeroplanes

being prepared, and so on."

Anxious that there should be no jealousy, and that the pageant should not seem to be sponsored by just one paper, I visited various other editors. When I mentioned that *The Daily Blank* was co-operating the way was smoothed at once. If one paper was doing it the others were not going to be left out.

The slogan "The Greatest Air Pageant" was suggested by one of the editors; and this and the date was the only wording we used on the posters—an effective form which aroused curiosity and left much to the imagination.

In due course the city blazed out with red-and-blue, orange-and-black, red-and-black posters—more than two thousand of them in all. Every standard throughout the main streets screamed of "The Greatest Air Pageant." One journal, in an excess of enthusiasm, even placarded the standards in the neighbouring city of Salford, and it was three days before this was realized to be an unauthorized action and the posters were removed.

No one who came to Manchester about that time could fail to realize that an air pageant was to take place; the advertising was extensive and striking, and it cost the firm

absolutely nothing.

Once the publicity was arranged I turned to the question of the pageant itself. A review of the resources at Barton proved anything but encouraging.

Of professional pilots there were two. One of these, George Yuill, was a first-class pilot, and might be relied upon to put up a good 'stunt' show as and when required. The other, while perfectly competent and an excellent cross-country pilot, appeared to be more useful for normal flying than for aerobatics.

It seemed probable that four machines only would be available: the D.H.50, the five-seater cabin aeroplane, which was to be flown by Yuill, would be useful for joyriding; an Avro 504K for the other pilot; and two 'school' Moths, on which all stunting and programme items would have to be done.

My idea was that the two professional pilots should concentrate on the joy-riding, which brought in money and helped to make the air seem 'busy,' but that from time to time, while their machines were being filled up with petrol, they should dash over to a Moth, and put in

whatever item on the programme seemed desirable. As a reserve, to keep things going between times, I proposed to go up myself in one of the Moths.

As I look back it seems inexcusable that we should have attempted to run an air pageant with such meagre resources: three pilots, four machines. I realize now that the thing was unpardonable effrontery, but let me plead that we were desperate, the whole staff were fighting backs to the wall for the survival of Northern Air Lines.

We did everything we could to make the pageant worthy of its slogan. I wrote to several firms, and urged them to send a pilot and a machine. Unfortunately, at that date not one could do so. I even risked an appeal to Kingwill and Holmes to send back one of their fleet; both pointed out that they were already short themselves, and at a holiday time . . . However, by sheer good luck, one of Holmes's machines developed serious engine trouble before the appointed day, and was sent back to Barton to have a new engine fitted. I think the 'plane reached us on the Tuesday, and from Wednesday onward Holmes made many vain telephone calls demanding to know why it had not been returned to him. By strange coincidence, that machine was not completed until midday Saturday just when our pageant was about to open-and, as it would then have been useless for him to try to reach Holmes that day, the pilot stayed on and helped us at Barton. As I pointed out to Holmes, fitting engines is an uncertain job, and often leads to unexpected delays.

In the days immediately preceding the pageant there was considerable anxiety felt as to our 'school' machines. Any serious breakage at this time would have put us in

an awkward position, and the warnings and instructions given to pupils before they left the ground were so disturbing that for the time being 'school' flying almost ceased.

Let me cut the story short and say that the Saturday pageant was a great success. The weather was moderately good, and quite a satisfactory number of people paid for admission and joy-rides. The machine that should have gone to Holmes proved invaluable, and the others put in so much flying that the public did not seem to notice any lack of aircraft. Matterface, our indefatigable works manager, lined up on the tarmac several machines that were in for repair, and this gave the aerodrome quite a crowded appearance.

Two unfortunate happenings, however, marred the success of the day, and caused serious anxiety as to what

we should do for aircraft at the Monday pageant.

One item on the programme was a game of aerial skittles. Two rows of tall tubes, tubes made of brown paper about two feet in diameter, were placed out on the aerodrome, and the two Moths dived at these, the pilot who knocked down his row first being the winner. Yuill was the winner, knocking all his skittles down one after another in fine style. As the other pilot, however, was turning when flying low, the wing-tip of his machine touched the ground. How a very serious smash was avoided I cannot tell, but in some way the pilot managed to haul the Moth round and landed safely. Inspection showed that the wing spars had been cracked, and other internal damage was suspected. In consequence, one of our precious Moths was out of service.

The second misfortune was the failure of the engine

in our joy-ride Avro towards the end of the day. The engine was an old one that had seen much work, and it passed out peacefully by blowing off a cylinder and pushing a compacting and through the grapheses.

ing a connecting rod through the crankcase.

Matterface and I held a review of the position late that night. The Monday pageant was what worried me. The Moth was beyond immediate repair; it was definitely out of service for some days. As to the Avro, there was no engine available to put in, but Matterface thought that, by working all night and through Sunday, he and the mechanics could build up another engine, and have it mounted in the machine in time for Monday's show. He proved to be right; we all worked, and by four o'clock on the Sunday morning not only was the wrecked engine out of the machine, but another engine had been half built up.

up.
"We'll leave it now," Matterface said at last. "If we stick into it all to-morrow, it'll be ready for mounting by

evening."

As it happened, I had to go over to Llandudno that Sunday. I went in the one Moth that still remained in flying condition. It was a wonderful day for flying, and coming back on that Sunday evening, I felt quite cheerful. The weather looked like being good the following day; that sunset promised settled weather. If it was fine a larger crowd than on the Saturday might be expected. Of course, we were in a mess for machines; I had had to let Holmes have his machine; his pilot had left with it that morning. But there was the cabin 'plane, this Moth, and the Avro—assuming that the new engine functioned all right. Three machines to run an event that had been advertised as "The Greatest Air Pageant"!



'WING-WALKING' ABOVE LLANDUDNO

Matterface came out to meet me as I taxied the Moth into the hangar at Barton. He looked tired and

weary.

"I'm not too happy about the engine in the Avro," he said. "We've had it running twice, but we can't get the 'revs.' out of it. We're going to pull it down again now; it means working all night again."

"You'll all be worn out to-morrow."

"Well, there's nothing else to do. With only this Moth and the cabin 'plane . . ."

I glanced round the hangar.

"Where is the cabin 'plane?" I asked.

"We got a taxi job. Two men wanted to go to Black-pool, so Yuill went off about an hour ago with them in the D.H. 50. He ought to be back any minute."

"It's getting late," I said anxiously. "If anything happened . . . It was rather dark for landing when I came

in.'

"We'll get some flares out," said Matterface.

The flares were put out. It grew darker and darker. Away over towards Worsley the yellow lights of lighted windows glittered like gold specks on a backcloth of deep blue. Twice we thought we heard an aircraft engine, and scrambled to pour more petrol on to the improvised flares. Somewhere aloft we felt was Yuill searching for the aerodrome, trying to find . . .

The anxiety became sickening. The horrible feeling of utter helplessness when a 'plane is overdue and darkness has come is something that must be experienced to be appreciated. We arrived

be appreciated. We waited.

At 10.15 a telephone message came through. Yuill had crashed. His engine had failed near Chorley. Forced

to land in a small field, the cabin machine had run into a ditch. The damage was extensive.

Somehow—I have never found out just how—we did run that pageant the next day. Two amateur private owners came to our assistance in response to my frantic appeals on the telephone. Peter Eckersley, captain of the Lancashire County cricket team and chairman of the Lancashire Aero Club, offered his Avian if we would provide a pilot for it, and a member of the Liverpool Club, one Crawshawe, came over to Barton in his machine, and worked unceasingly to save the situation. The Avro made a number of flights before its hastily built engine did finally pack up. Our only serviceable Moth never seemed to come out of the air. It looped, rolled, dived, stall-turned, took up passengers; I almost wrote 'flew in formation,' so ubiquitous did that Moth seem to be. The crowd appeared to be perfectly contented. Perhaps they sensed some of our difficulties and felt sympathetic. You can't easily deceive a Lancashire crowd, but they can be very kindly if they feel that anyone is in trouble.

VI

The remainder of the story of Northern Air Lines is one of endless difficulties. Everything went wrong.

The outside 'shows' under Kingwill and Holmes experienced abnormally bad weather. They never had a chance. There were thirty-one wet week-ends that year, and, as the week-ends are the time that touring air pageants make their money, the effect was disastrous. At town after town rain spoiled the pageants. Weeks went by when they could hardly cover their own expenses, much

less send back money to subsidize Barton or build up a fund for the winter. It was a summer of heart-breaking

disappointment.

Touring pageants such as we were running are, as I have said, expensive things. They necessitate costly staffs, bills for police, a high charge for field rent, and heavy bills for advertising. All these charges are incurred, and go on whatever the weather may be. The outgoings in our case amounted to something like three or four hundred a week for each show. We could not stop; we had to struggle on week after week, hoping that the weather would change and give us a last chance to pull through.

But, with the debt we already had about us, the fight became hopeless. By August the end was obvious. Yet Kingwill and Holmes never admitted defeat, never appeared discouraged, never uttered a word of complaint

—except against the weather.

Things moved rapidly as the season closed. In order that we might gain time to explore our chances of continuance my accountant friend was appointed to control the company as receiver. In early autumn we were approached by a large aircraft firm who, after cautious inquiries and lengthy discussions, made certain tentative proposals. This firm—or rather group—had influential and extensive backing; they had many 'underground' sources of information to guide them; and their financial experts had come to certain definite conclusions. They believed that within the next few years the aircraft industry was due for something like a boom. Years of propaganda had stimulated public interest; politicians were awakening to the fact that 'the air' was a subject popular with those who had votes; big financial interests were stirring.

"We believe," one of their directors told me, "that shortly the demand for a more active air policy will become insistent. I think we shall see the railway companies come into aviation, possibly a larger Air Force, certainly greater Government support for civil flying."

In consequence the directors of this firm—urged on by their masters in the city—were considering an extension of their activities into the operating side of aviation; and they made guarded proposals that this extension might be made through Northern Air Lines. Our machines had no interest for them; they regarded all our fleet as 'scrap'; but our *personnel* and our organization they believed would be useful. For experienced men highly trained in operating aircraft are not numerous; and to collect a staff such as we had might take a considerable time. When the boom came competition might even make the gathering of a staff difficult. In short, this group had decided that it was simpler to use our existing organization as the nucleus of their new development rather than to start entirely afresh.

They pointed out that our company had little to sell. Our assets—chiefly obsolete aircraft—would fetch almost nothing if put on the market. They made a non-committal suggestion of reorganizing, in which case they would be prepared to find adequate funds for the firm's continuance, and to put a fleet of new passenger-carrying aircraft into service. Joy-riding was to be dropped. Regular air services, centred at our headquarters at Manchester, would be gradually built up; they were prepared to lose money on such services for some years. We were in no position to argue. To refuse their terms meant extinction; in acceptance lay our only hope of continuance.

In acquiring our company one of the things which this group most desired was an assurance of tenancy at the Manchester Airport. They regarded Manchester as an ideal centre for their operations, and the really excellent accommodation available at Barton made this doubly attractive. They instructed us to approach the Corporation, put forward certain terms, and endeavour to obtain a lease for seven years. But unfortunately they did not allow us at this stage to disclose to the Corporation their interest in the matter.

I blame no one for what happened next. The Corporation had expected much of our firm, and must have felt disappointment at the continuance of ill-luck. Unfortunately for us, Sir William Davy had ceased to be chairman of the Airport Committee, and his worthy successor, Alderman Carter, had likewise left office. Another had recently become chairman, one who knew nothing of the struggles in early days, one who came to the airport only when it was an established fact, one who knew little of the practical difficulties of aviation.

One morning a certain influential personage in the newspaper world telephoned me. Would I meet him for lunch?

It was at that lunch that I learned the whole story—or nearly the whole story. The Airport Committee had entered into negotiations with two other aircraft-operating concerns. Discussions had been taking place for one of these to take the place of Northern Air Lines at the municipal airport. Arrangements had been made for the managing director of one concern to visit Manchester within a day or so; the full story would appear in the Press that evening.

"I felt I couldn't let you just buy a paper and find out that way," said my friend.

When the news of these unexpected negotiations on the part of the Airport Committee reached the group they immediately cancelled all proposals for the reorganization of our company. Manchester as a centre ceased to interest them.

Two months later Northern Air Lines closed down.

