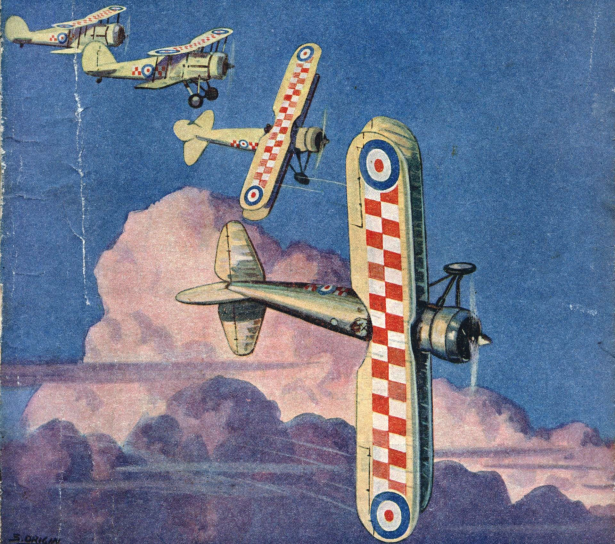


ORDER OF THE BATH — By G. M. Bowman

# AIR <sup>7<sup>D</sup></sup> STORIES



ARABIAN FLIGHT

BY A. J. PELHAM-GROOM

WINGS OF TREACHERY

BY RUSSELL MALLINSON

AND OTHER GREAT AIR STORIES OF FACT AND FICTION  
MODEL PLANS OF BRITAIN'S LATEST WARPLANE

MAY



*'Hallo, here's the packet of Greys I dropped in the bath last night. And every cigarette still bone-dry, thanks to the Greys patent hermetically-sealed carton !'*

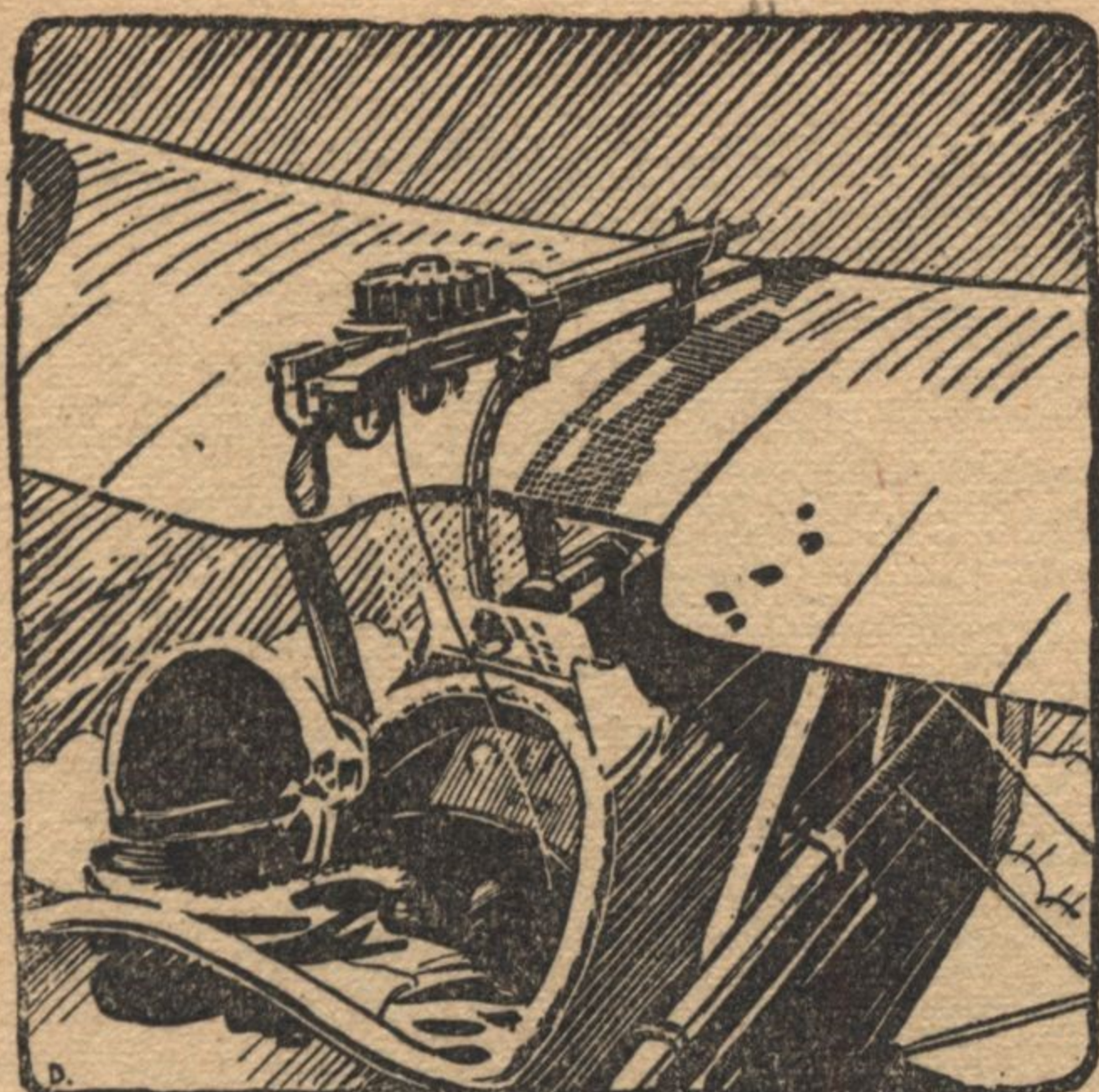
For all we know, there may be people who practise the difficult art of smoking a cigarette under a shower-bath. But Greys are not made for them. They are merely very good cigarettes.

## THE **Greys** CIGARETTES

*Ten for sixpence*

*Footnote.*—Twenty ordinary cigarettes a day, says a doctor, can do a smoker no harm. The trouble is that, judging by what one reads, there is hardly such a thing as an ordinary cigarette . . . except Greys.





# AIR STORIES

FLYING THRILLS AND  
AERIAL ADVENTURE

MAY 1937.  
Vol. 4. No. 5.

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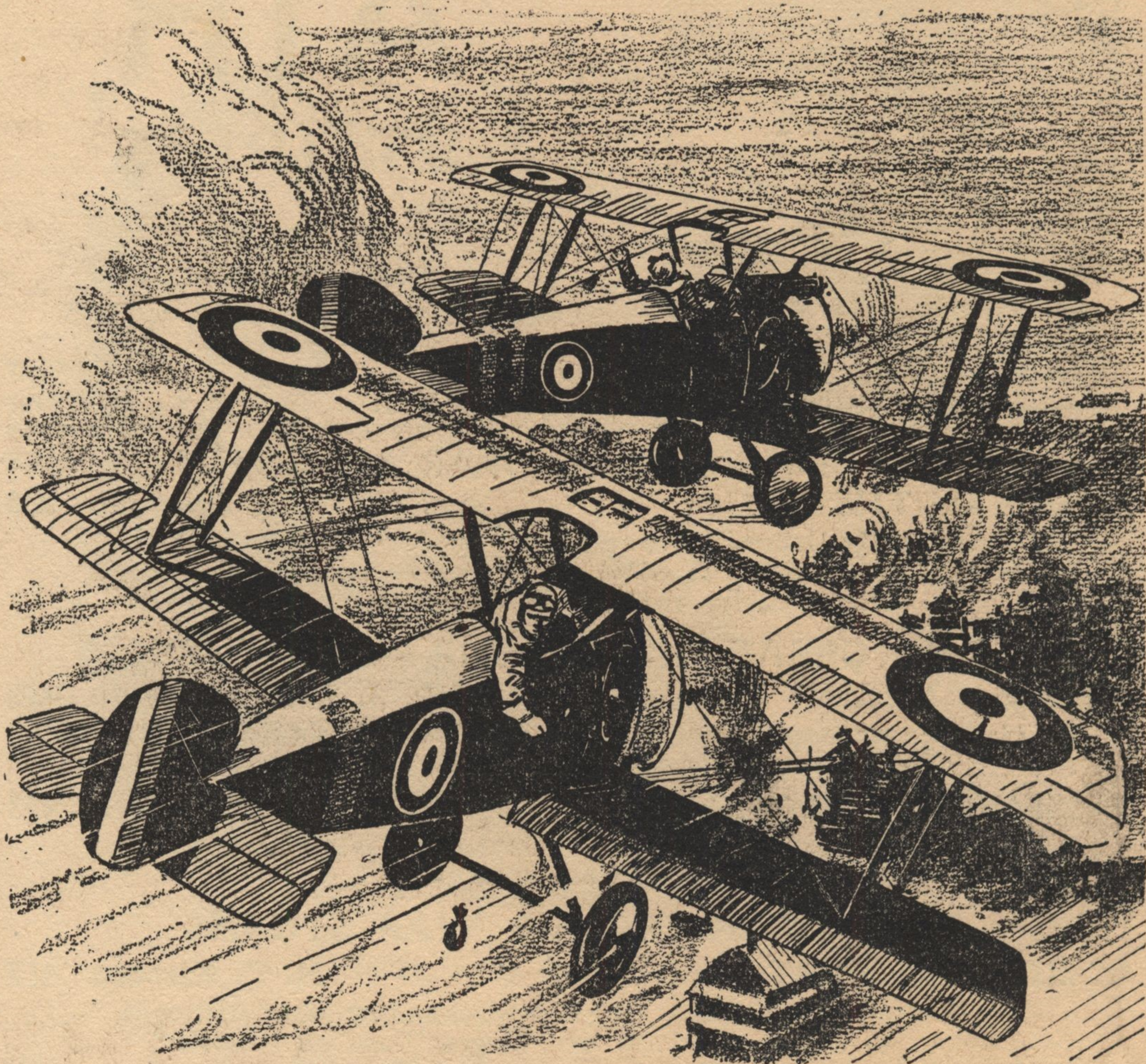
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*The Camel Squadron roared back across the town to finish the bombing—*

## *A Long Complete Air Adventure of an R.F.C. Camel Squadron on The Western Front*

**By G. M. BOWMAN**

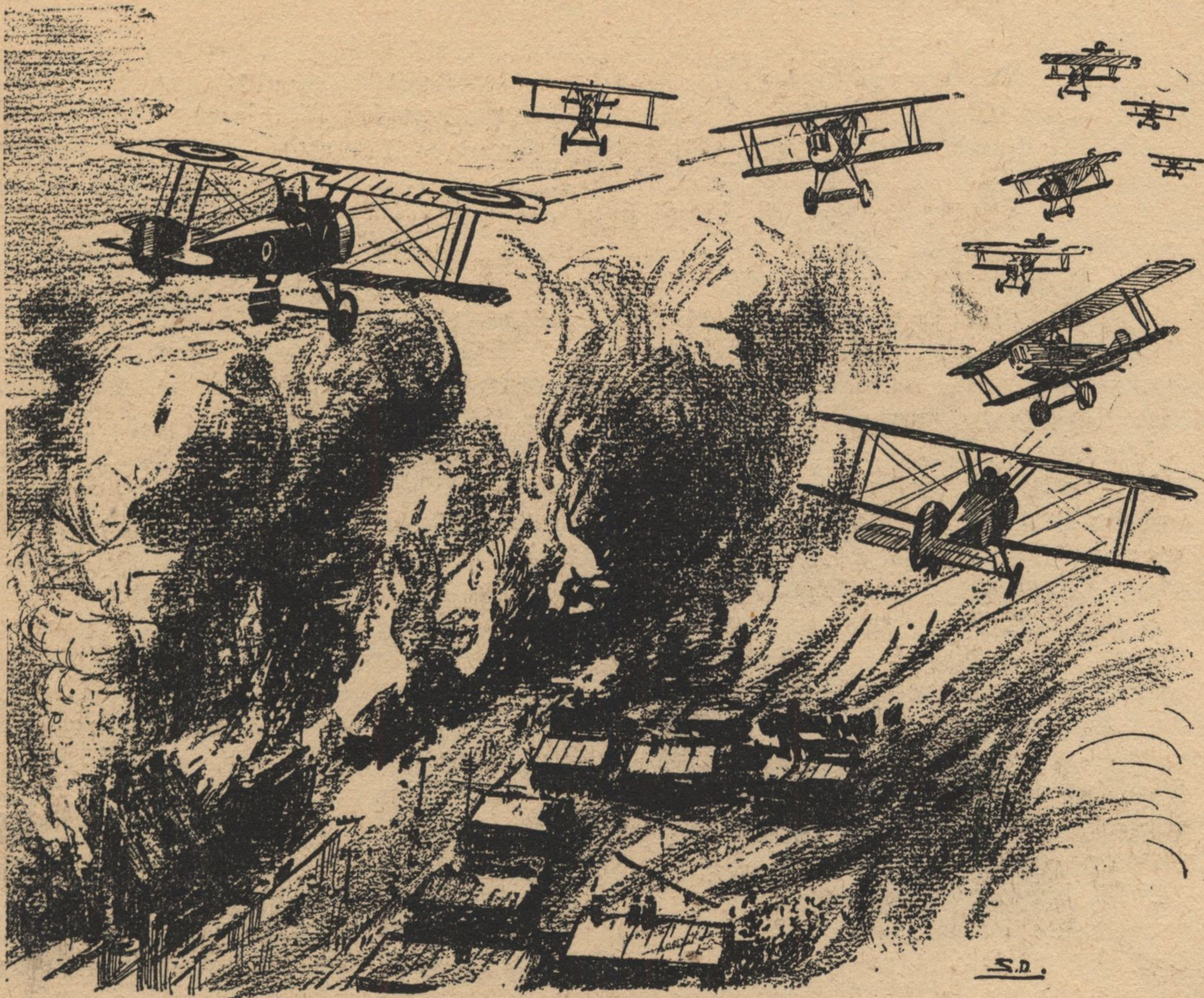
### **CHAPTER I**

#### **Horses and Tails**

**I**N the ordinary way of things, the navy is not considered a connoisseur of art. But, in the winter of 1917, the Navy who sat in extremely cold and cramped circumstances regarding the shattered triangle of railway, river and canal about the mudheap of Ypres, showed a disapproval of art that was almost frenzied.

The art in question was that practised by four, serious-minded, German photographers who were taking pictures, excellent in detail and depth, of the British battle-line and its communications. These artists reposed in the back seats of four Pfalz reconnaissance machines, alternatively standing on their heads to change plates in the cameras on the floor, or sitting up to crack the backs of those same heads against their machine-gun mountings—which is the peculiar





—and found themselves flying dead into the guns of the *Horst Circus*]

## ORDER OF THE BATH

**"The Navvy" was the Curious Nickname of Captain William Tully, R.F.C., and Because of the Unusual Talent to which he Owed it a British Scout Squadron Plunged to Purposeful Destruction, thereby Saving Itself and Annihilating its Enemies in their Moment of Triumph**

habit of all photographers, of all nations, in time of war.

The Pfalz machines flew at about three thousand feet. The Navvy, in a Clerget Camel, had just come out of a cloud-drift at about eight thousand feet, with six companions in perfect formation behind his tail, when he first spotted this interesting expression of the artistic German soul.

The Navvy got busy at once. He jerked half round in his cramped seat

and waved one gloved hand above his head in a mystic sign. Evidently that sign was well understood by his followers, for, as the Navvy pushed his stick forward and went straight down the sky in the manner of a grand piano falling out of a sixteenth-floor window, the six other Camels did much the same thing. Yet, as they dived, they broke up, diverging to spread out in a vast fan during that hurtling descent to the level of artistic endeavour.



## AIR STORIES

There, they flattened out, paired off, and lunged for the photographers, who barely realised that trouble had arrived until they found themselves in it right up to the chin.

The Pfalz pilots swerved away as machine-gun bullets began to whistle about them. They dived, too. They dodged and plunged wildly in a desperate effort to head back in the direction of the homely Rhine, where art was appreciated and understood.

The Navvy, howling up beneath the tail of one of them—and twisting that tail badly with a burst of tracers that smashed the elevator control—was trying a rather optimistic experiment. He was trying, in fact, to look towards all the cardinal points of the compass, as well as up and down, in the same second. And he was talking to himself, for the very good reason that the Sopwith Camel was designed on the principle of the domestic hip-bath, which caters for only one occupant per session.

"I'll bet Horsey turns up right now," gasped the Navvy. "I'll bet he does. He's got the Devil's own luck! Always comes blundering in just when we're really getting on with the war——"

A DISTANT gleam of sunlight through the grey clouds caught the Navvy's eye. Automatically, he checked its exact direction and noted just how the ground was sliding past beneath his lower right wing—which, surprising though it might seem, explained his peculiar name.

Some twenty-three years before, the Navvy's entry into this world had been noted by a registrar, forwarded to Somerset House and inscribed, together with reference numbers and other details, as William James Tully. But it was not to be expected that the Royal Flying Corps would take any notice of birth-certificate details or any such Government red tape and flim-flammery. The Royal Flying Corps, in due time, absorbed William James Tully, placed three pips on each of his shoulders, called him a captain, and laughed loudly. They laughed because Captain Tully had a bee in his bonnet. The bee

was represented by the study of aerial navigation—then very much in its infancy—but which William James Tully swore was one of the most important articles of a pilot's equipment. And their laughter was loud because the navigator never seemed to realise his brilliant qualities as a really first-class single-seater fighter pilot.

So the Flying Corps disregarded all Government documents and re-christened him "The Navvy."

They also re-christened every other familiar object around them, even including the Hauptmann Hermann Horst, leader of the 70th Jagdstaffel of the German Imperial Air Service, situated near Courtrai. Captain Horst became "Horsey," and his squadron of thirty machines, "The Circus." Incidentally, they also became a menace to the British forces in that area, and a thorn of thirty barbs in the Navvy's side.

Now, that momentary checking of sun and ground, made so automatically, had given the Navvy an exact knowledge of the light wind's force and direction. He allowed for and acted on it. As he swept up above the Pfalz, he half-rolled quickly and then plunged down again. Any ordinary pilot would surely have said that the move would not bring him back on his target, but ordinary pilots, in 1917, regarded navigational knowledge as useful only to those strange gentlemen in the egg trade who delivered supplies of high explosive into farthest Germany from long-range machines at night.

The Navvy proved its usefulness to a single-seater pilot there and then. The wind finished his movement for him, and brought him dead above the fleeing Pfalz. And the Pfalz pilot and photographer expired with merciful suddenness before the last of the Navvy's tracer-bullets detonated their petrol-tank in a splashing blossom of flame.

Meanwhile, the Navvy's six followers were still discouraging German art. Another Pfalz was already whirling down in flames, and the remaining two were plunging for home, with the rear-seat men flinging overboard cameras,



## ORDER OF THE BATH

plates, and all surplus weight in a desperate attempt to increase speed.

It was then that Captain William James Tully caught sight of a mass of black specks high above, and made a grab for a Verey pistol, at the same time giving vent to a string of remarks calculated to afflict the Recording Angel with an attack of writer's cramp.

"Horsey!" spluttered the Navvy, "and his damned Circus. I *knew* it!"

He swerved his machine over and raced after the farthest of his pursuing men. At the same time, he swung his pistol high and sent a red light hissing and arching brilliantly against the grey vault of the sky.

The pursuers abandoned pursuit at the sight of that signal. They swung over and closed in behind their leader, who was doing his best to break his neck by craning round anxiously to see that they were all there.

Then, as thirty highly efficient Fokker D.7's came screaming down out of the heavens with a vicious splutter of machine-gun fire, the Navvy and his lads turned tail and fled!

It was an un-English proceeding, and the Navvy's men knew it. To retire in the face of the enemy without giving battle was a heinous crime. The Navvy's men knew that, too, and hated it.

It was showing your tail to the Hun, who, up to these days of 1917, was largely unaware of what an English aeroplane tail looked like.

But it was—orders!

## CHAPTER II

### The Man who Obeyed Orders

**T**AKE six pounds of dynamite. Place in a wash-bowl, and add a pint of nitro-glycerine and sixpennyworth of paraffin (obtainable from any reliable oil- and colour-man). Drop a lighted match into the mixture, simultaneously striking the bowl with a ten-pound bung-starter.

The result will give some slight impression of W. J. Tully's temper when he arrived at his home aerodrome west of Bailleul, twenty minutes after his meet-

ing with Horsey, and jumped down from his machine to stalk into the squadron-office. Behind him, six other incensed young gentlemen also handed over their machines to the running mechanics and sought the ante-room. Far away overhead, the thirty machines of Horsey's Circus circled round in impudent and contemptuous triumph, until the ground gunners got their eyes in and encouraged them to go home.

In the squadron-office, the Navvy faced his superior officer, and said three words, which, according to King's Regulations, should have resulted in his being shot at dawn.

"I've had enough!" said the Navvy furiously, and leant forward to beat an oily fist upon the ramshackle desk.

"I'm no war-horse," continued the Navvy in concentrated tones, "I'm no pot-hunter, and I don't suffer from an ambition to get myself covered with putty medals. But I am sick of being chased home by that performing horse. And I am *not* going to keep on turning the other cheek every time he gives me a kick in the pants!"

"You're mixing your metaphors, Navvy," said his superior officer reprovingly, as he heaved himself up from his desk. With a stiff limp, he walked across the office—the limp being due to the fact that he had left his right leg in the Somme trenches a couple of years earlier. Major Hopkins was a man of deep and bitter experience. Like all really fine soldiers, he was the most peaceable and kindly creature one could wish to meet. But he knew very well how to deal with men whose nerves were ragged to tatters.

"Things are awkward, Navvy," he agreed quietly. "I don't pretend to know what the High Command are up to, but we've had to give ground badly this year. We seem to be short of men, of supplies, of almost every kind of war material. And, like every commanding officer all along the line, I can only ask my men to hang on like grim death until the luck turns our way. Now, with regard to the Horst Circus——"

"Hopper, we could beat him at his



## AIR STORIES

own game ! ” said the Navvy excitedly. “ I know the odds are about two to one, but if you’d only let me take the lads out. If you’d let me send a decoy to make the beggar come down with his trapeze artists, so that we could smash into them when they didn’t expect us——”

“ IF ! ” said the impolitely nicknamed Hopper. “ The point being, my dear Navvy, that I can’t. I’m only a one-legged crock. My one job is to receive orders, and hand them on to you as the squadron leader in the air. And those orders are that you mustn’t lose a single man, if you can possibly avoid it. There just aren’t enough to go round. We’ve got to fight a defensive war, now. And on top of that you’ve got to solve a problem.”

**I**T was an unusually long speech, and spoken in an unusually grim tone of voice for such a quiet, easy-going person as the Hopper. The Navvy breathed deeply and clenched his fists.

“ I’m sorry, Hopper,” he said. “ I know you’re not the sort of person to give idiotic orders and ask the impossible——”

“ But, my dear fellow,” answered the Major, “ in a war situation like this every C.O. has to ask impossible things. Look at this——”

He limped to his desk and took up a buff confidential-message-form from Headquarters.

*“ Whilst adhering to standing orders with reference to defence tactics,” it ran, “ squadrons are requested to make every effort to break up and put out of action enemy squadron under the command of Hauptmann Hermann Horst. This is to be regarded as a matter of the utmost urgency.”*

“ Great snakes ! ” gasped the Navvy. “ Are the Brass Hats all cracked ? They order us NOT to attack, then they demand that we smash up one of the biggest circuses the Hun has ever put into the air ! Why, Hopper, it doesn’t make sense ! ”

Major Hopkins laughed on a queer note.

“ We are the only scout squadron in this section of the line,” he said. “ The nearest aerodromes on either side of us are two-seater Art Obs, Photographers, and Reconnaissance. Quite apart from keeping the Hun picture-mongers out of it, we have to escort our own people and brush the Hun wasps off their necks. We have to keep three patrols a day going, on a limited personnel. Navvy, if I were an ordinary business man faced with such a request, I should ask for immediate transfer to a lunatic asylum. But that’s war ! ”

He came forward and laid a hand on the Navvy’s shoulder.

“ I’ve seen quite a bit of war,” he said. “ When you’ve got your enemy on the run, when you’re giving him more than he can take, well then, it’s an easy, straightforward business. But when you’re the under-dog, as we are now—well then it’s just plain crazy, the point being that the only possible way of saving yourself is to do the impossible. Now, Navvy, I haven’t the faintest idea how you can break up that Circus without getting this squadron broken up, too. I can only tell you that it’s got to be done. The miracle just has to be performed.”

The Navvy sat down and laughed. It was rather an ugly laugh, with a strained, hysterical ring in it.

“ By golly, I admire you, Hopper,” he said at last. “ You’re a real soldier. You face up to things, whilst I go howling around like a spanked kid.”

“ You’re the one who’s got to do the miracle-working,” said Major Hopkins, glancing down instinctively at his artificial leg. “ We might be able to work out some system, Navvy, whereby you keep your lads out of Horsey’s way, but try to lure a machine from his main flight. Do it one by one. It would be a long and difficult process, but it seems the only method——”

“ I’m going to get a drink,” said the Navvy, heaving himself up. “ Forgive me, Hopper, you know I’m rather inclined to get riled at times. When I’ve simmered down and got off the boil, I’ll set my mighty brain to your



suggestion and see if there is any practical way of damping Horsey's ardour."

With a grin and a nod he quitted the office and marched into the ante-room.

THE atmosphere in the ante-room was much the same as that which had surrounded the Navvy when he first entered the Major's office. Tired, over-strained and angry pilots were lounging around in battered cane chairs with glasses in their hands or on the floor. There was not a man in the room who had reached thirty, yet, looking at those drawn, racked faces, one would have assessed the general age at something over forty. War, as the Major had said, was a crazy business.

In the few seconds since he had left the Major the Navvy had thought swiftly. Inwardly he reproached himself for nearly having lost his self-control. This was no time to do so. It was a time for leaders to be cheerful, and to keep up their men's spirits at all costs.

"Anyone going to buy me a drink?" he inquired, forcing a grin. "Or must I deprive my wife and seventeen children of a large portion of their favourite breakfast food by squandering my own hard-earned cash?"

"There's one man I'd like to buy a drink for," said Tim Ryan, the finest scout pilot in the squadron, "and that's the Brass Hat who gave orders that we must bunk every time Horsey comes neighing around the sky. Yes, I'd like to buy that Brass Hat a double prussic acid with a dynamite cherry in it! I'd like to——"

"Roll" Baker, a pleasant-faced youngster from the Midlands with tragic eyes, tossed aside the paper he had been trying to read.

"Oh, shut up!" he snapped in a strained voice. "If there's one thing I'm more sick of than the war, it's mess attempts at humour! I'd rather listen to a third-rate comic in a touring show——"

"No doubt you're a judge of such people," snapped Ryan in an ugly tone. "You Provincials——"

Baker heaved himself up, his face set.

The word "Provincial," spoken in a certain tone by a Londoner, can be a deadly insult. There was a burst of acid laughter from the others. Indeed, a small but bitter civil war would have started there and then amongst men whose nerves were at breaking point. But, at that moment, a quiet voice spoke from the doorway, and the whole group jerked round to see the Major leaning on his stick.

"Hardly the place for talk of that kind—a civilised mess," he said. "In fact, hardly the kind of talk for any place. Not very clever of either of you——"

There was a sudden dead silence. Every man in the ante-room looked uncomfortable. But it was Ryan who spoke first.

"Sorry, sir," he said. "I—we—well, what's said in temper——"

"Is nearly always nonsense," finished the Major. "Well, talking nonsense is good for the soul, sometimes. It lets off steam. By the way, you boys may be interested to know that we're being supplied with new and improved machines. A re-designed Camel, with a Bentley engine. I've just had the notification, and Captain Tully, here, is going over to-night to ferry the first one across. Ryan, you'll be taking charge during his absence."

"ME?" gasped the Navvy.

"A new machine?" spluttered Roll Baker.

In a moment, the whole atmosphere of the room had altered. All the men were on their feet. Their faces were vividly interested, and keen.

But the Major merely nodded to the Navvy and gestured him out of the room.

"More details later," he said. "Tully, you've got to get along without delay."

ONCE outside on the sodden ground beyond the mess building, the Navvy grabbed the Major's arm.

"Jove, it was clever of you to take that line with those youngsters and give 'em something new to think about, Hopper," he said. "The situation was damned awkward—their nerves are all

to pieces. But how are you going to keep it up?"

"By producing the new machine," said the Major quietly, and there was rather a queer expression on his face. "At least, you'll produce it, Navy. I spoke nothing but the truth. The order came through by telephone from Headquarters, just after you'd left me. You're to go straight home to Hawkinge, leave your old Camel there, and bring back the first of the new ones. Fly the direct route; don't do any weather-dodging. You're to go now, my lad. I've got the sergeant filling up your machine already."

Captain W. J. Tully was in a slight daze. The prospect of a flip home to England, coupled with the interest of handling a new machine, was a perfect godsend after the squalid, bitter monotony of so-called defence tactics amidst the Flanders mud. For the first time in weeks, he actually felt cheerful as he dashed for his beloved maps, carefully laid out his course, and checked wind and deviation details.

After a final handshake with the Hopper, who came to see him off, he roared away across the aerodrome, circled steeply and struck off almost directly due west.

As he left, the sergeant-mechanic came up to the Major and snapped a salute.

"I'm afraid I've to report a mistake that some'ow got on my record book, sir," he said. "We've got Captain Tully's machine entered as empty, when he come in half an hour ago. I put in a quarter-fill as you ordered, sir, but——"

"It was Captain Tully's mistake, Sergeant," said the Major quietly. "He told me about it in the office. Put your books right according to that. He was three-quarters full when he came in."

"Yes, sir. Very good, sir," said the puzzled-looking sergeant, saluting again. Had he been asked privately, he would have said that the Major was either lying or crazy.

He would have been right the first time—as the Navy was destined to discover, in quite astonishing circumstances, within the next hour! For

the Navy was now setting a careful compass-course right out across the rain-clouded sea, with only enough petrol to take him about a quarter of the way on his journey!

The Navy was a first-class navigator, who would obey course-orders to the letter. The sudden stoppage of his engine would occur twenty miles out over the sea, where he could not possibly turn to reach land on either side.

And with this sure knowledge of both man and machine, the Major was satisfied.

He walked back to the squadron office, gently humming.

### CHAPTER III

#### The Navy Meets an Admiral

TO have one's engine stop suddenly and unaccountably whilst flying at three thousand feet above the wintry wastes of the bleak North Sea is not a pleasant experience. The Navy disliked it intensely. Instinctively, he switched over to the reserve tank. Still nothing happened. He fiddled with his engine-controls and switch. He swore in a furious temper, and then, perforce, put the nose of his machine down in order to avoid a stall, and strained his eyes through the drifting rain-clouds in the desperate hope of seeing some kind of succour.

It was a desperate hope, indeed. By taking the direct line from the aerodrome to Hawkinge in England as ordered, he was crossing the Channel diagonally, and was now above its widest part, well clear of the ordinary beats of the Dover Patrol. The Navy prepared himself for a plunge into ice-cold water, grimly anticipating an hour or more of slow torture before his cramped and exhausted body finally sank into oblivion.

Then a choked cry left his lips, and he swerved the gliding machine crazily as his eyes fell upon a slow-moving destroyer. The chance of a destroyer being just there was in the region of ten thousand to one, but that chance, it seemed, had favoured the Navy. He



## ORDER OF THE BATH

swept low and circled round the sleek, vicious-looking little craft, judging the wind carefully, and finally "pancaking" his machine on to the leaden sea as close alongside the destroyer as he could manoeuvre. Even before he struck the water, however, a boat had been smartly swung out, manned and dropped. With half-a-dozen hefty ratings at the oars, it swung alongside the water-logged and sinking machine as the Navy clambered up on to the top wing.

He was chuckling rather idiotically as willing hands helped him on board—chuckling because he hadn't even got his feet wet. But five minutes later, when he climbed a short accommodation ladder to the deck, and looked back to see his Camel cock up its tail and disappear completely from view, his heart was so full that he could hardly find words.

"By golly, that was a close shave!" he panted, offering his hand to the short, square-faced man in admiral's uniform who came forward to greet him. "Darned lucky for me that you happened to be around here, sir. My engine packed up, just went as dead as bully beef. I shouldn't have had a chance in this temperature——"

It was only then that he realised there was something incongruous about his surroundings. In the first place, it was unusual for a full-blown admiral to be on board a destroyer, which is normally "run" by a person no more senior than a lieutenant-commander. Behind the admiral stood a full-blown captain. And beside the captain was an individual in a thick tweed overcoat—a civilian whose clever, rather chubby face the Navy recognised instantly from the many newspaper photographs he had seen in the past.

The civilian, in fact, was one of My Lords Commissioners of the Admiralty, a politician whose name was a household word right across the world!

"THERE'S a lot of luck about this business, my boy," said the Admiral with a queer smile. "We counted ourselves lucky to find that the

Flying Corps had a good navigator at the very aerodrome in which we were especially interested! But come along below, we rather want to talk to you."

The Navy was speechless. It required no very intelligent brain to realise that there was something very queer about all this, something which might explain why his engine had failed just where a destroyer-full of high officials was cruising!

The Navy was right. Down below in the narrow wardroom, still slightly stupefied, he was introduced in turn to the captain, a world-famous authority on gunnery, and the Admiralty Lord, who threw off his tweed coat, opened a cupboard and produced extremely welcome drinks.

"Now, my lad," said the politician, when the Navy had steadied himself with a large peg of whisky, "I'll explain a few of the things that seem to have been puzzling you. The Navy is going to carry out a certain manoeuvre. For that purpose it needs the full co-operation of your squadron, in particular, owing to your proximity to the Belgian coast. But in cases like this we have found from bitter and costly experience that every precaution has to be taken to avoid details leaking out. Therefore, you were purposely sent flying out here, with a petrol tank that would run dry, as near as could be judged, by the time you reached the place where we were cruising, and waiting to pick you up! Not a single man on your aerodrome, with the exception of your commanding officer, could be taken into our confidence, in order to bring this about. You had to have a nasty minute or so, but that couldn't be helped. Meanwhile, our secret's safe."

The Navy took another drink. This was at once the most brilliant and most extraordinary piece of organisation he had heard of. But he was amongst high dignitaries and superiors, and it was not for him to speak, until asked.

"Now," resumed the politician, pointing to a large map of the Belgian coast suspended from a bulkhead, "now we'll come to the point. Here is Ostend. A



## AIR STORIES

short way south is the little town of Buhl, and I'm going to tell you that just off the coast from Buhl there is a secret refuelling *rendezvous* where, at certain times, as many as fifty German submarines are gathered, taking fresh oil on board and recharging their batteries. It took us months of careful Intelligence work to discover the place, and the truth about it. Now we know all that's necessary. And, if we strike at the right time, we can blast every one of those submarines out of the water, and at the same time sink a whole battery of store tanks attached to pontoons which are floated out there, just beneath the surface, for the subs' benefit ! "

"Where do I come in on this, sir ? " asked the Navy, who had by this time regained his composure.

The Admiral laughed.

"You're what I may call the low comedian of the show ! " he chuckled. "At the right and proper time, which will be signalled to your C.O. by code, you will take your squadron out to make a sudden bombing raid on the town of Buhl. The day we shall choose will be one of heavy rain-drifts and low visibility. You will dive upon Buhl and plaster the place with as many three-pound incendiary bombs as each of you can carry. In short, you will set that small and seemingly inoffensive town blazing from end to end, as brightly as you can manage ! "

**T**HE gunner captain set down his glass and took up the tale.

"Buhl is a small abandoned coast town of no strategic importance," he explained. "It isn't much wanted by either side, and friend Fritz certainly won't be expecting us to waste our time setting it on fire. You ought to get through without the slightest trouble. But the real use of your work will be this. That blazing town ashore will be visible for fifteen miles across a flat sea. The glow of it will show even through rain-drifts. And it will give me a dead line of fire at the submarine

base, which lies in front of it, just off the coast."

"Jove, I see, sir ! " exploded the Navy. "It's a great idea—why, of course, I see. You'll be able to bring your warships up within ten or fifteen miles of the place, lurking behind the rain-drifts where no Hun will see you. And the fire ashore'll give you a perfect line on your target."

"Sir Percy's done even better than that," chuckled the politician. "He's had a couple of C.M.B.'s\* sneaking out at night and laying anchored barrels at regular points between ten and fifteen miles, due west of Buhl. Those buoys are painted in code numbers, and give the range on the submarine base dead to an inch. It's nice work, Sir Percy. What with that fire ashore and the range-buoys, you couldn't miss with your eyes shut."

He turned to the Navy.

"My boy," he said, "I needn't tell you that the success of a job of this kind relies on perfect organisation and the exact carrying out of orders, in detail, to the very second. That's why we've shown you the whole scheme. You've got the full plan in your mind. You know the full importance of every detail of your part of it. If there is any hitch—and one always has to be prepared for hitches in war—use your head, think carefully, and do anything that seems likely to make the plan a success. Otherwise keep strictly to orders. And finally——"

For an instant there was a sharp edge to his voice.

"Finally, keep your mouth shut, and don't say a word to any living person," he snapped. "Secrecy is the most important thing of all. Make no mistakes. And it is only fair to tell you that steps will be taken to ensure that you do remain discreet."

For a moment, the Navy felt slightly cold. He knew that the strange, wraith-like organisation of the Intelligence Department worked on both sides of the battle-front. He knew that the Intel-

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\* C.M.B. = Coastal Motor Boat.



## ORDER OF THE BATH

ligence were swift and merciless even with men of their own side who blundered.

"I shan't talk, sir," he said quietly.

"I know you won't," answered the politician in a different tone of voice, "but one can't be too careful in a matter like this. Now then, we're told that you're a first-class navigator. That's highly necessary. Admiral, perhaps you will question our young friend——"

The next half-hour was full of both interest and triumph for the Navy. The grim-faced, keen-eyed admiral put him through a cross-questioning that was almost as good as an examination paper. But the Navy had not earned his nickname for nothing. He came out of the ordeal with flying colours.

As they talked he heard shouting and movement from above, and when finally he came out on deck behind his seniors it was to find, to his astonishment, that the destroyer was already docked in Dover Harbour.

When the Navy had recovered from his very obvious surprise, the politician smilingly offered his hand, and nodded ashore.

"There's a closed car waiting," he said. "It will take you straight to Hawkinge aerodrome, where you will collect the new machine you started out to fetch. You will fly it back to your aerodrome, saying nothing about your forced landing in the sea. In fact, you will say nothing whatever about what has happened to-day; you will merely await the order for action which will come to you from your commanding officer."

His hand gripped the Navy's shoulder.

"Goodbye, my boy," he said, "and good luck. Now I've met you, I know that we can rely on you."

Captain William James Tully was a man who verily walked on air as he stepped down the narrow gang-plank and climbed into the big closed Crossley tender which was waiting. It was empty but for the uniformed chauffeur in front. Without waiting for orders, the man immediately started up and drove swiftly away.

Later that afternoon, the Navy was once again crossing the Channel, this time in the opposite direction. He was at the controls of the finest machine he had ever handled in his life.

And he sang lustily as he flew.

## CHAPTER IV

### Surprise for a Circus

WHEN he arrived back at his squadron, the Navy found the aerodrome so changed that he hardly knew it. The place was almost in holiday mood, and the men who flocked round his new machine, crawling under and over its fuselage, opening cowl-flaps and burning their fingers on the hot engine—generally, in fact, behaving like a pack of schoolboys—were a very different crowd from the almost mutinous company he had left less than twelve hours before. Every single man pestered the Major with immediate requests to be allowed to take the new machine off and fly it. Strangely enough, the Major nodded his permission to all of them, and never turned a hair when the gasping and sulphurous Navy turned upon him in high wrath.

"What's the idea, Hopper?" belloyed the Navy. "That's MY machine! It isn't a flying roundabout for a suicide club! And I'm jolly well not going to have a crowd of madmen——"

"Come into the office and tell me your troubles there," said the Major blandly, turning and leading the way. Once inside, he laughed outright as he regarded his second-in-command's face.

"Let them work off their steam, for Heaven's sake, Navy," he said. "There isn't one of them who isn't a first-class and thoroughly experienced pilot. They won't smash up your precious new toy. And meanwhile, they'll be giving themselves so much to talk and think about—especially as I've been able to promise new machines for the whole squadron inside a fortnight—that they'll forget they ever had nerves. By the way, I'm sorry about this morning."

"Don't mention it," said the Navy, his wrath evaporating. "A most

interesting trip. Got any idea when the —er—band is likely to play ? ”

“None whatever,” shrugged the Major. “In fact, I wasn’t even told the name of the band or the music on its programme. My only instructions were to give you your—your Order of the Bath ! Meanwhile, please don’t talk, Navvy, not even to me. I know these little stunts, and I know that the only way to keep one’s mouth shut is to give up talking altogether. Now, about our friend Horst——”

“Thanks, Hopper,” said the Navvy. “Decent of you to make things easier for me. Well now, as regards Horsey, I was having a quiet think to myself as I flipped over this afternoon. That new Bentley-Camel of mine will climb like a rocket. It’ll leave any D.7 standing on the level. And it’ll turn on a tanner. The cream of the joke——”

He tapped the desk impressively.

“The cream of the joke is this,” he said, “that it doesn’t look appreciably different from any of the flying bedsteads we’re equipped with now. The Performing Horse won’t even shy when he sees it, and his men will cheerfully walk flat into trouble without realising what they’re up against. So I reckon that if we——”

For the space of half an hour the Navvy discussed his reckoning in detail. The Major listened carefully, here and there making a suggestion. Finally he nodded and lit a cigarette.

“Yes, that’s about the only way,” he said. “It’ll be a long job, of course, but the new machine certainly makes it possible. Actually, I suppose I ought to be extremely careful, as things are, to see that you run no risk of breaking your neck. Without wanting to know anything, I imagine you’ll be suddenly requisitioned for certain duties at almost any time now. So, Navvy, for Heaven’s sake, don’t go and get a bullet in the neck, or I foresee that I may be hauled up on to the carpet.”

“You’ve got no orders to the contrary,” grinned the Navvy, “and neither have I ! Meanwhile, we *have* been ordered by Headquarters to damp Hor-

sey’s ardour. And that Bentley-Camel of mine is the perfect damper ! If the lads have still left it all in one piece, I’ll have the sergeant-rigger check it over, and we’ll see if we can start the ball rolling on to-morrow’s dawn patrol.”

**I**N spite of Captain W. J. Tully’s remarks, however, he did not leave the ground with the dawn patrol on the following morning. Actually, he left the ground half an hour earlier while it was still dark, and ventured into the upper atmosphere, taking a certain course and finally circling amidst drifting clouds at about twelve thousand feet.

Meanwhile, the squadron, carefully primed in their parts, left according to schedule with Tim Ryan at the head of the formation. They went on their usual morning photographer hunt, flying at about five thousand feet beyond Ypres, and following the faint, battered line of the Menin road towards distant Tourcoing.

Which was just about where the Navvy was sitting on his cloud.

It was also just where three German photography machines appeared, heading for the British lines.

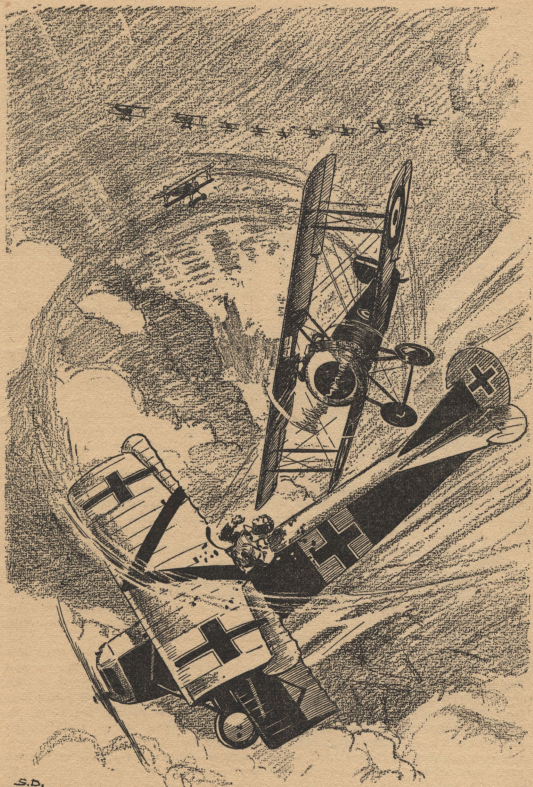
The photographers were cheerful. In these days, they knew they had little to worry about. Even when they were attacked, the attack did not last long, for the ever vigilant Hauptmann Horst was their big brother and protector.

And on this morning, as on all others, the gallant Hauptmann and his thirty followers, from a height of ten thousand feet or so, kept a watchful eye on those photographers as they went about their double work of artistic reconnaissance and decoying.

The Hauptmann grinned cheerfully when, from his eyrie, he suddenly saw the eleven-strong squadron of British Camels diving down to turn the artists back. He raised a hand and waved it, then dived down at the head of his mighty array, which swooped with guns stuttering and warming up even before they got within range.

It was not much of a fight. The British squadron, it seemed, were on the





S.D.

The Camel turned on a miraculously short radius and, next moment, was diving straight at the side of the D.7

watch for the Performing Horse, and swerved and dived away for home before the Circus could get near enough to do much damage.

But, when it came to diving, Captain William James Tully did not propose to be left out of the general entertainment. He saw the Circus, but the Circus did not see him, since their eyes were cast downwards in search of their prey. As the Circus dived, so he dived also, at a pace something over twenty miles an hour faster than their own.

He dived straight for the last man on the right-hand side of the great arrow-head formation. And he could have ended that man's life there and then with a bullet-burst clean through the back—if he had not happened to be Captain William James Tully, with a supply of red corpuscles as English as barley wine.

It was typical of the Navy that he put a bullet-burst through his victim's right wing-bay, by way of giving fair warning of impending trouble. The startled German pilot swerved violently away from that bullet-burst, and, in doing so, became completely detached from his diving companions. Then the German pilot grinned cheerfully, for his attacker appeared to be nothing more dangerous than an ordinary English Clerget-Camel, which was fair meat for any well-handled D.7. He wrenched up out of his dive, pivoted on one wing-tip and thumbed both gun controls as his ring-sights captured the end of the Camel's tail.

And that was the last thing his ring-sights ever did capture. With amazing and unaccountable speed, the Camel hoiked its tail out of danger before the flying tracer bullets so much as got within a foot of it. The Camel turned, too, on a radius miraculously beyond the power of any Camel the German pilot had yet known! Next moment, it was diving straight at the side of the D.7, and a line of bullets was smashing the German's dashboard dials into broken glass, was striking and battering at the pilot's body with miraculous, vicious power—

The German pilot shivered convulsively, knocked sideways in his seat by that deadly bullet-stream. He was not conscious of any vivid pain; he felt as though he had been punched furiously by a dozen frenzied boxers. The roar of his engine increased, it drummed in his ears, it became deafening. He suddenly felt violently sick, and his mouth was burning and hot. . . .

The German pilot fell, down into a bottomless black well, forgot that he was even falling, and died before his spinning machine had made three full turns and begun spurning flame.

By this time, the Navy was diving, engine on, as hard as he could go in the opposite direction. For the Circus, becoming aware of the fate of their comrade, had turned. There was no chance of catching up with the fleeing Clerget-Camels, so they were out for revenge.

But they never got it. They never even realised the actual speed capabilities of that impudent Camel, which had got a three-mile start, quite apart from having a record level speed that took it over the lines and out of danger before they fully realised what was happening.

**B**ACK at the aerodrome, the grinning Navy walked into the ante-room where the rest of his men had already gathered, and then solemnly stood on his head—an expression of joy that was the signal for the start of one of the roughest and most hectic "rags" in the history of the squadron.

It was the first straight man-to-man fight that the squadron had won, or even been allowed to attempt, for weeks on end. And the squadron celebrated, as squadrons do. At every meal for the rest of the day, they showed their respect for the victor by putting pins on his chair, ink in his soup, and by furtively crawling under the table to tie his bootlaces together when he thought he was safe from further assault.

All of which was thoroughly approved of by the Major, and, incidentally, by the victor himself. Paradoxically, these mad antics showed that the squadron

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had got its sanity back! Weeks of nerve-strain and depression had been swept away like cobwebs before a fresh breeze.

During the next five days, the squadron actually scored five more victories. To sustain the rising morale, the pilots took it in turns, by the Major's arrangement, to handle the Bentley-Camel. All of them were seasoned, first-class fighters. By employing the same tactics as the Navy had used, with slight variations, they registered their victories without getting even so much as a bullet-hole in the treasured Camel's fabric.

But, amid the general jollification, the Major still had moments of worry. For both he and Captain Tully had noticed that Hauptmann Horst's squadron still made its daily appearance thirty strong.

For every pilot gone, the German Imperial Service was drafting another to take the vacant place. Every dead man was but a seed for a live one. Moreover, it was not likely that Horst would stand this kind of attack for long. Above all things, your German is a clever organiser. Soon, steps would be taken to render the "picking off" game impossible.

And the Horst Circus was still as strong as ever!

IN the quietness of the squadron-office one evening, the Navy walked up and down, pulling irritably at a cigarette and glowering.

"We shan't do it this way, Hopper," he said. "The boys are all happy enough, thank goodness, and if H.Q. will let us, we can give the Performing Horse a run for his money when we all get the new machines. But, as things are, I'm worried. And, what's more, I haven't heard anything from—I mean, I don't know what they're up to. You know, about the—the—well, *you* know."

The Major shrugged. "I'm not going to countenance any straight attack on Horst, if you're not here to lead it, Navy," he said quietly. "The lads are all right, of course, but in a job like that they need a steady head to lead

them. I hope you're not going to be away long—"

As he spoke, the telephone buzzed, and he leant aside negligently to pick it up. But almost immediately his body stiffened. He listened carefully, grunted a brief reply and dropped the receiver back on its hook.

"Oh, I shan't be away long—" began the Navy, but the Major interrupted him.

"A special tender is to be sent down to railhead to pick up additional spares for the new machines," he said meaningfully. "I've been expecting this message for some time, Navy."

"You mean—" gasped the Navy, his eyes blazing with excitement. "Great snakes, do you mean that—?"

"You have your instructions," said the Major calmly. "My orders were that you carry them out at dawn, following the day on which I received the code-signal. Carry on, Navy."

The Navy let out a long breath and then chuckled.

"Well!" he said. "So at last there's one job we *can* carry out, eh? Right! The dawn patrol will take-off as usual to-morrow morning. Full squadron strength. Every machine will carry a dozen three-pound incendiary bombs. I'll give the lads their instructions immediately before we take-off. But, by golly, though, I wish these were orders to go after the Performing Horse! I *wish*—"

"If wishes were horses," said the Major tritely, "there'd be a lot of cat's-meat around here to-morrow morning. Come back alive, Navy. I shall want to hear the stirring tale."

But the Navy, with a gleam of cheerful anticipation in his eyes, was already striding out of the room.

## CHAPTER V "Special Job"

HAUPTMANN HERMANN HORST was in a bad temper. In six days he had lost six good men. Certainly, he had had six more drafted to take their places, but he had the German charac-



teristic of glorying in success, and hated anything that even slightly marred his splendid record.

The Hauptmann, however, also had the German instinct for organisation. For five days he had been on the watch for any "picking off" attack in his rear. By suddenly turning the squadron he had almost got to grips with the last one. But, even at close quarters, that single Bentley-Camel had fairly walked away from them. The conclusion was obvious. The Camel was no ordinary Camel. It was something new.

So the Hauptmann, taking-off immediately after the first pale streaks of dawn on the seventh day, had decided on tactics which, in his triumph, he had hitherto scorned.

Two men had already gone ahead, to comb the heights and stay on the watch. After the big squadron had taken-off, two more followed a couple of miles in their rear. As a matter of fact, it was just the sort of tactical organisation that Major Hopkins and the Navy had anticipated.

But on this particular morning, the Navy and his men were occupied elsewhere. In the gloom that shrouded the tarmac, while the assembled machines stood asthmatically warming up, the Navy had called his men together and addressed them briefly.

"Special job!" he said. "When you get into your machines, you will find crammed in at the sides of the offices a dozen small bombs. They're not very powerful, they're incendiaries. Wherever they hit, they'll start a fire. And all you've got to do is to heave them overboard, one by one, when I lead you down over the town we're making for."

"What town is it?" asked Tim Ryan in astonishment.

"Lord, I've clean forgotten!" said the Navy with bland cheerfulness. "Never could remember names—but I know my way there, all right. The point is, however, that that town has got to blaze up like the bonniest bonfire you ever saw. Don't shy your bombs over all at once. I shall circle round

the place, fairly low down, and I shall drop mine over at intervals of about every second. You're all to do the same. That town's got to be fired from one end to the other. And when we've got it nicely warmed up, we'll all come home to breakfast."

He pushed his way through the group, and ran to his machine.

"Come on, my merry fire-bugs," he shouted. "Get going, we can't hang about here all day!"

And with that the mystified pilots had to be content as they clambered up into their machines, puzzling mightily as they buckled their belts and looked ahead for the waving hand that was the starting sign.

Then, with a mighty concerted roar, the squadron swept forward, climbed gracefully over the far edge of the aerodrome, and roared due west after their incomprehensible leader.

SEVERAL things were happening at that precise second. One was the stealthy progress of three British warships, which were creeping through the heavy rain-haze to certain marked barrels anchored fifteen miles from the Belgian coast. The warships were surrounded by a number of escort-destroyers, C.M.B.'s and other craft, which scouted in all directions to give warning of any approach of the enemy.

In the fire-control top of the flagship, an admiral stood beside a gunnery captain, and stared forward in dead silence. All ships were moving at quarter speed, so that the thud of their propellers would be less likely to be picked up by submarine sound-detectors. Slowly, they forged ahead until they were nearing the buoys at the ten-mile mark where their engines were stopped altogether.

The gunnery expert spoke into telephones, examined the wind chart, and gabbled figures. He scribbled problems on a note-pad, and occasionally had resort to a slide-rule.

At this time precisely fifty-three German submarines were peacefully gathered at the refuelling base, just off Buhl.



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Only their conning-towers were above the surface, open to the cold biting air as engines thudded within their hulls, recharging the great batteries. Snake-like pipes came up from the water, leading down to the conning-towers. They were pipes from submerged oil-drums of vast size, attached to innocent-looking pontoon lighters. Ever since the storming of the Zeebrugge Mole, the German Naval Command had realised the danger of easily identified shore-bases for this purpose. What had been done at Zeebrugge, with the consequent bottling up of an entire submarine flotilla, might easily be done again. British organisation, bad though it was, was more than outweighed by the blind recklessness of British courage—a thing you couldn't calculate.

So sea bases of a new kind, in spots unlikely to be suspected, were decided upon by the German High Command as the order of the day.

CAPTAIN William James Tully proceeded towards the town of Buhl.

On the previous night he had sat up late, carefully plotting alternative courses, alternative tactics, in case of unexpectedly shifting winds, or mists. The plan was clear in his mind, but he was preparing himself for hitches. Now, as he swept diagonally over Dixmude and headed straight out over the coast, he began to frown.

For the rain was stopping. It was an uncertain day. There was even a watery sun peeping here and there through the ragged grey clouds. And, to the Navy's disgust, the wind was whirling all over the compass.

Of all his squadron, the Navy was the only man who noticed the fact, for the simple reason that he was the only member who had more than a schoolboy's idea of the principles of navigation. Behind him, to the south, the clouds were massing steadily, and there was definite indication of fog. To the north and west, the weather was clearing alarmingly. As he crossed the coast and then turned sharply to make an unexpected deviation towards Buhl,

he could see far out over the tossing waves.

And then he jumped, for the dull detonation of a heavy gun came unexpectedly from the shore.

IN the fire-control-top of a battleship, ten miles away, an admiral swore as heartily as any angry A.B. as a shell screamed harmlessly over the mast-head and dropped nearly a mile behind, with shuddering concussion.

"The worst!" he breathed from between set teeth, "the very worst that could have happened! Damn this ruddy ocean! I've sailed it for more than thirty years, and I've never yet known it do anything expected of it. Look at this weather! We've been seen."

"But we can't see the shore yet!" objected the gunnery captain viciously, "and we're on a fifteen-knot tide. Unless I see that blazing town, I wouldn't bet a shilling on getting a shell within a quarter of a mile of that submarine base. What's more, our first salvo's got to do all the damage. We've got to sink that crowd of tin-fish before they can realise the danger, slam down their lids, and plunge! Oh, my hat, what devilish luck——"

Ten miles away, the Navy was saying something about luck also. As the shore guns started firing—guns which the Intelligence had not yet heard about—he made his first wild dive for Buhl. But, even as he did so, he sensed rather than saw a vague scattered shadow almost directly overhead.

And as he looked up, he saw the Horst squadron!

It is a corollary that luck for one man often means the opposite for another. As things stood, Hermann Horst's luck had been as good as that of his enemies had been bad. After starting out he had made directly for the British aerodrome which had been causing so much bother. By prearranged signals, he had intended sending down a couple of his men as decoys to lure the Britishers up if they were not already in the air.

But even from a distance he could see that the aerodrome was empty. He



cursed, for he certainly had not seen the squadron anywhere about.

It was then that, through his wireless, came the Urgency Call which was only occasionally sent out by High Command, to be obeyed by all squadrons in the air, no matter what duties they might be engaged upon.

The Urgency Call ordered the Hauptmann to turn directly west and prepare to meet possible enemy aircraft coming inshore to assist suspected enemy warships located somewhere out in the North Sea. The call was a routine matter, so far as High Command were concerned, and was sent out as soon as they received that sudden and surprising warning. By good fortune Hauptmann Horst and his men were at hand, and within easy striking-distance. Moreover, they were a good deal nearer Buhl in a straight line than the Navy and his men had been on starting out ten minutes or so before.

Now, as Hauptmann Horst plunged down upon Buhl, and upon the eleven-strong squadron of British Camels which were doing the same thing just ahead, he grinned in delight.

This was luck, indeed! By careful tactics, now, he could wipe that British squadron out. He outnumbered them by more than two to one. He had faster machines. And he could make an encircling movement which would drive them out to sea, and prevent them getting back inshore.

Here was the great smashing triumph he had been looking for. Here was the coveted Iron Cross of the First Class, in his own opinion much overdue, absolutely falling into his hands.

The Navy, in the lead of the diving British formation, set his teeth and kept straight on without the slightest deviation.

The thoughts that had been in Hauptmann Horst's mind were in his own. To fight against such odds in slower machines, with escape back to land cut off, was utterly impossible. There wasn't a single man in the squadron who had a chance. Now, right at this moment, if he swerved them aside in a frantic

break for escape, it might conceivably come off. But it must be made on the very second. There must be no hesitation. It was run NOW, or go to certain death.

The Navy did not run.

Of all his squadron, he alone, in the Bentley-Camel, had a chance of fighting for his life, but he did not take it. The very knowledge made him snarl with fury—the knowledge that every one of his men, inside the next half-hour, must be cold meat for German bullets.

**T**HE luck was appalling. It was more than a hitch, more than he or anyone else could possibly have bargained for.

The clearing in the weather was due to the sudden backing of the wind, which was now blowing steadily and strongly from the south. Certainly that wind was bringing up fog. He dived through the first drifts of it as he made for the small coast town. But the damage was done. The guns were now roaring and cracking frantically, proof positive that the distant British ships had been seen.

The Navy had been told to use his head in an emergency, and do what he thought best. Here was an emergency. But the best he could do was to carry out orders. There was no other way in which he could help the plan, which seemed to have gone so disastrously astray, even though it meant his own death.

The Navy kept on. Already he could hear the stutter and crackle of Spandau guns immediately behind, but he thundered straight down over the town, flattening out at a height of less than a thousand feet.

And, ten miles away in that warship control-top, the admiral raked the distant horizon with his glasses, and breathed sharply.

"If that young man is on time, we've still got the ghost of a chance," he breathed. But his voice was drowned by the howling passage of a high-explosive shell, which seemed verily to go through the top-mast halyards



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before it struck the sea with a mighty roar of spray. Another and another shell followed it. The sister ship, to port, was struck on the bows, and immediately fire roared up amidst the appalling, shattered ruin.

"It's now or never!" breathed the gunnery captain. "They've got our range. We're sitting dead still. Another minute will see us blasted out of the water. But if that flying boy's on time—it's right on the second, now——"

The admiral suddenly let out a shout, and jumped across the control-top as nimbly as any midshipman.

"There it is!" he yelled. "There it is. Here, take the glasses. The fire's started! There's a fog coming up—and that may save us—but I've seen the first gleam!"

The gunnery captain whipped up the glasses. Far away, through their magnifying lenses, he saw a glow. It was a glow that spread—that grew in intensity.

With a fifteen-guinea pair of bifocal binoculars lying smashed on the deck where they had dropped from his hands, the captain flung himself at a speaking-tube, rattling out figures and deflections.

Then both he and the admiral sprawled flat on their backs as the whole ship shuddered to an appalling vibration and shifted bodily backwards quite six feet in the water.

Which is the effect of a full broadside of 16-inch naval armament.

### CHAPTER VI

#### Decoyed for Ducking

THE Navy did not see any detail of the sudden, annihilating end of the secret submarine base. He did not see salvo after salvo of 16-inch shells come whistling and raining down out of the fast-darkening sky amongst those fifty odd clustered craft.

Those that received a direct hit sank practically on the instant, their fragile plates disintegrating like cracked eggshells beneath the appalling force of the high explosive. Those that were not struck buckled up with hulls collapsing in the frightful concussion. One after

another, the submerged tanks of oil burst in vast columns of uprushing flame. In two minutes, the cream of the latest German submarine craft were annihilated and lying, a tangled mass of wreckage, on the sea-bottom.

And Buhl burned furiously.

Absolutely heedless of the pursuing danger, the Navy had done his work. In that first dive he went clean across the town. Contrary to his own orders, he made no attempt at careful bombing. He flung the small incendiary missiles out as fast as he could grab them and toss them over the side. His companions did likewise. Every one of them now realised the appalling position they were in.

But, to their eternal honour, not one turned back. Not one man tried to save himself. Without the slightest break in information, all kept at full speed on the Navy's tail.

Then the Navy turned widely, to roar back across the town and finish the bombing in a cross-direction—and found himself flying dead into the guns of the Horst Circus.

Actually, his move took the Hauptmann Horst clean by surprise. He had expected a chase. It had never entered his head that the Britishers would turn and come right at him. Jerkily, he altered course, thereby just saving his life, for the Navy and he were approaching one another at a combined speed of something over three hundred miles an hour, both thumbing their gun-controls.

That sudden reversal of direction was the best thing the British force could have done. The Horst Circus was disorganised. Two men were actually hit, and whirled away down, plunging into the sea of flame which was already boiling up below.

But even such a waspish counter-attack could not help the trapped men to any great extent. Horst swerved over cleverly, took the land side and led a ragged formation diagonally, planning either to force the enemy into a pitched battle, or dead out to sea.

The Navy saw the move, but was



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powerless to combat it. In his Bentley-engined Camel he might have had a chance of getting clear away and back to shore again at a headlong run. But the thought of doing so, and deserting his men, never entered his head.

There was just one cold feeling of satisfaction in his heart. This time, the squadron would not have to run. Now at last, without attention to orders from Headquarters, they could fight their enemy. It was a hopeless fight, there was not a chance for one of them, but not one would die the death that all had feared for weeks on end, the death by bullets in the back.

Thick, drifting fog was all around them now, beaten along by the strong wind blowing from the south. Yet it offered no loophole for the Navy's men. The two forces were on top of each other, too close, even in the mist, to lose touch. That south wind, bringing the fog, might be of help to the British ships out at sea—but so far as the squadron was concerned——

The Navy's brain seemed suddenly to stop dead. Three words re-echoed through it. Without knowing he did so, he spoke them aloud.

"The south wind——"

And it was because he had the brain of a trained navigator that the words, and all they meant, became suddenly and brilliantly clear.

For a moment he had a fierce fight with himself. They were at grips with Horsey's Circus at last. They could fight now and, even in death, wipe out all insults. To a man in the heat of battle, the relinquishing of such an opportunity required a terrific effort of will.

The squadron was still following in formation behind him. Away to their left, close by in the fog, the great Horst Circus was cutting off their return inland. Every man of the British side was waiting, tense, thin-lipped and furious, for the expected German attack.

And then every man in that squadron was put to his greatest test of discipline.

For the Navy fled again! He swerved over and turned clean out to sea!

FOR long minutes now, both squadrons had been completely cut off from any view of the shore-line by the weaving fog, which had grown thicker and thicker borne on the wings of the strong south wind.

The Horst Circus turned behind the Navy, and followed him. He flew due north-west by compass, straight out across the ocean. And the effect of his sudden movement was to give him a good long lead over the German force, which had naturally made its turn a few seconds later.

Hauptmann Horst frowned. Instinctively, he glanced at his petrol-gauge, and saw that it registered about a quarter full. He knew that the rest of his squadron would be in the same state. Rapidly, he came to a decision as to how far out to sea he dared fly before turning back with the certainty of reaching land.

Then he smiled. The British squadron, although far ahead, must turn and so be caught. Their petrol supply would be about the same as his own. If they did not turn, they would come down in the sea and be drowned in its icy waters.

It occurred suddenly to Horst that it would be a brilliant idea to bring that event about, in any case. When the Britishers did turn, he determined to let them approach within a mile or so of the shore, and then to prevent their getting back, and force them down into the sea. Whatever happened, he and his followers would have just enough petrol to get back to dry land, since they were on the "inside."

These insolent Englishmen should drown like rats. They had run so often, they should not even be given the honour of death by fighting.

It was just about then that the Navy did turn. In a wide circle, he swung the squadron round. He began heading just west of south. And every one of his followers knew that, by this move, if they kept on the same course, they would reach the shore-line somewhere about Calais. It seemed that the Navy was trying to throw off the chase by going so far into home territory.

Horst thought the same thing. Grin-



## ORDER OF THE BATH

ning, he purposely allowed the move, still with the idea of holding the Britishers off the coast in the last mile or so.

But it was then that things began to go wrong as far as Hauptmann Hermann Horst was concerned. When he judged they were nearing the coast, he made a signal and dived down low, alone, to make sure of his position with regard to the shore-line.

To his horror, he could not find it! Yet the fog was thinner here, and he could see for quite a long way.

Within his mind, horror piled upon horror as he saw nothing but a vast expanse of sea all round him and no land anywhere in sight!

The Hauptmann made a swift decision and, swinging up again, signalled his followers. He turned east at a sharp angle, and gave his engine all it had.

Immediately, the Navvy turned, too. By the amazing paradox of war, he was now the pursuer, and the German force the runaways. He began to catch up with them, his guns barking as the enemy came within range.

Then, suddenly, the engine of the Navvy's Camel began to cough and splutter. Almost at the same time, the rest of the Camel engines were affected with the same complaint. And, to make the party complete, twenty-eight Mercedes engines also followed suit.

"DAMN!" breathed the Navvy. "I did so want to have just one smack at them——"

With a wry grin he began swinging down towards the surface of the water. His tank was empty. He could see the Horst Circus, also with empty tanks, fluttering down ahead like wounded sparrows. And behind him, machines of his own followers were coming down as well.

**F**IVE minutes later, on a leaden sea which still showed no sign of a shore-line, there were just over thirty sinking machines, gradually getting lower and lower in the water.

There was also a fine show of Verey lights. Every pilot in the two squadrons had grabbed out his Verey pistol and

started shooting, even before he touched the water.

And it was only natural, as the astute Navvy had previously realised, that this fine firework display should be seen by the plentiful shipping which, even during the war, was constantly in and out of the Calais roads.

A couple of destroyers were on the scene within five minutes. In a very short time they had picked up every member of the British squadron, and all but two of the German. And everyone of the survivors—with the sole exception of the Navvy—was still in a state of almost stunned bewilderment.

Neither of the squadrons could understand how the thing had happened. By all the rules of the game, that sudden turn of the Germans ought to have taken them all well back across the coast. Yet here they were still out at sea beyond sight of land!

The spluttering Tim Ryan was the first to hear the truth from the Navvy himself. As they both clattered down below, in one of the rescuing destroyers, soaked and shivering though he was, the Navvy was laughing.

"I had to do it!" he said. "By golly, our orders were to wipe out Horst's Circus—and we did it! We've collared the lot! Horsey's out of the game for the rest of the war, with all his merry men——"

"Yes, but——" panted Ryan, "but how on earth—I can't understand——"

"Of course you can't," grinned the Navvy. "You've got about as much idea of navigation as a seasick cab-horse has of playing the flute. I'll bet you didn't even notice that the wind went round to the south and stayed there, did you?"

"No, I didn't," answered Ryan, "and anyway, I don't see what on earth——"

"When you get home," said the Navvy, "get yourself a bit of paper. Draw the French coast from Calais to Ostend. Then decide what would happen to a machine *taking a south-westerly course*, out at sea, in the face of a *strong south wind*. If the machine was *really* going south-west, it would come back



inshore. But against a strong south wind, even you might realise that it would take a crab-like course, keeping parallel with the coast and not making back inshore at all! Add to that the fact that there was a most convenient fog, so that our little Circus friends couldn't see the shore, or check their drift——"

"Great snakes!" gasped Tim Ryan, "Great snakes. Now I see the idea! But, Navvy—Navvy, you old fox! I believe you worked that out from the start. You always were a beggar for figures!"

The Navvy shrugged his shoulders modestly, as he stepped out of soaking trousers.

"Orders is orders," he chuckled. "Good old Hopper told us that somehow or other we'd got to damp the ardour of that Performing Horse. And, by golly, we've done it! We've damped his ardour, and given him an order—the Order of the Bath!"

**I**N another part of the ship the Hauptmann Horst, changing into dry clothes

lent by a courteous enemy, heard mighty laughter rising. Still puzzled, furious and shivering, he gritted his teeth. He could understand nothing of his present plight as a prisoner of war. He was dazed by the turn of events.

It is a matter of history that he never received that Iron Cross of the First Class which had seemed so well within his grasp.

On the other hand, Captain William James Tully received an order he had not expected—the enamel-and-gold Distinguished Service Order. He also received a little brass crown to wear on his shoulder-straps instead of three pips.

In addition to this, there were eleven Military Crosses officially issued to the squadron within the next week.

Altogether, as Major William James Tully was subsequently heard to remark when viewing his beribboned comrades at the dinner table, they looked like a crowd from the ruddy—and much maligned—A.S.C., who were, by popular legend, awarded a decoration every time they were caught pinching the jam!

## HERE'S THE ANSWER

*Readers' Questions are invited and should be addressed to AIR STORIES, Tower House, Southampton Street, London, W. C. 2. A stamped, addressed envelope must accompany ALL enquiries.*

**SPEED RECORDS** (G. S. Makin, Barnstaple, Devon). The present landplane speed record of 352 m.p.h. was set up on September 13th, 1935, by an American, Howard Hughes, flying a Hughes Special monoplane, fitted with a 1,000 h.p. Pratt & Whitney Wasp engine. The world's absolute speed record, set up by the Italian Macchi-Castoldi seaplane (2,500 h.p. Fiat engine) stands at 440.67 m.p.h.

**BRISTOL SCOUT** (T. Morgan, Singapore). The Bristol Scout of 1914 was an equal span biplane with no fin and a small square-shaped balanced rudder. It had a span of 23 feet, was 21 feet long and, with an 85 h.p. Le Rhône engine, had a top speed of about 100 m.p.h.

**GERMAN WAR BIRDS** (P. G. F. Mercer, Chingford, Essex). The Kondor Scout was a high-wing unbraced monoplane, built about 1918, and practically a copy of the Fokker D.8. Its engine was usually a 190 h.p. B.M.W., which gave it a speed of about 145 m.p.h. The Walvet Scout was of similar design and period, but some 7 m.p.h. slower. It did not see war service. The Pfalz D.13 scout was produced late in 1918 and was very like a small edition of the Bristol Fighter. With a 225 h.p. Benz engine it could do 140 m.p.h., but did not see service because of its dangerously high

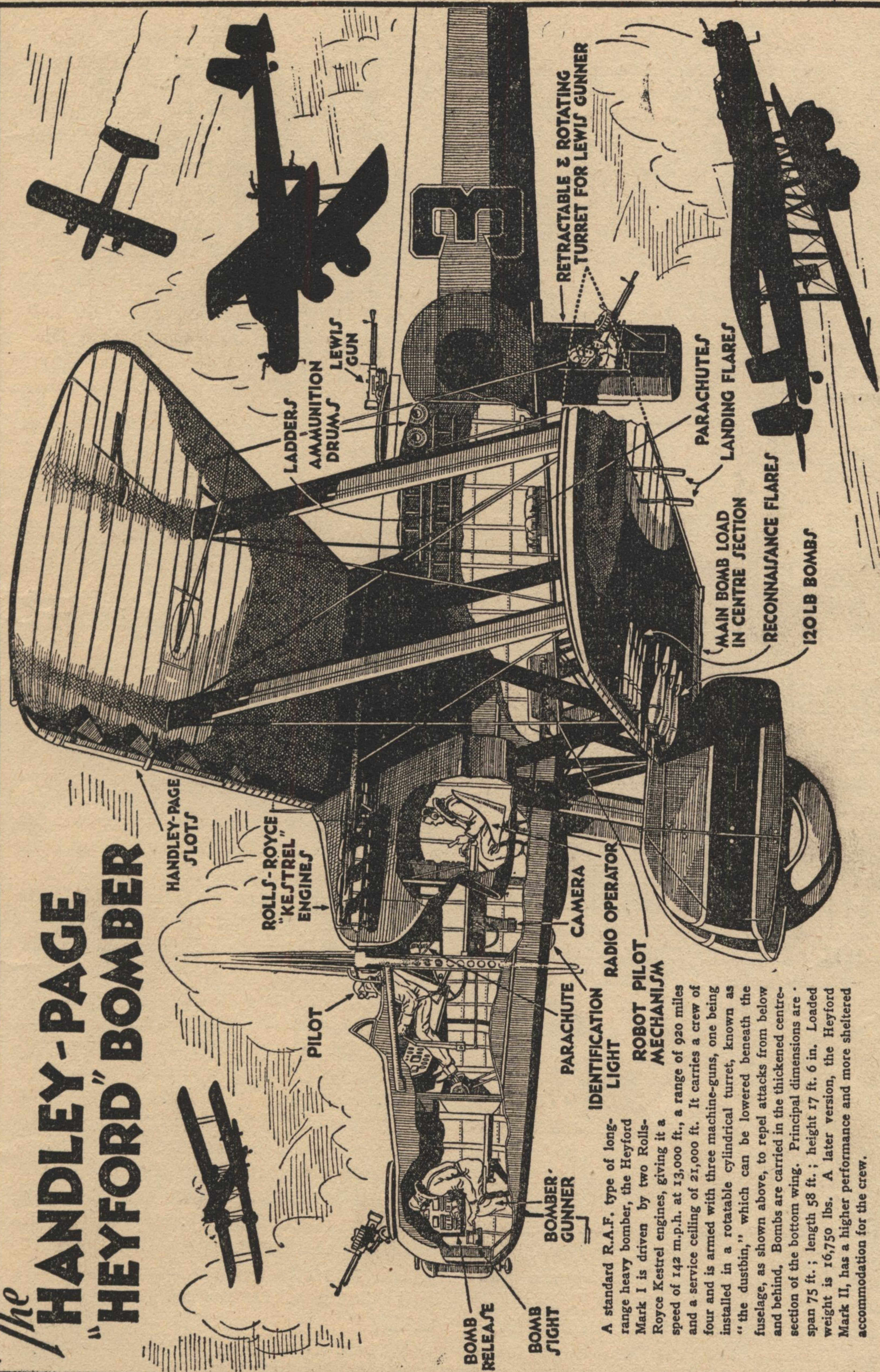
landing speed of 75 m.p.h. The Siemens-Halske and Siemens-Schukert D.4 were one and the same machine, the latter being the name of the makers of the aircraft and Halske the name of the engine.

**R.A.F. SQUADRONS** (G. W. Hainsworth, West Drayton, Middlesex). (1) The location of all R.A.F. squadrons, together with a list of their commissioned personnel, is given in "The Air Force List," issued monthly, price 3s., and obtainable from H.M. Stationery Office or through any bookseller. (2) No. 219 Squadron is by no means the last, numerically, in the R.A.F. There are Nos. 220 and 230 Squadrons in the R.A.F., sixteen squadrons in the Auxiliary Air Force, ranging from No. 500 to No. 611, and Fleet Air Arm squadrons with non-consecutive numbers from 712 to 825.

**"B" LICENCE** (T. Crowder, Borough Green, Kent). Sorry to disappoint you, but it costs considerably more than £60 to qualify as a commercial pilot. The exact cost depends upon a pupil's ability, but, in any event, a candidate must put in at least 100 hours' solo flying and few schools charge less than 30s. an hour. However, we are sending you the addresses of two good and inexpensive schools specialising in "B" licence training and suggest you seek their advice.



# The "HANDLEY-PAGE" "HEYFORD" BOMBER



A standard R.A.F. type of long-range heavy bomber, the Heyford Mark I is driven by two Rolls-Royce Kestrel engines, giving it a speed of 142 m.p.h. at 13,000 ft., a range of 920 miles and a service ceiling of 21,000 ft. It carries a crew of four and is armed with three machine-guns, one being installed in a rotatable cylindrical turret, known as "the dustbin," which can be lowered beneath the fuselage, as shown above, to repel attacks from below and behind. Bombs are carried in the thickened centre-section of the bottom wing. Principal dimensions are: span 75 ft.; length 58 ft.; height 17 ft. 6 in. Loaded weight is 16,750 lbs. A later version, the Heyford Mark II, has a higher performance and more sheltered accommodation for the crew.



# ARABIAN FLIGHT

Nothing ever Happened on the Desert Aerodrome of Tel Ebban—until a sudden Tribal Uprising caught it with its Squadron away at the Base and with only Starlings' Little Stars to Stem a Savage Tide of Armed Revolt

By A. J. PELHAM-GROOM

## CHAPTER I

### Squadron Replacements

FLIGHT LIEUTENANT JEREMY JEFFERSON, known to all his friends as "J.J.," was a product of the R.A.F. Cadet College at Cranwell. Tall, fair, with an infinite capacity for seeing humour in anything that occurred, he was a member of the R.A.F. Pentathlon team and well above average at the five accomplishments of running, pistol shooting, fencing, swimming, and riding. It was, therefore, because of no softness on his part that envious brother officers often referred to him as "Beloved of the gods."

But it was of matters other than sport that J.J. was thinking as he entered the H.Q. building on the sun-baked desert aerodrome of Tel Ebban and treated his Commanding Officer, Squadron Leader Oliver, D.S.O., M.C., D.F.C., A.F.C., to a crashing salute.

"Morning, J.J. Your two new pilots arrive to-day from Bashek." The C.O. flicked a message-form across the desk.

"*Flying Officers Jarrold and Jalden reporting 808 Squadron for flying duties*" read J.J.

"Ever met either of them, sir?"

"No," replied his C.O. "But I've looked 'em up in the List, and they've both got about eighteen months' service in. Wonder what their vices are?"

J.J., determined to lose no time in finding out, was on the aerodrome when the large troop-carrier arrived. His languid form was spotted by the pilot, who waved cheerily, but J.J. had little time for anyone but the new arrivals, and having snapped a few staccato instructions to a bearer regarding their

baggage, he devoted his attention to the newcomers.

"Jarrold?"

"Sir!" Toby Jarrold was as dark as J.J. was fair, and about the same height as his new flight commander.

"Grand! And you're Jalden?"

"Sure, sir." Jalden was stocky. A pair of massive shoulders from which a pair of arms hung negligently had earned him the soubriquet of "The Ape." His voice held the music of a Southern American drawl.

"O.K. Well, you'll want to get bedded down, but I suggest a drink first. The squadron's away at the base, and we've slackened restrictions about 'alk' for the time being."

J.J. led the way to the mess, and as they were passing through the door Toby paused dramatically.

"The drinks are on Jalden, sir," he announced. "I bet him there would be an even number of steps up to the mess."

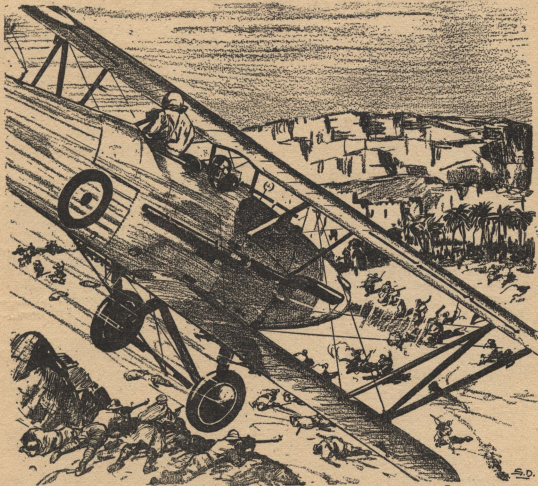
"Say, you're a danger to society," drawled Jalden. And then to J.J.: "You know, sir, this is the twenty-fifth bet he's won off me this week."

J.J. laughed. "Sounds pretty good going to me," he said. "Oh, and by the way, you can cut the 'sir' out. I expect you to salute me once a day and call me 'sir' on that occasion, but apart from that I'm J.J. to you. That's excepting the times we meet in my office, which won't be often. Our job's to fly, and that's what we're going to do. O.K.?"

"Sure. And I'll bet you a bottle of beer, Jalden, that you call our illus-



## A Story of the East and of the R.A.F. in Action



*Madly the Arabs ran for the trees, with the Audax spattering death at their heels'*

trious flight commander 'sir' before I do."

"Done!"

Jefferson held his glass up to the light and watched the cascading bubbles in their mad rush to the surface.

"How many hours have you got in, Jarrold?" he enquired.

"Seven hundred and fifty, si—shiver my timbers!"

"Cranwell?"

"No. 16 F.T.S.\* then 907 Squadron."

"So you know the Audax."

"Do I not?"

"And you, Jalden?"

"Haven't totted up this month, but it's something over two thousand."

"What!" J.J. was incredulous, and Jalden grinned happily. "True enough. I'm a Cannuck, learnt the game in the States. Had my own crate."

J.J. winced. "Not crate, laddie, please—anything but crate."

"Sorry. Then I came to England and . . ."

"They made you learn all over again, I know. Well, did you have a good trip out? I should have asked that before, but I was rather keen to find out how much you knew."

It was Toby Jarrold who answered.

"Rather," he said. "Most amusing

\* F.T.S.: Flying Training School.



cove on the boat, local big-wig I gather—Sidi ben Haq. Grand fellow; been learning to fly in England, and's now on his way back to his tribe. He's had a Comper Swift sent out which I imagine will be plastered with the King's photographs. He had his cabin crammed full of them."

"Sidi ben Haq, eh?" remarked J.J. "I've heard of him. Quite a big noise round here, I believe. The C.O. was talking about him the other day."

"Incidentally," Jarrold interrupted, "where is the C.O.? Oughtn't we to toddle along and make our salaams?"

"The C.O., who, by the way, is the king of all men," J.J. explained, "is out on a personal reconnaissance."

"Recco, eh?" queried Jalden. "Anything exciting?"

"Good Lord, no," laughed J.J. as they left the mess to stroll over to the hangars; "looking for jackal, I expect. Nothing more exciting than that ever happens here."

## CHAPTER II

### Flight of the Starlings

THE next morning "D" Flight went into the air, and, led by J.J., made a tour of the countryside. Save for a range of hills in the far distance, it was as flat as the ocean and burning with a heat that could be felt even at four thousand feet. It was on the return from this initial trip that the Flight first earned the name by which it was later to become famous throughout the Service.

The three aircraft approached their temporary aerodrome of Tel Ebban in perfect formation. Then on J.J.'s signal they broke up and indulged in a whirlwind display of individual aerobatics, each one rolling, diving, banking and spinning with perfect timing.

"Looks like they've all got fleas they can't scratch," said an airman on the apron, but the C.O. and his Adjutant watched with professional interest.

"Good flying, those J's, sir."

"Jays," echoed the C.O. "Why,

from the murmururation they're making up there I should think magpies would be a better description of 'em."

"Murmuration," said the Adjutant, "is the group term for starlings."

"Starlings? Well, call 'em what you like, but they can fly, and that's what I want. Starling's little Stars!"

And so the three "J's" landed to find they had already been christened "The Starlings."

"Gosh, it's hot," said Toby, mopping his brow a few minutes later as the three of them sat in the shadow of the mess. "Bet the mercury's up to a hundred and twenty degrees."

"Not taking you," Jalden promptly retorted. "And to think that my last job in England was investigating officer at an L.A.C.'s \* Educational Examination and then the room was so cold that the men could hardly hold their pens."

"In England, of course," put in J.J. "Lucky dogs, you know. When I was on Salisbury Plain it was so cold that eggs and tomatoes froze; we were cut off by snow for ten days."

"I'll have a little bet with you," began Toby, but was interrupted by the native mess steward.

"Excusing me, sahib," he said. "The Officer in Command wishes Jefferson Sahib to come to him *eck dum*."

"Be seeing you," J.J. remarked as he slid off the corner of the table and strode languidly out of the ante-room and then hurried to H.Q.

"That you, J.J.?" called a voice as he mounted the verandah. "Come in."

THE Squadron Leader was sitting at his desk, a worried frown on his face, and his Adjutant was gazing despondently out of the window.

Before the desk an Arab, his torn clothing bearing testimony to the hardness of his way, gazed in silence at the floor.

Oliver, his chin resting on his cupped hand, glanced at J.J.

"Hell's loose," he announced

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\* L.A.C. : Leading Aircraftman.



abruptly. "This wallah says his tribes are rising."

"Not the whole bag of tricks, sir?" J.J. was incredulous.

"Can't say that, but he reports that chiefs are holding a council under Ben Raddi, and that's more than enough. He is our perpetual fire-brand. I've sent a signal to the base asking for our flights to return, and," Oliver shrugged his shoulders, "'here's the answer!'"

J.J. accepted the proffered slip.

"Jupiter, that's bad! Sand-storm holding them up, eh? That means we're left with five 'planes to play about with."

"Neither more nor less," the C.O. agreed. "You and Jalden had better do first reconnaissance. I'll go next with Jarrold, then Sunny Jim here"—Oliver indicated his Adjutant—"can work in with someone. Patrol work only, no fireworks—we've no authority to beat 'em up. Right, let's get moving, and don't let 'em take you prisoner!"

J.J., pausing only to issue a few orders to an airman, dashed across to his flight, and while they hurriedly made ready to leave, the wireless worked at high pressure.

Higher Command wanted confirmation . . . confirmation . . . no, the sand-storm was still in full force . . . confirmation . . . confirmation. And before the patrol could leave the ground confirmation was forthcoming, and of a nature that shook the scepticism of those in the Seats of the Mighty to its foundation. Oliver came running across to the hangars and found the two pilots.

"Hancock's dead!" he announced briefly.

"The Government Agent?" J.J. gasped.

"Yes! Mutilated, poor devil. News just came in. They broke into his bungalow and—well you know the rest. Don't let them catch you!"

"Not likely, sir. Well, we'll be off. Ready, Jalden?"

"All ready, sir."

the back seat of J.J.'s Audax A.C.2, Arthur Clark, who, for reasons unknown but honoured by long tradition, was known as "Nobby," hummed a cheerful little ditty which related the sad fate of some Vernon pilots who had been captured by Arabs after having to make a forced landing. The song went on to deal with their experiences after death. A happy man was Nobby, and quite undeterred by the gravity of the situation implied by their present lone patrol.

For it is an unwritten law in the R.A.F. overseas that a single patrol is never sent out if there are enough 'planes to avoid doing so.

At intervals J.J. sent back negative reports by wireless to Tel Ebban. There was not a sign of tribal movement, and he was fast coming to the conclusion that the Arab's warning had been another false alarm, and that the murder of poor old Hancock, the Government Agent, was an incident apart.

"Hello, Jalden—Hello, Jalden," he called. "We'll go as far as that oasis—and then return. Over."

"O.K. with me," came back the reply from the Audax out on his wing.

The two 'planes made a circle round the desert well and turned for home, but only five minutes of the return journey had elapsed when Jalden's Kestrel developed an agonising cough.

"Christmas daisies," he muttered. "This ain't so funny."

He gave the throttle a sharp jerk, hoping to clear the engine, but the paroxysms grew worse, and finally, with a despairing choke, the engine stopped altogether.

Automatically Jalden's left hand pushed the nose down, and switching on his wireless set he told J.J. in lurid terms what had happened to his engine.

In effortless turns he approached the ground and made a perfect landing near a hillock, while Jefferson, pausing only to report what had happened to Squadron H.Q., and to say that he was going down to lend assistance, throttled back his engine and glided towards the sister-Audax.

THE two 'planes skimmed over the hard surface of the aerodrome, and in



## CHAPTER III

### Down in the Desert

IT was not until J.J. was almost down that he realised that this particular piece of desert was by no means flat. A nice place to choose, he thought—with enough stones lying about to make even a graveyard envious.

But it was too late now to find another patch. He glided on, and then, after his final turn, straightened out, and was just congratulating himself that all was well when the starboard wheel hit a boulder, the tail went up, the airscrew bit the dust, and the air was full of wooden splinters choicely mingled with colourful English adjectives.

"Carnage and crows!" gasped the pilot as he hung forward in his harness. "Not a bright effort!"

He pulled the pin and released himself. Then, having slid to the ground, he turned to assist his gunner who, with his face covered with blood, was emerging from the cockpit.

"How did you do that?"

"Caught it on the flaming gun-ring, sir. Nothing very serious."

"Let's have a look at it." A brief examination showed that it was only a surface wound, and having rifled the machine's first-aid kit for the iodine that is its most useful component, J.J. turned to meet Jalden.

"Dr. Livingstone?" Jalden enquired cheerfully.

"No, Alice in Blunderland," replied J.J. "This is a pretty kettle of fish. What's your trouble?"

"Haven't had time to diagnose it yet—too engrossed in watching you, and anyhow there's no need to ask what yours is."

"Fairly leaps to the optic, doesn't it?" admitted J.J. "I suppose we'll be here for the night unless we can get your juggernaut into the air. Pity they don't run 'buses in this country. But they don't, so I suppose we'd better agree on the plan of campaign."

"Hamilton," he turned to Jalden's gunner, "you get up that hill and keep a look-out! Clark, get the wireless

rigged up. Jalden, get out the ground strips, both sets, and show 'Bad Landing Ground,' and 'We Need Help by Ground Transport.' Meanwhile, I'll have a crack at that engine of yours."

From the innards of Jalden's Audax Nobby Clark produced a collapsible aerial, which he hastily erected. Then came "Mary Pickford," that ingenious hand-operated wireless generator, without which a 'plane on the ground would be helpless indeed. In five minutes the wireless set was in working order.

"WHAT shall I tell them?" Jalden enquired as he sat down at the tapper-key.

"Everything," grinned J.J. "Firstly, that your flight commander doesn't think he's quite so good at choosing landing-grounds as he did, and secondly, that he's rapidly losing faith in his prowess as a mechanic. No, tell 'em we've seen no Arabs, and that all is peaceful. We'd like assistance, and explain what is wrong with my 'plane.'"

Jalden tapped away busily while Nobby, with perspiration pouring down his forehead, turned the handle of the "Mary Pickford."

From time to time J.J. glanced at them and noticed Jalden blink more than once, and when at last the latter removed the headphones and mopped his brow, J.J. enquired "Well?"

"Not so well. The Old Man doesn't consider us with the same parental feelings as of yore. He says, amongst other things, that we'll have to stay here the night, but he hopes, mark that—*hopes*—that Toby'll be able to look in and see us later. Drop us a little food, perhaps. A tin of raspberries, most likely, but he's making no promises. My God, I don't know why people rave about the East. I suppose it's because they know nothing about it beyond what they see on the films. Women like Marlene Dietrich riding on white pomfrets."

"Palfreys, if you don't mind," J.J. corrected.

"Palfreys, then," Jalden agreed. "Dashing gigoloesque sheiks plunging



about on Arab steeds. Exotic perfumes and—and, well mummies."

J.J. laughed. "Instead of which, flies, fleas, and towns you can smell from as high as four thousand feet. Not a woman within a hundred miles, and natives that smell worse than their towns. You know, it's a wonder to me that that statue of De Lesseps at Port Said, which stands pointing down the Canal, has managed to keep its arm outstretched all these years. I should have thought he'd have been holding his nose long ago."

"True enough," admitted Jalden. "And to think we might be sitting in an English pub with cool clear beer in front of us !"

"Shut up ! We'll be thirsty enough without that."

"Oh, don't worry, I came prepared !" was Jalden's surprising retort.

"What do you mean, prepared ?" J.J. demanded.

"Just that !" was the cool reply.

"Look here, Jalden, when two Pillars of Empire fall out and——" began J.J., striking an attitude with his spanner held aloft, "when they fall out, I say, it is a sad day for the British Constitution. What, my brave Boy Scout, did you prepare yourself for ?"

"A big thirst, O Commandant ! But now that you've dropped in—and dropped just about describes it—I suppose I'll have to make my thirst a little one. A pity, because it's really only a small crate of beer !"

"What ! ! !"

"Just a tiny one. Of course, I know it's against King's Regs. and Air Council Instructions, but think of the thirst you might have."

"Think of the knuckle-rapping you'll get when you get back," J.J. rejoined.

"Then you won't drink ?" Jalden said, with evident relief. "Well, well—it's a poor thirst that never rejoices."

"Don't delude yourself," was J.J.'s crushing rejoinder, "I'm drinking. Here, Clark, see what you can do with this engine !"

THE work proceeded slowly but methodically. From time to time Jalden renewed contact with the Squadron, but no relief was sent to them, and it was not until the late afternoon, when J.J. had returned to the attack on the Kestrel and had skinned his knuckles for the third time, that the hum of an approaching aircraft was heard.

Jefferson threw his spanner into the air and caught it again. "Old Toby ! We may be home to-night after all," he rejoiced. But as the noise grew louder he looked at Jalden in amazement. "That's no Kestrel," he announced.

"I'd just arrived at that conclusion," admitted the other, and then the unknown aircraft was spotted.

In silence they watched it approach.

"If I was a madman, I'd say it was a Swift," said Jalden.

"So would I."

The stranger throttled down his engine. "He's going to land—and it is a Swift," shouted J.J. in amazement. "Well I'm damned. Some England-Australia flyer lost herself, I suppose !"

The Comper Swift glided in and made a perfect landing quite close to them. The pilots stood motionless as the newcomer slid from his cockpit, but J.J.'s hand sought his pistol.

"Looks like a wog. Look out for squalls !"

"Larrikins," shouted Jalden, "it's Ben Haq. You know, the patriotic cove who came out on the boat with us."

"Well ! Well ! Of course, you said he had a Swift."

The tanned figure who, despite J.J.'s recent assertions, contrived to look very much like the late Rudolf Valentino, strode lithely towards them. At a short distance he halted and favoured them with a formal salute. Suddenly recognition came to him, and he sprang forward to grasp Jalden's arm.

"By the Beard, this is good indeed. My friend of the boat. But you must



not stay here ! " His eyes swept over the two R.A.F. 'planes, and his smile vanished. " But one 'plane between three of you. That indeed is not good. "

" Four of us, " put in J.J.

" Four ? "

" Yes, we've a scout out on the hill. "

" One of you must go and get help. The tribes here are rising. The cause I do not know. You must go ! "

" Hold your horses, " J.J. objected.

" That's easier said than done. Neither of these machines is serviceable, and, well—that's all there is to it. "

" I . . . , " began Ben Haq, when a shout from the hill interrupted him, and with one accord they all turned to see Hamilton sprinting down the hill. Even as they watched, several figures appeared on the crest. There were several white puffs, a few staccato cracks, and the airman fell on his face, jerking spasmodically.

" The swine ! " snapped J.J., jerking at his Colt. " Get the Lewis guns going. Let 'em have it ! "

" Hold ! One move towards that aeroplane and I'll blow this officer's head off ! "

J.J. swung round in amazement to find Ben Haq's automatic within unpleasant proximity of his head.

" You ruddy traitor ! " he snapped.

Ali Ben Haq flinched. " Stand perfectly still, please ! " he ordered.

" **T**HAT be damned for a yarn. " Jalden, his surprise of the Arab's treachery mastered, flung himself forward, and with a swift blow jerked the pistol aside. Then, seizing Ben Haq round the waist he heaved him into the air. Three times he spun round with the Arab kicking madly above his head, then, with a sudden jerk, he catapulted him at the ground.

But now the raiding party were up to them. Twice J.J.'s Colt fired, and two men fell. Then it was hand to hand until the weight of numbers bore the Englishmen to the ground, though even then Jalden struggled to his feet again, and with his long arms succeeded in clearing a space about him.

A deft kick, a mule-like punch, and his way was clear. Running hard, he reached the Swift and scrambled into the cockpit. The engine roared, and he tore across the ground, scattering Arabs in all directions. Then, digging a wing-tip into the loose sand, he spun round and charged again. Once more they scattered, and though several, braver than the rest, stood their ground for a moment in a desperate attempt to get a shot at the speeding 'plane, even they were forced to duck for their lives at the last moment.

Nevertheless, it was a party of these warriors that finally ended Jalden's exhibition of crazy flying. Three of them failed to get out of his way in time, and the impact caused the Swift to swerve wildly, a wing-tip caught a projecting boulder, and the small aircraft cartwheeled over on to its back.

J.J., his arms pinioned, watched them drag his companion from beneath the fuselage and sling his limp body across a horse.

" A pretty kettle of fish, " he murmured to Clark, who was struggling at his side.

" It is that—and of all the triple-obdurate semi-opposed swag-bellied sons of— "

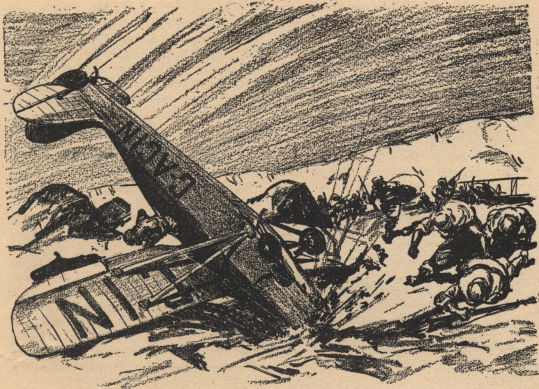
" Shut up ! " came the sharp command from Ben Haq, who had risen to his feet and was thoughtfully masaging his jaw.

" Shut up yerself, you pig-eating— " Nobby began furiously, but his tirade was abruptly terminated by a rifle butt impinging on his stomach. Winded, he fell to the ground to the accompaniment of guttural Arab laughter.

The sight of Clark on the ground and Jalden coming towards him, a sack across a saddle, filled J.J.'s cup of bitterness to the full. They were caught like a parcel of fools. Why hadn't Hamilton given them more warning, he wondered. Probably the man was dozing and had been taken unawares.

With the return of their leader from the wrecked Swift, a consultation took place between the Arabs and Ben Haq, but since it was in Arabic, a language of which J.J. knew only the impurer





*A wing-tip caught a projecting boulder and the Swift cartwheeled over on to its back*

words, the Englishman was left little the wiser.

## CHAPTER V

### The Squadron takes a Hand

**S**QUADRON LEADER OLIVER stood in his office at Tel Ebban and seriously considered tearing his hair. The tribes were rising in Heaven only knew how many directions, two flights were away, and two of his remaining 'planes were down in the desert. He looked up as Jarrold entered his office on his return from patrol, and in a few clipped sentences outlined the situation.

"You'd better take some food out to them. Don't land unless anything is wrong. We'll send transport out in the morning. On your return we'll go out again, and for the love of Mike keep in touch with us here!"

"Very good, sir!"

And so Toby set off. A cheery soul this Jarrold, and the fact that all respon-

sibility now rested on his shoulders worried him not at all.

With the refrain of "Clementine" coming discordantly from his lips, and his mind busy with thoughts of the note he proposed to drop to Jalden by parachute together with food supplies, he took-off and set a course towards the map co-ordinate given in J.J.'s first message.

The expanse beneath him was desolate. Not a living thing moved, but here and there an eddy caused a funnel of sand to whirl into the air, where it danced like a dervish until it subsided as quickly as it had arisen.

Toby watched these dancers curiously. They were a new experience to him, and only that morning he had been badly shaken when half a dozen petrol drums had whirled into the air and cavorted madly about the hangar roof.

The Kestrel droned on.

"Ought to be about there by now," Toby muttered at length, and almost immediately he saw the machines out to starboard. "Three of them! By



Harry, that's funny!" he ejaculated. Gliding down to within two hundred feet of the ground, he flew round the abandoned aircraft. The total absence of life worried him, and a sudden glimpse of a flock of vultures on the hillside made him decide to land immediately.

"Hello, Tel Ebban! Hello, Tel Ebban!" he called by radio to H.Q. "Three aircraft found—three aircraft found. No sign of pilots—no sign of pilots. Am going down to investigate—I am going down to investigate. Over!"

It was Squadron Leader Oliver himself who answered. "Message received," came his calm voice. "Look out for an ambush.—Look out for an ambush! Over."

Before gliding in to land Toby encircled the hill, but all was quiet, and, watching the ground carefully, he descended. His landing was good, and without pausing to examine the 'planes, he ran up the slope, pulling out his Colt as he went.

The scavengers rose at his approach. He fired quickly, and the eight shots he pumped out brought six of them fluttering back to earth.

With a shudder Jarrold knelt beside Hamilton's body. The Arabs had done their devilish work, and, feeling very sick, the pilot rose to his feet and shouted for his gunner. The airman came across the boulders at an erratic double, and by the time he reached the spot Toby had covered what was left of Hamilton's face with his handkerchief.

"Who is it, sir?" asked the airman in awed tones.

"Hamilton!"

"Dead, sir?"

Toby nodded. "Take his ankles—we'll take him back with us!"

Slowly they returned to the Audax and eased their passenger into the fuselage behind the back cockpit. Then Toby turned his attention to the other aeroplanes. Round about there were numerous footprints in the sand, and the desert wireless set had been destroyed. Beyond that there was nothing to indicate the fate of his companions.

Toby climbed into his seat. The airman clambered up beside his grim companion, and in a few moments the Audax was soaring high above the scene of tragedy. Hurriedly unwinding his trailing aerial, Toby switched on his wireless.

"Hello, Tel Ebban!—Hello, Tel Ebban!" he called and received an instant reply. The story was soon told, and Toby pushed farther out into the desert in the hope of finding other traces of his companions. Four times he circled the oasis and dived on the ruined fort behind it before returning, despondent, to the aerodrome.

AN hour later Jarrold sat facing his Commanding Officer. "There was a signal out in ground strips, sir," he was saying. "In fact, there were two. One saying that the ground was unfit to land on, and the other that they wanted help from ground transport. But as I could see no signs of life I disregarded the first signal and landed."

Oliver raised an eyebrow, but Toby went on.

"It was the only thing to do, sir, but you may be sure I kept my eyes open. There was nothing. Nothing to show what had happened apart from the smashed Mary Pickford, some signs of a horse, and of course—Hamilton. I tried to trace the footprints, but it was impossible."

"They must have been surprised, and that's not like J.J. Hell! Why can't those other fools come back. I'm going off on patrol myself. I've sent a message asking for armoured co-operation. I'm afraid it'll be too late to save the Starlings, but, by Harry, we'll avenge them!"

"Too late to save them, sir?"

Oliver nodded. "Fraid so. The women'll have got at them by now."

"The women! Do you mean that—that they torture them?"

"My boy, that's just what I do mean. Those women are fiends, and their particular delight is the most devilish form of mutilation."

Jarrold blanched. He was remember-



ing now some of the stories he had heard of the horrible cruelty of these fanatical Arabs—stories he had always rather regarded as "travellers' tales" until now.

Squadron Leader Oliver interrupted his unpleasant reverie. "Well, I must be going," he announced. "I'll be gone for about two hours. You get some sleep in, you'll be up all night!"

## CHAPTER VI

### By Right of Dakhil

FROM the camouflaged shelter of the trees surrounding the oasis J.J. had been forced to watch Toby circling overhead. That Jarrold had not seen the raiding party was not surprising. The art of taking cover was second nature to the Arabs. For a second J.J. thought of bursting from his captors and making a dash for the open desert where he could signal Toby, but the idea was abandoned as he realised that they would all be dead long before Jarrold could take action. And so the Audax had vanished, taking J.J.'s last hope of rescue with it.

The departure of the aeroplane had been the signal for the moving-off of the raiders, and for hours J.J. had trudged along ahead of Nobby Clark, both men with their right wrist tethered to an Arab saddle. As darkness fell their way became harder, as they were unable to see where their feet were going. One moment they were stumbling over a boulder, the next they were sinking ankle-deep in loose sand. But at no time did the party rest, and overhead the deep mauve of the sky held the serenity of velvet.

"Ruddy skies got all t'blooming medals on to-night, sir," remarked the irrepressible Nobby.

"Full dress parade," agreed J.J.

"Last one I was on was Mr. Pye's funeral. This may be ours!"

"Cheer up, man," encouraged J.J.

"We're not dead yet!"

"Oh, I don't care about that, sir. No, sir, it's those devilish women I'm

scared stiff of—torture you something 'orrible they do—— 'Struth, look there, sir!"

Nobby lunged forward to catch J.J.'s arm, but his tether brought him up short. But J.J. had also seen the cause of Nobby's ejaculation. Some two miles away the heavens were brilliantly illuminated. A dazzling white ball of fire had burst in the air and was sinking slowly earthwards.

For a few moments their hopes soared anew, but at last the parachute flare reached the earth, and the darkness was more intense than ever. Then, as the flame of a dying fire flickers, their expectations leapt again as an aircraft could be heard approaching. The party halted, and J.J. felt the cool muzzle of a rifle pressed into his neck. It was a warning not to be ignored.

The steady drone grew louder until it was overhead.

"Now," breathed J.J. "Let off another."

But the Audax droned on, and in the front cockpit Squadron Leader Oliver, humming quietly to himself, decided to wait another five minutes before releasing his next flare—five fatal minutes that took him miles away from the small cavalcade.

AFTER a further hour of purgatory for the dead-weary marchers, the band of Arabs reached the foothills and filed wearily into a valley, plodding monotonously onward until at last they were challenged in Arabic.

"Well, 'ere we are, sir," remarked Nobby, nervously glancing around him. "Wonder what sort of bint they'll choose for me!"

With small ceremony the two men were dragged into a large tent, outside which the chief's *bairaq* had been planted. Within, the Sheik, as dirty as J.J. had expected, sat cross-legged on the finest rug he had ever seen.

The Arab gazed at them for a moment without speaking. Then, turning to Ben Haq, who stood by his side, with his eyes fixed on the floor, as though fearing to meet the Englishmen's



gaze, he addressed a few curt sentences to him in Arabic.

They were remarks with which Ben Haq obviously disagreed, and J.J. considered it high time that he took part in the debate.

"*Salaam alaikum*," he said, treating the chief to a winning smile.

It was wasted, for the only result of his intervention was that the Shiek signed to one of his men, and the two Englishmen were promptly jerked round by their shoulders and hustled out of the tent.

On the way through the camp J.J. had an opportunity to notice the large numbers of banners about the Chief's guest-tent, a sure sign that a meeting of tribal chiefs was in progress, and that trouble was definitely in the air.

Their new quarters, they found, was a spacious bell-tent, made of some striped material. Inside, lying on his back with his head propped against a bale of rugs, was Jalden. His eyes were closed, but as J.J. bent over him he opened one of them.

"Hello, old man! Where are we?"

"God knows! How're you feeling?"

"Not too bad. In fact, between ourselves, I'm quite all right. But I thought that if I made out that I was a bit worse than I was we'd hamper their passage a bit. Funny, old Ben Haq turning on us like that. I'd 've sworn he was for us to the last ditch. But they're treacherous blighters, the whole lot of 'em."

Propping himself against the other side of the bale of rugs J.J. seated himself on the floor and calmly produced from his tunic his Air Force Pocket Book, that unofficial bible which tells a man everything from how to carve a joint to the correct respect to pay to an admiral.

"What are you looking for?" Jalden demanded curiously.

"Don't know," J.J. replied with a grin. "Just thought, maybe, they'd have a chapter on what to do in emergencies like this!"

Jalden laughed. "It gives a burial service that might be useful!"

"Shut up!" J.J. rustled the pages. "Here we are. Desert Hospitality."

There was silence for a while, then J.J.'s muttered comment: "No, I don't think that'll help us much—just says we needn't take our shoes off, must never sit on the floor with our feet pointing to anyone, never stand over a Moslem when he's at prayer. Oh! Wait a moment—this is interesting."

Before he could continue, the tent flap was raised and Ben Haq stepped through the doorway. In a second J.J. had sprung towards him, and seizing his handkerchief, tied a knot in it. "*Daheelék!*" he cried, while his companions looked on in amazement.

They did not know J.J. had just read in his Pocket Book that "*Daheelék*" was the formula by which a captive can claim an Arab's protection. It is known as the *Dakhil*, and by this custom any man upon whose mercy a stranger throws himself is bound in honour to give protection, even with his life.

**B**EN HAQ smiled. "There was no need for that, my friend. You thought me a traitor, as indeed you might, but my only object in making you my captives was in order that I could save you." He shrugged his shoulders. "Now I'm not so sure. They want information from you and may not be content even with that. But whatever happens I am your friend. You must know this. Once in England I saw your King. I had heard that he was a monster, a persecutor of our race, but he singled me out." Ben Haq threw back his shoulders and smiled reminiscently. "After he had gone," the Arab went on, "I went to the mess and took a picture of him to my room. And there before his portrait I swore allegiance to him, his heirs and successors in person, crown and dignity."

Such a melodramatic speech coming from a European would have been ludicrous, but this Arab nobleman so obviously meant every word he said that J.J. was deeply moved as he offered him his hand.

"Good lad!" was the best reply he could manage.

Ben Haq gripped J.J.'s fingers.



"And now listen. I had hoped that they would spare you, but, even though you have used the Dakhil, they may still persist in killing you. Whatever happens, you must trust me."

"We do!" J.J. assured him.

"I will go now," the Arab continued. "We must await an opportunity. There are camels tethered before the guest-tent, and if it is necessary to try and arrange an escape you will hear from me soon. *Ah-vi!*"

## CHAPTER VII

### Desperate Measures

**B**EN HAQ swung round on his heel and made for the door. With both hands he flung the flap aside, took one step forward into the night and suddenly stiffened. "You . . ." he gasped, and there was terror in his voice.

Outside stood the Sheik himself, and now he came forward into the tent, followed by an Arab carrying a rifle in an all-too-alert position.

"So it is my trusted friend, Ben Haq!" said the Sheik quietly, and for a few moments there was uneasy silence.

"Have you informed the infidels of their end?" the Sheik enquired at length, still in the same calm tones.

"Their fate is changed," Ben Haq replied. "They have claimed the right of Dakhil."

"So be it," was the answer. "Their fate is changed, as is yours! I heard your traitorous speech. One does not stand outside a tent flap and hear nothing. They will die to-night, and because you are my friend and I do not want your honour sullied by a broken vow, you shall die with them! It will be at once. I move before the dawn."

He turned to J.J. "Your eagles were busy to-night, Englishman. I must strike now. You will be found to-morrow, never fear, but whether your friends will recognise you—ah!—that is a different matter!"

"You——" Nobby began and never finished, for at that instant Ben Haq struck.

His arm flashed up from his waist, and from above his shoulder there came the gleam of metal. Next instant a crescent of shining steel had plunged down and into the Sheik's chest.

Taken off his guard, the Arab soldier now raised his rifle, and instantly J.J. was upon him. His right hand knocked the rifle aside, his left connected with a brown unshaven jaw, and the Arab sagged. Another right to the pit of the stomach and a left behind the ear laid the Arab at his chief's side.

"Quick, man," snapped J.J. to Ben Haq, who was looking at his blood-stained knife with a stunned expression. "Off with their clothes!"

"No time," cut in Jalden. "They may come for him. It's as dark as the pit outside. They're showing no lights—afraid of our Demons!"

"That's it! Listen!" J.J. had taken charge. "We break from here, make for the camel lines and bunk. You all follow me, I think I've got the direction taped. If we can reach our machines we stand a chance. The repair party should be there by now."

Stopping only to collect an automatic from the dead chief, and to supervise Nobby's trussing-up of the other victim, J.J. moved across to the back of the tent, slit the canvas and peered out. Then without a sound he stepped out into the night.

Crouching as they ran, the four men made for the camel lines. At one end a sentry rested on a long rifle. Silently, J.J. crept forward, with Ben Haq like a shadow behind him. Nearer and nearer crept the pilot, and still the sentry made no movement. A sudden rush, a quick use of the butt of the automatic, and another enemy was out of action. Like a shadow Jalden appeared beside them, and together they tore at the picquet ropes.

"Where's Clark?" J.J. looked about. "The confounded idiot! Where is he?"

"Ere, sir, tripped up. . . ." came the muffled reply from behind him.

No sooner had the airman been located and set to work than Ben Haq promptly



disappeared. J.J. was about to re-enter the labyrinth of silent tents in search of him when the Arab appeared at his side.

"Right! Mount and follow me!" he whispered.

TEN minutes later, when the little cavalcade was well out of earshot of the camp, Jalden broke the tense silence.

"Call these things ships of the desert," he complained. "Why, I'd rather sail before the mast or abaft the rudder in Boadicea's coracle than navigate one of these brutes."

"Ungrateful dog!" laughed J.J., though he, too, was beginning to notice that his camel was painfully solid.

"Wonder when they'll start after us, sir," put in Nobby Clark some time later, and was answered by Ben Haq.

"It may not be until the dawn," he suggested. "When I left you, I returned to cut the other animals adrift."

J.J. looked towards him in the darkness. "Stout effort, Ben Haq," he murmured, and there was admiration in his voice.

For hour after hour the little procession made its way across hills and desert. No sound of pursuit followed them, and though they were all but dropping with fatigue, the knowledge that every mile gained brought them nearer to safety, buoyed them up and kept their flagging muscles moving.

Once an aircraft droned overhead.

"Matches!" yelled J.J. "Light a flare"; but though Nobby slid from his camel with alacrity and frantically tore sheets from the celebrated Air Force Pocket Book, his fingers were all thumbs, and it was not until the Audax had disappeared in the distance that the make-shift flare took life.

"Never mind, he'll be back," J.J. encouraged them, though he realised that there was little chance of it. "Keep your eyes open, Clark. If you spot him again get busy!"

Nobby scrambled back on to his mount, cursing quietly. It was bad enough trying to keep his balance at

all, without trying to see behind as well.

The monotonous journey continued until at last J.J. broke the silence.

"Awake for morning in the bowl of night, has cast the stone which puts the stars to flight..." he quoted cheerfully.

"All right—let 'em fly!" was Jalden's despondent comment. "Should be nearly there by now, shouldn't we?"

"I hope so," replied J.J., but he was far from sure. The darkness was still intense despite the slight break over to the east, and as yet there was no sign of the hill where they had been captured.

Steadily they pressed forward until at last the sun appeared above the horizon to reveal their objective close at hand.

## CHAPTER VIII

### A Garrison at Bay

"NO sign of the repair party," said Jalden, when, half an hour later, they were gathered about the derelict aircraft.

The situation, they realised, was still serious. The "Mary Pickford" was out of action, and at any moment their enraged captors might appear on the scene. Their tracks across the desert would be plain for any Arab to see and follow.

"Well, thank Heaven your beer's still intact!" was J.J.'s comment. "Clark, get one of the Lewis guns. Jalden, you get the other. We'll camp on top of the hill. Ben Haq, will you take the beer up? I'm going to find Hamilton."

J.J. set off ahead of them at a brisk run, but in a few minutes he had rejoined Jalden, who was struggling with the Lewis gun in the rear cockpit of his Audax.

"Can't understand it," he announced, "there's not a sign of him. Not even a hat. Get up the hill as soon as you can. I'm going to alter those signals. Things may be getting warm soon!"

J.J. was still laying out the ground strips when he was hailed from the hill-



## ARABIAN FLIGHT

side. Looking back over his shoulder he saw Clark with his arms above his head.

"Enemy in sight, eh!" he mused. "Well, it won't be long now!" Sprinting over the uneven ground, he regained his companions on the hill.

At the top of the hill in a natural hollow, surrounded by massive boulders, the defenders had made their position. In two of the crevices Lewis guns stood ready, and through the sights of one of them J.J. watched the approach of the tribesmen. They were advancing in force, some four thousand strong. Some were on horses, some on camels, and the whole great host was cantering forward at a good speed, with banners flying. At the oasis they came to a sudden halt, and a party of about a hundred swept on towards the hill.

"Shall we let 'em have it, sir?" Clark enquired breathlessly.

"No! Jalden, you take this Lewis. Clark, move round. When they're out of sight of the oasis, after rounding the hill, I'll give the order to fire. And I want every bullet to tell. Stand by!"

The Arabs came nearer, passed below them and advanced to the attack. As calmly as though he were on the practice butts J.J. snapped out the order: "FIRE!"

The two guns laughed together, a sardonic cackle that emptied saddles with devastating speed. Taken by surprise, the Arabs, panic-stricken and confused, made an easy target for the marksmen on the hill, and in less than two minutes those that were left were in full flight back to the oasis.

"First round to us," grinned J.J.

"Just an appetiser, just an appetiser," replied Jalden. "They expected to find us by the 'planes—never thought we'd have Lewises ready for 'em."

There was a lull for some ten minutes, and then from the trees separate groups of Arabs appeared and, each taking a different direction, quickly encircled the small hill.

The Lewis guns promptly gave tongue, but although many of the raiders fell,

the waves came on, and now from the boulders at the foot of the hill bullets began to sing over the defenders' heads.

Smoke and sand blinded the defenders. Clark dropped suddenly with a bullet through his shoulder. Ben Haq, with a pistol in either hand, shot with calm precision. But the odds against them were too great. The Arabs, yelling as they came, were almost upon them.

**T**OBY JARROLD, dog-tired and despairing, had taken off again.

All through the night he had kept up intermittent patrols, but had seen no sign of the Arabs. Now he was returning once more to the derelict 'planes in the faint hope that he might find some clue to lead him in the direction of the raiding party.

As he took-off from Tel Ebban he had been told that the Squadron were returning, and that armoured cars were converging on the scene of the Audax's forced landing.

It seemed impossible to Toby that he should be the sole survivor of his flight. Incredible that J.J. and Jalden could have been wiped out before he had really got to know them. He forced his thoughts into more pleasant channels and started to hum the chorus of the last Astaire romance.

"Jupiter!" Far ahead was the hillock, and around it many figures were moving. The Kestrel roared full out, and the Audax went screaming across the sky.

"Hello, Tel Ebban!—Hello, Tel Ebban!" Jarrold called wildly. "Five emma toc calling—Five emma toc calling—Arab activity SJ5010—Arab activity SJ5010. Am going to investigate. Over!"

In two minutes the situation was clear, and, plunging down in a steep dive, Toby shot towards the hill.

His two thumbs went down together on his gun triggers. "Ha! Ha! Ha! —aaaaa—aaaaa—Ha! Ha! Ha! Ha! Ha! Ha! Ha! . . ." laughed his guns, and as he swung round in a steep turn the gunner in his rear seat joined in the deathly chorus with his Lewis.



Its attack delivered, the Audax zoomed up in readiness for another dive.

Again Toby called the distant aerodrome.

"Hello, Tel Ebban!—Hello, Tel Ebban! Five emma toc calling—Five emma toc calling. Arabs attacking Jefferson and Jalden SJ5010—Arabs attacking Jefferson and Jalden SJ5010. Arabs in strength at Oasis SJ5110—Arabs in strength at Oasis SJ5110. Over!"

Down went the Audax again, guns chattering madly, and above it all Toby heard the reply to his message.

"Hello, Five emma toc—Hello, Five emma toc. Your message O.K.—Your message O.K. Armoured cars converging on SJ5110—Armoured cars converging on SJ5110. Over!"

The attack on the hill faltered, and as Toby dived for a third time, it broke off in confusion. Madly the Arabs ran for the trees with the Audax spattering death at their heels.

From the security of the Old Fort a hastily-mounted machine-gun spat lead at the Audax, but Toby decided that it was not worth his attention. The Arabs, he knew, would not make a break during the day, and the Squadron would arrive at any moment now.

Throttling back his engine, he circled the oasis, his gunner firing occasional bursts at the trees to keep the Arabs under cover, until in the distance could be seen the dust-cloud which heralded the approach of the armoured cars.

WITHIN half an hour the insurrection had failed. The Arabs, completely cowed by the sudden appearance of the cars, had surrendered.

"Hello, Tel Ebban—Hello Tel Ebban," Toby was wirelessly, "Five emma toc calling—Five emma toc calling. I'm going to land at SJ5010—am landing at SJ5010. Over!"

The roar of his Kestrel diminished as he glided in towards the other aircraft. His judgment was perfect, his landing smooth and effortless. Flinging back his harness he slipped to the ground.

"What-ho, J.J.!" he yelled. "What-ho!"

But no answer came from the hill.

Bewildered and suddenly alarmed, he ran forward, shouting as he went. Still no answering hail came from the little garrison on the hill-top.

Sick at heart, he reached the barricade and climbed on to it.

"Well, I'm damned!" he exclaimed.

Seated on the ground were the defenders, and each of the Englishmen had a bottle in his hands.

"Hello, Toby," grinned Jalden. "We're just celebrating. Sorry there's not one left for you!"

"Your mistake, my friend!" Toby Jarrold lent forward and whisked the bottle from Jalden's hand.

"That's mine," he declared. "You forget our bet. You called J.J. 'sir' when you set out on patrol yesterday. Why do you think I've been spending the whole night looking for you?"

## THE STORY BEHIND THE COVER:

### A DIVE-BOMBING ATTACK BY GLOSTER GAUNTLET FIGHTERS

A FLIGHT of Gloster Gauntlets, caught at the moment of the start of a dive-bombing attack on a ground target, form the subject of this month's striking cover painting by S. R. Drigin. The attack is being made from a formation known as "echelon on the left" and the leader is seen cartwheeling down to gain momentum for his dive, with his next-in-line about to follow his manoeuvre.

In dive-bombing, which is the most accurate form of aerial attack on surface targets yet devised, the aircraft is aimed bodily at the target in the course of an almost vertical dive, which is maintained for several thousands of feet. When within a few hundred feet of the target, with the machine travelling at its maximum velocity, the bomb is released, the high speed at which it is launched adding greatly to its penetrative power.

The Gauntlet, a high-altitude day and night

fighter with a Bristol Mercury engine, has a top speed of 230 m.p.h. at 18,500 feet. Those depicted on the cover carry the markings of No. 56 Squadron, R.A.F., which is at present equipped with this type of fighter. One of the most famous of the great fighting squadrons of the R.F.C. which operated on the Western Front during the War, No. 56 will ever be associated with such notable air fighters as Ball, McCudden, Hoidge and Rhys-Davids, all of whom served with it for a time. Its notable war record included the destroying or driving down of nearly 400 enemy machines.

Disbanded on January 22nd, 1920, the Squadron was subsequently re-formed and is now stationed at North Weald, Epping, Essex, its Commanding Officer being Squadron-Leader Charles L. Lea-Cox, R.A.F.





# Accidental Death

Five Minutes was the Narrow Margin by which an Imminent Disaster became an Immense Triumph—The First and Last Stroke of Luck in the Career of the Unfortunate Gugger and his Beetle

By H. C. PARSONS

## CHAPTER I

### Strange Behaviour of an Officer

**T**HE tent flap smacked aside, letting in the bite of damp, cold air, and a hurricane in the pyjamaed form of Second Lieutenant Mason.

"Wake up, you lazy devil!" he belowed to the youth slumbering in the camp-bed.

A prolonged snore being the only reply, the hearty Mason seized the end of the bed, tipped it up on end, fished among the heaving blankets, and dragged forth a sleepy but wrathful young man, whose vivid language rivalled the hues of his pyjamas.

*The whole world appeared to become an immense oven, out of which rushed a hurricane of red heat*



Cheerfully ignoring the stream of abuse, Mason hauled his victim outside the tent, dumped him on an upturned tub, and pointed delightedly across the aerodrome :

"Now behold our one and only Guggler !" he roared. "And, if you're not satisfied, we'll give you back your money."

The peevish expression of the lately slumbering pilot altered somewhat at the name of "Guggler," and his eyes followed the direction of Mason's pointing finger. He could see only dimly in the grey dawn of the threatening June morning, but sufficiently well for the loud and unfeeling laughter that followed to bring out the annoyed occupants of most of the other tents.

Across the 'drome an F.E.2b, looking strangely like a great intoxicated beetle with its black nacelle curving out in front of the almost invisible body of bamboo struts, careered over the field, lurching first to port and then to starboard. Time after time a wing almost hit the ground, but miraculously recovered to send the machine lumbering off on a new and unexpected tack. In hot pursuit was a figure clad only in pyjama trousers, while a couple of Ack Emmas, evidently planning a dual flank attack on the errant 'plane, recovered their exhausted wind in the background.

Scattered about the 'drome were here a gum-boot, there a British Warm, farther off another gum-boot, and, nearer to the spectators, a pyjama jacket, all cast off in the exigencies of pursuit. The half-nude figure, at full speed, appeared to be a short head behind the nearer wing-tip, for approach from the immediate rear was impracticable owing to the wash from the prop. The idea evidently was to grab the tip of one of the lower planes and swing the Beetle round on that axis sufficiently to enable Guggler to clamber up into the cockpit and throttle off. It would be a feat of nimbleness and acrobatic precision not usually associated with Guggler, but probably he was relying on the materialisation of the flank attack threatened

by the lurking Ack Emmas, if he could restrain the wanderlust of the 'bus for a moment or two. Whatever the intention, the Beetle suddenly lurched away in the opposite direction, charged and eluded the waiting A.M.'s by the width of a gnat's whisker, and triumphantly lumbered off towards the far hedge.

Unnoticed by the helplessly mirthful watchers, the early morning sky had darkened threateningly, and now added to the fun by loosing a storming sheet of rain upon the scene. Whether the clammy hindrance of the thoroughly soggy pyjama trousers was too much for Guggler to endure any longer, or whether that long-suffering garment had already borne too much strain to contribute further support, is a matter for speculation, but through the teeming rain there now offered the incredible sight of the bumping 'bus, on a fresh tack, galumphing a short neck in front of an entirely nude and gleaming figure, upon which the rain splashed and played with exuberant abandon.

"SERGEANT, double out a squad of S men immediately to fetch that machine in," snapped an approaching voice.

"Golly ! The Old Man. We'd better get going," murmured Mason, his enjoyment diminishing. But the Officer Commanding No. 17 D. Bombing Squadron—he was known variously as Major Lord, The Old Man, and Nero (the latter due to a quite inaccurate belief that he had murdered his mother for some unrecorded breach of discipline)—was too quick for them.

"Why the devil are you damned hyenas lolling about here instead of giving Lomax a hand ?" he demanded, turning upon the subdued Mason as his nearest victim.

Sheepishly, Mason found his tongue : "You see, sir, Guggler—I mean, Lomax—is a very touchy bird, likes to do things himself and gets sore if you offer to help."

"Sore be damned !" replied the C.O. with some heat. "If that 'bus is damaged, you'll all be sore by the time



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I've finished with you. Four of you get out there at once, and ease her down slowly, or you'll have her tail over tip."

The nearest quartet sprinted straight across the 'drome, glad to remove themselves from the patently simmering wrath of Nero, although what Mason had reluctantly said was quite true. Gugger had always stuttered rather badly (hence the nickname), and this made him extremely self-conscious and inordinately awkward. His awareness of his defects, coupled with a native obstinacy, caused him to refuse help offered in a perfectly friendly spirit, and had earned him a reputation, really unjustified, for taciturnity bordering on moroseness.

However, the possibility of Gugger's becoming peevish, although unlikely in the circumstances, was not put to the test, for, before any of the rescue parties reached the scene of action, the Beetle at last rolled too deeply. One wing stuck in the ground, and she swung round, stood on her nose, and slowly but majestically tilted over on her back, with the wet and panting Gugger a yard or so away—beaten at the post!

The fire-cum-ambulance tender stopped *en route* at the Major's signal, picked him up, and moved across to the recumbent Beetle which was, by now, surrounded by a squad of Ack Emmas, each man busily at work under the baleful eye of the Sergeant. The latter approached the Major and saluted.

"No chance of fire, Sergeant?"

"No, sir."

"Right. Wait a moment."

The C.O. looked at the shivering Gugger. "Here, Lomax, take my coat and get into some togs before you catch pneumonia. Now, Sergeant, let's look at the damage."

The Sergeant cleared his throat with the air of an expert orator, justifiable in one who had delivered hundreds of similar verbal reports to various superior officers, from corporals to colonels. "Not so bad, sir, at a rough glance. Three prop. blades smashed, all starboard struts gone, top aileron wires broken, under-carriage buckled, and king post snapped. Can't tell the rest, sir, till we've had a

look at her, back in the hangar. Looks like a two-day job, sir."

The C.O. allowed a flicker of a smile to cross his face as the worthy sergeant paused to draw breath. "Right, Sergeant! Get her in as soon as possible," he ordered, and added grimly, "I'll send you some extra help—quite a lot of it."

He waved back to their tents the pilots he had sent to the rescue, and strode away in close conversation with the Adjutant.

"POOR old Gugger's for it," said Mason to his nearest companion as they ran back through the rain.

"Um," agreed the other, but added ruefully, "and he's not the only one. Didn't you hear those last dirty words of the Old Man—'quite a lot of extra help?' Means us, I s'pose."

That this was exactly what the Old Man had meant, his discourse with the Adjutant was now rendering quite clear, as the two sat in the Major's tent, drying off in front of the stove.

"Brown, we shall have to do something about Lomax. Things are becoming a little hectic."

"Quite, sir," answered Captain Brown, who, as became a sagacious adjutant, was fairly non-committal before a wrathful commanding officer.

The Major pondered for a time. "While I think of it, Brown, put up orders right away that there'll be no flying this morning—weather impossible—but that all the officers out on the 'drome just now will report to the Officer of the Day, who will detail them to work on Lomax's machine; and when I say 'work' I mean work, not just slacking around hindering the sergeant and his men."

"Afraid they won't give Lomax three hearty cheers," remarked the Adjutant.

"No," replied the C.O., "but if they'd lent a hand instead of laughing their fat heads off, I shouldn't have a perfectly good 'bus in dock. However, tell Lomax to report to me at ten, and you come along about half-an-hour before to talk it over."



## CHAPTER II

## On the Carpet

AT 9.30 a.m., a distinctly disturbed Adjutant bent his steps towards the C.O.'s private den, which was next to the makeshift orderly-room, with none of his usual cheerful feeling that all was bright in a pretty good world. This latter normal frame of mind arose from his being a natural optimist, possessed of an iron digestion and engaged to embark upon matrimony with the most wonderful girl in the world, when he went on leave in ten days' time.

In spite of these advantages, the world seemed to have lost much of its brightness this morning. In the first place, when the Mess had read the Orders of the Day, and learned the labours proposed for them that morning, their personal comments—pithy, pointed and painful to a sensitive soul—were directed solely upon the character, person, and general upbringing of the unfortunate Adjutant. The resultant sense of wrathful injury in that much maligned officer blinded him to the fact that the Mess was disinclined to add to trouble already in store for the hapless Gugger at the hands of the C.O., and had too much respect for the C.O. himself and his sense of justice to dream of murmuring against him personally. Whereas, the Adjutant (actually a senior pilot filling in time while recovering from a burned hand) was, as it were, a cursable go-between upon whom one could pour contumely, within limits.

It was not merely that the gentlemen in question were above handling a spanner and a pair of pliers, but, when the weather made flying impossible, it was their custom to make tracks for the small town of Jeancroix, to enjoy to the full whatever life might flourish there, and return to Brumeux viewing the Universe through rosier spectacles. Hence a certain amount of plainly expressed and understandable exasperation.

Then there was the question of Lomax himself. The Adjutant hated rows or

"strafes" of any kind, and he would have given a great deal to avoid being present while Lomax stuttered his way through some sort of appeal against being returned to store. He liked Lomax, who, in his opinion, was not careless, sloppy or a fool, but just born awkward and unlucky. In fact, the Adjutant shared the general commiseration for Gugger, the more so now that he was about to go on the carpet before a doubtlessly irate Nero—verily, a lamb to the slaughter.

Last but not least, Captain Brown's mail that morning had consisted only of a soulless postcard from his future mother-in-law, stating baldly that the loveliest girl in the world had fallen a victim to measles. Measles, of all things! Pneumonia, angina pectoris, or even alopecia (whatever the last two might portend) would have merited a distraught and romantic grief, if only by virtue of their deep Latinity, but measles! Had any wandering measles noticed the ferocious expression on the Adjutant's face as he read the postcard, its miserable little heels would not have been seen for dust. In this mood it was, then, that Captain Brown entered the sanctum of Major Lord.

IN one corner of the room sat Acting-Captain Grant, a man of few words, and Gugger's flight commander. The C.O.'s features, seen through clouds of pipe-smoke, did not look so formidable as usual, although the keen eyes were as swift to notice things as ever.

Waving the Adjutant into a chair, Major Lord grunted, "So you're bothered, too." It was more of an assertion than a question. "Measles coming on?"

The Adjutant goggled, returned to normal with an effort, and replied, "No, sir. Matter of fact, I feel rather badly about Lomax."

The C.O. cocked an eyebrow. "Maybe. But look at the facts. Lomax has been with us less than two months. On his first patrol his engine conks over the lines, and we find he accidentally knocked the tap over from main tank to reserve



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and exhausted the juice in the reserve without knowing he wasn't running on main. The next week, his foot becomes fixed under the rudder-bar as he's taking-off, and he knocks a row of tents for six. The following week, one of his bombs isn't properly fastened in the rack, drops off and blows old Groschamps, who happens to be the local Mayor, into his own cesspool: no great damage done, but the cause of much painful bickering."

The Adjutant interrupted. "It served Groschamps right. The blighter has been known to sting us two bob for a doubtful egg and a quid for what he called a chicken. Lomax ought to be given credit for that instead of blame!"

The C.O. stared, puffed furiously at his pipe, then continued without comment. "Last week he kicked over a bucket of petrol in a hangar, somehow it caught fire, and it's the devil's own luck that the whole place wasn't burned down."

Again Captain Brown broke in. "All the same, sir, Lomax wasn't the fool that left the bucket there, but it *was* Lomax who had the guts and the sense to taxi two 'buses out of the blazing hangar while everyone else was screaming for a hose."

The C.O. nodded. "That's true. But you're my adjutant, not the 'Prisoner's Friend.' And how do you excuse that astonishing show this morning?"

Captain Brown felt his risible muscles getting out of hand at the thought of the nude Gugger chasing his errant Beetle through the rain, but, before the appraising eye of Nero, the Adjutant managed to control himself. "I've had words with him about that, sir," he said. "He intended to have a flip round, as his 'bus had seemed to be flying tail-heavy during yesterday's patrol. So he revved up the engine, waved the chocks away and taxied into the wind. Then he remembered he had only his nightie on, and climbed out to fetch his fur whatnots, without waiting for the Ack Emmas."

Major Lord snorted. "Preposterous. This isn't a kindergarten. Post up a

notice that there'll be trouble for anybody appearing on a job improperly clad. Carry on."

Captain Brown made a final attempt to preserve his gravity, then shook with helpless merriment, murmuring "Improperly—clad!" and even the stern visage of the C.O. lightened to show that the comic effect of the early morning "Study in the Nude" had not been wholly lost upon him. But discipline had to be preserved, and his customary "parade-ground" expression chased the smile from the Major's eyes as he barked, "I said, 'Go on,' Brown."

"Very good, sir. Well, it seems that Lomax slipped as he climbed out and must have kicked the throttle on as he fell. Of course, he should have waited for the Ack Emmas, sir, but I s'pose he thought he'd save the men a trip as he was near his tent."

The C.O. drew hard on his pipe, then growled, "Save them a trip and lose us a 'bus for two days—and it was no fault of his that it isn't a complete write-off. Extraordinary how so many damn silly accidents happen to him, in particular." He turned to the hitherto silent Grant. "Have you anything against my sending him back to H.Q., at least for further instruction?"

THE flight commander stirred uncomfortably, paused a moment as if marshalling his arguments, then answered: "Yes, sir. I probably understand Lomax better than anybody else, and, strange as it may sound, I consider him the best man in my flight. These accidents appear stupid, but they could happen quite easily to anybody. Lomax has guts, and he's a fighting man by instinct. Also, we're likely to be short of pilots soon"—he was referring to the push known to be due within a day or so—"and I should be grateful, sir, if you would give him one more week."

The Adjutant began a brisk "Hear, hear," but turned it into a respectfully strangled cough of alarming gravity as the C.O.'s gimlet eyes flashed in his direction.

Major Lord switched his regard to



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the roof to gather inspiration. These two officers were young by the calendar, but mature by experience of war, and he knew them to be reliable. Moreover, they had put into words his own private opinion. On the other hand, duty seemed to indicate that Lomax ought to be sent back, and, to the C.O., duty was very much the "stern daughter of the voice of God."

Nevertheless, he sent up a thick cloud of smoke from his pipe ("burning his blessed boats," murmured the Adjutant to himself), and delivered his decision in a characteristic speech. "If I didn't know your records and the length of time you've been out here, I should suspect you both of going sentimental. But Lomax shall have another week, unless, of course, he breaks his neck or somebody else's before the day's out. Right! The palaver is finished."

The C.O. stood up, tapped out his pipe, pocketed it and strode to the door. There he turned for a moment. "Send Lomax to me at the Pilot's Hut, and see that those pups are putting their noses to the grindstone. If the weather lifts at all, everyone's to stand by for a call," and, turning up his collar against the driving rain, the C.O. made off towards the hut.

### CHAPTER III

#### Orders for a Raid

THE Pilot's Hut was a small Nissen structure where, amongst other business, the C.O. was accustomed to explain the course to be followed on any particular job, and to discuss similar projects with the officers of the squadron.

A new man was enthusiastically studying a large sector map when the C.O. entered, but, after a brief word of greeting, the budding warrior was dispatched elsewhere to leave Lomax a clear field.

The door had hardly closed upon him when Gugger arrived, looking a little red about the gills. He saluted with commendable smartness and waited for the C.O. to kick-off. It was not, however, the C.O.'s intention to involve the

unhappy Gugger in painful explanations, so he went straight to the point.

"You probably know, Lomax, that I'm not too happy about your series of accidents—altogether too many for this squadron. I thought of sending you back to H.Q."—Gugger turned white, but otherwise presented a face of stone—"but I had a word with Captain Brown and with your flight commander, and they both think you're the man for us in spite of everything"—Gugger's face flushed, but again gave no other indication of his thoughts.

The Major continued, "I myself know you're dead keen, and you've plenty of guts, and the makings of a pukka pilot"—here Gugger flushed to the roots of his hair—"but these accidents have got to stop. One slip against the Hun is one too many."

The C.O. paused a moment, then added, "Just one thing more, Lomax. You worry too much about your stutter. It's nothing. Many of us stutter with our brains, which I think is a complaint you don't have to bother about. So don't be shy of accepting a helping hand any more than you would be of offering it. We all depend on one another to a great extent in this game, and it's a game worth playing. Well, that's all. I must get along to the hangars."

As the C.O. reached the door he added, apparently inconsequently: "There's a big job of work coming along soon; expect to see you give a good show, Lomax," and, with a friendly wave, he disappeared into the drizzle.

AS the door closed behind his C.O., Gugger relaxed from his stiff attitude and sank on to a handy box. His heart was beating more warmly than it had done for many a day, for, to his honest amazement, it seemed he was not regarded as a complete fool by everybody. His own silent flight commander, the less silent but more beribboned Adjutant, and, most surprising of all, even the Old Man himself, considered him to be a potentially worthy member of a notably worthy squadron.



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"Calloo Callay, O frabjous day, the Jabberwock is slain," he murmured to himself, and to his now oily colleagues labouring in the hangar for their sins, the sight of the blithely whistling Gugger, as he arrived to help, led them to think that some alchemy had certainly disposed of Gugger's Jabberwock of awkward taciturnity, if not his Hoodoo of what they termed "bad luck."

Mason was squatting on top of a pair of steps in front of the propeller boss of the battered Beetle, tightening the screws of the new prop. He gave Gugger a hearty hail.

"What ho ! you greybeard mariner," he called, "now whither do ye sail ? Tack a point or so this way and take over this blasted spanner. I believe my confounded wrists are too weak to lift even a beer."

Gugger ducked under the tail, resting placidly on a trestle, and relieved the blasphemous Mason of his job. The latter seated himself on the bottom step, professionally mopping his already grimy brow with an oily rag.

"There's nothing like work, Gugger. Keeps the figure supple and restores that schoolgirl complexion," he roared. Mason had never spoken quietly in his life.

Gugger grinned at the alarming school-girl complexion presented at that moment by Mason, and proceeded cheerfully with his job.

"Did the Old Man carry on much, Gugger ?"

"N-not t-too b-bad."

Again came Mason's lusty bellow, "Good for you, lad. Thought you'd be packing your traps by now. 'Spect the Old Man knew what to expect from me if he cut up rough. When you get a tough C.O., train 'em, boy, train 'em. Y'know, C.O.'s fairly eat out of my hand."

"Shut up, Mason," hissed several warning voices, as a brisk step heralded the arrival of the Major, who entered and cast a quick glance round the hangar, where assiduous industry appeared to be the one and only aim.

"Everybody except regular fitters and riggers go and feed !" snapped the C.O.

"Pilots and observers to report at the Pilot's Hut in two hours' time, ready for a job of work. Squadron to take-off immediately after the palaver. Load bombs—112-pounders. Captain Grant, will you please tell the others? Orders will be put up later."

The C.O. strode out, pausing only to gaze with evident relish at Mason's heated and oily visage and to enquire, "Enjoying yourself, Mason ?"

"Fine, sir," replied that individual, wondering why he had been singled out.

"Good, but with your magnificent voice you'd be wasted as a mechanic," and the C.O. was out of the hangar before the inference had penetrated the vocal one's staggered brain.

"Come on, you cackling sycophants," growled a rueful Mason when the merriment had subsided. "I need some hot water and grub to restore my mangled tissues before I meet the Old Man again." A not unwilling crowd trooped out of the hangar and made for the Mess.

TWO hours and ten minutes later, Major Lord was winding up his discourse to the assembled pilots and observers, each one clad for action.

"I'll go over it briefly again," he concluded. "In square 14.P is Malroux railway station. Two hours ago, about five thousand Huns arrived there, and more are following. Their objective we don't know, but H.Q. say that both the station and the Huns must be removed.

"'A' and 'B' Flights will pass in formation straight over Brumeux woods and turn due east. At Wimpaune cross-roads, turn north again, and you should reach Malroux within half an hour. Drop your stuff and come straight back. BUT—see that the stuff lands where it should—on the station and the troops.

"'C' Flight will go west of Chateau des Fleurs, past our own explosives dump, over our lines and on as far as the old brick-kilns. There turn due east, and you should reach Malroux from the other side just as the Hun is picking up the pieces left by 'A' and 'B' Flights. 'C' Flight will make straight



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for the Hun ammunition dump beyond the station and blow it up."

With impressive deliberation the C.O. repeated, "That dump *must* be destroyed. Any Hun 'buses should have been drawn off in pursuit of 'A' and 'B' Flights, but, by then, 'Archie' will be very much awake, so 'C' Flight must be prepared. Sorry I can't get you an escort, and that the weather is so dud."

The C.O. glanced at his watch. "Time's nearly up. Any questions? No? Right. By the way, Lomax, Captain Grant has arranged for you to have that new machine. I tried her out yesterday. She's over-slow on a left vertical bank, but otherwise seems all right. Afraid we haven't an observer for you, so we've weighted her a bit. That's all. 'A' and 'B' take-off in vee formation, 'C' to follow ten minutes later. Good luck, boys!"

There was a chorus of thanks, and the eager bunch streamed out to the waiting machines. Gugger dashed off to inspect his new Beetle and chortled with anticipation. It wasn't too easy to sally forth on a pukka job of work in a 'bus you hadn't tried out before, without an observer, and on a mouldy day, but it was his chance, and he was going to take it with both hands.

### CHAPTER IV

#### Death by Error

CAPTAIN GRANT left the C.O., who had been seeing "A" and "B" Flights off, and, before clambering into his own 'bus, went over to Gugger.

"This'll be no picnic, Lomax. Keep as close to me as you can. Visibility is a bit better now the rain has stopped, but a 'ceiling' of a thousand feet is no good to us. We're climbing straight up to six thousand to see if we can get on top of this muck. If you lose me, try to reach Malroux by yourself. Anyway, you'll know your way about so long as you can see a bit of the country now and again. If I'm still in cloud at six thousand, I shall come down at once until I'm out of the stuff, but I shall keep in the same direction. So

now you know the idea. Time to go. *Au 'voir* Gugger, and bring the Beetle back!"

The flight commander climbed into his F.E., revved the engine up and down again, waved the chocks away, flicked a gloved hand in farewell to the watching C.O., and took-off into the dank air, with Gugger on his rear starboard.

Steadily, the Flight climbed towards the grey ceiling of cloud until, glancing round and waving cheerily, Captain Grant disappeared into it. Gugger plunged after him some five seconds later.

At once, he found himself in a soaking lifeless world of grey, but he peered intently at his rev. counter and kept the pointer steadily on the same mark. It was difficult to tell whether he was following the right direction, as the compass flickered nervously, and the rudder jerked now and then in the clutch of some ghostly current. There was no horizon, nothing but a yielding wet wall.

After what seemed a year of concentration, the gloom lightened, and, to his immense relief, he shot into comparative daylight and saw Grant's machine a hundred yards ahead. The altimeter showed only four thousand feet—things were not so bad as Grant had feared.

Glancing ahead, Gugger saw his flight commander wave a greeting, and then noticed that the leader had stopped climbing. Gugger accelerated slightly and, Mason appearing suddenly to port, the formation was soon proceeding in regular order, and for a space there was time to observe the position.

Underneath and stretching far to the east and west was a dead ocean of tumbled white. To the north and north-east rolled a black mass of menacing cloud betokening a storm, but, long before they were near to it, Grant's machine turned due east.

The thought that Malroux was now somewhere straight ahead sent a thrill of excitement along Gugger's spine. The Hun was evidently choosing that day to rest, for there seemed to be nothing else in the world except that



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great black cloud advancing rapidly from the north.

Grant evidently hoped to reach the spot where he was to dive through the clouds below on to Malroux before the storm caught them, but the smoky black spirals of its vanguard were upon them with the speed of the wind. Gugger saw the leading 'bus dive, and was just in time to put the nose of his own Beetle down in pursuit before the inky whirl of the storm hit him like a great fist.

Down again through the grey sea of cloud he hurtled, until the wildly shrieking wires warned him that he was diving too steeply. Not so long this time, but long enough, before he came tearing out of the clouds and abruptly flattened out some five hundred feet from the ground ; not that he could see much of it through the thin curling mist that swirled between. Odd currents, however, kept breaking up the mist and enabled him to see a railway line, which, if the compass were true, ran direct from north to south, whereas the Malroux line ran roughly from east to west.

Nothing could be seen of the rest of the Flight in that poor visibility, so Gugger decided to follow the line, which he had instinctively kept in sight, in a southward direction, since Malroux was a junction and the end of the only north to south line he knew.

**T**HE mist from below soon enveloped him again, and the black, brooding clouds above descended, soaking him through to the skin. Either he must get on top of the stuff or down to a couple of hundred feet. If he chose the latter course, he would be over Hun territory, and a vulnerable target for "Archie." No, the only thing to do was to get above the clouds and follow the home line—roughly 18 W.S.W.—although there wasn't too much juice left to waste on climbing. Even this course was pretty hopeless, for the grim enveloping storm-clouds were full of electricity. Blue flames were licking along the stays, and, worst of all, his compass needle was spinning madly, first clockwise, then 180 degrees the

other way, so that he could no longer rely upon it.

Gugger sighed. He certainly seemed to strike all the bad luck ; squadron lost, objective missed, himself blinded by the storm, and the compass doing a can-can of its own. And if he had to land in some weird spot, it would, ten to one, be bad land, and those four bombs under the wings were very full of explosive. It might be advisable to drop them now, but he'd bet his buttons they'd land where they shouldn't. Besides, he wasn't done for yet, and the game was still on. It would be foolish to drop his bombs too soon. They might serve a more useful purpose later.

Which direction he was following he did not know, but on he went for what seemed an eternity, catching an occasional glimpse of the ground. The gloom became a little lighter, and Gugger, peering rather hopelessly through it, suddenly gave a wild howl of jubilation, for, through a momentary break in the mist, he caught a glimpse of a railway not four hundred feet below, as well as what was obviously a dump not far away, with a large body of troops on one side of it.

The swiftly swirling mist, although thinning every minute, hid the sight again, but, with the fiendish delight of a terrier about to spring on a rat, Gugger swung his 'bus round in an appalling right-handed bank, flattened out and raced straight towards the dump, that could now be seen every few seconds through the rapidly lifting mist.

A shot or two whistled his way, but harmlessly, and, with one hand on the joystick, the other on the bomb-toggle, his eyes never moving from that dump, he rushed on. Fifty yards away, he released his bombs.

Grinning all over his face, Gugger started to zoom back into the higher mist, but for once he had done his job properly. Even as he strove to climb out of harm's way, the F.E. faltered, and, simultaneously, the prop. raced madly. Then, before he had time to wonder what was wrong, the fun started.

The whole world appeared to turn into



an immense oven, out of which rushed a colossal hurricane of red heat, hurling the 'plane over and over, suffocating its pilot, blinding him, burning him, until he was conscious of nothing but a shrieking desire for some merciful providence to put an end to this fiendish nightmare, to deliver him from this torturing inferno and let him sleep, just to close his eyes to try and still the agony of his scorched eyeballs. . . .

His goggles and helmet gone, one side of his face burnt black, Gugger felt each fresh wave of heat sear through his hammering brain until each one seemed as if it must be the last he could ever feel; and, after what seemed years of unendurable agony, all sensation slipped from him and he slumped into unconsciousness.

**A** COOL wind blowing strongly on one cheek revived Gugger, and he slowly raised his heavy head. He was considerably surprised to find that he was still in his 'bus, which was side-slipping rapidly, but still about eight hundred feet from the ground. The mist had practically cleared, but much of the ground to the north-east was hidden by a great yellow cloud, shot with red, rolling sluggishly over where the dump and railway had been.

With immense effort, he sat back from the joystick, over which he had fallen, and straightened the F.E. laterally, but at once she put her nose up and tried to stall. To get her to fly on a level keel at all, he had to push the stick forward at an angle sufficient in normal times to run her into the ground, and, glancing back over his engine, Gugger saw that the bamboo tail was curved like a scorpion about to sting. The dashboard, too, had suffered considerably, and bits of altimeter leaned lovingly upon a fragment of compass, while the rest of the instruments were simply not there. Pieces of charred fabric flapped sadly from the wings, half the wires appeared unable to make ends meet, and his gun had disappeared into the blue.

How the petrol tank had managed to

escape injury Gugger could not imagine, but he perspired even more freely when his torpid brain remembered that the tank also served him as a seat! But the old Beardmore was still humming merrily, and it looked as if he might yet be able to limp back home, provided that no Hun 'plane intercepted him.

The shying of the Beetle at a puff of "Archie" on her starboard put a sharp end to his musings, and, taking a look over the side, Gugger saw a line of trenches below, filled with figures that were obviously unfriendly. Communication lines straggled away in front and revealed to the startled Gugger that he was flying completely in the wrong direction. Turning the crippled 'bus round was rather like steering a heavy, elderly dowager through a crowded ball-room, but Gugger eventually accomplished it, and looked round to take his bearings.

Almost straight ahead was the heavy pall of smoke that hung above the blazing dump, but the light was now good enough for a greater expanse of country to be seen, and what Gugger did see was paralysing enough almost to extinguish the senses only recently recovered. Not half a mile from the dump lay the unmistakable towers of the Chateau des Fleurs—which meant that he had most efficiently wiped out the only Allied dump in that sector, and probably a battalion or so of British troops as well!

## CHAPTER V

### Gugger's Last Landing

**A**T the realisation of the awful truth, all the shuddering pain of the previous half-hour returned to Gugger with added intensity. For one ghastly moment he thought of letting the Beetle stall, that he might meet a quick and merited end in the torn earth beneath, but an inherent obstinacy and repugnance at running away from trouble steadied him. Grimly and painfully he swung the 'bus over towards the slightly wooded ridge of Brumeux, now distinct on the horizon, and let his



## ACCIDENTAL DEATH

weary brain confusedly speculate as to which officers would be constituting the court martial that must even now be in preparation.

Not that he had much opportunity to think even if his mind had been capable of such action, for it required all his poor concentration to push the Beetle along at all, what with the turned-up tail, and ominous creaks and twangs whenever a sportive gust cast an extra strain on the depleted wires.

Added to these mechanical troubles, Gugger's burnt face throbbed continuously and mercilessly, and his left arm was growing numb, probably, he thought, from the strain of holding the joystick well forward all the time. He glanced at the offending arm, and, with a stupid feeling of surprise, noticed that the sleeve had been blown right off, in the freakish way of explosions, and that blood was slowly oozing from the fleshy part of the forearm.

The simple act of bending his head turned the sky a dancing red. Only the sudden stalling of the Beetle restored his fainting senses, and the sky once more assumed its previous dull grey hue.

But soon that red began again to dance before his eyes, and nausea overcame him. But his mind managed to pin itself to the one coherent thought, that at all costs he must get the Beetle back to the 'drome. His subsequent fate troubled him no more, the past was a complete blank, only that one urge possessed his mind until he was unknowingly intoning, with no stutter, no pause, and an hypnotic deliberation, like a running-down clockwork parrot—"I—must—get—the—Beetle—back—I—must—get—."

He tried to throw off the awful feeling of sleepiness and nausea, and to rend the thickening veil of red before his eyes, by standing up, but, apart from the

immediate swerving action of the uncontrolled rudder, he had not enough strength to support himself on his feet.

Somehow he kept on, until, at long, long last, the welcome trees of Brumeux were beneath him, and the 'drome in sight just behind them. A few moments more, and he would be safely home.

The veil was now a darker red, and spinning wildly. He opened his eyes with a last tremendous effort, saw the edge of the 'drome not a hundred feet below, and tried to reach the throttle; but, with the semi-conscious realisation that it could not be done, Gugger's world vanished into black nothingness.

"POOR devil," said Major Lord. "After a wonderful job like that, too. Any good shifting him?"

"Not worth while," answered the M.O. "Five minutes, at the most. Surprised to see him alive at all when they pulled the engine off him. Shsh! Believe he's coming round."

Major Lord bent over Gugger. "Can you hear me, Lomax?"

The eyelids flickered, and then two bloodshot but curiously peaceful eyes looked at the C.O. A few words came huskily from the scorched lips:

"S-sorry—about the d-dump, sir——"

"Sorry?" replied Major Lord. "Finest bit of work I've ever seen, boy. Large force, surprise attack, and Jerry had captured that dump of ours not ten minutes before you took a hand. Great job, indeed, boy."

Across Gugger's face passed an expression that might have been amazement or a spasm of pain, and the M.O. quickly knelt beside him, a needle in his hand. Rather meaninglessly he asked, "Feeling bad, Gugger?"

"F-fine!" whispered Gugger, and perhaps it was true, for it is said that a man does not feel any pain when his back is broken.

### Remember to Read—

## HIMALAYAN HELL

A Stirring Story of the R.A.F. in Action on the North-West Frontier

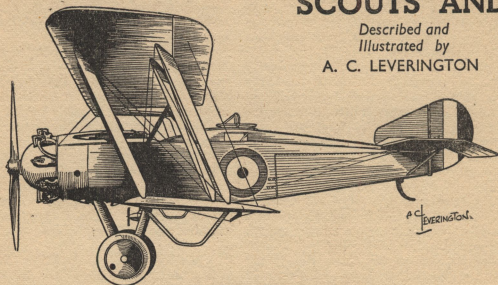
—In Next Month's AIR STORIES



# SCOUTS AND

Described and  
Illustrated by

A. C. LEVERINGTON



## THE WESTLAND WEASEL

A two-seater day-bomber with lines reminiscent of the present-day Wapiti, the Westland Weasel was designed and built in 1918 but appeared just too late to see active service in the Great War. As was usual with most British aircraft produced late in 1918 the Weasel was designed to be fitted with any one of a variety of different types of engines. Its highest performance, however, was probably attained with the 320 h.p. A.B.C. Dragonfly radial

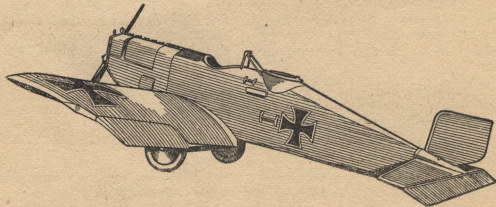
depicted in the sketch above. With this power-plant the Weasel had the creditable top speed of 147 miles an hour at a height of 8,500 feet. Particularly strongly built, the machine was very pleasant to fly, and the cut-out in the centre-section of the top plane helped to afford a wide field of view for the pilot. The principal dimensions of the Weasel were a span of 32 ft. 3 in., a length of 25 ft. 0½ in., and a height of 11 ft. 2 in.

## THE JUNKERS C.L.I "GROUND STRAFER"

THIS up-to-date looking low-wing monoplane was one of the first all-metal aircraft ever built, and was the product of the well-known Junkers works directed by the late Doctor Hugh Junkers. It made its appearance in 1918 and its descendants, employing a very similar system of corrugated metal covering, are to-day being widely used in Germany as air transport and heavy bomber types. The duty for which the Type C.L.I was designed, and for which its metal covering admirably suited

it, was that of "ground strafing" from low altitudes, and it proved a formidable performer at this dangerous work.

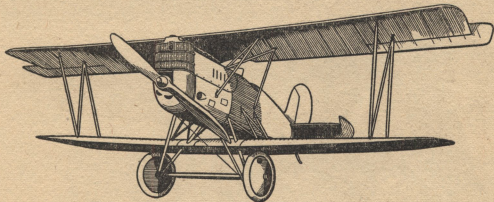
No official information is available regarding the type of engine used or the speed attained, but, assuming a 230 h.p. Benz, it may be estimated that its maximum speed was in the region of 98½ miles an hour at a height of 3,500 ft. Principal dimensions of the type C.L.I were: Wing span 36 ft. 9 in., length 24 ft. 8 in., height 10 ft. 11 in.





# TWO-SEATERS OF THE WAR DAYS

*Famous Warbirds of the British and German Air Services*



## THE PFALZ D.13 SCOUT

THE last of a long line of scout types produced by the German Pfalz works, the D.13 appeared late in September, 1918, and in the course of the last two months of the War some fifty of these machines saw active service.

There is no doubt that this machine owed much of its design to the Bristol Fighter, for it was virtually a single-seater edition of the famous "Brisfit." In the view shown above the resemblance is

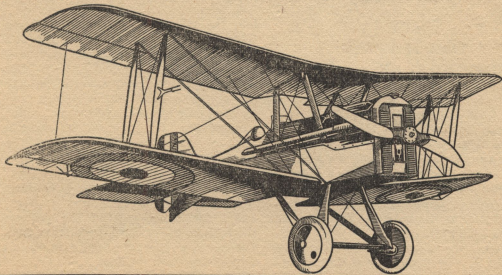
particularly striking in the typical Bristol underslung lower wing that the Pfalz designer adopted.

Fitted with one of the most successful engines of the time, the 230 h.p. water-cooled Benz, the D.13 had a maximum speed of 136 miles an hour. It had, also, a remarkably good rate of climb and could reach 10,000 ft. in twelve minutes. The top wing-span was 30 ft. 11½ in., the height 9 ft., the length 24 ft. 7 in., and the wing chord 4 ft. 7 in.

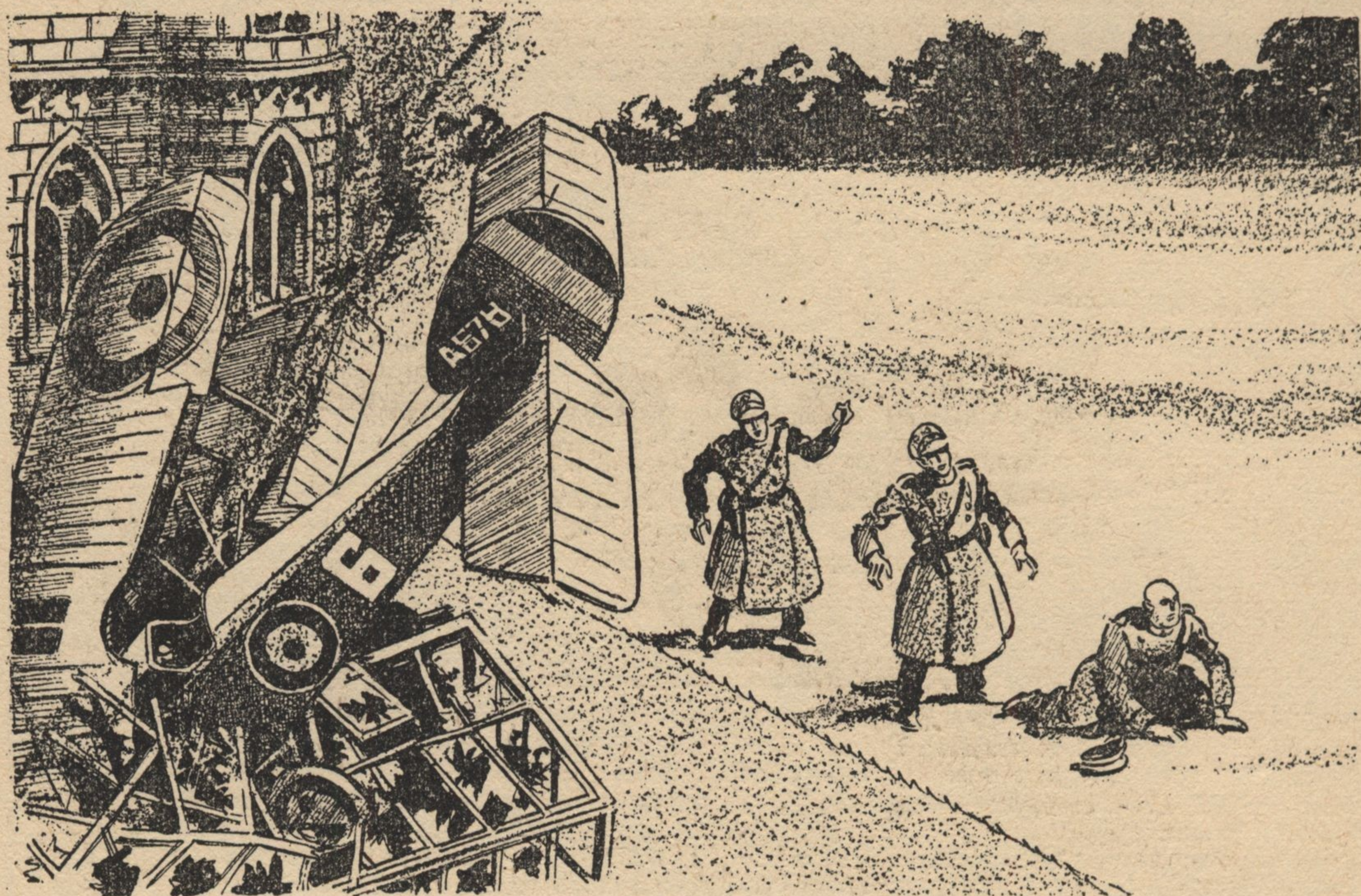
## THE S.E.5A

THIS famous British scout was a development of the S.E.5, the machine that was instrumental in calling a halt to the fast-growing ascendancy of the Imperial German Force in 1917. When first produced, the S.E.5 was fitted with a 150 h.p. Hispano-Suiza engine, giving it a speed of 105 m.p.h. Later it was given more powerful engines of the same type and re-christened the S.E.5A. Its top speed rose accordingly, and with a 200 h.p. Hisso it could

do 115 m.p.h., with a 220 h.p. Hisso 120 m.p.h., and with a 240 h.p. Hisso 136 m.p.h. Finally it was given a Wolseley Viper, as shown below, which raised its speed to 137.8 m.p.h. Apart from their engines, however, the S.E.5 and the 5A were identical, and the following dimensions apply to both types: Span 26 ft. 9 in., chord 5 ft., gap 4 ft. 6 in., length 21 ft. 0½ in., height 10 ft.







*A group of bewildered police officers gaped up . . .*

# WINGS OF TREACHERY

**It Was the Irony of Fate that Flying Officer Jimmy Dunbar, R.F.C., should Fall the First Victim to the Vogels—and just How Ironic Fate had been England never Knew until the Vogel's Designer nearly Wrecked the Peace Treaty with a Private War of His Own**

## CHAPTER I

### Victim of the Vogels

**J**IMMY DUNBAR paused on the squeaking duckboards and stared across Reckem aerodrome with a dour expression on his rugged face, not entirely attributable to the fact that he was a Scot.

It was January, 1919, and the receding tide of war had left in its wake a depressing flotsam of empty Bessoneaus, deserted Nissens and silent butts. Even the wind-sock flagged lifelessly against its mast like a signal of distress.

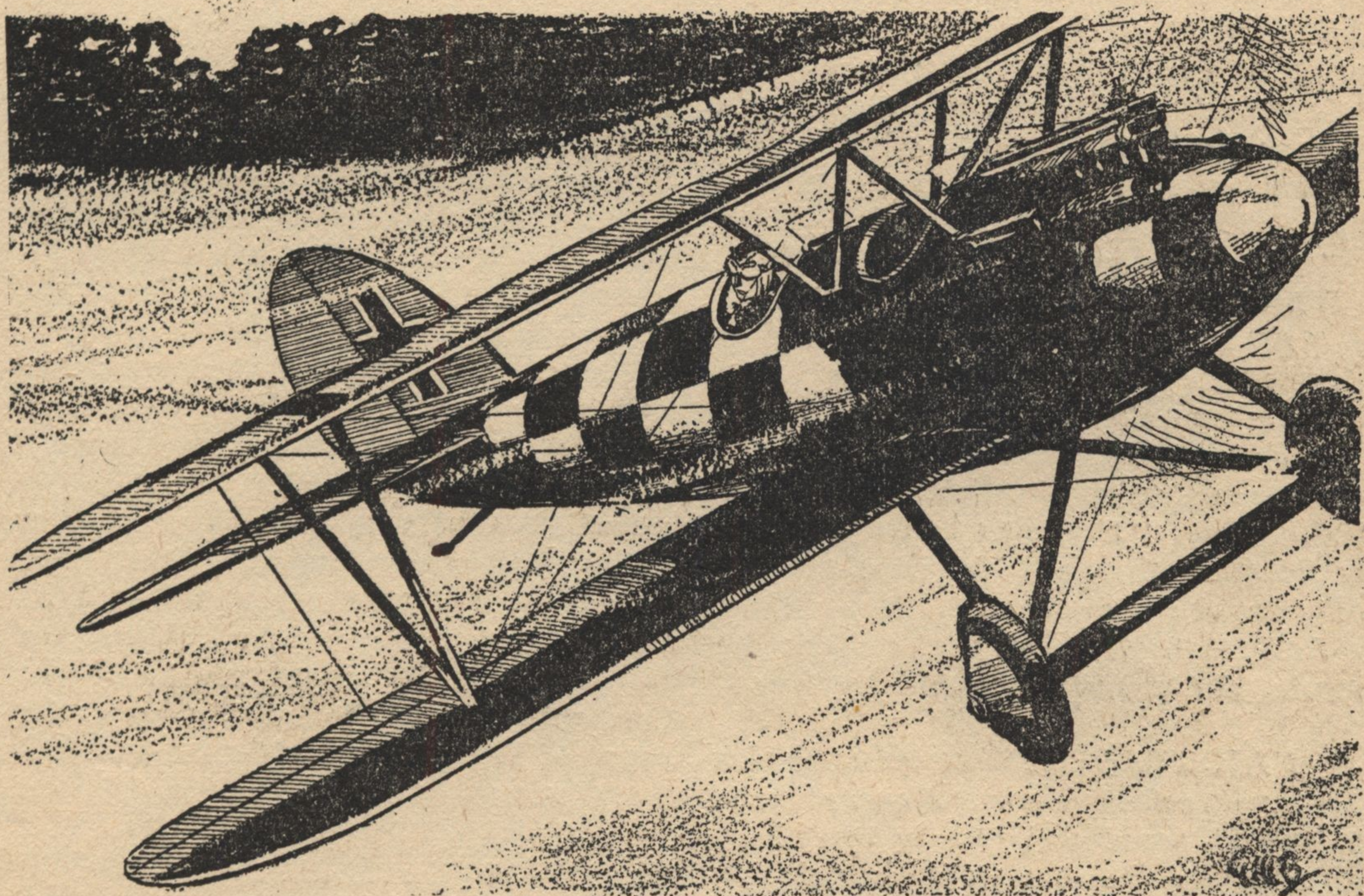
Across the 'drome, the last surviving Camel of 110 Squadron, R.A.F., taxied

into the wind on its homing flight to Rely Aircraft Park, there to join the rest of the machines which had preceded it.

The departing Camel streaked through the winter twilight like a wraith, and climbed over the sheds with their peeling camouflage. Jimmy stood watching it until it was a speck in the sky. The throb of the Clerget drifted back to him like a lament.

Viciously he kicked a lump of Flanders mud off his gum-boot and cluttered along the duckboards to the orderly-room. As he pushed open the door, Jimmy saw that the office wore an unfamiliar air of tidiness.





... as the Vogel swept past them and took-off on a climbing turn

## *A Story of Aerial Adventure with the Army of Occupation*

By **RUSSELL MALLINSON**

On the desk the customary litter of papers had given place to neat stacks of squadron records and combat reports, which Major Carthew was busily swathing with red tape in readiness for submergence in the Air Ministry archives.

The Major greeted Jimmy with a suspicious cheerfulness.

"I'm handing this lot over to you, Dunbar," he said, helping himself to a Red Hussar and pushing the packet across to Jimmy. "This mopping up has been worse than the jolly old War itself. My demobilisation papers have come through, thank the Lord. I'm sailing for New Zealand on the twentieth."

"Who's taking over the Squadron, sir, or, rather, what's left of it?" asked Jimmy in sepulchral tones.

"You are, Dunbar, as senior flight commander. Don't worry. In a week

or so you'll be taking the cadre back to H.E., and you'll be demobilised in England."

Jimmy's jaw stuck out, and that stubborn expression with which the Major was familiar came into his frosty blue eyes.

"But I don't want to go back to England, sir," protested Jimmy.

"Good heavens, man, there's nothing to stay out here for. The War's over. 'The shouting and the tumult dies . . . the Captains and the Kings depart . . .' In other words, we've all got the order of the boot."

Jimmy moved restlessly.

"You don't understand, sir. I've . . . er . . . urgent personal reasons for wanting to be posted to a squadron attached to the British Army of the Rhine."

Carthew gave Jimmy a puzzled glance.



"Unless you're thinking of putting in for a permanent commission in the Air Force," he advised, "there's no point in hanging on. You'd be wiser to get back to England while there are jobs going."

Jimmy's jaw retained its stubborn line.

"I'd rather go up to Cologne, sir."

The Major shrugged his shoulders.

"All right, I'll recommend you. But it will mean your demobilisation being held up for some months."

"Thank you, sir," said Jimmy, a strange expression of satisfaction lighting up his eyes. "I've got a better job to do in Germany than anything England can offer me at the moment."

And with that cryptic remark he saluted and turned to the door.

**M**AJOR CARTHEW stared after him with reflective eyes. A queer fellow, he mused, wondering exactly what kind of bee was buzzing in Flying Officer Jimmy Dunbar's bonnet.

He'd done a sound job in the Squadron, nothing particularly brilliant, but he had accounted for a number of Huns by workmanlike tactics allied with straight shooting without any frills.

The Major thoughtfully crushed his cigarette-end beneath the heel of his carefully-polished field boot.

Now he came to think of it, he had noticed a queer change in Jimmy Dunbar, ever since that August morning in 1918 when his flight had been shot up over Menin by the first staffel of Vogel scouts which had sprung so costly a surprise on the Royal Air Force.

Highly efficient single-seater fighters, superior in manoeuvrability and climb to the Camels, the red- and black-chequered Vogel D.9's had established a temporary aerial supremacy over the Flanders front.

Jimmy Dunbar, reflected the Major, had caught a bad packet when the speedy Vogels had dived out of the sun on that August morning to wreak havoc with his flight.

Jimmy's best pal, Tommy Marsden, had gone down in flames, and Jimmy

himself had been forced down in No Man's Land, his machine a shambles of trailing wires and bullet-torn struts and fabric.

Just the fortune of war, no doubt. Yet Jimmy Dunbar had brooded over that encounter with a strange vindictiveness, almost as though he regarded the fact that he had made history by becoming the first victim of the devastating Vogels as a personal affront.

Since then, Jimmy had displayed more hatred against the Boche than Major Carthew had deemed the comparatively mild Scot was capable of.

But all that was over now, and the Major, reflectively knotting the final strands of red tape round a batch of accumulated hot air from Wing, was too busy with his thoughts of demobilisation and freedom to ponder over the cause of Jimmy Dunbar's strange metamorphosis.

## CHAPTER II

### The Army of the Rhine

**O**N the day that Major Carthew embarked on a crowded troopship for New Zealand, the last buff form on which he had scrawled his signature had its sequel in a chit from Wing, informing Jimmy Dunbar that he was posted to No. 171 Squadron attached to the British Army of the Rhine.

Jimmy duly collected a new B.R.2 Camel from St. Omer, and set off to ferry it over to Cologne. When the powerful Bentley engine had carried him clear of the devastated areas and he was enjoying the unfamiliar experience of flying over green fields and peaceful villages, he reflected on the wisdom of the German High Command in withdrawing their armies to the Fatherland, instead of devastating their country with a fighting retreat to Berlin.

The twin spires of Cologne Cathedral looming through the mists drifting from the Rhine, told Jimmy that he had reached his journey's end.

He landed on the vast expanse of the old German aerodrome at Bickendorf on the outskirts of the city, and taxied



up to the solidly-built hangars, like massive tram sheds, which housed the majority of the machines of the scout squadrons attached to the Army of Occupation.

In the orderly-room Jimmy was greeted enthusiastically by the C.O., Major "Pluggy" Harlow, who had been a flight commander with him in 110 Squadron.

"You're getting fat, Pluggy," said Jimmy, fielding the tin of cigarettes the youthful Major tossed across to him.

Pluggy grinned.

"You're on a joy ride here, Jimmy," he announced cheerfully, tilting back his chair and planting his feet on the office desk. "A morning police patrol, and the rest of the day you live a life of ease according to taste and the number of marks you can screw out of the Field Cashier. S'truth. It's a good life. Plenty of sport, a darned good opera and snappy cabarets at the Rosenhof and the Wintergarten."

Jimmy did not enthuse over this Bacchanalian prospect. He was staring through the window to where a number of familiar machines with iron crosses stood on the tarmac.

"I see you've got some of Jerry's 'planes here," he murmured.

"A Rumpier or two, an Aviatik and a Fokker," said Pluggy. "We found them in the sheds when we arrived. They're amusing to fly, but you have to get wise to the gadgets."

"You don't happen to have a Vogel D.9?" questioned Jimmy.

"What's that?" murmured the Major with a preoccupied air as he spread a copy of the "Cologne Post" on the desk and ran his eye down the amusement column. "Oh, a Vogel. No, friend Boche didn't leave any of them behind, although I suppose he'll have to hand a bunch of them over under the terms of the Versailles Treaty. Tricky little brutes to fly, I've heard. . . ."

Jimmy came out of his lethargy with a jerk.

"They're damned efficient," he expostulated, "and aerodynamically sound. The Vogel is one of the few machines

that's been given a fast rate of climb without sacrificing longitudinal stability. The scientific plane camber permits a wing incidence for a tight turning axis without necessitating a suicidal landing speed. Actually, the Vogel's high performance is largely attained by applying the principles of dihedral and stagger from an entirely fresh angle. . . ."

"Whoa . . . whoa!" protested a grinning Pluggy. "You sound as if you've escaped from a wind-tunnel or swallowed a slide-rule. What the devil do you know about a Vogel D.9, anyway? So far as I know we never captured one. . . ."

Jimmy opened his mouth in a perfectly good imitation of a codfish coming up for air, then closed it again so abruptly that Pluggy waited for the click.

"What about my billet?" said Jimmy at last, abruptly changing the subject.

"I've fixed you up in Lindenstrasse, the best residential district in the city, my lad. All the comforts of home provided by the dear old Government." Pluggy reached for his gold-braided hat and thrust it on his head at a jaunty angle. "Come along. The Crossley's waiting to run us along to the Officer's Club. You'll find a good many old-timers there squandering their Army of Occupation bonus on good beer."

JIMMY spent a hectic evening of joyous re-unions at the Club. Powell, White, Harmer and other good fellows of the war days gathered in the bar to celebrate his arrival.

Jimmy noticed the change in them. The familiar signs of overwrought nerves and strain had gone from their eyes, to be replaced by an expression of carefree cheerfulness.

And as the evening wore on Jimmy found himself an initiate in a brighter aviators movement, which in reality was reaction after the strain of war flying, a reaction which, in those early post-war days that have faded into history, made Cologne a hot-bed of ragging. Orderly Rhinelanders awakened to find their *kolossal* statues painted with the varying colours of the Allies, and the



Hohenzollern Bridge flagstaffs crowned with inverted specimens of domestic china.

Jimmy sat swapping yarns with his old friends, whilst out in the streets that the curfew had cleared of all civilians, the deep-toned bells from Gothic towers chimed the night hours away.

At last Jimmy rose, unsteadily, and announced his departure. That bee was buzzing in his bonnet again.

The squadron Crossley deposited him and his noisy escort outside the impressive mansion in the Lindenstrasse that was his billet.

In the hall, with its heavy furnishings and everlasting aroma of Gorgonzola, attributable to the Teuton habit of cooling the family cheese in the larder beneath the stairs, Jimmy was greeted by his enforced host.

Herr Woolrich proved to be an amiable German who, despite the submarine blockade, had succeeded in preserving an ample waistline.

He pressed Jimmy to share a bottle of wine, a gesture which was the latter's introduction to the politic hospitality that the Rhinelanders extended to members of the Allied forces.

Suppressing a hiccough with difficulty, Jimmy indicated in halting German that Herr Woolrich could do him no greater service than to lend him a directory with the names and addresses of the citizens of Dusseldorf and its environments.

Herr Woolrich's cherubic face expressed curiosity.

"You 'ave a friend in Dusseldorf you wish to find, *hein*?" he smiled. "If you would tell me her name, perhaps I can help you."

"It's a 'him,' not a 'her,'" replied Jimmy. "A man called Schwartz. Edrik Schwartz. He lived in Dusseldorf in 1914."

"Edrik Schwartz!" echoed Herr Woolrich in tones of respect. "You know him, the famous designer of the Vogel D.9? He did wonderful work for the Fatherland. . . ."

"I'd be obliged," snapped Jimmy, "if you could find me that directory."

Herr Woolrich bowed apologetically.

It had been a mistake, he realised, to have mentioned the machine which had been such a thorn in the side of the Royal Flying Corps.

"Pardon," he said, "I will bring it immediately."

The corpulent little German disappeared into his study, to emerge a few minutes later with the directory, which Jimmy grasped with an odd expression of satisfaction.

Thus helpfully ballasted, he carefully ascended the shallow thickly-carpeted stairs.

The windows of the spacious first-floor bedroom that had been allotted to him overlooked the Stadt Wald. But Jimmy hastily drew the curtains across the casements without appreciating the picturesque view of slender pine trees silhouetted against the moonlit sky.

He slumped into a chair and opened the directory on his knees. For some moments he studied the pages intently until at last he found what he sought.

"Edrik Schwartz." Jimmy laughed mirthlessly as he traced with his finger the printed name and the address following it. "The Schloss, Lindheim."

He thrust the directory back on the table and, lighting a cigarette, sat staring thoughtfully up at the blue-grey smoke wreathing above his head.

"So Edrik Schwartz has done wonderful work for the Fatherland, eh," he murmured with a cynical twist of his lips, "and picked up a small fortune in the process, no doubt. Yet in 1914 he'd scarcely two pfennigs to rub together."

His aching head did not help to lessen Jimmy's ill humour. He rose and crossed to the dressing-table and, pouring himself out a glass of water, lifted it in a satirical toast.

"Here's to an early meeting, Herr Edrik Schwartz," he said aloud, an unusual viciousness sharpening his voice. "That's a toast you won't reciprocate—you double-crossing swine."

### CHAPTER III

#### Schwartz Receives a Visitor

"WELL, we've ruddy well asked for it," sighed Major Pluggy



## WINGS OF TREACHERY

Harlow as he pushed aside the unusually formidable paper barrage which had arrived that morning from Wing.

"Asked for what?" queried Jimmy Dunbar, who at that moment came through the office doorway with "C" Flight's logbooks under his arm.

The Major laughed shortly.

"The G.O.C.'s on the warpath over the ragging that's been going on and the slackening in discipline generally," he growled. "So Wing's appointed an education officer who's arranging ump-teen courses on the Lord knows what, and we're all going back to school for several hours a day. Sport is to be compulsory. Each squadron is to select representatives for boxing competitions, tennis tournaments, cross-country running, and in our spare time we'll be allowed to play rings, darts or ludo. You'd better go and buy a little pair of running shorts, Jimmy, my lad, and prepare to sweat for King and Country. . . ."

"And when do we fly?" grimaced Jimmy.

"Only for target practice and on official patrols. Joy-riding is definitely washed out," replied Pluggy. "You'd better warn the members of your flight."

JIMMY'S face was thoughtful as he walked across the aerodrome to the sheds. The ban on joy-riding had come at an unfortunate moment so far as he was concerned. He had planned an unofficial flip over to Lindheim, a trip that he had resolved to make ever since the Armistice. The slow-working machinery of peace had forced him to delay his plan until his posting to the Army of the Rhine had brought him closer to his objective.

He did not intend to abandon his efforts now, despite the fact that, as Lindheim was outside the occupied area, his contemplated joy-ride entailed greater risk.

Outside "C" Flight sheds, his B.R.2 was warming up. He climbed into the cockpit and ran up the powerful engine in readiness for the customary morning patrol.

He listened rather more attentively than usual to the Bentley's rhythmic roar, and his gaze travelled slowly over the glass facets of the dashboard.

He took-off in a sharp climbing turn, and flattened out with the oil-flecked nose turned towards the city as if to commence the customary patrol.

Soon Cologne lay beneath him, wrapped in a haze of drifting smoke. Over the Hohenzollern Bridge he banked steeply on his tracks, and opening the throttle wide, set a course for Dusseldorf. He had only to follow the winding course of the Rhine. Five thousand feet below the slender, smoke-belching factory chimneys of Germany's awakening industries lined the banks.

In ten minutes he had flown beyond the occupied zone. He was aware that a forced landing now would produce disturbing complications. But with excitement stirring his blood, and the realisation that the plan he had rehearsed so frequently in his mind during the last restless weeks was nearing fulfilment at last, Jimmy was only conscious of the urge to reach his objective.

He recognised Dusseldorf Bridge with the aid of the giant lion standing on the centre pier stoically facing the town. A few moments later he glanced at his map and banked steeply southwards towards Lindheim.

Jimmy leaned out of the cockpit and studied the lay-out of the unfamiliar landscape. He knew that he would find an aerodrome near Lindheim with a factory beside it—the production centre of the Vogel 'planes.

He soon spotted the aerodrome with its attendant factories, but he made no endeavour to land there. His visit was of a more personal nature. He kicked on rudder and swung over to where a large white building, with slender towers and Gothic windows glittering like jewels in the sunlight, stood in the valley.

Lindheim Schloss. Jimmy's lean jaw hardened as he circled over the rambling grounds and manœuvred for a tricky landing.



COMING in low over the trees, he throttled back and side-slipped in with the nose of the Camel lifted to kill his forward speed.

He dropped neatly on to the smooth lawns, but he had come in a trifle too fast. The Camel rolled on and, despite his desperate efforts with the rudder, the machine ploughed its way into the extensive conservatories flanking the house. There was a crashing tumult of splintering glass and smashing woodwork, and Jimmy ducked into the cockpit.

The machine stopped with a lurch, the airscrew scything its way through a bench of potted geraniums. A cascade of earth and greenery and broken flower-pots descended on the hapless Jimmy.

As he crawled painfully out of the tilting cockpit and landed on his hands and knees amidst the chaos, he saw a door at the far end of the conservatory open violently.

Then a corpulent German stood framed in the doorway, his ample face purple with combined shock and indignation. Jimmy wiped sticky earth from his eyes and stared at that familiar figure.

He had often rehearsed in his mind this meeting with the man who had defaulted in a matter of honour. He had pictured himself as a calm dignified figure denouncing Edrik Schwartz with scornful words. But now, as he rose from the wreckage of the greenhouse, he was painfully aware that he far from resembled the spirit of Nemesis.

Edrik Schwartz stepped forward and cleared his throat.

"You *dummkopf* . . ." he began explosively.

His voice died away in a gasp. Recognition dawned on his face, and an expression of sudden alarm came into his close-set eyes. He took a step backwards.

Jimmy grinned. He was regaining something of his confidence.

"I scarcely recognised you, Edrik," he said. "You've developed a regular profiteer's paunch since last we met, and you've increased your head resistance with at least another chin."

Edrik Schwartz stared incredulously.

In the sunlight his countenance looked a sickly green.

"Dunbar . . . !" he gasped. "This is indeed a surprise. . . ."

"Isn't it?" responded Jimmy cheerfully. "You've no idea the trouble I've had getting on your tail. You know why I'm here, of course . . . ?"

The German extended his podgy hands.

"I haf no idea . . ."

"Haven't you?" Jimmy mocked.

"Then I had better refresh your memory. I've come to collect some property of mine. To be precise, those blueprints on which you based the design of the Vogel D.9."

SCHWARTZ laughed offensively.

"My dear fellow! Are you quite mad?"

"On the contrary, I've never been more sane," retorted Jimmy with ominous calm. "When I first spotted a Vogel D.9 through my Aldis on a somewhat eventful morning over Menin last August, certain unusual features of the design seemed oddly familiar. Queer, isn't it, how one's mind, working under nervous stress, registers details with photographic accuracy! And in that dog-fight that followed I had opportunities thrust upon me for observing the Vogel at close quarters. Those deeply-cambered wings with their pronounced stagger and unequal span and chord, those tapering ailerons operating on all four planes, were just a few of the points that made me more than suspicious as to the source of those designs. And when I subsequently discovered through Intelligence that a certain Herr Edrik Schwartz claimed to be the designer of the Vogel D.9, well, those suspicions just became certainties. . . ."

Schwartz's uneasy voice broke in.

"I think, my young friend, that you are suffering from—how do you say—hallucinations."

"Just a moment," persisted Jimmy.

"Think back to July, 1914, when those rumours of war forced me to leave hurriedly for England and dissolve our partnership. We'd been working together, hadn't we, for the best part of a



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year—building an aeroplane for the International Aviation Competition. Remember the shed we rented on the Oberweltfeld? I put every bean I could lay hands on into the venture after I met you on a student's course at Heidelberg, and you converted me to a belief in aviation. I didn't regret it then. I knew I'd hit on a basic design for a fast single-seater that was far in advance of its time. . . ."

"I think it is you who are forgetting, my friend," Schwartz interrupted uneasily. "You had the benefit of my experience as a trained engineer. My contribution to our partnership was not inconsiderable."

"I certainly hand it to you, Schwartz, where engines are concerned," agreed Jimmy at once. "You could make an engine eat out of your hand. But you didn't contribute so much as a decimal point to the design of that aeroplane. Since then, of course, you've had four years of immense advance in aircraft-building technique to help you to enhance the value of my designs. I'm not claiming the credit for that, by a long chalk. But I am claiming that you stole my basic design—as my blueprints can prove. You always knew those designs were good, Schwartz. That's why you lifted them from my trunk the night I left for England back in '14, and substituted some worthless blueprints of your own."

Schwartz shrugged his shoulders, but his pale eyes were uneasy.

"That's a lie . . ." he protested.

"It's the truth, and you damned well know it," Jimmy retorted. "I want those prints, and I intend to have them. I'm betting that you've kept them to bolster up your claim to have originated the Vogel. Until now you've had all the plums. Now I want my share. I don't hope to get any compensation from your Government. But I'm pretty sure the British Air Ministry 'll back me if I can prove the part I've played in the production of the Vogel D.9. And I can only prove it by producing those original plans. I've got to prove it for the sake of my future. . . ."

Jimmy could not conceal the anxiety

in his voice. Then he heard Schwartz's taunting laugh.

"Who do you think will credit your story, my dear fellow? You will admit that it sounds somewhat improbable, to say the least. Surely you see that the word of Edrik Schwartz, the eminent aircraft designer, will be credited against yours?"

But for all his display of confidence, the German's eyes were watchful. He was disturbingly aware that he had a new and more formidable Jimmy Dunbar to deal with. He was no longer the enthusiastic young undergraduate with a genius for aerodynamics, but an older, more hard-bitten Jimmy with a grim recklessness showing in his eyes that suggested unpleasant possibilities to the timid Herr Schwartz.

His heart gave a convulsive leap as he saw Jimmy's hand go down to a pocket that bulged ominously, almost as if it might conceal a revolver.

Schwartz's nerve suddenly broke. Before Jimmy realised his intention, he had swung round and, reaching the house door with swift strides, slammed it behind him.

## CHAPTER IV

### "Third Degree" by Air

JIMMY heard the key grate in the lock as he sprang in pursuit. With an oath, he hurled his weight against the panels, but the door did not budge.

Then, from beyond the barrier, he heard the German's excited voice drifting down the hall. Schwartz was sending an urgent message over the telephone.

"Ja . . . he is here. An English flying officer. I think he is a little mad. Gut. You will send immediately to place him under restraint. . . ."

The rest of the conversation was inaudible to Jimmy. But he had heard enough to realise that Edrik Schwartz had telephoned for police protection. It was the obvious move, of course.

Jimmy's spirits sank as he foresaw the inevitable complications that would ensue. The German police would be within their rights in detaining an



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English officer who had landed outside the occupied area. Before the prolonged formalities necessary for his release were complied with, Edrik Schwartz would have ample opportunity to disappear, or, at least, to destroy the incriminating blueprints.

Jimmy stared at the crippled Camel with its jagged prop., and swore softly.

Suddenly his head jerked round. Across the grounds drifted the deepening rumble of a Mercedes engine.

He stiffened as he saw the streamlined nose of a Vogel D.9 emerging from a shed built beside the west wing of the house. As the tapering fuselage slid into view he saw, too, that Edrik Schwartz was in the cockpit.

The 'plane was a two-seater, and for several seconds Jimmy watched it indecisively. Then, as the Vogel taxied out to gain position for its take-off, he made a swift decision.

Thrusting his way past the shattered wall of the glasshouse, he began to run. His breath coming in harsh gasps, he strained every nerve to reach the 'plane before it could turn into wind for the take-off. Frantically he tore over the ground; a final heart-breaking sprint and the red and black chequered 'plane was within reach. Bracing his muscles, he sprang.

His outstretched arms slithered over doped fabric as he landed across the vibrating fuselage with a jerk that jarred every bone in his body. He hung on grimly, and at last his hands got a firm grip on the leather-padded rim of the rear cockpit.

Spreadeagled across the cockpit, Jimmy dragged himself forward, the propeller slipstream smashing against his face. He saw a pale, scared Schwartz staring back at him over a hunched shoulder. The Vogel swerved perilously, and Jimmy had visions of an almighty crash as he slithered down into the cockpit.

To his relief he saw that the machine was fitted with dual controls, and it was the work of a moment to slip the catch which disconnected control-column and rudder-bar in the front cockpit.

Quickly he had the machine under

control, a burst of engine brought the head round into wind, and next instant it was roaring off the ground in a steep climb. A thousand feet up Jimmy levelled off, and as he felt the Vogel respond to the slight movement of his hand, Jimmy laughed a little wildly. Now he had Edrik Schwartz just where he wanted him.

**F**OR the next few minutes Jimmy forgot all about Edrik Schwartz in the cockpit in front of him.

He relaxed happily in his seat, his hands and feet moving gently on the controls of the machine that had been born in his brain.

His gaze travelled slowly over the pleasing lines, and details that time had dimmed in his war-weary brain now quickened with reawakening memory. There was the carefully-graduated wing camber, the sharp dihedral of the upper planes, the pronounced stagger and the perfect streamlining from prop. boss to rudder.

He became aware, too, of the many details of modern technique, discovered in recent years, and to which he could lay no claim. The intensified progress in aircraft design and construction of the latter years of the War was embodied in the machine, but, nevertheless, his basic design, which he now realised had been an uncanny forecast of things to come, still prevailed. Essentially, this machine was the child of his brain.

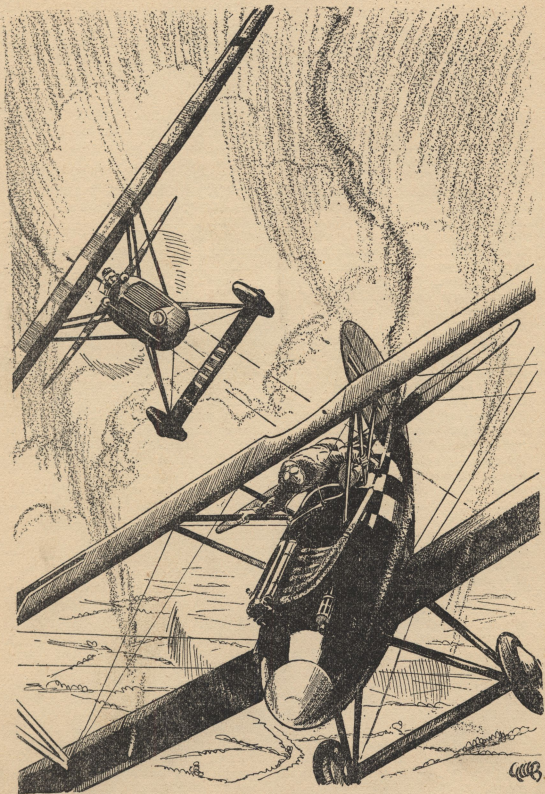
With a thrill of anticipation he opened the throttle and eased back the stick. He would see for himself how efficiently Edrik had exploited his stolen designs. Up came the cowl as the Vogel roared skywards in a surging zoom. Jimmy flattened out and, sweeping round in a wide circle, turned over in a slow roll.

"Jove, she's a beauty!" he murmured with pardonable pride.

Down went the streamlined nose, the song of burdened wires rising to a shrill crescendo as the Vogel plunged earthwards.

Jimmy eased the stick back. The cowl reared up, and green fields





Gripping the centre-section struts, Jimmy Dunbar dragged himself forward into the front cockpit



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streamed past his vision and melted into blue sky again as, effortlessly, the loop was completed.

He cut off the engine and, dropping into a glide, bent forward to shout at the limp figure in the front cockpit.

"You made a good job of her all right, Edrik," he yelled with a sardonic grin. "Controls are beautifully balanced, and the longitudinal stability's a dream. You certainly know a good design when you see it."

Schwartz wrenched himself round, his rigid hands gripping the cockpit rim. His flabby face was a sickly green.

He shouted, but his words were lost in the strident clamour of the Mercedes as Jimmy opened out and went down in a power dive. His eyes on airspeed indicator and rev. counter, he pulled up the streamlined nose again in a tight loop.

It was the first of a series of breathtaking loops. As a grim-faced Jimmy pump-handled the Vogel over and round the sky in delirious circles, he watched the pale blur that was his passenger's face, waiting for Schwartz's nerve to crack under the strain of this aerial "third degree."

As the Vogel dived out of the twentieth loop, a white-faced Schwartz hammered feebly on the coaming with fluttering hands. His eyes were bulging. He looked on the verge of collapse, and Jimmy flattened out, not without relief if the truth were told, for even his air-conditioned stomach was evincing signs of nausea.

As he throttled back Schwartz's imploring voice rose feebly above the whine of wires.

"*Gott in Himmel . . . stop . . .*"

"Can't be done," replied Jimmy relentlessly. "Unless, of course, you've decided to be sensible. . . ."

"I'll do anything . . . anything . . ."  
his victim whined through pallid lips.

"That's better," Jimmy grunted. "Now what about those designs?"

Schwartz hesitated, and with a shrug of his shoulders Jimmy reached for the throttle.

"They're in the safe in my study,"

yelled Schwartz, his morale completely collapsing.

"And the keys?" said Jimmy laconically. "It will simplify matters if you hand them over now. Or would you prefer a few more advanced aerobatics?"

Schwartz shuddered visibly, and fumbled in his pocket. A few moments later he thrust a bunch of keys across the coaming.

Jimmy grabbed them with relief.

"Pity you didn't think of that before," he said. "You'd have saved a lot of bother. . . ."

But Edrik Schwartz was no longer listening. He was being violently air-sick.

A merciful Jimmy floated round for a few minutes on an even keel. His brain was working quickly. He had to get back to Schloss Lindheim to collect the plans and would have to rely on his resource to avoid the police, who would have arrived by now in response to his late partner's telephone message.

His gaze rested uncertainly on the discomforted Edrik. To return him to Schloss Lindheim would only complicate matters. Safer to maroon him where he could not cause any more trouble.

Jimmy went down in a slow glide, his eye on a field two thousand feet below, which seemed sufficiently isolated for his purpose.

## CHAPTER V

### Robbery with Violence

WITH a neat three-point landing, Jimmy put the Vogel down in a meadow that was at least half a mile away from the nearest road.

As the machine rolled to a standstill he rose in his seat and, gripping Edrik Schwartz's shoulder, explained with scant ceremony that this was where he stepped off.

Edrik did not argue. In fact, the expression of sickly relief that spread over his pallid features when he slithered down the side of the fuselage and his



## WINGS OF TREACHERY.

feet touched solid ground evidenced the effectiveness of Jimmy's reprisals.

"*Auf Wiedersehen*," grinned Jimmy satirically, and then his voice was drowned in the blare of the *Mercédès*.

As he took-off in a climbing turn he saw out of the corner of his eye a swaying Edrik feebly mopping his moist brow with an elegant white silk handkerchief.

Jimmy relaxed in the cockpit as he picked up his course back to Lindheim. For the first time during the last hectic hour he had an opportunity of sorting out his somewhat chaotic thoughts.

His plans had largely slipped beyond his control, like a stampeding horse with the bit between its teeth. He had not intended to start a private war of his own. Yet here he was flying a stolen German machine over territory well beyond the British occupied zone, with the German police awaiting an opportunity to arrest him. With difficulty, he refrained from dwelling on the number of clauses of the Versailles Treaty he must have violated during the last irresponsible hour.

His jaw tightened stubbornly. He was not going to turn back now. He must go through with the job. At the moment he had not a shred of evidence to justify his actions. His explanations would sound far too weak for belief without the supporting evidence of the blueprints which still rested in Edrik Schwartz's safe.

Jimmy leant out of the cockpit as the white towers of Schloss Lindheim gleamed in the landscape below. His thoughtful gaze rested on a number of uniformed figures grouped round the crashed Camel still protruding from the shattered glasshouse.

Swiftly he made his plans. The element of surprise was on his side. It was improbable that the German police suspected that he was flying the Vogel.

He throttled back and came in low over the trees. He flattened out with sufficient way to carry him to where the lawn gave place to a short gravel drive leading past box hedges to the main doorway.

With a last kick on the rudder-bar

and a burst of engine, he swung the Vogel's nose into the wind with a clear take-off run in front of the slowly-revolving prop.

Leaving the *Mercédès* ticking over, he dropped to the grass and ran for the door even as the German police officers began to move across the lawn to investigate the new arrival.

The main door was locked. Jimmy, working against time, did not stand on ceremony. He clenched his fist beneath his flying glove and drove it against a glass panel. It was the work of an instant to slip his arm through the jagged hole and release the door-catch.

In the deserted hall he stood looking round him uncertainly. There was a confusing number of doors. He moved forward, opened the nearest and stared into a vast kitchen. Two startled servants swung round from steaming pots on the stove and squealed in alarm.

Jimmy slammed the door and sprinted for the next one. As he wrenched it open he saw the dark glow of panelling, and he knew he was on the right track. This looked more like a study. He closed the door behind him and, turning the key in the lock, glanced hurriedly round the room in search of the safe.

There it was, over by the huge oak fireplace. Edrik Schwartz's keys glinted in his hand. In a few moments the safe door yielded, and Jimmy's hands were moving swiftly over the mass of papers in the steel-walled interior.

His eyes were anxious. It was quite on the cards that Schwartz had sent him on a fool's errand. Then, with a quick breath of relief, he saw a bundle of tattered blueprints in an inner drawer he had wrenched open. A brief examination satisfied him that his quest was ended.

Even as Jimmy straightened, the precious plans in his hand, a strident knocking echoed from the hall, and the door panels shook with a rain of blows.

A hoarse command came from outside.  
"*Offen Sie der Thüre!*"

JIMMY laughed and ran for the window. As he struggled with the catch the



door gave way with a crash, and a surge of uniformed figures burst into the room. At the same instant the casement flew up with a bang, and the hard-pressed Jimmy slithered over the sill and dropped to the grass.

He straightened and ran like a hare. Round a corner of the house three police officers came at the double, caught sight of the Englishman, and swerved to cut across his path to the waiting Vogel.

As the foremost pursuer barred his path Jimmy's shoulder muscles tensed beneath his leather coat, and his clenched fist upper-cut the German mercilessly. The man went down as if he had been poleaxed, sprawling in the path of his comrades. And as they stumbled over the crumpling figure Jimmy gained valuable respite.

Swerving beneath the grasping hands, he tore himself free and raced for the Vogel. Gaining the machine a bare three yards in front of his closest pursuer, he threw himself into the cockpit and grabbed the throttle. The roar of the Mercédès was like music in his ears, and its clamour drowned his yell of delight as he took-off in a climbing turn.

A group of bewildered German police officers gaped up at him. For the last strenuous five minutes they had entertained serious doubts as to whether the War was really over.

### CHAPTER VI

#### Attack from the Blue

**A**S Jimmy Dunbar swung the Vogel on a compass course back to Bickendorf, he derived considerable satisfaction from the sight of the roll of blue-prints he had thrust into the cubby-hutch on the dashboard.

At last he had definite evidence to supply at least some justification for his trespassing over the unoccupied areas of the Rhine provinces, and for his manhandling of certain late enemies of the King's Realm.

There would be a devil of a row, of course, and a lot of difficult explanations

when he turned up with a stolen Vogel D.9 in place of the crashed Camel. And to what extent a private feud would be regarded by a court of enquiry—or in all probability a court martial—as vindicating his irregular behaviour, Jimmy could only surmise.

At the worst, he reflected philosophically, he would be turned out of the service a little more spectacularly than through the ordinary channels of demobilisation.

Against this, there was the reassuring thought that his future was considerably less speculative now that he could prove the considerable part he had played in designing one of the most successful scouts of the War. That alone should be enough to ensure a good job with a British aircraft firm.

Jimmy waggled the Vogel's tapering wings joyously. Edrik's treachery had done him one good turn, inasmuch as he had provided an excellent working model to prove the soundness of his designs.

An instant later the smile froze on Jimmy's lips. His hand tightened convulsively on the control stick as he listened in incredulous disbelief to the crackle of gunfire at the back of his head.

It was some moments before his brain reverted to the fast-moving efficiency to which tense danger in the War had accustomed his subconscious mind. And he paid for that hesitation by seeing his instrument-board reduced to splinters by a hail of lead that slashed across the cockpit.

Frantically, he slammed on rudder and yanked the stick across. Then, whirling round in a vertical bank, he saw a Fokker D.8 behind and below him, in process of pulling out of a dive. A flame of tracer rippled from its rearing nose, and Jimmy side-slipped away from an arc of screaming nickel-jackets.

His face was grim and rather pale. With shocked enlightenment he realised that, although the War was over officially, the Fokker pilot on his tail was out to shoot him down as mercilessly as though hostilities still existed.



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Jimmy's jaw tightened grimly. With full right rudder he fanned round and dived on the mysterious attacker as the Fokker fell away on the peak of its zoom. And as he dived his hands instinctively fumbled for the gun grips, only to realise with a sudden numbing shock that there were no guns in a rear cockpit.

**J**OCKEYING for position, his narrowed gaze travelled along the cowling of the Vogel, and his heart leapt with renewed hope. Neatly streamlined in sunken grooves ahead of the front cockpit were twin Spandaus, and Jimmy caught the dull gleam of cartridge-cases in loaded belts. . . .

He breathed a prayer of thankfulness to the hard-worked gods of all good airmen, that Edrik Schwartz had attempted his get-away from Schloss Lindheim in a war machine which apparently had been left with its armament untouched.

But how to get at those guns?

Jimmy made a swift decision. Crouching in the cockpit, he locked the catch connecting the control stick and the rudder-bar in the front cockpit. Then he straightened and, gripping the centre-section struts, dragged himself forward over the coaming. The rush of air beating against his body almost dislodged him, but he hung on grimly as the uncontrolled Vogel plunged fantastically. He had at least the consolation of knowing that the machine's erratic course made it an elusive target for the pursuing Fokker.

A last convulsive heave and Jimmy was sprawling across the canting cockpit. He wriggled his feet down and slumped on to the seat to find that the Vogel was losing height at an alarming pace with a combination of a dizzy side-slip and a flat spin.

With a grunt of relief he clamped his feet on the rudder-bar and grabbed the stick. He felt the machine shudder as bullets battered up through his tail from below. But now the responsive Vogel was under control, and a grim-

faced Jimmy banked steeply round as he wheeled to attack.

The Fokker leapt into the ring-sights with Jimmy groping for the unfamiliar gun handles. He found the grips, and without a twinge of conscience let loose a flaming burst from the chattering Spandaus. He had not started this crazy duel. He was fighting now in self-defence.

He swore lustily as the converging bullets curved harmlessly past the Fokker's tilting wing. It pulled up sharply and Immelmanned back to dive on the Vogel's tail.

Jimmy wrenched back the stick to loop out of the immediate danger zone. A trail of tracer tore through his top centre-section, and he was rattled into heeling over in a ragged turn.

Firing as he dived, he slammed a close range burst into the zooming scout. The flaming tracers reached down, and Jimmy saw the Fokker's starboard wing-tip disappear in a flurry of splinters and fluttering fabric. For a few moments the stricken machine kept on an even course with the velocity of its zoom. Then, slowly, it fell away on one wing in the first convulsive twist of a spin.

A sobered Jimmy followed the Fokker down. Even now he was conscious of a sense of unreality, as if that grim duel was some fantastic nightmare from which he would soon awaken.

Twenty feet from the ground the Fokker pilot pulled the machine out of the spin. But it stalled, and the ground was too close for escape. The starboard wing hit the turf and crumpled, and the stricken 'plane cartwheeled to splinter into ruin with a sickening crash.

Jimmy circled lower, watching for signs of movement amidst the wreckage. Nothing stirred, and with quick decision he throttled back and glided down to the field.

Damn it . . . this wasn't wartime. Common humanity demanded that he gave what assistance he could.

He landed close to the wreckage and sprang out of the cockpit before the Vogel had stopped rolling.



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### CHAPTER VII

#### The Luck of Jimmy Dunbar

A FEW moments later Jimmy was struggling to lift the buckled wing which pinned the pilot's lower limbs. He heaved and tugged at the wreckage, the sweat rolling down his face, until at last he had freed the unconscious German.

He laid him on the grass and, kneeling at his side, coaxed between his pallid lips some raw spirit from the brandy flask he had drawn from his pocket.

The German stirred and slowly opened his eyes. He was a fair young Saxon with a weak, good-looking face that relaxed in a faint smile as he stared up at Jimmy.

"Badly hurt?" asked Jimmy sympathetically.

"My leg . . . I think," the German answered in halting English . . .

Jimmy saw the red stain spreading on the German's thigh. Gently he ripped away the cloth to expose a deep flesh wound from which blood was spurting.

He tore off his scarf and knotted it in a tourniquet which served to check the bleeding.

Jimmy gave the youth another pull from his flask.

"Feeling better?" he said.

"*Danke* . . ." There was gratitude in the German's voice. "Much better . . ."

Jimmy eyed him curiously.

"Like to tell me what all this is about?"

The German raised his hand to beckon him to bend closer.

"*Ja* . . . I will tell you. I owe you that. You have behaved like—how do you say—a good sport." He paused for a few moments and brushed his hand across his forehead as though he found it difficult to collect his thoughts. "Herr Edrik Schwartz telephoned me half an hour ago at the aerodrome at Lindheim. I am his chief test pilot. He sent me to catch you. He told me you had stolen designs which were of the utmost value to my country. Those

designs had to be regained at all cost. Schwartz told me that we had authority to stop at nothing to prevent you reaching Cologne . . ."

Whereupon, to Oberleutnant Max Buschmann's great astonishment, his companion laughed, a laugh that echoed derisively in his ears.

"Hells bells . . . that's funny! . . ." said Jimmy weakly.

"Funny?" echoed Max Buschmann soberly.

"Yes, about those plans. You see they happen to be mine. All my own work in fact," explained Jimmy. "Edrik Schwartz didn't tell you, of course, that he stole them from me in the first place. You see, he happened to be my partner in a private aircraft concern back in '14. I can't tell you all the details now, but I tackled him at Lindheim this afternoon and got those plans back. I'm afraid you were sent on a fool's errand, my lad. . . ."

MAX BUSCHMANN, late of the German Imperial Air Force, stared thoughtfully at Jimmy. Something more than the assurance the Englishman's voice had held convinced him that he was telling the truth. For did not his story strangely confirm certain doubts he had long harboured in his mind about his employer? Often he had been puzzled by something inconsistent in Herr Edrik Schwartz's claim to have created the designs on which the Vogel scout had been based—the strange ignorance of aerodynamics that the arrogant Schwartz had displayed on many occasions.

Enlightenment came to Max Buschmann. Edrik Schwartz was nothing but an impudent impostor, and with that realisation Max cursed his folly in allowing Schwartz to inflame him into attacking the Englishman he had accused of the very thing for which Schwartz himself was responsible. He had thought he was striking a blow in the cause of justice, and because Max Buschmann, like many of the flying officers of the German Imperial Air Force, had been embittered by defeat, Edrik Schwartz had



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fostered that resentment for his own unscrupulous purpose.

A rather shamefaced Max held out his hand.

"I am sorry . . ." he murmured. "I make one damn fool of myself. Now you must go. I see a car has stopped out on the road. I need your help no longer."

"I think you're right," laughed Jimmy, clasping his companion's hand. "Sorry you caught a packet, but it might have been a darn sight worse."

The German did not seem to be listening. He was staring at Jimmy with strange intentness.

He said quickly: "You fly back to Bickendorf, *hein*?"

"That's the programme . . ."

Max Buschmann raised himself on his elbow, and as he spoke his voice was queerly strained.

"Keep clear of Bickendorf," he urged.

"I tell you that in all seriousness. . . ."

"What on earth do you mean?" echoed Jimmy blankly.

The young German lifted his earnest face.

"Bickendorf aerodrome is mined, a time-mine beneath the petrol tanks. It is due to go up at six o'clock to-night."

Jimmy stiffened.

"My God! Is that true?"

"Go at once if you would warn your comrades," Max Buschmann urged. "It is the truth, I tell you. I saw the mine fixed before we evacuated Bickendorf aerodrome. . . ."

Jimmy waited to hear no more, but turned and ran. Already dusk was deepening into night. He leapt into the cockpit and jabbed open the throttle. He glanced at the dashboard clock and he felt the cold sweat break out on his forehead.

It was twenty minutes to six!

MAJOR PLUGGY HARLOW ran his hand distractedly through his disordered hair. Not since the War had he been bombarded with such a barrage of contradictory and confusing messages. They had started to trickle in from Wing two hours ago, and had

descended upon him at half-hourly intervals.

"What the devil can Jimmy be up to?" he murmured weakly, his bewildered gaze roving over the buff chits strewn the orderly-room desk.

"*Camel B.R.2, No. 4098, reported crashed in private grounds of Schloss Lindheim. Report immediately name of pilot. . . .*"

That was how it had started. The plot had thickened considerably after that.

"*German Vogel D.9 reported stolen from Lindheim. Last seen flying westwards. British officer piloting. Believed to be pilot of crashed B.R.2. German police demanding explanation. . . .*"

And then the amazing anti-climax:

"*Vogel D.9 reported fighting Fokker over Lindheim. Flying Officer Dunbar to be placed under close arrest if and when he lands.*"

The Major's youthful face bore a worried frown as he thrust open the office door and went out into the deepening dusk.

There came the sudden snarl of an engine from the darkening sky, followed next moment by the scream of overburdened wires.

With a rumbling tail-skid the Vogel jerked to a standstill. A figure leapt from the cockpit, and then Pluggy Harlow was staring at a white-faced Jimmy Dunbar, whose eyes were dark and haunted, as he had so often seen men's eyes in the War.

Then he remembered the barrage of chits from Wing.

"What the devil have you been playing at Jimmy? You're under arrest . . ." he was saying angrily, until something in his companion's face stopped him.

"Never mind that now," Jimmy panted. "For God's sake warn everyone to get clear of the 'drome and push all the machines you can into the air. There's a time-mine under the petrol tanks. And it's going up at six o'clock. . . ."

For a second the Major stared incre-



## AIR STORIES

dulously at Jimmy. Yes, he looked sane enough, and the grim urgency of his voice forced conviction.

"Hades!" said Pluggy with sudden shocked enlightenment, and swung round to race towards the sheds, shouting orders as he ran.

In a few minutes the quiet 'drome was transformed into a scene of feverish activity. The clamour of hastily-started engines filled the air, and there was the thudding of many feet on the tarmac as pilots sprinted for their machines.

In the orderly-room Major Harlow was sending an S.O.S. to the R.E.'s, while, out on the aerodrome, a weary Jimmy spurred his flagging senses and moved towards the hangars. He glanced at the packed sheds, at the men's living-quarters from which khaki-clad figures were streaming, and there came upon him the awful realisation of the havoc an exploding mine could wreak.

Now, the R.E.'s Leyland came rocking across the 'drome, with Pluggy on the running-board. With screaming brakes it jerked to a stop in front of the petrol tanks, and instantly the Major was on his knees on the concrete, with an R.E. officer close beside him.

For several moments, that seemed like hours to the tensed-up onlookers, the two officers crawled over the narrow strip of concrete before the pumps, their ears close to the ground.

Then came a sudden shout from the Major.

"Here!" he called, pointing down at a faint crack in the cement beside him. "Hear it . . . like an alarm clock?"

Crisp orders rapped out from the R.E. officer, and soon the aerodrome echoed to the clang of a steel drill biting into the concrete as quickly as desperate men could drive it.

The hole gaped, and the R.E. officer bent down, wire-cutters glinting in his hand.

The time fuse had commenced to splutter even as the officer severed the wires that were the arteries of the mine.

"I'M afraid you're under arrest, Jimmy" said the Major in the

orderly-room some ten minutes later. "But when my report goes through saying that you saved the 'drome from being blown to blazes together with thousands of pounds' worth of His Majesty's aircraft, I don't imagine you'll hear much more on the subject of courts-martial."

He stared curiously at the weary-eyed Jimmy.

"What puzzles me," he said, and still that note of bewilderment was in his voice, "is how you knew about the mine. And there are a good many other things, my lad, that need a bit of explaining."

Jimmy subsided into a chair, and for the next few minutes only his tired voice broke the silence as he told his astonishing story.

"All most irregular, of course," snapped the Major as Jimmy's voice died away, but there was a twinkle in the C.O.'s eyes. "Though I certainly hand it to you for sheer, unadulterated nerve. . . ."

"Just cussedness," said Jimmy dourly, "and a Scotsman's fundamental dislike of being done."

Pluggy looked thoughtful for some moments. Then he said eagerly.

"I'm being demobbed with the next draft for H.E. What about you and I joining up together and starting our own aircraft concern? A lad with your talents could go a long way with the right backing, and my gratuity should prove useful."

"That goes with me," grinned Jimmy. "I'll be needing a test pilot."

And so the Dunbar Aircraft Company was born.

They're running a quite successful aircraft factory, down Hounslow way, building very efficient twin-engined passenger and freight 'planes to Jimmy's designs.

Drop in and see them when you're passing. There's always a bottle of the best in the bottom drawer of the managing-director's imposing filing-cabinet for the refreshment of wartime F.O.'s who may drop in—and a surprising number of them do!



# AIR BOOKS

Reviews of the  
Latest Books  
on Aviation

## SKY SAILOR

*"Sailing South American Skies": By James Saxon Childers: Barkers: 7s. 6d.*

HERE is an account of a 25,000 miles' journey by air round South America, and there is not a dull page in the book. The author, an American newspaperman, wanted to learn about air travel, and to see how it differed from other means of travel. So he set off from Texas, and, travelling throughout by Pan-American Airways' services, flew down the West Coast, crossed the Andes from Santiago to Buenos Aires and then continued up the East Coast to Miami.

Summing up after this thorough-going test, he comes to the original conclusion that the greatest defect of air travel is its speed.

"You travel so fast," he complains, "and you shift from one scene, frequently from one civilisation, so quickly that you can't keep up emotionally, you are always behind yourself. That night in the cabaret at Buenos Aires, for example, I wasn't there, I was out somewhere flying the Andes. And when I arrived in Rio, I still had something of a hangover from Buenos Aires. And when I left for the Amazon I was, in a way, still sitting on my balcony in Rio. . . . The aeroplane doesn't give you enough time. You are in Ecuador. You go up in the air, and you come down in Peru. Only you aren't ready for Peru; and, for that reason, you feel that when you travel by air you lose something, not only because you don't see so much of the people, and how they live, as you would if you went more slowly, but because you haven't time to forget one place and prepare yourself for the next before you are already there."

Nevertheless, Mr. Childers must have kept his bearings pretty well, for, wherever he landed he seems to have picked up a story: and every one was a good one. In Nicaragua he clears up the mystery of the execution of Augusto Sandino, the Nicaraguan patriot, which was wrongly supposed to have been instigated by American officials; in Guatemala he runs chewing-gum to its source, and a forced landing for petrol at Cayenne provides material for a vivid chapter on life in the French penal settlement on Devil's Island. And so this flying reporter continues his aerial voyage of discovery across a continent, and whether he is describing the horrors of a bullfight, the thrills of a flight over the Andes, or the glories of Rio de Janeiro, "the most beautiful city on earth," he has the gift of compressing a whole incident into a few lines of graphic description.

This is a great book, far above the usual run of travel books, and so inviting in its

example that it cannot safely be entrusted to anyone with four months to spare and £800 to spend.

## BEHIND THE SCENES

*"An Airman Remembers": By Hans Schröder: John Hamilton: 10s. 6d.*

THE author of this excellent collection of war-time reminiscences is a former officer of the German Air Service whose war record was one of remarkable variety and adventure. Joining up with a cavalry regiment on the outbreak of war, he volunteered for service as a mounted orderly in the belief that the work would afford greater scope for initiative and adventure. He was right, and until trench warfare put an end to his activities he had excitement enough to last most men for a lifetime.

It was inevitable that such an adventurous character should eventually find his way into the air service, and early in 1916 Schröder was acting as an observer on the Eastern Front during the eventful days of General Brussilov's offensive. A transfer to the Western Front followed, and, after serving in various capacities from Air Defence Officer to Air Liaison Officer at a divisional H.Q., he entered upon the most interesting period of his career, as a member of the German Intelligence Service. His work here brought him into touch with many captured British airmen as well as their opposite numbers, and he has many good, and a few quite startling, stories to tell of the inside working of the secret service.

The book concludes with a moving description of the final collapse of the German military machine in its hour of defeat, and of the perils and hardships of the author's journey home from the front with the Belgian girl he had met and married in the last year of the war. Special mention should also be made of the very competent translation from the original German by Mr. C. W. Sykes, and of the interesting collection of personal photographs with which the book is illustrated.

## FOR PRACTICAL MEN

*"Aero Engineering": George Newnes, Ltd.: Price 1s. Weekly.*

ALL who are interested in the now flourishing industry of aeronautical engineering will find much of value in this new serial publication. Published in weekly parts at 1s. each, it will be completed in about 32 issues, and will then provide a comprehensive work of reference to modern methods of aircraft- and aero-engine construction, production, main-



tenance and overhaul. Never before, it is claimed, has the entire technique of aircraft production and maintenance been covered within the confines of a single work.

Though very far from being a "popularly" written work, the technical information contained in "Aero Engineering" is presented in a manner which enables it to be readily understood, and the work should have a strong appeal to practical men already engaged in the industry and anxious to extend their knowledge of modern production methods, and also to those who are about to enter the industry.

### AIR ADVENTURES

*"The Secret Aeroplane":* By D. E. Marsh: Harrap & Co.: 3s. 6d.

*"The Desert Air Raider":* By Jack Heming: A. & C. Black: 3s. 6d.

THESE two books of aerial adventure for boys have several virtues in common. They are both fast-moving stories in which the excitement is well maintained right up to the end, they both have strong and credible plots, and they are written by men with an obviously expert knowledge of aviation. Which, altogether, is just about as much as the most critical reader, whatever his age, is likely to demand from an air adventure story.

In "The Secret Aeroplane" a powerful criminal's theft of the plans of a robot aeroplane and the attempts at their recovery by the inventor's schoolboy son provide the chief excitement. The scene is laid first in Ireland and then in an Alpine village in France, though a great deal of the action takes place in the air. Mr. Marsh's inspiration has obviously been the R.A.F.'s radio-controlled "Queen Bee" target-plane and, without stretching imagination too far, he foresees some highly sinister possibilities for a pilotless 'plane in unscrupulous hands.

Jack Heming, a former R.N.A.S. pilot with a number of excellent aerial "thrillers" to his credit, goes East for the setting of his latest story, "The Desert Air Raider." It is the story of how Tod Slade, a young British consul in Egypt, learns of a plot to overthrow the power of the white man in the East by the massing of a huge army in the Libyan Desert. Slade flies off to break up the conspiracy and this tale of how he fights and schemes, is captured and escapes, makes powerful friends and no less powerful enemies, is as good as anything that Mr. Heming has yet done.

### THE AIR MENACE

*"War on Great Cities":* By Frank Morison: Faber and Faber: 8s. 6d.

MANY books have appeared recently in warning of the awful horrors that aerial

invasion has in store for us. Some of their writers have defeated their own purpose by so over-exaggerating the horrors to come that the reader has been left with a fatalistic indifference to a menace that seems too immense even to attempt to counter. Others, using the novel as the medium of their warning, too often show either an appalling ignorance about present-day aviation, or credit it with an impossibly-rapid rate of development within the next few years. In either case, the reader is no better informed of the reality of the danger that threatens, though he may possibly be more liable to panic about it.

In a different class altogether is this book by Mr. Frank Morison, probably the best documented and most authoritative work on the air menace to great cities yet written and well meriting its sub-title of "A Study of the Facts."

The threefold aims of the book are set out in the preface. The first is to bring together in a single volume an actual photographic record of the effects of air raids throughout the county of London during 1915-1918. The second is to study the consequences of various theories exploited by the German Air Service during that period. The third is to consider the conclusions to be drawn from this survey, with special references to future contingencies and the progress of modern aircraft.

The most sensational feature of the war-time raids—the so-called Fire-Plan, which aimed at the total destruction of London by a series of simultaneous fires started by incendiary bombs—is discussed in detail, and in the final section the contrast between the methods of the last war and the consequences of modern scientific bombing is clearly indicated.

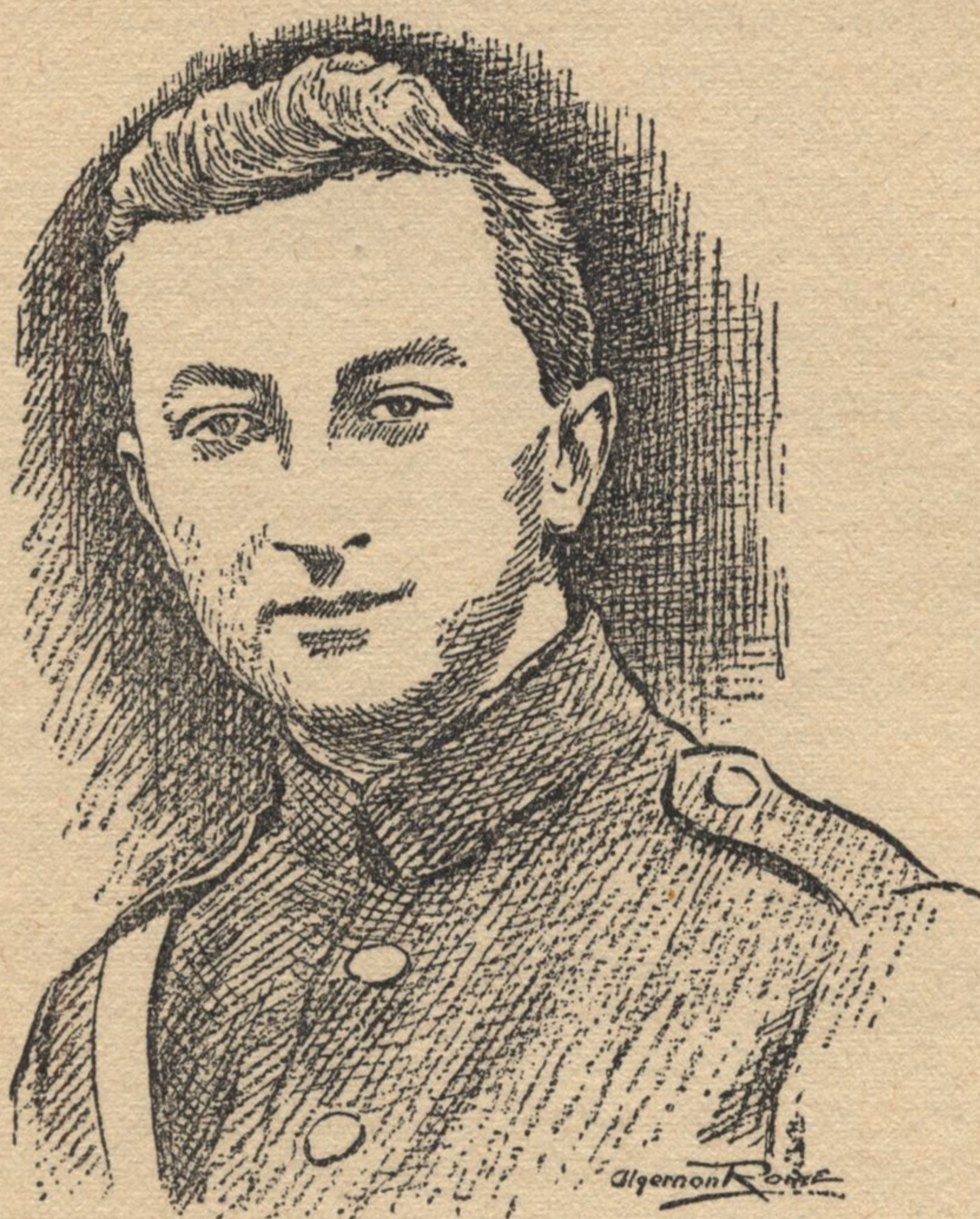
The book is documented by 64 photographs, most of which depict the results of war-time air raids, and there are numerous maps, diagrams and tabular summaries of raid results. According to these records, the raid that caused the heaviest casualty list was the daylight raid by fourteen Gothas on June 13th, 1917, when ninety-two explosive bombs were dropped, killing 145 people, injuring 382, and doing damage to the extent of £125,953. Gothas were also responsible for the most expensive raid of the war, when, on December 18th, 1917, nine machines dropped forty-seven incendiary and forty-two explosive bombs, destroying property in the London area to the tune of £225,016.

The author of this book, an ex-R.A.F. officer, was formerly an instructor in aerial bombing to the R.F.C., and was later attached to Air Ministry Intelligence in London for special duties in connection with the air raids. He writes, therefore, with authority on the war period, and certainly no one has yet written with more earnestness or greater conviction of the possibilities of the future.



# *The Ace of Balloon "Busters"*

Destroyer of  
Twenty-six  
Enemy Balloons,  
Willy Coppens  
Fought Fifty  
Aerial Combats  
before he Secured  
his First Vic-  
tory—



—and then De-  
stroyed Two  
Balloons and an  
Albatros Scout  
within a Period  
of Six Minutes

**The Gallant Record of Major le Chevalier Willy Coppens,  
Premier "Ace" of the Belgian Air Service**

By A. H. PRITCHARD

**T**HE War Birds who won fame as destroyers of enemy observation-balloons can be counted on the fingers of one hand—and the survivors on one finger of that selfsame hand. Many were the pilots who picked the clumsy gasbags as samples of easy meat, and many were the shattered machines that lay around the balloon lines in Allied and enemy country, mute testimony to the dangers of an attack of that fatal fever, "balloonitis."

The greatest "balloon-buster" that the War produced was Major le Chevalier Willy Coppens de Houthulst, premier "Ace" of the Belgian Flying Corps, whose bag of thirty-six enemy aircraft included twenty-six *drachens*, the name given by Germany to the type of observation balloon she employed.

There was no Chevalier before the name of Willy Coppens when the Germanic hosts first invaded tiny Belgium, and mobilisation saw him enrolled as a

simple private in the 2nd Regiment of Grenadiers. Late in September he transferred to the Motorcycle Machine-Gun Corps, but apart from stray duels with Uhlan cavalry patrols, he found little chance for action, and on January 17th, 1915, he applied for training in the Flying Corps.

Hundreds of other adventurous youths had made the same request, and it was not until late September that Coppens' formal application was answered and he was ordered to report to the Beaumaris Aircraft Park. Fired with the glorious enthusiasm of youth, Coppens presented himself in record time, but a great disappointment awaited him. The number of would-be pilots far exceeded the number of available machines, and it was sometimes over a month before students were taken for a trial flight, while instruction was practically unobtainable.

After weeks of waiting, Coppens and



a number of his fellow-students finally persuaded their C.O. to allow them to train in England, at their own expense, and so we find Coppens enrolling as a pupil at the Ruffy-Baumann school at Hendon, on October 1st, 1915.

### Posted for Active Service

**I**N England, he once more encountered weary months of monotonous waiting, with flying chances few and far between, but he finally mastered the controls to the extent of being able to return to the French schools. There, despite the fact that he was to all intents and purposes a fully qualified pilot, he had to undergo another course of training, and it was not until early 1917 that Coppens found himself posted for active service. After a short period with No. 6 Squadron, he was posted to No. 4 Squadron on April 17th, and nine days later he found himself engaged on his first night bombing raid. During the course of this attack, his old Farman was hit five times by anti-aircraft fire, but Coppens expressed himself as "well pleased, and proudly showed my scars of war."

On May 1st, he had his first combat, for, while flying a Sopwith 1½ Strutter over Houthulst, he was attacked by four Albatros Scouts, and a bullet neatly sliced the top off his helmet. Coppens' observer stood to his guns with great skill, however, and the German quartet eventually drew off and vented their feelings on an unfortunate Spad that happened to appear on the scene.

Ten weeks later, on July 15th, Coppens was transferred to the 1st Fighter Squadron, flying Nieuport Scouts, but despite numerous combats, he failed to secure a single victory throughout the remaining months of 1917. Even his next noteworthy achievement has nothing to do with air-fighting for, curiously enough, at this stage Coppens showed no promise of making the fighter pilot he was to become in mid-1918.

February 18th, 1918, saw Coppens make a flight that few, if any, other pilots could boast of while engaged in the business of war—he actually flew

over his own "back-yard", then held by the enemy, and waved a greeting to his parents. On the way home he paused to attack a German two-seater, but had to break off the fight when two Albatros Scouts came rushing to its aid.

This trip across his home town seems to have ignited some aggressive spark within Coppens, for he now began to thirst for victories, and was soon mentioned in despatches for his attack on an observation balloon. He failed to destroy the balloon, but his attack cost the Imperial Air Service one trained observer, the man's parachute failing to open when he had jumped clear of his threatened craft. Coppens had participated in over fifty aerial combats before he managed to "break his duck" and commence his climb up the ladder of fame.

During the course of an early morning patrol, Coppens, in company with six other Belgian pilots, attacked an enemy formation of twenty machines, and soon found himself engaged in a tail-chasing bout with a Fokker D.7. This time, however, Coppens was not to be denied, and a well-placed burst sent the Fokker tumbling earthwards, a mass of torn fabric and shattered spruce. This initial success gave him the spur he had needed, and the enemy soon had good cause to dread the daring Belgian who flew an all-blue Hanriot.

### The First Belgian Balloon Victory

**O**N May 8th he made his second attack on a balloon, and the *drachen* at Zarren was soon in flames, the first observation balloon to be destroyed by a Belgian airman. With the day still young, Coppens ventured farther afield and attacked a Hannoveranna over Houthulst Forest, but the two-seater suddenly thought of an urgent appointment and fled, leaving the balloon it was supposed to be protecting to fend for itself. Two seconds later, a burning heap of silk and rubber marked Coppens' third victory.

This balloon line at Houthulst had a



## THE ACE OF BALLOON "BUSTERS"

great attraction for the Belgian, and he made successful sorties against it on May 15th, 19th, and June 6th. The occasion of the fourth victory, May 15th, provided him with yet another unique experience, for he crashed into his intended victim and lived to tell the tale. After several bursts had failed to ignite the balloon, he lost his temper, attacked from point blank range, and misjudging the distance, ran his wheels along the swaying envelope. With a great gash torn in its side the balloon plunged earthwards and burst into flames. Returning home, Coppens' fellow pilots ragged him unmercifully when he gave an account of his adventure, but the scoffers were soon shown proof, for the fabric of his machine showed unmistakable signs of contact with the "woolly" fabric of the balloon.

June brought Coppens eight confirmed victories, including a double on the 24th, and a triple on the last day of the month placed his score at the ominous figure thirteen. The omen proved a good one, however, for he secured another eight victories in July, and his fame grew in leaps and bounds. On July 22nd he destroyed two balloons and an Albatros Scout within a period of six minutes—a feat which brought him the British Military Cross and the Belgian Order of Leopold. To celebrate the occasion, he destroyed a balloon over Ruyterhoek on the 24th, and the German Air Force lost another £400 worth of equipment.

His twenty-second victory, a balloon over Reutel on August 3rd, provided him with another thrill while attempting to destroy its companion. The sight of one balloon going up in smoke drove the German anti-aircraft gunners to a frenzy, and, throwing caution to the four winds, they plastered the area with steel. As Coppens dived for the second balloon, a shell neatly cut its retaining cable and the now free balloon made a wild leap at the Belgian machine, Coppens having to employ all his skill to avoid a collision. Seemingly immune from bullets, the runaway then set off at a terrific pace, and the last Coppens saw

of his intended victim was a black dot, steadily climbing into the blue, evidently intent on being the first balloon to reach the stratosphere.

### A Narrow Escape

THREE more balloons fell to his hungry guns on August 10th, but by this time the Belgian Air Force Commander had decided that Coppens must not be allowed to take undue risks, and he was ordered to give up all solo offensive patrols. He obeyed this order for just two weeks, by which time he had become tired of his enforced idleness, and sallied forth on the morning of the 24th to destroy the balloons at Ploegsteert and Warneton, to follow up with a Fokker D.7 on the 27th. Two more balloons, a Fokker and an Albatros, fell to his guns during September, and with the enemy now on the run, it seemed certain that Coppens would reach his half century of victories. He had tempted Fate too long, however, to escape unscathed, and the War Gods allowed him just two more weeks of war service before exacting the price of fame.

His first victory in October brought him within a hair's breadth of death by fire and water. While engaged in a little ground "strafing" expedition on October 3rd he ran into a barrage of ground machine-gun fire, and an incendiary bullet passed between his feet, glanced off his carburetter, and passed out through the windshield. A fraction of an inch either side of the carburetter and the bullet would have entered the petrol tank with fatal results. Undismayed by this narrow escape, Coppens destroyed his chosen balloon, but on his return journey his engine broke down, and he just managed to land his machine on the edge of the sea off La Panne. On the 5th he attacked two balloons at Roulers, destroyed one and was at once attacked by a Fokker D.8, last of the German scout machines. For five minutes he had a hard time trying to save himself from Spandau bullets, but by superb flying he completely out-



## AIR STORIES

manœuvred the speedy Fokker, and its pilot beat an ignominious retreat, leaving Coppens to destroy the remaining balloon at leisure.

### Coppens' Last Fight

ON October 14th the last offensive of the Great War began at 5.30 a.m., and ten minutes after it had opened, Coppens' Hanriot took-off to blind the enemy observation balloons. He soon had the balloon at Praet-Bosch falling in flames, and then turned his guns on the Thourout balloon. Flying through a terrible fire, Coppens was hit in the left leg by a dum-dum bullet which, upon exploding, smashed his thigh bone and severed an artery. To this day Coppens has no clear impression of how he managed to set his machine down in the Belgian lines, and, at the time, did not know that his last victim fell in flames. This is unfortunate, for he

never received credit for what would have been his thirty-seventh victory. On October 22nd his leg was amputated, and for a time his life hung in the balance. The British D.S.O., the French Legion of Honour, and five other decorations were pinned on the pillow of his hospital cot, but to Coppens all that mattered was the fact that he might never again pilot his beloved 'plane. It says much for his great spirit when, on July 28th, 1919, he actually made a solo flight in a Bristol Fighter.

Ennobled by the late King Albert, he took the name Chevalier de Houthulst from the scene of many of his victories, and the years that have passed since 1918 find him still keenly interested in military aeronautics. He has been Belgium's military attaché in England, America, and at the time of writing, France, but despite these honours, he is still at heart the slim youth who became the greatest balloon buster of the War.

"A motor-cycle combination came tearing along, an officer driving and Sergeant Haystead in the sidcar. The Sergeant was looking back over his shoulder. The pace they were going was terrific. Then I heard a sort of whirring noise behind me. I looked round, and suddenly threw myself flat on my face—just in time to avoid the Thing getting me. Fortunately for me it didn't stop, but continued after the other two. It looked like a huge black hornet—and speed! Those two on the motor-cycle must have been doing seventy, but they were only just managing to keep their distance. I thought the Thing would catch them up at any second."

*Read this Long Complete Mystery Thriller*

## THE FROG THAT FELL OUT OF THE SKY

Another Great Air-War Story of the Three Squadrons

By WILFRID TREMELLEN

Popular Author of "Bridegroom of Death" and "The Macaroni Cup," etc.

and

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By J. H. STAFFORD

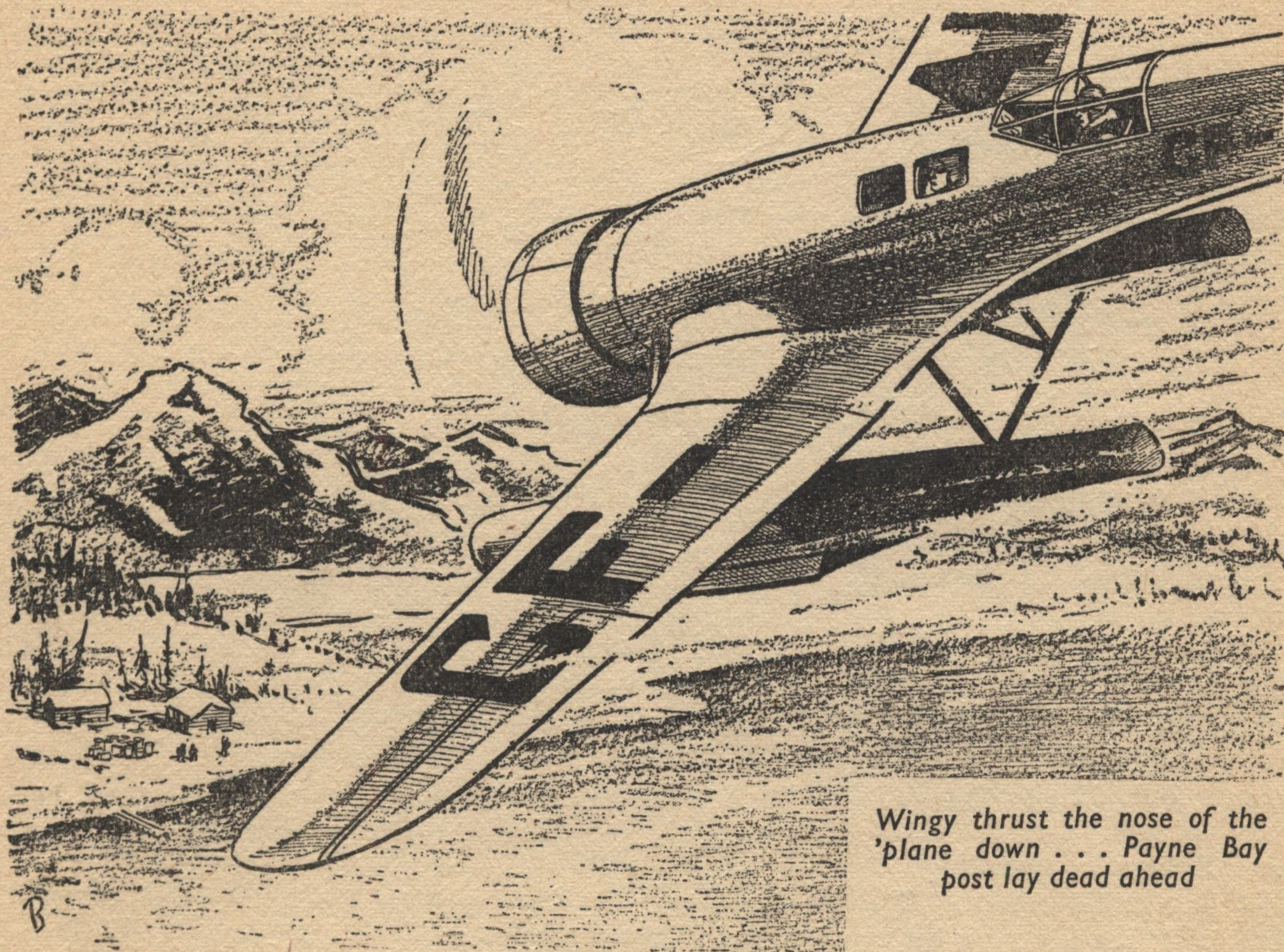
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Wingy thrust the nose of the  
'plane down . . . Payne Bay  
post lay dead ahead

# PASSENGER TO LONDON

The Experts said That it Couldn't be Done—but Arm-chair Experts have always said That even while Airmen like "Wingy" Wingham have been Busy Doing It

By EDWARD GREEN

## CHAPTER I

### Fifty Hours to London

**T**HERE were three or four "wind-mill jockeys" in the tiny office of the Peerless Air Lines at Coal Harbour, Vancouver. They were talking "shop" as usual, and Groves, a veteran pilot of the North, was in prophetic vein.

"Things are happening in this game right now," he was saying. "That China Clipper's making the Pacific Ocean look like a duck pond."

"Yes," Tommy Holden agreed, "and this new Lockheed Electra of Canadian Airways is mapping a course that'll

make the Rockies look like pimples on a pool table."

Dick Glen, manager and junior partner of the Peerless outfit, was about to say something when the door of the little shack flew open and Thomas Wingham, chief pilot and senior partner, burst in.

"Congratulate me, boys! I'm about to become a pioneer of aviation. Well—not aviation exactly, but something like it."

The pilots stared in astonishment at Wingy's animated countenance. He was positively beaming. Something very unusual must have happened to have so inspired his usually sombre character.



"You're about to *what*?" Dick managed to gasp.

"I am about to aviate with a passenger," stated Wingy, "who is paying me the handsome sum of twenty-five thousand dollars. Nice going, eh?"

The pilots came to their feet like one man.

"Twenty-five thousand dollars!" they echoed incredulously, and Groves almost yelled,

"Where the deuce are you taking him, Shanghai?"

"No," Wingy grinned, "not Shanghai, my friend, just London."

Dick stared as though he could not believe his ears.

"London!" he barked. "London, England?"

"You heard me," his practical partner retorted. "Now, come along. Get the charts out. Have the boys check over the Gamma and fit extra tanks. My man'll be here soon."

"Not so fast, Wingy," Dick expostulated. "Let's hear a bit more about it. Where's your passenger? How did you get him? And how can you fly from here to London? You must be nuts."

"You ask too many questions," Wingy snapped. "My passenger's coming in on the 'Empress of Japan'; she's coming through the First Narrows now. Moncreiff, of the Passenger Department of Canadian Pacific Railways, made the charter and put up the deposit; fifteen thousand down and the balance on arrival in London. I've guaranteed to do it—and I'm going to. Now get busy."

"But, Wingy," Dick objected, "all the experts say it can't be done. The North Atlantic route is——"

"Experts, experts!" the impatient Wingy roared. "All they ever tell you is what you *can't* do. They told me I couldn't make that twelve-thousand-mile experimental flight round the Arctic. They told me I couldn't make a coast-to-coast hop in that old Fokker. I've done nine thousand hours' flying, and they want to tell me where and how to fly! I've flown every damned inch of this country without the benefit of

advice from armchair experts. There's only one way to be an expert, and that is to do something so often that you know all the answers. Don't tell me this can't be done. I'm doing it, and I haven't any time to waste. Get going."

DICK shrugged his shoulders. He knew the futility of arguing with Wingy. His partner's ability as a navigator was uncanny, his resourcefulness unbounded, his stamina and courage unquestioned. There wasn't a trick in the flying bag that he didn't know. If he'd taken a charter to fly a passenger to London, that passenger was as good as there if human ingenuity could accomplish it.

But how far could human endurance be stretched? London was over five thousand miles away. How long had Wingy reckoned on being in the air? And why the exorbitant charter fee? There must be an exceptionally strong reason for a man to pay so large a sum and risk so much in order to reach his objective.

"Is there a time limit on this thing, Wingy?"

"Yes, in fifty hours from now we've got to be in London."

"Fifty hours!" The men gaped at him. "It can't be done."

"Sez you!" Wingy snorted. "Watch my smoke!"

Outside on the aerodrome, Dick called the engineers together and gave them orders, while Wingy climbed to the cockpit of the big Northrop Gamma and subjected the instrument-board to a critical inspection.

"Borland!"

"Yes, Wingy?" An engineer started forward.

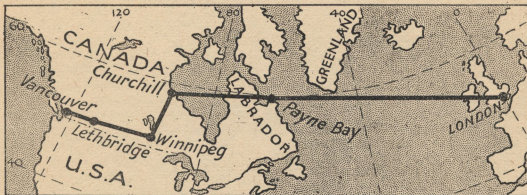
"Throw this magnetic compass out of here and put in the earth inductor mill.\* There seems to be a blind spot

---

\* An earth inductor compass is a highly efficient form of aeroplane compass, whose accuracy remains unaffected by the attitude of the machine or by local magnetic conditions. The magnetic element is usually carried well aft in the plane and is electrically connected to a pointer on the dashboard in front of the pilot.—EDITOR'S NOTE.



## PASSENGER TO LONDON



A map of the route followed by "Wingy" on his 5,000 miles' flight from Vancouver to London

off Labrador, and these magnetic outfits can't be relied on."

"O.K. How about the radio?"

"Throw that out, too. I want all the payload I can get."

"But you may need it, Wingy."

"No. Get those tanks filled, and hurry."

Dick came forward.

"Here are the charts. What route are you taking?"

"Lethbridge, Winnipeg, Churchill, Port Burwell and London."

"Across the ice cap!"

"Exactly."

"Hm-m-m!"

"Hmmm to you. Spread the news around the North and tell all the boys to stand by at the fuel stations. I might drop in on them. You can also advise London to level off a nice slice of Croydon Aerodrome. I'll be there soon if you start moving and give me some action."

### CHAPTER II

#### The Passenger for London

**A**CTION there was in plenty at the seaplane base for the next hour. Expert mechanics checked and rechecked the big Gamma. Wingy said little, but watched every move, tried clearances himself and inspected every drop of fuel vanishing into the huge tanks. He felt himself lucky in possessing this great amphibian. He had only taken delivery of it a few days before. Designed for long flights with big payloads, the

machine was admirably suited to the projected flight.

Action, action. The seaplane dock hummed with it. Men scuttled about like rabbits. Reporters got wind of the flight and rushed to the scene. A Peerless Air Line 'plane preparing for a flight to London, England—the thing was incredible, yet its pilot had made flights of longer duration than a trans-Canada-Atlantic trip.

They tried in vain to obtain the name of Wingy's passenger. They wanted all the details, but Wingy hated publicity, and gave them nothing save a brief outline of the proposed route.

Inch by inch he went over his 'plane. Everything, every nut, petrol and oil line, and ignition connection was subjected to his closest scrutiny. Vital parts were checked twice over.

The big 750-h.p. Pratt and Whitney Hornet engine received a super-critical inspection. Though rated at 750 h.p., it had been judiciously boosted-up until it actually developed 1,250 h.p. at full throttle. Wingy had entertained hopes of making a record-breaking flight at some future time, and this engine had been the result of a long series of experiments made by himself and the builders. The time had now arrived when Wingy's expectations of it were to be put to the test.

"**H**OW about grub, Wingy?"

Groves was standing on the dock peering from behind a five-pound



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tin of the greasy bacon which was standard winter emergency rations on all Northern 'planes. The bronzed old veteran held the tin before him with one hand and his nose with the other. The men on the dock laughed. Wingy had once been obliged to live for six weeks on two tins of bacon when he was forced down in the far North.

"No," Wingy laughed. "I can get all the sowbelly I want when I get there."

"That's what you think," Groves retaliated.

Tommy Holden came forward.

"Are you slamming straight through to the 'Peg'?"\*

Wingy stopped. He peered hard at Tommy.

"Say," he said slowly, "do you think I'm crazy to attempt this thing?"

Tommy laughed.

"Why should you ask me that?"

"Well, it's a long way. Fifty hours is a long time to sit in one place."

"Listen, Wingy, you know you can make it. Don't forget, a lot depends on this flight; more than just getting your passenger to London. If you can make this hop on schedule without having half the world hunting for you, you'll make history and push Empire air transportation ahead ten years. Don't ever think you *can't* make it."

"Oh, I didn't think that," Wingy grinned. "I just wanted to hear you say it, you know. Sort of a good omen, I felt."

"Yes? Well, here's another. When you get to London say 'hello' to Cecile for me. You'll find her at the Leicester Lounge. I left her there in '18."

"And you think she'll still be there, eh?" Wingy laughed.

"Sure. I hear they've pulled the old place down since I left—but I guess she'll still be there. She said she'd wait for me. She had brown hair."

"She'll be blonde now, or else wearing a wig. Did I know her?"

"No, she was too respectable."

They both laughed uproariously at this, then Wingy suddenly sobered.

Strange, he thought, how that reminder of war days put this flight in a different light. It had nothing whatever to do with the trip, but it put him in the right frame of mind. It made the hazardous journey seem like a week-end leave. London, light and laughter in the darkest war days, had always been cheering. Wingy grinned.

"Warm her up, Borland," he called.

Energy and alertness characterised the movements of all on the dock. Every man felt the responsibility of his job. There was no bungling, nor was there any sentiment displayed. This flight, epoch-making though it would be if it proved successful, was just the same as any other made by the Peerless outfit. They were short on demonstrations, but long on performance.

The big Hornet burst into a coughing roar, then settled back to a discontented rumble as it began to warm up. Wingy listened to it for a second, then began to re-check his equipment.

More people gathered on the dock. They seemed awestruck by this great 'plane about to take-off on a six-thousand-mile flight. They watched it bob gently at the float, watched its indomitable pilot preparing to leave his haven and brave the fury of the North Atlantic ocean, and they were left speechless. What perils faced this daring adventurer and his powerful machine? They did not know, but they felt a profound admiration for him.

"**H**ERE'S your passenger, Wingy."

A small, dark-featured man alighted from a car. He was accompanied by Moncreiff, the passenger agent for the railway company.

The little man's sharp black eyes darted over the 'plane, and then fastened on Wingy.

"You're the pilot?" he demanded.

"Yes," was Wingy's calm reply.

"Good. We'll get away at once."

"O.K. What's the name, please?"

"The name doesn't matter, but my mission is of the utmost importance."

The little fellow fairly radiated energy. He climbed into the cabin, selected a

\* "The Peg": Canadian nickname of Winnipeg, capital city of Manitoba.



## PASSENGER TO LONDON

seat near the door of the pilot's compartment and settled back comfortably.

"No baggage?" Wingy called.

"Nothing but this brief case."

"O.K."

Wingy climbed out of the cabin and shook hands with the assembled pilots.

"So long, boys," he said. "London or——" He shrugged, then turned to Dick. "Keep that radio outfit going. I'll take it easy from here to Lethbridge, and open out a little on the way to Winnipeg. After that, I'm going flat out."

Four two-quart thermos-flasks and a package of sandwiches were placed in the cabin. Wingy took a last look round and was about to climb aboard when a ship's officer whispered,

"Did your passenger tell you who he is?"

"He as good as told me to mind my own business. I don't care who he is. So far as I'm concerned, he's just freight from now on."

"Well, as a matter of fact, he's connected with the War Office, Intelligence staff at Singapore, or something. Things are happening out East just now, you know."

"They're going to happen in the West, too," Wingy smiled, and climbed into his cockpit.

The lines were cast off, willing hands pushed gently and the big Northrop floated clear of the dock. Wingy opened the throttle, dropped his water rudders and eased away.

### CHAPTER III

#### Speed Crazy

THE powerful symphony of nine perfect cylinders shattered the stillness of the cabin. The reverberating roar re-echoed from the tall mountains on the North Shore, flung its throbbing cadence across the waters and crashed against Vancouver's towering skyline.

Glistening water spumed away in the slipstream and fell like cascading jewels in the wake of the speeding 'plane. The foaming line thinned, spattered, then disappeared as the floats left the water. The Hornet bellowed a thun-

derous challenge and flung the 'plane into its element.

Wingy glanced below, saw bunting waving from the mastheads of many ships in the harbour, saw steam plumes leaping from syrens, and knew the coast city shipping men were giving him a good luck send-off. He wagged his wings in reply, then headed towards the threatening crags of the mighty Rockies.

He watched his instrument-board carefully. Everything was working perfectly. From force of habit, he checked his compass by familiar landmarks, though he well knew that it was accurate.

Port Moody—Chilliwack—Boston Bar—Princeton—Oliver and Midway, all airports of the proposed trans-Canadian air mail route flashed by beneath his speeding wings. The Hornet was doing its work well. At three-quarter throttle it was churning out a speed of 220 miles an hour with little effort. It gained altitude easily, and altitude was needed among those frowning peaks which reached up to the clouds and, in many cases, far beyond them.

Action. Speed. Wingy's nerves were attuned to the resonant cadence of the Hornet's steel lungs. He itched to push the throttle open to its fullest extent. The flight no longer seemed a venture over uncharted trails. It became a course which he must cover in the shortest possible time. Hazards vanished. He could see nothing but the route ahead, and the hungry Northrop eating it up at a terrific rate, but never fast enough to suit the dynamic Wingy.

He found himself wondering if it were commercially possible to build a 'plane capable of five hundred miles per hour. Why not? Unconsciously his fingers reached out, tapped the throttle and the giant Pratt and Whitney responded nobly.

The air speed indicator crept to three hundred miles per hour. Wingy felt certain that a few more months of experiment and five hundred miles an hour would be easy. Men and metals could stand it. Engrossed in his dream of speed, he forgot his cautious plans for the first lap and slammed his throttle wide open.



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ATTENDANTS at the Lethbridge airport were astonished when Wingy's machine lanced down from the sky. They had not expected him for at least another hour, but he gave them no time for speculation.

"Gas up and dry up," he snapped. "Fill her to the top. I'm going places." Reporters rushed forward. Camera-men snapped shutters.

"Where's your passenger, Wingy?" they cried.

"Locked up inside. This is secret stuff."

"Nuts!" the reporters chorused.

"So's your old man," Wingy retorted. "Come on, snap into it. Get that locomotion juice into those tanks. See my secretary for further information."

A good-natured howl of laughter went up. Wingy was the same old joker that he had been when flying the Prairie Air Mail with Lethbridge as his home port. Attendants replenished the fuel and oil tanks, made a hasty check of the engine and waved an "O.K." sign.

SPEED and more speed. Wingy pulsed with it. His blood surged through his veins at fever heat. He had never known such ecstasy before. His nerves vibrated and cried for action that only breath-taking velocity could satisfy.

There was safety in speed, he told himself. Navigation was of small account on this leg of the flight. Landmarks were plain; he could not miss them, would not miss them until he left the Labrador coast behind. He wondered when that would be.

Winnipeg lay nine hundred miles ahead. Wingy climbed to ten thousand feet on full tanks, noted his rate of climb, and was satisfied.

"If there's fog over the Big Drink I'll climb above it," he decided.

The promise of a stormy crossing did not bother him. Experience of the Arctic Circle had made him a past master in the art of dodging storms. He would rather face a storm than fog at any time.

His lips closed in a thin white line. He glanced at his watch and checked it

against his speed indicator. With a quick, nervous gesture he pushed the throttle wide open, set his carburettor mixture at its best point for his present altitude, then peered ahead, his tense nerves at one with the shrieking wail of the wind.

The tumultuous song of the Hornet rose to the rich triumphant tones of full power. It seemed alive, eager to hurl its master onward to his goal. Power, speed, Wingy's lips tightened until they were a razor-edge slit in his drawn face. He was speed crazy, but he was careful. One hint of discord in the triumphant note of his engine, and he would know it instantly.

Maple Creek—Swift Current—Moose Jaw—Regina—Wingy's bullet-like progress was kaleidoscopic. The cities on the plains appeared, grew larger and vanished in a seething swirl. The fresh, sweet smell of the prairies was lost in the pungent odour of burned oil and petrol. Far below, a weird black length snaked itself along a gleaming rail. It seemed painfully slow to Wingy. It was the Continental Limited doing eighty miles an hour against his four hundred.

Wingy's speed mania vanished as swiftly as it had arisen. He relaxed in his seat, satisfied, but he did not throttle down. He checked and re-checked his instruments, watched his engine temperatures, tachometer and air speed indicator. His nostrils twitched as he sampled the fumes from the engine. Excess heat would give the oil odours a more acrid bite. With a fifteen-hundred-miles' over-water journey he must be prepared to accept the judgment of his instincts should any of his instruments fail.

The Wheat City, Brandon, appeared off the port wing. Wingy glanced at air speed indicator, compass and watch. Brandon was about one hundred and forty miles from Winnipeg. If his reckonings were correct, he should be over Manitoba's capital in a trifle more than twenty minutes. He determined to test his blind navigation.

For exactly twenty minutes and thirty



## PASSENGER TO LONDON

seconds he flew full out, guided only by his compass and turn-and-bank indicator. Then he looked over the side. The long, wide streets of Winnipeg were sprawled below.

He was elated. True, it had only been a short hop, but it encouraged his belief that, if his 'plane were aimed straight and could maintain the terrific speed required of it, he would have little difficulty in finding his way across the ocean, provided the weather was calm.

**T**HERE were crowds of people waiting at Stevenson Field to welcome Wingy. They lined the east edge of the field, held back by a detachment of Mounties. Commercial pilots, all Wingy's friends, watched the western skies. Suddenly a cry went up.

"Here he is! Keep back, everybody!"

Excitement gripped the watchers as they saw the great Northrop, its wings glittering in the brilliant afternoon sunshine, flash out of the west. Spellbound, they saw it hurtle towards them, lance downward, make a single circuit of the field, then suddenly turn north. A minute later it had vanished far out in the northern skies.

For a full moment there was silence, then a mighty cheer went up, a spontaneous tribute to a daring courier of the clouds and his great machine.

But Wingy did not know they were cheering him. He imagined they would be disappointed at his failure to stop, but he had decided against it at the last minute. He had plenty of fuel left to make Port Churchill, on the bleak west coast of Hudson's Bay.

He gained altitude sharply as he passed over Lake Winnipeg. At twelve thousand feet he laid a straight course for Churchill, checked his instruments once more, and raced on.

He wondered how his passenger was faring. Funny how anxious the fellow was to reach London. Who was he? He must have plenty of money or he wouldn't have thrown five thousand pounds into a speed venture that might possibly cost him his life. He must be

a pretty important fellow, or be carrying some mighty important documents, if the War Office were anxious to bring him to London in the shortest possible time. Yet, in that case, why hadn't he been given an R.A.F. machine—probably because none of them had the range, or speed, of his Gamma, thought Wingy proudly.

Wingy remembered seeing the man's face before somewhere. He couldn't for the life of him recall exactly when or where, but he knew he had seen it. He glanced through the little trap-door to the cabin. His passenger was fast asleep.

"Thinks he's home in bed," Wingy grinned. "I wish I knew where I'd seen him before. And why the hell is he in such a hurry?"

## CHAPTER IV

### Peril by Fire

**T**HE big Pratt and Whitney, flinging a sonorous challenge to the North, hurled the Northrop onward. Wingy never glanced over the side. He knew every inch of this country and determined to fly blind to Churchill. He would refuel at the Bay port and then push on. He checked his watch. He had been in the air for five hours.

Five hours; three hundred minutes, and he was at least one thousand eight hundred miles from Vancouver. Distance, he told himself, meant nothing. Machines could conquer that, but could man keep pace?

Why not? He was feeling no ill-effects from the speed of his machine. True, the vibration was a trifle tiring, but that could be remedied. He visualised the future: saw 'planes hurtling to London in ten hours, held on their course by a rigid radio beam that would permit no wavering. All a pilot would have to do would be to take his machine off and land it.

A glance overside and Wingy thrilled. Churchill's huge grain elevators were already in sight ahead.

The waters of Churchill's harbour caressed the floats of the Northrop as Wingy brought her in. He taxied to a



concrete dock, answered the crowd's roar of welcome with a wave of his hand, then exhorted his attendants to hurry the refuelling job.

They went at it with a will. Petrol cascaded into the big tanks; splashed over the chamois screens on the funnels; ran down the wings and floats into the water. Wingy watched it anxiously. He wondered if he dared take a chance and start his engine with all that vapour around.

He had decided against it when suddenly a casual spectator, after lighting his pipe, threw the still burning match into the water.

A sheet of flame, followed by a cloud of black smoke, shot up. The petrol on the water roared into vicious life.

Luckily an on-shore wind was blowing, but the flames were creeping back to the petrol-soaked floats of the 'plane. Working desperately, Wingy ripped an emergency paddle loose from its lashings on the understructure and drove it into the water.

His shoulder muscles bulged. The paddle bent dangerously under the strain. He gripped the smooth maple tightly, drove it into the water and heaved once more.

Flames crept closer to the floats. They licked Wingy's paddle, seared his hands, set fire to the sleeves of his jacket, but he paddled like one insane. The 'plane was moving, but slowly.

A lick of fire touched the floats. The petrol-soaked surface caught. Wingy smothered it with a smash of his flattened hand. The blow left the skin of his hand sticking to the dural float surface. Pain shot up his arm, but he ignored it and drove his paddle into the water like a man possessed.

He worked with the speed and strength of desperation. It seemed impossible that he could ever hope to get the big 'plane clear of those hungry flames that were advancing faster than he could paddle his craft away. Help from the dock was out of the question. The 'plane was now too far out, and the entire surface of the water between it and the dock was aflame.

He thought of dropping his paddle and trying to start his engine, but decided swiftly that he would have no time. He must struggle to keep those flames from reaching the floats again.

His passenger appeared at the door of the 'plane. One swift glance and the little man dropped to the floats, seized another paddle, and bent to the task of getting the seaplane clear.

It was a losing fight. Despite their combined efforts, the fire was creeping up fast, and the movement of the water as the floats shifted away carried a small amount of petrol with it, just enough to keep the fire a constant threat. Wingy was about to give up hope and jump for safety when a rousing cheer went up from the dock.

Wingy looked round. A small motor-boat was bearing down on them. His passenger saw it, threw his paddle into the water and straightened up.

The man at the wheel covered his face with his arms and drove the boat through the flames round to the lee side of the 'plane. Wingy's passenger, by agile gymnastics, crossed to the far float, reached out, gripped the stern of the motor-boat and yelled to the man to open the throttle.

The man obeyed, while Wingy's passenger wrapped his legs round a strut and gripped the stern of the boat. Slowly at first and then with increasing speed, the 'plane was drawn from the danger zone.

"NEAR thing, that," was the passenger's only comment to Wingy as he climbed back to the cabin.

Wingy agreed with him. His hands were smarting. He looked at them a moment, thought of London so many miles away, and said:

"To hell with them. We've got to get going."

His 'plane was smudged and blackened by the smoke of the fire, but the big Hornet was undamaged. It turned over with the same sonorous roar as Wingy edged the throttle open, gathered speed, and flung the 'plane into the air.

The black waters of Hudson's Bay



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sped past below. Wingy paid little attention to them. His hands were hurting fiercely. He wished he had something to take the sting out. If only he could get some oil—but that was impossible. The oil lines were tight.

His right hand was burning unmercifully. The lacerated nerves were throbbing and sending piercing shafts of pain up his arm into his shoulder. Wingy released his grip on the control-stick and dropped his hand down in the space between the two seats in the front office.

His fingers touched a sleek, cool surface, and a thrill coursed through him. He wondered if one of his men had left a small tin of oil between those seats. He gripped the tin, drew it out and snorted.

"Damn, a tin of sowbelly !"

It was the tin of bacon Groves had been taunting him with. For a moment Wingy was furious, but the next instant he was frantically working the patent opener. A moment later he had a two-pound slab of greasy bacon on the seat. He plunged his stinging hand into the clinging fat and heaved a sigh of relief as the greasy substance drew the fire from his injured fingers.

"This is the second time I've been saved by sowbelly," he half grinned, and he was almost comfortable as he settled down to fly.

### CHAPTER V

#### Gale from the North

AN hour and forty minutes after leaving Churchill, the lonely trading post of Povungnetuk appeared off to port. Wingy checked the post with his chart and instruments and felt better. He was right on his course.

As he left Povungnetuk he angled slightly northward to the 60th parallel, then turned due east. This course would bring him over the Payne Bay Post of the Hudson's Bay Company where he could check his instruments again.

Stuart Bay, another trading-post, appeared, a mere spot in a bleak expanse of waste. On every hand, rock, ice and

open water stretched as far as the eye could see. Desolation reigned supreme. There was no sign of any living thing.

Wingy's throbbing fingers sought the throttle. He was feeling tired. Must be his nerves. He'd been through a lot since leaving Vancouver, and night was falling fast. He comforted himself with the thought that it couldn't last long. He and his passenger would spend the shortest night of any two mortals on earth, for they were racing towards a new day at a speed of four hundred miles an hour.

But before he reached the new day he must triumph over many hazards. Things had happened so swiftly during the past few hours that he had had no time to consider each step before he took it. After a moment's thought he was glad that this had been so. When one thought too much about the dangers of a proposed venture, there was a strong possibility that the attempt would not be made. No, it was better to go right ahead. If one could visualise success then there was nothing to do but follow that vision and overcome difficulties as they arose. Too much preparation was an open confession of lack of confidence in one's ability to meet a sudden crisis.

Grim and determined, Wingy flew on. Given decent weather he could reach London on his present fuel supply, but even as he thought it, a wicked squall of snow whirled down from the North.

The sturdy Northrop heeled over in the sudden biting blast, but Wingy brought it back to an even keel again. He glanced over the side and saw that the ground had disappeared in the smothering storm. It was equally impossible to see ahead. He noted with some anxiety that the gale was blowing from the north-east. It was holding him back ; not very much, but enough to alter his idea of going right on without refuelling again.

For more than an hour, Wingy fought through one of the worst gales that had ever come down from the north. The possibility that he might be blown off his course never entered his head. He pushed straight on, trusting to his



instruments and to his ability to read them correctly. The throbbing roar of the Hornet never faltered. It was strong, insistent and triumphant, a challenge to the storm and a comfort to Wingy.

Fatigue was creeping over his body. He gritted his teeth. Payne Bay could not be far away. He was coming out of the storm area now. Was he on the right course?

Patches of rock and snow became visible in the half gloom. Wingy thrust the nose of his 'plane down and scanned the horizon ahead. He peered hard for fully ten minutes before heaving a sigh of relief. Payne Bay post lay dead ahead.

**T**HERE were Eskimos at Payne Bay, and they had been kept on the look-out by McLean, the old factor. He had received radio messages, both from his own company and the airways organisation, to be on the alert for Wingy. He had not failed. Twenty barrels of petrol and plenty of steaming tea were awaiting the 'plane and its pilot.

And Wingy used both. As he dropped down from the sky to a smooth landing on the waters of the bay, his passenger opened the door between cabin and cockpit.

"Where are we?" he enquired.

"Payne Bay—next stop London," Wingy replied. "Would you like to stop here a few minutes and have a cup of tea?"

"Tea—that sounds pretty good to me!" was the enthusiastic reply.

"Not if old McLean makes it," Wingy grinned. "It's so strong you can float a spike on it."

His passenger slipped back to his seat, but was ashore as soon as the floats touched the beach.

The Eskimos went to work with a will. They were used to refuelling 'planes, and Wingy did not hurry them this time. The result of the last rush was still fresh in his memory. He shuddered. It had been a narrow squeak—and he was running no more risks like that again.

When, at last, the job was finished and a much-refreshed Wingy had climbed

into the cockpit again, McLean, the factor, was beaming like a child.

"The lads at Port Burwell will be glad to see ye, laddie," he called.

"They'll have to wait a while, then, Mac. I'm not landing at Burwell."

"Not landin' at Burwell!" the old man exclaimed. "Ye don't mean ye're —"

"Exactly," Wingy replied evenly. "I'm hopping off over the ocean at Hebron."

The old man shook his head in wonderment as the fierce blast of the Hornet shattered the stillness of Payne Bay and drove the Northrop at an ever-increasing pace through the half-light of a northern night and into the crisp air.

Wingy knew he was tiring, but he also knew he must push on. He called up all his endurance, slapped the throttle wide open and roared ahead.

Soon he was gazing down through ten thousand feet of air on to the tiny village of Hebron on the Labrador coast. The long, grey rollers of the North Atlantic were just discernible far below. Somewhere on the other side of those menacing waves lay London, his goal. What he might experience between Labrador and his goal was on the lap of the gods. The Big Adventure was at hand, and Wingy welcomed it. He glanced back at his passenger, who appeared to be dozing, cast a last look at the rocky shore, then sent his rocketing 'plane out over the broad Atlantic.

## CHAPTER VI

### Drama in Mid-Ocean

**W**ITHIN a few minutes he was out of sight of land, racing through a leaden-hued void carpeted by hungry waters and topped by glowering clouds. Alone, save for his passenger, he faced those miles ahead, miles which would be threatened every minute by the treachery of North Atlantic weather.

The thought of those wastes of water below sent a momentary shiver through him, but he quickly controlled it. They were no different from the murderous rocks of the North, provided one kept



out of their grim clutches. He wondered what he would do in the event of engine failure. Should he push the nose of his 'plane straight down and end it all suddenly, or should he land, make an attempt at repairs and fight on? He made a grim resolution that, if he landed through engine failure alone, he would either make repairs or paddle his 'plane to England. He would not be beaten; not at any cost.

The pain of his burned hands made his arms throb. A desire for sleep crept into his brain. With something of a start he realised that he had eaten nothing since leaving Vancouver. He wondered if lack of food was causing him to weaken. A drowsiness stole over him. He fought it back. More than a thousand miles of black water lay ahead. He'd better wake up and stay awake.

His heavy-lidded eyes searched the instrument board. The needle of his earth inductor compass indicator was dead on the course. He felt unaccountably heavy, and kept slipping down in his seat. His movements were leaden. He struggled against the inertia that was creeping remorselessly upon him. It would be suicide to surrender to it.

His passenger tapped upon the door of the front office. Wingy turned. A thermos flask was thrust into his hand.

"Coffee," the passenger called. "Black coffee, very strong. Are you tired?"

"Very," Wingy answered and his voice sounded strained.

His passenger stood on the swaying floor of the madly-racing 'plane, pouring a cup of scalding coffee for Wingy, who drank it almost at a gulp and signed for more. The caffeine in the liquid spurred his tiring nerves. He became awake. He drank the second cup and asked for another. His passenger smiled.

"Dry, too, eh?"

Revived, Wingy bent to his job and peered ahead. Light streaked the eastern sky. In a few minutes it would be daylight. He felt better.

A bank of fog rolled down from Greenland. It swirled about the 'plane, crept in through cracks in the windscreen and brought a choky tang with it.

Wingy cast anxious glances at his wings. He wondered if it were cold outside. He opened a windscreen slot and an icy blast tore into the cockpit. He shut the slot hurriedly and looked at the dural wings again.

Suddenly his pulse leaped. The last vestige of drowsiness left him. Ice, tiny ridges of deadly ice were forming on the leading edges of the wings. If nothing were done, it would destroy the wing efficiency and the 'plane would drop like a stone into the sea.

**H**IS altimeter registered eight thousand feet. Thick fog lay above and below. He wondered if he could climb through it. Could he afford to waste the fuel in a long, fruitless climb? Would that ice melt if he came clear of the fog at a higher level? Would there be warm sunshine or just a cold, clear sky? What would he find?

Unconsciously, he drew back on his stick. The Northrop rose in a steep climb, but it lacked something of its former vibrant vitality. There was something missing and, as Wingy glanced at his wings again, he knew that he must either break through the fog or fall like a plummet.

At ten thousand feet there was no break in the thickening blanket. Wingy considered the latitudes again. The temperature at a ten-thousand-foot altitude would be too low to melt wing ice. He would stand a much better chance near the water. He eased the stick forward and tore down towards the sea.

He wondered where he could be. According to his calculation, he was about five hundred miles off the Irish coast—or was he?

For a moment the question caused him grave concern. He knew how easy it was to become panic-stricken when far from land. He knew, too, that once a pilot began to doubt his instruments that man was surely lost. He would fly in ever-widening circles until his fuel gave out and he was forced down miles from his goal. Wingy shook himself and grinned. He believed his instruments, and if his calculations put him



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about five hundred miles off the Irish coast that was exactly where he was, and in no other place. They had carried him this far without trouble, and they would take him the rest of the way—if he could get rid of the ice on his wings.

But that ice was getting thicker and heavier, and his 'plane was now wallowing instead of slicing through the air. His controls felt loggy, and the air speed indicator had fallen back to one hundred and fifty miles an hour, which was barely flying speed for the Gamma.

He must do something at once. Every second of hesitation was fatal. A sudden resolve flashed into his mind. He would land, chip the ice off the wings and take the air again.

When he tore down through the fog he saw the angry tips of whitecaps reaching for his floats. The sea was rough, too rough to risk a landing. He must keep his floats just clear of the waves and fly on until the ice-laden wings refused to support him further. After that, he would have to trust to luck.

The big Hornet was roaring full out. Wingy found himself praying for a miracle to happen. Was this to be the end of his daring attempt? Was there no kind fate to care for pilots who had done a good job of flying? His heart was heavy, heavy as the ice on the wings which had now slowed the Northrop down to almost its minimum flying speed. Instinctively, he reached for a lifebelt and called to his passenger to do the same. Barely twenty feet now separated his floats from the angry waters. This, then, was to be the end of his flight—of all his high hopes.

The Northrop gave a sudden lurch. Wingy felt it surge upward then settle back. He peered hard at the wings, and held his breath. Why had the 'plane climbed suddenly like that? He watched the ice on the leading edge of the starboard wing and the 'plane lurched again, flinging itself to starboard. Wingy fought it back to an even keel; another surge sent it to port. The miracle had happened! The warmer air at sea level was melting the ice from the wings! It was being blown off in

great pieces. He waggled his controls, felt the 'plane's quick response, then threw his head back and laughed riotously.

A whipping wind buffeted the snout of his speeding 'plane. The fog bank lay miles behind. The pointer on his earth inductor compass dial slid around to "Right." A quick stab at the rudder brought it back to dead centre, and Wiggy was happy. Nothing could stop him now.

OFFICIALS paced the tarmac at Croydon, gazing anxiously at clouded skies. Where was this man-made meteor that had flashed across five thousand miles of uncharted air trails in less than fifteen hours?

They were asking themselves this same question again when a thunderous roar sounded overhead and a gleaming durallumin comet, oil-spattered and besmudged, hurtled down from rain-soaked clouds, made a single circuit of the field and came in for a fast landing.

Congratulations poured into Wingy's throbbing ears, but he heard none of them. He was gazing at his passenger, who was accepting the hearty congratulations of a group of men.

"He's a great guy," he said to an airport official. "He knows just when to speak and act and how not to be a damned nuisance. Who is he?"

"Him? Why, don't you know? That's Sir Robert Dolling, the newspaper owner. Thanks to you, he's just finished a round-the-world race and beaten his rivals by weeks. He'll win a tremendous amount of money."

"He'll need to," Wingy grinned. "It costs money to have a round-the-world taxi service, but we'll have it some day—and soon, too."

Four days later, Sir Robert watched the Northrop lift into a darkening sky and turn westward. He turned to a group of friends beside him.

"Well, he's gone, but he'll be back—and many more after him along the trail he's blazed. You can't keep men like him down."

To which Wingy, had he heard him, would probably have replied, "Nuts!"



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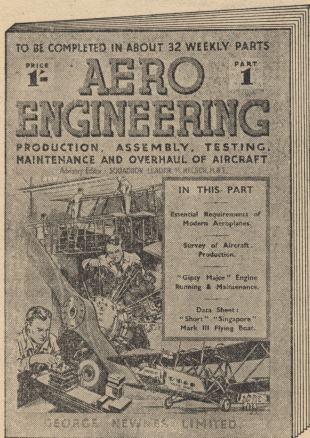
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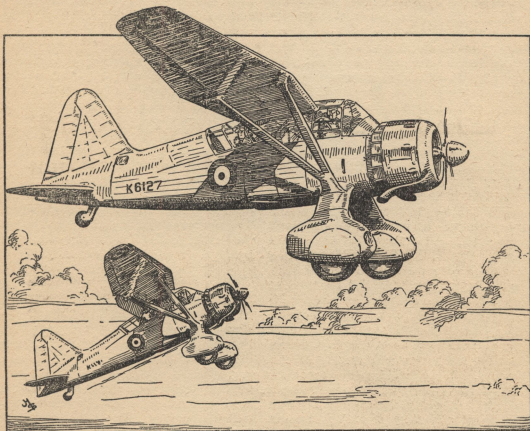
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# The R.A.F.'s New Army Co-op.' Plane



## A Description of the Westland Lysander, the R.A.F.'s Latest Army Co-Operation 'Plane, with Full Instructions for Building a Scale Model

By JAMES HAY STEVENS

**I**T is a pleasant change to find in the Westland Lysander a high-wing type of aircraft amongst the sudden spate of low- and middle-wing types with which the Royal Air Force has recently been flooded. That the strut-braced high-wing monoplane is capable of very high speed was demonstrated when Benny Howard produced his *Mr. Mulligan* and won the American Thomson Trophy Race in 1935. It is, of course, rather more difficult to obtain clean lines with this type of wing, but, on the other hand, the problems of view and of downwash on the tail are greatly simplified.

The Westland Company, it may be

recalled, produced one of the first really high-performance fighters, the high-wing Wizard, fitted with one of the early Rolls-Royce Kestrel engines. This aeroplane astonished everybody by its two thousand feet rocket-zooms at the take-off. Prior to the Wizard, Westland's had already designed and built one of the few British high-wing light aeroplanes, the Widgeon. Now, in the Westland Lysander, they have produced a first-rate Army Co-operation machine.

For the arduous and multifarious duties of Army Co-operation squadrons, a high-wing aeroplane presents certain distinct advantages; It is essential that



## AIR STORIES

the pilot of such a machine should have as perfect a view as possible in a forward and downward direction for the purpose of observing for the artillery or for landing in small fields. The Army Co-operation pilot has to do all his own "spotting," and subsequent reporting by wireless, his observer's chief duty being to keep a look-out for E.A. and to guard the tail of the machine against attack. Naturally, when a pilot has so much work to perform, he must have an aeroplane which will not require much looking after for ordinary cruising flight.

It is this need for inherent stability which has led, in the Lysander, to the adoption of a completely automatic system of Handley Page slots and slotted flaps. The slots and flaps come into operation only when required, and only to the extent required. For instance, at the take-off the pilot gathers speed with his tail up, slots closed, flaps normal, then pulls the stick back. Down goes the tail, the slots open, the flaps droop, and the machine climbs steeply off the ground. When making an approach, the pilot holds the stick forward to obtain a flat glide, and as he thereby keeps up his speed the slots and flaps remain inoperative. To steepen his glide, or for the final stage of his landing, he eases the stick back; speed decreases, slots open, flaps go down, and the machine "parachutes" slowly and steeply earthwards.

### Notable External Features

ONLY external features of the Lysander may as yet be discussed. No description of equipment, armament, internal cockpit arrangements or construction can be given. The wing, with its double taper and shouldered attachment to the fuselage, probably represents the best form of wing-to-body joint, short of a gull-wing shape. The inner section of the wing has slotted trailing-edge flaps and automatic leading-edge slots. The outer section has slots only, with tab-trimmed Frise-balanced ailerons. The wing, it is permitted to say, has a single spar, so that the use of "vee" strut

bracing would seem to point to torsional considerations only. The fairing of the wing struts is very neat, especially where they join the undercarriage. The wing is fabric covered.

The fuselage has that fat-nosed bulgy shape which is becoming increasingly popular for all but very fast racing aeroplanes. Designers have realised that head resistance of the right shape is more economical than a low frontal area which has the wrong profile. The Lysander has as unbroken a line to its fuselage as any civil machine, yet the crew have a good view, and by sliding the top of his cover back towards the tail the gunner has space to use his gun. The side panels of the pilot's section of the cabin slide downwards into the fuselage.

### A Sleeve-Valve Engine

THE power plant in the prototype Lysander is a Bristol Mercury, supercharged to give 840 h.p. at 13,000 feet. In some, at any rate, of the production machines a Bristol Perseus sleeve-valve engine will probably be used. The now familiar Bristol long-chord cowling, with nose exhaust-collector ring and controllable cooling flaps, is fitted. A D.H.-Hamilton three-bladed controllable-pitch airscrew, with a spinner over its rather clumsy looking business end, is also standard.

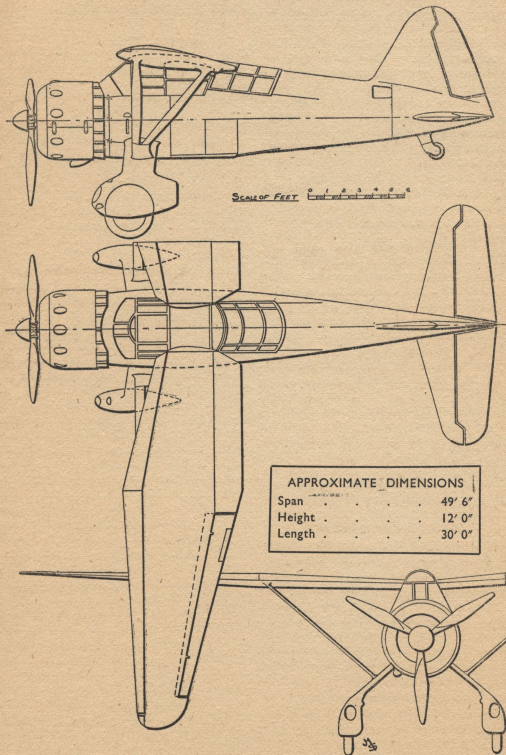
The undercarriage is of interest because it is made from a single Hiduminium (light aluminium alloy) extension, and is rigidly fixed. All landing shocks are absorbed by Dowty internally sprung wheels. The whole undercarriage is enclosed in very neat light alloy fairings. An ingenious feature is the fitting of landing-lights in the noses of the spats. The tail unit is conventional in shape, with balanced controls. The very large fin and rudder necessitated by the short fuselage add to the distinctiveness of the machine.

No performance or weight data are available, but, judging by its brief public appearances, the Lysander is very fast, and also, when necessary, very, very slow.



THE R.A.F.'s NEW ARMY CO-OP. 'PLANE

THE WESTLAND LYSANDER MONOPLANE



A Three-view General Arrangement Drawing of the Lysander Army Co-operation Machine



## HOW TO BUILD THE SCALE MODEL

### A Description of the Methods of Construction and Assembly

**B**EFORE describing the modelling of the Lysander, it may be as well to emphasise that all information that it is permissible to publish about this aeroplane is included in this article. Only those dimensions given may be mentioned, and it is not permissible to show the framing of the fuselage inside the cabin.

The drawings and the following descriptive matter deal with the construction of a  $\frac{1}{72}$ nd scale model, to conform to the others in this series.

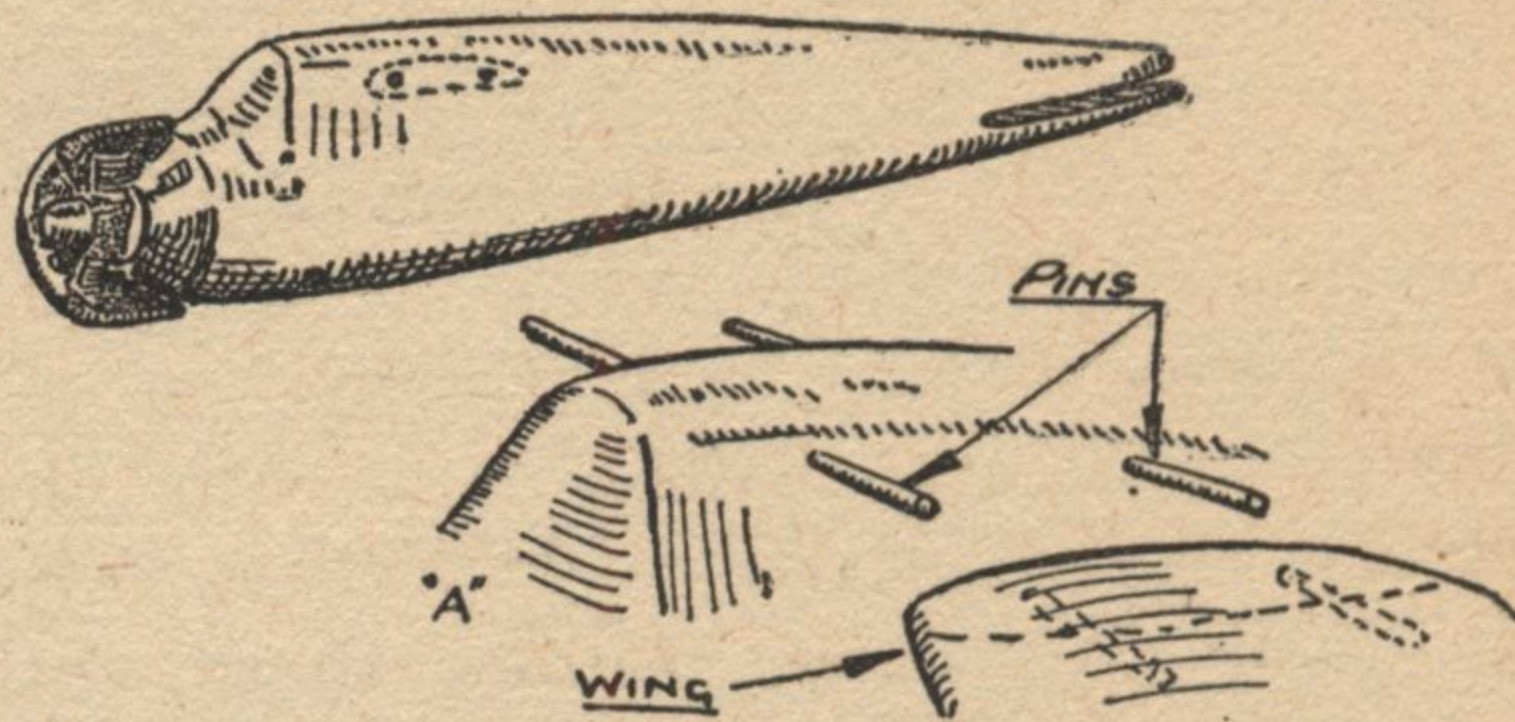
#### Materials and Tools

THE following list of materials will be found necessary for the construction of the model: for the fuselage, a block of white wood or beech  $4\frac{1}{2} \times 1\frac{1}{8} \times \frac{7}{8}$  in.; the wings should be made from a sheet of good quality fretwood (satin walnut or whitewood)  $9 \times 3 \times \frac{3}{16}$  in. A piece of fibre  $4\frac{1}{2} \times 1\frac{1}{2} \times \frac{1}{10}$  in. will be needed for the tail unit, and another piece about  $6 \times 3 \times \frac{1}{16}$  in. for the wing and undercarriage struts. This fibre is the same material as is normally used for washers, and can be purchased at any service garage. No description of the engine and its cowling is given in this article. It is assumed that the modeller will save himself trouble by purchasing the excellent  $\frac{1}{72}$ nd scale castings of the Bristol Mercury and its cowling, which are available at any large toy or model shop. Wheels are also better bought than made.

Here is a list of essential tools:  $\frac{1}{4}$  in. chisel; small plane; penknife; oil stone; small half-round file;  $\frac{1}{16}$  in. bradawl; fretsaw; small long-nosed pliers; plastic wood; tube of cellulose glue and a penny ruler measuring in  $\frac{1}{16}$ ths,  $\frac{1}{12}$ ths and  $\frac{1}{10}$ ths inch.

#### Method of Construction

OWING to restrictions on the publication of details, no description of the interior of the Lysander can be given, and, for this reason, the following



*Figs. 1 and 1a.—Showing details of finished fuselage and method of wing attachment*

instructions have to deal with a solid model. In the March issue of AIR STORIES a detailed description was given of the way in which to make a hollow cabin; if the reader cares to make a guess at the interior structure, he can refer to the article on the Bristol Blenheim and apply the same principles to this machine.

Trace the outline of the side elevation of the fuselage from the G.A. Drawing on page 467. When drawing the nose of the fuselage, do not forget that it projects inside the engine cowling in order to support the engine in its correct place (see Fig. 1). Another point to remember is the position of the tail-plane, in order that a slot may be cut for it in the fuselage block. Lay the tracing on the wood, pin-prick its outline, then line-in with a pencil. Cut away the surplus wood and carefully slot the tail—taking the greatest care to get the slot cut square to the sides of the block. Draw a centre-line down the top of the block and mark the outline of the fuselage plan. Again remove the surplus wood.

Now to proceed with the real shaping of the fuselage; the section throughout is an inverted egg shape, gradually becoming thinner and more elliptical towards the tail. Make two holes (shown in Fig. 1) for the pins, which will keep the wings in place. These holes should go right through the fuselage, and pins or thin wires are inserted so that they project each side (Fig. 1a). Two more holes, about  $\frac{1}{16}$  in. diameter,



one on each side of the fuselage this time, should be made for the undercarriage legs. For the greatest strength in the undercarriage, these holes should go upwards into the fuselage at an angle of about 40 degrees to the vertical.

When marking out the main planes, a tracing can be made from the G.A. Drawing, the right-hand wing being drawn by turning the tracing upside down. Cut the wings out with the fretsaw, taper them in thickness with the plane, and also camber them with this tool. For a modern aeroplane, the wings of the Lysander have a very flat undersurface, there being only a slight convex curve. Mark the outlines of the slots, flaps and ailerons with the bradawl and ruler. Holes have to be made in the inner ends of the wings to correspond with the pins in the top of the fuselage. Two  $\frac{1}{16}$  in. holes have to be made in each wing to take the upper ends of the wing struts.

The tail-plane and rudder units are made in the same way as the wings, the cambering in this case being done with file and glasspaper.

Figure 2 shows how the undercarriage and wing struts are assembled. All the struts are cut from the  $\frac{1}{16}$  in. fibre, and are left on the long side. The two undercarriage struts are first assembled and adjusted for alignment, angle and track.

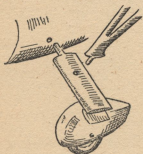
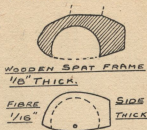


Fig. 2.—Showing the method of assembling the undercarriage and wing strut.

When they are satisfactory, assemble the two wings and adjust the lengths of the two vee struts until everything is correctly lined up. Then dismantle the parts and get on with streamlining the struts. Fig. 3 shows you how to cut the spats from wood, with fibre sides glued in place, and the whole shaped with file and glasspaper. This

Fig. 3.—Outline of the spat sections drawn to scale. The fibre sides are glued to the wood and the whole then shaped with a file.



sketch has been made to scale so that the tracing method can be used.

The airscrew on this machine is rather tricky to make, and it is advisable, for all save experienced modellers, to use the simpler shape with the complete spinner, as described in the article on the Bristol Blenheim (AIR STORIES, March, 1937.) The blades may be made from scrap pieces of wood or fibre. The streamlined tail-wheel unit is cut out and filed to shape from fibre.

## Method of Assembly

GLUE the undercarriage struts into the fuselage, then glue the main plane "vee" struts in place, and glue the main planes themselves into position. Make sure the parts are all correctly adjusted, and then leave them for the glue to set. Fair in all joints with plastic wood.

Glue the spats in place and fit the two wheels with two pins for axles. Again allow the glue to set.

The tail unit is next glued in place and the tail-wheel unit fitted beneath the fuselage. The fin and rudder will require holding until the glue has set, unless it has been made with a little projecting prong in the lower edge, which can be glued into a hole in the top of the fuselage.

Glue the engine and cowlings to the nose and fit the airscrew on its pin to complete the model.

The original Lysander bears the number K6127 and is painted entirely silver. The engine cowlings are yellowish-grey in colour. R.A.F. cockades are carried on the wings and fuselage. Those on the wings are small and are arranged so that they do not overlap the slats or ailerons. The number is painted in black on the fuselage only.

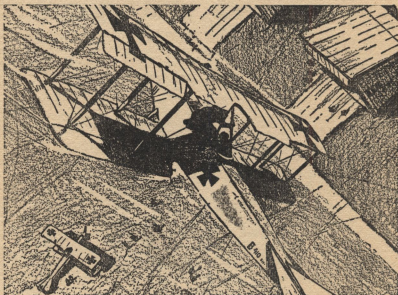
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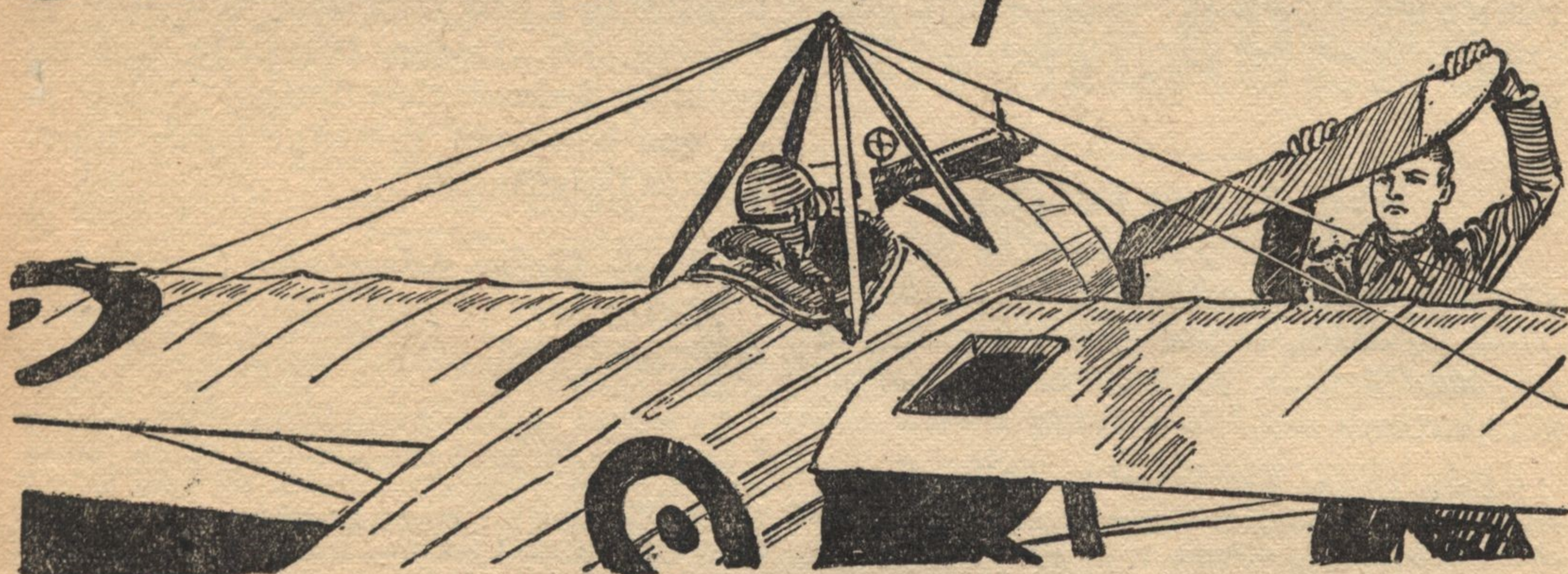
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# CONTACT *by the* EDITOR



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**P**RIDE of place among the many interesting letters received this month must be given to that which presents in an entirely new light one of the most daring raids of the Great War in the Air. The letter is from Mr. John D. Hughes of Newton, Chester, and it concerns those two great air fighters, Colonel W. G. Barker, V.C., and ex-Sergeant-Major L. F. Powell, D.F.C., best known to fame, perhaps, as the partner of Major A. E. McKeever in one of the greatest two-seater teams of the War.

Mr. Hughes writes to correct our version, described and illustrated in the January issue, of Colonel W. G. Barker's Christmas morning raid on an Austrian aerodrome. The following, he states, is the actual story of that raid :

"On the morning of Christmas, 1917, Barker ordered Sergeant-Major L. F. Powell to have a Bristol Fighter prepared for a raid with incendiary ammunition, bombs and darts, and also to procure from the Mess a packet of twenty Gold Flake cigarettes. Subsequently, the Brisfit, piloted by Barker and with Powell in the back seat, went alone on the raid. Reaching the Austrian aerodrome, the machine circled and when the Austrians came running out to see what was happening, the cigarettes went over the side accompanied by a card bearing the inscription '*Wishing you a Very Merry Christmas and a — hot time for the next ten minutes.*'"

"A few moments later, the Bristol went down low, and its occupants let go with all they had, creating terrible havoc. Barker even actually taxied about on the ground to be better able to fire into the hangars.

"As the Bristol left, three Fokkers came over from another aerodrome, but they probably recognised the Bristol and its crew, for their attacks were very half-hearted, and they kept at a respectful distance until the Bristol, running out of petrol, went down to land on an Italian advanced 'drome.

"Next day, a regular Austrian armada came over to raid this Italian 'drome, in the belief that it was Barker's station. Unfortunately for them, Barker got the news and came over, this time with the Camels, and it proved a sad day for the Austrians who, I believe, lost eleven bombers and sundry scouts. I think you will now see how the stories of these two different raids have become mixed. The authority for my version is ex-Sergeant-Major L. F. Powell himself, now a distinguished Police Superintendent and so bashful that these yarns are only got from him on rare occasions and then only by knowing part of the story first and taxing him with it.

"Incidentally, confirmation could probably be obtained, if you wished, from an artist in London named, I believe, Higgins, who was Adjutant at the time, and who has photographs of some of the Austrian bombers shot down on the Boxing Day raid. These include one particularly grisly one showing an Austrian airman whose bones had been so displaced by the impact of the crash that when he was laid out he was some 8 feet long! (rather gruesome, I'm afraid, but it may serve to prompt someone's memory about the rest of the show)."

The official, and generally accepted, version of this raid is, of course, that it was carried out on the Austrian aerodrome of Motta by Captain W. G. Barker, Lieutenant A. Hudson, and one other, all members of No. 28 Squadron, R.F.C., and all flying Camels. On the other hand, an actual participant in such an eventful raid as this is hardly likely to have had his memory of it dimmed by time.



## AIR STORIES

We wonder if any other former members of 28 Squadron can help to explain this curious confusion between two versions, both apparently well-authenticated, of one Christmas Day raid.

### When Airmen Fall Out

"IS it possible for a man to fall out of an aeroplane—and fall back again?" This, in effect, is the question proposed by Mr. Arthur Pagden of Plymouth, who writes:

"Some friends and myself are engaged in an argument concerning an account we read recently about two R.F.C. officers who were flying over the Western Front about 1916 when, in the course of a loop, the pilot was horrified to see his companion fall out. Some seconds later, and several hundred feet lower, he straightened out from the loop, felt a thump and turned to see his companion sprawling on the fuselage behind him. This is stated to have been an actual occurrence and, though I claim it to be quite possible, my friends maintain that it could never have happened. Will you please give us a ruling?"

We have never heard of this particular incident—and we should welcome details from anyone who has—but there are several well-established precedents for the "out and in again" experience. Captain, now Lieut.-Colonel, L. A. Strange, for example, was once thrown out of a spinning Martinsyde at a height of eight thousand feet above Ypres, but managed to catch hold of a centre-section strut and finally succeeded in regaining his cockpit after falling five thousand feet.

More recently Flight Lieutenant C. S. Staniland, the well-known Fairey test pilot, jumped from the front cockpit of an experimental two-seater that had got into an uncontrollable flat spin and, next instant, found himself sprawling back on board—in the rear cockpit. Realising that centrifugal force had caused his sudden return, he jumped again, this time over the opposite side, and landed safely by parachute.

For the most unusual query of the month, however, the prize must go to Mr. K. C. H. Taylor of Leicester, who flatters our Information Department by asking for the length, breadth and colour of a German pilot's identification papers,

and for details of the kind of notepaper on which a German Air Force adjutant would write a "chit" for a pilot on transfer to a new unit.

Sorry, Mr. Taylor, but we're just an ordinary Information Bureau trying to do our best—not the War Office Intelligence Department!

### More Kinley Adventures Coming

FROM Mr. J. Archbold of Isleworth, Middlesex, comes a sad story.

"I started reading AIR STORIES," he writes, "about a year ago, and now the whole family read it before I get a chance to set eyes on it! My father votes it the best magazine on the book-stalls and—when I see it—I fully agree with him.

"Incidentally, we should all like to see Flight Lieutenant Kinley back in AIR STORIES."

Many other readers have written urging that the omniscient Kinley should be restored to the strength, and we are glad to announce that Captain J. E. Gurdon has agreed to contribute a further series of this popular character's adventures, the first of which will appear very shortly.

### A New "Three Squadrons" Story

OUTSTANDING among the contents of next month's issue will be another grand, long story of the Three Squadrons by Wilfrid Tremellen—recommendation enough for all who have read the previous chronicles in this brilliant series. "The Frog that Fell Out of the Sky" is the intriguing title of this latest adventure and, once again, those inimitable characters, "Woggy" Wane, Sergeant Haystead, and the C.O. of the S.E.5 Squadron, Major Tignall-Wingate, better known as "Tiggy Wiggy," are caught up in an aerial drama of the Western Front as exciting as any the Three Squadrons have yet experienced—and that is saying a good deal.

Two other great stories in what promises to be one of the best numbers of AIR STORIES yet produced are "Himalayan Hell" by J. H. Stafford, a really stirring story of the R.A.F. in action on the North-West Frontier Territory, and "The Sky Clown," an unusual type of air-war adventure, contributed by J. Railton Holden.



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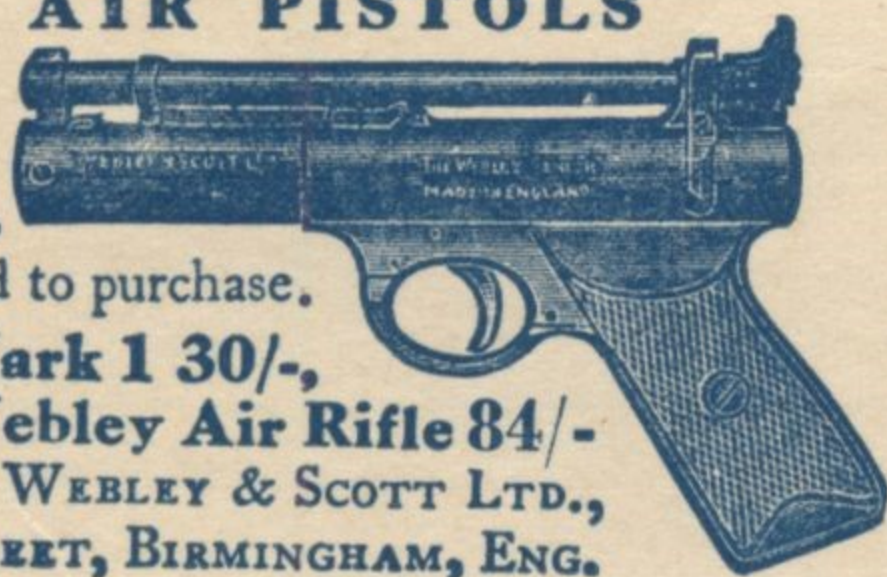
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