BRIDEGROOM OF DEATH - By Wilfrid Tremellen

AIR STORIES

7d

THE PHANTOM FOKKER

THE EPIC STORY OF THE FRENCH AIR SERVICE IN THE WORLD WAR

THE PHANTOM FOKKER — By Russell Mallinson

DECOY FOR DOLPHINS — By Elliott White Springs

FALCONS OF FRANCE

FEBRUARY
OPEN LETTER TO MR. SOMEBODY AND HIS SON

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Both were at the height of their fighting career. Either might win. No one could tell

A Long Complete Mystery Thriller of the Air War on the Western Front
CHAPTER I
The Face from the Past

WHILE I was standing on the platform the other day waiting for a train, I picked up from the bookstall one of those "Funniface" cards. You know the kind of thing I mean; the card shows the portrait in profile of a man in a bowler hat, but the line of the face is not drawn in, and taking its place there is a small length of fine-gauge chain. You shake the card and the chain shifts its position, forming a different face—a differently-shaped nose, a differently-shaped chin. You can make all sorts of funny faces, just by shaking the card.

I had ten minutes to wait for my train, so I stood there in front of the bookstall playing with the thing. (I had just bought a couple of aviation magazines, and felt that the boy in the peaked cap owed me a certain amount of indulgence.) I shook the card again and again, and every time the features formed themselves differently—long noses, pug noses, Hitler scowls, and Mussolini-cum-
AIR STORIES

burglar chins. It was quite fun.

Suddenly the card slipped out of my fingers and dropped on to a pile of magazines. I was just about to pick it up again, when I noticed the face that the card was now showing, and suddenly memory made me catch my breath. It was a face . . . It was the face of . . . Well, if it had been you, you would have just said that it wasn’t a face at all, and you would have shaken the card again. But to me that ghastly caricature was a face. It was the face of a man I had known intimately. It was the face of Woan-Cortright of the S.E.5 squadron; Woan-Cortright who had shaken his head when “Tiggy Wiggy,” the C.O., wanted to send up his name for a bar to the D.S.O.; Woan-Cortright who had delivered to Squadron Office a written request that his name should be removed altogether from the leave-list; Woan-Cortright who had spent his last three weeks on our aerodrome without uttering a single word, writing down anything he had to say in pencil on paper.

My thoughts ran on to tiny incidents I thought I had forgotten. There was the time when that chucklehead Teddy McFane won a box of cigars at a raffle. He was going round offering them to those present, and in due course came to Woan-Cortright. There was a sudden pause in the conversation and the laughter ceased. Teddy looked up, saw that it was Woan-Cortright, and promptly dropped the box in his confusion. Then there was that lovely summer evening when “Woggy” Wane, Woan-Cortright and I were strolling down a lane not far from the aerodrome enjoying the warm moist air. Suddenly a child’s rubber ball came bouncing out of the gate of a cottage garden. A little girl ran out after it, and was about to pick it up from Woan-Cortright’s feet, when he stopped and handed it to her. At once she turned and ran back into the house screaming for her mother. The ball was left in Woan-Cortright’s hand. Woggy had to take it in to her. We could still hear her screams as we turned the bend in the lane.

There was a screech of brakes behind me. My train was in. Hastily I turned to find myself a corner seat if there were any going.

“Hi, Mister! Tuppence, that costs!” It was the bookstall boy. I hadn’t intended to buy that “Funniface” card, but as it was now reposing in my pocket where I had absent-mindedly slipped it, the least I could do was to pay up.

I got into the train then, and filled my pipe, and sat for a long time without giving a glance at the magazines I had bought. My thoughts were still back in the war years. I was thinking of Woan-Cortright and the best manner of presenting his curious story. Now if you feel that there is going to be something horrible about it just stop reading at this point and turn to one of the others.

CHAPTER II

The Scarlet Hussar

T
HE Woan-Cortrights, the handsome Woan-Cortrights, were the kind of family that always went into the Cavalry—and not the ordinary Cavalry of the Line, but the Scarlet Hussars. If you take down the Army List, any number since the very first issue, you will find that there has always been a Woan-Cortright in the Scarlet Hussars. The name stands out, not only because it is a long name in itself, but because nearly all the other officers of the regiment are titled. The Woan-Cortrights were commoners, and had been ever since they had taken the wrong side in the Wars of the Roses. But they were immensely proud of their ancient lineage, and though, as great families go, they were not wealthy (and it costs money to keep a son in the Scarlet Hussars), they could afford to look down their noses at the baronets of recent vintage who turned up to show off their five-hundred-guinea hunters when hounds met.

Captain Francis Woan-Cortright, our Woan-Cortright, that is, was more original in his outlook than his family. He broke with ancestral tradition, not only by transferring from the Scarlet
Hussars into the Royal Flying Corps, but also by conducting his life as though high birth and striking good-looks were a matter of luck and in no way due to any merit of his own. Believing that only by one’s own efforts is merit attained, Woan-Cortright made himself the most reliable and efficient formation-leader in the Three Squadrons. I can add this: that if you had asked every officer and every mechanic on our aerodrome to write down the name of the person he considered the finest example of a gallant pilot and an English gentleman, nine out of ten of them would have plumped for Captain Woan-Cortright.

For good measure I may as well give you the testimony of Private Painter, who was Woan-Cortright’s batman. It provides a notable exception to the rule that no man is a hero to his own valet. The following is an extract from a letter written by Private Painter to his mother. As I happened to be Orderly Officer for that day, I had the job of censoring letters, and I remember this one for its flashes of unconscious humour. It ran something like this:

“They’ve just give me a new officer to look after and being a reel gentleman, he suits yours truly to a T. Name of Woan-Cortright, and I must say he is better than the last bloke I had by a long chalk. No swank about this one, though they do say as he has been to Eaten and Harrow and all the best colleges. He came into the R.F.C. from the Cavalry where all the biggest toffs are and you has to pay to get in. Also they’ve given him the D.S.O. and other medals for bravery, which you would not think, him being so quiet and gentle like. I neer forgot; who do you think’s photo is beside his bed? I bet Liz wouldn’t half be interested! Rita de Maris, the grate actress! She is his girl would you believe it? They will look a magniversonic thing coming out of the church door, her being as butiful as a picket and him being tall and dark and the most andsome officer in the B.E.F. I bet Liz will want to go and see!”

I didn’t half go red, being caught at it, but he did not say nothing, just told me not to dust things with my ankerchief, which of course I was only pretending. He is most poplar, everybody liking him. Also I may say with all deep modesty that he is the only officer here who does not get his cigarettes pinched by his batman, which is because I resepce him and gratefully admire.”

I can endorse most of the opinions of Private Painter; Woan-Cortright was not only the idol of the Three Squadrons, but a daring pilot, and a brilliant formation-leader.

WHOOF! Whoo-oof! Whoo-oof! A salvo of anti-aircraft shells burst less than a hundred yards ahead of us and I caught the acrid smell of cordite as we sped through their dark smoke. Then Woan-Cortright, who was leading, altered course to the right to make things more difficult for the gunners, and we followed him.

There were three of us in that formation besides the leader; there were Haltrick, Woggy Wane and myself. One Hun was wanted, just one Hun, and then Woan-Cortright would consent to take his long-delayed leave. He would cross over to Folkestone next morning, and in a few days every fashionable illustrated paper in England would print photographs of the happy pair coming through the door of St. Margaret’s, Westminster—“Captain F. J. G. Woan-Cortright of the Scarlet Hussars and the Royal Flying Corps and Miss Rita de Maris, the well-known actress.” Meanwhile, just one Hun was wanted, one Hun.

The four S.E.5’s sped on their way. Woggy searched the sky; Haltrick searched the sky; I did the same, right and left, above and below. But no Hun was to be seen. Roaring away at the head of the formation, the machine piloted by Woan-Cortright ate up league after league. I could see his helmeted head turning this way and that, looking upwards and downwards and all around. But though it was he who was to shoot down the Hun when we found it (he
didn’t know it, but that had all been arranged between the three of us), his search was no more eager than Woggy’s and Haltrick’s and mine.

We were all as keen as mustard on Woan-Cortright getting that Hun. It would be his twenty-fifth enemy aircraft destroyed—and a landmark in his life. Not for worlds would I open fire on the victim when he materialised. It was the same with Woggy and Haltrick. We were merely going to hold the ring. It was to be Woan-Cortright’s Hun; and we, as soon as he had shot it down, would fall in behind him and fly home as happy as sandboys. Then there would be a popping of corks in the ante-room, and champagne-froth tumbling into shallow, wide-mouthed glasses. Woan-Cortright’s twenty-fifth Hun! And he goes home to-morrow to London Town! Lucky Woan-Cortright! Best-looking girl on the Stage!

But you will want to know why there was all this fuss about Woan-Cortright’s twenty-fifth Hun. It all began with a minor mystery about his leave. “Why doesn’t Woan-Cortright take his leave?” people asked. “He was due to go before Sedly and Hurkett. Why doesn’t he take his turn?” Speculation was rife. Usually as soon as the adjutant issues railway vouchers and ration cards, the leave-taker beetles off to Calais as fast as he can lorry-hop. Woan-Cortright just stayed on. It was most strange.

And then Teddy McFane, who knows everything about everybody and is always the first to nose out any mystery, found out the reason. He came barging into our ante-room (where he has no right to be) waving an illustrated paper.

“I’ve found out all about it, you fellows!”

I was playing chess with Renwright; Woggy was showing ha’pennies with someone else; Haltrick was sprawling on the sofa deep in the latest number of the British Medical Journal. None of us stirred; Teddy spends his time finding out all about something or other, and we had got used to it.

Teddy stared round. “Here! Listen! I’ve found out all about it!” He looked more than ever like an overgrown puppy.

Renwright, who hates to be disturbed when playing chess, looked up warily. “Why the sweepings of the Camel Squadron should be allowed to poke their noses into a decently-conducted mess I can never understand. Get away, you red-headed lumber-jack!”

“Stop playing that silly game and listen!” Teddy retorted, and putting his toe beneath the edge of the chessboard, sent the pieces flying. Uproar! Renwright and I rushed at Teddy and hurled him with all our strength in the direction of the sofa. The recumbent Haltrick raised one eyelid, saw him coming, and then raised one foot. He settled the sole of that foot firmly against the seat of Teddy’s breeches, and with a mighty effort propelled him violently towards the shove-ha’penny players. Then he went on reading the British Medical Journal.

When Teddy, by our combined efforts, had been hurled out on his ear, we dusted ourselves down.

“We ought to post a sentry at the door to keep the place free from those maggoty Camel merchants,” Renwright growled. “Hallo! He’s dropped something.”

He stooped down to pick up the illustrated magazine that Teddy McFane had dropped in the struggle. It was folded and there was a passage marked in ink.

“Listen to this, you fellows!” Renwright exclaimed, and he read it aloud.

The paragraph was from the pen of one of the more fatuous of the gossip-writers, those gentlemen who spend their time dodging from one social function to another, snooping round and gathering tit-bits of personal information about well-known personages. This particular piece of information was what the press-men call a “scoop.” It made known to all and sundry that the ravishing Rita de Maris had again delayed the date of her wedding. “I have told Captain Woan-Cortright,” she had said, “that he may take me just as soon as he has shot down his twenty-fifth German.
First I made it ten, then twenty, but now I say twenty-five—and mean it. After all, when Love comes in, there are limits even to one's patriotism, aren't there?"

Haltrick snorted. "There seem to be no limits to Woan-Cortright's fat-headedness," he growled. "Fancy a fine chap like him falling in love with that tinselled vamp!" Haltrick was a serious-minded medical student with no illusions whatever about life.

Woggy Wane picked up the magazine and read the paragraph again, his chubby face puckered into a frown. "It seems pretty cheap," he agreed, "but if they love each other, I hope —"

Haltrick crackled the pages of the British Medical Journal impatiently. "That woman couldn't love anyone but herself. Can you imagine a decent girl risking her man's life just to get her name in the gossip pars? Tcha! You make me tired." And he smoothed out the British Medical Journal and resumed his study of the latest ideas in the treatment of compound fractures of the femur. It was Haltrick's ambition to be established in Harley Street within ten years of the end of the Great War.

"Well, anyway, this explains why the Skipper doesn't take his leave," Woggy said. "What's his present score? Twenty-four. One more Hun he wants. I vote we help him——."

At that moment the door opened and someone came in; someone who was very tall, dark, and distinguished-looking. He was wearing the D.S.O. and M.C. beneath his pilot's wings and on the lapels of his G.S. tunic were the badges of the Scarlet Hussars. The familiar half-smile was playing round his lips; Woan-Cortright always gave you the impression that he was thinking of something pleasant and rather amusing. We all of us shifted into a position a shade less free-and-easy. Woan-Cortright, though only a flight commander, had the kind of personality that made everyone instinctively want to appear at his best. Even Haltrick shifted his feet off the sofa.

We felt his dark eyes roving over us, and Renwright and I wished that we had set up our chess game again, and Haltrick was glad to be found engaged in serious reading, and Woggy was sorry that just at that moment he happened to be standing about doing nothing. Woan-Cortright had that kind of ascendancy over us. Somehow you couldn't help wanting him to think well of you.

I watched him, very tall and well-groomed and "cavalry," move over to the notice-board to find out what machines were available; and I thought what a pity it was that such a splendid fellow should fall for a girl of the stamp of Rita de Maris.

Woan-Cortright turned. "The mint is clearing, lads. Does 'B' Flight feel like a spot of hostility?" It was characteristic of him that his orders always sounded like invitations to cooperate; he was that kind of leader.

Haltrick slapped down his journal. "We'd like nothing better, Skipper."

As we left the ante-room Woggy Wane tugged at my arm. "We'll find that twenty-fifth Hun for him now," he said with a wink, "and by this time tomorrow he'll be on the leave-boat."

He was wrong. By that time tomorrow Woan-Cortright was to be in another kind of conveyance.

CHAPTER III

Baldur the Fox

WHOOF! Whoo-ooof! We were still looking for that Hun, and the "Archie" gunners below were still sending us frequent reminders that we were trespassing. It was not until we were near the end of our beat that anything showed up. Then, just as we were speeding across a layer of wispy cloud, Woan-Cortright waggled his wings and pointed downward.

A Pfalz triplane was racing for Hunland, following a course at right angles to our own. It was what Haltrick and Woggy and I had already come to think of as the "Wedding Hun." Doubtless Woan-Cortright thought of it in the same way.
He banked round and put down his nose. We all followed suit. Woggy looked across at me and winked behind his goggles. Haltrick made a gesture towards our leader. "Leave it all to the Skipper," that gesture seemed to say.

As we three reduced our speed Woan-Cortright pushed forward his throttle-lever to the limit and went streaking downward, engine thundering all out. On seeing that he was to have one opponent to fight, and not four to run away from, the pilot of the German triplane banked round. And as he turned I saw that his machine was all-green and that painted on the side of the fuselage in brilliant red was the sign of the Running Fox. I caught my breath in excitement. So this was the notorious Baldur von Althaus! What Hun could be more suitable for our champion's twenty-fifth victim? It was going to be a tussle though. I looked all around me to make sure that there were no other enemy aircraft in the sky—that this was no cleverly-baited trap—and, seeing the sky clear, throttled back still further. Woggy Wane and Haltrick did the same. Not for a moment did any of us doubt that our peerless Woan-Cortright would get his man—even though he was pitted against Baldur himself.

You see, we knew all about the Herr Hauptmann Baldur von Althaüs. We knew the colour of his hair and eyes and his taste in field-boots; some of us, who collected such things, had his signature scrawled in our autograph books. We had reason to know him. Not so many weeks back the merry hauptmann had stood in our mess making wry faces over a glass of whisky. Then, with the colossal nerve that was characteristic of him, he made his way behind the bar, examined every bottle on the shelf with comic grimaces, and finally selecting cherry brandy, poured himself out a stiff peg amidst the loudest of applause. Later we saw him off in a lorry, and he shifted the two bottles of his favourite drink which we had given him under one arm and shook hands all round with the greatest of bonhomie.

Five hours later the driver of the lorry and the two guards presented themselves at their destination without their prisoner. They had no clear idea of what had happened, and smelt very strongly of cherry brandy. Which seems very humorous and very smart of the wily Baldur—until I mention the fact that this officer had voluntarily given us his parole.

But Baldur was not entirely ungrateful to the squadron. The note he dropped on to our aerodrome some weeks later thanked us most handsomely for our hospitality, and invited any individual among us to a "trial of skill" whenever we felt inclined. Up to date the escaped hauptmann had cost the Royal Flying Corps the lives of seven pilots, and cherry brandy was a drink for which not one of us had a fancy. Now, however, Woggy Wane, Haltrick and I strained our necks over the side of our cockpits in confident anticipation. False Baldur was to meet his match, and we would watch the promise-breaker spin down in flames almost without pity.

For five minutes or so Woan-Cortright's S.E.5 and the green triplane decorated with the emblem of the Running Fox circled warily. Not a shot was fired; the pilots, old hands at the killing game, were taking each other's measure. Then, as the circles became smaller and smaller, short, vicious bursts of fire would break, now from the Vickers, now from the Spandaus. I saw, as Woan-Cortright thundered past me at a vertical bank, a grouping of bullet-holes in his tail-plane; the German had drawn first blood.

The two machines were now racing round in the tightest circles of which they were capable, but so evenly were they matched in performance that always a full diameter separated the one from the other. It was breath-taking to watch; both pilots were on their mettle; just one false move with joystick or rudder-bar and the penalty would come instantaneously in the form of a deadly burst of bullets through the back.

SUDDENLY—it happened almost too quickly to see how—Woan-Cortright
broke circle, cleverly escaped the hail of bullets that was the penalty of his daring, and gaining height at some distance from his opponent, renewed contact with a definite advantage.

Yow-oo-ool! With every wire screaming and engine thundering crescendo, the little S.E.5 came pelting down on the triplane. There was a murderous crackle as the Vickers gave tongue, and we saw the darting tracer pass between the German pilot's head and his tail-plane, peppering with small holes the top of the green fuselage. Had that burst been aimed a shade higher, there would have been a different story to tell. As it was, after one panic-stricken second Baldur whirled his triplane round in a vertical bank to the left, and soon forced Woan-Cortright to begin all over again the game of tail-chasing.

But the elusive hauptmann had evidently spent a nasty moment. He was rattled; his turns showed it. He realised that in this cool-headed English pilot he had met someone who was more than his match, and decided to change his tactics. We watched in amazement.

Flying hands-off past his opponent, he indicated by genial gestures that he had come to the end of his ammunition, and could the duel be postponed, please? It was colossal nerve of this kind that had made him famous, even on the Allied side of the line. With a cheery wave of the hand he headed his green triplane north-east and made off without even turning his head, leaving his unprotected back an inviting target. The brazen cheek of the man! Evidently he had the fullest confidence in the chivalry of the English.

Woan-Cortright could have put a burst of bullets through his back then and there. But he didn't. Perhaps he felt that in this, of all combats, his victim should not be such easy meat. And though he knew that the last person to deserve chivalry from anyone in our squadron was Baldur von Althaus, he answered the German's wave by curtly raising his hand in acknowledgment. Then he banked round and, throttling back his engine to normal cruising speed, flew over to join us.

But the treacherous Baldur, as soon as he saw over his shoulder that his enemy had turned away, suddenly banked round himself and approached the unsuspecting flight commander at full speed. Woggy and Haltrick and I were too far off to do anything but fire frantic warning bursts of machine-gun fire. We saw the green triplane streak forward like some venomous snake about to strike. We heard the harsh crackle of its Spandaus. We saw our beloved leader, surrounded by a hail of darting tracer, half-turn his head to look back. And then he just slumped forward on the joystick and disappeared from view.

His machine heeled over and began descending in a tight spiral which rapidly developed into an uncontrolled spin. After dropping three thousand feet below us, it was still spinning madly. I felt as though my heart had turned to stone; I was witnessing the going-out of one of the finest fellows that ever wore wings. I did nothing at first; I was stunned, incredulous.

Woggy Wane and Haltrick must have had similar emotions. We wasted fully a quarter of a minute before we got going. Then with red murder suddenly flaming in our hearts, we pushed forward our sticks, jerked open our throttles to their widest, and went streaking down after that treacherous dog of a Baldur, who was now racing, tail-up, for home.

We managed, after a long chase, to work up to within two hundred yards of him and, clapping our eyes to the Aldis, poured in a triple stream of lead. The green triplane, shedding splinters and rags of fabric, put down her nose, dropped her left wing, and shot downwards, gyrating like a sycamore seed.

We distrusted the crafty hauptmann even now; we followed him down closely, Haltrick in his cold rage keeping up a continuous fire all the way to the ground. And we were right in discounting him. Baldur was by no means dead; four hundred feet from the earth he suddenly flattened out of his spin and looked round wildly for protection.
A few hundred yards away there was a small copse. He made for it and, pancaking his triplane neatly down on top of it, crashed to a standstill. We saw him struggling to throw off his safety-belt.

"Yow-ool! Yow-ool! Yow-oo-ool!" One after another, we three came pelting down on him, guns jickering, wires screaming; and zoomed upwards to come round again. Nothing but Baldur’s death would satisfy our hot anger at the vile trick he had played on our leader. But in spite of our murderous intentions, the desperate man was able to slip out of his cockpit. In a few moments he had disappeared through the foliage, and was no doubt crawling to a place of safety. Petrol was running short, and we were some miles behind the lines; we were forced to leave the fox lying up in his lair.

That we had wounded him seemed highly probable; because not for another three whole months was the sign of the Running Fox seen again in our skies.

CHAPTER IV
An S.E.5 Returns

We flew homewards feeling pretty sick with ourselves. We had set out to help our leader find his twenty-fifth Hun and to hold the ring while he made his kill, and now the affair had ended with the fall of our champion through a mean trick which, knowing Baldur, we ought to have suspected from the first. Well, it was over now. There would be no champagne and no celebration in the mess; and there would be no triumphant send-off for our flight commander on the morrow. Life seemed suddenly very grey and empty. Somewhere down there on the war-scarred earth below lay the wreckage of an S.E.5, the body of its pilot huddled and lifeless in the cockpit. The peerless Woan-Cortright was dead.

That was what we thought, all three of us, as we flew back over the lines. And then, while we were circling low over our aerodrome, before shutting off at the leeward end to glide in, we had a joyful surprise. There in the middle of the field stood an S.E.5 bearing the streamers of a flight commander. I looked at the number. Glory be! It was the machine that I had last seen going down in an uncontrolled spin after that ill-starred combat with Baldur. My heart leapt. So Woan-Cortright had got back after all!

The machine was empty, though. And why hadn’t the mechanics taken it in?

Haltrick was ahead of me. He waved and pointed excitedly in his delight—and nearly wiped off his undercarriage in landing. Almost as soon as he touched down, he began taxying towards the derelict S.E.5. Then he got out of his machine and ran over to examine it.

I came up behind him just as he was dropping down to the ground after looking into Woan-Cortright’s cockpit. His face was grim and he took me by the arm, leading me away.

“Don’t look,” he said.

“Why not?”

“It’s not a pretty sight. You’re not accustomed to that sort of thing.”

“What—what about the Skipper?”

“If he’s still alive,” answered Haltrick slowly, “he’ll be on his way to hospital by this time.”

He spoke in the quiet matter-of-fact voice that medical folk always seem to use. But we had not gone twenty yards before the real Haltrick broke through. He turned to me suddenly with blazing eyes. “If ever we get that devil Baldur for prisoner again, I’ll—I’ll throttle the swine with my own hands!”

HOW Woan-Cortright returned to our aerodrome after that duel with Baldur von Althaus we had to piece together from the accounts of several people—people who seemed strangely white about the gills and looked as though they would rather talk about something else.

It seemed that Major Tignell-Wingate, our C.O. (“Tiggy Wiggy” to us) happened to be just turning into the aerodrome in his car when he heard the sound of an aero engine being shut off,
and looked up to see an S.E.5 coming in over the hangars. The C.O.’s driver, a young mechanic named Simpson, was at the wheel.

The C.O. saw that the pilot of the newly-arrived machine, instead of making for the leeward end of the aerodrome before turning to glide in, evidently intended landing straight away, as though he were in a hurry to touch down. Watching with knitted brows, Tiggy Wiggy saw that one of his streamers had been shot away, and that there were bullet-holes in the tail-plane. He bade his driver halt.

There was little wind; the S.E.5 made a fair crosswind landing, trundled to a standstill, and remained motionless with propeller still flickering and engine ticking over.

The C.O. was puzzled. No attempt was made either to taxi to the hangars or to switch off the ignition; and no pilot’s head could be seen in the cockpit. The S.E.5 just stood there, as though derelict.

"Simpson!" Major Tignell-Wingate ordered. "Drive me straight over to that machine, please."

The car screamed across the aerodrome on second gear, and before it had come to a stop the C.O. was out of it and clambering up to look into the cockpit. He took a deep breath.

"Climb up on the other side, Simpson, and help me lift him out."

"Yessir!" The youngster climbed up. But no sooner was he in position to look into the cockpit than he dropped to the ground again.

Then Tiggy Wiggy, who never speaks harshly to anyone, spoke harshly to him. "Get away, then, Simpson! You’re no good! You’re thinking of yourself; get away and fetch someone else!"

And the young mechanic, who had just been violently sick, stumbled to the car and drove quickly away.

By the time that Woggy Wane, Haltrick and I landed, an ambulance had taken Woan-Cortright to hospital.

In answer to our unspoken questions, the Adjutant, who had gone over with him, looked grave. "Fraid he’s fought his last Hun, poor fellow. There won’t be any twentieth for him now."

"But will he live?"

The Adjutant shrugged. "They can’t say—yet. I doubt it; I don’t see how it’s possible."

"Lord! If I had Baldur on my sights just for two seconds!" growled Haltrick.

"Well, you had him this morning—and let him get away," Walsmey pointed out unkindly. "And there were three of you."

"Bet you couldn’t have done any better!"

"Bet I could!"

"Oh, shut up!"

Everyone was overwrought and dispirited. It had been a bad morning for the squadron.

The flame of hatred for Baldur the Fox burnt high for some time, very high. We searched the skies daily for the green triplane. But when week after week passed without a sign of the wily hauptmann, he gradually dropped out of conversation. Pilots were killed or went on to Home Establishment, and were replaced by youngsters fresh from the training schools who had never heard of either Woan-Cortright or the Fox. At the end of three months (which on active service seems like three years) only the old hands remembered that piece of treachery.

"We must have killed him in the copse that time," Woggy said, "—one of us three."

"Hope so," growled Haltrick. "But I shan’t forget that devil in a hurry. Thought I saw his green ‘bus in the distance the other day; must have been a trick of the light."

"Oh, he’s a dead’un all right; must be after all this time."

CHAPTER V

The Bird of Death

ONE morning a few days later, Teddy McFane of the Camel Squadron came up to me when I was in the armoury shed.
"Hallo, Teddy!" I remarked. "How's things in the private detective business?"

Teddy ignored this, and just stood watching me test cartridges for bulged rounds. I went on with the job.

"Why that furrowed brow, Teddy?" I asked at last. "I know that mighty brain is at work on some problem."

"How can a bird fly an aeroplane?" said Teddy thoughtfully, and he emphasised the nouns as though he were posing a conundrum.

I gave him a quick glance to see if he were tight, and answered soothingly, "Why should it, my poor Teddy—seeing that it's got wings of its own?"

"But a bird has been seen flying an aeroplane—a Nieuport, to be precise," persisted Teddy. "I don't believe it myself, but Runnion of the R.E.8 Squadron swears he saw it."

"Oh? Was it waggling its wings to get along, or did it let the prop. do all the dirty work?"

"Runnion said that when he was reconnoitring the line he spotted a Nieuport making for Hunland, and passed it at a distance of fifty yards. When he waved, the—the thing in the other cockpit didn't take any notice, but just flew straight on without turning its head. He swears that it was a bird with a huge brown beak. After he had passed it, he looked back—as well he might—and he saw that the bird had turned its head and was looking back too. It put the wind up Runnion, I can tell you. He says he flew back here with his head over his shoulder all the way—in case the thing should come after him and chew him up. What d'you think of the yarn, Trevelyan?"

"I've heard of many cases like that, Teddy. It's quite common. Only generally it's purple snakes or green rats that they see. Never heard of a brown bird. That'll be a warning to young Runnion; I hear the drinking in that R.E.8 Squadron is something dreadful."

"I suppose you're right—though Runnion didn't look tight. By the way, talking about those R.E.8 blighters, they don't seem to be able to spot the position of this secret German howitzer battery."

"What battery, my poor Teddy?"

"Haven't you had any orders about it? Then you soon will. Why, the one that's known to exist but can't be spotted. It's been doing a hell of a lot of damage to our P.B.I."

"None of the enemy batteries is exactly kindly disposed towards our infantry, Teddy," I pointed out.

"Course not, fathead! But this one's a special one. It's so well camouflaged that the R.E.8's admit they're whacked—can't spot it nohow. Yet that ruddy battery has been emplaced long enough to get the range of all the important positions in our front line to the yard, and it gives them hell. It's got to be found, and we've been told to help."

"Since when did the Camel Squadron spot for the artillery, my poor Teddy? I thought you were supposed to be a fighting squadron—in name at any rate?"

Teddy bridled. "It's orders from Wing, fathead. We've been ordered to keep our eyes open for howitzer flashes in suspicious places whenever we are in the vicinity of the line. You'll be told the same; you see if you aren't."

"I doubt it, Teddy. A first-class fighting squadron like ours isn't usually asked to——"

THE latch clicked at that moment, and one of the newcomers to the Camel Squadron put his head round the door. Seeing Teddy, he came right in.

"Oh, McFane! Have you heard about Webster?" he asked politely. He was evidently proud to bring news to an old hand like Teddy.

"Spit it out, kid!" Teddy encouraged. "My friend here is a doubtful-looking customer, but he's quite in my confidence really."

"Well, Webster has been brought down in No Man's Land after a duel with a Hun."

"Oh?"

"He's quite all right; he's just telephoned from a gunner battery and described the machine that shot him
down. All the older chaps in the squadron seem to know it well, so I thought you would, and came to tell you. It was an all-green Pfalz triplane, and it was flown by——"

"Baldur the Fox!" Teddy and I leapt to our feet and stared at each other in wild excitement. So the Fox was still alive after all!

Teddy collected himself. "Here, I'm off to find out about this!" he jerked out, and shoving the news-bringer ungratefully aside, he went through the doorway at a run.

My thoughts were in a whirl. I collected my gear together and prepared to leave. Haltrick must know about this.

I found him standing at the table in the ante-room staring with a contumacious smile at a photograph in an illustrated paper. He turned his head as I came in.

"Hallo, Trevelyan! What do you think of this?" And he jabbed his finger at the offending photograph.

"Never mind about that! There's news! Baldur the Fox is alive after all!"

"Wha-a-at!" Haltrick stared.

"Who says so?"

"Webster of the Camels has just been shot down by him."

And I told him all I knew.

Haltrick took a deep breath. "We'll get him then," he said grimly. "If he's on this part of the line, we'll get him sooner or later, as sure as eggs are eggs."

"He seems in pretty good form."

"Leave him to me. The treacherous devil! He'll not escape me next time. Here! Take a look at this; it's not unconnected with Baldur."

I bent my head over the photograph as he thrust the magazine towards me, and recognised beneath the bridal veil the well-known features of Miss Rita de Maris, the actress. She was coming out of St. Margaret's Westminster, on the arm of her bridgegroom, a wealthy young stockbroker. So that was that.

Haltrick was watching my face.

"Pretty cheap, eh?"

"Poor old Woan-Cortright," I murmured.

"Lucky escape, if you ask me," Haltrick grunted.

"'Fraid he won't think so. Where is he now?"

"Still in hospital. Yesterday I heard from my brother—he's an M.O. there—says they can't do anything for him, 'cept just keep him alive." He drummed his fingers on the table. "That's why I'm so anxious to meet the Fox again."

I said nothing. Haltrick is a fine fellow and a daring pilot, but I did not think he was up to Baldur's standard. Still, we should see.

It was in the same quarter of an hour that a curious incident occurred. I was due to go on offensive patrol with "B" Flight and, the first to arrive outside our hangar, I was doing up the buttons of my Sidcot. Mechanics were wheeling out the machines. Hearing the sound of an aeroplane engine, I looked up and shaded my eyes. Yes, there was only one. "If that's all of 'A' Flight that has got back——" I muttered anxiously.

But it was not an "A" Flight man returning; I saw with relief. It was a machine of a type unfamiliar on our aerodrome—a single-seater scout with a rotary engine, though it was no Camel. I watched its nose go down over the hedge at the further end of the aerodrome and wondered why the pilot had not shut off his engine. But he evidently had no intention of landing; he kept it running at full throttle and came hurtling in my direction at a height of twenty feet or so. What the deuce was the fellow after?

Involuntarily I moved sideways; he was streaking straight for me now with a noise like a typhoon. Something dropped and was whirled away in the slipstream from the propeller. A moment later my eyelashes were flattened into my eyes by that same slipstream, and with engine screaming the pilot zoomed up to clear the hangar in front of which I was standing.

But just before he began that zoom he had leaned over the side of the cockpit—and given me the shock of my life.
Good Lord! Was I drunk? Even though I had been half blinded by the slipstream I had seen, and what I had seen sent a cold shiver down my spine. I stood there like a fool, gaping after that strange machine that was now racing back towards the line, climbing as it went.

I made no attempt to retrieve the message bag it had dropped. A mechanic ran out of the hangar and put it into my hands.

"Anything the matter, sir?" he inquired, looking at me in surprise.

"Batley, did you happen to see the pilot of that machine?"

"The Nieuport? No, sir—not particular; I was in the 'angar at the time."

"All right, thank you. I'll take charge of this."

I walked quickly over to Squadron Office, telling myself that what I had seen must have been a delusion. Flowers, the Adjutant, was coming towards me.

"Hallo, Trevelyan! You look as though you'd seen a ghost. What's in that message bag?"

I handed it to him and watched while he fished out the paper and read it. His eyes popped.

"Geewillikins!" He turned and dodged back into Squadron Office. I heard him telephoning urgently.

When he came out, he was rubbing his hands and beaming. "Wing will be pleased no end!"

"What was the message?" I asked quickly. Anything that threw light on the mysterious pilot of that Nieuport was of immense interest to me at that moment.

"Why, it was the bit of information that all the R.E.8 fellows have been busting their braces to try and get hold of!"

"The—?"

"The pinpoint of this mystery 'how' battery of course! I've just been 'phoning the R.E.8 Major.* He'll get in touch with the gunners and they'll fix up a spot of counter-battery work between 'em. There'll soon be an end of that nuisance." He glanced down at the message again. "Curious, though. This fellow writes just as though it were any old 'how' battery he happened to spot. Who was it? Who brought this message?"

"A Nieuport that's just gone back over the line. It——" I was going to say more, but checked myself. What was the use? He would only have laughed at me if I had told him. In all the Three Squadrons there was only one man who wouldn't have laughed—and that man was Runnion of the R.E.8's. And yet there was no doubt about it; the head that had peered down at me from the cockpit of that Nieuport was no human head, but the head of a bird!

CHAPTER VI

The Running Fox Returns

I WENT on patrol immediately afterwards, and had the thrill of watching Sergeant Haystead†—quite the smartest man in the R.E.8 Squadron at conducting a "shoot"—superintending the destruction of that notorious German howitzer battery. By the time he had finished there was only a quagmire of shell-torn earth where the once so cleverly-camouflaged emplacements had been situated. Beyond this, the patrol was without incident.

I happened to go into the Intelligence hut on my return, and was at once pounced upon by Teddy McFane. He seized me by the arm.

"Trevelyan, man, listen! I've seen the Fox! I have, I tell you!"

"Wha-a-at! Where? What was he doing?"

Teddy hoiked himself on to the table. "There was a rotary scout of some kind running like hell for the line, and Baldur's green triplane was streaking after it. When——"

I pulled out my cigarette-case. "You

* Observation for the artillery ("art-obs") was one of the chief functions of R.E.8 squadrons.
† For Sergeant Haystead and "art-obs" work see "The Macaroni Cup," AIR STORIES, May, 1936.
generally like to begin at the beginning, Teddy," I pointed out.

"Well," said Teddy, lighting up, "I was showing Rogers the line, and he and I were just tootling along at fifteen thou' as well-behaved and gentlemanly as you please, when a spot of trouble cropped up. A formation of eight Fokkеры—seven or eight, there must have been—dived down on us from out of the sun. Luckily one of 'em opened fire at long range and gave us warning, so it wasn't so bad. But I wasn't out for any death-or-glory stuff that time. Rogers is a new lad, and it'd be a bit thick to ask him to stand up to a young circus on his first trip over the line. So I just put up my tail at the Huns, and the pair of us beetled back towards the aerodrome like bumble-bees on the home stretch.

"We hadn't far to go, and I knew that the Alley Men* wouldn't chase us much beyond the line, so I wasn't worrying. Sure enough, as soon as our 'Archie' began dosing the Boche formation they packed up and banked round for home. 'Goodenoughski! I thought. 'That'll be the end of the rough stuff for this trip, anyhow.'

"Then, while I was looking round to get my bearings, I heard a machine-gun sputtering away on my right and saw—what I told you.'

"The Fox?"

Teddy inhaled a mouthful of smoke and nodded. "—Chasing this single-seater all over the shop. The poor devil didn't seem to dare stop and fight; he was just beating it to get back safe across the line. Miserable show! If we hadn't taken a hand he would have been a goner. Well, Rogers is a good kid and played up well. The pair of us piled in on that Fox as though we'd been looking for him for years, and he didn't like the idea of having three to deal with. He thought better of it after we'd exchanged a few hostilities, and packed up, turning north-east.

"We chased him, of course—at least Rogers and I did—and we might have got him with any luck. But we didn't have any; that Fokker formation seemed to have scented the rumpus, and came nosing back. Then, of course, the Fox altered course and made straight for 'em. I gave him best then, and Rogers and I retired gracefully towards the line. It was then that I looked round and saw that the other fellow in the scout had slopped off—couldn't see him anywhere. Pretty cheap, eh? He might have stood by us—after we'd saved him from a sticky end."

"Teddy!" I said suddenly. "This rotary scout—it wasn't a Camel?"

"Don't I know my own type of 'bus? 'Course it wasn't a Camel!"

"Could it have been a Nieuport?"

"Dunno. I was too busy looking at the pretty picture painted on the side of the Pfalz. Might have been—'cept that there aren't any Nieuport squadrons about here. What are you getting at?"

"About what time did all this happen?"

"'Tween ten and ten-fifteen, I should say."

I made a quick calculation and drew a deep breath. "Then I can give you a jolly good reason, Teddy, why that Nieuport didn't stop to argue the toss with the Fox."

"Why?"

"Because its pilot knew jolly well that in a few minutes his engine would be sputtering. He was nearly running out of petrol."

"How d'you know that?"

"Because that Nieuport was over here early this morning," I said, and added carelessly: "It dropped a message giving the pinpoint of the mystery 'how' battery."

Teddy stared. "Was that the machine that dropped it?"

"It was. You didn't see the pilot's face by any chance?"

"No," answered Teddy wonderingly. "Pity. The pilot of that Nieuport was—was what Runnion saw."

Teddy's eyes goggled. "The—the
bird thing?"

I nodded.

* R.F.C. slang from the French: Allemand.
"Ten miles we must have done," Woggy Wane remarked as we stumped down the duckboards of our little "street" of Nissen huts. We were returning from a long tramp through the Forêt de Mavignolle a few days later. As an antidote to war and bloodiness there is nothing like a walk through a green, silent forest with a companion not given too much to chattering.

"Seems more like twelve to me," I said. "Hallo! Is Sakes planning to burgle that hut over there?"

Sakes was our batman. At the moment he was standing on tip-toe, cautiously peering in at the window of a small hut that had once been used as a part of the Q.M. stores. Sakes has a comical face, podgy, shapeless and waxen, which one humorist likened to the end slice of a suet pudding. Now it was twisted into a ludicrous expression of mingled curiosity and apprehension.

Woggy called out to him. "Sakes!"

Sakes started violently, but collected himself and came, licking his lips and pulling down his tunic.

"What's the game, Sakes?"

Sakes swallowed and gave an apprehensive glance over his shoulder. "It's that new officer, sir! 'E—'e fair gives me the 'orrors, 'e do!"

"Then it's most undisciplined of you, Sakes," Woggy pointed out gravely. "I don't know whether it's so laid down in King's Regs," but it seems to me that for a soldier or airman to allege in public that a superior officer gives him the 'orrors constitutes a 'crime' within the meaning of the Act."

"Sessir," mumbled Sakes, who had taken all this quite seriously, "but you see, sir—"

"Anyway, why expose yourself to the 'orrors' by snooping in at the new officer's window. What's his name?"

"Dunno, sir. 'E don't look like 'e could talk."

We stared at the man. Obviously there was something at the bottom of all this. "Pull yourself together, Sakes!

What are you drivelling about?"

"'E—'e ain't got no face, sir!" Sakes whispered.

"Eh?"

Sakes stepped into the mud as we pushed him aside, and went clacking down the duckboards. "Sakes," Woggy remarked, "is what the doctors call a 'very low mental type,' but we may as well investigate."

He threw open the door of the hut and we walked in.

A tall officer with greyig hair was stooping over an open valise with his back turned towards us. "Seems pretty old for war-flying," I told myself.

"Hallo!" The kind-hearted Woggy specialises in making new arrivals feel at home. "Hallo! Are you the new——?"

At that moment the officer rose and turned towards us.

It is queer how, at times of emotional stress, small details stick in your mind. I remember clearly the light-hearted sound of our feet going tramp, tramp, tramp, down the bare boards of that hut—and then the sudden tense silence as we both stopped short in our tracks. We were both struck dumb, frightened almost.

I stared fascinated at the ghastly khaki-covered bird-like mask of the new arrival and, dully, my mind took in that this was the face that Runnion had seen, and the face that had looked down at me from the zooming Nieuport.

I haven't much tact, I am afraid; I just stared and stared. When my eyes dropped, for lack of something better to fix on, they fixed on the lapel badges on the poor fellow's tunic. The Scarlet Hussars! Good God! So this was Woan-Cortright!

Thank heaven that Woggy is quicker in the uptake than I. Already he was shaking hands heartily, full of warm welcome. I pulled myself together and managed to smile and say something adequate, and Woan-Cortright himself made things easier with his cheerful gestures and the obvious pleasure that shone in his dark eyes.

Only for the first few seconds had

* King's Regulations.
He was racing like a hare down the road while we went roaring round in vertical banks, our wing-tips almost brushing the hedges.
Woggy's voice been a little strained and artificial; it is disconcerting, at first, to talk to a person unable to answer. In a few minutes he was lounging in a chair and chatting away about the happenings in the squadron as though Woan-Cortright had merely come back from a fortnight's leave. He's a marvel, Woggy; he carried off that one-way conversation like one who had done it all his life. As for me, I was only just beginning to train myself to look into Woan-Cortright's eyes when I was talking to him, and not at the khaki mask. Poor Woan-Cortright! That mask was all too inadequate to conceal the fact that an armour-piercing bullet from the guns of the treacherous Fox had blown away most of his lower jaw. The pity of it, that just in that split second of time he should have turned his head!

The door of the hut was pushed open. "May I come in?" It was the pleasant voice of Tiggy Wiggy, the C.O., and at once the room seemed flooded with his breezy kindliness and common-sense tact. Woggy and I stood up.

"Just dropped in to see if you were settling down comfortably, Woan-Cortright," he said with his famous "welcoming" smile. "Anything you want, just jot it down and you'll get it." He looked round. "Old friends turned up already, I see. Good!" He sat down on the bed and motioned us to find seats. "Now I want you two youngsters to help all you can. Here's our old friend Woan-Cortright come back to us again, and, I'm sorry to say, come back with the silliest of ideas."

Tiggy Wiggy paused, and we stared wonderingly.

"He's come back with the fixed idea of getting himself killed as soon as he possibly can. Ever hear of such nonsense? Of course he is not so pretty to look at, but does anyone mind that? Of course not! We have got our Woan-Cortright back again with us, and we don't want to lose him. Now what you two youngsters have got to do is to cure him of this ridiculous idea—what's that?"

Woan-Cortright had scribbled something down in pencil on a writing-pad and was handing it to the C.O. Tiggy Wiggy glanced at it.

"Oh, yes! I know all about that! He wants to be given a free hand to settle accounts with the Fox, when and where possible. Of course, Woan-Cortright! Shoot down the Fox by all means if you can—I did not mean that. What I will not have is hanging about near 'Archie' bursts, hoping for a direct hit, and charging whole circuses all on your own. There'll be plenty of special missions coming through from Wing; you will probably be given all the suicide-jobs you can handle."

He turned to Woggy and me. "As I was saying, what you two have got to do is to keep him amused. Don't let him get down in the dumps. Now you play chess, don't you, Trevelyan?"

"Yes, sir. There are several of us in the squadron who play a decent game."

"Good! He plays too. Play chess with him then."

"Now you, young Wane—what do you do?"

Woggy beamed chubbily. "I go for walks in forests, sir—we both do."

"Splendid! Take him for squirrel-spotting walks in the forest then. Lucky fellows! Wish I had time to go along with you! Well! I'll see you all later!" And Tiggy Wiggy got up to leave.

Woggy and I stayed on, but I sat there with a feeling of shame at my inadequacy; I would have given a great deal to possess the selfless good-nature of the C.O. and Woggy. It took me days to conquer my repulsion for that dreadful bird-mask of Woan-Cortright's.

It was not until later that I learnt how he managed to get himself posted back to the squadron. Most of the information came from Haltrick's M.O. brother via Haltrick himself. It seemed that as soon as he was fit again, Woan-Cortright had demanded to be sent back to the squadron. This was refused. "How would you be able to receive proper medical attention on active service?" they asked him. "Besides, there are the feeding arrangements to think of."
(Jaw-cases are given liquid nourishment through a tube introduced into the oesophagus.)

Woan-Cortright had an answer ready for that; he scribbled it down on his writing-pad. "Lend me an R.A.M.C. orderly to take with me." They laughed at his determination and shook their heads. "In any case you are not fit to fly under war conditions."

Woan-Cortright wrote down no answer to that. Instead he provided them with incontestable proof to the contrary. Leaving hospital without permission, he made his way to the nearest aerodrome. An ack-emma was filling up the petrol-tank of a Nieuport. Woan-Cortright waited till he had finished, and then showed himself. The mechanic ran. Woan-Cortright climbed aboard. The chance discovery of the howitzer battery while its camouflage was being rearranged, the dropping of the message bag on our aerodrome, and the subsequent skirmish with the Fox when petrol was running low you already know about.

[At the end of that flight Woan-Cortright quietly returned to hospital. "Have proved that I am fit for service," he wrote. "Request you to get in touch with Major Tignell-Wingate. Feel sure he would take me back."

Tiggy Wiggy did the rest, and Woan-Cortright was taken back on the strength of the squadron, though not, of course, as a flight commander.

Most of all he wanted to meet, and settle accounts with, Baldur the Fox. His fighting skill improved daily; his score began to mount high. Mostly he flew alone, roving over the enemy's back areas at his will—a free-lance restricted by nothing except the capacity of his petrol-tank and the length of his ammunition-belt.

This went on for three weeks—three weeks during which his audacity was unsurpassable and his luck amazing. No Hun formation was too large for him to tackle, and no balloon too heavily-protected by machine-gun and rifle fire. He flew scatheless through fusillades that would have dealt a dozen mortal wounds to any other man—and then raced on to attack his second gas-bag.

In those three weeks he twice came up against Baldur himself. But the wily Fox had now been promoted staffelleader and was rarely seen attended by less than a dozen trusty henchmen. In these days he preferred a position of god-like superintendence, sitting up above the whirling dog-fights, and adding to his score by sparrow-hawk dives on well-chosen stragglers. And though Woan-Cortright sent his little S.E.5 screaming into the middle of the German formation with an audacity that took away one's breath, he never worked near enough to his chief enemy to exchange more than a few bursts.

In the first of these brushes his machine finished up by succumbing to the concentrated fire of the circus and was sent crashing down into No Man's Land, whence Woan-Cortright was rescued by a friendly tank. And on the second occasion, having run out of ammunition in the course of his reckless circus-strafiging, he was extricated in the nick of time by the arrival of Teddy McFane and a flight of Camels. The tables were turned, but among the Huns that escaped fire and break-up was one green triplane bearing the emblem of the Running Fox.

By the time he had been back with us for a few days Woan-Cortright's disfigurement no more worried us than the loss of an arm would have done. Nobody

CHAPTER VII

The Man Who Sought Death

We did all that the C.O. suggested, Woggy and I. We played chess with Woan-Cortright; we rigged up a net for deck tennis; we bought terriers for the three of us and went rattling; we went for long tramps in the forest. But cure him of that idea of getting himself killed in a scrap on the other side of the lines, we could not. It was his fixed intention to seek danger wherever possible and to court death, but always with the proviso that he did as much damage as possible to the enemy.
stared at him, even covertly—nobody who belonged to the Three Squadrons, that is. But where other people were concerned, unfortunate incidents occurred, as they were bound to. There was a certain spy, a species of Belgian, who was to be dropped by night on the other side of the lines and fetched back some days later. Wing, at Tiggy Wigg's request, gave the job to Woan-Cortright.

All was prepared; a two-seater was ticking over in front of the hangars, and the parachute, the provisions, and the pigeon-basket had been placed on board. Woan-Cortright was already in the pilot's cockpit, when the Belgian, in his peasant-rags disguise, climbed up behind him. It was dark, and all would have been well had not the little man fanned his torch to examine the layout of the cockpit. By chance Woan-Cortright turned his head to look back at that moment. There was a startled yelp from the little Belgian, and in a second he was clambering down from the cockpit and running to the C.O. Tiggy Wigg managed to calm him, but nothing would persuade him to carry on.

"Non! Non! Mille fois non!" How could he take his life in his hands and drop down into the darkness in the face of an omen so unfortunate?

Tiggy Wigg was perplexed. "Mais c'est mon meilleur pilote que je vous donne—I am giving you my best pilot!"

The little Belgian shrugged. He was infinitely sorry, but another pilot must be found, one on whose face Woe and Disaster had set their marks less clearly.

Deadlock. The C.O. was in a quandary. And then it was seen that Woan-Cortright had climbed down from the two-seater's cockpit, and slipped quietly away into the darkness.

Another pilot was found to take his place. The superstitious little Belgian nodded his acceptance. "On a mission like mine," he murmured, "who would choose to fly behind the Bridegroom of Death?"

Haltrick had been sitting reading on the sofa with his brows knitted in that studious manner of his, when Teddy McFane blew in. "Hallo, Haltrick, old boy! I say! What do you think—?"

Haltrick did not look up. He was examining some diagram or other in the magazine he was reading, his face a picture of concentration. Teddy picked up a cushion and threw it at him. He didn't throw it very hard, but it was enough to upset Haltrick. He had taken from between the pages of his magazine a black full-plate size negative, and at that moment was holding it up to the light. He exploded violently.

"Damn you, you swob!" he stormed. "Why can't you leave a fellow in peace? Get to hell out of it, you cameldriving chucklehead!"

Teddy looked pained. "Oh, very well!" he said loftily. "If this is a sample of S.E.5 hospitality—!"

"Get out!" And Haltrick irritably jerked his legs up on to the sofa again, and resumed his study of the diagram and the negative.

I watched him curiously. "Time old Haltrick was sent back for a spot of Home Establishment," I told myself. "Nerves all to pieces." But it was not so; there was nothing wrong with Haltrick.

Ten minutes later, as though he had made a decision, he suddenly got to his feet and came over to where I was writing.

"Look here, Trevelyan," he began in a low serious voice. He spread out his magazine over the letter I was finishing, and pointed to the complicated diagram. I saw that what I had before me was a copy of the British Medical Journal.

"Do you see this?" he asked.

"Ugh! I hate your beastly medical stuff."

Haltrick ignored this. "The B.M.J.," he explained patiently, "is a paper that publishes all the latest ideas in medicine and surgery as soon as they appear. This article and diagram, for instance, give an explanation of a new surgical operation invented by two blokes named Broddrick and Carlsen. It's an opera-
tion for the replacement of the lower mandible, and—"

"Good old Broddrick! Good old Carlsen!" I exclaimed cheerfully. "I hope it keeps fine for them! But what's all this got to do with me? What is a mandible, anyway?"

"Jaw, fathead! Lower jaw! Don't you see?"

Suddenly I did see. I whipped round my head and looked him wonderingly in the eyes. "You mean—they might be able to do something for—for Woan-Cortright?"

Haltrick nodded. "I'm pretty certain of it."

"Have you seen his—his face then?"

"No, but I've seen something a jolly sight more useful. Look!" And he held up the X-ray negative. "His batman, the R.A.M.C. fellow, lent it to me. The articulation is still there and—"

I stared at the thing, my mind filled with this new and wonderful possibility. "But are they able to replace bone?"

"Yes. Bits are removed from the iliac crest—that's the top of the hip here. Then they're sculpted into shape and set in position with bone screws or silver wire. A flap of skin from the inner side of the upper arm is grafted on—" He rattled out a wealth of technical detail, most of which was lost on me, and concluded: "It's all here in this article—and quite new. You see, this facial surgery business has only recently been developed; before the war it was neither needed much nor thought of."

"Good old Broddrick and Thingmajig!" I exclaimed. "That's splendid!"

Simultaneously we rose to our feet. Tiggy Wiggy must be told of this. Woan-Cortright must be sent back to England at once. We left the ante-room and walked arm in arm across the aerodrome to Squadron Office as happy as sandboys. Woan-Cortright was going to be cured of his disfigurement! Everything was going to turn out sunny-side up! Topping!

CHAPTER VIII

Three Squadrons to the Rescue

At the sound of an aircraft engine we turned our heads. An S.E.5 was coming in low over the leeward line of hedge that bordered the aerodrome. Its wheels clawed tautly for the ground as the pilot made a pump-handle landing, and then it bumped three or four times and trundled to a standstill.

"Hats off to Mr. Sopwith!" grinned Haltrick. "Wonderful what his under-carriages will stand up to!"

"Who is that fellow?"

"Dunno. Must be one of the new lads."

We watched the newly-landed pilot send his machine scurrying under bursts of engine power to the hangars. Brrrrmp! Brrrrmp! Brrrrrrmp! The tail-plane danced wildly on its skid.

"He must be in a hurry."

The latest arrival was in a hurry. After jumping down from his cockpit, he overtook us just as we were approaching Squadron Office. We turned to have a look at him.

"Hallo! Where've you sprung from?" Haltrick asked cheerily. Like all the old hands, he makes a point of being encouraging to the latest arrivals at the squadron.

It was Whitley, a promising kid not three days out from England. Ten months or so ago he had been sitting at a desk in some fifth-form classroom. Now he was visibly agitated; there was a trembling at the corners of his mouth.

"I've been up with Captain Woan-Cortright. He was showing me the line, and then—"

I caught my breath. "Yes. Where is he?" Haltrick's voice had grown suddenly quiet.

"We met—we met a circus—thirty machines—more. They were flying a thousand feet below us, and. . . ." The corners of Whitley's mouth trembled.
AIR STORIES

violently, and for a moment he could not go on.

"Yes, you met a circus," encouraged Hal trick in the same quiet voice, "and what happened then?"

"He signalled me to return home, and—and—and . . ."

"Go on!" jerked out Hal trick, his patience snapping.

"Then he charged straight down on a green triplane that was flying above the formation, and engaged it. The last thing I saw was that he was fighting in the middle of the whole pack of them."

"A green triplane!" groaned Hal trick.

"The Fox!" I muttered.

"And you left Woan-Cortright to face thirty Huns all by himself!"

This was unreasonable. The scorn in Hal trick's voice roused sudden resentment in the boy. "I was obeying orders!" he shouted defensively—he was overwrought and hysterical—"Doing what I was told! If you don't believe me, read that—and be damned to you!"

He snatched something from his pocket and flourished it under Hal trick's nose. It was the paper on which poor Woan-Cortright, being bereft of speech, had written down the classical advice to new pilots being conducted for the first time over the lines. "Stick close to me. Learn all you can of the countryside." And so on. Last of all came: "If you see me circle my hand above my head, leave me at once and make for home as fast as possible." The last dozen words were heavily underlined.

"Sorry, kid," Hal trick growled, and stared dully at the ground.

I got into action myself then. I'm not usually very bright in a crisis, but something at that moment made me see everything very clearly. "How long ago was this?" I asked Whitley sharply.

"Fifteen or twenty minutes, I should think."

"Good! There may still be time!" I seized Hal trick by the shoulders and shoved him towards the Squadron Office. "Go and see Tiggy Wiggy! Now! At once!" I exclaimed excitedly. "Tell him about the Broddrick-Thingummy operation; tell him it's Woan-Cortright's only chance of looking like a human being again; tell him that at present he's dog-fighting a whole circus by himself; and then ask if we can all take-off now, knock the circus to hell, and bring him back. Go now! Quickly!" I gave him a final shove, and he set off at a run. Then I turned to Whitley.

"Now where was it you met the circus?"

"About three miles east of those salt lakes."

"Carvilliers. And Woan-Cortright was still going strong when you re-crosse d the line?"

"Yes. I kept looking back long after I'd crossed, and the fight was still going on. I couldn't distinguish his machine, of course, but I knew it must be, because the Huns were still diving and zooming."

"Good! Now listen! If Hal trick comes out of that door in a hurry, it'll mean that the C.O. has consented to every machine getting into the air and taking-off against the circus, see? But that doesn't mean you. You'd only be in the way until you've had more experience. There's another job for you."

I pointed to a machine up on trestles outside the nearest hangar. "Climb into that machine, and when you get the word from me, sound the Klaxon horn to wake hell—and keep on sounding it. When the fellows come running up to ask you what the deuce is the matter, tell 'em to get into their 'buses and prepare to take-off. Got that?"

"I'll do that—but, I say, can't I go too?"

"No, you can't. Do what you're told."

A MINUTE later Hal trick came shoot ing like a jack-in-the-box out of the door of Squadron Office, waving his arms and yelling.

"Yes! It's all right! Every machine available! Every machine!"

"Tiggy Wiggy's a sport," he panted as he came up to me. "He's telephoned to the squadron offices of the Camels
and the R.E.8's as well. In a few minutes there'll be a ruddy armada taking-off!"

I signalled to Whitley, and soon he had the Klaxon blaring away like a fog-horn. Fellows came running up from every direction. We explained briefly, and urged them to tell others. Everywhere there was a shouting, a running of feet, and a cramming of flying-helmets on to heads.

On the other side of the aerodrome, in the ante-rooms of the Camels and the R.E.8's, magazines were flung across the room, games of chess were knocked over, and poker schools broke up precipitately. The doors crashed open, loosing a stream of eager volunteers; Tiggy Wiggy's telephoned call-to-arms had met with instant response. Every pilot and every observer of the Three Squadrons who happened to be off duty was arriving at the double. The story had spread like a prairie fire. Woan-Cortright of the S.E.5's was locked in combat with the Red Fox and thirty of his men. Eyes glinted; jaws tightened. Woan-Cortright might, or might not, be still alive—probably he wasn't—but in any case Baldur the Fox was a doomed man. The Three Squadrons would see to that!

Soon a most appalling racket broke out as a score or more of engines woke to life, and Camels, S.E.5's and R.E.8's strained against their chocks as though eager to be off.

\textit{Brump! Brump! Br-rrrrmp!} A captain of the Camels, the first pilot to be ready, was being pushed and pulled into position by sweating ack-emmas at the wing-tips. His streamers stood out taut in the slipstream as he opened out his throttle, and then he was off, racing into the wind, his engine screaming crescendo.

Two S.E.5's and an R.E.8 quickly followed, and streaking three abreast across the aerodrome, rose to clear the further hedge as though tape-tied. Soon the whole air was filled with the thunder of engines, as pilot after pilot went racing forward and slid into the air with wheels still spinning.

\textbf{CHAPTER IX}

**The Duel of Death**

\textbf{FLYING} on the flank of the S.E.5 formation, I looked about me. The Camels were roaring away ahead of us and a little to the right. The slower R.E.8's were behind. In some the observers were standing up fitting drums on to their Lewises or making minor adjustments. In others there were no observers; the pilots had taken-off alone rather than miss the scrap. The whole armada, climbing steadily, went thundering towards the line.

The black puff-ball of an exploding "Archie" shell made its appearance between us and the Camels, and by the time we were over the line, dozens of them were mushrooming all around us. I strained my eyes forward in the direction of the salt lakes of Carvilliers, and gave a grunt of satisfaction at what I saw. A cloud of machines, milling like gnats on a summer evening, had come into view. Good! That meant that unequal combat was still in progress, that Woan-Cortright was still alive!

A minute later the staccato crackle of machine-gun fire broke out ahead of us; the Camels had come into action. I watched them break up their formation and each go racing across the sky to tangle with an opponent of his own selection. Then we were in the thick of it ourselves. \textit{Tacca-tacca-tacca! Tacca-tacca-tacca!} Soon the R.E.8's had joined in, and the mêlée was general.

I doubt if anybody is able to remember all the incidents of his share in a dogfight in their right order. The reason is that in an aerial combat in which machines of a speed upwards of 100 m.p.h. are engaged, everything happens so swiftly that it is impossible for the conscious mind to react in time. It is the sub-conscious mind which directs one's actions. In other words, you don't consciously \textit{think} what ought to be done about the friendly machine that is swirling across your front threatening collision, or the Fokker that flashes for a moment into the lens of your telescopic sight; you just \textit{do} it, yanking
over your joystick, or tightening your fingers over the firing-lever as the occasion demands. And these actions, I say, are instinctive—determined by the sub-conscious mind. The successful air-fighter—or sportsman of any kind, for that matter—is he who trains himself to make the right movement at the right time without thinking. Hence the great value of practice, which in warfare is called "experience."

We must have been in action for quite five minutes before I caught a glimpse of Woan-Cortright. You don't get much time in dog-fights to see how the other fellows are getting on. You are utterly absorbed in the task of getting on to some Boche's tail and pumping him full of lead. With any consciousness that you may have left over, you are hoping like hell that no Boche is on your tail and doing the same sort of thing to you. With all that racket going on, you never know—until bits of glass and splinters of wood shower into your lap from the instrument-board. Then you realise that the machine whose engine is yowling a few yards behind your tail-skid is neither an S.E.5, nor a Camel, nor an R.E.8.

Woan-Cortright, as I should have expected, had utilised the comparative freedom that the arrival of the Three Squadrons had afforded him to seek out Baldur the Fox. He had climbed up after his old enemy, and the Fox had been forced to give up the superintendence business and fight for his life.

I saw them whirling and darting at each other in ferocious action, flame jetting from their guns as each answered burst with burst. They were good, both of them. Both were at the height of their fighting career. Either might win; no one could tell.

I realised that this was the end of the war for me. We were miles and miles behind the German trenches; I should have to land and be taken prisoner. I looked about me. We had done splendidly; only eight or nine of the enemy survived, and each was being engaged by two or three of our machines. This was going to be a victory utter and complete. Not one of the Huns would get away. Then poignant grief that was almost like a physical pain gripped me when I realised that I should not be there in the mess to join in the celebrations. It was "Finish" for me.

My last glance was for Woan-Cortright still whirling in mortal combat with the Fox, and I prayed that he might kill his enemy and return home to England and be made a whole man again. Then I pulled up the nose of my S.E., waited until the wires ceased their singing, and kicking on full rudder, went hurtling downwards in a spin. Farewell, Three Squadrons!

By spinning down I was less likely to be set upon and finished off by Boche aeroplanes cruising at lower levels. I held that spin with one or two breaks for twelve thousand feet.

But there was no danger, as I soon realised when I flattened out. Now I was gliding with gently sighing wires over a peaceful countryside. Below me there was a lonely farm-house, and farther off a tiny village dominated by a rustic church. Cattle were grazing in the meadows as though war were a thing unheard of. I rudder towards more open country and, craning my neck over the side of the cockpit, selected my landing place—a secluded field sheltered by high hedges.

As I slowly glided down to it, my mind ran over the well-known recommendations to flying officers taken prisoner: "Burn your machine at once. See that no papers on you bear the number of your squadron. Keep a stiff upper lip when brought before the interrogators; your rank and name is all they are entitled to be told. Distrust all fellow-prisoners until you are sure they are not 'planted.'"
BRIDEGROOM OF DEATH

A forced-landing is always a ticklish business. As I glided towards the lee-ward side of my field, I saw, on closer inspection, that there was more than a hint of downward slope to it (you never can see these things from on top). That meant I should need all the runway I could get. I put my nose downward still further, intending to brush the hedge-top with my wheels and touch down as soon afterwards as possible.

It was while I was concentrating on doing this that a diversion occurred that took my mind right off what I was doing and brought about the mishap. There came a sudden shrill wail of wires from somewhere away to my right, a sound like a banshee’s wail of doom. Like a fool I turned my head to look, just when all my attention was needed in easing back the stick to clear that hedge.

What I saw I saw indistinctly, partly because of the sun which was over my right shoulder, and partly because, anyhow, I only had time for a glimpse. An aeroplane with smoke issuing from its starboard side was descending steeply. I saw from the outline that it was a German, and I saw also that the pilot was bringing her down in an almost vertical sideslip to keep the flames from his body. There was a cracking of tree-branches as it crashed down two or three fields away from mine. One of the Huns shot down by our people, it would be.

As I said, I ought to have been concentrating on negotiating that hedge—and I wasn’t. The consequence was sudden and unpleasant. There came a hideous crashing and splintering, and then silence. I opened my eyes to find the cockpit in semi-darkness. My ears were singing, and there was a painful pressure against my stomach. I craned my neck to look upwards, and instead of blue sky I saw green turf not three feet away from me. I could distinguish the individual blades of grass and a clump of daisies.

On catching her wheels in that hedge, my machine had turned completely over.

I was hanging upside down in the cockpit supported by my safety-belt. I felt for the catch and then paused and went more warily to work. More than a few pilots, after crashing more or less safely in the upside-down position as I had done, had joyously pulled the catch of the safety-belt—and promptly broken their necks. You fall straight on your head.

I TOOK two or three minutes getting out. It’s a ticklish business lowering yourself down from the joystick. Perhaps that is why I didn’t hear the landing of the other S.E.5. Crawling out and blinking in the sunshine, I was just turning to have a look at the wreckage of my little ‘bus, when a hand was placed on my shoulder.

I whipped round startled, expecting to find myself looking down the muzzle of a Mauser rifle. And there stood Woan-Cortright. Fifty yards away his S.E.5 was ticking over. He had just landed.

He had no paper and pencil, and no means of giving orders. He just pointed, and what he meant was unmistakable. I was to take-off in his machine and make my escape, leaving him to face the Huns.

"No! No! Of course I can’t!" I shook my head in vigorous negative. "Go yourself; the Boches will be here before long. Go now!"

His dark eyes hardened above that hideous mask. He caught hold of my wrist with a grip that hurt, and began pulling me towards the waiting S.E.5. I struggled and broke free, and then stood staring at him, wondering what on earth to do. To act as he suggested was unthinkable. Leave him there to be taken prisoner in my place! I couldn’t. There was the new operation which would make him whole again. Because of that, every available machine in the Three Squadrons had set out to rescue him. He must go back!

I explained the whole thing to him, blurring it all out like a kid. But either I explained it badly or else he wasn’t listening. He grabbed hold of me again,
and dragged me protesting violently right up to the S.E. Woan-Cortright is a powerful man.

But he couldn't make me climb on board. I stood there defying him. His eyes blazed angrily. "Do as you are told!" those eyes seemed to say. "I am your senior officer. Obey!"

There seemed to me only one thing to do: run for it. If I got away from him, he would be forced to fly the machine back himself. Choosing my moment, I suddenly ducked under his arm and ran.

He caught me within three yards and dragged me back again. With his free hand he pointed to the machine. "For the last time!" I read in his angry dark eyes. I shook my head. "No! I won't!"

Then Woan-Cortright did a strange thing, something that sent the blood rushing to my face. Suddenly dragging me towards him with one hand, he gave me a stinging slap across the cheek with the open palm of the other.

Tears of pain and mortification sprang to my eyes. His grip on my shoulder tightened as he forced me once more alongside the mounting-step.

What I should have done then I don't know. As it turned out, I didn't have to do anything. A shot suddenly rang out, and a bullet whined past our ears.

I crashed heavily to the ground, hurled there by Woan-Cortright, and when I looked at him, he had his foot in the mounting-step of the S.E. and was feeling for something inside the cockpit. Another bullet went whanging past as he dropped to the ground. Now there was a revolver in his hand. He flung himself down beside me.

Who had fired those shots? We thought at first that the Boches had come to take us prisoner, but it was not so. There was only one gunman concerned, and he was out on a mission of personal vengeance rather than official duty. I saw something move behind an elm tree a hundred yards away.

"Skipper!" I whispered excitedly. "The big tree! I can see a fellow skulking behind the trunk!"

At that moment the gunman put his head round the side to get a better view, and I recognised the face.

"The Fox!" I burst out.

Woan-Cortright nodded. He must have guessed that already. The green triplane he had shot down in flames had landed with less damage than he had thought. "It must have been the one that made me foole my touch-down," I told myself. I was beginning to understand now; Woan-Cortright had followed the Fox down until the crack-up and had then spotted me and landed.

Another bullet whizzed over our heads. Woan-Cortright fired almost simultaneously, aiming at the momentarily-exposed head. Wha-a-a-ang! Wha-a-a-ang!

He left my side and began to crawl cautiously forward, putting in a shot every time the other exposed himself to take aim. Unarmed, I followed more slowly.

The shots rang out more frequently as the distance between the duellists lessened. Suddenly, in answer to a bullet from Woan-Cortright, we heard an exclamation of pain, and the body of the Fox tumbled from its hiding-place and lay still.

Woan-Cortright leapt to his feet and strode forward. I saw the recumbent body of the German make a swift movement.

"Look out!" I yelled in sudden alarm. "He's shamming!"

CHAPTER X

The Place of Reckoning.

I WAS too late. A shot rang out, and Woan-Cortright dropped to the ground. The hand he clasped over his left shoulder was bloody; he had been hit.

"Is it bad?" I asked anxiously. He shook his head. The Fox had by this time scuttled back to cover. I had an idea. It was given to me by the far-off rattle of machine-gun fire overhead. The Three Squadrons were still rounding up the last of the circus; if they knew of our plight, there might still be hope for us.
BRIDEGROOM OF DEATH

"Look, Skipper, if you can cover my retreat, I’ll take-off in the S.E. and try and bring down the Three Squadrons to us!"

Woan-Cortright nodded encouragingly. For himself he did not care; he had only two desires left in life; one was to kill the Fox, and the other to see me safely off the ground.

The Fox must have seen me get up and run backwards, but no shot was fired at me. The bullets that had thumped into the tree-trunk near his head had proved to him that Woan-Cortright was not a marksman to give chances to.

I scrambled up into the cockpit of the S.E. and with short bursts of engine-power sent her scurrying into a corner of the field from which I could get run enough to take-off. A minute later I was roaring over the farther hedge. Looking back, I made out Woan-Cortright worming his way painfully towards the elm tree, behind which lurked his enemy. I little imagined the plight I should find him in when I returned.

There were plenty of machines up above, but to attract their attention was going to be a bit of a problem. Half crazy with impatience, I climbed laboriously up to five thousand feet, and then shot off a whole barrage of Verey lights. Red for rescue. But there wasn’t much response. Hell! Were they all blind up there? I continued shooting off lights at intervals.

Then, at long last, someone came nosing down to see what was the matter. Good! It was a two-seater, Naylor of the R.E.8’s, and what was better still was that his back seat was empty. Naylor was going to be useful. I signalled to him to stand by, and then succeeded in collecting Haltrick and Teddy McFane. We flew down in company.

I should have liked to have collected a few more, and would have done so had not my impatience to get back to Woan-Cortright overcome me. Instead, I lost one of those I had. We were down to a thousand feet when that irresponsible chucklehead, Teddy McFane, spotted a lorry down below, and promptly left us and went streaking down after it. Teddy with a Hun motor-car is like a puppy with a slipper; he simply can’t help worrying it. For him one of the greatest joys in life is to go racing down after some wretched lorry, pump its bonnet full of lead, and watch the driver pile it up in a ditch. I cursed him bitterly; in a minute or two’s time we might be in dire need of Teddy’s marks-manship. For shooting-up stationary or slow-moving objects on the ground I have never seen his equal.

But Haltrick and Naylor were still hanging on, and when we came in sight of the burnt wreckage of the green triplane and my own ’bus lying upside down across the hedge, they realised that it wasn’t for nothing that I had fetched them down.

I was flying in front. For the moment, the big elm tree obscured the duelling place. I heard no sound of shots and was anxious.

I circled to land, craning my neck over the side of the cockpit to find out what had happened in my absence. I saw a body sprawling on the green grass not ten yards from the tree, and knew the worst. Instinct told me that the man was dead.

Overcome by emotion, I pointed out the body to the other two, and Naylor, who had an empty cockpit behind him, prepared to land. The dead body of our Woan-Cortright must be taken back to the Three Squadrons for honourable burial.

Naylor would need help with the lifting; Haltrick and I landed also. I taxied up to him as he ran over to the body and stopped to turn it over.

Suddenly he straightened. "Hey!" I heard him shout as I began climbing out of my cockpit. "We don’t want this carrion!"

My foot was still in the mounting-step. Startled, I jerked round my head. "What did you say?"

"This—this isn’t Woan-Cortright!"

BEWILDERED, I ran to him, and found myself staring down at the dead face of the Fox. An empty revolver
lay near him. There were dark marks round his neck. Evidently when ammuni- tion had given out on both sides, the two duellists had come to grips, and Woan-Cortright had slain his man with his bare hands. This was confirmed when Haltrick came up. That there had been a tremendous struggle we could see from the trodden grass.

Haltrick and I stared at each other. But where was Woan-Cortright?

It was obvious that he was nowhere in the vicinity; otherwise, seeing our machines overhead, he would have shown himself. It was very puzzling.

And then Naylor, who had been on an expedition through a gap in the hedge, came back to us. "There are recent marks of car tyres on the road," he announced lugubriously. "'Fraid the Huns must have sent a detachment to rope him in."

"Leaving this body here! No!"

"They may have caught him a mile away."

"They certainly have caught him, anyway," said Haltrick drearily. "Let's get back." He turned towards his machine. I felt sorry for old Haltrick; he had been so dead keen on seeing this operation business through. All three of us were tired and depressed. It was a miserable ending to the day's excitement.

We climbed into our machines and took-off.

We had been hearing frequent bursts of machine-gun fire not far away, but had paid no attention, putting it down to Teddy's playful transport chasing. We had not flown more than four or five miles before we sighted Teddy himself.

Teddy was doing exactly what I had imagined—teasing the unfortunate Huns. Yes, but this was different! What the deuce——! I strained my eyes ahead, and with a sudden exclamation pushed the throttle-lever forward. The engine roared as I eased forward the stick and went streaking downward. On my right and left I heard the engines of Haltrick and Naylor bellow in answer. Our eyes were glued on the drama that was taking place on the ground ahead of us.

A Hun lorry was capsized in a ditch—that was Teddy's usual game; nothing much in that. The significant thing was that tumbling out of that lorry as fast as their minor injuries would permit were a dozen or more steel-helmeted German soldiers, all intent on one thing. We watched them jump down to the ground one after another, and then go streaking down the road after one who had been quicker-witted at the moment of the crash than any of them—their prisoner. I stared in amazement and delight. It was Woan-Cortright! By the most astonishing good luck the lorry that Teddy had piled up in the ditch was the very one which was taking Woan-Cortright and his captors back to headquarters! Now he was racing like a hare down the road, the nearest Boches panting quite a hundred yards behind.

_Tacca - tacca - tacca! Tacca - tacca - tacca!

Flame jetted from Teddy's Vickers. Diving, he fired his bursts and zoomed up again. _Yowoo-oo-oo!

"Good man, Teddy!" I yelled.

Wisely he had chosen the foremost of the pursuers, and his raking, dust-kicking bursts of bullets had already sent two of them sprawling. For shooting-up ground targets there's no one in the Three Squadrons to touch Teddy McFane.

Haltrick, Naylor and I went roaring round in a vertical bank, wing-tips almost brushing the hedges. _Tacca-tacca-tacca! Tacca-tacca-tacca!_ By the time we had put in our bursts Teddy had come round again. The demoralised remnant of the Huns turned tail and tumbled over each other in their eagerness to dive under cover beneath the lorry.

We saw Woan-Cortright look back and climb through a hedge into a large field. And we landed, all three of us.

Then there was a rejoicing such as only the end of a day's work like that could have occasioned. In our enthusiasm the hand of our old flight commander was nearly wrung off. Haltrick was the first to sober up; he had just noticed the blood-stains on Woan-Cortright's shoulder.
BRIDEGROOM OF DEATH

"Get a move on, chaps! That wound's got to be dressed." He shepherded Woan-Cortright to the back seat of Naylor's 'bus.

"To-morrow, Skipper, you're for England!"

But Woan-Cortright only shook his head, not understanding.

ALL that was eighteen years ago. Lord, how time passes! Eighteen years! Only the other day I had a letter from Sir Frencham Haltrick, who, when with our squadron, was such a keen student of the British Medical Journal. Haltrick's address is Harley Street, but he was writing from East Africa on the note-paper of his host, the District Commissioner of Kawanami. Haltrick's idea of taking a well-earned rest from consultations and surgical "ops." is to go big-game hunting in the wilds. He enclosed a snapshot, which of course I looked at first. I grinned as I held it to the light. There was old Haltrick standing rifle in hand in the approved manner, and one foot buried in the mane of a socking big lion. He looked as pleased as Punch with his trophy, but no more pleased than the District Commissioner at his side. He looked a charming fellow, this D.C., and was older and taller than Haltrick, and grey-bearded.

I ran through the letter—and my eyes suddenly opened wide in puzzlement.

"My host," Haltrick wrote, "sends you his warmest greetings, and hopes——"

I snatched up the photograph again and looked eagerly at the face of the District Commissioner. Jove! It was our old flight commander!

If any scars remain, the beard hides them. Good old Haltrick! Good old Woan-Cortright!

THE STORY BEHIND THE COVER

An Incident in the Work of the Fleet Air Arm of the R.A.F.

A HAWKER Osprey seaplane, just after it has been catapulted into flight from the deck of a cruiser of the "Achilles" class, forms the subject of this month's attractive cover painting by S. R. Drigin. The light of the rising sun reflected from the under surfaces of the aircraft and the upper works of the men-of-war gives a colourful setting to a routine duty of the Fleet Air Arm, a branch of the R.A.F. whose vital importance has lately been recognised by the allocation of one or more aircraft to each capital ship and cruiser in the Navy. These ship-borne aircraft are all seaplanes, since, to return to the parent ship after being catapulted into flight, they must alight on the water alongside and be picked up by the ship's crane.

Catapulted into Flight

WHEN about to be catapulted into flight, the aero-plane is mounted on a cradle which, in turn, stands on a narrow steel runway some 60 ft. in length and projecting over the side of the ship. This runway is mounted on a turntable and can be rotated so that it points directly into wind. Attached to the cradle is an endless cable which passes round the pulley wheels of the discharging ram. At a signal from the officer in charge, the pilot of the seaplane opens his throttle full out and, simultaneously, the cradle is set in motion by firing the cordite charge in the ram. The cable draws the cradle forward with rapidly increasing acceleration and, at the end of the runway, the cradle is automatically checked while the seaplane, having now reached a speed of over 70 m.p.h., rises from the cradle and takes to the air.

Stainless Steel Structure

THE Osprey is the Fleet Air Arm's standard type of two-seater Fleet Fighter Reconnaissance machine and, in addition to duty in aircraft-carriers as a landplane, is extensively used as a seaplane on men-of-war equipped with catapults. Driven by a 600-h.p. Rolls-Royce Kestrel engine, the latest Type 4 has a top speed of 175 m.p.h. and a ceiling of 21,320 ft. It differs from the Hawker Hart, of which it is a development, in that it has folding wings, a stainless steel structure as a protection against sea-water corrosion, and has been specially strengthened to withstand the great strains imposed by catapulting. The principal dimensions of the seaplane are a height of 12 ft. 5 in. and a length of 31 ft. 9½ in. The span of the top wing is 37 ft. and that of the bottom 31 ft. 4 in.
THE HANDLEY PAGE TYPE 52

The R.A.F.'s latest type of "fighter-bomber," the Handley Page Type 52, is of revolutionary design, with its exceptionally deep but narrow forward body and its slim afterpart, which is little more than a boom to carry the tail unit. The advantages of its novel shape are that great capacity is provided for load and head resistance is kept down. Driven by two 900 h.p. supercharged Bristol Pegasus engines, this new bomber has a phenomenal performance and is officially stated to be as speedy as the fastest single-seater fighter yet in service anywhere in the world.

Undercarriage and tail-wheel are retractile, the landing wheels going upwards and back into cavities in the rear of the engine nacelles. There is an enclosed gunner's turret in the nose ahead of the pilot's compartment, while from another turret facing aft a gunner has an almost unrestricted field of fire for repelling attacks from the rear.

THE QUEEN BEE TARGET 'PLANE

A MODERN miracle of engineering and scientific skill, the De Havilland Queen Bee is a pilotless radio-controlled aeroplane extensively used by the R.A.F. as a flying target for anti-aircraft gunnery practice. In external appearance it closely resembles the Tiger Moth light biplane trainer, but, whereas the Tiger Moth is made of metal, the Queen Bee is of wood, to ensure that it will float if brought down on the water by gunfire.

The front cockpit is fitted with a sliding cover, and can be rapidly fitted with flying controls for use by a human pilot. The rear cockpit is closed and contains the secret mechanism which guides the machine on its course and controls the engine throttle in obedience to radio signals sent from a ship or ground station. With its 130 h.p. Gipsy Major four-cylinder air-cooled engine, the Queen Bee has a top speed of 100 m.p.h., an endurance of three hours, and can climb to a height of 10,000 feet. It may be fitted with either wheels or floats, and has special attachments to allow of its being catapulted into flight from the decks of a man-of-war.
Military Aircraft that Lead the World

THE HAWKER P.V.4

Capable of carrying over 1,000 lb. of bombs at a maximum speed of 215 m.p.h., the Hawker P.V.4 is specially strengthened to withstand the immense loads and strains involved by dive-bombing—that spectacular and accurate form of attack in which the aeroplane itself is aimed on the target in an almost vertical dive from 10,000 feet or more, the bombs being released just before the pilot levels out.

Fitted with a Bristol Pegasus IV. engine, it can do 200 m.p.h. at 15,000 feet and can cruise at 175 m.p.h. for a range of 675 miles. Its service ceiling is 25,000 feet, and with full load it climbs from sea-level to 15,000 feet in twelve and a half minutes. Fitted with the more powerful Pegasus X. engine, top speed is raised to 215 m.p.h.

THE CONVERTIBLE ENVOY

This model of the Airspeed Envoy has been specially designed to allow of its rapid conversion into either a high-speed luxury air-liner or a formidably armed medium bomber. In civil form it accommodates six passengers in a comfortable cabin, but, if desired, it can be rapidly transformed into a military machine, the modifications including the fitting of an Armstrong-Whitworth rotatable gun turret above the deck of the fuselage, installation of forward-firing guns in the nose, and attachment of bomb-racks under the wings. The entire job of conversion can be done by four men in eight hours.

The craft has two 310 h.p. Siddeley Cheetah radial engines and, in civil form, is capable of a top speed of 210 m.p.h. In military form, the bomb load, which is carried externally, and the defensive armament, reduce the maximum speed by about 20 m.p.h. A number of these machines was recently acquired for defence purposes by the South African Air Force.
PART TWO

The Stirring and Authentic Story of the French Air Service's Gallant Part in the World War in the Air

1917

The Bombers Take the Offensive

FOR many years now historians have credited the Imperial German Air Service with the first organised "ground strafe" of the war, citing the "strafe" near Peronne, on September 6th, 1917, as the first instance. Actually, the first attack of this kind should go to the credit of the French bombing service, for a very similar attack was staged on the first day of 1917 by a Caudron group. Eight Caudron G.3's swept the German trenches for an hour and a half and, although they lost one machine, and two gunners and a pilot of others, the sortie was successful, for the French infantry took five miles of the German front lines within half an hour of the Caudrons' departure.

On the 5th of the same month, Sub-Lieutenant André Delorme, one of the pilots who took part in this raid, destroyed an L.V.G. two-seater over Auve for his fifth victory, all scored from the front cockpit of the old bomber. He was not to enjoy fame for long, however, for on the 14th he took-off to test his gun, and while diving on the ground target a wing tore loose, the machine broke up, and the pilot's head was smashed when the wreckage fell through the roof of a hangar.

During the night of January 24th-25th, Escadrille Voisin 114, commanded by Captain Cadaux, raided the railway stations at Brieulles, Guiscard, Tergnier, and St. Quentin, and, at the latter point, a portion of their 4½ tons of bombs found a quarter of a million gallons of petroleum. The resultant bonfire was better than any Guy Fawkes celebration. On the way home, the Voisins were attacked by an Albatros staffel and the pilot of one machine, Sergeant Delmas, was killed. The gunner, Private Huret, pulled the pilot's body clear of the
controls and, despite the fact that he had no flying experience, got the machine out of its death spin and managed to bring the 'plane home. For his gallantry he was awarded the Medaille Militaire, and never was the decoration better earned.

Three days after this raid General Lyautey was appointed Minister of War, and he began to make plans for a great Air Service expansion, in the course of which he proposed to form both the Army and Navy sections into one combined unit. On February 9th he formed the General Directorate of Aeronautical Services, and placed General Guillemin at the head. Just what expansions were planned is not known, for, as will be seen later, a political crisis interfered with the functions of Guillemin and his staff.

Beginning on the day that the Directorate was formed, Escadrille V.B. 101, commanded by Captain Laurens, opened an offensive that was to last three weeks. On the first day ten machines dropped 8,500 lb. of explosives, their total for three weeks being 53,000 lb. against the loss of two machines, one gunner killed, and a pilot and gunner wounded. According to the official records, very little day-bombing seems to have been attempted during January and February, but this deficiency was made up by the exceptional number of night raids that were carried out, and the 100,840 lb. of bombs that went spinning down through the night air.

A Change of Command

March came and the promised delivery of new machines had failed to materialise, whereupon, at a meeting of the Deputies, the War Council was accused of slackness. As a result of this accusation there was a change in the Government, and General Lyautey relinquished his command, to be quickly
superseded by Guillemin. For a time air organisation went by the board, the proposed amalgamation of Army and Navy services fell through, and a serious debacle was threatened. Then, on April 1st, M. Vincent was handed the reins of Military Aeronautics and, with great energy, he proceeded to weed out all undesirable influence. Of the changes he made and the posts he created, we shall hear more later.

Unperturbed, or unaware, of these affairs of State, the bombers carried on, two squadrons in particular being very prominent. One of them, Farman 25, dropped 6,000 lb. of bombs on the last night of the month, while the now famous V.B. 101 surpassed its own brilliant record by staging over a hundred raids during the month, in the course of which they dropped 25 1/2 tons of bombs, 6 tons alone being dropped on Briey goods yard on the night of April 13th.

May brought increasing activity, and on the morning of the 1st, five machines from Caudron 46 dropped a ton of bombs on the 3rd Army Aircraft Park at Soissons, and at 11.30 that same evening Escadrilles V.B. 102 and V. 103 staged a joint raid on the same park, an experimental pavilion being set on fire. Two nights later, four squadrons dropped 8 1/4 tons of bombs on the munition works in and around Metz. The return journey proved an eventful one, for the raiders were attacked by over fifty enemy aircraft, and things looked black. However, they kept formation and fought their way clear with only two losses, while three German scouts went down to the French observers’ guns.

The 3rd of June brought the Naval Air Service into the despatches again, for on that date a fishing smack wirelessly that she had sighted a U-boat in the Channel, travelling on the surface. In answer to her call, five Borel torpedo-seaplanes left Le Havre naval station, and within forty minutes had sighted the enemy commerce-raider. Even as they pounced upon her, the submarine made a crash-dive, but the ’planes were out for a kill. For half an hour they bombed the spot where the submarine had disappeared, and great air bubbles and a huge patch of oil showed on the surface of the water, an almost certain indication of a direct hit.

On this and the following day, the bombers surpassed all their previous records by dropping 37 tons of explosive on enemy points up to 235 miles away, Escadrille V.B. 101 again being in the lead with a total weight of 21,750 lb. Every day throughout the month shows similar achievements, and on the 15th some 73 tons rained down on German railway and munition centres.

So the story went on, and once again the names of bomber-crews vied with those of the “aces” on the honours lists. In point of fact, the bombers received more citations for decorations than did the scouts during 1917, a statement that cannot be made of any other Air Service. On July 7th, Sergeant-Pilot Gallons was cited for extreme gallantry, displayed on a solo raid against the Krupp munition works at Essen. During the course of this flight he had covered 443 miles in seven hours, two hours with a bullet-shattered elbow. Exactly one week later Sub-Lieutenant Giallet, of the Brest seaplane station, was awarded the Medaille Militaire for destroying a submarine. In the first few moments Giallet was wounded through both legs by shrapnel splinters, but he stuck to his task until a well-placed bomb tore the stern out of the U-boat, and it sank with all hands.

France Adopts the Sopwith

AUgust 3rd saw most of the old Caudrons and Voisins withdrawn from service, and replaced with the new Breguetts, Letords, Caudron R.4’s and twin-engined Farman, while some hundreds of Sopwith 1½-Strutters had been turned out by the licensed French factories, and were being issued to artillery and reconnaissance squadrons. Although practically out-moded on the British Front, the Sopwith “’Strutters” did yeoman service with French squadrons, and were later handed over to American squadrons and used up to, and after, the Armistice.
FALCONS OF FRANCE

The majority of the new machines received their baptism of fire during the second week in August, and when the infantry made an assault on enemy strong points north-west of St. Quentin on the 12th, they were aided by forty machines. For thirty-six hours the bombers "strafed" machine-gun nests, concentration points, artillery positions, and all reserve lines, the 25 tons of bombs dropped and 13,000 rounds of ammunition fired preventing any reinforcements reaching the German front line. When they eventually drew off, all the infantry had to do was to walk across No Man's Land and consolidate the shattered ruins that had once been a strongly fortified line of defence.

Five days later the largest aerial formation, to date, proceeded to knock merry hell out of the German back-areas. No less than 111 machines, bombers and protecting scouts, raged over railway centres in a series of raids that were to last for thirty-two hours. Treves, Laons, Thionville, Rottweil and Hansheim, all received their share of the 26,000-lb. cargo of death that was unloaded from the French bombers on that memorable day. The enemy scouts were massed against the raiders at every point, and only the log-book of the Grim Reaper can ascertain just how many men died in and under that hail of death. Seven French machines were claimed by the German scouts, while French records show a counter-claim of twelve.

This great offensive of the bombing groups was maintained up to the last few days of the year, and neither enemy aircraft nor adverse weather conditions could counter their activities. One of the last German air reports of 1917 contained the words, "The activities of the enemy bombardment squadrons are having a serious effect on the morale of our ground forces—they must be stopped." Consequently, every raid was the signal for a mass attack by enemy scouts, and the bombers had to fight their way in and out of Germany. And fight they did, for they would not be stopped.

Fourteen machines from Escadrille C. 46 and twelve from C. 18 made three combined raids on December 21st, 22nd and 23rd, in the course of which 18 tons of explosive and incendiary bombs rained down on enemy munition dumps. It is estimated that the raiders were attacked by 120 German scouts during these three days and, although seven French machines were lost, nine enemy scouts paid for their going.

In order to increase production during the coming year, the Under-Secretaryship for Air Services had, on November 15th, been linked with the Ministry of Munitions, and on December 14th an Air Board was formed to help out the Inter-Allied Aviation Service. This Board was to meet three times weekly to discuss progress.

Before turning to the achievements of the scout groups it should be mentioned that, in 1917, the bombers had dropped a total of 108 tons of bombs in daylight raids, and 600 tons at night, and formidable though this may seem, it is nothing compared with the amounts dropped in 1918. Monthly records were counted in hundreds of tons, and April, with the lowest figure of all, was to show 106 tons by day, and 112 tons by night.

And now, to the scouts.

The Story of the Scouts

JANUARY to April, 1917, saw the Imperial German Air Service at the height of its power, but the French seem to have suffered comparatively little attention from the Germanic concentration, as most of the enemy forces were being assembled on the active British Front. It has been estimated that there were less than 850 enemy aircraft along the entire French Front during the early months of this eventful year. In the light of later events this was just as well, for, as was the case with the bombers, the promised new French scouts had failed to materialise. Admittedly, a few had been delivered, but they were giving considerable trouble; engines failed when at a height of anything over 8,000 feet, oil pressure could not be maintained, and controls were too "loggy" for quick
maneuverability, an essential factor in aerial warfare. This lack of co-operation from the aircraft factories cost the French Air Service 247 machines in ten weeks.

Although the observation and reconnaissance groups had suffered the greatest number of casualties, the morale of the scout squadrons sank to a very low level, especially when their unfortunate comrades sent in a complaint about their lack of protection, couched in terms that were, to say the least, highly uncomplimentary. Actually, the much abused pilots had not been idle, and between January and April had accounted for 162 enemy aircraft, all confirmed, while on January 30th, Escadrille N. 55 was awarded the fourragère for having destroyed fifty enemy aircraft since its formation in August, 1915.

Despite heavy rain and mists, thirty-five victories were credited during January, and Guynemer was again prominent, his five victories in three days creating a new record for L'Aviation Militaire. On the 24th he destroyed an Albatros and two L.V.G.'s. On the 25th a Fokker D.3 fell to his guns, and he rounded off the game with another Fokker on the following day. Other pilots who were doing well were Heurteaux, 3; Doumer, 3; and Madon, 2; the last-mentioned, who was later to secure fourth place on the final list of French "aces," securing his fifth victory at the expense of an Albatros D.2, on the 31st. Several new names were also cited as having shot their way to "acehood," including those of Delorme, with an L.V.G. on the 5th; Doumer, with a Fokker on the 23rd; Gastin, with an Albatros two-seater on the 27th; and Hauss, with an Albatros on the 29th.

Of the twenty-three victories obtained during February, Guynemer could claim only one, his thirty-first. However, this was a memorable one, for the machine he destroyed on the 8th proved to be a Gotha, one of the first ever seen. The machine was an object of much interest to the French designers, and its capture was so highly appreciated that Guynemer was promoted to Captain and awarded the Russian Cross of St. George. His squadron, Les Cigognes, were, as usual, well to the fore, and all but nine of the victories obtained by the entire French Air Service during the month fell to the guns of Heurteaux, Chaput, Deullin, De La Tour, Pinsard, Sauvage, Sanglier and Raymond.

As previously mentioned, March brought a great upheaval in the French military and political circles, an upheaval that led to the appointment of M. Daniel Vincent as Under-Secretary for Aviation, while Colonel Regnier was chosen as his assistant and adviser. A few days later the Inter-Allied Aviation Service was formed under the direction of M. Flandin, and this service was employed to exchange ideas with the other Allied air services. It also had complete control of all French aircraft production plants, was responsible for the equipment and maintenance of training centres, the issues of petrol and oil, and, perhaps the most important of all, it kept a watch on the financial side of the War in the Air. There had been too many scandals, arising from misappropriations of funds and of using faulty workmen and materials, for the good of the Service, and the Inter-Allied Aviation Service was determined to obtain the best for the airmen. Various investigations were made, and as a result of the findings, it was decided that every machine should be tested before being sent to the Front. Previous to this, about two machines of each type had been tested, and then the whole production batch was sent off. Villacoublay, the great French supply centre, now became a hive of seething activity, and to make doubly sure, pilots were brought direct from the Front to test the machines that they and their squadron mates would have to fight and die in.

The Death of René Dorme

By the time all the proposed changes had been made, the kinks had been taken from the Spad's engines, and May brought 108 confirmed victories. The British had also been rejuvenated after their nearly disastrous "Bloody April,"
and with the new Allied machines beginning to get the Albatros and Fokker Scouts on the run, the fighter pilots made hay while the sun shone.

Victories are never obtained without cost, however, and several prominent names soon appeared on the list of "killed in action." Captain René Doumer, who in the early days of the war had won fame by being cited eight times for gallantry in the ten months that he had piloted a bomber, was the first to go. Transferring to the "Storks," he secured seven victories in four months, the last, an Albatros, going down in flames during the afternoon of April 1st. A slight wound put him out of action for three weeks, but, returning to the Front on the 23rd, he took-off next day for an offensive patrol. Over Brimont he was surprised by five enemy scouts, and fell, shot through the heart. A few hours later two comrades avenged him by shooting down Ober-Leutnant Reinhold, C.O. of Staffel 15. The next to fall was Sub-Lieutenant Sauvage, and he was followed a few days later by Maréchal des Logis Hauss. These losses did not, however, shake the morale of the scout pilots, and as fast as one "ace" fell, two new ones rose to take his place. There were few French aerial reports at that time which did not contain the words, "Lieutenant — has to-day secured his fifth victory over hostile aircraft."

May cost the life of another gallant pilot, for on the 28th Lieutenant de Laage de Meux flew to Valhalla. While he never aspired to "acehood," he was a gallant fighter and had given much valuable service as second in command of the famous Escadrille Lafayette, that gallant band of Americans who flew to death and glory for France.

The "Storks" suffered other losses, for Albert Heurteaux was shot down badly wounded on the 3rd, and the best-loved of them all, René Dorme, fell on the 25th. He left Fismes aerodrome in the company of Lieutenant Duellin. Far over the German lines the two Frenchmen were attacked by five Albatros D.3's, and Duellin saw Dorme send one down in flames. That was the last time Dorme was ever seen, for he disappeared into the blue and the details of his end remain a mystery even to this day.

Turning now to the victors of May, we find that Nungesser had increased his bag to 29 by securing eight confirmed "descendus." Pinsard got 5, Madon 4, Matton 3, and among the names on the list of new "aces" was one that, during 1918, was to rise to top position in the galaxy of French aerial stars—René Fonck. Scoring three victories during the month, he became an "ace" on the 11th with a victory over a D.F.W., and followed this with an L.F.G. two days later. Of course no monthly record is complete without some mention of Guynemer, and, true to type, he was again outstanding. Burning with a desire to avenge Dorme, he took-off late in the afternoon of the 25th, and performed a feat which, up to that time, had no parallel in French archives. Flying over Goyencourt, he sent a two-seater down in flames, to be immediately followed by a trio of scouts, who had used the L.V.G. as a decoy. Within five minutes two German machines had gone down minus their wings and the third was heading homewards. Returning to Fismes, Guynemer caught a Rumpler and a Fokker D.5 directly over the aerodrome, and thirty rounds from his gun sent them both down. Two fights, five victories, and all in a two-hour patrol.

The Exploits of Madon

June saw the monthly victory score fall to sixty-five, and at the end of the month Guynemer went to Villacoublay to supervise the fitting of a new air weapon to his Spad—a 37 mm. light cannon. True, some of the Farman and Voisin bombers had carried such a gun for use against pill-boxes and machine-gun nests earlier in the year, but never before had an attempt been made to adapt the gun for use on scout machines. Built into the casing of the Hispano-Suiza engine of a new Spad 22, the gun
was a one-pounder, and the shell was fired through a hollow crankshaft, emerging from the propeller boss. Taking the air in his new "Vieux Charles" on July 16th, Guynemer met an Albatros D.3, and a direct hit from a range of two hundred yards blew both machine and pilot to smithereens. The recoil from the gun, however, was a serious menace, and after two more attempts to destroy enemy machines, Guynemer discarded the gun as impracticable. As will be seen later, Fonck was to develop the gun to great advantage, and score many victories with his Spad-Cannon.

Faced with the prospect of a slow and horrible death from the tuberculosis that was gnawing at his lungs, Guynemer now went berserk, and by August 1st he had taken his score to fifty, despite twice shaking hands with death when he fainted at high altitudes. Narrow though these escapes were, it was Jules Madon who was to win the title of "prince of close shaves." Four times in six months had the Grim Reaper taken up his pen to scratch the name "Madon" from his black book, but each time some lucky star had saved the reckless Frenchman. His first narrow escape came during a dog-fight between seven Spads from Escadrille S. 38 and six Albatros scouts. Diving after one Albatros, Madon crashed into another that was zooming towards him and cut it in two. His own machine appeared to be doomed, for with one wing torn loose and the tail-plane shattered, it spun into the ground. Yet, when a party of French infantry arrived to save his body from the wreckage, they found Madon smoking a cigarette and heartily cursing a broken finger, his only injury.

Within the next three weeks Madon was twice forced to land inside the German lines with engine trouble, but managed to escape on both occasions. On yet another occasion he attacked a Rumpler two-seater from close range, so close in fact that when a bullet from his gun shot the German observer's goggles off, they fell on a bracing wire of his machine, and to-day are still one of his most treasured souvenirs.

Another pilot who had a thrilling escape during the month was Sub-Lieutenant Boyeau, the balloon-buster, who scored thirty-five victories before he was killed. On the morning of July 31st, Boyeau had four victories to his credit and sallied forth to add another to his score. He burnt a balloon successfully, but his plugs oiled up and he was forced to land. Despite the close attentions of an artillery battery, he cleaned the plugs and managed to take-off again, and was later awarded the Medaille Militaire for his coolness.

August brought sixty-one victories and September sixty-nine, but the latter month was a bad one for the scout pilots, and over seventy were listed as killed and missing. Heurteaux, who had now succeeded Brocard as commander of the "Storks," was seriously wounded on the 3rd, and put out of action for the rest of the war, while on the 11th France mourned the loss of her greatest hero—Georges Guynemer.

Guynemer—Idol of France

FLYING over Poelcapple with Lieutenant Bozon-Verduraz and Captain Duellin, Guynemer attacked a Rumpler two-seater and a split second later his companions were assailed by eight Fokker D.5's. By the time the two Frenchmen had fought their way clear, Guynemer had vanished. Reports filtered through from Germany that he had been killed by the Rumpler pilot, Captain Wiseman, and lay buried at Poelcapple. However, when the British took the village a few days later, no trace of his grave or wrecked machine could be found. The true manner of his death may never be ascertained, but it is quite probable that the grave had been obliterated by shell fire. Curiously enough, Fonck, who was later to wear the mantle of the dead hero, killed Wiseman four days after Guynemer's death.

The last three months of 1917 were months of heavy rain and fogs, and though flying on the French Front was curtailed to an absolute minimum, many

(Continued on page 139.)
## SCORES OF THE FRENCH ACES

A Complete List, Compiled from Official Records, and showing in Order of Merit, Victory Scores of All Aces of the French Air Service

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SOME FAMOUS WARBIRDS

Six Noteworthy French Aircraft Types of the

THE CAUDRON G.2
BOMBER-TRAINER

FIRST produced in 1913, the Caudron G.2 was one of the best known of the early French warbirds. The first machine to loop the loop, in the hands of Lieutenant Chanteloup, it was also one of the first bomber types used during the Great War and had many daring and successful raids to its credit. Although withdrawn from front-line service in mid-1915, the type continued in use as a preliminary training type at French flying schools until the end of the War. A special clipped-wing version, known as the "Penguin," was evolved for training purposes, and many famous French pilots made their first uncertain "hops" in machines of this type. The standard G.2 was fitted with an 80-h.p. Mono-Gnome engine, which gave it a speed of 76 m.p.h. It had a span of 33 ft. 6 in., and was 19 ft. 11 in. in length. A 1915 edition, known as the G.2b, was fitted with a 160-h.p. Mono-Gnome, which raised the top speed to 85 m.p.h.

THE NIEUPORT BÉBÉ
SINGLE-SEATER
FIGHTER

USED throughout the Allied air services in 1916, the Nieuport Bébé is continually being mentioned by writers of war-air fiction, with the result that it is now generally believed to have been a very fine and popular machine. Actually, it was notoriously weak, and the bases of its frail "V" struts were liable to snap on the slightest provocation. Its chief claim to fame was its use by Guynemer and his "Storks" squadron, but even they abandoned it with relief when the sturdier Nieuport N.12 arrived. The latter was fitted with an 80-h.p. Mono-Gnome engine and, though its principal dimensions of a span of 24 ft. 6 in. and a length of 16 ft. 2 in. were similar to those of the Bébé, it was slightly faster with a top speed in the region of 90 m.p.h.

THIS little-known machine was an exact copy of the 1915 Type 20C1, so far as the air-frame was concerned, but was powered with a special 300-h.p. engine. A top speed of more than 140 m.p.h.—a truly remarkable figure for that time—was claimed for this machine, but official performance figures were never issued as, owing to a long series of mishaps during its flying trials, the type never saw active service. The famous Eugene Gilbert met his death while making a flight test of the first model, and after five more test pilots in succession had been either killed or injured, the machine was black-listed and the design dropped. The principal dimensions were a span of 23 ft. 11 in. and a fuselage length of 19 ft. 6 in.

THE MORANE-SAULNIER
TYPE 29.C.1
OF THE FRENCH AIR SERVICE
War Days which were Marvels of their Time

THE
SPAD TRACTOR-PUSHER TWO-SEATER FIGHTER

ONE of the most freak-like aircraft of the entire War period, the Spad Tractor-Pusher fighter was designed in 1915 to combat the Fokker scourge. So much trouble was, however, experienced with the experimental model that it could not be persuaded into the air until May, 1916, and even then crashed on its trial flight. A two-seater machine, the gunner-observer was separated from his pilot by the propeller, the idea being to afford the front gun an unrestricted field of forward fire. The gunner sat in a detachable bath-tub nacelle, held in place by two steel hawser attached to points in the top wing. On the first machine sent to the front for demonstration purposes, one of the hawser snapped, the unfortunate gunner was tossed out, the propeller smashed and the whole contraption collapsed. Thereafter the design was abandoned.

OF the many types of French seaplanes produced during the War, the Breguet 14H was, perhaps, the greatest all-round success and remained in service until 1922. Powered by a 300-h.p. Renault engine, it had a top speed of 90 m.p.h. and, in addition to its normal equipment of guns, bombs and wireless, could, if necessary, carry an 850-lb. torpedo slung between its twin floats. Alternatively, a depth charge of similar weight could be carried. Used primarily for sea patrol duties, the Breguet 14H had a fine record as a fighter of U-boats, having destroyed six and damaged or captured nine. A machine of this type also succeeded in sinking a destroyer by means of a daring torpedo attack. Principal dimensions of the Breguet 14H were a span of 56 ft. 6 in. and a length of 34 ft. 10 in.

THE
BREGUET TYPE 14H
PATROL SEAPLANE

THE first really successful scout produced by the S.P.A.D. concern—and the forerunner of a type that was to make history for the Allied air services—was the 1916 type, Spad S.5. A single-seater scout, the S.5 was driven by a 150 h.p. Hispano-Suiza engine, which gave it a top speed of 110 m.p.h. It had a span of 25 ft. 9 in., and was 20 ft. 1 in. in length. The first few models were somewhat unreliable, but nevertheless most of the early French "aces" scored their victories in this machine, and survived. A contemporary machine of this period was the Nieuport, which, while more manuevrable than the Spad, had a nasty habit of shedding its wings in a dive. The Spad, on the other hand, could dive like a brick, a very useful attribute when tangling with the German Halberstadt and Albatros scouts of that day.

THE
SPAD TYPE S.5
SINGLE-SEATER FIGHTER
# WINGS OF THE FALCONS

A List of the Principal Types of Military Aircraft used by the French Air Service from 1917 to 1918

<table>
<thead>
<tr>
<th>TYPE</th>
<th>ENGINE &amp; H.P.</th>
<th>SPAN</th>
<th>LENGTH</th>
<th>SPEED (m.p.h.)</th>
<th>PURPOSE</th>
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<td>29' 2&quot;</td>
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<td>Recon.</td>
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<td>29' 7&quot;</td>
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<td>Donnet F.B.</td>
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<td>31' 3 1/2&quot;</td>
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<td>Sea-Patrol</td>
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<td>20' 1&quot;</td>
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<td>42' 6&quot;</td>
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<td>Hispano 300</td>
<td>35' 2&quot;</td>
<td>23' 7&quot;</td>
<td>130</td>
<td>Recon.</td>
</tr>
<tr>
<td>Spad 11</td>
<td>Hispano 220</td>
<td>35' 9&quot;</td>
<td>25' 6&quot;</td>
<td>120</td>
<td>Recon.</td>
</tr>
<tr>
<td>Spad 22</td>
<td>Hispano 300</td>
<td>26' 3&quot;</td>
<td>20' 5&quot;</td>
<td>142</td>
<td>Fighter</td>
</tr>
<tr>
<td>Voisin Triplane</td>
<td>4 Hispano 220</td>
<td>118' 0&quot;</td>
<td>79' 4&quot;</td>
<td>110</td>
<td>Bomber</td>
</tr>
<tr>
<td>Voisin 10 BN.2</td>
<td>Renault 280</td>
<td>59' 1&quot;</td>
<td>32' 11&quot;</td>
<td>115</td>
<td>Bomber</td>
</tr>
<tr>
<td>Voisin 12 BN.2</td>
<td>4 Hispano 220</td>
<td>100' 8&quot;</td>
<td>54' 7&quot;</td>
<td>91.5</td>
<td>Bomber</td>
</tr>
<tr>
<td>Voisin 13 BN.2</td>
<td>4 Hispano 220</td>
<td>98' 9&quot;</td>
<td>57' 6 1/2&quot;</td>
<td>92</td>
<td>Bomber</td>
</tr>
</tbody>
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(Continued from page 134.)

pilots were lost through engine trouble and forced landings in enemy territory. Despite the weather conditions, however, 117 victories were credited, and the leading pilots at the close of the year were: Nungesser, 32; Fonck, 19; Pinsard, 17; Madon, 17; and Boyeau, 11. Of the "aces" who had gone to eternity during the closing months of 1917, Sanglier 14, Mathieu de la Tour 9, Auger 7, and Tochard 5, were the most prominent, but several other good men had also paid the price, including Lieutenant Amoux Maison Rouge, sub-leader of Escadrille S. 123, and victor over four enemy aircraft.

Up to December 28th, 1917, the French Air Service could claim 2,192 enemy planes confirmed as destroyed or captured, 1,075 enemy aircraft claimed, but not confirmed, and 76 observation balloons totally destroyed. Of this total Escadrille S. 3, Les Cigognes, had destroyed 221 planes and 18 balloons, against a casualty list of 44 pilots killed and wounded; Escadrille S. 103 had 167 victories, and S. 55 had 96.

No casualty reports have ever been issued for this period, but a fair estimate would be 2,500 killed and wounded.

The year ended with France facing a new problem, that of training, and finding machines for, the hundreds of American flyers who had arrived in France to win the War in the Air, without one single machine of their own. Leaving behind a year of many changes and political squabbles, L'Aviation Militaire looked forward to 1918 as a year of perfect cooperation on the Home Front.

1918

The Bombers Fight Back

At the opening of the New Year a census was taken of the French air strength, and official figures showed some 2,180 first-line aircraft on the Western Front, while a similar number was reckoned to be in service overseas and in defence service around the principal French cities. The personnel was made up of 75,000 officers and men, and included 6,417 pilots and 1,682 observers, while it was estimated that 5,000 men were in training at thirty-two Government flying schools.

Bad weather heralded 1918, but rumours of a new German offensive sent the French fliers aloft at every opportunity. The bombers made a tour of the German railway centres on January 4th and dropped 4½ tons of bombs, while on the 29th a Breguet, piloted by Captain Vuillemin, with Sub-Lieutenant Lecreux as observer, staged a daring attack on the munition sidings at Thiague-court station. Flying only forty feet above the ground, Vuillemin "strafed" a machine-gun crew, while Lecreux laid his eggs. A series of explosions caused the machine to buck heavily in the displaced air, and the whole station dissolved in a mass of lurid flame. Somewhere up the line a German field-battery would go short of shells.

Busy engaged in protecting the reconnaissance groups, the scouts had also been active and received credit for forty-one victories during the month.

February saw the bombers drop 460 tons of bombs, but to achieve this result they had had to take a terrific battering. On the 5th, fourteen Breguets from Escadrille B. 117 attacked the great Mauser armament factory at Oberndorf and plastered it with 5½ tons of steel-cased death. Whilst still thirty miles from their own lines, they were attacked by a mixed formation of Fokker triplanes and Pfalz scouts, and pandemonium broke loose. Four Breguets went down in flames at the first onslaught, and two triplanes fell locked in an embrace of death when they collided while converging on the French leader. For over an hour the raiders fought their way over the thirty miles to safety, and as one machine went down, the next in line took its place and so kept the formation intact. Seven Breguets went down, however, and only the timely intervention of two scout groups saved the raiders from total annihilation, and of the surviving machines, five carried dead men and the other two held three wounded, one seriously.
AIR STORIES

On the whole, however, the first six weeks of 1918 had been weeks of outstanding success for the French Air Service, and the following is an extract from the official communiqué, published on February 20th:

"During the past 77 days commencing December 1st, 1917, to February 15th of this year, 22,518 flights were successfully performed by our aircraft of all types. 104 enemy machines were brought down, of which total 59 fell in our lines, and only 38 French machines were lost, 1,400 photographic flights were made and during these, 21,328 photographs were taken. In addition, our bombardment squadrons dropped 960 tons of bombs, against the 190 tons of the same period of 1917."

A report on the activities of the Naval Air Service, published a week later, stated:

"During the two months of December, 1917, and January, 1918, our naval machines, including airships, have flown 2,500 hours. Up to the 24th of this month great activity has been maintained, and 2,100 flights have been made, and 23 attacks aimed at German submarines."

March dawned with rumours of a great German offensive on every lip, and in order to obtain some confirmation, the reconnaissance squadrons crossed the German lines during every hour of daylight, and in sixteen days had made 516 flights and taken 8,432 photographs. Then, at 5 a.m. on the morning of March 21st, the earth shook under the opening roar of a terrific artillery barrage, a barrage that was to continue for five hours. It heralded the last great Germanic effort to win the war. From Arras to La Fere, the Allied positions were swept by a holocaust of flame and steel, while far above the bloody horror, the war-birds fought to the death.

During these terrible battles of March the French Air Service accounted for 127 enemy aircraft officially confirmed as destroyed, against a loss of ninety-one of their own machines. The chief casualties occurred in the reconnaissance groups, but the scouts also suffered heavily, particularly the "Storks." To help fill the depleted ranks, René Fonck was transferred from Escadrille S. 103, and he quickly showed Les Cigognes what he could do by destroying a Pfalz scout on the 17th for his thirtieth victory. Nungesser scored two victories during the first few days of the attack, but was wounded on the 28th during a fight with five Albatros scouts, the first of the thirteen wounds he was to receive during 1918. Madon was going great guns and had brought his score to twenty-five with a double victory on March 9th, while mention should also be made of Garraud, Herbelin, de Meuldre, Marivitch, and Jailler, all of whom secured their tenth victories during the opening stages of the German offensive.

New Italian Bombers

Late in 1917, rights had been acquired for the building of giant Caproni bombers in the French aircraft factories, and the first of these Italian dreadnoughts appeared on the Western Front in April, 1918. Friday, April 12th, seems to have been a very busy day for the French Air Service and a report was issued to the effect that "During the day our chaser pilots have made 320 flights, of which total 120 resulted in combats with enemy groups, and 13 hostile aircraft and 10 balloons have been destroyed. In addition, our bombardment machines have dropped 48 tons of bombs on German railway centres and munition dumps. Twelve of our new Capronis took part in these raids, and were very successful."

Just why the French bought these Capronis is not known, for they were usually well in the lead with their bombing machines, and had sold them to England, Belgium, Russia, Italy, Serbia, Roumania, and America. The Naval Air Service, too, did very well during this month, and accounted for nineteen enemy 'planes, three balloons and five U-boats. The destruction of one of these latter is well worthy of record here.

On April 18th, Sub-Lieutenant Rossai and two companions sighted two submarines on the surface, and closer investigation showed them to be Germans. At that moment one of the French pilots had to return with engine trouble, but Rossai and his companion carried on and attacked the enemy deep-sea
raiders. Finding that they had no time to dive, both Germans opened fire with their deck guns and, by a lucky fluke, scored a direct hit on one of the attacking 'planes. Seeing his friend going down in flames, Rossai opened fire on the submarines and forced the gun crews to take cover. Then, swooping to within thirty feet of the water, he let all four of his bombs go down together, and one submarine sank like a stone. In the meantime the other had again opened fire and a large chunk of red-hot shell casing almost severed Rossai's left arm from the shoulder. Half dead from loss of blood, he managed to set his machine down safely, and was found nearly two hours later by a French destroyer that had been sent out by the pilot who had had to return with engine trouble.

The two leading naval "aces" had also increased their scores during the month, de Meldre having destroyed an Albatros, his twelfth victory, on the 18th, while two days later Mossenet attacked a formation of five Brandenburg monoplanes and sent one down in flames for his sixth victory.

May saw the offensive still going strong, and the activity in the air increased accordingly, the French Air Service recording its peak of activity to date. During the first twenty-eight days, 160 enemy 'planes and 29 observation balloons were credited to the Service, and another 191 were claimed, but not confirmed. Another 23 fell victims to the anti-aircraft gunners, while the bombers had dropped 530 tons of explosives, of which total 380 tons were credited to the night bombers.

René Fonck opened his scoring for the month by making history, when, on the 9th, he shot down no less than six German 'planes. It should be mentioned that French records credit him with another six-in-a-day in September, but there was considerable doubt about this second claim, of which we shall hear more later. When Fonck took-off from the "Storks'" field at Metomesnil, weather conditions were against record-breaking of any kind, and a heavy mist prevailed up to a thousand feet. Over the lines, however, the visibility cleared, and Fonck began his customary shuttling back and forth over No Man's Land. Over Moreuil he found a pair of Halberstadt two-seaters, with a Pfalz D.3 flying at cover, and ten rounds sent the enemy scout down in flames. Hardly pausing in his swift dive, Fonck came down on one of the two-seaters, and within the space of an eye blink that, too, was a blazing funeral pyre. Before the survivor of the German trio had time to dive to safety, the Spad was upon it, and both pilot and observer were riddled in one burst. Just 110 bullets had sped from the Frenchman's guns, and five brave men had died. Still Fonck was not finished, for he took-off again at 4.30 p.m., and before an hour had passed, front-line observers reported three two-seaters down to the credit of a Stork-marked Spad. It is not surprising that Fonck's mechanics looked at him with awe when a careful check of his machine revealed only three bullet holes, two in the lower wings and one in the tail.

Six days after Fonck's marvellous feat the French Army report stated, among other things, "Sub-Lieutenant Nogues to-day secured his fifth victory, a two-seater," but behind this simple mention lies a story of devotion to duty that would be hard to equal in any Service. Early in April, 1917, Nogues was shot down and captured only a few moments after destroying two enemy 'planes, but within three weeks he had escaped and rejoined his squadron. In August of the same year he was seriously wounded and invalided out of the Service, only to join up again under an assumed name. By the time his deception was discovered he had scored two more victories and was allowed to remain at the Front, and finished the war with thirteen victories to his credit. Of such stuff are brave men made.

Fonck, the Ace of Aces

Readers may be wondering at this stage why so little account has been given of the deaths of the various French
“aces,” and the truth of the matter is this: only thirty-two French “aces” were killed during the war, as against double that number of their German prototypes, and very little can be obtained from official records as to just how those men died. When one stops to look at the huge number of French machines that figure on the German victory lists of 1918, this small number of losses among the “aces” seems out of all proportion, but there it is—one cannot contradict official figures.

By the end of May, Fonck was the French “Ace of Aces” with 45 victories to his credit, and he was followed by Nungesser 36, Madon 32, Guerin 22, Pinsard 19 and Boyeau 14, while a string of lesser pilots followed close on their heels.

Turning again to the bombers, we find them still piling up their records, despite the ever-growing threat from the new German scout machines, the Fokker D.7 and Pfalz D.3.

On May 11th, one of the strangest fights of the war was staged in the Straits of Gibraltar. A French seaplane was fired on by the German submarine U.29, and retaliated with a bomb which crippled the submarine’s diving power. The French pilot then headed the crippled U-boat to the shore, encouraging it with a few machine-gun bursts or a bomb in the water near-by, whenever the commander attempted to make a break for freedom. This is believed to be the only instance on record of an aeroplane capturing a submarine single-handed.

Back on the Western Front another strange freak of the war was recorded a few days later. Between May 14th and 17th, the bombers dropped 110 tons of explosives on enemy munition dumps, and it was as the result of a night raid on the 14th that the incident occurred. Just after 9.30 p.m., eight Breguet 14 BN.2’s arrived over the great shell dump at Bois de Champion, and, swooping down in Indian file, scored direct hits on the main storage sheds. That same night the Dutch Meteorological Institute recorded a local earthquake between 9.46 and 9.50 p.m., and this was later traced to the Bois de Champion. That was one French bombing claim that the Imperial High Command could not report to be untrue.

Events of the 19th brought the Capronis into the news again, for one of them made a midnight attack on the German aerodrome near Ville-Aux-Bois, and inflicted severe casualties. Two hangars were reduced to ashes, twelve machines were totally destroyed and twenty-three men killed and wounded. In comparison, the raiders suffered only one casualty, the pilot of one machine being killed by rifle fire from the ground, but the machine was brought safely home by one of the gunners.

Turning now to the records for June, we find 150 enemy machines destroyed, an additional 181 unconfirmed, 31 observation balloons destroyed, and 641 tons of bombs dropped, but, on the whole, these figures are apt to be misleading, for the French Air Service had to pass through a period much akin to that of the British during the “Bloody April” of 1917. The German scouts were now fighting with their backs to the wall, and many an Allied pilot died before their stubborn defence. The famous Richthofen “Circus,” Jagdgeschwader 1, was arrayed against the French, and so great was the toll exacted from the Spads, Nieuports, Breguet and Farmans, that the Royal Air Force had to be called to their aid.

A Gotha Raid on Paris

On June 1st, a formation of Gothas attacked Paris and, although one Gotha was shot down after a combined attack by a Breguet and two Spads, the rest carried on, and five defence machines fell in flames. Coming in again on the 27th, the same formation lost one machine to a direct hit by an anti-aircraft battery near Compiègne, but again took its price from the defence force, four machines of which were destroyed.

Casualties among the French bombers were abnormally high, and one group alone lost eighty-one pilots and observers killed, and thirty-seven machines de-
stroyed, in three weeks. When fifteen machines from Escadrille Breguet 117 crossed the German lines on the 27th, they were met by forty-eight enemy scouts, and lost twelve of their formation. Nine of the would-be raiders went down in flames, two were lost in a collision, and one was forced to land inside the German lines. Even the three survivors were "strafed" when they landed on their own field, one pilot and two observers being killed. This squadron seems to have been dogged by ill-luck, for in thirteen weeks it lost forty-five machines and 116 men, the highest casualties ever recorded by any French escadrille over a similar period of time, and it is doubtful if so unenviable a record was equalled in any air service.

The day after these twelve machines were lost, however, the bombers took their revenge in no uncertain manner. A message was received to the effect that the enemy were massing for an attack near Cutry, and ten machines took-off to give them a welcome. Five tons of bombs rained down on the massed troops, and then the observers opened up their guns. In less than an hour the ground about Cutry was littered with still, field-grey forms, and no attack was attempted in that sector for the next three days.

Perhaps the most noteworthy event of the week, from the bomber's point of view, was the development of the French answer to the Gotha Giants—the Farman Goliath. On the 20th, this huge machine successfully passed its test flights at Villacoublay and proved that it could carry a full load of five guns, 2,000 lb. of bombs, and a crew of three for 260 miles at an average speed of 94.8 miles per hour. With its wing span of 92 feet and length of 46 feet, it really looked its name, and two 260 h.p. Salmon engines had to pull the whole contraption along. Although only fifteen of these machines saw front-line service, thirty were being held for that dream of Allied bomber crews: a raid on Berlin, a raid that was only foiled by Germany's hurried call for an Armistice.

Like the bombers, the scout pilots had also suffered a reverse, and several of the "aces" had winged on to Valhalla, the first to go being Captain Derode. On the morning of June 4th he made a dive-and-zoom attack on four Fokker D.7's, and one went down in flames for his seventh victory, without a shot being fired in return. Twenty minutes later he found a Halberstadt two-seater and proceeded to stalk it. Death, in the form of two Pfalz scouts, suddenly plunged from above, and Derode was going down with three bullets in his brain before he had time even to see his attackers.

Five days later another seven-victory man, Lieutenant Jean Marty, made the great sacrifice. While diving to the help of a comrade, he collided with an Albatros, and, locked together, Frenchman and German fell in flames. Still another "ace," Pierre Rosseau, after surviving ten months of aerial warfare, during which time he secured six official victories, died in the peaceful surroundings of an English countryside. On June 14th, he and Lieutenant Pierran left France to fly to Hounslow, where they were to lecture on war-flying to a group of student pilots. All went well until within a quarter of a mile of their destination, then a control jammed, the machine fell like a stone, and buried itself four feet in the ground. When extricated from the wreckage, both men were crushed beyond recognition.

The Scores of the Aces

Despite these stories of death and defeat, the leading "aces" were carrying on unperturbed, and their rapidly-swelling scores told of the vengeance exacted from the German staffels. Sardeur sallied forth on June 4th and increased his score to eleven at the expense of two burning observation balloons; Duellin registered his twentieth victory when he burnt a Fokker D.7 on the 23rd, and De Sevin got a Pfalz on the same day to make his score ten. Boyeau and Coiffard, the balloon specialists, also did well, the latter destroying five balloons and a Pfalz scout in three days.
Fonck, who had been away from the Front for a few days to receive new decorations, returned in a blaze of glory, destroying two Fokkers and a Halberstadt on the 25th and following up with another Halberstadt and a Pfalz D.3 on the 27th. Hailed as a new Guynemer, the stocky, silent little man was to carve a record of wrecked machines that was to eclipse even the score of the immortal Guynemer during the next three months.

51 Bridges Destroyed in 52 Hours

July opened with the great German drive across the Marne, a drive which, when it collapsed on August 15th, sounded the final death knell of Germany’s hope for victory, for its very fury sapped all the reserve strength of the Germanic armies. Machines of all types and sizes played a great part in stopping the enemy advance, and during the 16th and 17th over 300 machines concentrated on an unceasing “strafe” of the Marne bridges. As fast as a bridge was built it was blown to smithereens by the bombers, and any attempt to throw across light pontoon bridges was foiled by the scouts, who rained down thousands of bullets and small bombs on the engineers, or cut to pieces any columns that attempted to board them. In this manner no less than fourteen iron and thirty-seven pontoon bridges were destroyed over a period of fifty-two hours. In addition, scores of enemy observation balloons dotted the skyline along the entire French Front, and the “aces” were ordered to concentrate on the destruction of these ungainly directors of steel death. How well they carried out their orders can be seen from the fact that 49 balloons went down in flames, and 22 more were destroyed on the ground, between July 15th and 31st, and another 66 were destroyed during August.

July 15th was a very busy day for the balloon “strafers,” and the principal “busters” were Bourjade 3, Lahouille 3, de Turenne 2, Nuville 1 balloon and a protecting Pfalz scout, Nogues 1, and Boyeau 1. Bourjade followed up with another on the 17th, his thirteenth victory, de Turenne bagged a Fokker for his twelfth, while Coiffard got his sixteenth next day and was cited for the Medaille Militaire, the citation reading, in part: “This pilot has destroyed 13 enemy aircraft in six weeks, seven of them in four days, and he is now credited with victory over 11 balloons and 5 enemy aircraft.”

Other pilots cited in the day’s orders included Bouyer, Casale, Artigault, and Nogues, all of whom were steadily increasing their victories. But, as usual, it was Fonck who piled up the highest monthly score, destroying 2 machines on the 16th, 2 more on the 18th, 3 on the 19th, and 1 on the 21st. All eight victories were scored over aeroplanes, for Fonck was essentially a solo hunter, and was never partial to balloon “strafing,” which was quite probably the reason why he survived the war, when most of the famous balloon-busters died while attacking the clumsy but highly-dangerous gas-bags.

The last three months and eleven days of the war brought the French Air Service 1,159 confirmed victories, and the records of the bombing groups show that 1,727 tons of explosives were unloaded in day and night raids, the majority being dropped on retreating enemy troops. Although mid-August saw the Allies begin their final offensive, the French Air Service had to record many losses, and it was not until early September that they gained the mastery of the air. The 14th saw Nungesser close his war record by destroying four balloons in less than twenty minutes, but shortly afterwards he received his seventeenth wound, and was unfit for service for the rest of the war.

August 15th was the blackest day in the history of Germany, for it marked the real end of the war, and once the retreat started, it was never stopped. Taking advantage of the enemy’s shortage of petrol, a shortage that kept most of the German war-birds tied to the ground, the French fliers began to take revenge for the devastation of “La Belle France,” and many an orderly
FALCONS OF FRANCE

retreat was turned into a bloody rout, the events of August 24th becoming an everyday occurrence. About midday, front line observers reported a great enemy column retreating towards Landricourt, whereupon four squadrons of Breguets took off to hasten it on. The luckless infantry were caught in the open and, flying in relays, the Breguets dropped 12 tons of bombs and fired 11,000 rounds of ammunition. When they swooped for the last time, nearly half of the retreating column lay dead or wounded.

The Beginning of the End

SEPTEMBER and October found L’Aviation Militaire swarming over enemy territory, and, desperately though the German pilots fought, they were beaten to a standstill, and the majority of the French “aces” secured easy victims. Coiffard brought his score to 30 by destroying 5 balloons in two days, 2 on September 14th, and 3 on the 15th, while Ambrogi, Herrisson, Dalasier, Bouyer, Berthelot, Maundry, Waddington and Guerin swelled their victories at the expense of the half-trained pilots that the enemy was now being forced to rush to the Front. September 26th saw René Fonck obtain his second “six” when he destroyed three Fokker D.7’s, two Halberstadts and a D.F.W., but much controversy arose over his claim, for Lieutenant de Sevin, one of his companions, also claimed the D.F.W. However, the French archives give the credit to Fonck, and this must end the matter. During the last three months of the war Fonck was using an improved version of Guynemer’s 37 mm. Spad-Cannon, and claims to have destroyed sixteen ‘planes with the tricky little gun, the principle of which is still in general use on the cannon-carrying aeroplanes of to-day.

In their last efforts the German pilots took several of the premier French “aces” with them to Valhalla, and on the 20th, Boyeau, fifth on the list of the Great, fell to the guns of an unknown Fokker pilot, a few brief seconds after he had watched his thirty-fifth victim falling in flames. Joining the Air Service as a private, Boyeau blazed his way to a commissioned rank, and at the time of his death he held the Legion of Honour, Médaille Militaire, Croix de Guerre with twelve palms, and the British D.S.O.

October cost France the life of her leading balloon “strafer,” for in that month Coiffard fell in flames, the victim of a ground machine-gunner. Several lesser pilots also met their death during the month, including de Guingand, Lobert and Bosson, but they gave their lives knowing full well that they had helped secure the victory now so close at hand.

Then came the famous seventy-two hours’ respite for a discussion of Armistice terms, and Captain von Geyer crossed the French lines to receive the Allies’ ultimatum. The respite ended at 11 a.m. on November 11th, 1918, and the German motored to St. Quentin, where a Breguet was waiting to fly him to the German headquarters at Spa. With its two white flags flapping gaily in the wind, the machine crossed the now silent Front—the world was at peace!

Falcons Triumphant

WHEN the thunder of the guns was finally stilled, the French Air Service comprised 6,000 first-line aircraft, 6,417 pilots, 1,682 observers, and a personnel of 58,000 officers and men, these totals including the figures for all fronts. Official figures of casualties in all spheres of activity throughout the war show that the losses of L’Aviation Militaire were far in excess of those of any other belligerent, and represented over 58 per cent. of its total effective strength. In all, 5,353 pilots and observers made the supreme sacrifice, while 3,085 received wounds while in action with the enemy; the figures for the killed, however, are believed to include the men killed in accidents or at training schools. No official figures have been published to show the number of machines actually produced by the French aircraft factories, but a rough estimate of 53,000 machines of 850 different types would be very
near the mark, making provision, of course, for the machines sold to the various Allied air services.

The Service had produced 162 men who secured five or more victories, and, as previously mentioned, 32 of them lost their lives, while an additional 47 were wounded. All in all, the French Air Service accounted for some 2,962 enemy aeroplanes and 347 observation balloons and the bombers could look with considerable pride on their record of 6,460 tons of explosives dropped in the course of day and night raids. This branch of the Service had produced five “aces” and claimed the destruction of 91 aeroplanes and 6 balloons. Not a bad record for clumsy old bombers!

The eighteen years that have passed since the cessation of hostilities have claimed the lives of many French warbirds, and the survivors are past their prime, but, dead and living, their deeds are enshrined in the traditions of the French Air Service, and history will long remember the “Falcons of France.”

HERE’S THE ANSWER

Readers’ Questions are invited and should be addressed to AIR STORIES, 8-11 Southampton Street, London, W.C.2. A stamped, addressed envelope must accompany ALL enquiries.

CAMEL ENGINES (O. S. Caldecott, Capetown, S. Africa). (1) When the Camel first appeared in 1917 it had a 9-cylinder Gnôme-Monosoupape engine. This was replaced shortly afterwards by a 130-h.p. Clerget which, in turn, gave place, early in 1918, to a 150-h.p. Bentley rotary. (2) The S.E.5a, a more powerful version of the S.E.5, appeared in France in the spring of 1918 and was originally fitted with a 200-h.p. Hisso.

THE NIGHTHAWK (Frank McGuire, Ontario, Canada). (1) The Nieupeurt Nighthawk was British-built and -designed and has no relation to its French namesake. The 28 C.1 and the two-seater Triplane were the last French Nieupeurt types to see service. (2) The last Albatros type was the D.11 and the only S.E. after the 5a was the S.E.9, of which only three were built. Most of the other machines you mention never passed the drawing-board or testing stage. The Pfalz D.1 and D.4 were 1915-16 types that saw little service, the D.8 saw service, but the D.9 and 10 were failures, and the D.11 was quickly superseded by the D.12 and D.13 types. The D.13 was to have been produced in quantity, but the Fokker D.8 proved a still better proposition.

RICHTHOFEN’S MOUNT (John Horne, Edinburgh). (1) Richthofen not only flew and fought in a Fokker D.R.I, but was killed whilst flying one of these triplanes. Obviously you missed A. H. Pritchard’s fine history of the German Air Service, “Wings of the Black Eagle,” which appeared in our June and July issues. (2) The British pilot with the best record as a “balloon buster” was A. W. Beauchamp-Proctor with a “bag of sixteen.” (3) The fastest British and German scouts of the war were the B.A.T. Basilisk with 162 m.p.h. and the Konig Ferdinand with 145 m.p.h. The fastest two-seaters were the Bristol Fighter with 138 m.p.h. and the Fokker C.1 which did 138 m.p.h.

AIRSHIP SIZES (H. Penn-Lewis, Eastbourne). (1) Sorry, but you lose your bet. The “Graf Zeppelin,” though longer, is actually considerably smaller than was our R.100. Gas capacity is the basis upon which all airships are compared, and that of the R.100 was 5,150,000 cu. ft. as against the 3,710,000 cu. ft. of the “Graf Zeppelin,” or L.Z.127. Comparative lengths are L.Z.127, 772 ft., R.100, 709 ft. (2) Yes, the new Zeppelin “Hindenburg” is the world’s largest to date with a gas capacity of 6,709,804 cu. ft. and a length of 814 ft.

BRITISH ACES (J. D. Millett, Scunthorpe, Lincs.). (1) Mannock was shot down in flames on July 26th, 1918, behind the German lines, but it has never been fully established whether the fatal bullet was fired from the ground or from the two-seater he was attacking at the time. (2) McCudden, who had a victory score of 58, was killed in July, 1918, in a flying accident on a French aerodrome. (3) Albert Ball secured 43 victories before he was shot down behind the German lines on May 7th, 1917. The manner of his death has never fully been established, though, in German records, his defeat is attributed to Lothar von Richthofen. (4) Warneford was killed at Buc, near Paris, on June 17th, 1915, when his Henri Farman broke up in mid-air. (5) Leefe-Robinson returned to England from a prisoners’ camp after the war, but died of influenza on December 31st, 1918. (6) W. G. Barker was killed in a civil flying accident at Ottawa on March 12th, 1930. And after this tragic list we are pleased to be able to add that “Billy” Bishop (72 victories), Roy Brown, and Raymond Collishaw (68 victories) are still alive and well.

GERMANY’S ACES (Patrick Kennedy, Dublin). A list of Germany’s air aces and their victory scores was published on p. 503 of the June, 1936, issue of “AIR STORIES.”

AUXILIARY AIR FORCE (V. J. Reece, Seven Kings, Essex). A pamphlet giving full details of A.A.F. conditions of service and method of joining may be obtained from The Secretary, The Air Ministry, Adastral House, Kingsway, London, W.C.2.

The Hun leader knew his job and was gaining twenty feet on each turn

DECOY FOR DOLPHINS

Fifteen Camels for the Trap, Fifteen S.E.’s to get the Fokkers and Ten Dolphins to hold the Ring—it seemed the Perfect Booby-trap but it proved the Greatest Air Fight of the War

By ELLIOTT WHITE SPRINGS
Late of No. 85 Squadron, R.F.C.

LIEUTENANT HENRY WINSLOW was tired. He got up every morning tired. He wanted to go away to a quiet place where he could sleep for a month. He was so nervous now he couldn’t stay in bed five minutes unless he was completely exhausted or dead drunk. Sleep? He would never sleep again.

For months now—it seemed years—he had been doing nothing but flying, drinking, and arguing. The liquor sooner or later went to his head, arguments sooner or later ended in fights, and the flying sooner or later would bump him off. What was the use?

Five months he had been at the front now. Five months or five years; he’d forgotten which. His ears were ruined, his eyes were strained until he couldn’t read, and his heart beat around a hundred in the air and a hundred and forty on the ground.

Somewhere in the back of his head was the picture of a big white house with a wide shady lawn. He used to call it home. And so was there a memory of marble palaces and golden cities and turreted castles from the fairy tales. Was the big house a part of them? He couldn’t remember. His home now was in the clouds. Years ago he had left his girl. His girl? He wasn’t sure. What difference did it make? He was going on patrol in half an hour. His date was with Atropos. The Fokkers got two yesterday. Whose turn to-day?

That was a bad show yesterday. The Fokkers had a new leader, apparently a man of cunning, who had taken Rich-
thofen’s place. He knew how to fight Camels. Wilmot had gone down in flames and Ben Thomas had died in the ambulance after he got back to the field—shot through the stomach and leg, he had flown back to his own field to die among friends.

Henry felt badly about that show. He wasn’t leading it but was up above protecting, and he saw the disaster coming. The Hun leader had made a feint with half his patrol and then zoomed up as his other men came down. It was a dangerous thing to do, but it evidently had been carefully planned and rehearsed. It worked and Henry had got only one doubtful bird to soothe his injured pride and ease the loss of Wilmot and Thomas. It wasn’t his fault—it wasn’t anybody’s fault—give the Hun credit for something—but it was up to him to see that it didn’t happen again. Perhaps, one day, he might get his revenge!

HE had just landed after leading a patrol and his feet seemed to drag as he walked into his office to take off his flying clothes. He told his sergeant to shoot the gunnery corporal at once. Every time he’d got on a Fokker’s tail his guns would jam. And get him a new buckle for his shoulder harness so he could unfasten it in the air if he had to. You can’t change gun locks if you can’t reach forward.

Johnny Warren walked up to join him. Johnny was the flight commander of “C” Flight and had led the top flight of five machines above him.

“For Heaven’s sake, use your head, Henry,” Johnny begged him, “I washed out another ’plane in that scrap to-day—all full of holes and one through my floorboard. Those Fokkers have got something now they haven’t had before.”

“Yes,” Henry agreed, “I believe it’s a new engine. There’s been a rumour about it for some time. I hopped on some cold meat yesterday and he not only climbed away from me but could turn with me. I didn’t get a shot at him and he got two cracks at me. They’ve certainly got something! And the lad who was leading their formation knew his stuff! But that stunt they pulled yesterday was overripe. If Wilmot had been a little quicker and climbed back towards me instead of going down after those first three, we’d have mopped up. I’m not blaming him—he’s gone now, anyway—and nine times out of ten he’d have been right. He knew I could take care of myself and he didn’t know the first ones had a new engine to zoom up so fast. I’d have been sore as hell if he’d let them get away with their feint.”

“Well, you know about these new engines now, so don’t try to win the war every day. Leave a few Huns for the next generation to scrap with. I haven’t got any grudge against the Hun as long as he’s got the best engine. And Napoleon said that God was on the side of the most horse-power. He knew all about it.”

“Suppose you lead hereafter.”

“No. I’d rather you’d lead. I’m not worried about your leading. You’re the best patrol leader in this outfit and you’ve the best eyes in France, but for Heaven’s sake don’t be so pugnacious. There’s no time limit on this war. Wilmot got his yesterday because he was trying to keep up with your pace, and he couldn’t do it. It’ll get even you before long. And when you go, you’ll snap like a straw. I’ll stick by you till hell freezes over, but don’t turn my hair grey with any more shows like that one last week. If they’d had those new engines last week, you and me would either be guests of his Imperial Highness or His Plutonic Majesty.”

“You need a rest, Johnny; why don’t you take it? You’re getting stale.”

“Who’s going to keep the Huns off your tail while I take leave? Tubby is as blind as a bat and has lost what little guts he ever had.”

“Well, thanks for sticking if it’s on my account, but you’d be better off in the long run.”

“If you take a rest, I’ll be all right. You’re the one that keeps me awake at night. Take a rest yourself. Haven’t you got any nerves at all, you fish?”

“Don’t know. I’m afraid to find out.”

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THEY walked over to the squadron office to make out combat reports.

Henry was tired. He sank into the chair and couldn’t remember what he was going to write. He had to ask Johnny the time, the height, and the number of Fokkers. He knew all this but his mind was too tired to recall it.

Then he strolled down to the mess tent and looked at himself in the mirror behind the bar. His eyes and nose were red with a coating of black carbon from the exhaust and burnt powder from the guns. His chin and cheeks were white where the helmet protected him. Lord, he was tired. He had a whisky and somebody handed him some letters. Four papers and a dozen fat letters. He threw the papers in the wastebasket and stuck the letters into his pocket. He’d read them later. No, he’d be damned if he would! Then he’d have to answer them. As long as he didn’t read them he felt no obligation to answer them. He had another whisky and started an argument with the gunnery officer who came bustling in to explain that the stoppages occurred because he didn’t know how to handle his guns—probably let them get cold—opened fire too soon—

He walked off to finish his drink in peace and read La Vie Parisienne.

He had another whisky and a couple of bottles of beer with lunch and then slept until four. Lord, he was tired!

At five he was on patrol again. This time he was on top and Tubby White of “A” Flight was leading. The sun was with them now and the wind as well. The Huns had had enough for the day, and didn’t fancy fighting with the sun in the west. Tubby scared up a two-seater underneath the clouds and Henry had to stay up and watch while all five streaked down out of the sun, pounced on it, and shot it down in flames. He landed in disgust.

Lord, he was tired! He hadn’t walked a mile in six weeks. He didn’t even climb in and out of his machine without two men to assist him. He got into bed alone and lifted his own glass. That was all the exercise he got—yet he was dying of exhaustion.


And now he had to have dinner with the colonel. That meant another binge. The squadron had a reputation to protect.

HENRY and the C.O. arrived at the colonel’s château at eight. The colonel, his adjutant, the wing gunnery officer, the wing equipment officer, the wing intelligence officer and the M.O. were all discussing the day’s combat reports. Richthofen’s old circus had accounted for fourteen pilots, and there were four missing. Only one Fokker was known to be destroyed and three two-seaters. We had also lost three balloons. That irked the colonel particularly. Not a very good day.

Henry had five cocktails with the colonel. The colonel was crying for vengeance. Henry was mourning for Ben. He could still see Ben being lifted out of his ‘plane. Ben was mad about the matter. He was cursing the Kaiser when he died. Henry somehow felt ashamed that he wasn’t mad, too. Why was it he always killed in cold blood? He never took any joy in it. And very little interest now. Months before it had thrilled him—now it only tired him.

The colonel wanted a whole flight to act as decoy. Henry admitted that as decoy he didn’t have his equal except in the German Army, and he wasn’t sure about that. The colonel asked him if he would go over with the flight and stay over long enough to get the whole Hun circus down on him.

“Certainly, sir,” said Henry, looking about to see where the sixth cocktail was coming from. “If you give me enough ‘planes up above to handle them when they come down.”

“How many do you think you’d need?” the colonel asked. “You can have all you can use.”
"Give me fifteen Camels for the trap," Henry told him, "fifteen S.E.'s up above the Camels to get the Fokkers, and ten Dolphins at 22,000 to keep anything off the S.E.'s."

"All right," said the colonel, "day after to-morrow morning. I'll have the S.E. and Dolphin majors bring their flight commanders over for a conference to-morrow afternoon. And if you don't get the Fokkers, don't bother to come back."

The general of the brigade came in with his adjutant. Henry had five cocktails with the general. They were old friends. Either the general had stolen his girl in London or he had stolen the general's girl. It took half an hour to settle it. At any rate, she was a fine girl! Henry magnanimously forgave the general.

Dinner was served at nine and was constantly interrupted by telephone calls from squadrons. There was soup and white fish and chicken livers and salad and champagne—a great deal of champagne.

Discipline was temporarily shelved and Henry was called upon for jokes. He told all he knew. Stories he hadn't told since he was at school—stories that had whiskers on them—stories that hadn't been laughed at for fifteen years. But the general laughed. He enjoyed them.

After dinner, they gathered around the piano and sang. The general played and they sang "'Keep the Home Fires Burning,'" "'Little Grey Home in the West," and "'Down the Long, Long Trail." Then the C.O. sang a ditty of his own composition, and had to repeat it three times.

They were drinking port now, and cognac and whisky. Henry stuck to the port. It was heavy and would put him to sleep. It did. He woke up in the car outside his tent and the chauffeur was shaking him and the C.O. to awaken them. Damn good evening!

The next day Johnny led an uneventful patrol and Henry made plans. He was going to avenge Ben. Rot! Ben was killed in a fair fight. He was simply going to outguess that Fokker leader. He was going to let him see two top flights but not let him suspect the S.E.'s. The Fokker leader would be acting as decoy himself. So much the better. He could spring his own trap. He could slap himself in the face with his own shovel.

He went out for an hour in the afternoon to drop little twenty-pound bombs on the Hun back area. Nothing exciting.

The majors and flight commanders of the S.E.'s and Dolphins came over. They were all older than Henry, and they had been flying at least three years, two of them at the front. They didn't very much like the idea of following Henry, but the decoy had to lead and they were heartily in favour of letting the Camels be the decoys. Nobody wanted to be a decoy. It wasn't safe.

In the end they were satisfied—all but the Dolphins. They refused to go beyond gliding distance from the lines unless there was a dogfight in progress. Their engines were bad and they had forced landings on every patrol. They would start on the patrol with fifteen 'planes. Perhaps they would be able to get ten up to 22,000 feet. Perhaps—no promises. That's where the Dolphins had the advantage. They were no good low down.

Then the majors and flight commanders descended upon the bar and the battle raged until dusk. Somebody took them out, threw them into their 'planes and started up their engines for them.

Henry took-off at exactly six next morning. They chose that hour because the Fokkers were sure to be out enjoying the advantage of the sun behind them, and still the sun wasn't high enough to let them get immediately above them.

Henry had four 'planes behind him. Johnny was a thousand feet above him with five 'planes and Tubby was a thousand feet above Johnny with six 'planes. Sixteen little Camels—going out to deliver an invitation to battle.

At 10,000 feet over a ruined town they made a rendezvous with the S.E.'s. The S.E.'s turned south and continued to climb. The S.E.'s worked best at 15,000 feet, so they were to stay high up. The
Camels were no good above 12,000. At 18,000 were the Dolphins—how many, he couldn’t see.

He crossed the lines at 12,000 and was greeted by a bombardment of “Archie.” Fine—good advertisement! The S.E.’s were invisible now. Good! Mustn’t let the Huns see them.

He steered straight into Hunland for ten miles, turning, twisting, and peering below and above. Nothing but “Archie.” Johnny was back three miles and 2,000 feet above him. Tubby was 2,000 feet above Johnny. Then there were the S.E.’s and finally the Dolphins. Just like the steps of stairs. When the fight started the formation would collapse like a house of cards. Woe to the Huns at the bottom!

Henry turned south and held his level. The wind was against him fairly strong so he turned back over the lines. Mustn’t get too far over. That Hun leader knows his business.

In ten minutes he saw what he was looking for—four Fokkers 2,000 feet below him. So that was it? The Hun leader wasn’t going to take a chance of letting him slip out of his clutches this time. He was going to cut him off from below. He studied the sun, his finger covering the ball of it. There they were! Two layers of them—about ten in each layer several thousand feet above him.

The four were climbing and turned south underneath him. The nerve of it! What an insult—four Fokkers flying under fifteen Camels! He knew it was because they had other machines above them. They were decoys too! All right, a little closer to the lines and he’d give them the surprise of their lives. He’d nail those four first—before the others got down on him—he’d show them what to do with decoys!

The Huns above were drawing nearer, two traps were ready to be sprung. All right, he’d spring them. He warmed his guns, waved to his men, and raised his right arm. Then he put his nose down and throttled back. No zooming now—he was going to stay down with them—dogfight those four; and he didn’t need speed—too much speed and he couldn’t shoot straight or get in a long burst.

The four Fokkers saw him coming and were ready. They closed up and turned. Henry took the leader head on. The leader turned and Henry was on his tail in a flash. But before he could get his sights on him another Fokker was firing at him. He saw the tracer bullets streaking by and had to turn quickly. The Fokker stuck on his tail. He circled and turned to shake him off. Where was Johnny? The Fokker was firing again. Pretty close, that! Here were the others!

Down came five Camels, guns blazing tracer sparklets and phosphorus. Four Fokkers and ten Camels—but only for a second. Eight more Fokkers dived after the Camels! A Camel was firing at the Fokker on his tail. Good old Johnny! He could tell it was Johnny by his streamer. He saw the Camel go down out of control. Poor Johnny! Goodbye, Johnny. Henry was firing at a Fokker and a Fokker was firing at him when both guns jammed. Damn that gunnery officer! He turned on his side, loosed his shoulder harness, and worked at the stoppages. One clear. Where’s that hammer? Bang! The other gun was clear. Where’s that top flight?

Five more Camels plunged into the centre of the whirling mass, each man taking a Fokker as he levelled off. Henry saw two ‘planes go down in flames—burning like meteors. So swift was their descent that he could not tell friend from foe. All were firing, twisting, turning. Henry saw a Fokker beneath him and pounced on to its tail. The Fokker half rolled, and he turned quickly on to another. There was that damn sickly yellow phosphorus again in front of him. He looked back. There came the other eight Huns. Where were the S.E.’s? He was too busy to look.

He looked at his altimeter—10,000 feet. He noted his position—ten miles over. A killing for the S.E.’s. For God’s sake come on! He saw a Fokker explode and blaze up. Fine. Down went another ‘plane, twisting dizzily and smoking badly. A Camel this time. God, what a
fight! Greatest dogfight in history. He was proud that he had staged it. Beyond his control now—nothing to do but fight his own battle. Another jam—he cleared it and looked above him. There was a Fokker coming down on him. He turned sharply and the Fokker roared by and turned back towards him. Henry noticed that he had a streamer on his rudder—it was the Hun leader! All right—after this scrap one side or the other would have a new leader. Johnny was already gone. He must even up the score.

There were the S.E.’s. We’ve won! My God, there’re more Fokkers! Where’d they come from? What a fight! He saw an S.E. and a Fokker collide, head on. A horrible sight. An immediate death was kind—think of the seconds they had to wait as eternity rushed up at them. There were the other Fokkers. Must be fifteen of them. All right—every man for himself. The sky was black with ‘planes and powder. The greatest fight of the war!

HENRY and the Hun leader were to the south-east of the flight and five-hundred yards from it now as they jockeyed for position. Twice they came at each other head on and pulled away in climbing turns at the last fraction of a second before colliding. Nerve the fellow had! Not a shot fired—both were too wary and too cool to waste a foot of altitude for a random shot. A burst of twenty at fifty feet on a man’s tail was worth 300 random shots. Henry didn’t even glance through his sight. He was watching the Fokker—an ugly square ‘plane with a white nose and a black and white checkerboard fuselage and tail. He made out a skull and crossbones on it. The same fellow! He’d give him a death’s head all right. They had closed in now and were circling. The circle was not a hundred feet in diameter and each ‘plane was at its nadir, flat on its side in a vertical bank. Occasionally one would hit the other’s backwash and stagger dizzily for a moment, then get back into its stride. Not a shot came from either pair of guns.

Henry glanced at the ground. The wind was blowing him farther over; this wouldn’t do! All the Hun had to do would be to hold him in a turn, and the wind would do the rest. He must get out of this.

Henry was as cool as if he were playing chess. He had perfect command of every faculty—every resource. He was in the enemy’s territory. He had a good ‘plane but a poor engine. The Hun clearly had the better engine for he was gaining a little in height every time.

Henry was thinking calmly; this lad is too good for me—I’ll never get him—got to get out of this—can’t run for it—he’d get me first crack—can’t stay here—other Fokkers will see this fight and come down—then finis. Got to get out of this—this fellow knows his job and he’s gaining—he’s gaining twenty feet a turn—we’re at 7,000—he’ll run me into the ground at this rate—he’ll get above me—then he’s got me. I can come out of this turn, but he’ll be on my tail above me. I can half roll and loop, but he’ll follow me. Everything I do, he’ll do right above me. If I half roll, he’ll half roll. Sooner or later he’ll get me. He’ll never fire until he’s sure of me. If I go into a spin, so does he. When I come out, he’s still on my tail. He can do this all day—damn fine pilot. And he will! Well, I’ve got to get him. Got to get him! Only one way to do it. It’s he or I now. Take a chance. Let him get on my tail—he’s going to sooner or later—dive for it and see who can stand the gaff the longest. Then pull the old trick on him—it might work. When I pull up, he’ll pull up and wait for a shot. I’ll take one when he isn’t looking—worth a try—my only hope!

Henry looked at the sun and waited until his back was to it. Then he levelled off and dived towards the lines.

Come on, you mug, I’ll dive until I see your tracer!

He hadn’t long to wait. The Hun finished his half circle and dived after him. Henry had a start of five hundred feet on him.

The Hun closed it up. Henry turned around as far as his shoulder-straps would let him and watched—three hundred feet.
Deceit for Dolphins

two hundred feet—one hundred feet. He must sit still and take the first burst. He was suddenly cold as he awaited the crack of the Spandaus. How good a shot was this Hun? Cool and deliberate he was. Could he hit him with the first burst? He’d soon know. Got to sit and take it.

140—150—160—175—his airspeed indicator told him. It broke. Crack—crack—crack! There it was—the Hun was making his killing. Now for it! Henry had both hands on the stick and he pulled it back steadily with all his force as he pressed his own trigger. The terrific pressure threw him back into his seat and pressed the breath out of him.

He was looking through his sight now—what a noise from the wires! He heard one snap—good shot—would his wings stay on! The whole machine shook convulsively as his nose rose, pointed straight up, and continued backward in a loop. Would the Hun see him and pull up or would they collide? Crack! Something pierced his left shoulder. Good shot again!

Then he saw through his sight what he was looking for—the white nose. Both guns were going and he pushed the stick forward to hold his sight on the Hun—just a second, oh God—just a second! He was upside down now—both guns playing on the white nose.

His nose started to drop—he half rolled and turned quickly—thank God for that shoulder-strap—ouch—how his shoulder hurt! Where was the Hun? There he was—my God, what a zoom! The Fokker was going straight up like an elevator—he must be doing 250—there, he’s half rolling—he’s— An icy hand gripped his heart as the wings folded backward and the Fokker turned a somersault in the air and went roaring down not fifty feet from him. He watched it a second and saw it fluttering downward. Too bad—he was losing a friend—a fine fellow—hell of a war!

He was diving towards the lines now with his throttle wide open. He must get back quickly. Faster—faster—faster—nothing could catch him now but the Angel Gabriel. He tried to look back, but when he moved his shoulder stabbed him. The pain made him sick at his stomach. How was his arm? He could move his arm all right—at least he could land—he could work the throttle. God, what pain! Would he bleed to death before he got back? Probably. He felt he was fainting.

There were the lines, two miles ahead. Should he land in the balloon line while he was still conscious? No. Go on—back where he came from—like Ben did. Die on his own field—that was the way to do it. He could feel the blood running down his back. Was his shoulder blade broken? He tried to move it—the pain made him wince. What about his lung? Pierced? He took a deep breath. More pain. Yes, shoulder and lung. Fini la guerre! He was through. He and Johnny—gone the same way! And Wilmot! Good way to go!

They’d died with their shoes on! All right.

What’s the use of the whole thing? Been fighting five months. What for? To get plugged through the shoulder by a better man.

He wondered if he had hit the Fokker or if the Fokker had simply broken up from structural weakness. Nobody would ever know. At least, he was firing at the Fokker. He would get credit for it. Credit? What did he want with any credit? He couldn’t take any credit with him where he was going.

He was tired, dog-tired. His mind burned him. Well, it was all over now—he could feel himself getting weak. Could he last it? God, what pain!

Well, this was the end. Suddenly he was frightened—panicky. He didn’t want to die. He was young; the wealth of life called to him. He had never been afraid to die—damn it, he wasn’t afraid to die now—never had been afraid—he knew he had to die—that was the bargain he had struck with himself at the price of his courage. But he wasn’t ready yet to pay the forfeit. He wasn’t afraid—only regretful. Now he would never enjoy the fruits of his labours. In the moment of victory he was snatched away. He
would die in torture like Ben. He recalled his shrieks of agony. No, he wasn’t afraid to die but he was afraid of pain. He couldn’t stand pain. They would probe and cut and sew. He couldn’t stand it! Should he dive into the ground now and end it?

This was the end. Why? He had given his life. For what? He couldn’t remember. War! A good joke on him. He was a soldier—well, soldiers got killed. Why? So somebody else could get the booty. So that politicians could come out of their funk-holes, go home and get elected to office eternally. So our grand-children could be taught a fresh bunch of lies. This was glory. This was the end!

Was this what happened to a drowning man? God, he was so lonely. He didn’t want to die. He wanted to scream it so loud that Johnny would hear and yell back to him. Think of the wine he would never drink—the girls he would never kiss—the books he would never read—the music he would never hear! His name on a monument at home—"The Last Post"—he felt sorry for himself and the tears came. No, he didn’t want to die—he wasn’t going to—he must pull himself together! He must fight for his life.

There was the aerodrome. He throttled back and sideslipped in. He landed in a daze. How tired he was!

Henry saw the bloody cloth—blood from his shoulder—his life’s blood! Then he fainted.

When he came to he was lying in the shade. The sergeant was sitting beside him fanning him with his hat and holding a wet piece of cloth to his forehead. The pain was all gone and a piece of canvas was thrown over him.

"There, you’re all right now, sir," the sergeant soothed him. "They can’t kill you. We got ten of ‘em this morning—five of our men missing. Lie still a minute, sir. You’re all right, but your ‘plane's no more good. Every wire loose—full of holes too."

Henry groaned. Why, he didn’t know. He was in no pain. He was just tired.

"I’ll be losing my stripes now, I suppose, sir," the sergeant went on. "I blacked an eye for that saucy medical orderly. He laughed at you, sir. Perishin' cheek!"

"Laughed at me?" Henry asked, trying to think what he had done that was funny. "Why was he laughing at me?"

"'Cause you thought you was hit, sir, and wasn’t."

"Not hit? What about my shoulder?"

"You must have reared back something fierce, sir, 'cause you jabbed the buckle tongue of your shoulder-strap right through your flying suit and dug it an inch under your skin. Must have stayed in the flesh because it’s all torn loose. Ready to go down to the M.O. now, sir, to have it plastered up? I’d better let one of the other men take you down. I ain’t popular in the medical tent just now."

"All right, my boy," the doctor told Henry as he worked with tape and gauze. "I’m glad it’s no worse. But you’re through here. No more flying for you for a while. I’ve been expecting you to break—you can wear out any machine. You had a fine case of dementia. You go to Boulogne this afternoon. I don’t know what they’ll do to you there—probably two weeks' leave. Good for you—all right—trot along, now."
The Eagle of Lille

Arrogant, Self-assured, and a Lone Wolf among Air Fighters, Max Immelmann won Fame out of all Proportion to his Fifteen Victories

By
A. H. PRITCHARD

ICHTHOFEN, Boelcke, Immelmann—these are names that appear in nearly every article dealing with Germany's war in the air, and are kept alive to-day by squadrons of the new German Air Force bearing the names of these war heroes. The records of Richthofen, leader of the famous "Circus," and victor over eighty Allied machines, and of the chivalrous Boelcke who scored forty victories and founded the Jagdstaffels, are universally known—but what of Immelmann, who scored only fifteen victories, yet ranks higher in the Germanic histories than men who scored as many in a month? Numerous legends have sprung up around the early war-birds, and in consequence much of the truth has been lost. This brief biography of Max Immelmann, Eagle of Lille, is concerned only with facts, and many old theories are contradicted.

Born at Dresden on September 21st, 1890, Immelmann joined the Dresden Cadet Corps when he was fourteen, and rose to Ensign's rank in an engineer regiment. In spite of all stories to the contrary, he was not a good soldier, but a brilliant mathematician and mechanic, and when he discovered that he had no opportunity to increase his technical knowledge, the headstrong young Ensign denounced the Army in no mean terms, and resigned his commission in the mid-summer of 1912.

Within a few days of the outbreak of war Immelmann received his mobilisation papers, ordering him to report to his old regiment, but before doing so he applied for a transfer to the Air Service. The mechanical side of flying appealed to Immelmann's technical mind, and he was overjoyed when ordered to report at the Aldershof Flying School on November 12th, 1914. This date is worthy of attention, for it confounds the story of the September raid on Paris so long accredited to Immelmann, and raises the interesting point of who did, in fact, write the note that is now in the Paris Museum and was supposed to have been dropped by Immelmann?

Actually, Immelmann had never even made a flight until November 21st, and that was only a short "hop" with an instructor!

Surviving the usual run of training crashes, he was sent to Flying Section 10 at Vizry on April 12th, 1915, and soon found himself in hot water. On his very first flight he smashed an L.V.G. through a heavy landing, and two days later, after collecting a brand new machine from an aircraft park, he
repeated the performance. It is not surprising that Section 10 gave a sigh of relief when, just two weeks later, their crash-expert was sent to Doberitz and assigned to the newly-formed Section 62. Here it was that Immelmann really found his wings, and by the time Section 62 went to their front-line quarters at Douai, on May 19th, he had corrected his landing faults. Oswald Boelcke was also with Section 62 at this time, and he and Immelmann formed a friendship that was sharp in its contrasts. Boelcke, quiet and a born leader; Immelmann, arrogant, self-assured, and a typical “lone wolf” type of fighter.

**Shot Down by a Farman**

Immelmann’s first experience of air-fighting came while flying a photography patrol on June 3rd, and he had to make a hurried landing when a Farman put several bullets in his engine. This little brush can hardly be called a fight, for the German machine carried no guns, but it brought Immelmann his first decoration—the Iron Cross, Second-class, awarded for his coolness under fire.

Shortly after this incident, Anthony Fokker arrived at Douai with two of his new single-seaters, and Immelmann had a first-hand opportunity of studying the new fighters. He showed such enthusiasm that Fokker promised to send him a new machine from his Schwerin factory, a promise that was fulfilled on July 30th. After an hour’s instruction from Boelcke, Immelmann flew the machine that very afternoon and went up on the following day to try out the new machine-gun.

In the early hours of the next morning, Section 62 was rudely awakened from its slumber by the roar of engines and crash of exploding bombs. Ten B.E.2c’s were plastering the aerodrome with high-explosives, but by the time the Germans had reached the hangars the raiders were on their way home. Within a few moments Boelcke was in the air and Immelmann followed without even waiting to dress.

Near Vitry he overtook the rearmost machine of the enemy formation, and managed to fire 500 rounds from close range before his gun jammed. The gun had done its work, however, for the British machine went down in a spin and made a hurried landing. Going down to inspect his victim, Immelmann found that the pilot, the only occupant, was wounded in the arm, and over forty bullet holes were clustered around the front cockpit. This initial victory brought Immelmann a glowing citation and the Iron Cross, First-class.

Two more victories, another B.E.2c on September 9th, and a B.E.2e near Willerval on September 21st, were credited to him before he received a taste of his own medicine. Flying alone near Arras on September 23rd, he was caught napping by a Farman two-seater, and its observer proceeded to shoot away his undercarriage, smash the engine, and drill nine holes in the Fokker’s petrol-tank. How the pilot managed to survive the hail of lead that sang all around him is just another unsolved mystery of the air.

Such a narrow escape held no terror for Max, however, and he was soon back in action, destroying a B.E.2c near Lille. His next victory proves just how helpless were the British and French machines against the speedy Fokkers, armed as they were with the synchronised gun.

Flying over Arras, Immelmann found a British machine slightly below him, and coming out of a thin cloud bank, sent it down before the observer could fire a single shot in defence. A B.E.2c, on November 7th, and a Morane, on December 15th, brought his score to seven before the year ended, and with each victory came fresh honours and acclaim. Germany took great care of her famous war-bird, and he was greeted everywhere with wild enthusiasm, while the coming year was to bring him undying fame—fame that was at its peak when the Grim Reaper snatched him from the skies, into Valhalla.

**Awarded the Pour le Merite**

Immelmann had several fights during the early days of 1916, but failed to
score again until January 12th, his victory on that date marking the high-
light of his whole career. At 8.20 a.m. news reached Section 62 that many
British machines were crossing the lines, and Immelmann, Boelcke, and Oster-
reicher took-off to intercept them. The three Fokkers soon separated in order
to cover a larger section of the lines, and Immelmann found an enemy a few moments later. Near Bapaume he attacked a two-seater from close range, and
three bursts sent the machine down in flames. Meanwhile, Boelcke had also
scored a victory, and that night a party was held in honour of the squadron’s
double success. In the midst of the celebrations a telegram was received, and the C.O. read it aloud to the assem-
bled war-birds. "His Majesty, the Emperor, has been graciously pleased to confer his highest war order, the Ordre Pour le Merite, on the two victors of aerial warfare—Boelcke and Immelmann."

Congratulations poured in from every side, and the two pilots were wined and
dined to such an extent that Immelmann did very little flying during the next six
weeks. Inactivity had not cramped his style, however, for he secured five victories during March, a fine achieve-
ment for this period of aerial warfare.

A.B.E. on March 3rd marked the end of his inactivity, while the 13th was his
lucky day inasmuch as he destroyed two enemy machines and sent another down in its own lines "out of control." In company with Lieutenant Mulzer, he attacked an R.E.2 about mid-day, and
after a short skirmish got home with a burst that killed the observer and wounded
the pilot, the machine crashing near Serre. Ten minutes later he fired on
another two-seater, but this managed to effect a crash-landing in its own lines
and Immelmann never received confirma-
tion. Going up again that same evening, he attacked four machines over Arras
and managed to send one down in flames. German records state that the machine
was a Bristol, but this is an obvious error, for no Bristol machines were yet
in service, and it must have been either an R.E. or B.E. type. A Farman on
the 29th and a Vickers on the 30th closed a very profitable month and
brought his score to thirteen.

Early in April, Immelmann’s mechani-
cal inclinations nearly proved his own undoing, and he had a remarkable escape from the death that was soon to claim him. Working to instructions, his mechanics fitted three machine-guns to his Fokker, and the contraption was ready for a test on April 16th. All went well till Immelmann opened fire, and
then the extra strain threw the syn-
chronisation gear out of order, and the propeller dissolved in a flurry of splinters. The engine shook itself from its bed, and
the pilot just managed to land before
the terrific vibration tore the machine
to pieces.

This incident is worthy of special note, for after Immelmann’s death, German experts formed a very similar theory and stated that engine vibration, caused by a split propeller, had made his machine break up in the air. After a few more experiments, the budding arma-
ment expert came to the conclusion that two guns were as much as his frail monoplane could safely carry, and with this new armament he destroyed an F.E. on April 23rd, and a "pusher" scout of an unknown type near Douai on May 16th. The last day of the month saw him again shot down by
his own gun, which ran amok when he
attacked a bombing formation, and a
large piece of laminated propeller tore
a great gash in his flying-helmet. With
his usual luck, however, he survived
another nasty crash without a scratch.

The Death of Immelmann

Rain curtailed most of the flying activity during the first weeks of June and during the wet spell the Imperial High Command resolved to form its "Single-Seater Commands" of scout machines, and Immelmann was naturally chosen as a section leader, on
June 13th—a command that fate decreed he should never assume.

The morning of June 18th was heralded by a fine drizzle of rain and flying was
impossible until mid-afternoon. Going up before tea, Immelmann had a brief skirmish with two enemy formations, but obtained no results and returned to his aerodrome to refuel. At 9.18 p.m. he took-off again with two companions, Sergeant Prehn and Corporal Heinemann, and two F.E.2b’s from No. 25 Squadron R.F.C. took-off from a British aerodrome at almost the same time. Over Annay the two formations clashed, and an F.E. containing Lieutenants Robinson and Savage went down before the concentrated fire of all three German machines. Second Lieutenant G. R. McCubbin and Corporal J. H. Waller, crew of the surviving F.E., put up a stiff resistance, and McCubbin fired several effective bursts before a bullet through the arm forced him to make for his own lines. The Fokker piloted by Prehn had had to pull out early in the fighting, owing to a blocked-up petrol pipe, and Heinemann found himself alone in the air for Fokker E.4, No. 127, Immelmann’s machine, had disappeared.

The various conflicting accounts of how Immelmann died, by structural failure, shot down by German anti-aircraft guns, destroyed by his own guns, etc., have all been told too many times to need chronicling here, but on the evidence available the author still gives credit to McCubbin or his gunner, Corporal Waller.

To-day, the famous airman lies buried beneath a great statue at Dresden, whence he was carried in 1928, and the inscription is befitting, “Immelmann, Der Adler von Lille.” The Eagle of Lille.

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**OUR LATEST BOMBER**

**A Giant Monoplane of High Performance and Great Load-carrying Ability**

A NEW and formidable heavy bomber, for which the Air Ministry has recently placed a substantial order, is the Handley Page ‘‘Harrow.’’ A metal-built monoplane with a 120-ft. wing span, the Harrow has been designed for the carrying of very heavy loads over long distances. Its bomb capacity is greater than that of any aeroplane yet in service with the R.A.F., and it may be quickly adapted at need for the transport of considerable numbers of fully-armed troops. Performance figures are secret, but the new bomber is stated to have an exceptionally high top speed, while its normal cruising speed is considerably more than that of any comparable big ‘plane yet in service.

**Controllable-pitch Airscrews**

TWO Bristol Pegasus air-cooled radial engines, driving three-bladed controllable-pitch airscrews—the aerial equivalent of a motor car’s gear-box—provide power, and each wing has automatic slots on the leading edge and flaps on the trailing edge. It is claimed that these slots and flaps, in addition to giving the machine a low landing speed and improving its take-off, also help to make the craft a steady platform for bomb-aiming and for accurate gun-fire.

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**AN “AIR STORIES” CORRESPONDENCE CLUB**

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IN response to the requests of many readers wishing to be put into touch with correspondents interested in Aviation, the following service has been introduced and is available to all readers of AIR STORIES. There is no charge made and the procedure, described below, is quite simple:

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AIR BOOKS

Reviews of the Latest Books on Aviation

FUN ON FLOATS

"Ride on the Wind": By Francis Chichester; Hamish Hamilton: £os. 6d.

ANYONE who has read "Solo to Sydney" or "Seaplane Solo," the accounts of two previous long-distance flights by that experienced amateur pilot, Mr. Chichester, and his veteran Gipsy-Moth "Elijah," is not likely to wait for the recommendation of a review before hastening to buy, borrow or steal this latest saga of that indomitable pair of adventurers.

For Mr. Chichester and "Elijah" are two of the Wonders of Aviation, and the casualness with which they set out on the most amazing long-distance flights is matched only by the narrowness of Mr. Chichester's repeated escapes from violent death—about the only form of disaster that he has not yet suffered in the course of his arial odyssey.

Not satisfied with a lone flight from England to Australia and a 1,500 miles' flight across the Tasman Sea, Mr. Chichester decided to complete a round-the-world flight by travelling, as he characteristically describes it, "north to the Arctic Circle, then to the right and east until I reached England again." With the same trusty "Elijah," now mounted on a pair of discarded floats; he started from Sydney, and flew up the eastern coast of Australia inside the Great Barrier Reef to Thursday Island where, to his delight, he met both a cannibal and a murderer. Thence he flew to New Guinea, traversing great stretches of unexplored country inhabited by hostile tribes, mended a damaged airscrew in one of the Philippine Islands with a piece of petrol tin and proceeded, quite unperturbed, to Manila, where "Elijah," now beginning to feel her age, was hard put to it, flying "flat out" at 96 miles an hour, to keep in sight of her welcoming escort of three U.S. Army 'planes.

From Manila to China the flight developed into a race with a typhoon, which they just managed to escape at Shanghai by setting off with nine hours' petrol on a probable nine and a half hours' overseas flight to Japan. By amazing good luck, they reached Japan—with the petrol gauge registering "empty"—only to be involved the next day in a spectacular crash from which Mr. Chichester's particular and hardworking "ju ju" alone knows how he managed to escape alive.

But before he suffered this final disaster, Mr. Chichester had experienced excitements and near-disasters enough to satisfy even his adventurous soul, and it is his special gift that he can communicate everything he felt, saw and suffered to his readers. Whether, desperately tired after a long flight, he is vainly endeavouring to convince a suspicious Japanese official that he is a "private fty" and not a "Government fty," or whether he is taxing for hours on end in a heartbreaking effort to get a water-loged "Elijah" off the unruffled waters of a tropic sea, one laughs and curses with him, so realistic and engaging is his unaffected style of writing.

The book ends with "Elijah" a complete write-off on a Japanese quayside and her pilot being pieced together in a Japanese hospital, but as Mr. Chichester has once before completely rebuilt a crashed "Elijah" almost single-handed, no one is likely to imagine that this is the last they will hear of the Chichester-Elijah round-the-world flight.

SMUGGLERS' WINGS

"Contraband": By Dennis Wheatley; Hutchinson: 7s. 6d.

HERE is a splendid story of fast-moving adventure by Mr. Wheatley in his most exciting vein. It is a story of international intrigue with fleets of aircraft plying phantom-like by night between lonely landing-grounds on the French and English coasts, the carriers of a vast smuggling organisation directed by Lord Gavin Fortescue, a sinister figure with a brain as twisted as his body.

Pitted against him is Gregory Sallust, torn between duty to the great commercial enterprise that employs him and devotion to the alluring but suspected Sabine Senty. Bringing up the rear comes a baffled Scotland Yard man, the air-minded Inspector Wells, in time to share with Gregory the more unpleasantly tight corners of a breathlessly exciting pursuit by land, sea and air. Knife attacks in a Continental slum, lingering death in quicksands, and a parachute descent by night are but a few of the adventures that await them before the last dramatic round-up of the smugglers is made on the secret aerodrome of their Kentish headquarters.

Mr. Wheatley does not avoid quite all the pitfalls that lie in wait for the author of an aerial thriller, and the Bristol Aeroplane Company will doubtless be surprised to find that they gave the smugglers preference over the car Ministry in delivery of their new Blenheim bombers. Again, Gregory, whose independent spirit may explain but does not excuse his complete disregard of cross-Channel air navigation regulations, would have been spared some anxious moments if he had realised that a ring and not a "rip cord" is the usual method of releasing a parachute. But it would be carping criticism indeed to suggest for one moment that so few and such minor technical errors as these could possibly detract from the enjoyment of this brilliantly told and thoroughly exciting story.

THE WAR TO COME

"War Over England": By L. E. O. Charlton; Longmans Green: 12s. 6d.

THE R.A.F. Display at Hendon; a quarter of a million people, including statesmen, high officers of the Services, Dominions and foreign representatives, watching the skilful manoeuvres of some 200 aeroplanes. Suddenly, without a hint of warning, squadron after squadron of German bombers, flying fast and low, sweep over the packed aerodrome and release a rain of high explosive and incendiary bombs.

That is the manner in which the next war may begin, as foretold by Air Commodore L. E. O. Charlton in "War Over England," a grim but
graphic warning of the new menace that has been born of modern Air Power. The sudden coup of the enemy destroys at one blow the assembled two-fifths of the Home Defence Force and with them half the Government and the greater part of the higher executives of the Navy, Army and Air Force. While our Defence organisation is thus crippled, the attackers launch a further on- ning blows. London's main power-station is destroyed and the underground communications of the city paralysed. Next, the docks of London, Bristol, Hull and Liverpool are attacked, and then comes the turn of a panic-stricken London, laid waste by high explosive and incendiary bombs, burning with a heat intense enough to start inextinguishable fires.

The author paints in lurid colours these horrors that await a country subjected to a modern aerial bombardment and, for the benefit of a generation that did not know the last war and is apt to be sceptical of the many prophecies about the next, he prefaces his awe-inspiring vision of the future with a vivid and detailed narrative of the air raids on London during 1914-18. From the terror of those days, he argues in effect, multiply them by twenty years of "progress" and you have some conception of what the future may hold for a nation lacking adequate defence.

Air Commodore Charlton ends his imaginary war with the complete surrender of Britain and France and their capitulation to peace conditions which enable them better to prepare themselves for yet another war twenty years later, when the whole of Central Europe is saved from utter devastation only by the combined intervention of Britain and the United States, the only two great powers strong enough to remain uninvolved.

Unlike some of his many predecessors who have lately been making our flesh creep with their forecasts of aerial warfare, this author, at least, has both the authority and the vision to offer constructive suggestions for organised defence and, in the present critical state of Europe, his book is of especial value and importance. As an incentive to public appreciation of the vital importance of adequate aerial defence measures its value is less certain, for such books as these are apt to defeat their own purpose in that the very magnitude of the horrors they promise forces the reader to the pessimistic conclusion that there can be no real defence possible against such calamities as these.

**DICTATORS OF THE AIR**

"Vulture's Wings": By Petty Officer Davis: Herbert Joseph Ltd.: 7s. 6d.

No reader of this novel will be able to complain of lack of excitement. A world-wide criminal organisation based on a vast underground factory on an isolated estate in England, in order to construct a fleet of aeroplanes with which they propose to paralyse trade routes, destroy all who oppose them, and finally dictate their own terms to the Government. In control of the English branch of this ambitious business is a famous airwoman, a female more deadly than any male.

An abortive and a daring attempt at rescue by air, robbery on the grand scale, murder, and an unusual use of drugs all figure in the struggle that follows and provide a full quota of romance and thrills. The author has yet to acquire the ease of the practised writer, but the plot is well conceived and, if there is too little about aviation to satisfy the air enthusiast, there is plenty of action from first to last.

**ALL ABOUT AEROPLANES**

"Aeroplanes: How, Why and When": By R. Barnard Way: Cassell: 3s. 6d.

**HOW** aeroplanes work, why alterations in design have constantly been made, and when those alterations proved so satisfactory that they were universally adopted—here, in brief, is a description of the scope of this book and the explanation of its rather curious title. In easily-understood text and with the aid of some 200 drawings, the author traces the history and technical development of heavier-than-air craft from the time of the earliest pioneers up to the stream-lined and high-performance marvels of the present day. From time to time in the course of this pictorial narrative there are detailed explanations of such matters as the working principle of an airscrew, the controls of an aeroplane, the "inners" of an aero-engine, the effect of the airflow on an aeroplane's wings and the comparative advantages of biplane and monoplane.

The Great War period is briefly but quite adequately dealt with, and the progress in design in the post-war years is emphasised by illustrated descriptions of famous aerial achievements.

Altogether an admirable primer of Aviation and, though primarily intended for young people, a book which might be useful, if surreptitiously, studied by children-owning elders.

**AERIAL ECSTASIES**

"Sky Gipsy": By Claudia Cranston: Harrap & Co.: 10s. 6d.

"SKY GIPSY" is an account of an American woman novelist's 25,000 miles' flight over South America, Central America, Mexico and the Caribbean. The greater part of the journey was made in the "Clipper Ship" flying-boats of Pan-American Airways, with several overland stages in Douglas and Ford landplanes. The itinerary followed was Miami (Florida), Haiti, Puerto Rico, the Guianas, Brazil, Uruguay, Argentina, then over the Andes to Chile, Peru, Costa Rica, Guatemala, Mexico and so back to Miami.

Though the author's style of writing of herself in the third person is apt to be annoying, the book is interesting enough in its vivid descriptions of the scenery, costumes and customs of the various countries visited. As the record of three hundred hours' flying, however, it is certainly the average "air-minded" reader will be limited, if not completely ruined, by the author's gushingly ecstatic reactions to most things aeronautical, from the "tall blond captains in blue" who pilot her aircraft to "the song of all the past of men upon the earth—of all the promise of men upon the moon" (e.g., the noise made by opening up four seven h.p. Wright aeroplane engines, similarly to a flight above the sunlit Caribbean Sea is no doubt a memorably beautiful experience, the impression is, to say the least, somewhat inadequately conveyed by such an outburst as:

"Oh! I can't stand it! It's too much beauty! Too, too much!" Claudia babbled mentally, incoherently.

"Oh, I can't stand it, because it's too beautiful!"

A verdict with which this reviewer, for one, is in complete agreement.
THE PHANTOM FOKKER

By
RUSSELL MALLINSON

... he stared up incredulously at the Fokker that came diving down upon him

Down from the Twilit Skies of Flanders plunged a Black-crossed Fokker D.7, grim Spectre of the past to the Lone Airman cruising above the Battlefield of Twenty Years Ago

CHAPTER I
The 'Plane from the Past

AFTERWARDS, when Tony Crichton looked back on the strange events of that autumn evening, he realised that the trouble began with his sentimental impulse to fly once again over the war areas.

Tony was delivering a new and shining Gloster Gauntlet to the Belgian Air Force aerodrome at Steenvoorde for his firm, Aircraft Agents Limited, and if he had conscientiously followed the last leg of his compass course he would have flown some ten miles eastward of the Flanders fields and lakes which nearly twenty years ago he had known as the Ypres Salient.

But from the moment he had crossed the familiar coastline Tony had been conscious of a restlessness, a stirring of almost forgotten memories of the time when he had fought over the Western Front with a Camel squadron, first as a raw and rather scared subaltern and finally as a weary, hard-faced flight-commander whose eyes held the grim wisdom of a man who had out-stared death.
AIR STORIES

It had only required a mild kick on the rudder-bar to swing the speedy Gauntlet on its sentimental journey.

A detour of a few miles was a matter of mere minutes to the fast single-seater, and Tony had decided that it might be a long time before he again had the chance to revive memories of his adventurous youth.

A cross-Channel ferrying job was a rare interlude in his routine work of demonstrating new machines of all kinds over his company's aerodrome in Essex, putting them through their daily dozen for the benefit of likely purchasers.

Now, as Tony circled reminiscently over Poperinge, he leaned out of the cockpit into the battering tornado of a six-hundred horse-power slipstream and smiled a little derisively.

This modern town, with its shining roofs and smug-looking villas, its straight white roads bordered with green saplings, wasn't the old "Pop" of affectionate memory.

Tony remembered a city of darkness with shattered roofs and shell-torn roads, cellar estaminets with sand-bagged entrances where one had drunk atrocious wine with a war-time thirst before bumping cautiously round the night's new shell-holes in the Crossley tender on the way back to the 'drome at Droglandts.

Droglandts! Something quickened in Tony's blood. Jove! he'd like to see the old aerodrome again—if he could find it.

Yet the flat Flanders landscape still remained familiar. Tony picked out the valley overhung with chalk hills. It was there that poor old Bennett had crashed while struggling back from the lines with a bullet through his lungs.

Tony craned his leather-clad head out of the cockpit, his eager eyes searching for his old aerodrome.

There it was, the winding road circling the wood, and beyond lay the field where the Bessoneaus had housed their covey of Camels.

He dropped lower. Over by the cross-roads had stood a lighthouse that had flashed out its code of dots and dashes to guide the night-flying F.E.'s.

He crossed the road at fifty feet. Now he was over the field where the elephant huts and the officers' mess had stood.

And Tony looked down upon the ghosts of things that were dead, remembering the glamour and thrills and companionship, which, perhaps because one had been very young, survived those grimmer memories of fear and the shadow of a death that was not always mercifully swift.

He circled for a while in the twilight. The years had fallen away from him and he was back in the dim past. He almost seemed to hear the strident song of the Clergets, the wail of wires, the laughter of a "binge" night.

He slammed open the throttle abruptly and pulled back the stick. The powerful Gauntlet flashed upwards in a zoom, and the thrill of that surging ascent helped to banish Tony's depression.

"Cheerio, chaps," he murmured whimsically. "If we'd tried that with a Camel it would have been good-bye to our wings..."

His voice died suddenly in his throat, as he stared up into the evening sky, stared in incredulous disbelief at a 'plane that came diving through a swirl of cloud, its green-grey-camouflaged wings blending with the dusk.

And because Tony had not forgotten the wisdom of the war years, the sixth sense which brought swift warning of the nearness of an enemy aircraft, he absorbed in a flash the silhouette of the
single-seater—saw to his amazement that it was a Fokker, a snub-nosed D.7 with the familiar twin “V” interplane struts and tapering fuselage on which a black cross leapt into his startled line of vision.

CHAPTER II

Fokker versus Gauntlet

INSTINCTIVELY, Tony’s limbs braced on the rudder-bar and his hand gripped the stick.

Then he laughed in self-derision. Of course, his imagination was tricking him, as a result of his reminiscent mood and the war-time memories that his return to those familiar surroundings had evoked.

He blinked behind his goggles and stared again. It couldn’t possibly be a Fokker D.7, an obsolete bus which now scarcely existed outside a museum.

For some moments he believed that his eyes had deceived him. He looked round and above him, but the machine, if it had been a machine, had disappeared and he seemed to be alone in the darkening sky.

His gaze rested reflectively on a bank of drifting clouds and, acting on a sudden impulse, he throttled back and leaned out of the cockpit as the tumult of the Bristol Mercury died away.

Above the whine of wires a deeper note vibrated in his ear-drums. To his growing amazement, Tony found himself listening to the familiar drone of a Mercédès engine. Too often in the past had the snarl of a Fokker’s engine brought warning of danger for Tony to be mistaken.

Even now, after twenty years, it stirred his old fighting instincts. He laughed with the old thrill of battle quickening his blood and, smacking the throttle wide, he yanked back the stick.

As the Gauntlet rocketed upwards to where the mystery machine was hidden in the cloud-bank, Tony’s hands instinctively fumbled for non-existent gun grips. His brain was reverting to the automatic movements which moments of tense danger in the past had impressed upon his subconscious mind.

The grey vapour of the cloud strata swirled against his face. Then, with a sudden chilling sense of shock, a dark shape leapt across his bows. It was the Fokker, and he caught a fleeting glimpse of the pilot’s head and the flash of his rectangular goggles. In that confusing world of vapour, the indistinct outline of the machine loomed in Tony’s line of vision like some wraithlike shape.

But there was nothing ghostlike about the roar of the 200 h.p. Mercédès as the Fokker hurtled past him so perilously close that Tony flung his weight on the rudder-bar and slammed over the stick. That screaming bank saved him from disaster, as his tilting port-side wing missed the deeply-cambered top plane of the Fokker by inches.

A sobered Tony eased the Gauntlet into a steady dive, and he dropped clear of the treacherous cloud-drift.

The pilot of the mystery machine had lost height also in his dizzy sideslip to avert a head-on crash.

Tony turned his head and glanced back over his jazzy tail at the sound of the Mercédès behind him. He had given up speculating as to the identity of the resurrected German fighter. That the pilot was attached to some flying circus on an exhibition job seemed the most probable explanation.

Tony grinned as the temptation came to him to try out a modern fighter against a war-time Fokker.

He flung the Gauntlet round in a tight turn and, with a flash of wings, had fastened on the Fokker’s tail, as he had often done in the past. Yet never before had the manœuvre seemed so simple or the much vaunted D.7 of the war days so easy a prey. An enlightening lesson in speed ratios, mused Tony. The Gauntlet’s vastly superior pace and manœuvrability practically eliminated the Fokker as a fighting machine.

But the Fokker pilot also knew something about the game. He pulled up in a loop and then came down the chute in a power dive on the Gauntlet’s tail.

Tony kicked on right rudder and moved over the stick, and the Gauntlet flashed into a tight vertical turn, literally making
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rings round the helpless Fokker.

"Gad! if I'd had a bus like this in the war days," thought Tony, who was enjoying himself immensely.

He grinned cheerfully and waved his hand in a friendly gesture, but the Fokker pilot did not respond. He broke away and, clawing for altitude at a pace which compared farcically with the Gauntlet's effortless speed, disappeared again into the low-lying clouds.

Tony hesitated, and then the realisation that darkness was overtaking him chastened his mood. He'd been sky-larking long enough. There'd have been the devil to pay if he'd crashed the Gauntlet in that blind zoom into the clouds, even if his parachute had saved him.

"You'd better remember you're a sober commercial pilot with your living to earn," Tony grunted to himself, "instead of throwing yourself about the sky like a death and glory ace."

But he relaxed happily in the cockpit as he pushed down the Gauntlet's nose to pick up his course. That flash of the old days, when his blood had quickened to the thrill of aerial combat, had been as good as a tonic.

Suddenly, he realised that he might have to pay for his indulgence. A rasping sound came from the engine and the rev. counter flickered ominously. The next moment, the Bristol Mercury spluttered and cut out.

TONY recognised the symptoms of petrol starvation. He switched on to the emergency tank, but the engine did not pick up. He swore lustily. There must be a feed choke somewhere. His hand moved swiftly over the gadgets, but no reassuring roar came from the engine.

He braced himself for a forced landing, calling himself several kinds of fool. If he hadn't started monkeying about over the war areas he'd have landed at the Belgian 'drome half an hour ago without trouble.

He leaned out of the cockpit and swiftly surveyed the darkened landscape below him. It was not reassuring. Fields everywhere with ditches and fences to trick him, and every moment he was losing useful height. But there was one field which, although awkwardly masked by a wood, had a clear run.

He carefully negotiated his approach in a sweeping curve and came in low over the trees. Side-slipping steeply to kill forward speed, he dropped down on to the field, easing the stick as the grass raced beneath his wings until the rumble of the undercarriage told him that the wheels had touched.

Gently, the machine rolled to a stand-still and, with a sigh of relief, Tony climbed out of the cockpit.

He stood looking around him. On closer inspection, the field looked almost as if it might have been prepared as an emergency landing-ground. There were signs of filled-in ditches and tree stumps razed to the turf. But it was improbable, Tony thought, for he saw now that the field was surrounded by a high wall, as if it were private property. He stood staring reflectively at the lights of a chateau gleaming through the trees.

CHAPTER III

The Mysterious De Marney

THERE was a path leading through the coppice to the house, and Tony started to make his way towards it.

It was too dark to tinker with the Gauntlet and, in any case, it might take some time to locate the trouble.

He must find a telephone and inform the aerodrome that he was delayed by a forced landing. The flares were probably out now, and doubtless some unfortunate duty officer, standing by to put the night-landing guides into operation, was cursing him for being overdue.

"You've made a prize ass of yourself, my lad," grumbled Tony, as he walked along the path beneath the trees with the crackle of dead leaves beneath his flying boots. "You'd better keep quiet about that comic Fokker."

But he had an uneasy feeling that the pilot he had hustled rather badly round the sky might report him for dangerous flying.

A ribbon of light streamed across the
THE PHANTOM FOKKER

grey flagstones of the terrace as he approached the house. A French window had opened, and a man stepped out and stood watching him, an elderly white-haired man who held himself erect with a certain dignity that was enhanced by his aristocratic features.

An odd feeling of uneasiness stirred in Tony's mind. There was something macabre about the old man standing there in the shadows, the dark cloak that hung from his shoulders accentuating his tall, lean figure.

Tony walked up the terrace steps and smiled disarmingly.

"Good evening, sir. I must apologise for having to put my machine down in your grounds. I've had a forced landing, but fortunately I've done no damage."

For a moment, a pair of not very friendly eyes regarded him intently.

"This is not a landing-ground, my young friend," the man said at last in a slightly guttural voice. "You realise that you are trespassing."

"My engine petered out, and I had to get down where I could," answered Tony a little testily. "But if you will allow me to use your telephone to speak to the aerodrome at Steenvoorde, I'll have a mechanic along as soon as possible. Meanwhile, I'll have a shot at remedying the trouble myself."

The man's lined face relaxed in a smile, but it was a smile that did not reach his restless eyes.

"Would it not be better to wait until daylight?" he suggested unexpectedly. "Your machine will be safe here."

"That's very good of you, sir, but I don't want to be a nuisance..."

"Not at all." A deprecating hand brushed Tony's words aside. "You must allow me to offer you a little hospitality. They will tell you in the village that Karl de Marney is a recluse, a hermit. Yet I have not forgotten how to be host to a stranger within my gates."

As he spoke he led the way through the open French windows. The next moment Tony found himself looking curiously round a spacious room with dark panelled walls and heavy Flemish furniture, whose sombre tones gleamed in the flickering light of the pine log fire in the wide, carved fireplace.

THE room, with its atmosphere of the past, was in keeping with Karl de Marney's old world courtesy, thought Tony. He studied his host uncertainly, trying to place him. He might be French or Belgian, or even perhaps German. He possessed that elusive quality associated with the international type that belongs to no definite country or creed. And as he stood with the firelight on his handsome bearded face, he might have stepped out of a Van Dyck picture.

"If you will give me the necessary particulars I will telephone to Steenvoorde," Karl de Marney suggested, pushing a box of cigarettes across the polished table.

"I need not trouble you, sir," Tony protested, "I can telephone myself."

His host shrugged his shoulders.

"Unless you speak French well, it will be difficult for you to make the operator understand." He pulled up a chair and motioned Tony into its heavily-upholstered depths. "Make yourself comfortable, my friend. You must be cold and tired after your journey. Have you come far?"

"From England," explained Tony, unaware that he was being adroitly cross-examined. "I'm delivering a machine for my company to Steenvoorde aerodrome."

"Very well, I will convey to the aerodrome that you are delayed and that I am giving you hospitality for the night. You will perhaps give me your name."

"Crichton. Tony Crichton... but..."

"No protestations, please," smiled de Marney. "I shall be glad of your company. I am a lonely man. Now, if you will excuse me, I will telephone your message."

"Thanks awfully."

But Tony's careless smile changed to an expression of thoughtful contemplation as the door closed behind his host. Why had de Marney been so anxious to keep him away from the telephone? Slight suspicions were stirring in Tony's
brain. He was aware of the vague, indefinable sense of danger he had experienced on occasions during the War when some sixth sense had warned him of an enemy aircraft lurking behind a cloud or hiding in the sun.

With sudden decision, Tony rose from his chair and moved across the room, his footsteps falling silently on the thick pile carpet.

Cautiously he opened the door a fraction and stood listening. From behind the closed door of a room on the opposite side of the dim hall a voice drifted to his ears.

For some moments he did not recognise it as de Marney’s voice. It was different, harsh, imperative. The man was speaking in French, and Tony understood enough of the language to realise that he was being discussed in anything but friendly terms.

“Is that you, Max?” he heard that incisive voice saying. “Keep the landing light switched on to danger. Schwartz must not land when he returns to-night until I have given the ‘all clear’. Some blundering fool has landed in the grounds—if he is a fool. I am not sure of that yet. I’m keeping him here until I discover if his story of a forced landing is genuine or whether he is spying on our activities. Mais oui. I will deal with him if he is dangerous...certainement...”

Tony grinned and hurriedly closed the door. He had heard the warning click of the receiver as it was replaced on the hook.

He moved back to the fireplace, helped himself to a cigarette, and lit it thoughtfully.

“There’s something queer happening in this mausoleum,” Tony thought. “Machines are landing in the grounds for some purpose which that old fox is anxious to hide. Now I know why those ditches are filled in and the trees levelled. But what the devil is the game? And what am I going to do about it?”

The vague threat to his personal safety he had overheard a few moments before did not disturb him unduly. Life was pretty dull as it was, and a rough house would provide some welcome excitement.

But there was another Tony, an older and more level-headed Tony, who kept him in order when his Irish blood quickened at the prospect of a scrap.

He remembered his responsibility for the Gauntlet standing unprotected in the grounds. His first thought must be for the safety of the valuable machine it was his job to deliver to its destination.

He must try to remedy the trouble himself and fly on to Steenvoorde. He made the decision reluctantly, but he could not risk his job by indulging in a quixotic impulse to investigate whatever shady game his not-so-charming host was playing.

He went to the French windows and lifted the catch, but the windows would not open. Then he saw that they were locked and the key had gone.

Behind him the door opened quietly. In a wall mirror Tony saw de Marney watching him with narrowed eyes.

Some instinct warned Tony that a false move, at this juncture, would imperil any chance of escape he had. He was still very much in the dark, but he had a feeling that he would be wise to lull de Marney into a false sense of security.

Tony turned with a bland smile.

“Did you get on to Steenvoorde all right?” he asked casually.

His host nodded.

“I explained that you had landed in my grounds with engine trouble,” he answered smoothly. “I assured them that it was nothing serious and that you would be continuing your journey tomorrow morning. Now, will you come and dine? You must be hungry...”

CHAPTER IV

The Danger Signal

UNDER the mellowing influence of his third glass of Chambertin, Tony looked at his host across the table with its gleaming cut glass and silver and wondered if, after all, he were not misjudging him.

He had been regaled with an excellent dinner and still more excellent vintage
The shadow of the Fokker's wings swept across the Gauntlet's cockpit as it dived with full engine upon its opponent.
wine. And Karl de Marney, playing host with seeming frankness, had talked about himself and his affairs without any apparent effort at concealment.

Tony had learned that his companion was a research chemist who, during the War, had been engaged in the production of poison gases for the Allies.

Now he had settled down in the old chateau, to end his days in peaceful seclusion.

De Marney re-filled Tony’s glass and moved a box of opulent-looking cigars across the polished table.

“You may think it foolish sentiment on my part, but I wanted to be near the old battlefields,” he was saying in his pleasant, cultured voice. “I lost many good friends in the War and I feel that I am still near them.”

Tony helped himself to a cigar.

“He’s lying, of course,” he thought, “but he’s doing it damned well.”

“I happen to know this sector well,” observed Tony, in his best conversational manner. “In fact, my old aerodrome was at Droglands. Which reminds me, a queer thing happened to me this evening when I was flying over my old ’drome.”

“Indeed. And what was that?” inquired de Marney.

“I barged into a war-time Fokker, a good old D.7, that I never thought to see again except in my nightmares.”

Tony noticed an almost imperceptible expression flicker momentarily in his host’s pale eyes, something that might have been fear. The thin fingers toying with the stem of the wine glass were suddenly still.

Quite mechanically, Tony’s mind registered the fact that de Marney was frightened, that he knew something about the Fokker which, in some way, was associated with his mysterious activities.

“Really . . . that sounds incredible,” de Marney said, after a perceptible pause. “Surely you were mistaken?”

Tony proffered a bait, which he imagined his host would swallow hook, line and sinker if he were anxious to deny the existence of the Fokker.

“I might have let my imagination run away with me,” he agreed. “It was getting dark and visibility was none too good. . . .”

“I think I can offer an explanation,” de Marney smiled. “That machine only existed in your imagination. You were a victim of temporary self-delusion, no doubt attributable to the stimulus of war-time memories when you flew over your old aerodrome again. I know of many similar cases. . . .”

“Of the supernatural?” prompted an innocent-eyed Tony.

Inwardly he chuckled. “The resourceful old fox,” he thought, “he’s trying to convince me that I’m suffering from hallucinations.”

“Living near to the old battlefields as I do, I have heard many extraordinary stories,” de Marney continued impressively. “I have met ex-soldiers who are convinced that they have seen ghostly platoons of their old comrades marching at night along the roads leading to the trenches. Others have sat at this very table and told me with full sense of conviction that they have been awakened from their sleep by bugle calls which seem to come from the old rest camps, or the clanging of gas alarms. Many like yourself believe that they have seen aeroplanes flying over the Salient at dusk.” He paused, with a shrug of his thin shoulders. “I do not scoff at such things. They are inexplicable. Perhaps they are manifestations of the war neurosis which afflicts those of our generation.”

DE MARNEY’S hollow voice died into silence. The firelight threw flickering shadows on the dark panelling. Out in the darkness the night wind flung a flurry of rain against the window pane and Tony started, his nerves tensed by something more than the ghostly trend of the conversation.

He rose restlessly and went to the window.

“I don’t like this wind,” he said. “I ought to peg my machine down, or it’s likely to be damaged.”

This excuse for going out to the Gauntlet, and perhaps starting her up,
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had just occurred to him.
He wanted to get the machine away, while it was safe. He was conscious of a deepening feeling of suspense, as if the silent house held some hidden menace.

De Marney’s glib endeavour to explain away the existence of the Fokker had only served to confirm Tony’s suspicions. He had a feeling that it was not the first time his host had resorted to moonshine to evade awkward questions concerning the mysterious Fokker.

“I do not know if I have anything suitable for your purpose,” de Marney said.

“A few tent pegs and an old clothes line will do admirably,” suggested Tony, “if it is not giving you too much trouble.”

“Not at all.” Now that the conversation was diverted into safer channels de Marney seemed willing to be helpful. “I’ll see what I can find.”

He went to the door and, to Tony’s relief, closed it behind him. Alone in the room, Tony stood listening to the dwindling echoes of de Marney’s footsteps as he crossed the hall.

Then he moved quickly to the window and lifted the casement quietly. It was the work of a few moments to clamber out to the terrace beyond. Vaulting the low brick parapet, Tony ran to where the pale wings of the Gauntlet loomed through the darkness.

With dead leaves scurrying beneath his feet, Tony doubled through the coppice. Anxiety for the safety of his machine was uppermost in his mind, coupled with an uneasy conscience.

If he had not played the fool over Droglannts, chasing that mysterious Fokker, the Gauntlet would now be safe in a hangar at Steenvoorde.

As he emerged from the trees, Tony noticed an odd luminous glow rising from the grass near the wire fence that bordered the field. He swerved to investigate and next moment was staring down at a red glass panel let into the turf in a metal frame.

The panel was illuminated by an electric bulb. He noticed that it was a dual affair like a railway signal, with a green panel adjacent to the red. A simple, pivoted movement enabled either colour to be moved over the light chamber.

Memory of the enlightening telephone conversation he had overheard stirred in Tony’s mind.

“Keep the landing light switched on to danger. . . .”

Tony grinned as he bent over the frame and moved it in a half circle, replacing the red panel with the green.

“The mysterious Mr. Schwartz’s reactions to the ‘all clear’ signal may prove interesting,” thought Tony, as he made his way across the darkened field.

He clambered into the Gauntlet cockpit and examined the gadgets. Everything that could have remotely influenced the petrol supply seemed to be in order. It occurred to him that a comparatively simple air lock in the petrol feed pipe might have caused the trouble. And air locks have a habit of clearing themselves. He might be lucky.

He bent forward and switched on. Then, suddenly, he stiffened. The throb of an engine drifted from the darkness overhead, and Tony caught sight of the dark outline of an aeroplane circling to land.

CHAPTER V

The Secret of the Arrow

THE ‘plane swung down and made for the field, and Tony chuckled quietly as he saw that it was the Fokker. The green signal light had produced quicker results than he had expected.

“I’ve a feeling,” he murmured, “that this is rather going to cramp de Marney’s style.”

Through the trees he caught sight of a familiar figure moving across the terrace. Then he saw de Marney hurrying along the woodland path with every sign of agitation.

The Fokker came gliding in over the trees and, caressing the turf with a neat three-point landing, rolled to a standstill within twenty yards of the Gauntlet.

Tony wriggled down in his deep cockpit, and peered cautiously over the
coaming. He was not anxious to advertise his presence, especially as that simple manoeuvre with the landing signal promised to throw light on the things that had puzzled him until now.

He heard de Marney’s voice spluttering with rage as he came abreast of the Fokker.

“You fool, Schwartz ! Cannot you read the signal? It is set at danger....”

A protesting voice came from the Fokker cockpit.

“Hein... I can read the signal. Look for yourself, my friend. It is green, nicht war ?”

Tony suppressed a chuckle as he saw de Marney’s pale face register incredulous astonishment as he followed the pointing finger of the aggrieved Schwartz.

Unmistakably, the landing light over by the trees threw a green beam up into the darkness.

De Marney gasped.

“That idiot Max has blundered. An hour ago I telephoned the lodge telling him to keep the landing light at danger.”

“Danger!” rasped an uneasy voice from the cockpit. “Mein Gott!... do not tell me the police are here?”

“Calm yourself, my dear Schwartz,” murmured de Marney. “It is merely that I took certain precautions when a young fool landed his machine here to-night. I had to satisfy myself that he was not taking a dangerous interest in our activities. But I am now convinced that his story of a forced landing is true and that he is harmless. At the present moment he is probably helping himself to my vintage port and congratulating himself on having found so generous a host as myself.”

Tony, giving a painful imitation of a “V” strut in the cramped confines of the Gauntlet cockpit, cautiously eased his knees off the sharp edge of the instrument-board. So far he was safe. De Marney’s derisive picture of him guzzling old port was reassuring.

“Then it is safe for me to make another trip?” Schwartz questioned uneasily.

“Safer perhaps than your staying here, until I have made our young friend sufficiently drunk to snore harmlessly in bed. But you must be quick or you will not be back before daylight. Wait. I will send Max with the flechettes.”

De Marney turned away and Tony, peering over the coaming, watched his tall figure vanish into the darkness.

“Now what the devil does he mean by flechettes?” murmured Tony. In some dim recess of his mind a memory stirred, memory of a pitch black night in 1915 when he had marched with a column of infantry, foot-slogging their way up to the line past the notorious Hell Fire Corner near Ypres.

From the darkness overhead the faint drone of a high-flying aeroplane had drifted, heralding swift and silent death—not from machine-guns, for at that time Vickers and Lewises did not figure in the armament of aircraft, but death from flechettes, the slender steel arrows which, dropped from a height of several thousand feet, acquired the velocity and deadliness of bullets.

Tony had seen men stumble and pitch forward in the closely-packed ranks, killed or wounded by the steel shafts raining from the German ‘plane as it swept over the road.

Tony shook his head in puzzled indecision. This was 1937 and there wasn’t a war on, at least not in Belgium. Why, then, was de Marney monkeying with so primitive a form of aerial killing as the flechette?

Tony moved restlessly in the cramped confines of the Gauntlet’s cockpit. Inaction was getting on his nerves. He had a feeling that something unpleasant was liable to happen at any moment now. He had gained a brief respite, but it was probably only a matter of minutes before de Marney discovered that he had disappeared from the house. Before he did so, Tony was hopeful that the Fokker would take-off. He would do his damnest to follow it—if only the Bristol Mercury would obligé.

A movement beneath the trees attracted his attention, and he saw a man dressed in the conventional velveteens and gaiters
of a gamekeeper move from the porchway of a white-walled shooting lodge at the end of the drive.

"Our friend Max," mused Tony, "disguised as family retainer."

Whatever the game de Marney was playing, he was clever enough to conceal his activities behind an apparently well-ordered establishment.

The man in leggings came across the field, a powerfully-built, bearded individual whose unprepossessing appearance increased Tony's disquietude.

As the newcomer paused beside the Fokker, Tony's thoughtful gaze rested on a strange cylindrical drum he was lifting over the edge of the cockpit. As it tilted, Tony saw the reel of flechettes packed in the cylinder in a circular series of grooves.

He strained his ears to catch the drift of the muttered conversation as the bearded man spoke to the Fokker pilot, but the words were inaudible.

The man addressed as Schwartz was groping in the cockpit. At length his head in its dark leather helmet reappeared, and he handed out a cylinder similar to the weightier one he took from his companion. Again he dived into the depths of the cockpit.

The manœuvre was simple for Tony to follow. The Fokker pilot was fitting a freshly-primed cylinder of flechettes into the well of the fuselage.

"But what the devil is the gadget for?" pondered Tony.

He saw a flechette glint in the pilot's hand when, for the second time, he straightened in the cockpit. He unscrewed the blunt end and, tilting the detached cup of metal, allowed some whitish powder-like substance to drop from the hollow interior into the palm of his hand.

A puzzled Tony heard the bearded man laugh.

"Dutch courage, eh. . . . Schwartz?"

The pilot grinned with a curious glassy stare. Tony saw him crush the white crystalline powder in the palm of his hand with his finger tips and then brush them across his nostrils with the characteristic gesture of a drug addict.

CHAPTER VI

The Dope Runners

With a sudden gasp of shocked enlightenment Tony awakened to the partial truth. Cocaine was packed in those hollow flechettes.

Obviously he had stumbled on an ingenious method of drug smuggling. Those drug-filled flechettes could be dropped from the 'plane when it flew at a low altitude over carefully selected localities such as the secluded grounds of the chateau.

Anger stirred in Tony. So this was the sinister design cloaked by de Marney's pose as a benevolent seigneur. He was drug smuggling with the aid of the Fokker, which no doubt was considerably more efficient than its war-time prototype. His imagination sketched in the obvious details. Fitted with long distance petrol-tanks and with modern night-flying equipment, the Fokker could carry out nocturnal flights from that strategical point over the frontiers of Germany or Holland. Even the eastern counties of England would not be beyond its range.

But why use a war-time Fokker? Memory of de Marney's moonshine provided the clue. It was all part of a clever blind. Flying high at night over the old war areas, it was possible, for a time at least, to conceal the Fokker's identity behind the legendary stories of ghost machines that were said to haunt the battlefields.

Tony did some quick thinking. He realised now that he was up against crooks who most certainly would not be too scrupulous in finding a means of silencing him if they discovered the extent of his knowledge.

He tensed suddenly as he saw an ominous figure running along the path beneath the trees.

It was de Marney. He heard him shout, and it did not require a great deal of imagination on Tony's part to realise that his disappearance from the chateau had been discovered.

Fortunately, de Marney's warning shout from the coppice did not reach the Fokker pilot. At that moment he opened
out the Mercédès, and its thunderous roar blotted out all other sounds as the single-seater swung into the wind and took-off.

Tony bent forward and adjusted the throttle with unsteady fingers. Then throwing caution to the winds he sprang down from the cockpit and dived beneath the lower wing.

He gave a hefty heave on the prop. To his joy the Bristol Mercury spluttered and then with a purr of valves raced into life. As he had hoped, the air lock had cleared itself.

He raced for the cockpit and next moment he had his foot in the metal stirrup of the moving machine and was hauling himself into his seat. His feet groped for the rudder-bar and he jabbed open the throttle. The Gauntlet leapt forward with a throaty roar.

Tony caught a fleeting glimpse of de Marney’s distorted face, as the man threw himself flat on the grass to escape the Gauntlet’s spinning wheels. Then he pulled back the stick, his eyes fixed upon the Fokker now climbing up over the trees. In a matter of seconds the powerful Gauntlet closed up the distance between the two machines, and now Tony saw the pilot’s head turn as he threw a startled glance back at the thundering fury streaking in his wake.

The Fokker’s nose rose steeply, and with a flick half-roll it came straight back at its pursuer.

It flashed through Tony’s mind that the drug-crazed pilot meant to ram him. He stood on the rudder and slammed over the stick. The screaming Gauntlet cartwheeled into a vertical bank and the Fokker streaked past his tilting wing.

Tony saw the scout rock in the fierce backwash of the Gauntlet as he fanned round to fasten on its tail.

The old joy of combat stirred his blood. Instinctively, his fingers groped for the gun-grips, and then he laughed a little wildly as he realised that he had no guns. He would have to rely on the Gauntlet’s superior performance to force the Fokker pilot to land outside the chateau grounds and, if possible, near the village, where he could quickly enlist the aid of the law.

The Fokker’s tail assembly leapt into his line of vision at an alarming rate. He grabbed at the throttle, easing the Mercury’s revs. in an endeavour to level up the speed ratios of the two machines. In this strange duel the tearing speed of the Gauntlet was disconcerting and for the moment it was blurring his judgment.

He had overshot his quarry again and he throttled back, his head swivelling in search of the Fokker whose green-grey wings, even in the cold clear light of a full moon, blended all too well with the night sky.

Then he heard the sudden roar of the Mercédès above him and the shadow of the Fokker’s wings swept across his cockpit as the scout dived with full engine to overtake its faster opponent.

Tony lifted his head, momentarily puzzled by the pilot’s tactics. Next moment grim enlightenment came. There was a screaming swish close to his head, and something bit deep into the cockpit edge with an ominous twang.

Tony recoiled as he saw a steel flechette quivering in the padded rim, and instinctively he ducked as another deadly metal arrow slashed past his shoulder and, gaining impetus in the slipstream, tore through the fleshy part of his arm. But he scarcely felt the pain in his fury at this dastardly attack.

He saw the Fokker wheeling to dive on him again, yanked back the stick and rocketed skywards, grimly aware that to allow the Fokker to get above him would bring a deadly stream of flechettes raining down into the cockpit.

He dived and pulled out into a tight bank directly over the wavering Fokker. He saw the pilot’s pale face peering up from the shadowed cockpit, and he bent over the side of the almost vertical Gauntlet and jabbed his arm downwards.

The Fokker twisted and turned, trying to escape. It was a hopeless effort against a machine of the Gauntlet’s flexibility and speed, and Tony had no difficulty in following the Fokker’s every manoeuvre, his wheels threatening its centre-section as he forced it to give way with the threat of collision.
At last the hard-pressed Fokker dived, the roar of its Mercédès dying away as the pilot put his nose down towards a darkened field. Tony hung on warily, foxing the machine to earth.

His eyes were watchful as the Fokker flattened out over the field. Then the sudden booming roar of the Mercédès warned him that the pilot was opening out to hedge-hop in the hope of shaking him off in the darkness.

Tony's hand clenched on the stick. His arm was throbbing painfully. Down went the Gauntlet in a screaming dive, across the single-seater's bows. The Fokker wavered and the nose dropped with a jerk, as Tony had often seen Fokkers whip out of control with the loss of flying speed.

The pilot had sufficient height partially to pull out of the stall, but the ground was too close for escape. The undercarriage hit the turf and disintegrated into a cloud of splintering spars. The Fokker spun on to a crumpling wing and cartwheeled to destruction.

Tony came down low and circled the piled-up 'plane. He saw the pilot crawl from the wreckage and stumble to his feet, and knew that he was not badly hurt.

"You can do your damndest to get rid of those incriminating flechette," muttered Tony. "But, thanks to your blood-thirsty methods, my lad, you've handed me all the evidence I want."

He winced with pain as he drew the drug-filled flechette from the jagged tear in his sleeve. Tossing it into the cubby-hole on the dash, he opened out the Mercury and swung the Gauntlet on to its long-delayed journey to Steenvoorde.

"Of course, de Marney made the mistake of putting over a little too much moonshine concerning that Fokker," laughed Tony Crichton when, the next day, he related his strange adventure to an interested audience in the pilots' room of the Essex aerodrome.

"It just didn't wash with an old war-time pilot. As if I didn't know a ruddy Fokker when I saw one! Otherwise, I might never have realised that I had dropped into a hornet's nest when I forced-landed in the chateau grounds. The police made some enlightening discoveries when they raided the place, although they were mighty shy of my story at first and I must admit it sounded pretty incredible. . . . de Marney"

"Of course, de Marney was running a clever air smuggling scheme for a European drug ring. When the police arrived they caught the Schwartz-Max combine busy destroying every paper they could lay hands on, but they weren't quick enough and there was ample evidence left to round the whole gang up. Old Schwartz, it seems, was an ex-war pilot of some repute and he certainly could handle D.7! Apparently the poor devil had become a drug addict and, to obtain his dope, he'd sold himself to the syndicate."

"And de Marney?" questioned Powell, the senior pilot, from the depths of his armchair.

Tony reached for a cigarette with his unbandaged arm.

"A case of poetic justice, I think. De Marney was watching my scrap with the Fokker over the chateau grounds when a flechette dropped from the Fokker intended for yours truly. It went clean through De Marney's head and killed him instantly. In fact, one might say that he died through an error of judgment on the part of the pilot!"

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**IN NEXT MONTH'S ISSUE**

Grand Long War-time Adventure Story of the Coffin Crew

**TARTAN FLIGHT**

By ARCH. WHITEHOUSE

Other Contributors to this Outstanding Number include

A. H. PRITCHARD — RUSSELL MALLINSON — J. H. STAFFORD — HUGH STANDISH

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A diagrammatic sketch showing the pilot's cockpit, armament and principal fittings of the Gloster Gladiator. Four-gun fighter of the RAF, which has a top speed of 200 m.p.h. and reaches 20,000 ft. in 9½ minutes. Drawing by S.O. Bredin.
STORY OF AN AIRMAN

The Rumpler turned slowly over and, nose vertical, disappeared into a cloud

In War and in Peace there was One Blind Spot in Billy Marslow—One Queer Defect in the Make-up of an Otherwise Perfect Airman

By HUGH STANDISH

CHAPTER I

The War Birds Meet Again

UNDER the control tower at Lyon was where I met Billy Marslow again. I had wrangled a few days' leave from my paper, borrowed a Moth, and was en route for Monaco and the motor races.

From the restaurant on the ground floor of the control tower I saw a smart-looking Monospar carrying British registration put down with finished neatness.

I was still wondering idly who might be in her when the swing-door from the tarmac opened and a hard-faced woman came in escorted by Billy.

He looked almost the same as he did in the days of the old scout squadron, save for a little grey about the hair and a few lines of worry about the eyes.

Those war-time friendships seldom lasted. But Billy was too genuine a soul for ours to peter out. His face lit up as he caught sight of me. He found a table for his companion and a waiter to take her order, then came across to me.

We were back on our old footing instantly.

He had had, I gathered, a pretty thin time during the bad years of aviation after the war. Yet he had acquired a wife and two children, of whom he was inordinately proud, while drifting from
one joy-riding outfit to another, always trying to break into bigger fields, and always being prevented by the ill-luck that dogged him so persistently.

Now, however, he had hopes of better things. The hard-faced woman was employing him on a stunt which might make him known, a record-breaking flight to somewhere or other.

Over his shoulder I had been aware that she was registering displeasure. I mentioned it to Billy.

"You’d better come over and be introduced," he said nervously. "Then I can talk to you a bit longer."

At first she was inclined to look down her nose at me, but became distinctly cordial when she learnt that I was connected with the Press. I knew her type—the vain and giftless seeker after notoriety, though that’s not what they call it.

However, I was carefully polite, for Billy’s sake, though very soon I had to leave them. I intended to park my machine at Cannes and, as I had no radio, I wanted to be over the hills before dark.

Billy came with me to the servicing place after I had collected my log-book from Control.

I started the engine and, leaving it to warm up, climbed out of the cabin for a few last words with Billy.

They were to start from Marseilles on this stunt flight of theirs.

I had tried to get some information out of him about the hard-faced woman, but he was as staunchly loyal as ever, which, of course, led me to guess that the woman was a dud pilot and worse navigator.

I grinned at Billy as I asked him: "Who’s the navigator?"

He grinned back, unembarrassed.

"I can navigate now," he answered.

Somehow, the way he said it told me a lot; a grim facing up to the one point on which he was weak—and mastering it.

"Good luck, Billy. Let me know how it pans out, if I don’t see it in the headlines."

Flying down the Rhone valley, I thought a lot about Billy Marslow.

We had first met on Salisbury Plain, both of us “huns” at the Netheravon station of the C.F.S., and both wildly enthusiastic about getting into the air.

Billy was lately down from some public school, very much the old school tie sort, but thoroughly genuine.

I had just been seconded to the R.F.C. from an overseas battalion. We were room mates in a hut, the rest of whose occupants were hard-bitten types from overseas.

With the exception of Billy, who was to some extent persona grata with them, we were in perpetual hot water with the officers in charge. They were mostly Army men who had early found that this war wasn’t quite what they expected it to be and had managed to insinuate themselves into the comfortable jobs of the R.F.C.—adjudants, gunnery instructors, and the like.

They were very keen to let us know what little officers and gentlemen they, the regulars, were, and how terribly short we fell of the high example they set us. Heaven knows, they were right. The overseas crowd in that hut were tough men to deal with. Yet most of us had handled men with no Army Act at our backs, and in places where ran precious little of the King’s writ.

We were kept hanging about for days, during which we imbibed all the gossip that circulated about the R.F.C. and the war in the air; what a great scout the two-seater F.E.2b had been, but how it was now being replaced by single-seater Pups, One-and-half Strutters and some French machine called a Spad. And Billy was terribly keen to fly scouts, which, according to the R.F.C. of those days, were reserved for the aristocracy of pilots who had “Hands” and “Feet.”

It turned out that Billy was well equipped with both these corporeal extremities as well as with a perfect sense of judgment—but he had about as much sense of direction as a bat in the sunlight.

One morning he received some dual instruction on a Shorthorn, made a few
good landings, and in the afternoon was launched solo.

Those were the days when writing off a few "huns" was no particular concern of anyone's so long as the weekly output of "pass-outs" was kept up.

Billy took her off nicely enough and flew steadily east, mindful of the injunction not to indulge in any foolhardy turns until he had gained height. After a little time, he did a few turns to have a look at the aerodrome and, of course, saw nothing. So down he put his Shorthorn, as near as you please, in the centre of an infantry parade-ground. There a fellow with a map told him how to fly back to Netheravon. So he took-off again and flew another fifty miles or so farther east.

But why go on? He finally arrived back at sunset after making a number of other landings to inquire his way and re-fuel.

Now, in the Shorthorn, you sat up high above a flimsy undercart of struts and wires that broke up on the slightest provocation. So that Billy's performance in landing anywhere, time after time, on his first solo flight, yet bringing his flying mattress back intact, was no mean accomplishment.

But two hours' solo on these craft was the allotted time for each "hun," and Billy had used four. It was a crime of the greatest magnitude, and our little runt of an Adjutant vented his spleen on him by voting him useless for scouts.

Poor Billy! It is better to pass over the scene in our room that night. He cherished a secret ambition to become what was afterwards known as an "ace."

Marked for "art. obs." he passed on to Upavon, the advanced training station of the C.F.S.

By virtue of keeping my mouth shut with my instructor and the flight commander, as well as possessing a good sense of country and moderate hands and feet, I was recommended for scouts and, within the next few days, had followed Billy to Upavon.

There, his superlative touch in handling a 'plane, combined with that old school tie manner, got him recommended for scouts again. We wrangled a room together.

CHAPTER II

Solo on a Shorthorn

They were not bad, those days at Upavon, while they lasted. Amusing, too.

I remember Gordon Bell, of stuttering fame, taking-off one day in a Shorthorn with an overseas "hun" who lacked the gift of turning the other cheek when reprimanded. A few minutes later, those on the tarmac were electrified by a Shorthorn careering madly along with not a hundred feet in hand. In the nacelle, regardless of controls, pupil and instructor were standing upright, obviously slinging each other for all they were worth. The subsequent repairs were not very extensive.

Orlebar, of High Speed Flight fame, was there, too, learning to fly, and young Rhys-David, newly down from Eton, a fine lad and a very gallant one.

In due course we flew dual on 2c's and Avros. There was no Gosport system of instruction with 'phones and set procedure in those days! You climbed into the front seat and when your knees were banged by the stick you took over—or, rather, you gingerly placed your hands and feet on the controls and prayed that the instructor, who, ten to one, was still hanging on like grim death, would not class you as "'heavy."

A knock from the stick on your left knee meant that you were to turn left, and so on.

After landing, if a grunt came from the back seat you gathered you were doing all right. If you weren't—well, it wasn't exactly a grunt you heard.

After a while, we flew Martynsides solo, gained our wings, and were posted to a gunnery course at Hythe.

A few days later, Billy came into our room and slung his camera-gun films on to the table.
"I've got the hang of this game," he said.

Every picture was good, whether dead in the centre for a tail sitter or in the rings for a crossing shot. And, mind you, this had to be done while you were kneeling in the front seat of a 2c and shooting your film over the head of the pilot.

Billy's score at the butts was equally good.

After that, we were posted overseas to No. 2 Depot at Candas, where we picked bits of wire off crashed machines and were less than the dust until, by a spot of soft soldering on my part, we were posted to the same scout squadron and became men again.

But I was worried about Billy's navigation, or whatever it was called in those days, for he could still lose himself on a clear day.

I determined to keep an eye on him. Fortunately, this was made easier for me by a new order which ordained that the machines trailing behind the flight commander should fight in pairs as far as possible. Billy was my opposite number.

During our first O.P. I became aware that something was afoot by the absence of "Archie" and by the fact that the flight had disappeared—with the exception of Billy, with whom it had suddenly become the devil of a job to keep formation.

Of anything else in the whole sky I saw nothing.

Then Billy spun round in an ultra-quick turn. I saw tracers leap from the nose of his machine just as I heard the crackle of bullets around my own 'plane. He had taken a Hun off my tail.

After that he started to climb steadily in one direction, while "Archie" started again. In a few minutes he had led me back to our flight commander.

In short, I learnt that Billy, in addition to handling and shooting a 'plane, had that rare quality in a beginner, eyes behind his ears. It was clear that he had all the makings of a first-class air fighter.

Yet, when our flight commander gave us the "nothing doing" signal (in those days this was often given just on the line) Billy settled down comfortably to fly straight to Berlin, until some frantic wing waggling on my part induced him to follow me for a change! A queer blind spot in the otherwise perfect make-up of an air fighter.

Then the enemy retired to the Hindenburg line, leaving us a waste of twenty miles to fly over every time we went up to the line. I watched Billy closer than ever, and thus saw him get his first Hun.

We were on a line patrol, just the two of us. Suddenly he waggled his wings at me and dived. I followed, though I had not seen anything. I had nothing like his perfect sense of speed and distance, and was still floundering out of range when he closed at some two hundred miles an hour with a diving Rumpler.

For perhaps ten seconds he held his position fifty feet behind and under that Rumpler's tail. Then the Hun machine turned slowly over and, nose vertical, disappeared into a cloud. Billy said, afterwards that he could see his tracers passing into gunner and pilot.

But he got no credit for it. Instead we both received a lecture on how easy it was for new people to imagine that they had shot down an E.A. when it was, in reality, only dodging them.

No ground observers confirmed it, and no wonder. I did not explain that Billy had led me some five miles across the line under the impression that he was doing a line patrol.

That evening some of us got leave for Amiens. To my surprise Billy, who was an abstemious fellow, said he'd come.

"Want a haircut," he explained.

The next morning I got a shock. His head was close-cropped, and the result, together with his round face and light colouring, would in Germany to-day have given him a clean card as a pure Nordic.

"Might be useful if one was shot down across the lines," was all the explanation he gave.

Then what I had been fearing happened. I lost Billy on patrol. We had
our first meeting with the circus which had lately moved down to our part of the line. It was a tough scrap, and at the end of it there was no Billy.

I had little fear that he was a casualty—he was too good a fighter for that. But I had every fear that he had flown well and truly into Hun-land this time.

The few Huns that had been brought down were duly confirmed and apportioned. Billy was posted as missing.

Two days later we received a message from the French farther south:

“For your information and necessary action have captured enemy espionage agent in British machine. Claims he belongs to your squadron.”

The C.O. got Billy out and gave him precise instructions as to how to fly back to us.

Again there was a lapse of two days. Again Billy was posted as missing.

Then from the Portuguese, of all people, came the news:

“Have captured enemy espionage agent, etc., etc.”

The remarks of the C.O. as to what he’d do to Billy when he did get back were lurid in the extreme. Once again Billy was released and took the air. He landed at Candas, fifty odd miles away, lost again.

That finished him. He hadn’t been in the squadron long, and I, alone, knew what type of man he was. The C.O. certainly did not, and poor Billy was sent home in disgrace.

I was put in my place properly for the home truths I told the C.O. and the Adjutant—and was very nearly sent after Billy for insubordination.

CHAPTER III
A Matter of Identity

After that, we were moved north for what turned out to be the Messines Ridge show. Our C.O. killed himself in a crash, and in his place we got a martinet just off Brisfits. By keeping my eyes open in the air and my head cool, I got my flight; certainly not by virtue of the Huns I had to my credit or my ability to get them. I had none of Billy’s gifts.

One morning before dawn, we were standing by for the big explosion—not that we knew it, it was well hushed-up—when out of the darkness a tender rumbled up.

Through the crowd of dim forms grouped around the machines I became aware of someone pushing his way. I turned, and there was Billy!

Somehow he had wangled it, or perhaps someone of importance at home who knew men had dealt with him.

I had hardly realised it was he when Messines Ridge went up and, like a great organ, the barrage filled the air.

Our time was up. I took-off with my flight for what turned out to be an uneventful patrol.

That evening we talked.

“You remember that last show, when I lost myself,” said Billy. “I got my first flamers then—two of them.”

I swore bitterly to myself and at the pilot, whoever he might be, who had got the credit for them. Of course, nothing could be done about it. But I promised myself that Billy should stay in my flight until he lost himself for good and all.

I needed him—a splendid fighter with hands, feet, judgment, and eyes at the back of his neck. Though how I should ever be able to recommend him for a flight when the time came I could not see. There was still that amazing blind spot in his make-up.

The usual life of a fighter squadron kept us busy for the next few weeks. Billy was invaluable to me, though actually he got no credit for any Huns during that time. But, by his quickness and keen eyes, he handed Huns on a platter to the rest of us.

To illustrate my point, if you see a Hun sitting on the tail of one of your men it is useless, unless you are very well placed, to try and get on his tail. It will be all over long before you succeed. You have to get your gun bearing on him in any way you can to upset his aim.

Three times in one dog-fight I saw Billy break away from a Hun with whom
he was flying circles and let loose, on a
pure crossing shot, at an E.A. that was
well on the stern of one of our men,
who was likewise on the stern of another
E.A. And, in each case, the machine
Billy was shooting at had to spin down
quickly and leave our man to get his
Hun.

Those who know what a crossing shot
is—and we had only a single gun in
those days—can gather how accurate
Billy's shooting must have been to make
those Huns even realise that they were
being shot at, quite apart from the fact
that his tracers must have been in or
around their cockpits to make them break
off a fight and go into an immediate
spin.

But, of course, none of that counted
with the C.O., though I think he was an
able judge of men and realised that
he had something good in Billy.

But that blind spot was to prove too
much for us.

We were moved farther north—
Passchendaele was beginning to
brew—to an aerodrome back of Ypres.

Balloon "strafing" was now the
rage. Billy got his turn on a fine clear
day, and his version had better come first.

Off he went, climbed above the clouds,
and, through the gaps, located the ruins
of Ypres.

He circled a few times, spotted the
long line of balloons, clenched his teeth,
put his nose well down and in due course
shot down his balloon. There wasn't a
shot fired at him as he regained the
clouds. Back to Ypres he flew, marveling
that balloon "strafing" should prove so
easy.

At Ypres he circled round a few times
to pick up his bearings, and then flew
home.

Our version was slightly different! Ab
above our mess-tent was a tree in
which we had made a sort of lookout.
From it, we could see in the dim distance
the Hun balloon line.

Some of us were up there watching
for Billy's balloon to go up, or rather
come down, when—

Tut-tut-tut-tut—

Right above our heads, it seemed;
and that was where our own balloon line
appeared to be. And, sure enough,
down came one of them in flames, the
observers jumping for their lives.

About two minutes later all hell was
let loose on the wires.

"One of your blank—blank—blankety
machines has shot down one of my
balloons!"

From balloon section to brigade, from
brigade to squadron and then right back
to G.H.Q. raged the battle of Marslow's
balloon. The C.O. stoutly refused to put
him under arrest until he had seen the
Brigadier. Off he went in the squadron
Crossley, full of determination not to let
Billy go.

Of course, as soon as Billy told me
about his circling around Ypres above
the clouds I knew what had happened.
He had no idea which was north and
which was south; and the markings
on our balloons were not so obvious.

In the meantime, I had to take up my
flight on O.P., and Billy came along.
It proved a heavy day, Camels, Spads and
S.E.'s mixed up with Pfalz and Albatri.

We came back two short, the absentee's
being Billy and one whom we will call
Smith. Little by little the stories were
sorted out. Then the ground observers' reports began to come in; about an
amazing scrap miles into Hunland just
below the clouds. It had been too distant
to observe accurately and the machines
had been in and out of the clouds, but,
as far as they could tell, a number of
Albatri had tried to down a single British
machine—of our squadron type. But
he downed four of them before he was
shot down himself.

Then from up the coast came news
that Billy was returning. This time he
had the sense to fly north and then west
along the sea. So, by process of elimina-
tion, Smith was the hero of that fight
far into Hunland.

Talk about the affair soon fizzled out.
The C.O. returned with bad news for
Billy. There would be no court martial,
but back to England he was to go with
a black mark against him.

I met Billy on the aerodrome when he
landed. I couldn't help noticing that he had his tail well up. But I was full of my bad news. I staved off the moment by telling him of Smith's end and how he had been recommended for a posthumous D.S.O. Billy was silent after that, and rather pale.

Then I broke the bad news. He said never a word, but went off to his tent. He did not speak to me again or to any of us before he left.

CHAPTER IV

The Quiet Birdman

WAR changes men inevitably; some it sours, some it breaks, and a very few it welds into something mighty fine.

The war had this effect on Billy Marslow, that it changed his simple ambition to become an ace into a grim determination to pull his full weight in the war irrespective of self.

And the queer thing was that, in transferring him from the field where his abilities might have had full scope, the authorities unwittingly gave him the chance to pull his weight far better than he could ever have done over the lines.

He was too good a pilot to send into the infantry, so they sent him to one of the new fighting schools as an instructor. But at Bolo House they still had that big black mark against his name.

Late in the year, I, and a good few other flight commanders in scout squadrons, began to feel his influence. Every now and again along would come a young fledgling who would take-off on his first patrol with an air of assurance unusual in his kind.

The first that came my way was flying second on my right on his first O.P. with the fifth man watching his tail.

To the east there were several large formations of E.A. with height in hand. We had a sharp encounter with a flight at our own level which we met head-on.

They turned east under the protection of their own formations. I looked back and around, searching the sky for my new man, whom I expected to be lost. There he was flying inside my wing, the first man some thousand feet below climbing to join us. Thankfully I continued to fly south, keeping my eye on the formations to the east in the hope that some of our own formations might come along with sufficient height to bring the E.A. down to our level. I was on the line, and the afternoon sun was lighting up all those craft in the east. As for the west—well, I was on the line and Huns did not fly west of that, not scouts, anyway.

*Tut-tut-tut!*

I jerked around. There was nothing on our tail. But there was my brave new man waggling his wings at me. He had loosed a few rounds to distract my attention from the east. From the west a formation of E.A. was diving on us.

I did the usual thing, turned right underneath them, so that they would have to stand on their noses to train their guns on us. This they did and, of course, misjudged, giving us a chance to fight at our own level.

I had my eye on the new man. There he was, flying circles with an E.A. Nothing came of this as a rule, so I left the pair of them and joined the others, who were in a bit of a jam. That righted itself by the Huns spinning out of it with my men after them, and I returned to the new man and joined the merry-go-round. That sent his E.A. down in a spin.

But after him went my new man, not diving, not spinning, but in a wide, steep, spiral dive which loses height better than anything and gave him a full view of his man and complete control to join the fight again immediately the other came out of his spin.

He did it, too. And got his man.

I congratulated myself upon acquiring a top-notch'er.

But he wasn't. He was just a good, average pilot, but, before arriving in France, he had been presented with the knowledge and experience that others only gained after weeks.

It wasn't until I had had one or two more like him that the similarity struck me. I questioned them.

Yes, they had learnt fighting under one,
Marslow; no, they didn’t like him much. He had put them through it too thoroughly.

Young blighters! They owed him their lives—for as long as they had them, that is.

And so it seemed that, to his other gifts, Billy had now added that rare one of being able to impart air tactics to novices.

I wrote to him, of course, telling him how much he was doing. So did one or two other flight commanders out there, but most of us were young and very occupied with our own jobs, and did not worry.

And that was about all the acknowledgment Billy received for his share in the Great War.

After it was all over, I met him again. He had recovered some of his enthusiasm, but of old times he would not speak. Years afterwards I discovered why.

I was attending a meeting of fighting pilots from both sides, and most of us had brought our war diaries. One of the Germans told the story of an amazing scrap miles behind the line back of Ypres.

A solitary British machine of our squadron type was attacked by a number of Albatri. He was trying to dodge them, when out of the clouds fell a regular demon of the same type. This chap shot down four of the Albatri. They couldn’t touch him—that bunch of E.A. Then the man he was attempting to save got into a proper jam and was shot down. Another flight of Germans had joined in. The remaining English machine evaded them with supreme skill and climbed into the clouds.

We compared our diaries.

There could be no doubt—it had been Billy.

Near the end of my short holiday at Cannes something in the headlines of a French paper caught my eye. I bought a copy.

From it I learnt that disaster had overtaken the famous airwoman whom I had met at Lyon. After long hours in charge of the craft, she had, stated the report, handed over control to her assistant pilot while she had a short sleep. And while she slept he had crashed. They were returning by Air France.

Hell’s Bells!

I took-off straight away, and within an hour I had landed back at Marseilles. By judicious inquiry I learnt that the Air France craft on which they were travelling would arrive there that evening.

In due course her lights showed from Barcelona way and after the Customs had finished with them I managed to disentangle Billy from the famous airwoman and took him over to the one-horse restaurant. There, over a bottle of wine, I put him through the third degree.

But he would tell me nothing. As in the old days, some distinctive sense of private and personal honour would not allow him to tell the truth. But I am a newspaper man and I learnt more than he realised.

Of course, the story had been trumped up. Billy had held his course well and truly until there had been nothing to do but follow a coast line in clear air. Then he handed over to the famous airwoman while he took a short sleep.

But short though it was, it was just long enough for her to run into a trifle of haze, get off course inland among mountains and clouds and lose both her head and her nerve.

Flying blind, Billy immediately put the craft back on its course. He had to guess what had happened. The woman was past speech.

But it was too late. They struck a hillside and were lucky to escape with their lives.

The only true part of the original story was that he had been flying when the craft crashed.

I tried to show him what a fool he was to let the woman damage his professional reputation by shifting the blame on to him, but he just grinned at me.

Billy will be the same to the end. The last I heard from him was an enthusiastic description of a new air line with which he had just joined up.

I knew a little about the directors. They were staunch believers in the chauffeur status for air pilots.
A FAMOUS WARTIME SEAPLANE

A Description of the Short N.2b Patrol Seaplane of 1918, with Full Instructions for Building a Scale Model

By JAMES HAY STEVENS

It was in 1913 that the firm of Short Brothers revolutionised the uses of the seaplane by inventing the Short Patent Folding Wing. By the introduction of this feature, it became possible to stow fairly large aeroplanes on board ships of the Fleet.

During the War several variants of the early "Folder" seaplane, all essentially similar in design, were produced, and all were extensively used by the R.N.A.S. Most of these models were unofficially known by the power of their engine: e.g., the Short 225 and the Short 320, which had the 225-h.p. and 320-h.p. Sunbeam engines respectively. Quite early in the War, a Short seaplane succeeded in staggering into the air carrying a torpedo. Later, torpedo-carrying seaplanes were extensively used in the Dardanelles, where at least one Turkish transport was sunk by a torpedo dropped from a Short. A Short 225 also had the distinction of being the only seaplane to have been used for "spotting" during a naval engagement. This machine was flown at Jutland by Lieutenant Rutland with Assistant-Paymaster Trewin as his observer, and, while under heavy fire from the enemy, carried out very important work identifying the opposing warships, thereby earning high praise from the late (then) Sir David Beatty. Besides these more sensational performances, Short seaplanes formed the backbone of the R.N.A.S. equipment for the North Sea patrols from shore stations and for the eternal convoy work of wartime.

Pilots appointed to fly Shorts from one of the North Sea air stations at first considered themselves lucky, as the machines were pleasant to fly and were fitted with large and comparatively com-
ftordable cockpits. The big seaplane was usually escorted by one or two Sopwith "Schneider Baby" scouts. However, the inevitable snag cropped up when it was discovered that, owing to their high undercarriages and consequently large airscrew clearances, the Shorts continued to do patrols when the weather kept all other seaplanes at their bases. It must have been a dismal business flying far out over the North Sea in a single-engined seaplane, often without wireless—a frail craft which had only the faintest hope of survival if forced to alight in anything like dirty weather.

**Constructional Features**

All the Short seaplanes were the same in general lay-out, so that the N.2b may be taken as a typical example. They were all large aeroplanes, with a span of about fifty feet. All had twin float undercarriages with tail and wing-tip floats, and they were also distinguished by the fact that the observer alone was armed; he had a Lewis gun on a Scarff mounting. Improvements in the N.2b were a neater undercarriage, fairied wing-tip floats, a more compact centre-section radiator, and lift-struts, in place of a maze of wires, to support the overhang of the upper main planes.

The main planes were of wood construction with steel tube compression struts, wire drag bracing and wire trailing-edges, covered with fabric. The top plane was flat, while the lower had considerable dihedral. The wings folded about hinges at the roots of the rear spars. The fuselage was a fabric-covered, wire-braced wooden structure. The pilot sat in front under the centre-section, with his observer ensconced some five feet behind him. The observer had his Scarff ring and Lewis gun—that, and the bomb load, being the only armament provided. The engine was a 275-h.p. water-cooled Sunbeam-Coatalen "Maori." The radiator was mounted in the centre-section, with the petrol-tank just behind it.

All the floats on the N.2b were made from mahogany; in the earlier machines the wing-tip floats had been wood and fabric cannisters. All struts supporting the floats were of steel tubing with wooden streamline fairings. The tail-plane, fin and balanced rudder were of very large area.

The N.2b was a 1918 design and, as such, was the result of four years' experience with seaplanes under the exacting conditions of war-time patrols. Naturally, it incorporated all the lessons learnt, and represented a distinct advance in performance on its predecessors. Bearing this in mind, the following figures are interesting:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight, empty</td>
<td>3,050 lbs.</td>
</tr>
<tr>
<td>Disposable load apart from fuel</td>
<td>1,170 lbs.</td>
</tr>
<tr>
<td>Weight, loaded</td>
<td>4,800 lbs.</td>
</tr>
<tr>
<td>Duration</td>
<td>4½ hours</td>
</tr>
<tr>
<td>Tank capacity</td>
<td>70 gals.</td>
</tr>
<tr>
<td>Maximum speed, sea level</td>
<td>90 m.p.h.</td>
</tr>
<tr>
<td>Maximum speed at 10,000 feet</td>
<td>88 m.p.h.</td>
</tr>
<tr>
<td>Climb to 5,000 feet</td>
<td>12½ mins.</td>
</tr>
<tr>
<td>Climb to 10,000 feet</td>
<td>40 mins.</td>
</tr>
</tbody>
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**HOW TO BUILD THE SCALE MODEL**

**Materials, Tools and Methods of Construction and Assembly**

In order to conform with the other aeroplanes modelled in this series, the side elevation drawing reproduced on page 188 is drawn to a scale of $\frac{1}{12}$ nd. The General Arrangement Drawing opposite is to a slightly smaller scale. If it is wished to use some scale other than $\frac{1}{12}$ nd, different measurements may be made accordingly. A scale of feet has been included with the drawings for this purpose.

Materials and Tools

The approximate dimensions for the materials required to make the model are as follows: a block of wood $5\frac{1}{2} \times \frac{3}{4} \times \frac{9}{16}$ in. for the fuselage; another block $8 \times \frac{3}{4} \times \frac{3}{4}$ in. from which to carve the various floats; a piece of wood $9\frac{3}{8} \times 3 \times \frac{1}{16}$ in. for the main planes; a sheet of fibre $3 \times 2 \times \frac{1}{16}$ in. for the tail surfaces; the struts may be made either from a couple of feet of 22-gauge
A General Arrangement Drawing showing Three-view Plans of the Short N.2b. The side-elevation drawing shown above is reproduced to a 1/2nd scale on page 188.
AIR STORIES

brass wire or from a piece 3 × 3 in. of 22-gauge sheet brass or aluminium. Fine-gauge florist's wire provides the material for bracing wires and cables.

The wood is best obtained from the local cabinet-maker or handicrafts shop. American whitewood or beech is good for the fuselage, and mahogany or a light-coloured walnut for the floats. These woods are usually stocked in strips of approximately the cross-section required for the model. Any good quality fretwood (not plywood) will suffice for the wings.

The most necessary tools are listed below: a ½-in. chisel; small plane; penknife; oilstone; fretsaw; small half-round file; ⅜ in. bradawl; archimedean drill; small long-nosed pliers; tube of cellulose glue; a penny ruler measuring in ⅛ ths, ⅛ ths and ⅛ ths of an inch.

Method of Construction

READ these instructions carefully, and be certain that they are understood before even collecting the materials. After reading the instructions, a good idea of procedure will have been gained, so then assemble the materials and the tools. Trace the side elevation of the fuselage which is reproduced on page 188. Lay the tracing on the fuselage block, pin-prick the outline, line it in with pencil and proceed to carve away the surplus wood. Mark the centre-line down the top and bottom surfaces of the block and draw the plan of the fuselage on the top surface. Again carve away the surplus, taking care to keep all the sides at right angles to each other with the help of the square. Hollow the cockpits and then round the top deck of the fuselage. The nose is rounded and the lower edges of the fuselage are slightly radiused as far back as the leading-edge of the lower plane. Cut the small cooling slots in the nose of the fuselage and drill the holes for centre-section and float struts. These points are shown in Fig. 1.

The wings are marked in plan on the sheet of fretwood and then cut out. The under surfaces of the planes are concave. This effect is best produced by filing along the span with the rounded side of a half-round file, finishing off with a piece of glasspaper wrapped round an old bit of broom-handle or similar rounded object. Having achieved the concave undersurfaces, it remains only to camber the top surfaces with plane and glasspaper. The slightly serrated trailing-edges are obtained by carefully filing with a half-round file in a fore and aft direction. Drill the holes for the various struts.

So much for generalities. Now for the individual characteristics of the planes. A cut-out has to be made ⅜ in. deep by ⅜ in. wide in the centre-section of the upper plane to take the radiator. The lower plane is in two halves; it is best to make it in one piece and then cut it in half. In this way an even camber on each side is assured.

Making the tail unit is practically duplicating the work on the wings, without the trouble of serrated trailing-edges. Draw the plan; cut out and camber with the aid of file and glasspaper. The tail controls (and the ailerons as well) are best outlined by scoring with the bradawl and ruler. Note the very flat camber which was used on the tail surfaces of these old machines.

There are two ways of making the struts, from wire or from sheet metal. A pair of tin snips or an old pair of heavy scissors will serve to cut the metal

Fig. 2.—Examples of struts mode of sheet metal. The "V" strut is for the float attachment
struts to shape, and this method is advised for the wing and main-float struts. Alternatively, plain wire struts faired with folded paper strips may be used. The struts are cut as shown in Fig. 2 and then streamlined with a file. Make the two rear float struts (these form a V although they are really separate struts) in one piece—this is also shown in Fig. 2—as they will be then more rigid and will look neater. Tail struts and rear float struts are made from plain lengths of 22-gauge wire. The float spreader bars are unfaired, so that they also can be made from plain lengths of wire.

The floats are carved in a similar manner to the fuselage. There is nothing special about them, and their respective shapes are clearly shown in the drawings.

The four-bladed airscrew is made in two two-bladed units and glued together as shown in Fig. 3. The radiator is carved from an odd piece of wood. The exhaust manifold is made from an ordinary wire nail and the exhaust pipe from one of those flat nails which are supposed not to split wood. The two nails are soldered together. The construction of a Scarff ring may safely be left to the modeller's own ingenuity.

**Method of Assembly**

THE wings of this model are assembled in a somewhat unusual manner. Two holes are first made in the inner ends of each lower plane. The front hole is \( \frac{1}{4} \) in. from the leading-edge and should be slightly above the middle of the wing's thickness. The rear hole is \( \frac{3}{4} \) in. from the leading-edge, and also should be somewhat above the middle thickness of the wing. Two pieces of wire are inserted into these holes and the two halves of the wing joined thereby. These two connecting struts are then fixed to the bottom of the fuselage just between the two rear float-strut holes, and are held in place by glue and staples. These staples are small U-shaped pieces of thin wire (''invisible'' hairpins are excellent), and they should have holes made for them. When the lower plane has been properly adjusted for squareness and alignment, glue it in place (see Fig. 4, above).

Fit the centre-section struts into the correct holes in the fuselage, and fit all the interplane struts, including the outwardly sloping struts which support the overhang, into their respective holes in the lower plane. Put the upper wing in place and adjust it, making any necessary alterations for such discrepancy as there may be in the lengths of the struts. When the alignment of the upper wing is satisfactory, remove it; glue the struts and re-assemble. Allow the wing to set firmly before continuing.

Now fit the two spreader bars between the floats and track them up accurately. Turn the model upside down and fit the float struts (without glue); then fit the floats to the extremities of the struts. Adjust for height and alignment. When satisfied that all is as it should be, dis- mantle the parts and re-assemble with glue.

Glue the tail-plane and rudder units in place and allow them to set firmly. Now fit the tail-plane struts—these are made from one piece of wire which rests in a slot across the bottom of the fuselage and is bent up on each side. Glue the tail float struts into the fuselage, fit the tail float and adjust it for height and correct angle. The little water rudder is made from a small piece of paper.

The odd parts, i.e., wing-tip floats, radiator, exhaust pipes, airscrew and
struts; wires brace the lower ends of the rear float struts to points on the lower planes beneath the inner interplane struts; the tail float is crossbraced by four wires which join the upper ends of the front and rear struts to the lower ends of the middle struts.

In response to numerous requests, here are a few words about control cables. The kingposts for the control cables are best made from very thin pins. Before the model is assembled, holes are drilled in the correct places; the kingposts are glued in place after assembling. The wires are cut to lengths and bent so that they fit exactly; they are then held in place by very sparing spots of cellulose glue.

**Colour Scheme and Painting**

The under surfaces of wings, tailplane and fuselage should be pale cream; all other fabric surfaces—sides and top of the fuselage, top of the planes, fin and top of the tail-plane—are dark green. The motor cowling, airscrew blades and struts are battleship grey. The floats may be either varnished mahogany or grey. The rudder is painted red, white and blue, with the blue forward and the red aft. Red, white and blue cockades are borne on fuselage and wings; the rings on the top planes and the sides of the fuselage are heavily outlined in white.

For materials, use ordinary 3d. pots of enamel, a No. 5 brush and a small liner's brush. The liner's brush is very helpful for doing the tail and making a neat job of awkward corners. Excellent transfers of cockades can be obtained from most model dealers for a few pence. These greatly facilitate the marking, as, when using them, it is necessary only to paint a white disc instead of four concentric circles.

The rules for painting are: keep the brushes clean; put each coat on thinly and evenly; allow each coat to dry thoroughly before applying another.

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In a recent issue we printed a note on the war record of Hugh Standish, author of that fine Spanish air-war story, "Raiders of the Rebellion," and referred to his leadership of a flight of Spads of No. 23 Squadron, R.F.C., during the historic battle of Messines. That reference brought back vivid memories to at least one reader, Mr. J. M. Sudbury of Barrow-on-Soar, Leicestershire, who, we now learn, was the sergeant-rigger in charge of those self-same Spads!

"I should be most grateful," he wrote, "if you would let me know the real name of Hugh Standish—you state it is a non-de-plume—as, having been sergeant-rigger in charge of some of the Spads which took part in the Messines engagement, I am sure I must have known him."

"I was a member of his squadron, No. 23, right from the time when it was formed at Gosport from a nucleus of No. 14 Squadron and sent over to France equipped with F.E.2b's. The Spads came later and were such a drastic change for both pilots and mechanics that casualties were numerous at first.

"At one time we were situated on a 'drome close to G.H.Q. between Poperinge and Ypres, where we often caught sight of some of the famous aces of the day. Guynemer frequently landed there, with his two-seater Spad fitted with a gun that fired a baby shell and with a winged stork painted on his fuselage. No. 56 Squadron shared the aerodrome with us for a time, and Ball was often to be seen walking quietly about the machines in his flying coat and without a cap."

"I remember, too, that Kennedy Cochrane Patrick, then a flight commander, once took up a brand new German 'plane which had been forced down by our pilots and staged a mock combat with our C.O. in a Spad for the benefit of the then Prince of Wales and General Longcroft. The C.O., I am afraid, did not put up too good a show and went on home establishment shortly after."

"That particular aerodrome, just outside Ypres, was the hottest spot we ever struck. We suffered from bombs and shells, while, at night, we could hear the queer thrumming of twin Mercedes, then the whine of bombs and the crashing explosions as the Gothas sought our G.H.Q. in a wood close by. I went to examine a dud bomb one morning, and found what looked like a great oil drum sticking out of the ground. Nearby a bell tent must have suffered a direct hit, as the tent and most of its contents were among the tree-tops."

We have put our correspondent into touch with his former officer, and are glad that AIR STORIES has once again been the means of reviving a war-time comradeship.

That 330 m.p.h. French Fighter

FOR new light on the mysterious "330 m.p.h." French fighter, which a correspondent recently claimed to have seen in a news-reel, we are indebted to Mr. D. McClure of Glasgow. He says:

"I, too, saw the alleged 330 m.p.h. French fighter in news-reel some time ago and have only just succeeded in identifying it. It was the Caudron Rafale fighter-trainer—with a top speed of 320 m.p.h."

"Such a 'bloomer,' however, is nothing new, as, during the summer, I saw a film of the Supermarine Spitfire taken during an R.A.F. Display rehearsal and, throughout the commentator's eloquent discourse on the virtues of Britain's latest 300 m.p.h. fighter, the only aircraft on the screen was the Vickers Wellesley. When the Spitfire did eventually appear it was dismissed without comment."
"On a more recent occasion, the new Handley Page Harrow bomber was referred to as 'without superior in the world,' which is very far from being the case. In my opinion, the machine is a positive disgrace when compared with such machines as the Boeing 299 or the Breguet 'Vultur.' I will spare you my opinions of the Hawker Hind and the entire equipment of the Fleet Air Arm, but if there is war within the next few years—as there will be—if nobody muzzles Anthony Eden—then Heaven help us!"

Hard words indeed, Reader McClure! but a lot of people said the same thing about this country and its armaments in 1914—and we're still here. And, incidentally, what is the Harrow's performance? We are advised that it is strictly an official secret, known only to the makers and to the Air Ministry.

Another reader concerned about the state of his country's air defences—and perhaps with better reason—is Mr. Robert Crossman of Toronto, Canada, who writes:

"In my estimation, our R.C.A.F. is very much behind the times. We are still using old A.W. Siskin 3a fighters, bought from England after they had become obsolete there, and there is even a rumour to the effect that, at Camp Borden, R.C.A.F. Headquarters, there are still some S.E.5's and Camels flying around!"

"However, we did buy seven new machines recently, and it was such a startling event that the papers splashed the news in great headlines. The machines were Blackburn Sharks, and two of them are being assembled here, while the rest are on the way."

It certainly does seem a little hard to expect Canadian airmen, despite their brilliant record in the last war, to win the next with the same old Camels and S.E.'s. Still, if Canada can hold on for another four years, all will be well—our correspondent tells us that he will then be of age and ready to join the R.C.A.F.!

**Six Victories in a Day**

FROM Mr. H. Coates of Handsworth, Birmingham, comes a courteous correction of a statement which appeared in the article "These Men Were First" in our December issue.

"May I be allowed," he writes, "to help rectify an historical inaccuracy of some importance to us 'amateur air historians'? I refer to the latter part of Mr. J. Colman's article, where he states that besides Captain Trolley, René Fonck and Captain W. G. Glaxton were the only men on either side to score six victories in one day.

"Captain Glaxton, of No. 41 Squadron, did, it is true, claim to have shot down six in one day (June 30th, 1918) in the course of two patrols on an S.E.5a, but as he was unable to secure full confirmation, his remarkable achievement was not officially recognised. Captain H. W. Woollett, however, whose name Mr. Colman does not mention, achieved the feat in a Camel, and it is recorded in the Official History of the War in the Air that he brought down three hostile aircraft in the morning of April 12th, 1918, and three in the evening of the same day. These engagements all took place near Estaires."

We stand corrected, but our regret for the mistake is tempered by the comforting assurance that when we do occasionally "slip up" there are good friends like Mr. Coates gently to show us the error of our ways.

"I think you may be interested," writes Mr. L. Manley of Upper Norwood, "to hear of the American Armament Corporation's new aircraft-cannon, a 37 mm. gun with a maximum muzzle velocity of 2,700 feet per second. Complete with mount, the gun weighs only 235 lb. and can, therefore, be installed on almost any type of bomber. It requires an opening of only 38 inches diameter, has a recoil pull of 1,000 lb. and is absolutely bore and detonator safe.

"Among the advantages claimed for it are that it will far outrange any machine-gun, that its high explosive shell will destroy an aeroplane with a single hit, and that it has an effective fire range of 600-700 feet. It is significant that four great American aeroplane firms, Boeing, Douglas, Consolidated, Lockheed and Vultee, are all making provision for installing this gun in their new designs."

We agree, and perhaps it is also significant that the European agency for this gun has recently been taken up by a firm in this country.

**The Return of the Coffin Crew**

NEXT month, in response to a persistent demand, that happy band of crazy warriors, "The Coffin Crew," will make their welcome reappearance in AIR STORIES. For the benefit of new readers, we may explain that the Coffin Crew are certain members of the Independent Air Force forming the flying crew of a battle-scarred Handley Page night bomber, whose daring exploits are a byword on the Western Front. The Crew have known some hectic moments in their eventful career, but never, we think, has Mr. Arch. Whitehouse, their talented creator, given them a more exciting adventure than in "Tartan Flight," which is the title of next month's great long story.
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