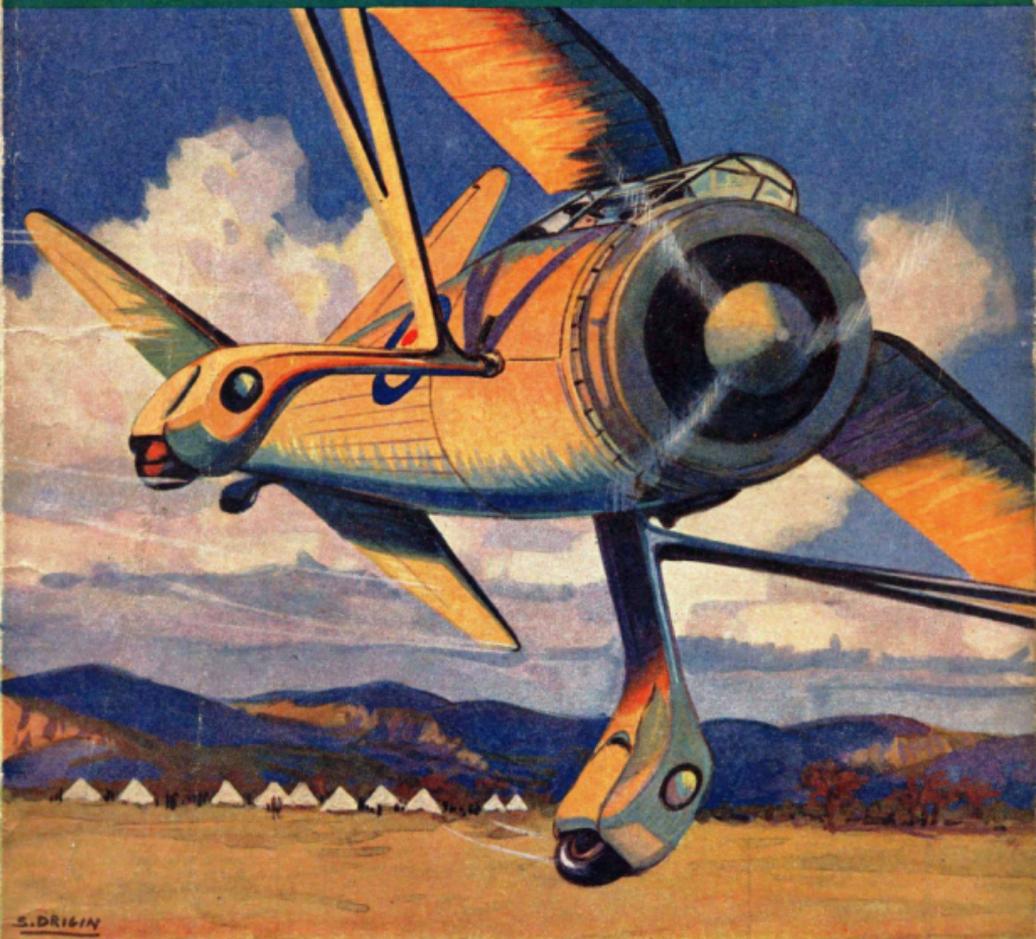


Great Long "Coffin Crew" Adventure: TARTAN FLIGHT

# AIR STORIES

7<sup>D</sup>



S. DRIGIN

CHALLENGE TO COMBAT | RAIDERS OF THE DESERT

BY RUSSELL MALLINSON

BY J. H. STAFFORD

WINGS O'ER THE SOMME

AN AIR OBSERVER'S THRILLING STORY OF THE BATTLE OF THE SOMME

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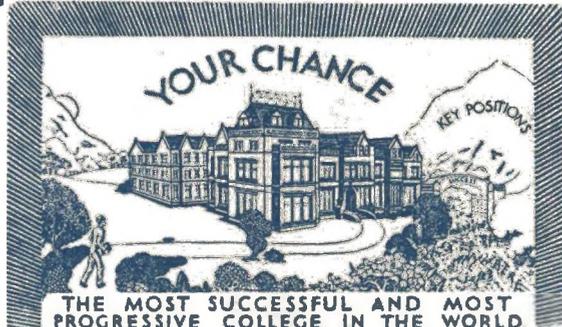
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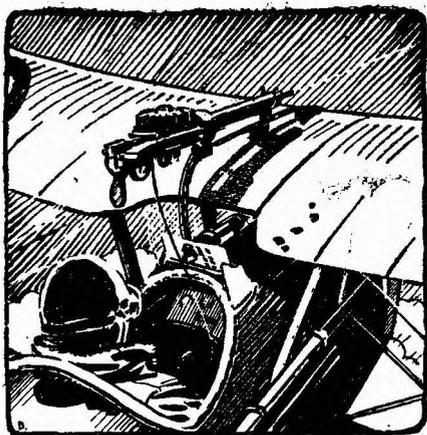
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# TARTAN FLIGHT

*A Long Complete Story of the Independent Air Force.*



*Into the inferno plunged the battle-scarred Handley, heading for the shaft-head . . .*

**Into the Very Shadow of Death Flew the Coffin Crew,  
the Craziest Band of Warriors in the Independent Air  
Force, to Discover the Secret of that Sinister Mound of  
the Dead, Hill 60, and its Strange Effect upon Corporal  
Andy McGregor, Aerial Gunner**

By ARCH. WHITEHOUSE

*Late of No. 22 Squadron, R.F.C.*

**CHAPTER I**

**Strange Behaviour of Andy McGregor**

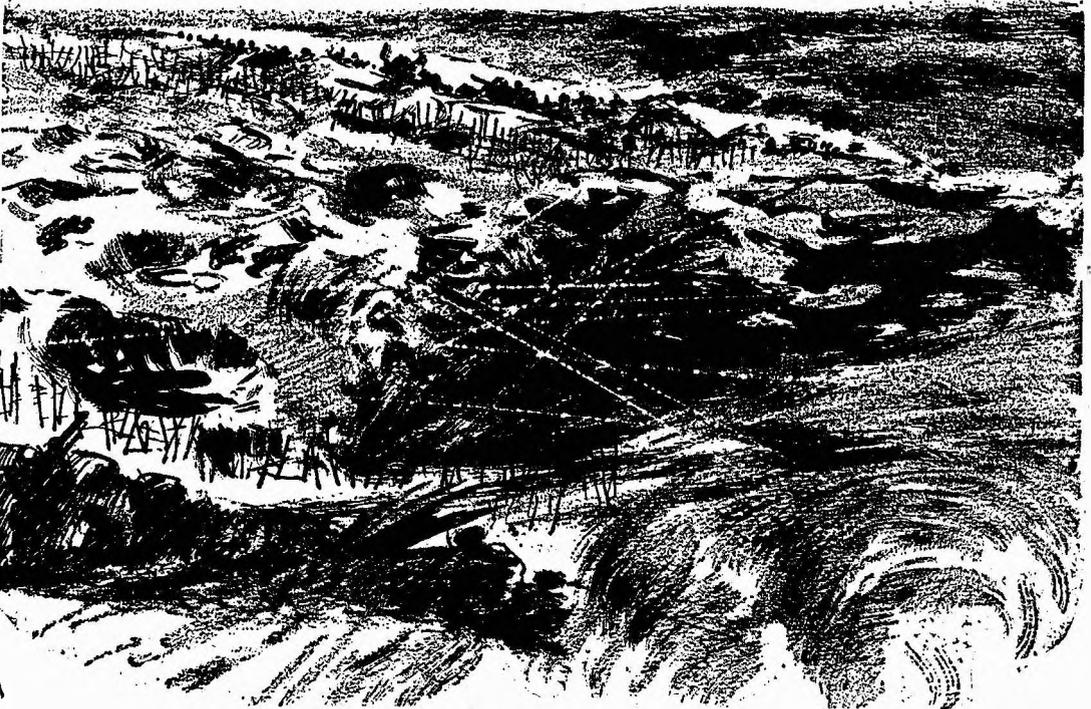
**W**HEN it was all over, the members of the Coffin Crew realised that Corporal Andy McGregor had had good reason for his actions, and of the three things that happened any one might have provided the clue to his strange behaviour.

First, there was a letter postmarked "Monymusk" which Lieutenant Townsend remembered was a small town near Aberdeen. Secondly, Andy had shown unusual interest in an American regiment that was heading for the front line and trench warfare training with General Gough's Fifth Army. Andy had stood at the top of a sunken road that ran along the side of the Cassel aero-

drome, and watched the column of tall young Americans who were heading for the fighting lines, eyes bright, heads erect and, to Andy's way of thinking, carrying their rifles on the wrong shoulder.

Then there was the new officer, an American Air Corps captain, who had come up for duty with 109 Squadron of the Independent Air Force, and was acting as squadron recording officer to get acquainted at first hand with R.F.C. practice. His name was Wilbur J. Preston, and McGregor had taken a special interest in him from the day the Americans had tramped through towards Poperinghe.

But the Coffin Crew did not remember these trifling events when Andy went "barmy," as Alfred Tate, the toggle-man



*... on a turn that almost put its wing-tip into the British trenches*

## AIR STORIES

put it. And that's exactly what Andy did—went completely crazy when they flew over Hill 60 heading for the railway dump at Roulers.

Without a word of warning or a signal of any kind, Andy suddenly leaped to his feet in the front turret, swung his double guns around and began banging away at the ground, six thousand feet below. Both drums were blasted out, and the sky was etched in scarlet tracer that curled in crazy designs over the sable sky.

Armitage, the Canadian bomber officer sitting in the control pit with Lieutenant Graham Townsend, who was pilot, yanked himself up and peered below. Townsend whirled the great Handley Page back and forth to give Mac a better view of whatever it was he was firing at. In the rear turret, Corporal Arthur Marks swung his guns around, too, and tried to see what McGregor was strafing. He turned back, frantic and puzzled. There was not a Jerry 'plane within ten miles!

**A**RMITAGE turned and stared at Townsend:

"What the devil's he firing at?" he yelled.

Townsend shook his head and stared over the side again. The Scot still stood up in his front turret, his Black Watch kilt—which he refused to change for R.F.C. "breeks"—flapping in the slip-stream beneath his short leather flying coat.

Armitage could stand it no longer. Slapping the cowl of the Handley's gaunt snout to gain Andy's attention, he began yelling. The Scot took no notice, rammed on two more drums and continued his mad display of tracer.

"The confounded idiot!" raved Townsend, "he'll have the whole blinkin' German Army on to us. Stop him, Phil!"

But Andy would not be stopped.

*Brat-a-tat-tat-tat-tat!* sang the twin Lewis guns, spitting a stream of cupronickel at the earth below.

Then came the gusty reply of Ranting Rupert, the Ack-Ack gun that had been

giving the Independent Air Force so much trouble of late.

*Bong! Bong! Bong!*

Three range-finding shots crashed out around them. One wing of No. 11 went up and Armitage went sprawling across Townsend's controls.

*Bong! Bong!*

Another splash of lemon-coloured flame and a broadside smack with an invisible sledge hammer knocked the big twin-engined bomber into a sickening side-slip.

The bomber officer scrambled back from Townsend's wheel cursing and swearing with all the ardour of a Canadian backwoodsman.

"Mac! . . . Mac! . . . You infernal idiot! Stop that blasted firing!"

*Bong! Bong! Bong!*

A shower of shell splinters rained down on them, battering taut fabric like giant drumsticks. Townsend ducked, yanked the Handley back on its course and sought the highway that ran from Dixmude to Roulers.

"I'll knock his head off!" screamed Armitage, diving under the instrument board. "Giving the show away like that!"

He disappeared up the tunnel, and came out to find his head up against Mac's legs. His nose was rammed against the gleaming dirk that was stuffed into the Scotsman's stocking. He dropped on his chest and yanked at the capering legs in front of him. The gunfire ceased abruptly.

"Awa' mon!" screamed Andy, slapping at the octopus that had grabbed his calves. "Let me be, mon!"

Armitage crawled to his knees and hung on. Finally, he swung the Scot round and yelled at him.

"What the devil are you playing at, McGregor? Stop that firing!"

"Ah moost, sor," gasped Andy. "Let me be . . ."

Smack!

Armitage's short crushing hook came round and exploded on the little man's chin. He went down in a heap of greasy leather and dark green tartan.

"Sorry, old fire-eater," Armitage

## TARTAN FLIGHT

apologised, "but I had to do it. You'll feel better when you come round."

With a last glance at the unconscious gunner draped across his guns, the bomber officer crawled back into the control pit and resumed his seat beside the pilot.

"What was the matter with him?" bellowed Townsend.

"Don't know," answered Armitage with a shake of the head. "Let's get going before Jerry's tripehounds come up after us. Went crazy, I think."

Lieutenant Townsend was mystified and not a little worried. This was not the McGregor they knew, by any means. He steadied the Handley, glanced over the front turret where no alert Black Watch gunner now stood, and aimed the snout at Roulers.

**D**OWN inside the long black body, Sergeant Michael Ryan was squatting on the catwalk, his legs braced against the opposite bomb-racks. From his mouth, an upturned clay pipe, cold of bowl but comforting nevertheless, hung dejectedly. He was cold—it was always cold in there. His eyes flashed back and forth, first at the expressive feet of Arthur Marks on the rear gun platform, and then at the door which led into the control-pit up front.

Sitting opposite him was Alfred Tate, the Cockney toggle man. He, too, was watching Marks's feet. The pedal extremities of the Aussie gunner were reliable tell-tales of what was going on outside. Alf ran his fingers down inside the legs of his short flying boots and scowled. No puttees. They always made them take off the tight-binding leggings when they went on patrol as a preventative against frost-bitten feet. But Alf, like Sergeant Ryan, did not approve of this no-puttees business. What if you were taken prisoner? Wouldn't you look silly walking about a Hun prison camp without any puttees on?

Sergeant Ryan withdrew the comforting clay and pointed at the doorway that led into the front cockpit. Alf turned his head, too. They knew what had

happened up in front, and were worried.

"That Jock," yelled Ryan. "There's something up with the laddie. He's never been himself for days now."

Tate crawled across the catwalk to hear better.

"He's seeing the banshees," yelled Ryan into his ear-flap. "The man sore needs a rest."

"Carn't make 'ead nor tail of 'im, lately," agreed Alf, bellowing back. "Went orf 'is onion, proper, didn't 'e?"

"There must be something worrying him, though," replied Ryan, shaking his head. "Andy's not the one to go off on a barney like that for nothing. But it was a crazy thing to do right then. We were just away past old Rupert, and then he must go and give the whole show away."

*Bong! Bong! Bong!* went Ranting Rupert below, angry at having missed old No. 11.

The 'plane heeled up again, and the two toggle men went toppling down the catwalk. Alfred Tate came up with a thump against one of the racks and suffered a bash over one eye. He crawled to his hands and knees, a trickle of gore making a red track across his face and disappearing under his chin piece. Ryan was on his stomach staring up at Arthur Marks's feet.

"Look! Get up to that toggle-board!" he yelled.

Tate looked. Marks's feet had assumed the crouch of a boxer. There was the retching screech of a Scarff mounting and another Lewis went crazy. Corporal Marks was blasting the fabric off a Fokker D.7 that had slid out of the mist.

Tate and Ryan went blind for an instant. A silver glare from below leapt up and bathed the bomber in a garish sheen. It streamed through the grey-green belly of the Handley Page and splashed a grid design on the roof, painting the two men in bars of black and white.

"The toggles!" roared the Irish sergeant. "Mister Armitage's ready."

They scrambled up the dancing catwalk and stumbled against the board that carried the release mechanism.

## AIR STORIES

They could see Armitage standing in the companionway between the tanks, bellowing and gesticulating.

No. 11 had reached her objective, the rail-head at Roulers. It had come up to them suddenly as they sat and pondered over the strange behaviour of Andy McGregor. Three Fokkers were there to greet them—and there was no Andy McGregor in the front turret to return the fire. Townsend shook his head as he slithered out of the searchlight beam for an instant. They would miss McGregor's help, those cold, calculating bursts that spat out from his guns when Huns were in the air.

But Corporal Marks, at least, was already on the job. First his upper gun blasted out over the top plane. Then the tunnel gun spat out of the belly of the Handley. A Fokker in flames went screaming down the sky to bury its nose in a railway yard—a vivid torch for Armitage to set his sights on.

"Now for it!" barked Armitage, nodding to Townsend.

### CHAPTER II

#### No. 11 Goes into Action

WITH a last regretful look at the empty forward turret, Townsend put the Handley into a dive. Armitage twirled the brass knob of his bomb sight and glanced at his stop-watch. With a sidelong glance down inside the fuselage, he caught a glimpse of Sergeant Ryan standing with his hand poised over Tate's shoulder.

Old No. 11, every strut creaking and every wire singing its pæan of war, went down the sky 'chute and nosed for the rail-head. Armitage crouched over the wires of his sights and flashed his hand down. Ryan smacked Tate across the shoulders and the little Cockney yanked two toggles.

*Scrawnch! Scrawnch!* went the 112-pounders out of their guides. The Handley gave a lurch with the release of the spinning missiles that almost sent Armitage over the side. He swore and clung to the cowling. Up came the nose of the Handley again as the first two

bombs billowed out.

*Crump! Crump!*

The bomber leaped under the concussion like a harpooned whale. A blinding glare of flame spat twice somewhere below. In the rear turret, Arthur Marks was holding off another Fokker that was lancing in with two scarlet fangs twinkling from its nose. He let go one burst at it and the lights went out. But almost immediately there came a choking cry of pain and Marks dropped heavily to the floor of the turret platform.

Creased!

The toggle men, hanging on as the Handley leapt over into a curling climb, watched Marks drop and roll out from the turret. The glare of a searchlight beam illuminated his gore-streaked face.

"Confound McGregor!" yelled Armitage. "Why doesn't he wake up and do something?"

Townsend was banging his free hand on the cowling:

"Come on! Come on! Get rid of that damned stuff!"

Armitage wheeled and caught his meaning. He dived back to the bomb-sight and steadied himself as the bomber nosed down again.

The Fokkers were on their trail now—and there was no gunner to ride them off!

Armitage sighted his wires on the two piles of burning ammunition and flipped his arm down again.

*Scrawnch! Scrawnch!*

Two more giant eggs went trickling out and nosed down for Roulers. Armitage was watching over the tail even as his arm dropped. The Fokkers were diving into position.

*Crump! Crump!*

Again 240 lb. of splintering death smacked home. The blast threw No. 11 over on to her side and Armitage flopped heavily into Townsend's lap. The slip saved his life, for, as he dropped, a burst of Spandau smashed through the struts and ripped out the instruments on his side of the panel.

"Stick it out!" yelled Townsend. "Get rid of it all!"

He was slithering out of the beam of

## TARTAN FLIGHT

another searchlight when something bobbed up in front of him.

"McGregor!" screamed Townsend and Armitage in unison.

The little Scot staggered up like a drunken man. He wiped the back of a gloved hand across his mouth and peered about him like a man in a daze.

"Come on Mac!" yelled Armitage, gripping the sides of the cockpit and sprawling across to the bomb-sight again. "Give it to 'em!"

Andy looked about him, at the blazing target below, at the men in the control pit, at the diving Fokkers.

Then with a sudden snarl, he whipped the double guns round on the Scarff mounting, and aimed them over the top plane. Townsend watched him with satisfaction, guiding the Handley with automatic movements.

Andy drew a bead on the nearest Fokker, and held it. Like a cobra he crouched and waited.

"Shoot—for God's sake, shoot, Mac!" roared Townsend.

"Give it to 'em, Mac!" added Armitage above the shrill scream of the Rolls-Royce engines.

But Andy was not to be hurried. He watched the dancing red tip on his wind sight and waited. At last the Fokker slewed into the ring. He pressed the triggers.

*Brat-a-tat-tat!*

That was all. One short burst—but it was enough. The Fokker pilot doubled up as though hit in the stomach with a sledge-hammer. He coughed once, fell over his stick and a dead hand guided the black scout into the earth a quarter of a mile away.

**T**HE remaining Fokker dived and tried to come up from below, but he had Andy to reckon with now. Holding the gleaming guns with one hand, Andy signalled to Townsend with the other.

The pilot whipped the Handley over as though he were guiding a Camel. Andy braced himself, swung the Scarff mounting round and poured a short burst into the Fokker from above.

Another night-flying Fokker pilot died—with half a dozen '303's in his spine.

"Good work, Mac!" yelled Armitage, as Townsend slewed over and shot for the towering columns of smoke that climbed up from the wreckage around Roulers station.

No. 11 was her old self again, except for the wounded Marks. Townsend watched Armitage as he flashed his hand up and down for a salvo of forty-pounders to clutter up the roadways.

*Crunch! Bong! Crunch! Bong!*

At last all the racks were empty and rattling their empty guides. With a scream the Handley Page slewed around, flung itself into a screening column of cordite smoke and headed north-east for Hooglege. It was no use trying to return the way they had come.

The Coffin Crew made some attempt to re-organise itself. Armitage wanted to crawl over the cowling and embrace Andy, but that Highland worthy was busy snarling across his sights, still looking for Fokkers. Under the gleam of the exhaust ports, his eyes held a strange glint—more like the flinty stare of a man insane than the excited flash of a fighter's eyes.

Inside, Ryan and Tate were crawling along the catwalk towards Marks. The Australian corporal was still unconscious. His helmet had been slashed open across the top, and tufts of sticky hair could be seen along the slashed edges.

In a minute they had him on his back on the catwalk. Ryan's coat came off and went under the corporal's head. Out of the lower corner of his tunic he ripped a tan-covered first field dressing, and while he tenderly removed Marks's helmet, Tate bit the end off the dressing and pulled out the billowing white bandages and the pinky-white pad of gauze. They slapped it across the "creaser" and Tate went back to the cupboard and got the brandy that Armitage had bought and put there for just such an emergency as this.

No. 11 was skating in and out in her attempt to evade the defenders and Ryan had difficulty in keeping his hand under Marks's head while he poured a few

## AIR STORIES

gulps down the Australian's throat. Tate watched the precious liquid trickle across Marks's face with anxiety. Finally, he could stand it no longer. With a sweep of his gloved forefinger, he curled it under Marks's chin, scooped up a drop or two and ran it across his tongue.

"Blimey!" he husked under his breath. "It's almost worth a creaser to get a swig of this poured down your bloomin' neck!"

**B**UT all was not yet over.

Lieutenant Townsend shot No. 11 over Staden and then headed due west on a course that would bring him across the lines at the intersection of the Yser. A few desultory shots spat up at them, but the worst of the clamour had now been left behind.

Both Townsend and Armitage, snuggling back in their cold cockpit, watched the Scotch gunner up front, as he crouched behind his spade-grips like a skinny-necked eagle, peering down at the shell-churned line around Hill 60.

"What the devil's he looking at now?" mused Townsend. "Must be seeing things."

Armitage, too, was puzzled. "Something seems to be worrying him, all right. I wonder . . ."

At that moment, McGregor jerked upright, slewed round in his turret and gripped the top of the Scarff ring. He reminded Townsend of one of those grim gargoyles that scowl down from the towers of Lincoln Cathedral.

"Hi, Mac!" shouted Armitage. "What is it—a Fokker?"

The Scotsman suddenly wheeled on them and began to point towards Hooge and Hill 60.

"Down there, sir—go down there!" he screamed above the concerted roar of the Rolls-Royces.

"Can't!" bellowed Townsend. "Can't go back the same way we came in—you know that."

McGregor could not hear what the pilot was saying, but he well knew what the objections would be. But still he flung his left hand out, stabbing it down, again and again, in imperative command.

The pilot and bombing officer exchanged puzzled glances through their goggles.

Finally, Armitage gave Townsend a nod of assent. It was as much as to say: "Go on, let's see what his game is."

With a shrug of resignation, Townsend wheeled the big bomber over and pointed its nose at the grim hill that had seen the deaths of nearly 200,000 brave men. Andy's parchment face relaxed its tension and, without taking his eyes off the grim mound, he swung the mounting round slowly and crouched behind it.

"Is the damned fool going to start shooting again?" growled Townsend to himself. "If he is, I'm not waiting. No sense in putting your hand out and asking for it. Damned tracers'll give us away beautifully."

They tore on unhindered through a fleckless sky. In a few minutes they were racing across St. Jean and leaving the battered ruins of Ypres under their right wing-tip. Then came Hooge and Hill 60. They were flying at about six thousand feet and the terrain below stood out boldly with its chalk-banked trenches showing up like festering scars on a blackened body.

Then, once more, Andy McGregor went mad. His guns, gleaming with double drums, swung their glistening snouts down towards the ground. The triggers were pressed as he crouched over the right sight, his gaunt chin resting on his right fist. Both Townsend and Armitage started in alarm as they caught sight of the hate-frenzied face behind the guns that were now trained dead on the sharply defined German trenches that opposed the British at Hill 60.

*Brat-a-tat-tat-tat-tat!*

Again there came that mad hail of gunfire, an ear-splitting chatter of bucking Lewises that was kept up until both drums were exhausted.

Then, with a snarl, Andy ripped off the empty drums, grabbed two more, slapped them on the pegs and yanked both cocking handles back twice.

Again the glistening snouts went down and sprayed the saffron earth below with a stream of spinning lead that had lost all its force by the time it hit the ground.

## TARTAN FLIGHT

Another pair of drums exhausted, Andy yanked them off and sent them crashing to the floor of the turret as he sought for more.

"The man's as mad as a hatter," yelled Townsend. "Can't you do something about it?"

But Armitage's reply, if he made one, was drowned by the roar of Ranting Rupert replying in full measure.

*Bong! Bong! Bong!*

The first shell blinded them by its brilliance. It belched out its yellow yolk about thirty yards in front of them and sprayed their whole frontal area with a hurricane of splinters. Two struts disappeared as though sliced by a knife, one prop., a chunk bitten off one of the tips, started to whistle, and the Handley vibrated madly until Townsend yanked the throttle back and eased the engine down. The wicked vibration softened to a tingling purr that ran along the main spars and down the steel longerons.

"I told you!" yelled Townsend, whirling round on Armitage. "That damned fool's just about bought it for us, this time!"

*Bong! Bong! Bong!*

Slashed flying wires flailed the taut fabric of the wings. The two severed struts flapped back on their base lugs and added to the nerve-wracking din.

"Can you make it?" yelled Armitage.

"Just about. Damn good thing we've got some height. Have to ease that port engine or she'll chew herself out and take the whole ruddy wing with her."

They slithered off on a wing-tip and slid out of range, a little closer to Hill 60. Ranting Rupert coughed harmlessly astern, and red carnations of other ground guns were blooming well off to their right.

"Hope McGregor's satisfied now," grumbled Townsend, as he set himself to the task of coaxing old No. 11 back to the aerodrome more or less in one piece.

### CHAPTER III

#### The Mystery of McGregor

THEY got back, somehow. How, no one knew. Townsend, with his delicacy of touch, brought No. 11 in and

dabbed her down as gently as possible. The petrol-tin ground flares were glowing and sending up their pall-like streamers of stinking black smoke.

"If I ever go through another night like that, I'm transferring to the Tanks," growled Townsend. "Of all the crazy idiots, that man McGregor's the worst!"

Armitage shook his head as he watched the ground crew manœuvre the small tractor out to tow No. 11 in. McGregor's behaviour had completely baffled him. Hitherto the little Scot had always been the sanest man aboard when things went wrong, cold and dour however hot the battle. But to-night—well, it defeated Armitage.

The trap-door was opened below and the narrow metal ladder placed against it. Ryan and Tate were dragging Marks up the catwalk, though the Aussie corporal fumed and protested that he was unhurt and needed no help. They rammed his rubber-soled flying boots down the trap and anxious grimy hands stretched up to take him.

Major McKelvie, his stick tucked under his arm, was among the first to greet them. His practised eye took in the slashed prop-tip and the broken struts. He knew No. 11 had "been through it" again. He helped get Marks on to a stretcher and saw him off to the M.O.'s hut.

"E's only got one wot parted 'is 'air," explained Alfred Tate, coming down the ladder stiff-legged. "Won't 'ave to use no Danderline on 'is curly locks next week."

But Ryan was silent, and stood at the bottom of the ladder waiting for the others.

Armitage came first and, with a word or two to McKelvie, stared around the group that had gathered under the snout of No. 11. He caught sight of Captain Preston, the American, an interested spectator of the proceedings.

Next down the ladder was Townsend, and finally the stocky legs of Andy McGregor came through the trap-door.

As McGregor's feet reached the ground, Townsend grabbed his shoulder and swung him round.

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"Now then, McGregor!" he began, no longer able to suppress his anger, "What the devil have you got to say for yourself? What sort of game do you think you were playing up there?"

McGregor pulled himself to attention, saluted, and then, without a word, stepped back two paces, turned on his heel and stalked away towards his Nissan hut. For the first time in the squadron's memory he even forgot to take his beloved guns across to the armourer's shed.

"McGregor!" burst out Townsend again.

"Let him go," whispered Armitage, "we'll get to the bottom of it later. Come on, let's make out our reports."

He glanced towards the Major, standing aloof and silent on the fringe of the gathering, and the C.O. turned and joined the two officers as they made their way to the Recording Office. Major McKelvie was completely mystified by Townsend's sudden outburst. Never before had it been necessary to emphasise differences in rank to maintain discipline among the Coffin Crew, but McKelvie was too understanding a C.O. unnecessarily to interfere with his officers.

The squadron tractor began tugging and puffing, and old No. 11 was towed inside, where a dozen mechanics awaited her with tools, spare parts, fuel and fabric to repair the damage and have her ready for her next midnight foray.

"**M**OST amazing thing you ever saw, sir," Armitage began, as the three officers entered the Recording Office. "We were no sooner over Hooge than Mac went completely off his head."

"Off his head?" broke in McKelvie.

"Yes, sir, completely crazy—started blazing away at something below. We thought he'd seen a Jerry of some sort, but there wasn't a thing in sight except the guns blasting at Hill 60."

Captain Preston came in and shut the door behind him. McKelvie nodded casually to him and he sat down, listening with evident interest to Armitage's strange story.

"Then, before we knew what had

happened," Armitage continued, "Rupert opened up and had a perfect range on the first salvo. I thought that was strange, but, before we could do anything about it, a couple of Fokkers came out of nowhere, just as if they had been hanging there waiting for us. Queerest thing I ever saw. We expected them over Roulers, but, Jove! they were on us before we were two miles inside the lines."

"I'm not surprised," growled McKelvie, "if McGregor started giving the show away like that with tracers. Easiest thing in the world at night to pick a target from tracers. They know how long they burn and at what point they die out. Just check the two and you have the height range at least. If the fire has any angle at all, the rest is easy. Besides," he added, "firing into German lines gives you away at once. They know you are British going over and not one of their own machines coming back."

"But I stopped him once, sir," broke in Armitage with a grin. "Clipped him on the jaw and put him out for a minute or two. Then more Fokkers, tripehounds or something, came in again over Roulers and Marks stopped one. Just then Mac came out of his stupor and potted two of them—he's entitled to those, by the way—and we thought he'd got over his fit."

McKelvie listened in amazement as Townsend and Armitage went on with the story. Captain Preston, too, put in a few questions, inquiries that might be expected from a man who was new to the game but anxious to understand what all the fuss was about.

"Hm!" remarked McKelvie, when Armitage had finished. "Wonder what's behind it all? McGregor's not the sort of man to do things like that without reason, though, as a matter of fact, I've noticed he's been behaving rather queerly for some days. Hm-m! Hooge... Hill 60," he went on. "Now, if my memory's correct, there are no Scottish divisions up there now. They are all down near Lille, so it couldn't be that he's got it into his head that he's helping some of his pals out, Sort of crazy thing he might do,

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you know."

"Ryan did tell me that McGregor had a letter from Scotland a couple of days ago," broke in Townsend. "Perhaps he's had some bad news that's affected him in some way."

At this point Captain Preston broke into the conversation.

"Look here," he suggested, "why not let me have a word with this man in the morning? As you probably know, I've had some experience in handling men and he may be more inclined to open up to me as an outsider, if it's some personal matter, than he would to either of you as his officers."

"What do you think, Armitage?" inquired McKelvie. "You know McGregor—is the idea worth trying?"

"I don't like the idea of anyone else butting into a Coffin Crew matter," snapped Armitage, moving over to one of the rough deal tables to make out his bombing report, "but if Captain Preston thinks he knows the man better than we do, why let him go ahead."

"Anyway, we're all probably making a mountain out of a mole-hill," remarked Townsend, who was ever ready to overlook slips made by the gunners under him.

"I don't think so," concluded Major McKelvie. "I know McGregor, and I know that something very much out of the ordinary must have occurred for him to stage a scene like that. There's more behind Hill 60 than a few guns and a regiment or two of gravel-crushers. And I wouldn't mind laying a fiver that it's a man in uniform, and I don't mean a kilt, either. Good-night, gentlemen."

And with that cryptic remark Major McKelvie went out into the night and left his Recording Officer to take care of the bombing report. A few minutes later he was in the sick-bay talking to the M.O. and the sore-headed Corporal Marks.

### CHAPTER IV

#### In the Gunners' Hut

**N**EXT morning, things went on at Cassel as though nothing unusual had happened. The S.E. outfit on the

other side had a long daylight raid to escort. They came back reporting three Huns down and the loss of one machine which had crashed on top of a Belgian church. The flight of Bristol Fighters did a highly dangerous photography show with fair success, and another group was standing by for a promised balloon strafe at Passchendaele. In one corner a Fee, painted black, was being groomed to slip across and pick up a spy who had gone over three nights before in a spherical balloon with a favourable wind. All was grist that came to the Independent Air Force mill.

By noon the Handleys were trim and ready for the scheduled raids on various sectors of the German back areas. Even old No. 11 was in place, sporting a new prop., several glistening struts and a few more daubed patches.

The noon mess bugle brought out the gunners who had been on No. 11. Ryan, still stiff-legged and bleary-eyed, waddled across to the Sergeants' Mess in quest of something to "buck him up." As he ambled down the cinder pathway he was met by Captain Preston. They exchanged active service salutes, which meant they stabbed at their forelocks with crooked forefingers and let it go at that.

"Oh, Sergeant," said Preston, "where is this Nisson hut of yours . . . where you gunners park?"

"Hut? Oh, yes, sor. It's the end one in this row. We're by ourselves, you know, sor."

"Thanks. Is McGregor in there, do you know?"

"Andy's there, sor. But he isn't what you could call matey this morning, sor. Can't get a civil word out of him, an' that's the truth, sor."

"Never mind. I just want a word with him. Anyone else there?"

"Only Donnegal from No. 9, sor."

**W**HEN Preston entered the gunners' hut there was no one there but McGregor. The little Scotsman was sitting on the edge of his bed, fully dressed and swinging his army dixie between his bare knees. His knife, fork and spoon

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were stuffed into the top of his gaiters.

"Hello, McGregor," greeted Preston, walking in and closing the creaky door behind him. "How are you feeling this morning?"

Andy started gingerly to get up and stand to attention, but a friendly gesture from Preston put him back on the edge of the bed.

"Ah'm na sae good this mornin' sir," whispered Andy. "It's a vurra bad nicht Ah've gone through."

"Well, don't worry about it. You did your best. They're giving you credit for two Huns, I understand," went on Preston.

Andy did not answer. He continued to stare at the floor, still swinging the shining dixie between his legs. Two more Huns did not mean much to him just then.

"What's ta-nicht, sir?" he asked finally, looking up.

"Back area bombing on railway between Courtrai and Roulers," Preston replied. "The British are expecting a heavy attack on the Hooge front tomorrow morning and are trying to spike it by holding up the reinforcements and ammunition. No. 11's to go alone on the show."

"A push at Hooge?" gasped Andy. "Ye mean that it'll start ta-morrer?"

"More than likely, McGregor," agreed Preston. "You'll probably be able to nail a lot of them as they move in from the support trenches."

"Aye!" nodded Andy, despondently. "Muster Aaa-rmitage and Muster Toonsend," he went on, "are they mad at me still?"

"No," consoled Preston. "Don't worry about that. Naturally, they were a bit sore because you drew the Archie fire, but they'll have got over it by to-night."

For a minute, Andy raised his head and stared at the gleaming yellow window. A light was beginning to dawn on him.

"That's richt. I shouldna done it. Ah drew the fire o' Rantin' Rupert. Ye should ha' tauld me, Muster Preston."

"Now, don't be foolish, McGregor.

Those Huns would have dropped down on you, anyway, and as for the Archie, it was just a lucky break that they got your range so quickly," argued Preston, moving over closer to McGregor.

"Ye doon't mean thot, Muster Preston," accused Andy. "Ye ken what Ah deed. I shouldna done it. Ah must see Muster Toonsend, an' explain."

"Don't be a fool, McGregor," growled Preston. "They wouldn't see your side of it. They only think of themselves. You should feel responsible for—well—you know who for, and do what you can for them. In your position you can do more, at a pinch, than a whole regiment. Think it out. Are you going to let *him* down?"

McGregor's face was that of a man in torment. His head went down. His shoulders heaved and he let his dixie go clanging to the floor. There was silence in the hut.

"Listen," broke in Preston at last. "Leave it to me. You carry on as before. Every chance you get, blast hell out of that area and I'll do the explaining to Townsend and Armitage. I'll make up some yarn that will excuse you. We'll only have to pull it once or twice more and they'll be out and back in rest billets."

FOR several minutes Andy sat silent, a look of concentration on his set features. Finally he got up, grabbed his dixie and turned to the American.

"You're richt, sir, Ah'll hammer hell oot o' 'em. You tell the tale to Muster Toonsend for a few days, an' Ah'll do ma best."

"I'll see to that, Mac, don't you worry. I'll tell 'em that you're sure you've seen some Germans starting a mine sap, and you think they're trying to blow up your old regiment. That'll satisfy them, I think."

"Ay, maybe, but yer ken the Watch is noo behind Loos?"

"Never mind that. I'll fix it. You keep your mouth shut and don't answer any questions unless they put you on the carpet officially."

McGregor went out first and cut across

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the aerodrome to the mess tent. Preston stayed behind a minute or two and finally strolled over to the Officers' Mess where he sat down next to Townsend.

"Just had a talk with that Jock gunner of yours, Townsend," he opened. "Quite a character, isn't he?"

"A damn fine man to have up front, Preston. As good as they come," said the Englishman. "But did you get anything out of him about that crazy show of his last night?"

"Nothing very definite," parried the American, "but he seems to have an idea that the Jerries are attempting to mine Hill 60, and thinks he saw them actually working on the sap-head. I gathered he's under the impression that they're trying to blast his old regiment out of it—and wanted to give them a helping hand."

Townsend whirled around in his chair: "Good Lord! Then why the devil couldn't he say so? Where's McKelvie?"

"Easy, Townsend," protested the American, surprised by the sensation his "news" had created. "I only got that impression from what he said. There's nothing certain about it."

"But, damn it all, man! It's devilish important! If the Germans are going to have another bang at Hill 60, the Red Tabs ought to know about it. You don't know Mac. If he thinks he's seen a mine-sap, you can bet your last shilling he has. He knows enough about trench formations to spot a mine head when he sees one."

### CHAPTER V

#### The Mine on Hill 60

ARMITAGE was in the C.O.'s office discussing the coming night's raid with McKelvie when Townsend, having shaken off Captain Preston and his repeated protestations, burst in through the door. The two men listened in silence until the excited pilot had finished his account of Andy's discovery on Hill 60 and then McKelvie strolled casually across the room, closed the door and turned to the two officers.

"Now we seem to be getting somewhere," he said, quietly, "and for the first time in the last twenty-four hours you're showing a little sense in this matter. No, don't misunderstand me," he went on, as both Townsend and Armitage showed evident signs of interruption. "You were perfectly right in tackling McGregor as you did—it was your duty to do so—but it ought also to have been obvious to you both that there was something more behind the whole business than a sudden attack of craziness on McGregor's part.

"Where you really fell down on the job," continued McKelvie, "was in letting Preston talk to Andy. One of you should have done that—if all I hear of the comradeship of the Coffin Crew is correct—and by not doing so and getting to the bottom of the matter you've made matters very much more difficult than they would have been. Because, gentlemen," McKelvie's face grew suddenly stern, "while McGregor certainly never saw any signs of it, there does happen to be a new mine at Hill 60!"

Armitage and Townsend exchanged amazed glances and turned in obvious bewilderment to McKelvie.

"Yes, there's a new and very dangerous mine there," the C.O. went on, "but, as I say, McGregor never saw it last night or any other night—*because it was only started early this morning*. The information came to me a few hours ago from Intelligence and we have since confirmed the fact and spotted the loads of T.N.T. being brought up to charge it."

"Holy Smoke!" gasped Townsend, "then how the deuce could McGregor have known anything about it? And if he didn't, what's his idea in making up a story like that?"

"That, I think, is what you might now try and find out for yourselves," was McKelvie's reply. "Oh, and by the way, I shouldn't say anything to Captain Preston about our chat or your visit to McGregor, if I were you—might hurt his feelings, you know. No doubt he meant well. That's all. Good-night."

The door slammed, and two astonished officers were left staring at each other.

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For several seconds they stood silent, gathering the import of McKelvie's parting words.

"A hint," suggested Armitage, at length.

"A definite hint," confirmed Townsend.

"Let's go and get it out of Mac," finished Armitage, making for the door.

**T**HEY found the gunners' hut, dimly lit with army issue candles stuck in shiny petrol tins that had been cut in half to make reflectors. Tate was sitting on his bed, a doubtful-looking structure built of wood from engine crates, F.E. tail-booms and strips of green canvas that looked suspiciously like the covers that were usually placed over the blades of mahogany props. The little Cockney was in his underwear, but he still wore his shapeless helmet and one flying-boot. He sat with his mug cupped in his hands. Over in a corner, Sergeant Ryan was leaning on an open window-sill staring out across the fields. He had taken his flying-coat off, but still wore his long flying-boots, which billowed down in shapeless rolls about his calves.

Pacing up and down the centre of the room was Andy McGregor, still wearing his bonnet and kilt. He had taken his tunic off and was in his shirt sleeves. His dirk gleamed in the half-light of the candles as he strode back and forth like some caged animal.

There were no other gunners there. Marks was in the sick bay. Donnegal and Murphy were on a show with No. 19.

As the two officers entered the hut Andy whirled round upon them. It was almost as though he had been waiting for them.

"I never thought about Rantin' Rupert," he cried. "Believe me, Muster Toonsend, sir, I'd clean forgotten all about that gun!"

"All right, Mac, all right," soothed Townsend. "I believe you, but we want to get this thing straightened up once and for all."

"I shouldna done it, if I'd remembered, sir, but that Captain Preston had me

fair crazy with worry and I just clean forgot."

Armitage and Townsend exchanged significant glances at the mention of Preston's name.

Then the bomber officer turned again to the distressed McGregor.

"Sit down, Mac," he suggested. "Let's get this straight right from the beginning. We may be able to help you."

Andy sat down, his brawny knees flashing beneath his kilt. Phil Armitage drew out a kit bag and sat on it. They motioned Tate and Ryan to come up, too. A couple of ammo. boxes provided seats for all.

"First of all, Mac, tell us what you were firing at down there on Hill 60," opened up Townsend. "Tell us the truth now, and we'll see you don't suffer. You should have told us right from the start."

"Ay, Ah noo," agreed Andy, dropping his head into his hands. "Ah should hae told ye."

They waited patiently for him to begin. Finally Andy raised his head, turned and reached back behind his bed and drew out his knapsack. From it he brought out a letter, addressed to him in shaky but clear handwriting.

"This is whut staarted it," he began, holding it out in front of him and staring at the postmark. "From ma mither in Monymusk. It's about ma brither, Bruce."

"Your brother," snapped Townsend. "I never knew you had a brother, Mac. What regiment's he in?"

"Ay, that's it," continued Andy. "The lad's bin awa' from hame for years . . . in the States."

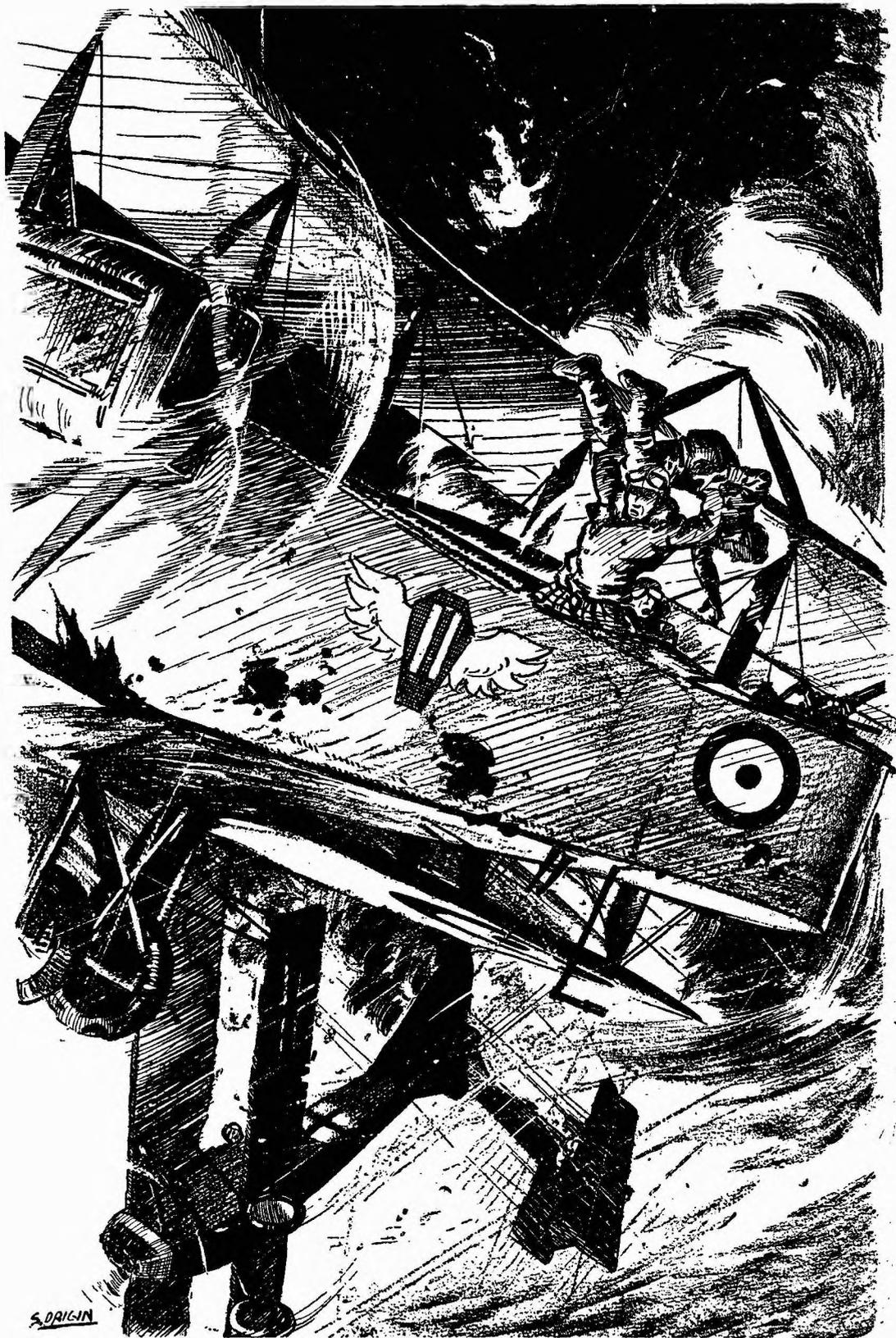
"You mean in the United States?" broke in Armitage. "Where does he live?"

"Bruce went tae New York, and stayed there wie a fine concern an' was gettin' along vurra weel. He's a braw lad, sir."

"Well, what happened?"

"The war . . . in Amurrica. The United States came in as ye ken, and ma brither joined up wie a New York regiment. He didna tell me a worrud. Ma

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The enraged Andy picked him up in his bear-like arms and tossed him over the side

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mither sends me a letter saying Bruce has come over wie the Amurricans and is somewhere in France. Then one day this Captain Preston coom here. He was a nice laddie and quite chatty, like. He asked me about the trenches and lots o' things, an' Ah takes a bit o' a fancy tae him.

"One day I ask him if he knows aboot ma brither's regiment, and he tells me that the division he's in is up in this sector. Ah'm surprised, but he says that they're a-helpin' the British behind Hooge. But that isna a' there was tae it."

"But where's all this leading to?" broke in Armitage. "It's quite true that a couple of American divisions are getting trench training with our men and that the 29th, a New York outfit, is up there somewhere. But how does that affect you?"

"Ah, weel," went on Andy. "That's what Ah thought at first, but Muster Preston he says things that makes me feel bad, vurra bad, sir. He said the English had pulled oot o' a bad sector and left it tae a lot of green Amurrican troops who hadna been properly prepared for trench warfare. A lot o' nasty things, sir, aboot how the English had quit and left them tae hold the whole Prussian Guard division at Hill 60. He said ma brither would probably be killed quick oop there."

"That's a damned lie!" snorted Townsend. "The English are still there, helping the ruddy Yanks all they can, and taking their turn in supports, second line, and up front. It would be suicide to go out and leave those new troops there like that. Preston ought to know better than to talk such rot. Trying to show off his knowledge, I suppose."

"Ah," agreed Andy, "but Ah didna think o' that. All Ah thot aboot was ma brither Bruce. That's why Ah've been firing at the Jerry line behind Hill 60 every time Ah gets a chance. It wasna because Ah wanted tae do anything agin orders, sir, or tae get the crew into danger. Ah wanted tae help him an' the Amurricans oot all Ah could. It was wrong, Ah ken that noo."

"WHEW!" puffed Armitage. "So that's what's been worrying you, eh?"

"Aye. An' it breaks ma heart tae think of that braw lad up there wie the Amurricans. I saw him a few days ago, passin' through. He looked gr-r-rand, sir. A fine braw lad, and Ah couldna think o' him being up there wie'out some help, if what Muster Preston had said was true."

"You saw him? Did you speak to him?" asked Townsend.

"Aye, Ah saw heem. A gr-r-rand lad he was, too, sir, but Ah didna get a chance tae speak tae him. He didna see me. Somehow, Ah didna want him tae see me in ma kilt. It would hae made him—well, sir, ye ken what the sight and the swagger o' the kilt does tae a Scotsman, and Ah wanted him tae be a good Amurrican soldier."

"I know," snapped Armitage, leaping to his feet. "Mac's right. The Americans up there in front of Hooge and Hill 60 are in a tough spot, but it's no fault of our men. The Yanks are in the war and they've got to take their chance with the rest of us now, but there's no reason in the world why any outfit should have to go into the line for the first time and face the prospects of a Jerry mine, and that's what's going to happen to them unless we stop that shaft."

"Jove, that's right," agreed Townsend.

Ryan and Tate edged in closer.

"Then there is a mine being sunk oop there, sir?" asked Andy in surprise. "I thought Captain Preston was just a-makin' it up as a kind of blind for me!"

"Oh, that was the idea, was it?" replied Armitage, thoughtfully. "Well, as it happens, there is a mine there, Mac, and they're bringing up the T.N.T. for it at this very moment. If we can nail it before it goes up, there's a big chance that they'll never try it again."

"McKelvie will *have* to let us," snapped Townsend. "Are you game, men?"

"Let's go now!" offered Ryan.

"Book me in, sir," said Tate.

"No, not to-night. Let's wait until

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to-morrow night when there will be more evidence to work on. How about a rear gunner, Marks won't be fit yet?"

"I'll get one," Armitage decided. "And he'll go if I have to go to General Pershing for the authority."

"General Pershing?" Townsend queried.

"Yes. Our rear gunner on this trip will be Captain Preston. It'll give him an idea of what this war is really like and show him that the Coffin Crew are quite able to manage their own affairs without interference from outsiders."

The assembled members of the Coffin Crew gave vent to a low rumble of agreement.

"He'll go, all right," went on Armitage. "He's up here to learn something about aerial warfare, and he can't learn it sitting in an Orderly Room reading reports. We'll give him a chance of some first-hand information, right from the rear-turret of a Handley Page. And we'll also teach him not to spoil damn good aerial gunners!"

Later, when McKelvie was acquainted with the situation and the plans of the Coffin Crew for the morrow, the opposition that Armitage expected to his proposal to enlist Captain Preston was not forthcoming. In fact, Major McKelvie's only comment was a chuckle and the rather cryptic remark, "Remember to bring your rear gunner back with you—we may be wanting him again very shortly."

### CHAPTER VI

#### A Recruit for the Coffin Crew

THE members of the Coffin Crew were up bright and early the next day—long before mid-day, in fact. No. 11 was being prepared for the mad trip from the minute the day-squad of mechanics reported on the tarmac. Armitage and Townsend were busy in the hangar office working out a compass course. Ryan and Tate were superintending the loading and fusing of the special bombs that would be carried. Even Major McKelvie was on hand in his university blazer, khaki slacks and a big woollen scarf.

McGregor, blissfully happy over his return to the fold and the sharing of his secret burden, had no desire to mingle with the crowd in the hangar as yet. Few knew just what was in the wind, and his dressing down of the night before was still the topic of whispered conversation on the wing engines and down in the dim caverns of Handley Page cabins.

The American officer reported to the orderly room at the usual time in the morning and prepared to take over his routine duties when Major McKelvie came in, puffing away at his pipe as usual.

"Good morning, Preston," he greeted, flicking over a sheaf of the day's orders. "Oh, by the way, Preston, you've had Lewis gun instruction and firing, haven't you?"

"Lewis gun, sir?" replied Preston. "Why, yes. Had a lot of it, and would have gone on through if they hadn't discovered that something was wrong with my heart, or lungs, or something. Never make a pilot, they said, and gave me one of these damnable desk jobs."

"Well," went on McKelvie with a reflective air, "how would you like to make a trip up the line to-night as a rear gunner? We need one on a small job, and it struck me that the experience might help you."

Preston searched McKelvie's face for several seconds before answering. A steely glint flashed in his eyes as he replied.

"Do you know, sir, I think that might be rather a good idea. I'd like to try it. The experience should be worth quite a lot to me."

McKelvie was puzzled. The man actually seemed pleased at the proposition.

"It's not compulsory, you know," he explained, "but since you are up here to get some knowledge of our working methods, I thought it a good chance for you to gain some actual experience. They're not going over far."

"I'd be glad to try it, sir," Preston answered at once. "What time am I to report?"

"Oh, drop around about 11.30 and

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report to Lieutenant Townsend on No. 11. Better take the rest of the day off if you're going to fly to-night. It'll just be a gunner's job so there's nothing for you to worry about."

"What's the show, sir?"

"I'd like to keep it quiet for a time, Preston, if you don't mind," replied McKelvie. "We're waiting for some special information from G.H.Q. before we can complete the details. You push off for the day. There's a tender going into St. Omer. Perhaps you'd like to go in with it and break the monotony a bit."

"Thanks, sir. And thanks for the chance of going over the line," closed Captain Preston, still with the flinty gleam in his eye.

"FUNNY," mused the C.O., as he tramped over to get his breakfast, "the blighter actually seemed pleased at the prospect of getting a chestful of lead. Can't make him out at all."

"What a break!" the American captain was thinking as he shuffled his papers together and took them across to the Recording Officer's desk. He was actually gleeful.

He, too, went across to the officer's mess and pecked away at some bacon and toast. No one there seemed to know anything about No. 11's coming show and he decided to try a few inquiries at the hangar.

"So you're coming along with us to-night, eh, Preston?" greeted Armitage, with a grin.

"Yes, rather. What's the show?"

A warning cough came from Townsend who was standing with the flight sergeant. Armitage took the hint.

"Nothing definite yet, Preston," he said, "but we're working out compass courses for Audenarde."

"Audenarde? Why, the C.O. said it was to be only a short hop. Not far over the line."

"Well, that's where we're working out courses for, but, of course, there might be a last minute change, you know."

Armitage was lying. A course from Cassel to Audenarde would take them

straight across the top of Hill 60, but he preferred that that noted mound should not be mentioned for the moment.

Preston walked away puzzled, and a few minutes later he was in his cubicle changing into a newly-pressed uniform and slipping a small package into his pocket.

He went out, crossed the aerodrome and sought the S.E. flight. A pilot came out of the hangars to greet him and they chatted a minute over a packet of American cigarettes.

"You on patrol to-day?" asked Preston.

The S.E. pilot nodded: "Dixmude to Ostend."

"Here's a packet of Fatimas. Drop them at Eerneghem. Open it a little so that it will—you know. I'm off to-night. Hope you like the fags."

The S.E. pilot paled for an instant, but finally turned so that the mechanics could see him pocket the precious packet of American cigarettes. They looked on with envy.

"I'll take care of you within ten days. Keep your eyes open for ground signals at the usual place," Preston continued, eyeing the S.E. pilot. Then in a louder tone he added, "I've got a day off. Going into St. Omer on the squadron tender. How's that sound?"

"Some chaps have all the luck," grinned the S.E. pilot. But he wasn't thinking of St. Omer.

## CHAPTER VII

### Death Flies at Night

NO. 11 was out on the cab-rank, her two engines warming up. Major McKelvie stood under the nose of the big bomber talking in quiet tones to Armitage and Townsend. Captain Preston, looking unfamiliar in a new Sidcot suit and carrying his Lewis gun in his arms, stood behind the two pilots and listened.

"It's all there for you, Townsend," explained the Major. "They're still bringing the stuff up and it's covered with a netting camouflage just off this communication trench, here." He indicated

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the spot on a photograph taken that afternoon, which he held under the glow of a small pocket torch. Preston moved in closer to look, and as there dawned upon him the nature of the patrol he was about to make his set face reflected his hardly-suppressed rage. But he said nothing.

"Where's the sap-head, sir?" asked Armitage.

"They've started it here," explained McKelvie. "See the new earth. They've tried to camouflage it by spraying it with some sort of liquid, but the late afternoon sun has brought out the uneven mounds. It's a complete give-away."

"Where shall we make for first, sir?" asked Townsend.

"Better take the forties and give it to them at the T.N.T. dump. If you can get a 'hit' there, you'll have all the light in the world to see the sap-head activity. Use your 112's there. They're detonated for delayed action and should go in deep before exploding."

"The same flight course, sir?" went on Townsend.

"Yes. Go right into their lines as far as Menin and run back to Hill 60. After that, it's up to you, and I wish you the best of luck."

"Thank you, sir," was Armitage's quiet response.

"And you, Preston," went on the Major, "you'll have to keep that gun hot and watch your tail. If you get a chance, rake their second line with all you've got. You'll be able to tell it by the difference in size of the dug-outs. They'll all be big funk holes."

"You mean, sir, that we're going down as low as that—so that we'll actually be able to see their dug-outs?" said Preston in amazed tones.

"Well, that's the usual practice of the Coffin Crew, I believe, Preston. But this is purely a volunteer show, you know. If it seems too hot, you can pull out, if you wish."

"Oh, no!" Preston said, and gulped. "I'll go. It will be a fine experience, and I need it."

"Good man!" beamed McKelvie. "And I hope you get back safely!"

THEY guided Preston up the metal ladder and into the cabin of the Handley. There, Sergeant Ryan put his gun on the Scarff mounting for him and showed him where the extra drums were kept. By now he seemed fairly well reconciled to his fate and even joked with Tate as he went down the catwalk. Ryan eyed him anxiously, but said nothing.

"Do you men have any weapons?" asked Preston.

"Only those," explained Ryan, nodding at the bombs in the racks.

"No guns, revolvers, or anything?"

"What for?" asked the sergeant bomber.

"Nothing. I only wondered," said the American, climbing up on his platform and testing out the Scarff mounting.

Then out of the darkness came Andy. Of his normal flying kit he wore only his helmet and a pair of goggles. He had left his flying coat and flying boots in the hut.

"What's the idea, McGregor?" growled Armitage, as the dour-faced Scot came through the trap-door.

"Ah canna stand a' that clobber aboot me when Ah'm fightin'. The kilt will be enough."

"But you'll freeze to death, man!"

"Och, no, sir! A fightin' Scot is never kilt wie the cold or cold wie the kilt," answered Andy, dropping on to his hands and knees and crawling up the tunnel to the forward turret.

"What the deuce does he mean?" growled Armitage. "Well, he's certainly stripped for action—no mistake about that!"

Townsend stuck his compass course paper on the dashboard and settled himself in the cockpit. The ladder was taken away and Sergeant Ryan closed the trap-door. The engines were opened up with a roar and the rev-counter needles quivered and moved up to the red line. No. 11 was ready for the fray.

The chocks were removed and McKelvie waved his stick, rammed his Dunhill back between his teeth and walked away, head down. Old No. 11 snarled and fumed at the delay until, finally, Townsend gave

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her her head and she started to rumble away.

Like a fussy old lady, she hoiked up her skirts, flipped up her tail and went lumbering across the field, leaving a streak of wind-blown grass behind her. Pennons streaked back from her engine exhausts, the rumble of the undercarriage died away and No. 11 skimmed aloft with her cargo of canned death and headed straight for the line.

ONCE they were off, McGregor became the Andy of old. He fussed with his guns and tweaked at the wind sights. He ran his fingers over the first layer of cartridges in every drum to make certain that they were free in their guides and slots. He fretted and fumed about his turret until Armitage wanted to throw something at him and make him sit quiet. Finally, the bomber officer got up and went down the companionway to see that Ryan and Tate were at their posts. They were, and he continued on to see how Captain Preston was faring.

"Like old times, this flying game," Preston greeted him as he gained the rear turret. "You chaps certainly have the life."

Armitage grinned and slapped him in a friendly manner across the back.

"Is that so," he thought. "You wait a few minutes, my lad, and you'll soon be wishing you were back in Texas, splashing about the sand with a Curtiss Jenny." He went back to the control-pit and noted that Townsend was screwing back and forth to get a little more height before crossing.

"How's Preston?" bellowed the pilot.

"Thinks it's a joy ride," responded Armitage.

"Let him enjoy it—it won't be for long," growled Townsend, with a grim smile.

Another five minutes of ploughing through the night mist, fighting the wheel to force the great craft ever higher, brought them up to six thousand, and Townsend decided to ram her across.

"Might as well take a chance with her

here as anywhere," he argued to himself.

Across the line they rumbled unhindered for several minutes. Hill 60, the festering scar of the Belgian battle front, glared up at them and Andy rose from his crouching position and stared over. For a minute, Armitage thought the Scot was about to start shooting again, but his guns were hanging idle in their slot. The two pilots exchanged knowing grins.

Gheluvelt came up to them, and the battered Menin road lay ahead. Finally they got a desultory burst of Ack-Ack. The shells burst well ahead and they crashed through the black carnations of smoke while the airmen held their noses. Again Andy stood up and stared about him. There was not an enemy plane in the sky, but a flight was taking-off from the Moorseele field south-west of Courtrai and they could be expected within a few minutes.

Suddenly Andy stiffened in his turret and peered backwards. He stood up on tip-toes and finally climbed on to the cowling between his turret and control pit—and continued to stare towards the rear turret.

"Now what's the matter with him?" exclaimed Armitage.

"Is the silly devil going off his nut again? He'll be blown off in a minute . . . kilt and all," said Townsend to himself, trying to see past the flapping tartan of the wild-eyed Scot.

"Captain Preston!" yelled Andy, dropping down and leaning over to Armitage. "Captain Preston! He's gone, sir! Not in his cockpit!"

"Damn!" spat Armitage, staring over at Townsend. "What's the silly fool playing at, leaving his turret?"

The pilot shook his head in dumb despair and indicated that Armitage should go back and have a look.

"Just our luck!" growled the bomber officer to himself. "He's probably fallen overboard and's half-way to heaven by now!"

He turned in his seat to slip down the companionway—and looked into the black barrel of a Colt automatic. It was held in the steady hand of Captain Preston.

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### CHAPTER VIII

#### Andy Squares an Account

“WHAT the——?” gasped Armitage.

“What’s the game, Preston?” Townsend started to say.

“Get back to your seat, Armitage,” bellowed Preston, edging farther forward, so that he commanded a full view of the three members of the Coffin Crew. McGregor still crouched in his precarious position on top of the cowling.

The Handley Page went hurtling on towards Menin, guided by the clenched hands of Townsend who was convinced that they had a madman aboard.

“Sit down there, Armitage, and fold your arms!” commanded the American, bellowing into the bomber officer’s ear. “And you, Townsend, stick to that wheel and put this ’bus down on the Moorseele aerodrome. They’re waiting for you!”

Armitage and Townsend exchanged amazed glances. Andy was staring at the gun in Preston’s hand, trying to make out what it was all about. He couldn’t hear what the American was saying, but he had a pretty shrewd idea of what was happening.

“What did you say?” yelled Armitage, screwing round in his seat.

The automatic went into his chest like a piston rod.

“Sit quiet, and you’ll be all right,” snarled Preston. “Come on, Townsend, swing her over and put her down at Moorseele.”

“Like hell, I will!” snapped Townsend. “You’re crazy, man! Moorseele’s a Hun aerodrome!”

*Smack!* Preston struck the Englishman across the mouth with the flat barrel of the gun. It drew blood and Townsend spat as he brushed the back of his gloved hand across his mouth.

“Now put her down, or I’ll blow the top of your head off,” screeched Preston. “Shut off and get her down on that field!”

He pointed over the edge of the cockpit to the Moorseele ’drome. Three blinking ground flares were laid out.

Slowly Townsend swung the bomber round and edged the throttles back, all the while watching Preston out of the corner of his eye. The American was bellowing into Armitage’s ear.

“They’re paying a big price for you lads,” he yelled. “Been trying to get you for weeks. I tried to kid McGregor into getting you in a jam, but it didn’t work. And when you gave me this opportunity to come along I couldn’t believe my ears! I tipped them off this morning that I’d be bringing you in to-night—the Coffin Crew, all present and correct! How’s that for good staff work, eh?”

Slowly, the bitter truth was beginning to dawn on Armitage.

“So you’re a German agent, are you?” he said.

“Of course I am. Planted in Texas when the United States came in. And damned glad I’ll be to be back with my own crowd to-night.”

Armitage watched Townsend as he brought the ’plane down lower. Suddenly, a group of Fokkers loomed up out of the night and poised above their wing-tips. Andy made a jerky move to get down into his turret, but in a flash Preston had whipped his gun round and was holding the Scot covered.

“Hurry up!” he yelled at Townsend, “or those Fokkers will be getting impatient. They’ve quite a few debts to settle with you fellows and they won’t need much encouragement to start things.”

Armitage sat back, a look of despair in his eyes. So this was the end of the Coffin Crew. Betrayed by a German spy in the uniform of an American officer. He stared ahead, trying to think of a plan. His eye fell upon McGregor still crouched on the cowling, and he saw the gunner’s fingers creep along his bare knee towards the gleaming hilted dirk in his hose-top. As Preston crouched lower over Townsend’s side of the cockpit, the fingers reached the dirk. Then he struck . . .

**T**HE kilted man took the longest chance of the war as he dived from

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the top of the cowling, his dirk aimed at Preston's throat. The spy's gun spat once, but Armitage chopped the arm down with a quick flick of his left hand, and the bullet crashed into the dashboard.

"Ye dommed Hun trickster, ye!" screamed Andy, slashing at Preston. "Ah'll carve ye wind-pipe oot!"

Preston went back, his gun blasting away in the narrow cockpit. He screamed and the scream was suddenly choked off into a throaty gurgle. Townsend opened up the engines and yanked the Handley up, while the three men wrestled together in the narrow cockpit. Amid it all, sparkling streams of tracer came biting in from above. The pilots sent up to convoy the captured Handley in had seen the fight in the cockpit and were joining in, regardless of friend or foe.

"Take care of him, Mac!" screamed Armitage. "I'll take the rear gun."

He dived down the companionway, tumbled over Sergeant Ryan who was tied up on the catwalk and fell against the unconscious form of Alfred Tate. Without stopping, Armitage clambered up on the rear platform and was soon answering the Fokker fire.

Up in front, the enraged Andy was still grappling with the German agent. His dirk had slashed Preston cruelly, the spy's gun was empty and now, after a final knife-cut that almost severed Preston's head from his shoulders, Andy picked him up in his bear-like arms and tossed him over the side of the cockpit.

"For God's sake, Mac!" screamed Townsend. "Don't do that!"

But it was too late. A gory, mutilated figure went hurtling down through the night to meet merciful oblivion not twenty yards from the tarmac of the Moorseele field.

"Ma dur-r-rk!" gloated Andy, slipping the scarlet-stained knife back in his hose-top. "Ye canna beat a dur-r-rk at close quar-r-r-ters!"

Then with a leap and another flourish of bare knees and flashing green tartan, he was over the cowling again and blazing

away with deadly short bursts at the Fokkers. Two were driven off out of control. Armitage drilled the engine of another and it burst into flames. Deterred by this sudden and disastrous onslaught, the remainder made off towards a screening cloud as Townsend slewed the Handley Page round and started back for Hill 60.

"Whew!" he gasped, watching the enraged Andy searching the sky for winged targets. "What a trip!"

THE immediate danger past, Armitage relinquished his post in the rear turret and went down into the cabin, where he untied Ryan. Together, they gave Tate a nip of brandy and swabbed a gash in his forehead with iodine solution.

"The blighter made me truss old Ryan up, sir. What's 'is gime?" gasped the Cockney, as he gathered his wits about him. "Put a bloomin' gun in me back, 'e did, and then swiped me one across the forehead and knocked me silly."

"Well, he won't knock anyone else," soothed Armitage. "Mac's attended to him. Now, if you can manage it, get up there on the toggles. We can't waste any more time."

The bomber officer clambered back into the control pit and looked round amazed. He stared at the blood that was spattered over the cockpit floor, gleaming up under the instrument lights.

"Where is he?" he demanded of Townsend.

"Mac dumped him!" was the laconic reply.

"'Struth! The blood-thirsty old devil!" gasped Armitage, staring in amazement at McGregor, who was now giving his undivided attention to Hill 60 up ahead.

"Well," he remarked at length, "that's that, and now I suppose we'd better get on with the job."

Townsend nodded and stared ahead for his point. Andy's nose pointed over the front turret dead on it. Armitage began to set his bomb-sight.

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### CHAPTER IX

#### No. 11 Runs the Gauntlet

**T**HE shell-slashed sides of Hill 60 glinted with its firefly eyes. The scratches that represented the trenches, saps and communications meandered about its base as if trying to scale its pock-marked sides. Townsend selected his target and nodded to Armitage, who rose and peered down the companionway. The still ruffled Ryan was at the board, while Tate, bearing up gamely under a gigantic bandage, was fumbling with the toggles.

The sky belched flame and sheaves of pointed lances. The gunners in the back area were clambering under their waggon-wheel mountings and hurling bursts of Spandau at this impudent giant of the sky. Townsend screamed something and rammed his wheel forward. Into an inferno of silver and gold fire, shot the Handley. Andy's guns ranted, raved and bucked on their Scarff mounting as he directed lines of quicksilver into the dim holes that spread out in front of the parapets. There, he knew, were the enemy's machine-gun emplacements.

The Handley gave a convulsive jerk. Armitage's hand had gone down and jerked toggles had released a trio of forty-pounders.

*Crump! Crump! Crump!*

"Damn and blast!" yelled Townsend, whipping her over for a return. They had missed. Armitage swore and raved as chunks of cockpit coaming flew past his face. He set the sight quickly again and shook his fist at the stop-watch.

"Now for it," shouted Townsend, nosing down once more. "Give it to 'em in the bread-basket!"

Andy's guns caught a group of grey figures that were scampering like ants from a partially-uncovered pile. These were the men who were still bringing in the T.N.T. under the cover of darkness, but this winged devil of destruction was not in the programme.

*Scrawnh! Scrawnh! Scrawnh!*

The Handley leaped again as it vomited three more eggs. Townsend fought the

wheel and held her in a dive as long as he dared.

*Crump! Crump! Wherro-o-o-o-o-m!*

A sheet of lemon and scarlet flame leaped up at them. The controls of the Handley suddenly went loggy and Townsend shook the wheel back and forth, yelling at the top of his lungs. Armitage went to his knees as the floor of the cockpit rushed up at him. Andy fell across the Scarff mounting and almost bit his tongue off.

They had caught the T.N.T. dump fair and square.

A torrent of stone, dirt, shattered duck-boards and vomiting sandbags showered down all around them, biting great gashes in the fabric of their top plane. Planks, elephant iron, parapets, revette-work and charcoal braziers went sky high, to fall in jumbled havoc behind the trench-lines. Andy swore, got to his feet and blazed away again.

"Got it," exulted Armitage, panting to get his breath. "Now for the shaft-head, and we'll bottle the devils up!"

Townsend was still fighting the stick in an effort to get some response to the controls. Now he rammed the throttles wide open to obtain more force on the control surfaces, and shoved the bomber's nose hard down.

"Trench strafing in a Handley Page," he laughed wildly. "This is certainly the Coffin Crew's night out!"

**T**HE bomber responded to the controls again and the pilot whipped her over on one wing-tip in an almost vertical bank that made Andy hang on for dear life. Down inside the fuselage Ryan and Tate were lying in a jumbled ball beneath the rear turret platform. They scrambled out and began climbing up the catwalk like men going up a ladder. The Handley whipped down again and they rolled head first against the tanks.

"The toggles! The toggles! Get to them toggles!" roared Ryan.

Alfred Tate, puffing and panting like a grampus, crawled up the strut of a bomb-rack and found the toggle-board. Ryan crawled through his legs and hung on where he could see Armitage.

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Through a fire-curtain of M.G. and Minnies charged No. 11, with what fabric and struts she had left. Her engines bellowed and raged as she nosed in and out like a winged dragon seeking its victim. Clouds of smoke from the T.N.T. blast were rolling across the trenches as if to blot out the target.

At last they found it, a gleaming black eye set in a yellowish-white socket. There had been no time yet to camouflage the dirt.

The Handley went down on it like a dart. Townsend caught Armitage's eye, grinned, and turned back to his controls. In the front turret, Andy was ramming more drums on, frantically feeding the double Lewis that was bringing death, swift and sudden, to the grey-clad figures huddled in the trenches below.

Into another inferno plunged the battle-scarred Handley, heading nose first at the black eye of the shaft head. Armitage was gripping the edge of the cowling with his right hand, ready to give the signal to Ryan with the left. Down his arm slashed—twice. Ryan, on his hands and knees, elbowed Tate in the legs. Alf yanked twice and two big 112-pounders went out. The Handley leapt with the released weight.

*Bong! Bong!*

"Back again!" roared Armitage. "We've got two more!"

Andy in his front turret was steadying himself on a turn that almost put their wing-tip into the British trenches. Suddenly he lunged forward and just saved himself from going over the edge. With a scream that could be heard even above the roar of the engines, he gave the Coffin Crew his news.

"That's them!" he roared. "That's them—the Amurricans in wie the British. Doon there, Muster Armitage!"

But Armitage, though he had caught a word or two of Andy's cry, held to his bomb-sight until they were back over the sap-head target and twice more his arm dropped in signal to the toggle men.

*Scrawnch! Scrawnch!*

*Bong! Ber-r-r-r-o-o-o-o-m!*

The last 112-pounder had found its mark and had plunged on through the

shale crust of Hill 60 and plumbed the depths of the German mine. A low growling concussion told the rest. A death-charged aerial torpedo screwing its spinning nose into the shaft had exploded and blasted the timbered tunnel into a battered tomb for a hundred brave men. Their tunnel that was to get beneath the British lines had been stopped for good.

"Home, James!" yelled Armitage. "I'll take the rear gun!"

He left the cockpit, dived down the companionway and went scrambling down the cabin catwalk to the rear gun platform. In a second or two the gun was chattering away and sweeping the enemy trenches with a torrent of fire. Up in front, Andy was giving the rear area communication trenches a fierce beating, his tracers carving a line of death along parapets and sandbags.

Townsend was fighting his wheel like a madman in an effort to get the big bomber round. Andy halted in his gun-play for an instant and stared back at the pilot.

Something was wrong!

They were still several hundred yards inside the German lines, and only about two hundred feet off the ground. Townsend could tell that the elevators had been hit by the strange vibrations that came up the wheel shaft. At any moment, the controls might go. With a desperate effort, he managed to get the nose up, skidded round in a dangerously flat turn and, with engines throttled back to ease the strain on a possibly fractured structure, headed for the British lines.

## CHAPTER X

### The War Cry of the McGregors

OUT on the tarmac of Cassel aerodrome a worried Major McKelvie paced up and down, stopping every now and again to cast an anxious glance up into the night sky and to listen for the welcome drone of a homing bomber. No. 11 was overdue and unless the Intelligence Officer who now stood discreetly silent in the shadow of a hangar was a liar, it seemed highly improbable

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to Major McKelvie that the Coffin Crew would ever again be seen at Cassel or any other Allied aerodrome.

Suddenly, McKelvie stopped his restless pacing. His practised ear had caught the first faint sound of an approaching aircraft. Rapidly, the noise grew louder and soon it was possible to recognise the characteristic beat of twin Rolls-Royces. Other ears, too, had caught the warning, and men rushed out to light the landing flares. One by one, in quick succession, a line of waste-stuffed petrol tins leapt into flame, forming a giant L up the long arm of which the incoming pilot could land with the assurance of heading directly into wind.

But this pilot, it seemed, had no need—or no time—for such niceties. Flying low, the machine came lumbering crazily towards the aerodrome, one wing well down, and fabric trailing from planes and fuselage. Over the far boundary of the aerodrome the nose of the Handley dropped—and the bomber all but plunged into the ground. A skilled hand at the controls plucked it up and straightened out in the nick of time, but an instant later the tail rose again, the undercarriage hit the ground and was wrenched bodily off. The sudden impact sent the machine over on to one side, there was a rending crash as the wing tore off in a tangle of splintered wood and fabric and, swerving violently, the bomber slid forward on her belly to travel a hundred yards along the ground before she came to rest. Old No. 11 had come home.

Major McKelvie was the first on the scene of the crash, closely followed by a small army of willing helpers who had been helpless spectators of the disaster. But there was no need for their ministrations. Townsend, expecting just such a landing every moment of their hard-fought way back from the lines, had been ready for it when it came. He had cut the switches before the bomber had hit and, apart from a collection of cuts and bruises that would give the M.O. a busy half-hour, the Coffin Crew had survived their sensational arrival unscathed.

Gingerly they clambered down and out of unexpected rents in the fuselage

and stood around surveying the battered remains of No. 11, while Armitage, as unperturbed as if a flying-boat landing on an R.F.C. aerodrome was quite a normal method of arrival, approached Major McKelvie, saluted and reported their successful bombing of the targets. Townsend, as the one responsible for the landing, kept a discreet distance behind the bomber officer.

But McKelvie's eyes were still searching the little group of Coffin Crew members, and now he turned to Armitage with a sharp inquiry.

"Where's Captain Preston?" he snapped. "I don't see him here."

"No, sir, we—er—dropped him on the way," Armitage began, and then, seeing the concern in McKelvie's face, proceeded to recount the story of their adventurous night and the berserk revenge of Andy McGregor.

"**I** UNDERSTAND," McKelvie said, when he had finished. "And perhaps it was the best way out. But if you hadn't gone off so promptly we could have nailed Preston before you went. Five minutes after you'd taken-off, this officer from U.S. Intelligence," he nodded towards the American officer who had been standing beside him throughout the conversation, "arrived with a squad of men to collect Preston. It seems they'd been trailing him for weeks, but he'd given 'em the slip by faking transfers to this squadron for instruction attachment."

"Well I'm damned!" was Townsend's blunt comment upon this startling news. "And to think that we never once suspected that he was a wrong 'un. Of course, his whole game's as clear as daylight now!"

"He was certainly pretty smart, though," reflected Armitage. "That stunt of his in getting Mac to spring the trap for us on Hill 60 very nearly put paid to the lot of us."

"Smart, yes," McKelvie agreed, "but, like so many smart people, he very nearly overdid it in the end!"

"How was that, sir?" Armitage asked in surprise.

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"He invented a new mine shaft on Hill 60 that was actually there," explained McKelvie. "He thought he was misleading us with a faked story, but, as it happened, it was the truth. I began to have my suspicions of him from that moment, but when he seemed so willing to go on this show with you to-night, well, I hesitated—and that's where I let you fellows down badly, I'm afraid."

"Nonsense, sir," Armitage objected warmly, "it was the best thing that could have happened. Jerry got blown sky high by his own mine and Herr Preston met his death at the hands of the man he had done his best to have killed. In fact, the only one who lost on the deal and didn't deserve to was poor old No. 11," he concluded sadly, with a reflective glance at the mangled heap of wreckage on which mechanics were already busily at work.

"Well, luckily, it did turn out all right," remarked McKelvie. "And now you'd better be getting your reports made out. I'll come with you—oh—and I think we'd better have McGregor along, too. His—er—disposal of Preston was a little irregular and an unofficial word with him now may save a lot of trouble later."

Andy was called over from the admiring group that had gathered round the

Coffin Crew gunners and, led by McKelvie, the little party moved off towards the squadron office.

OUTSIDE the office, standing easy, were four American privates, the escort that had accompanied the Intelligence Officer sent to arrest the masquerading Captain Preston. Towering head and shoulders above his companions was a tall, husky doughboy, and, as the little squad came to attention at the sight of the approaching officers, a curious transformation came over the tall Yankee. Incredulously, he peered beyond the advancing group at the kilted figure of Andy McGregor and then, his surroundings obviously forgotten, he cast his rifle aside, gave vent to a stentorian shout and charged madly forward.

"Ard Choillie!" he shouted and, as the famous McGregor war-cry reverberated across the aerodrome, Andy started in amazement, took one look at the charging figure and leapt to meet him.

"Ard Choillie-ee-ee!" he yelled, and next moment Private Bruce McGregor, U.S. Army, and Corporal Andrew McGregor, R.F.C., were executing an original form of Highland fling on the tarmac, blissfully oblivious to the presence of a highly amused Major McKelvie and a scandalised captain of the U.S. Army.

The McGregors were re-united.

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## THE STORY BEHIND THE COVER

### The Westland Lysander is Britain's Latest Army Co-operation 'Plane

THE latest type of Army Co-operation aeroplane to be adopted by the Royal Air Force is the feature of this month's attractive cover painting by S. R. Drigin. The machine is a product of the Westland Aircraft Works of Yeovil, Somerset, and has been officially given the type name of "Lysander." Its immediate predecessor in the equipment of R.A.F. Army Co-operation squadrons is the Hawker Hector biplane, so that a famous British regimental song lends obvious point to the name chosen for the new machine.

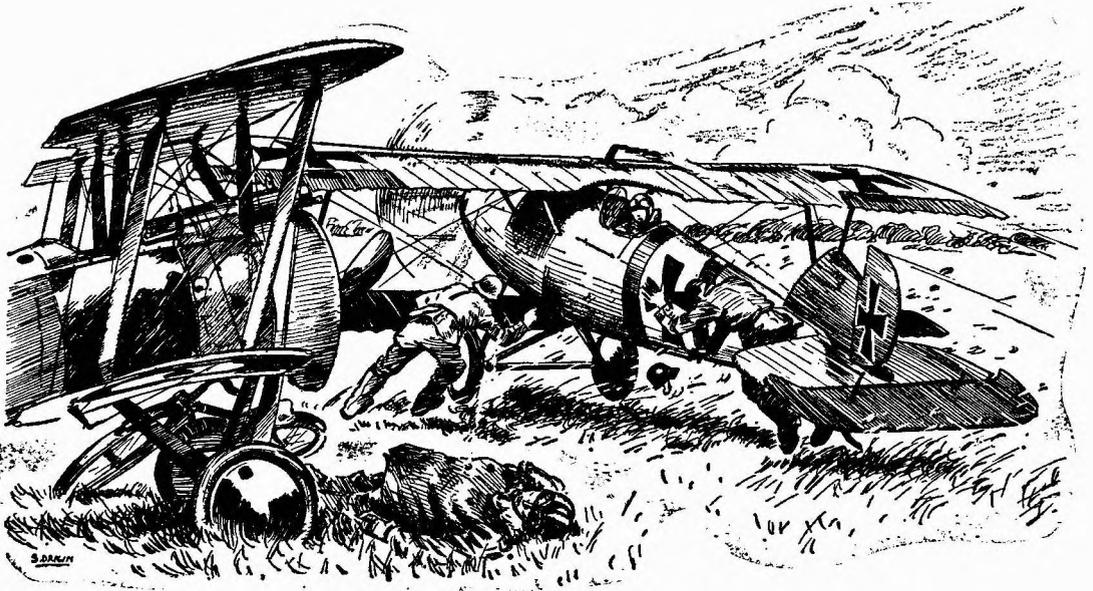
The Lysander is a high-wing monoplane with comfortable enclosed cabin accommodation for its crew of two. Power is supplied by a supercharged Bristol radial engine which drives a controllable-pitch airscrew. The engine installed in the prototype machine illustrated is a Mercury, but Perseus sleeve-valved engines will probably be installed in some at least of the production machines.

The aeroplane was planned from start to finish for efficient conduct of the duties of Army Co-operation flying, including artillery spotting,

reconnaissance and aerial photography. Details of its speed and other qualities in performance may not yet be published, but the Air Ministry permit the statement that its maximum speed is comparable with speeds formerly attained only by single-seater fighters. It is, therefore, by far the fastest Army Co-operation aeroplane in existence.

### Landing-lights on Wheels

A FEATURE of its flying performance is its extremely wide speed range, gained largely by the use of automatically-operated Handley Page wing slots and slotted flaps. Yet, in spite of its terrific top speed, the Lysander can be cruised under full control at low speed for reconnaissance and artillery spotting. Powerful landing lights are mounted in the "spats" covering the wheels, and the machine is fitted with all the usual equipment, such as message picking-up apparatus, signal lamps and wireless set, for communication with ground forces.



The tail-plane bowled the man over as the Albatros surged forward

# ONE MAN'S MEAT

When Two Aerial Opponents Both Require One More Victory to Win a Coveted Reward it is Less Disastrous to be Over-Confident in the Air than Over-Polite on the Ground

By JEREMY HOOD

**F**LIGHT LIEUTENANT RUPERT DU PONT FOTHERINGHAM, R.N.A.S., surveyed the mottled Flemish landscape without enthusiasm. Such a statement would appear to be simple enough, yet it is necessary to examine it closely and to elucidate several matters before proceeding further.

It is within human knowledge that other gentlemen of the air have undertaken E.M.F.\* without loud cries of joy. Indeed, the very letters are enough still to send a cold shudder through some of us.

But, apart from the fact that it was excessively early on an October morning, life should have been moderately good for this particular officer. He was young for his rank, and, judged by current counts, was within one step of a decoration, having gained twenty-four victories in an uninterrupted sequence of routine duties.

He was known as "Docker" in mess, and, the name having no particular significance so far as is known, it is to be presumed that he was pretty generally liked. His Camel was getting *astra* without apparent *ardua*, and the sky was clear. A pale sun caused the oil on the moving parts of his guns to glisten brightly.

Even the word "mottled" can be explained. It was not spots before the eyes caused by other odd spots the night before. It was just that mist was lying sluggishly in the hollows and valleys, as if great splashes of whitewash had been dashed on the varied quilt of the countryside.

Finally, Docker's lack of interest in his duty flight needs explanation. Actually, he had what he described as the "ruddy hump—the flamin' pip." And all because he couldn't get "leaf."

He had wanted that leave badly for a reason which, vital though it might seem

\* E.M.F. : Early Morning Flying.

## AIR STORIES

to young men in the circumstances in which Docker found himself, was not laid down in King's Regulations as adequate grounds for special absence. Indeed, the subject was of such delicacy that he could hardly explain the truth even to the C.O. To *some* one might have dropped a hint, but Wing Commander Ratline looked as if he'd never been aware that there were creatures in skirts called women.

Docker had first asked for a week, which had been refused, he having been back only a month from his last spell at home. Then he begged for three days, which was likewise declined. Finally, he proposed that he might be allowed to fly home one day and return the next. This also was ruled out.

Then someone pointed out that if Docker got a decoration he would automatically be sent home to receive it. And as at that time Docker had some eight victories to his credit and his flight was on offensive patrols, he had leaped at this idea and had reached twenty-four in double quick time. Then the last blow had fallen. He was told that he had been detailed for instructional duty at Vendôme, the R.N.A.S. school away down in the south. The authorities, noting his repeated applications for leave, had assumed he was in need of a rest. Vendôme would provide it.

Docker nearly bombed the Wing offices. For a day he raged and cursed in a manner most unbecoming an officer and a gentleman, and his behaviour in mess that night does not bear telling. But he could have rent Europe in twain without changing the official mind.

So it was that on this cold October morning he had set out from St. Pol with resignation writ clear on his brow and a barbed arrow through his heart. It was his last flight at Dunkirk and nothing ever happened on these early morning perambulations. Nothing was supposed to happen. The flying sportsmen on both sides believed in the sanctity of the early hours.

**D**OCKER mouthed a dirge which he believed to be a love song and looked

about him with dolorous eyes. Memories which wrung him persisted in returning to mind. Suddenly the lament stopped; the eyes were lack-lustre no longer; the sagging figure was erect.

Away to the east were three Albatros scouts, in neat formation, heading towards the sea. What they were doing there at this unseemly hour mattered not one whit to Docker. There they were and he was just the man for the occasion.

He headed away, hoping to mislead the Germans. Then, with nose into wind, he opened his throttle wide and jerked the Camel up into its steepest climb. When he judged he had a thousand feet advantage, he whipped his tail up and roared across the sky towards the enemy patrol.

Before he could get within firing range he saw one machine detach itself from the formation and turn towards him, climbing hard.

"You'll do first," muttered Docker. "Maybe I'll attend to your pals afterwards."

He should, of course, have dictated the tactics of the duel from the start. He had the height and he knew a thing or two about air fighting. But he made the mistake of over-confidence. He felt sure that he could finish his man with his first burst.

The Albatros, climbing steeply, looked an easy mark. Docker picked out his diving point carefully and sighted coolly. He held his fire in the approved manner and had an excellent target when he pressed the firing grip.

*Tat! Tat! Tat! Tat!*

He saw his tracers enter the machine, and ceased fire after a twelve-round burst, zooming away and turning sharply to see the enemy hurtle below.

To his surprise the Albatros was still in commission. Worse, it was climbing above him!

He swung away, nose up, looking anxiously behind him. He swore to himself as he saw that the German already had several hundred feet in hand. Could he make good the loss? Better still, could he lure the Albatros into a dive on his tail? If so, he had a pet manoeuvre which would gain him the advantage

## ONE MAN'S MEAT

unless, of course, the other fellow knew it too!

But Jerry seemed in no hurry. With infinite care he continued to gain height, and as minutes passed Docker realised that the Albatros was climbing faster than the Camel could. He writhed in his helplessness. How the deuce could one deal with a fellow who remained perched above one?

At fourteen thousand feet the cold bit deeply and Docker began to wonder how long he could stick it. He wondered, too, how long his Le Rhône would function at full throttle.

The German soon put an end to his doubts. The Albatros flattened out, a good fifteen hundred feet above the Camel. Docker flattened out too and throttled back. He wanted a little in reserve for some of his business later.

The Albatros came down in workmanlike style, although Docker could not understand why its pilot was using no engine. Jerry could not possibly have the same measure of control without it. Yet down he came, turning neatly on opposite banks so as to remain above the Camel.

Docker measured the distance between them with an experienced eye. Down swept the Albatros in perfect control, at last steadying in a deep dive towards the Camel. Docker allowed a split second to elapse, then he put his nose down and slammed his throttle wide open. He aimed at looping for height—or at least at presenting an erratic target during the loop, even if he didn't gain much by it.

But just as he pulled his stick back the engine began to vibrate like a cart on a French village road. The noise was even worse—like a dozen machine-guns in full blast, with a big drum thrown in. The Camel shook convulsively, juddering as if it were about to fall to bits.

**D**OCKER gave a great shout of mixed alarm and rage as he realised that a blade of his prop. had been fractured. He shut his throttle hastily and put his stick forward again. Although the wind created a racket about the broken propeller and sang in the struts and bracing wires, there seemed now to be a sinister

quiet in contrast to the former roar of the engine.

Docker cursed. Now he was for it! He looked back at Jerry and a throb of hope warmed him as he saw the 'plane heading away, still in its engineless glide.

Could it be—dared he hope?—could it be that Jerry had lost his engine somehow? It seemed so, otherwise he would surely have continued the attack.

Docker headed inland, hastily searching for a landmark to give him his position. With luck he might make St. Pol from this height—if he wasn't molested!

But he searched in vain. Either he had reached unknown territory in the heat of the pursuit or else the ground looked unfamiliar from this unaccustomed height. Well, he couldn't be far wrong if he set a southerly course.

He looked at his compass and saw only a mass of broken glass and twisted metal. Gad! That last burst of Jerry's, he thought, had been closer than was healthy.

So he couldn't set a course. Well, he'd just have to guess it. He looked up at the sun and, keeping it to port, maintained as shallow an angle of glide as possible. He searched the sky behind him without at first sighting the Albatros. Then at last he spied it, at about his own height, three miles or so to the east. Docker felt sure now that Jerry was as helpless as he himself was.

He allowed himself to relax, keeping, nevertheless, a keen eye on the air speed indicator. A stall now would not be dangerous in itself, but it could mean serious loss of height and that, in turn, might lead to unpleasant consequences on the wrong side of the line.

Suddenly he sighted black specks ahead. There were two of them turning after each other, directly on his course, but still far away. He changed direction slightly wondering whether his luck would hold. Were they friend or foe?

He held to his new course for about a minute, watching the two 'planes closely. Then, apparently, they sighted him and turned together to investigate.

Docker's teeth snapped together and his grip tightened on his stick. It was

## AIR STORIES

impossible for him to make out what they were. Reflection told him that they were unlikely to be British, since he had not yet made his report on flying conditions. At the same time, it was unusual to find Jerry about so early. Yet he had already met three. Maybe there was a private "strafe" on.

Docker weighed the odds swiftly. If they *were* enemy craft he would not have a snowball's chance in hell. If he turned now and put his tail right up he'd hold his own until he could get down. Then perhaps if he just stayed very still he'd be left alone. He hated the idea of a prison camp, but he hated still more the idea of figuring in the casualty lists.

He turned to the east and put his nose down. His prime consideration at the moment was speed. If he could keep far enough away from his pursuers not to be recognised, the fact that he was landing might put them off.

**H**E seemed to be in the dive for half-an-hour. Actually it was probably about seven minutes. He kept light green land before him, turning a little from time to time to avoid occupied areas and wooded lands. At last he had lost so much height that he began to search for a particular field to land in. He circled round, still losing height fast.

He noted with satisfaction that the two machines following him had now turned back. But a further shock awaited him. At the end of his turn he saw, not four hundred yards away, his old friend the Albatros!

Docker nearly jumped out of the cockpit when he first sighted the 'plane. He smiled when he had reassured himself. They were in the same boat. They both had a forced landing ahead. The only question was whose land would it be on?

Docker examined the ground critically and came to the conclusion that there was only one field which would give him the run he needed. And, quite definitely, that was well within German territory. He turned away down-wind as indicated by the smoke of a distant fire.

At five hundred feet he ruddered round into the wind to make his approach. As

he did so he saw the Albatros turning to glide in parallel with him. Jerry had chosen the same field!

They touched almost simultaneously and their run ended almost at the same time.

Docker looked at the Albatros and saw the top part of a goggled face regarding him curiously. Docker waved his gloved hand in greeting. Jerry waved back and grinned. Docker laughed softly to himself as he undid his safety-belt and climbed out of the Camel. The men met between the two machines.

"*Nich habe zie Deutsch,*" explained Docker, holding out his hand. He hoped he had said that he couldn't speak German. If not, he had certainly demonstrated it. The German, a typical blond type, smiled pleasantly.

"It's quite all right, I speak English," he said, shaking hands warmly. "I was in England two years."

"Grand," said Docker. There was an awkward little pause, but the German still smiled broadly. Docker found himself warming to the fellow. After all, he was behind Jerry's lines, and the pilot might easily have taken the high and mighty "You are my prisoner" attitude.

"What happened to you?" asked Docker.

"I ran out of petrol. A sin unforgivable. There will be trouble when I return."

"When the trouble's all over give the chap responsible a couple of pints on me," said Docker.

The German laughed.

"You flatter me," he said.

"After you hit my prop. I hadn't a chance," Docker explained.

"So? It was your propeller I hit?"

"And my compass. Good shooting."

The German bowed.

"You are kind, sir. I have in my aeroplane a flask. Will you do me the honour of joining me?"

"Bet your life, old lad! What is it, rum?"

"Better still—brandy."

**A**ND so the two pilots toasted each other in the middle of that remote

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field. The rumble of some distant bombardment hovered persistently about them. The very air seemed to smell of war. It was a study in the bizarre.

The German introduced himself as Von Mattenheim, a staffel-leader from Fluish, a temporary aerodrome near Ghent. Docker reciprocated. They discussed for a while their brief engagement but avoided mention of other battles.

Von Mattenheim pointed to a neat line of bullet holes along the fuselage of the Albatros.

"It was a miracle I was not hit," he said.

"That my handwriting?" inquired Docker.

The German nodded and grinned. They exchanged a few notes on life in their respective messes, carefully avoiding the subject of the War. Their strange meeting, it seemed, was one of Fate's typically ironic jests, and these two played it out to the end.

Presently Docker, with a friendly twinkle in his eyes, remarked: "And to think I was counting on you getting me some leave!"

"Explain, please."

Docker did so. Von Mattenheim laughed heartily.

"It is romantic. Also it is amusing because you, sir, might have procured for me the '*Pour le Mérite*'."

"I may do so yet. But my 'leaf' is a goner." Docker sighed. The bright lights of London which had mocked him an hour ago must be banished now. Mentally, he shook himself free of depression. It was no good moaning over the impossible. "Well, that's that," he said cheerfully. "Now, what next? Are you going to find a telephone? If so, I'll come along." He wanted to help the German in his commendable effort to maintain a friendly atmosphere.

"I suppose I must," replied Von Mattenheim. "We cannot remain here—er—indeinitely."

"Quite. Let's get going."

Together they strolled away towards a gate in the field, but before they had gone twenty yards two men in greyish-green uniforms appeared on bicycles, rifles slung

across their backs. Von Mattenheim stopped.

"So," he said, "they will save us the trouble."

Docker frowned. The sight of the German cyclists in their unfamiliar uniforms had recalled him suddenly to the grim reality of his position. He was about to be taken prisoner. His mind reverted to an instruction received in the past. "Never let a sound craft fall into the enemy's hands."

Impulsively he turned to walk back towards his machine. There was a Verey pistol there and some cartridges. He could fire her in a second. He found Von Mattenheim beside him.

"I am sorry, my friend," the German said. "I am afraid I must ask you not to go near your aeroplane."

**D**OCKER stopped dead, amazed that the German should have divined his intention. Von Mattenheim's expression became firm for the first time. He was as grimly determined as Docker.

"Please," he said. "I had hoped that we could have treated you with the respect due to a gallant officer. These men are armed."

And what was more, as Docker saw, their arms were at the ready and the men were now close upon him. He shrugged his shoulders in resignation.

"Very well," he said. "I've left it a bit late."

Von Mattenheim was smiling again now.

"Thank you. I will report your consideration to the authorities."

He swung away abruptly and spoke gutterally to the soldiers. His tone was authoritative, and the men drew themselves to attention with a click of the heels as they replied. Von Mattenheim seemed to be losing his temper. He spoke more and more sharply.

One of the men said something which relieved the tension. There was some gesticulating towards the gate and again towards the machines. The men ran back towards their bicycles. At last Von Mattenheim turned, his composure recovered, and spoke to Docker.

## AIR STORIES

"I am told there's no petrol available near at hand," he explained. "What organisation! But we will overcome that difficulty—with your permission."

He bowed and turned to stroll towards the machines. Docker joined him.

"We would like to borrow the petrol in your tank—or some of it," the German continued. "Enough to enable me to return to Fluish. We can transfer it to my tank by means of the bicycle pumps."

"Charmed," murmured Docker. "Help yourself!"

**T**HE two soldiers set to work with a will, hastening to and fro with their tiny loads of petrol, which yet gradually emptied the Camel's tank and filled that of the Albatros. As they worked, Von Mattenheim told Docker what was to happen to him.

"When I have left the ground," the German said, "you will be taken to Ostend. I will communicate, as I have promised, with the authorities so that you will receive every consideration."

"Thanks," said Docker faintly. To Von Mattenheim it occurred that the Englishman was a little dazed. Reaction had doubtless set in. Well, that was war. Someone must lose.

Even when the engine of the Albatros was started up the Englishman still seemed confused. His face was blank and he appeared listless.

Von Mattenheim gave final instructions to the soldiers, who were still holding their pumps, as he pulled on his gloves. Then he held out his hand to Docker.

"Good-bye," he said with a pleasant smile, "and good luck."

Docker looked down as he clasped the German's hand. Out of the corner of his eye he could see that the two rifles were lying on the ground where the soldiers had left them. Without a second's hesitation he pulled the German forward and smote him with all his might with his left fist. The blow landed on the side of the pilot's jaw with a crack which echoed in the air. Von Mattenheim fell limply.

Docker leaped swiftly towards the Albatros, and with a jump and a mighty heave scrambled into the cockpit. He opened

the throttle even as he slithered down into the seat.

The soldiers were shouting. One, c.assing the side of the cockpit impotently was belabouring Docker's head with his pump. Docker clutched at the clenched hand and twisted it fiercely. The pump fell into the cockpit. Docker brought his fist down upon the hand on the cockpit edge and the man let go with a yell. The tail-plane caught him and bowled him over as the Albatros surged forward.

Docker had to slow down to turn into wind, and as he did so he heard the crack of rifle fire. But now he had the length of the field before him—upwind—and he opened his throttle again.

He was frankly enthusiastic about the acceleration of the Albatros. He declared afterwards that he could have got off in a hundred yards. But, dubious about the machine's flying speed, he held her down longer. When at last he gave her a little stick she went up like a rocket.

He sang again on the way home, and this time it was not a dirge that he sang. He could see things straightening out after all. With luck he'd get his decoration, which didn't matter much, and leave, which mattered a very great deal. It wasn't such a bad war after all.

Out to sea he shot round in a wide turn, low down, so as to make his flight in a German machine over British ground as brief as possible. His luck was in, and he was not challenged on the homeward flight.

Things began to happen as he neared the coast. He saw the flashes of gun-fire and he saw Dunkirk very busy with their defence machines. When he streaked over St. Pol he had not much time to spare, and even as he landed the pursuing Camels were overhead.

**B**EFORE Flight Lieutenant Rupert du Pont Fotheringham went home to get his D.S.O. he asked whether he could carry out one individual patrol. "Permission granted," was the signal he received.

On the morning before he was due to go on leave he took-off in a Camel and, gaining plenty of height, set an easterly

## ONE MAN'S MEAT

course. At length he sighted Ghent and a little later picked out the hangars of Fluish. He risked coming down rather low, and when he was sure of hitting the aerodrome hurled out his missile, and then headed with all speed back to St. Pol.

After a not altogether dry session in mess that night he sailed the next day on leave. His movements on reaching home are none of your business, but if you are curious read on.

As the missile, turning over and over, floated down on to Fluish Aerodrome, figures emerged from the characteristically-thorough German dug-outs. This, they could see, was no bomb. The object thudded on to the ground and bounced once.

Pilots ran to it, and finding upon it a label addressed to Von Mattenheim, they called upon him instantly to present himself and open the pillow case.

Paper and rags piled upon the ground. In the middle of them was a bicycle pump, a bottle carefully packed in a box of straw, and a note.

"Returned herewith one pump, for use of which many thanks," read the note. "Also enclosed one bottle of rum, British quality. I invite you to drink a return toast to me to-morrow night. If you do, you may couple with it the most beautiful eyes in the world, for I shall be looking at them then."

And the note was signed "R. du P. Fotheringham, Flt. Lt. R.N.A.S."

## HERE'S THE ANSWER

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

**C. G. GRANT (Putney, S.W.).** (1) The German Air Force is now known as the *Luftwaffe* (Air Weapon). Its largest unit is a *Geschwader*, corresponding to a Regiment in the British Army, and each *Geschwader*, is divided into *Gruppen*, each corresponding to an R.A.F. Wing. The *Gruppe* are divided into *Staffeln*, equivalent to our squadrons, and these are again divided into *Ketten* or flights. (2) The present German equivalent to our "Archie" batteries is the *Flakartillerie* which, together with the search-light organisations, forms part of the *Luftwaffe*.

**A PUSHER FIGHTER (K. A. Taylor, London, S.W.2).** (1) The French Hanriot 110 C.1 is a modern single-seater fighter monoplane with a 600 h.p. Hispano engine mounted on the centre-section behind the pilot's cockpit. There is a ring type radiator in the nose of the machine and the water-pipes leading from it to the engine are used to heat the pilot's cockpit. Two Chatellerault machine-guns are fitted and the machine has a top speed of 200 m.p.h. and can reach 16,000 feet in seven and a half minutes. (2) The Dantrop was the name given to the Hawker Horsley torpedo-bomber as supplied to the Danish Air Force. (3) Yes, the Air Ministry did recently purchase a Northrop fighter from the U.S.A., but this was merely in accord with their usual policy of studying foreign practice in military aircraft construction.

**LARGER R.A.F. SQUADRONS (K. L. Marks, Bradford, Yorks).** Under the present R.A.F. expansion scheme all fighter squadrons, formerly consisting of 12 machines, now have 14. Heavy bomber squadrons, with former complement of 10 machines, now have 12. Flying-boat squadron strength has gone up from 4 to 6. Largest of all is the new general reconnaissance squadron with 18 machines. Reason for change is economy of administration.

**FASTEST CIVIL 'PLANE (K. A. Taylor, London, S.W.2).** Fastest civil plane yet built in England was the Bristol type 143 low-wing twin-

engined monoplane which, on a test flight, reached nearly 270 m.p.h. Now re-designed as a mid-wing medium bomber it is the Bristol Blenheim. Next fastest British-built civil aircraft are probably the D.H. Comet, with a top speed of 235 m.p.h. and the Percival Mew Gull, which does 225 m.p.h.

**LONGHORN AND SHORTHORN (John Horne, Edinburgh).** (1) Both the Maurice Farman Longhorn and Shorthorn were fitted with a 70 h.p. Renault. Longhorn had a span of 58 feet 8 inches, was 32 feet long and had a top speed of 85 m.p.h. Shorthorn had a 57 feet 11 inches span, was 32 feet 2 inches long and could do 95 m.p.h. Both types were fitted, at various times, with a single Lewis gun in the front (observer's) cockpit.

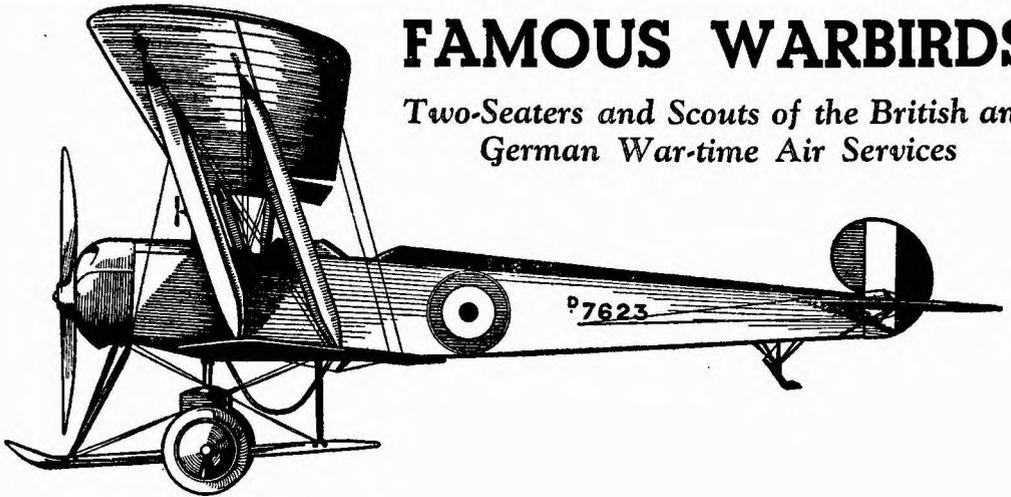
**'CEILING ZERO' (R. A. Hawks, Liverpool).** The aeroplane used in the film "Ceiling Zero" was an American Northrop Gamma, an all-metal single-engined mail-carrier with a 710 h.p. Wright Cyclone engine and a top speed of about 220 m.p.h. The same type was used in another recent air film, "Devil's Squadron."

**WARTIME 'DROMES (S. Cranmore, Southsea, Hants).** It is highly improbable that any aerodrome used during the War had its name painted on it. On the contrary, numerous devices, such as the camouflaging of huts and hangars and the preparation of "dummy" 'dromes, were employed to disguise the location of aerodromes from enemy airmen.

**'PLANE SPEEDS (Robert Crossman, Toronto, Canada).** (1) The top speed of the Hawker Danecock (385 h.p. Jaguar engine) is 150-155 m.p.h. The Avro Avian does 100-105 m.p.h. No performance figures of the Handley-Page 47 or the Fairey Battle have yet been released, but top speed of the latter is officially stated to be "in excess of 250 m.p.h." (2) The new Bristol Bulldog, the Mk.IV, has not yet been adopted by the R.A.F.

# FAMOUS WARBIRDS

*Two-Seaters and Scouts of the British and German War-time Air Services*



## THE AVRO 504.K

ONE of Britain's earliest war-birds, the Avro 504.K was used throughout 1914-15 as a long-distance bomber and was still going strong in 1918 as a training machine. It was used as a landplane, seaplane, scout, bomber, ground-strafer—in fact, it was adaptable to almost any kind of job that came along.

Many types of engines were used at various

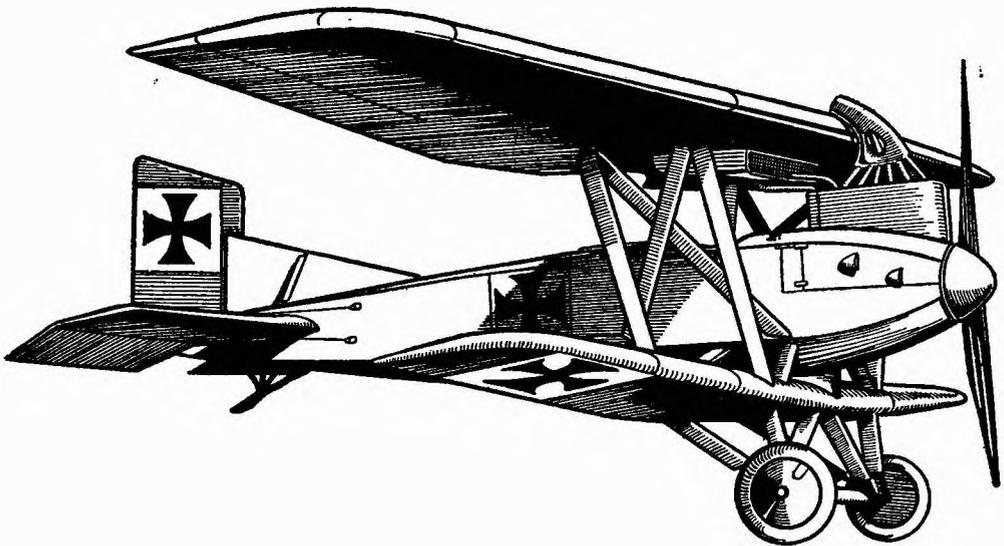
times, but the most popular seem to have been the 80 h.p. Gnome or Le Rhône, with either of which the 504.K could rattle up a steady 80 m.p.h. The usual duck-gun armament was carried during the early war days, but in November, 1915, one machine was fitted with a Lewis gun and the idea was soon generally adopted. With a span of 36 ft., the 504.K was 29 ft. 5 in. long and 12 ft. 3 in. high.

## THE JUNKERS J.4 TWO-SEATER

THE Junkers J.4 was an armoured attack machine that resulted from the Junker-Fokker combine of 1917, and many an Allied pilot came to grief whilst trying to destroy one. The entire machine was covered with steel plating 5-millimetres thick, and, although the pilot had no guns, his observer was armed with two Parabellums. One of these could be fired either through the floor or out of a tail tunnel, while the second

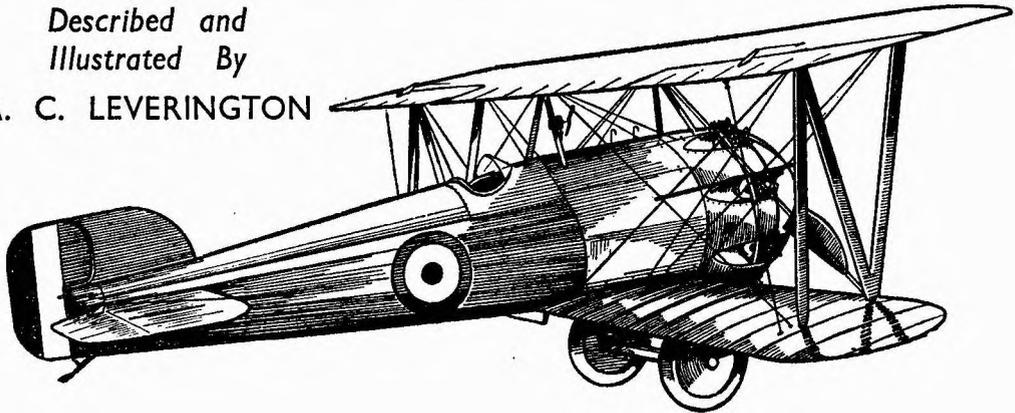
was of the usual ring-mounted type.

The aircraft carried complete wireless equipment, which was an invaluable aid in infantry contact work. Powered with a 230 h.p. Benz engine, the Junkers J.4 reached its maximum speed of 97 m.p.h. at five thousand feet. It had a span of 55 ft. 2 in., was 29 ft. 8 in. long and 11 ft. 9 in. high.



Described and  
Illustrated By

A. C. LEVERINGTON



### THE BRISTOL F.1 SCOUT

**T**HE last Great War machine produced by the famous Bristol Aeroplane works, the F.1 single seater scout, had little chance to prove its worth in action and so missed the fame that would no doubt have come to the Bristol Fighter's baby brother. Powered with the radial Cosmos-Mercury engine, the machine had a speed of well over 140 m.p.h. and its sturdy lines would have

made it a very formidable opponent to the much praised Fokker D.8.

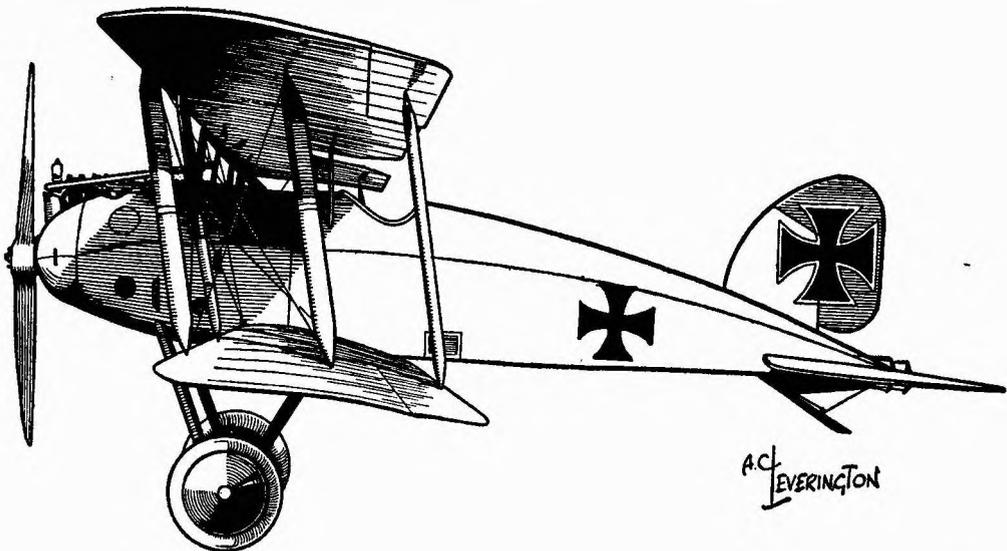
Incidentally, in general outline it is vaguely reminiscent of the modern Bristol Bulldog series of scouts, of which it may claim to be an ancestor. Principal dimensions of the Bristol F.1 Scout were span 29 ft. 6 in. ; length 20 ft. 10 in. ; height 8 ft. 4 in.

### THE ALBATROS D.9 FIGHTER

**T**HIS little-known Albatros fighter biplane was produced in October, 1917. Its 160 h.p. Mercedes engine gave it a top speed of 130 m.p.h. and it could climb to six thousand five hundred feet in 6.8 minutes—no mean achievement at that time.

The Allied pilots, however, soon discovered its weak point. This was that, owing to its extremely light construction, it could not stand the strain

of a prolonged dive and was liable to shed its wings as soon as an attempt was made to pull out. After several pilots had been killed through this weakness, the machine, despite its otherwise fine performance, was withdrawn from service early in 1918. Its principal dimensions were span 29 ft. 11 in. ; length 23 ft. 9 in. ; height 10 ft. 6 in.



**An Officer with a Distinguished War-flying Record here tells the True and Dramatic Story of his Experiences whilst Serving in an R.F.C. Army Co-operation Squadron during the Somme Battle of 1916, an Historic Engagement in which the Gallant Achievements of British Airmen proved of Immense Value to the Ground Forces**

# WINGS O'ER

**T**HE "Day" had dawned ; the Day for which we had been waiting and preparing for many weary months ; the day on which it was hoped the Allied arms would triumph once and for all, July 1st, 1916. A day, however, which, when it came to an end, led to yet another twenty-eight months of horror and strife before the World War came to its sudden and abrupt termination.

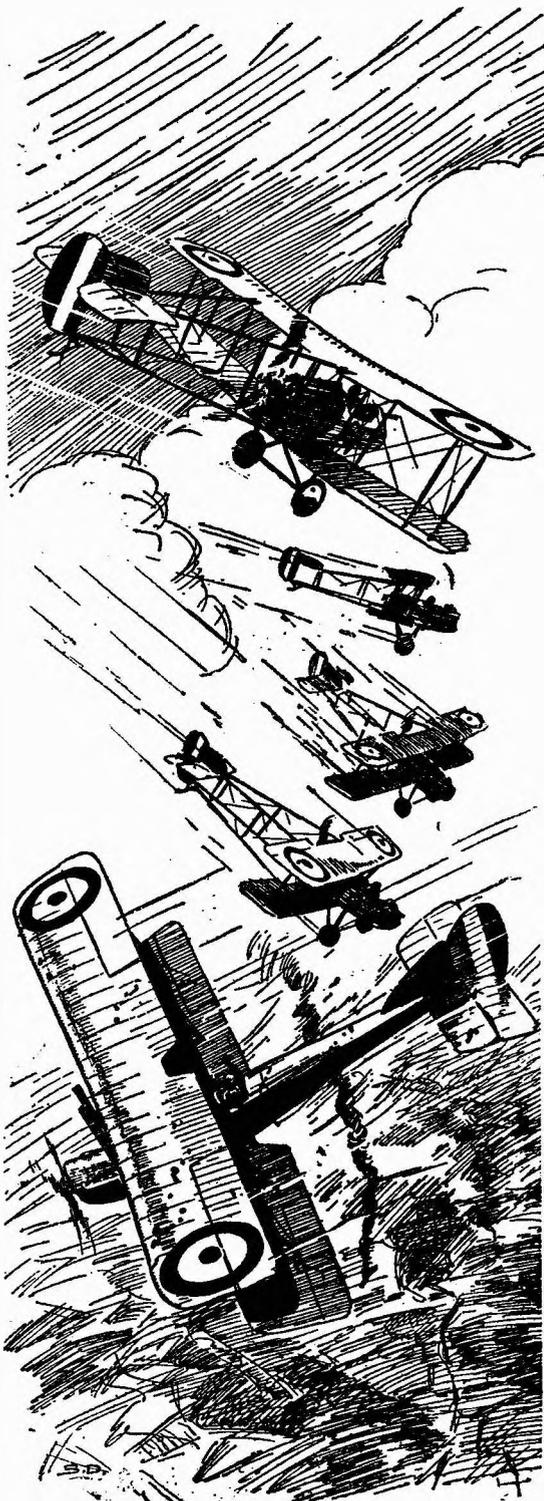
For months the Somme area had resounded to the tramp of many feet and to the rumble of innumerable gun wheels, until, as the Day approached, it seemed impossible to cram more troops into the chosen front. Day after day the guns thundered and flashed. From dawn to dark, field batteries fired their shrapnel into the wire defences that stood before the German trenches, or dropped their H.E. into the trenches themselves.

Day after day sixty-pounder guns belched forth their messages of death, raining their shells upon German emplacements behind the lines. Siege guns and howitzers boomed incessantly, hurling their mighty explosives far over the German lines, while all the time the Germans were silent, as if waiting, waiting. . .

Meanwhile, the Royal Flying Corps had not been idle.

Fortunately, the weather was fine and warm, and from earliest dawn until well after the summer sun had set the sound of mighty engines thrummed in the cloudless sky.

Formations of F.E.2b's, like huge storks with their leg-like undercarriages hanging



*Like terriers after a swarm of rats . . . .*

# THE SOMME

## *The Vivid Record of an Aerial Observer in the Royal Flying Corps who Took Part in the Battle of the Somme*

By

**Capt. JAMES ANSTRUTHER**

*Late of the R.F.C.*



down grotesquely below their nacelles, flew eastwards searching far into the back areas for information which would be of use to the High Command. Tiny D.H.2 single-seater "pusher" scouts hummed like mosquitoes as they climbed to what were, at the time, immense heights in search of hostile aircraft, or flew miles eastward in search of foes worthy of their guns.

Like knights of old these young pilots, most of whom were not out of their 'teens, surged across the skies looking for combat, but instead of gleaming armour, leather covered their bodies, while, in place of steel helms and vizors, they sported flying-caps and goggles.

For weeks past our aerodrome, a kilometre or so from the pretty town of Doullens, had been a hive of industry.

In the trees that surrounded the smooth wide field on three sides, rooks cawed and fluttered, bringing up their young and teaching them to fly, as the pilots of the Xth Co-operation Squadron had been taught to do but a few months previously.

In the semi-circle of brown canvas hangars were housed the B.E.2c two-seaters, with 8-cylinder R.A.F. engines. Theirs was the work of ranging the batteries which bombarded the enemy's trenches and batteries. Theirs was the doubtful pleasure of flying many miles into enemy territory on long reconnaissances, while still other machines of the squadron photographed the trenches or kept contact with the infantry battalions far below.

... the D.H.2's tore the Fokkers from the sky

## AIR STORIES

The personnel of the Xth Squadron was representative of many parts of the Empire. The squadron commander had been one of the small band who formed the R.F.C. of pre-war days. One of his flight commanders was a housemaster at one of the famous public schools of England. There was a pilot from Rhodesia, a barrister by profession, who at the present time holds one of the highest positions in the Government of that country.

There was a young pilot from Canada, a member of "Princess Pat's" Light Infantry. There was a wool merchant from Australia and a French Canadian from Quebec. Men of all trades and professions were represented, while the younger pilots and observers had but lately left their schools, or had been seconded to the R.F.C. from their regiments on leaving the Royal Military College at Sandhurst.

At the time of which I write I had been out of Sandhurst a year, and had accompanied the Squadron from England a year before as an observer, while my pilot, Robert Mockford, was, until the war had claimed him, a London stockbroker.

Long before dawn on that fateful 1st of July, 1916, the aerodrome had echoed to the voices of officers and men, who, by the aid of electric light tended the machines in which they would fly that day.

"A" Flight, to which I belonged, was detailed for a long reconnaissance to the rear of the town of Bapaume. An escort of scouts was to be provided for part of the way, but when these 'planes could fly no farther, owing to the small amount of petrol their tanks held, our B.E.'s would have to rely on their own devices and on the two Lewis guns that protruded from either side of the front seat in which the observer sat.

### "Eyes of the Army"

**T**HE pilots and observers of the flight were in conference with the Major in the Squadron Office. There were maps to be checked, and important points on the way to be pointed out to the observer, whose duty it would be to be the "eyes of the Army."

In those days we observers were considered to be mere ballast, or necessary

adjuncts to a flight, to be borne with in a condescending manner by the pilots, although both pilots and observers were usually the best of friends. But on a long reconnaissance it was on the observer's shoulders that the responsibility lay for finding the way and obtaining the required information for the Staff who eagerly awaited it in their headquarters.

On this reconnaissance Bob Mockford and I were to fly in the lead.

"Now you're quite clear, Anstruther?" asked the Major. "You know the route, you've been over it before. Beaumont Hamel, Serre, Puisieux, then to Bapaume. Study the concentration of troops and rolling stock. Then straight back; you'll probably be needed again later on," he concluded significantly.

I grinned. "Quite clear, sir. Anyway, I want to be back for zero hour, seven o'clock, isn't it, sir?" We had all been looking forward to the great Day for months past.

Saluting, we left the office.

"Better get along to the 'bus," suggested Bob, glancing at me. "Have a good 'dekko' round." He peered at his watch. "We're due to push off in twenty minutes. Hope we get some fun, but don't let your guns jam again."

I nodded with feeling. I was not likely soon to forget the jam in the midst of a fight with an Aviatik that had so nearly caused our downfall on our last flight.

Dawn was just breaking as we reached the tarmac, where our machines were drawn up in line. Pilots and observers set about their business, and were soon intent upon their various jobs.

With anxious eyes the pilots revved up their engines, watching the revolution counter on the instrument board as the speed of the engine increased. Others walked round their craft, feeling here, pulling a wire there, to see that all was as it should be.

Our machine had two coloured streamers fitted to the outside struts of the wings to show that it was the reconnaissance machine, and as such to be followed by the others.

I worked the cocking-handles of my guns and saw that the spare drums of

## WINGS O'ER THE SOMME

ammunition were in their racks. Pencil and note pad were placed to hand, the former fastened by a length of string to a buttonhole of my flying coat. I fixed the map firmly on the three-ply tray in the front of my seat, then I waved to Bob, who was peering at me from over the windscreen of the rear seat.

"Okay, Bob!" I called.

He nodded, then looked round to see that the other pilots were all looking in his direction. He raised his hand, and the others did the same. He waved his arm and the watching mechanics pulled away the wooden chocks that stood before the wheels. Bob opened the throttle and we bumped slowly across the aerodrome.

Turning into wind, the engine roared and, with tail up, the B.E. skimmed across the turf.

### Reconnaissance Flight

**W**ITH scarcely a motion we left the ground and mounted into the air.

Looking over the side, I could see the other 'planes taxiing out, one after the other. I waved to Bob who winked at me through his goggles. The reconnaissance had begun.

Round and round the aerodrome we circled, gaining height and waiting for the rest of the flight to come up.

A small "pusher" single-seater flashed across our bows. We saw a muffled figure crouched in the tiny nacelle. He leaned out and waved, and we knew that our escort of scouts had arrived, D.H.2's from a neighbouring squadron.

One after the other the B.E.'s rose to join us, while the scouts circled and gambolled about our slower two-seaters, like puppies frisking with their parents.

We watched the aerodrome, now far below, a patch of green surrounded by trees on three sides.

After a few minutes I saw a figure run from the Squadron Office and, with a second man, spread out a white strip on the ground.

I swung round to Bob. "Okay," I yelled, to make my voice reach him above the roar of the engine, "the 'carry on' strip is out."

Bob nodded in reply.

I felt for the Verey pistol and, pushing a red light in the chamber, leaned far out and pressed the trigger. The flaming arc of the light curved in the clear sky, a signal to the others to close in on us.

Down went our starboard wing as Bob banked to the east.

By my altimeter, which I carried fastened by its strap to the side of the seat, I saw that we had reached eight thousand feet. The air was extremely cold, but bracing, and a thin white mist enveloped the ground like a gossamer sheet.

On reaching the British battery positions we saw that many of them were in action, for flash after flash, like myriads of twinkling lights, came from the mouths of the emplacements where the guns lay camouflaged with painted canvas and boughs of trees to hide them from the prying eyes of hostile aircraft.

A short way ahead, the lines of trenches stretched, showing No Man's Land, so shortly to be the scene of bloodshed and strife, like a brown smudge between.

So intensive was the bombardment that the German trenches were half hidden in a pall of swirling smoke and, however closely we peered, we could not make out any figures from the height at which we were flying.

No longer were the enemy guns silent, and in the back areas I could clearly make out the flashes of artillery, while muffled detonations and huge clouds of smoke and débris could be heard and seen from time to time.

### Attack from the Sun

**T**HE sun rose as we reached the lines, dazzling our eyes and making observation to the east difficult. A sun, although welcome for its warming strength, is yet unloved by those who have to fly into its eye, for in the dazzling rays hostile machines may be lurking, the first sign of their presence a shattering crackle of Spandau guns.

As I peered groundwards I felt the machine sway from side to side, a signal that Bob wanted to attract my attention.

## AIR STORIES

I turned to see that his face was wreathed in a mournful grin.

Following his outstretched arm I saw, high in the sky, a cluster of small dots that shone in the sunlight like tiny silver insects. A patrol of hostile scouts, the first we'd seen for many months.

I jerked the Lewis guns into position as the first *whoof! whoof!* of anti-aircraft shells burst close by. Our 'bus swayed in the concussion, and I saw a jagged rent in the lower port wing.

Bob swerved aside, for he well knew that further salvos would follow the first, and the German "Archie" were extremely good and accurate in those days.

*Whumph! Whumph! Whumph! Whumph! Whumph!*

The expected five-gun salvo burst with deafening report in the exact place we would have been if Bob had not been wary.

I looked over my shoulder and winked, while I saw the rest of the flight surrounded by the pall of bursting shells. It was some encouragement to know that we were not alone in sharing the "hate" from below.

**T**HE sun had now risen high in the heavens, and the vast panorama showed to the east in the clear summer sky. The roads leading to the front line trenches from the rear were crowded with bodies of moving troops and mechanical and horse transport. Glancing at the map I made rough notes of the estimated strength of the reinforcements.

We passed over the small villages of Serre and Puisieux. Again the roads were packed with troops, and I wondered vaguely where they had all come from, as during the last few weeks activity behind the German lines had been hardly noticeable.

Then there was the hostile patrol to consider.

I peered in the direction in which I had first seen them, and saw with relief that the escort of D.H.2's had attacked. High above and to the east, there was a cloud of whirling shapes, and above the roar of our engines could be heard the sharp chatter of machine-gun fire.

As we watched I saw a sudden puff of jet-black smoke which turned into a bright flame, then, like a huge torch, one of the 'planes streaked for the ground. Whether it was friend or foe we could not tell, but so great was the force of that downward plunge that the wings were torn from the body to fall separately from the rest of the doomed machine. Now a tiny speck detached itself from the 'plane and, turning over and over, fell to the ground eight thousand feet below.

High in the air the fight went on. The chatter of machine-guns sounded clear and sharp in the rarefied atmosphere. I beat my hands together to restore the circulation, for in spite of thick fur and leather gloves my fingers were icy cold.

Steadily we flew towards the east, leaving the "dog-fight" above and in rear of our formation.

Again I peered over the side and saw the buildings and streets of Bapaume a short distance ahead. Here activity was greater than in any of the other villages we had passed over. Lorries and cars thronged the roads, while from the houses tiny dots could be seen moving to and fro across the crowded roads.

I counted carefully the amount of rolling-stock lying in the station siding and I made up sufficient for at least eight trains.

The continued *whoof!* of "Archie" showed that our presence was most unwelcome, and while Bob was using every artifice to dodge the storm of shells, I had to cling to the side of the seat, for on flights of this kind we observers seldom used our safety belts, as they cramped our movements.

Black puffs, sinister and grim, intermingled with the usual white "woolly bears" that floated in the air on all sides. These jet-black explosions were made by high explosive shells, while the white ones were plain shrapnel.

Time and time again I had to cling to the machine as we sideslipped steeply, or when a crash, closer than the others, lifted the machine with its concussion. Ragged rents appeared in the wings, while a wire pinged sharply, cut through by a flying sliver of steel.

## WINGS O'ER THE SOMME

At last I had all the information I wanted and waved to Bob to show that the job was finished. Round swung the B.E., and as we turned I fired a Verey light to tell the flight to turn for home.

### Running the Gauntlet

**F**OR some distance anti-aircraft fire followed us, while the pilots threw their 'planes about the sky in the time-honoured game of dodging "Archie." Then, suddenly, the crash of bursting shells ceased.

I turned to Bob, who shrugged his shoulders in resignation, and looked up at the arc of the heavens. Too well we knew that "Archie" stopped only when his scouts were in the air.

Climbing upon my seat I peered over the top plane, and as I expected saw a flickering group of German scouts. Their wings showed white and silver in the sunlight, and even their markings were quite distinct.

"Nothing for it, Bob," I shouted into my pilot's ear. "There's a whole bunch of 'em; we'll have to fight."

"Get to it," he answered, "and mind those ruddy guns of yours this time!"

I grinned a reply and settled myself as comfortably as I could for the scrap to come. The rest of the flight closed in, and in close formation we screamed away to the west.

The enemy swept overhead, then suddenly turned and cut us off from our lines. They formed a lane through which we must of necessity pass. I saw they were Fokker scouts.

On we flew and entered the lane, for Bob knew that by so doing we would mask the fire from each side. After a few bursts the enemy would have to swerve to save hitting each other, although later in the war converging fire was sought for by German and Briton alike.

I jerked back the cocking-handle of my Lewis gun, and as the first scout flashed across my sights I let him have it. The line of tracers flicked across the sky, but they seemed to be missing the target by inches. The scout vanished from sight above our right wing-tip.

*Tack-tack-tack-tack-tack. Tack-tack-tack-tack-tack.*

I felt the old B.E. bank steeply as Bob pulled out from the line of fire. An enemy streaked by, his Spandau flaming. He seemed to miss our wing-tip by a hand's breadth. I saw the masked face of the pilot staring into mine.

In a sudden exuberance of spirits I placed my fingers to my nose. The German shook his fist in reply.

As targets showed I swung my guns and fired short bursts, but the scouts were much more speedy than our slow B.E.'s, and flashed by to disappear before we could get in a steady stream of accurate shooting.

Once we were lucky enough to drive off an enemy who was diving full out on to the tail of one of our companions. The barrage of lead which we placed in his path made him swing aside, and for a moment I thought we had got him, for he wobbled, then rose in a zooming turn. Another immediately took his place.

We saw the B.E. observer kneeling on his seat, firing over his pilot's head, but the bullets seemed to be having no effect on the hurtling Fokker, which, at an extremely steep angle, continued its dive.

My gun would not swing sufficiently to converge on this new target. I saw the observer slump in his seat, and the B.E. tipped on to one wing as the enemy spattered it with flaming slugs. It turned over slowly, as if tired of the unequal struggle, and nosed down into a spin. The spin grew faster and faster, until the doomed 'plane had vanished from sight.

### Scouts to the Rescue

**M**EANWHILE I was busy with my mown affairs, for we were still some distance from the lines, and the enemy patrol were circling and diving from all directions. Our wings were riddled with shot, and I saw a small group of holes appear suddenly in the fuselage just behind Bob's head.

Then, suddenly, the firing broke off. I looked round in surprise and then shouted aloud at what I saw.

Flashing downwards came a patrol of

## AIR STORIES

D.H.2 scouts. At once the enemy turned for the east, but our little "pushers" were after them like terriers after a swarm of rats. The D.H.'s literally tore the Fokkers from the sky as they fell upon the enemy with blazing guns. The tables had been turned with a vengeance.

But what of our own flight?

With a sense of dismay we saw that besides ourselves only one other B.E. floated in the air. I wondered how the others had fared and whether they had got down safely into German territory, for that was at least better than death.

Bob pursed his lips and pointed to a large hole in the lower port plane. The fabric had been rent, and through the jagged hole a broken piece of main strut peeped. Two wires had also been shot away, and the fuselage seemed to be literally riddled with holes. (Later the mechanics counted 120 bullet holes in the old B.E.). Bob would have to fly with care if he was to get us home safely.

I set to work to sort my notes and map, while I threw over the side the scores of empty cartridge cases which had collected on the floor during the fight. The last two magazines I placed on the guns in readiness for any sudden emergency.

We crossed the lines at a quarter to six and from our height of three thousand feet the noise of the bombardment reached us plainly. Below we could make out the British support trenches packed with men, but there was no sign of life in the Boche trenches. The British bombardment was far too intense for any man to live in the open.

Every inch of the ground seemed to be heaving and swaying in the throes of bursting shells, while a murky cloud of smoke hung over all.

In the air scores of our machines flew at different altitudes, carrying out their various duties. Some were ranging batteries, some were photographing the defences, while others were searching the skies for hostile aircraft.

Some distance in rear of our lines five or six "sausages" swung idly at their cables, while in the baskets below the gas-bag keen-eyed artillery observers sat with glasses glued to their eyes. An unen-

viable job, we thought, for they were open to attack from any prowling German scout.

At last our aerodrome showed amid its cluster of trees. The regular beat of our faithful engine died to a mere mutter as Bob closed the throttle and eased forward the stick for his glide home.

We touched the ground with hardly a bump and taxied to the hangars, where an anxious crowd of officers and men awaited our return.

It was pitiful to see the expressions on the faces of the mechanics who stood ready to attend to their charges, when they had to turn away empty-handed. A jerk of the shoulders and a muttered curse, the fatalistic expressions so often seen and heard during those grim days of war.

We crossed to the Squadron Office to put in our report, and found the Major waiting us with a serious face.

"Good work," he said, "it must have been hell over there. Fill in your report form. I'll hear the whole story later, for I'm afraid you'll have to hop off again in a few minutes. Run along and get some food. I expect you need it."

### Back to the Lines

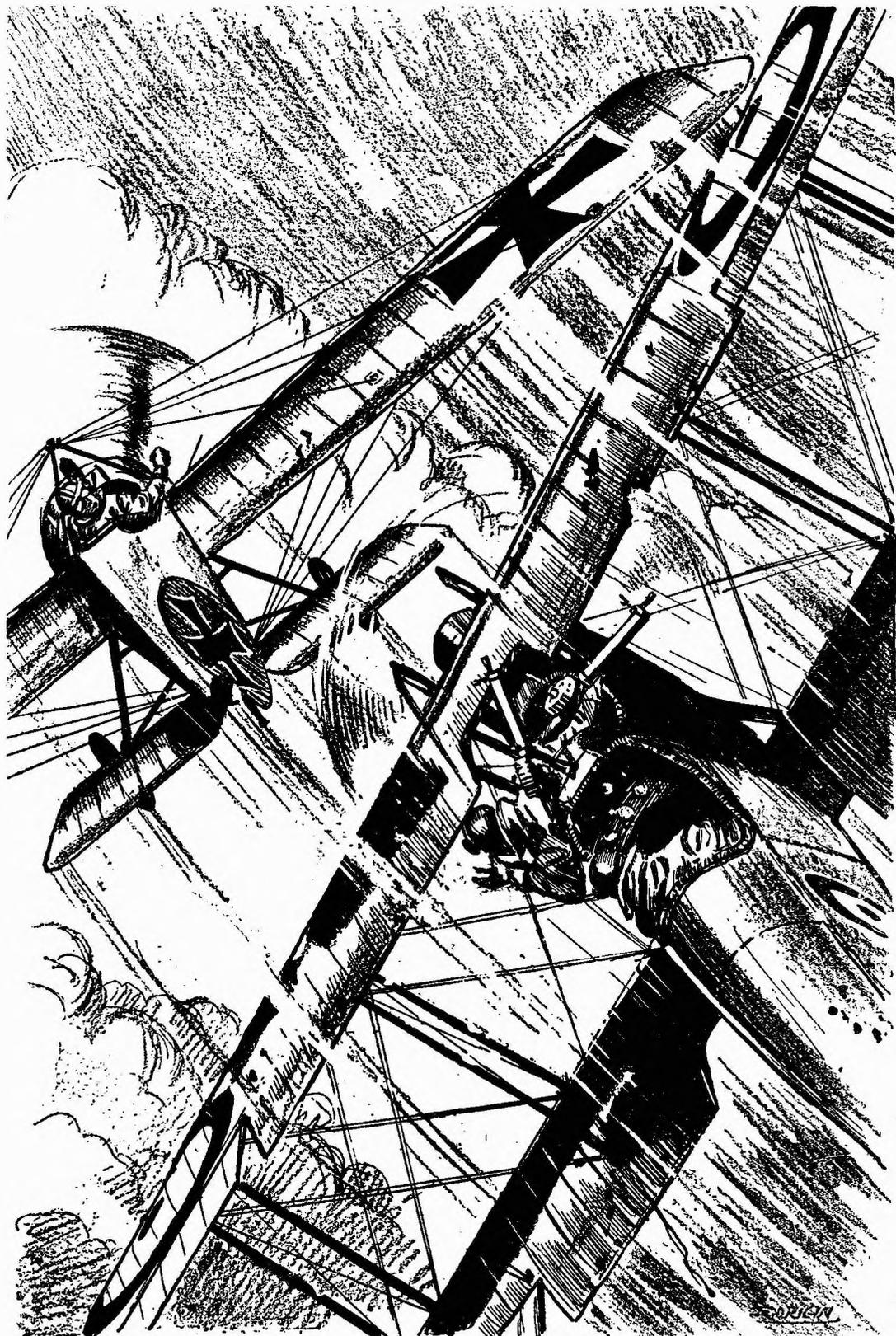
CASUALTIES had been heavy in the Squadron that early morning on July 1st. Apart from the machines that had been lost on reconnaissance, two others had been so badly damaged that they could not be used until repaired, while two observers had been wounded while flying low over the trenches.

We were detailed a 'plane from another flight, for ours of the early morning had been too badly damaged for further flying. Half an hour later we were again in the air.

Our job this time was to be over the lines at zero hour when the great attack was to be launched. We were to watch the progress of the attack and keep contact between the advancing infantry and the headquarters in rear.

It was not an enviable job, for most of the time we would be under heavy fire from rifles and machine-guns, while there was always the danger of being hit by one of the thousands of shells that were

WINGS O'ER THE SOMME



*In a sudden exuberance of spirits I placed my fingers to my nose. The German shook his fist in reply*

## AIR STORIES

hurtling through space in both directions. This danger was quite a real one and had actually happened on several occasions to 'planes flying low when passing through a barrage.

In the front seat of the B.E. I arranged the bundles of message-bags—twin streamers of red, yellow and blue, that were attached to a small weighted canvas bag, some four inches across. It was by means of these bags that our messages were to be dropped from the air on to headquarters.

The air was not much warmer, but this time we left off our heavy flying coats to give ourselves more freedom of movement.

If possible, the bombardment had intensified since we had last traversed it, and now the incessant crash of bursting shells practically deadened the roar of our engine. From time to time we actually saw shells passing through the air in a great arc, too close to us to be pleasant.

Lower and lower we came, until we were flying no more than two hundred feet from the ground. The sharp crack of bullets sounded in our ears as the enemy took pot-shots at us with their rifles.

We were too low for anti-aircraft guns to be depressed, so they turned field guns on us instead, and both H.E. and shrapnel burst around us with deafening crashes.

Still the enemy trenches were empty, while our own were packed with men, who turned their faces to the sky as we roared overhead. We could see their bayonets flashing in the sunlight.

My watch showed there was still half a minute to go before Zero. I called to Bob to fly towards the River Ancre, for I wanted to be close to Beaumont Hamel when the attack was launched.

Without warning, our 'plane rose vertically in the air. Higher and higher we shot, for all the world as though we were in a swiftly ascending lift.

Down below, just before Beaumont Hamel, I saw a mighty mushroom of smoke rise in the sky. Thousands and thousands of tons of earth and débris rose, slowly it seemed, into the air, to curve and fall in a thick shower.

Then came the explosion. I had never heard its equal. Loud and sullen, reverberating and rumbling with terrific force, the greatest mine up to that time exploded. It tore the ground asunder, the earth gaped, the pall floated slowly away to reveal an immense crater, deep and wide, with shelving sides.

### Massing for the Attack

**O**UR B.E. bounced madly in the current of air displaced by the terrific detonation, and as its reverberations died away we saw with dismay that the mine, instead of exploding beneath the fortifications of Beaumont Hamel as it had been meant to do, had exploded short. The German lines remained intact, while the crater gaped in No Man's Land.

I turned to the German trenches. No longer were they empty ditches. Now they were thick with men, and I could make out innumerable machine-gun posts.

Men and material had been safely hidden beneath the earth while the bombardment had been in progress, and the troops had only come above ground when the time of attack was at hand.

Line after line of khaki-clad figures, with bayonets flashing, appeared from the British trenches. They were slowly crossing the ground in the direction of the enemy. So low were we flying that we could even make out the equipment on the men's backs. Slowly the lines advanced. Men fell singly and in groups as machine-guns found them out. The chatter of rifle and machine-gun fire continued without pause, yet our men came steadily on in the face of that devastating fire.

The first wave, although terribly thinned, reached the enemy wire. These defences had been shelled continuously for weeks, and were thought to have been shattered by high explosive and a way made for the troops. But, alas! there were many places where the wire defences still stood intact in spite of the intensive shelling.

We saw that the advancing men were held up. I waved to Bob, and he banked sharply as we sped away to the west.

## WINGS O'ER THE SOMME

The dropping station at headquarters was marked with a white strip of cloth on the ground. We circled lower and lower as I scribbled the message, enclosed it in one of the bags, and, leaning out, threw it into the air. The streamers opened and it fluttered down. We saw men running to pick it up. They waved to us and I waved back.

Once more we headed back for the lines.

All this time, not a single German machine had attempted to cross the lines in our area, but we could see many whirling shapes flashing to and fro far in the distance, where our offensive patrols were heavily engaged over German territory.

As we regained the lines we saw that, in places, the infantry attack had penetrated the defences, but in others heaps of khaki-clad figures sprawling on the shell-pocked earth showed that the way had been difficult, and in some places impossible.

The Battle of the Somme had started.

Throughout that day all pilots and observers of our squadron were kept busy in the air, while the telephone in the squadron office rang almost without pause. No sooner had a plane returned, than the crew were sent for, and after rendering their reports, were sent aloft again.

Mechanics worked without ceasing, refuelling the planes, patching the bullet- and shell-fragment holes, and renewing wires that had been cut by enemy bullets.

### The Lost Battalion

**T**WO o'clock in the afternoon found us once again in the squadron office. We had been sent for in a hurry.

The Major sat at his desk before a small table on which was a wicker basket with a small parachute neatly folded on the top. The Major spoke for a while, then concluded.

"That's how the matter stands, my lads. There's a battalion somewhere about Serre, but their exact location isn't known. That's what you've got to find out.

"You must call for flares, and when they show them, you will release these little fellows." He pointed to the mysterious basket, from which came a fluttering of wings. "Then you will return home. Get the idea?"

We did, and with a salute we left the presence, followed by a mechanic carrying the basket of pigeons.

It did not take long to fix the basket on to the bomb rack below the lower plane of the B.E. I tested the release by working it and dropping the basket into the waiting hands of the mechanic who crouched under the plane.

Then the chocks were dragged away, and our hard-worked plane taxied across the aerodrome.

The air was rough as we reached the lines, for the bombardment was still vigorous, but our engine was running sweetly, and I blessed the luck that had given me a skilled pilot in the back seat. There is nothing more nerve-wracking for an observer than to fly with a pilot in whom he has not the fullest confidence.

"Archie" started again as we crossed the lines, and headed in the direction of Serre. Burst after burst made the plane sway and bump, but we had quite enough to do in watching the ground to worry much about them. At about four thousand feet, we made out the new lines with ease, for at many points north of the River Ancre the British had pierced the opposing lines and had advanced some distance.

We circled lower above the village, and I sounded the Klaxon horn in a series of dots and dashes. The village was enveloped in a pall of smoke, while the lurid glare of fast-mounting flames showed from ruined buildings.

For a while the Klaxon blared without response, so we came still lower, then, to our great relief, for "Archie" by this time was truly bad, a ragged line of red lights flickered through the centre of the village, showing the most advanced points the troops had reached. Understanding our signal, they had lit the small flares they carried for just such an emergency.

I signalled to Bob to go still lower, for

## AIR STORIES

I didn't intend the pigeons to be a present to the enemy if I could possibly help it.

Round and round we came in wide gliding turns, then, at five hundred feet, we levelled out and flew in a straight line across the village. Taking careful aim, I jerked the bomb lever, and leaned far over the side of the fuselage to see the result.

The basket was on its way, for I saw it falling earthwards; then the tiny parachute opened, and it sailed on in a steady descent. Round came our B.E. so that the flight of the basket could be followed. We saw it reach the ground, and a man run to the spot. He looked up and waved, then grabbed the basket and vanished into a ruined building close at hand.

As we were resuming our flight to the north, I noticed a large body of German infantry concentrating at the rear of a small wood some little distance behind the lines. It looked like the beginning of a counter-attack to me. I pointed them out to Bob, and he dived at them with engine full out. They fled in all directions while I fired each gun in turn as it would bear on the men below.

That excitement over, I grabbed the wireless key, and seeing that the aerial was out, sent the artillery code call for an S.O.S., giving the map reference of the concentration point.

For a minute or so we circled above the confused men. Then, suddenly, in the midst of them there appeared the bursts of a score or more of shells. The counter-attack was broken, and the survivors of that shelling fled in disorder.

"Good shooting," I shouted, and for a moment Bob let go of the joy-stick, and raising his clenched hands pointed them with thumbs upwards.

With the satisfaction of a job well done, we turned for home, where we knew a welcome tea would be ready in our tiny shack nestling among the trees.

"THREE o'clock, sir."

I opened my eyes, as the whis-

pered words stirred through my sleep-fogged brain and gazed at the pale light filtering through the window of the wooden hut.

The vague silhouette of my batman seemed to fill the doorway, his figure distorted incongruously in the folds of his thick coat.

I yawned. "All right, thanks. What's the day like, Sprigger?"

"Bee-u-tiful, sir, bee-u-tiful," answered the man with the cheery *bonhomie* of one who has not got to fly. "It's goin' to be 'ot later, and—'ere's a nice cup of 'ot tea." He placed the steaming enamel mug on a camp table, and left the room.

"Drat the fellow," I muttered ruefully, for I saw that to reach the tea, of which I was badly in need, I would have to get out from my warm blankets. With a sigh, I jumped to the floor.

Through the window I could see the wide expanse of aerodrome. From the hangars the mechanics were dragging the B.E.'s on to the dew-covered turf, while the armourers mounted the Lewis guns in the front seats.

In the distance the sullen rumble of the guns, with an occasional louder explosion as some shell of heavier calibre detonated, showed that the battle begun the day before was still raging.

Soon dressed, I drank the mug of tea with relish, and donned my leather coat and helmet.

Bob looked up from his cockpit as I approached our machine. "'Morning, old bird," he greeted cheerfully. Bob was always confoundedly cheerful in the morning.

"Glad you think so," I muttered, thinking longingly of my blankets. "Confound these 'sparrow wake' patrols. As if we didn't do our whack yesterday . . ."

"Aw, dry up," he laughed, "there's a war on. Have a 'dekkko' at the guns, it's time to be off."

I climbed into the front seat and swung the mountings.

Within a few minutes we were bumping across the wet turf.

## WINGS O'ER THE SOMME

### Spotting for the Guns

**O**UR work that morning was to fly to Hebuterne and the Ancre. We were to watch what was happening in the trenches and directly behind the lines, at the same time marking on our maps any new gun flashes seen in enemy territory.

Turning into wind, Bob opened the throttle, and the B.E. skimmed across the grass, and with hardly a movement soared over the trees.

We had circled the aerodrome several times when Bob waggled his stick in signal, and pointed down to a strip of canvas shaped like an aeroplane, which was stretched out in a corner of the field.

I nodded, and fitting a magazine on each of the guns waited until he had got into position, and was diving on the target below.

I pressed the trigger, and the gun broke into its chattering song. A second dive tested the other gun. Both were working perfectly.

The morning was cold and crisp, while the "ceiling", covered with fleecy clouds, reached to well over ten thousand feet.

At last the lines were reached, but it was difficult, after the fighting of the day before, to make out which were occupied by our own troops and which were held by the enemy.

A few miles distant, Serre could be seen through the haze. I wondered what had happened to the pigeons we had released the afternoon before, and how many of them were still alive. Any pigeons seen winging their way across the trenches were always the targets for sentries who, armed with shot guns, waited to catch the "carriers" on the wing.

The village streets were now mere heaps of rubble. I jerked my eyes to the skies above, but they were clear of aircraft. We seemed alone in the vast canopy of heaven. But all the same, it would be as well to keep a wary eye upon the clouds in case some hidden Jerry tried to catch us unawares.

From hidden positions, German batteries were firing continuously, the flashes

of their guns twinkling far below. As I located each battery I checked its position on the map and marked it down, but it was only after I had made sure that the flashes were real, and not merely dummies fired to mislead us, that I marked them on the map.

With the light increasing, "Archie" woke up, and began to take an interest in us. Soon the smoke of exploding shells floated through the air. Sometimes, with an ear-splitting crash, a 6-inch high explosive would burst close by, enveloping us in a pall of black smoke.

As we flew up and down our beat we were interrupted only by the methodical crash of shells as we passed above certain points. From time to time, small jagged rents appeared in the fabric of our wings, as pieces of metal pierced them, and an occasional wire would part with a sharp "ping," cut through by a flying splinter of steel.

With a roar, a flight of D.H.2 scouts, our friends of the day before, hurtled past on their way across the lines to look for trouble during the two hours of their patrol. Their pilots waved cheerily as they passed.

Following the fighters, came the lumbering shapes of half a dozen F.E.'s, on their way to some distant point behind the lines.

As the sun grew in strength, the silvery shape of a German machine would be reflected in the light, as it flew across the sky, but not once were we disturbed by hostile attack.

### "Granny" Takes a Hand

**A**FTER a while we noticed that each time we crossed above the village of Gommecourt, a line of pom-pom shells came hurtling up at us, the light of their phosphorous bases glowing as they curved in a huge arc across the sky.

As these solid 1-inch bullets were fastened together in bunches of about a score, we took a lively interest in these necklaces of fire, and from time to time Bob altered height in an attempt to put the gunners off their range, which was becoming rather too accurate to be pleasant.

## AIR STORIES

I was well aware that if once a group of these shells caught the B.E. in its fiery embrace nothing could save us from destruction. Therefore I decided to attempt to deal with "Percy," as we called him, once and for all.

Standing in my seat, I bent over to Bob and unfolded my plan.

With a grin he swung the 'plane towards the batteries, while I plotted "Percy's" position on the map. I then grasped the wireless key.

Rapidly I rapped out the dots and dashes that was "Granny's," the 15-in. howitzer's, code call. I followed it up by giving the position of the pernicious one, and then we turned for the lines.

Slowly we circled over Gommecourt, in an attempt to encourage "Percy" to open fire, for in this way he would be kept fully occupied.

"Percy" needed no encouragement, and pumped streams of tracer shells into the air until soon the sky was full of flashing balls of fire.

We fixed our eyes on his emplacement, and waited.

Half a minute later, a huge cloud of smoke and a mighty explosion took place in "Percy's" abode, and, as the smoke cleared away we saw only a large crater where previously the pom-pom had made its home.

With a string of code letters to "Granny" by way of thanks for her help and excellent shooting, we went on our way rejoicing.

**B**Y the time our unofficial "shoot" was over, the sky was alive with 'planes, passing between the lines and the British battery positions, registering their shots.

We flew over a sixty-pounder battery, and saw that the white strips which were usually left out during a shoot were being rapidly taken in. This, we knew, indicated the presence of hostile aircraft, for no righteous battery commander likes his position to be discovered by a hovering

observer, and gunners are bashful people as a rule.

Looking down, I suddenly saw the enemy. It was an Aviatik two-seater, flying steadily along a line of trenches some five hundred feet below us.

I felt my heart pounding against my ribs, for in all my months in France I had never once had such a "sitter" presented to me. Usually, the Germans took care to fly at great heights when over our lines.

The Aviatik was obviously busy taking photographs, for it flew on a steady course, diverging neither to west nor east.

I pointed out the 'plane to Bob, who waved his hand and nodded. Then he swung the B.E. round in a vertical bank, and with wires screaming we shot down upon our prey.

As we approached, I made out the pilot and observer leaning from their seats and peering downwards. Bob swung aside so as to give me a chance to get my gun to bear and, aiming between the pilot and observer, I pressed the trigger.

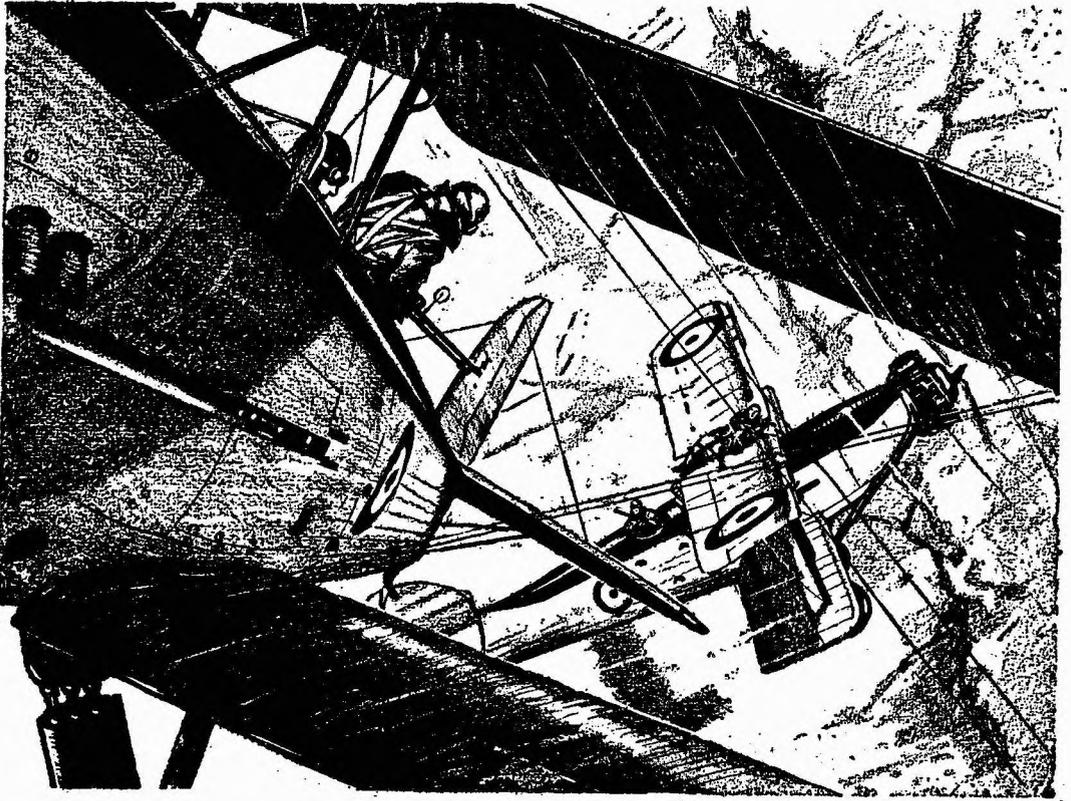
The Lewis leapt into action and two short bursts were enough. As we swept by we saw the observer lying crumpled over the side, while the pilot sat with his hands hanging over the side of the fuselage.

The Aviatik, now out of control, reared vertically up on its tail, then, turning on one wing, went into a spin. The spin increased, grew faster and faster, then first one plane and then the other broke away, until the fuselage with its heavy engine plunged into the ground. At once a pall of smoke covered the wreck, and as the petrol tanks burst the 'plane was enveloped in flames.

It was an awful fate, but this was war, and their death might yet be ours.

Our three hours at an end, the B.E. was swung round to the west, and with the engine humming its vibrant song we sped home high above the shell-torn earth where the Battle of the Somme still thundered on.

# RAIDERS OF THE DESERT



*The figure lashed to the centre-section of the Gordon checked the gunner's hand*

**The Stuttering Guns of Renegade Airmen were the First Introduction of those Two Inseparables, Flying Officers "Boil" and "Blister," R.A.F., to the Strange Mystery of the Stolen Squadron**

**By J. H. STAFFORD**

## CHAPTER I

### A Desert Encounter

**I**N the bar of the Carlton Hotel, Jaffa, two young Flying Officers, temporarily attached to the Palestine Police Headquarters for special duty, sat and discussed the political upheaval that had transferred them from the peace and quiet of Middle East Details, to "sit and listen to the neighbours calling one another names in Israel's back-yard," as one of them appropriately expressed it.

"When you think of it, 'Boil,'" said

one, "it seems absurd in a place like this, with everything you could want. . . ."

"Everything?" the other interrupted.

"Well, practically everything . . . it seems so stupid and empty."

"That's exactly how I see it," Boyle said, gazing pensively into his glass.

"There's nothing in it," his friend continued.

"Absolutely nothing, it's the most definite show of nothingness I've ever seen," Boyle replied.

"What are you talking about?"

## AIR STORIES

Lister asked as his glance fell on the other's glass.

"This glass," Boyle said. "What were you talking about?"

"I was meditating on the situation here in Palestine."

"Oh, yes, that's nothing, too; after all, what can you expect in a place where the beer's so thin it soaks through the glass and Johnnie Walker staggers along on a crutch?"

Lister's eyes wandered from the empty glass to the open collar of the other's shirt. "I would expect to find a new silk shirt in my case if I were looking for it," he said meaningly.

Boyle looked guilty, but only for a moment. "Oh, yes, I forgot to mention it, this is the last of our shirts," he said casually.

"Ours?"

"Well, yours and mine."

Before Lister could think of a suitably crushing answer, a corporal of the Palestine Police came up and Boyle, returning the man's salute, asked: "Anything wrong, Joyce?"

"Colonel Barrington's compliments, sir, and he'd like to see you," the corporal said.

Boyle rose with alacrity, welcoming the summons that had interrupted conversation at a delicate point. "Come on, Bliester," he said, "something's happening."

Lister held back. "Just a minute," he said, "what about the shirt?"

"Can't stop for that now, there's a war on."

"Oh, no, not in my shirt there isn't."

"Don't worry, I'll buy you a new one when we get some money."

**T**HERE was a bearded, dust-caked Arab seated in Colonel Barrington's office. Boyle nodded to him. "*Shalom*, Captain," he said. He had had previous experience of the remarkable native disguises adopted by Captain Harvey of the Intelligence and was not to be caught napping even by this brilliant masquerade.

The grey eyes of the Colonel twinkled. "*Shalom* is a Hebrew greeting, not

Arabic, Mr. Boyle," he remarked, "and this gentlemen is Khalil Ahmed, not Captain Harvey."

Boyle coloured in his confusion as he faced the smiling Arab. "I'm sorry," he began.

"Save your apologies," the Colonel interrupted him, "he doesn't understand you." Turning to Lister, he said, "You have only one machine here, eh?"

"Yes, sir, the other crashed in the sea, as you know."\*

"Umm, then Khalil Ahmed had better stay here until you return."

"A job on, sir?" It was Boyle who enthusiastically voiced both pilots' thoughts.

"Oh, nothing very important," was the casual reply. "Just a trip to Azrak Wells, where curious things are happening that require a little investigation. You will drop Captain Harvey there and report to me when you return."

A moment later another Arab, even more disreputable and dust-caked than the other, entered the office. Despite the typical Arab method of holding a cigarette low down between the first finger and thumb, both pilots recognised the English brand which the newcomer smoked.

The gleaming white teeth showed in a ready smile as Captain Harvey greeted them. "Do I pass?" he demanded.

"With that rig-out you'd break the heart of every servant girl in England," Lister replied.

"And poison them with the first whiff," Boyle added, remembering the last time he had shared the rear cockpit with a disguised Harvey.

Harvey laughed. "The first thing an Intelligence Officer has to learn," he stated, "is to suffer and smile."

Boyle nodded. "I know," he said. "I suffer and you smile. Come on, while I'm still conscious."

But despite the native smell which Harvey insisted was three-quarters of his disguise, Boyle really enjoyed the trip out to the ancient wells that had known the Syrian hordes, the Roman legions and the Crusader's follies.

\* See "Special Duty," AIR STORIES, January 1937.

## RAIDERS OF THE DESERT

Harvey was duly deposited at his rendezvous and was deep in conference with the small party of Arabs that had come to meet him before the Fairey had even finished taxying downwind for her take-off on the return journey.

**S**HORTLY after the homeward-bound Fairey had passed over the hot vacancy of the Jordan Valley where the earth drops away into a bottomless, shimmering mist one thousand three hundred feet below sea-level, Lister pointed ahead to two machines flying steadily at two thousand feet, and altered his course slightly as he recognised the Fairey Gordons of 14 Squadron.

Unlike their own Fairey 3 F., which was powered with a 450-h.p. Napier, the Fairey Gordons of 14 Squadron boasted the more powerful radial Panther, but lacked the clean lines of the 3 F.

"Anybody you know?" Boyle shouted to his friend, as they slipped down to greet the other machines.

"Don't know—can't see their faces," Lister replied.

Hovering ten feet above the others, they leaned over the side and peered down at the four occupants of the Fairey Gordons.

"The way they're muffled up you'd think this was the Arctic," Boyle shouted. "Hi! What's he doing?"

Lister glanced over at the machine on the starboard side, stared curiously at the figure in the rear cockpit that was fumbling with the gun, and shook his head in reply to Boyle's inquiry.

Then a startling thing happened. From the machine on the lower port side came the unmistakable rattle of a machine-gun, followed a moment later by the rear gun of the other.

Boyle sank back into the cockpit in dazed amazement.

"What in the name of blazes are they doing?" he bellowed.

Lister shot the 3 F. up into a sudden climb. From three hundred feet the two officers gazed down on the machines of 14 Squadron sailing serenely away beneath them, and stared in frowning perplexity at the rear guns still pointing menacingly towards them.

"Being funny, trying to scare us," Lister shouted.

"Funny!" Boyle yelled. "I'd like to knock their blocks off! Look at that wing." He pointed to several jagged strips of canvas flapping in the wind.

"I'm going to slip down alongside," Lister shouted, "and take their numbers. We'll find out who they are later on."

But as they dived easily towards the Gordons two menacing machine-guns were deliberately trained upon them, as though daring them to approach closer.

Boyle glared savagely at the watching occupants, hastily scribbled the numbers of the machines in his note-book and swung his own rear gun into position in mock fighting attitude. Immediately there came a burst from the nearer machine, and again Lister clawed for height, half rolled, and dropped in the wake of the two Gordons. If they wanted to see aerobatics he was just the one to show them, he decided.

Stealthily, he crept up to the tail of the rearmost Gordon until the spinner on his propeller boss almost kissed the rudder of the machine in front. The pilot made no effort to shake him off as most military pilots would have done. Instead, a sinister figure rose behind the rear gun.

Instinct warned Lister to dive out of range beneath the tail-skid before him. As he did so a long-drawn-out rattle of gunfire sent a hot wave of anger surging through him.

Burning with a sense of outraged innocence, he rolled over on his port wing, pivoted for a second on the tip and slipped away from the 14 Squadron machines with the easy grace of a gull.

As they drifted down in a long glide towards the green orange groves of Palestine, Boyle turned from the twin specks in the sky to the west.

"We ought to have gone back with them to Amman," he shouted.

"What could we have done?" Lister wanted to know.

"I could have told them something they don't know about themselves," Boyle replied wrathfully. "A joke's a joke, but that caper of theirs was just ruddy dangerous!"

## AIR STORIES

Leaving the Fairey in the charge of the fitter and rigger who had recently been attached to them, the two pilots marched determinedly across the Macabee sports' field that now served as a temporary aerodrome, to the office of Colonel Barrington.

There was a thoughtful frown on Lister's usually pleasant features, whilst the strange action of the 14 Squadron machines had converted the happy-go-lucky Boyle into a veritable human thundercloud.

"You flying people are far too reckless," was Colonel Barrington's verdict when he had heard Boyle's story of the encounter. "You're always taking unnecessary risks."

"Oh, no, sir," Boyle protested, "we weren't taking risks, they were pressed on us, we just couldn't refuse."

"You didn't see who these pilots were?" the Colonel asked.

"No, sir. They were too muffled up to recognise any of them," Lister answered.

"Um, well," the Colonel murmured thoughtfully, "leave those numbers with me and I'll get in touch with Squadron Leader Bennett."

"Of course, we don't want to make too much bother, sir," Boyle said as he handed over the slip of paper. "We'd rather talk it over with them ourselves. Still, those Johnnies will remember every word Benny—I mean Squadron Leader Bennett—says about it. I know him, he's got very decided views on etiquette."

### CHAPTER II

#### Trouble at Hebron

**S**ITTING in the lounge of the Carlton Hotel after tiffin the two pilots discussed the strange incident of the morning. Boyle suggested slipping quietly up to Amman and demanding an explanation without the formality of written reports.

"Pay them a social call and award a few black eyes for their gallantry, eh?" Lister laughed as he spoke, but the worried frown persisted. "You haven't even an idea who they were?" he asked.

"No, I was too busy studying the

muzzle velocity of their guns—most interesting," Boyle replied grimly. "Besides, they were all covered up like Granny when she bathes."

"I suppose they *were* our fellows?" Lister said quietly.

Boyle glanced quickly at his friend. The irresponsible character he presented to the world concealed an alert, observant mind that was quick to seize upon those little details that were most often overlooked.

"Curious you should say that. I've been rather wondering about it myself. They didn't handle those kites quite as the lads do, yet—well, who else but some ass from 14 Squadron would greet a friend with a twenty-round burst? As the Old Man said, we're too playful. We should have bunged a beltful of lead into their tanks, just to keep up the spirit of the thing."

Later, as the two pilots inspected the damaged wing, a corporal rigger remarked to Lister:

"It's had a good peppering, sir, but nothing serious. I'll patch it up."

"Yes, do," Lister replied. "She needs it, anyway—getting a bit threadbare."

"Spot of bother, sir?" the corporal inquired.

"Yes," Lister answered. "Met some friends of Mr. Boyle's and they recognised him."

"What, Arabs, sir?"

Boyle, who had been inspecting the under-surface of the lower wing, caught the drift of the conversation, stared at the corporal, and said thoughtfully:

"Arabs! Now I come to think of it, those blokes didn't look unlike Arabs."

**A**S they left the hangar an orderly approached them, saluted in the easy, respectful way of the Police Force, and began:

"You're wanted, sir—some trouble at Hebron."

"The Colonel?" Lister asked.

"Yes, sir."

Colonel Barrington wasted no breath on formalities when the pilots entered his office.

## RAIDERS OF THE DESERT

"What machines were they that fired on you this morning?" he asked.

"Fairey Gordons from 14 Squadron, Amman, sir," Lister promptly replied. "Why, is anything wrong, sir?"

The Colonel paced the office a moment before replying. "Yes, something is decidedly wrong, somewhere. This morning you are fired on by 14 Squadron machines; it is impossible to get a message through to Amman owing to a damaged line, and now a telephone message comes from the Jewish Settlement at Hebron to say that they are being attacked by three R.A.F. machines. What the deuce does it mean?"

"What!" exclaimed Lister.

"You say the Jewish Settlement at Hebron," Boyle said, "three Air Force kites. Wait a minute—do you think a flight has fallen into Arab hands?"

"Possible," Lister said, "but highly improbable. Why, all Amman would be out in war paint."

"If they had war paint," the Colonel said slowly, and something in the quiet tone caused the two younger men to stare.

"Do you mean to say, you think . . .?" Boyle began, but the Colonel's quiet voice interrupted him.

"I think you had better fly to Hebron and investigate. Use your own discretion and act as circumstances demand. I think you had better go armed." The faint warning in the quiet tones, as the Colonel uttered the last sentence, sent an inquiring glance flashing between the two pilots.

Boyle turned to his friend, "Blister, old crab, I see before me the path of glory, the rosy, red dawn of fame."

"And I see before me," Lister interrupted, "a spotless white silk shirt, its virgin purity sullied—"

"Pardon me, gentlemen," the Colonel's voice was calm but cold, "I should appreciate it if you would transfer your attentions to the village of Hebron and leave the discussion of personal matters until later on."

On their way to the hangar the two friends became serious.

"I've an idea the Old Man knows a lot

more than he's told us, Blister," Boyle remarked.

"Yes," Lister replied, "and I've an idea that he suspects a lot more than he cares to admit."

### CHAPTER III

#### Secret of the Gordons

LEAVING behind them the cultivated plains with their miles of scented groves, the Fairey 3 F. headed for the peak of the Judean Hills beyond which lay the village of Hebron. Behind them, forty miles away, lay the blue Mediterranean, sparkling and glittering in the afternoon sun. What lay before them neither of them could know.

They cleared the hills with a thousand feet in hand, gazed down at the landscape that fell sheer away to the Dead Sea, and gapsed.

Ahead lay Hebron, enveloped in a pall of dense, black smoke, while above it circled three Fairey Gordon machines.

"Holy Smoke! What in hell's name has happened?" Boyle shouted above the roar of the Napier.

"Don't know. Stand by that gun," warned Lister. "By Heavens, Boil—look!" As he spoke, one of the Gordons tailed up into a dive and shot down towards the blazing village. A fountain of flame and smoke leapt towards the sky, followed by a dull crash as the Gordon dropped a high-explosive bomb and climbed to safety.

Again Boyle's voice sounded in an excited shout, "Blister, they're mad—they're ——" His voice trailed off into as astounded silence as he sighted the occupants of the Gordons. "Arabs, Blister, look out!"

But the warning was unnecessary. Lister, watching the Gordon clawing for height, had edged cunningly in between his adversary and the sun, and now hung like a poised hawk, waiting.

In the rear cockpit Boyle's sudden excitement vanished. He stood calmly fingering the rear gun and watching the clumsy trap the Gordons were laboriously setting.

## AIR STORIES

Without warning the 3 F. burst into full throttle, pointed her glittering nose at the tail of the nearest Gordon and dived with a sudden shattering roar that grew to a scream of fury. Taken completely unawares by the suddenness of the manoeuvre, the Gordon twisted and turned to shake off its grim pursuer. It was quickly obvious to the two airmen that the Arab pilot possessed some experience of military flying.

Diving, climbing, rolling and circling, the two machines flashed about, as Boyle afterwards said, "Like a couple of London sparrows." Yet with each fresh twist Lister crept a few feet nearer, urging his prey on with sudden little bursts of gunfire until the Gordon, straining as if on an invisible leash, swung round in a frantic flat turn.

It was a fatal move with the vicious guns of the Fairey less than thirty feet behind. In a flash Lister had grasped the opening. With the skill of a master, he shot the Fairey up into the sky, the tail swept across the heavens as the machine cartwheeled on her starboard wing, and the next moment the Fairey came screaming down on the unfortunate Gordon.

It was a magnificent dive, clean at the front cockpit. The front guns blazed with deliberate, deadly intensity, and the Arab pilot slumped forward over the controls.

"GOOD work, Blister," cheered Boyle, but his exultation turned to sudden alarm. The awful chatter and scream of a machine diving on its target sounded above the roar of the Napier. Turning his head, Boyle gasped as he saw the second Gordon tearing down on them as if to shatter them into eternity with its impact.

Lister saw it too, watched it dropping down on them with the speed of a bullet, measured his distance, and then performed the apparently impossible.

It seemed to Boyle, grimly sighting the rear gun, that the Fairey side-stepped as a skilful matador side-steps the rush of a bull. The movement was less than twenty feet, but it was sufficient, and as the Gordon roared past Boyle turned on it

and sent a hosing of lead from the rear gun down after it.

Then, with a sudden half roll, Lister dived in pursuit, but it was not necessary. The Gordon continued to hurtle downward, its speed increasing, its pilot making no apparent effort to pull out of the terrific dive.

The Gordon hit the ground with an awful impact and as it dissolved in a sheet of livid orange flame, which seemed to splash back like molten metal, Lister shouted :

"You got him as he passed—one each."

Boyle's eyes, aglow with the heat of battle, were searching the skies for the third Gordon. He pointed as his glance caught its silvery shape far below them, heading for Amman.

In a moment the Fairey was screaming down in a long power dive towards the fleeing fugitive. Impatiently, Lister fingered the gun trigger as the gap between the two machines dwindled. This was easy, he felt, too easy. He had the sun behind him, the advantage of height, the added speed of his long dive and an enemy too anxious to escape to waste time in strategy. He must make one clean sweep while his luck lasted, for, if he failed, the superior speed and climbing power of the Gordon would leave a way of escape for the other. He had no doubt of the result of an open scrap, his one concern was to get to grips. Accordingly, he waited while the other machine grew in his gun sights, until he could see the rear gun trained on him, until he caught a glimpse of the olive-hued face of the pilot as he turned to stare up at them. Something unusual above the pilot's head drew his eyes to the centre-section of the machine. A dark shape, a bundle, a— Lister stared in horrified amazement.

"Let 'em have it, Blister." Boyle's excited shout came to his ears as though from an immense distance. A long burst from the Gordon's rear gun warned him that he was losing his advantage. He ought to open fire now or it would be too late, yet that figure lashed to the centre-section checked his itching thumbs. He could not fire.

## RAIDERS OF THE DESERT

Boyle had seen it now. As they flashed over the Gordon, their wheels missing the other's spinning propeller by inches, he hung far over the side, staring down with wide eyes.

"The swines, the utter fiendish swines!" he muttered.

"Who is it?" Lister interrupted the flowing abuse.

"One of our chaps, couldn't see who; it looked like Benny. He's alive. I saw him shaking his head," Boyle shouted back.

"Daren't attack him like that," Lister said. "The cunning devil knows it, too."

"Can't you force him down?"

"No, too risky. Besides, he can run away from us."

"Yes, and that's what he's doing now," cried the excited Boyle. "Follow him till he lands. Hell! What in Hades can have happened, Blister?"

"Don't know, but we're going to find out—hang on." Lister lifted the Fairey as he spoke, and the burst from the Gordon's rear gun passed harmlessly beneath them.

Like a tiger stealthily trailing its prey, the 3 F. clung tenaciously to the Gordon, losing ground slightly now that they were flying level, but never enough to lose sight of their quarry, with its helpless, living burden.

### CHAPTER IV

#### A Fairey to the Rescue

**A**CROSS the grey wastes of the Jordan Valley, over the Dead Sea cradled like a living amethyst in the sombre depths, up, over and round the hills of Trans-Jordania, the two machines sped towards the scene of so many historical battles—Amman, that grim fortress, poised in solitary defiance on the edge of the vast desert.

The Gordon had landed when they swept in across the 'drome and was taxiing hurriedly towards the hangars, leaving a cloud of dust in its wake.

Lister flashed down in a swift dive. It was in his mind to land and fight for the possession of the khaki-clad figure bound to the other machine, but, even as the

thought entered his head, the air was shattered by the rattle of mounted ground guns. From every corner of the camp dark-robed Arabs came rushing. Never in all their lives had the two men seen so many Arabs. In the face of such overwhelming odds it would have been sheer suicide to try and land.

Scarcely ten feet above the hangars Lister circled the camp. Boyle's sudden grip on his shoulder sent his eyes to the corner of the parade ground beneath.

In a square barbed-wire compound, normally used for confining Arab prisoners, the whole of the Service personnel were herded like sheep, surrounded by watching Arabs, whose rifles pointed at the prisoners.

The two pilots saw the frantic waving of their imprisoned companions, dived with savagely blazing guns at a group of important-looking Arabs, and lifted suddenly as the barrack block loomed huge before the Fairey's nose.

On the roof of the watch-tower a score of Arabs with a ground Vickers followed them in a circle, but they had little to fear from the wild, inexperienced shooting. Lister banked, and as the Fairey flashed past level with the roof, Boyle swept a hail of bullets across it with deadly accuracy.

A heap of struggling, scrambling black fiends danced in impotent frenzy, figures dropped and rolled off on to the heads of those below, while from the compound rose a mighty cheering roar that could be heard even above the Napier's bellowing.

But the battery of lead from below was now becoming so intense that low flying was out of the question. Lister glanced at the petrol indicator, pointed away to the west, and dived in salute on the wire compound. Then, with the throttle hard against the stop, the gallant Napier flung every one of her aristocratic horses into a mad rush back to Jaffa.

**H**ARDLY had the 3 F. rolled to a halt when the two men were out of it and running towards the office of Colonel Barrington.

"The 'wogs' have taken Amman, sir. It's hell there," Boyle burst out when the two stood in the office.

## AIR STORIES

"Calm yourselves, gentlemen." The quiet, even tones were in strange contrast to the pent-up emotions of the younger men. "Come now, sit down and let me hear the full story."

Boyle accepted the proffered cigarette, puffed at it savagely, and again burst out :

"But, don't you understand, sir ? Our fellows are prisoners in their own camp. Amman, of all places. Amman the impregnable. It's—well, it's incredible."

"Impregnable, eh ?" The slow quiet voice was addressing the ceiling. "There were two ways of capturing Amman, young man. One was by force—sheer weight of numbers. The other was by trickery."

"Trickery !" Lister asked. "How do you mean, sir—trickery ?"

"I can't answer that. Perhaps, later, Captain Harvey will be able to explain."

"Harvey !" Boyle exclaimed. "Where is he ?"

"He's in Amman camp," was the surprising reply. "There has been very little bloodshed, I believe. It was an amazingly daring coup that succeeded."

"Well, what are we going to do about it, sir ? We can't just sit here talking," Boyle said irritably. "Surely Middle East ought to be told ?"

"Middle East has been informed," was the Colonel's calm reply. "Baghdad has also been informed. Preparations are being made now. Air action rests entirely with them, of course, but several companies of the Trans-Jordania Frontier Force are advancing on Amman in readiness to attack."

"Then you knew about it before we left, sir ?"

"No, not before you left. A runner arrived shortly afterwards with a message from Captain Harvey which confirmed some suspicions I had." The quiet voice, which so utterly belied the penetrating eyes, now addressed itself to Lister. "You were speaking of Hebron, Mr. Lister."

Lister was about to deny it when he caught the gleam of those eyes and nodded. In brief sentences he described the fight with the three Gordons ; skipped

modestly over the crash of two of them, and described the figure on the centre-section of the third.

"It looked like Benny—er—Squadron Leader Bennett—but we couldn't be sure. Boyle said he was alive."

Boyle rose and paced the office like a caged beast. "He *was* alive," he muttered significantly. "Goodness knows what's happening while we're sitting here. They may be slowly torturing those poor devils ; perhaps, even now, slaughtering them off."

"Don't disturb yourself, Mr. Boyle." There was quiet assurance in the Colonel's tone. "They are Druses, mostly. Their object is to bottle up British authority while they annihilate the Jewish population. They're normally a peaceful tribe."

"Oh, they were peaceful enough with us," Boyle replied sarcastically. "They welcomed us with a ton and a half of lead in little bits."

"You were not asked to call on them at Amman, but only to investigate trouble at Hebron," the Colonel reminded him sharply.

An obstinate light was glittering in Boyle's eyes. "Then, I suppose we've to sit here and wait for orders from Middle East," he muttered.

"Exactly," the quiet voice replied.

"And what then, sir ?" Lister prompted.

"You will then proceed to obey those orders."

**H**ALF AN HOUR later Boyle and Lister were leaning disconsolately on a wing of their 3 F., watching the deft fingers of the corporal rigger feeling and probing the planes for serious damage.

"She seems sound enough, sir," he said, after a time.

"Good," Lister answered, "get her filled right up."

"I have, sir."

"Ammo. ?"

"Yes, sir."

"Are there any bombs in this place ?" Boyle asked casually.

The corporal glanced inquiringly from Lister to Boyle. "Yes, there're some

## RAIDERS OF THE DESERT

### CHAPTER V

#### The Siege of Amman

eight-pound Coopers in the armoury, sir."

For a long moment the two friends faced each other, then :

"Bombs are interesting things, Blister."

"Yes, I wonder if they really do go off bang 'l'"

"I wonder."

"Do fairies lay eggs?"

"This one does."

"You know, Boil," Lister said dreamily, "every time I think of bombs and bullets I seem to hear the boys up at Amman cheering."

"I can hear them, too, only it gets louder."

"Louder every minute."

"They're needing us."

"They're waiting for us."

In silence they shook hands, while the astonished corporal glanced doubtfully from one to the other. Then Lister recovered somewhat.

"Corporal, get hold of that fitter," he said sharply; "fill those bomb racks, and load every round of ammo. you can lay hands on."

"We're going to drop in on some friends," Boyle added. "A surprise visit, only they'll take the pot-luck."

It is doubtful if either knew quite what they intended to do. The thought of the terrific odds—one machine against ten, two men against five thousand—encouraged rather than dimmed their enthusiasm. As Boyle said :

"It's doubtful whether they've got ten pilots, and, even so, that's only five each. It's the blokes with the ground guns we've got to watch."

Their spirits soared as they laboured feverishly with their dangerous cargo. At last the Fairey was ready, a vicious hornet bristling with death-dealing stings.

As they taxied away from the hangar, Boyle sang out :

"If Colonel Barrington asks for us tell him we've gone to Amman on test, bomb test—he'll understand."

In the front cockpit Lister smiled quietly to himself. "Oh, he'll understand, perfectly," he murmured.

ON the tortuous twisting track between Jericho and Es-Sault a long, winding cloud of dust attracted attention.

"What's that?" Boyle shouted.

"Frontier Force," Lister replied, his gaze riveted on that long caterpillar of mounted native troops moving slowly, laboriously, but with grim determination, between the hills.

Flying low to avoid giving unnecessary warning of their coming, they made a wide detour and approached Amman from the desert. As Lister rightly judged, it was the point where attack was least expected, and where the safety gap for the runway made it the camp's most vulnerable spot.

Three machines stood on the 'drome in preparation for a raid on a Jewish village.

There was a rush of natives to the Gordons as the Fairey swooped in, and Lister met the wave of dark figures with a withering fire. In a moment the earth was black with natives rushing frantically for shelter from the screaming savagery of the first dive.

As they lifted over the hangars, Boyle mercilessly splayed the crowd with the rear gun. From the roofs of the barracks machine-gun nests wildly raked the heavens, their efforts wasted through the inexperience of the gunners.

A thunderous roar from the compound greeted the two men, and Boyle answered by sweeping a ghastly line of fire along the gesticulating sentries. A rattle of bullets in his rear warned Lister that a machine was up. Guns were blazing at them now from above. They had inflicted terrible damage with that first crushing blow, but both men recognised the gravity of this new danger in the air.

With a desperate wrench Lister sent the Fairey soaring into the upper air, banked steadily as Boyle sent a long burst into the Gordon less than fifty feet below, and nodded happily as the unfortunate machine reared up on its tail and dropped over on its back like a gaffed fish.

Now, from the 'drome, a second machine was speeding towards them, its wheels

## AIR STORIES

still spinning six feet from the ground. The tail of the 3 F. came up as they dived straight at the rising Gordon. It is doubtful if the pilot of that machine knew exactly what happened ; it is more probable that he was dead two seconds after the Fairey pointed her nose at him. His machine, with the throttle full open, instead of lifting over the hangars, crashed with terrific impact into a second machine ticking over on the tarmac. So great, in fact, was the force of the crash that the two machines, locked together in a tangle of wreckage, carried on into the hangar, sweeping everything before them.

At the peak of his dive Lister banked, and Boyle sent a shattering stream of lead into the remaining Gordon on the 'drome. The team work between the two men was perfect—it was as though each anticipated the thought of the other.

Again the Fairey dived. This time the guns were silent, only a whistling scream warned the natives of the approaching doom. A thousand rifles spat defiance as the machine zoomed over their heads, and a moment later the earth shook with the concussion of two Cooper's bombs. It took three similar dives with their shattering, deathly messages finally to convince the black horde of the danger of the open 'drome.

Banking over the centre of the camp, Lister pointed to the figure of an Arab raining death on the lines of sentries round the compound.

"Harvey!" he shouted, "he's beating them off the troops."

From a hangar roof a second gun peppered the scattering mob. Attacked from earth and sky, and with their morale completely broken, the Arabs were now swarming out through the safety gap, wave upon wave of fleeing dark cloaks. Lister circled over them and methodically dropped his remaining bombs, while Boyle goaded the masses to even greater panic with his rear gun.

From the unguarded compound the troops poured, familiarity guiding their steps to points of safety.

Out on the desert to the east a sinister cloud of dust told of an approaching

company of Frontier Force, while in through the west gate of the camp galloped the glittering advance guard.

**I**N less than an hour from the first shot, Amman came once more into its own. Squatting in the compound, four hundred prisoners glowered savagely at their captors.

In the disordered mess Squadron Leader Bennett raised a tin mug, for there was not a sound glass in the camp.

"Magnificent work, gentlemen," he said, then, turning to the two friends, continued, "I have to thank you for withholding your fire over Hebron. I was the—er—passenger on that machine."

"I thought so, sir," Boyle said without surprise. "Just as well we didn't shoot the beggar down."

"But how did it all happen, sir?" Lister inquired.

"Quite simple," Harvey interrupted. "It has been the custom here for a native cook to serve tea to the guard during the night. That native was replaced by another."

"You mean?" Boyle began.

"He was bribed away, and one of Ibn Kasim's men took his place. It was a simple matter to drug the guard's tea, and after that, well—the rascal merely unlocked the gates and Ibn Kasim and his merry men walked in." He turned to the gathered party of 14 Squadron officers. "The rest, of course, you know. The pilots are deserters from the Egyptian Air Force—men who have interested me for a considerable time."

"The most amazing thing to me," remarked Squadron Leader Bennett, "is that you two in one 3 F. came through it all without a scratch. At least, I presume neither of you has been hurt, have you?" he concluded, as his eyes rested on Boyle's shirt, now looking very much the worse for wear.

"Oh, no, sir," Boyle replied easily. "I ripped that on the rear gun." A wicked smile lurked about the corners of his mouth as he met his friend's straight stare and added, "It's nothing, sir, it was only an old one—and quite cheap!"



Georges Madon—a Sketch from a Wartime Photo

# The Luckiest Ace of the War

Survivor of a Collision in Combat, a Fire in Mid-Air and a Direct Shell-hit, Lieutenant Georges Madon, Victor in 41 Aerial Battles, was a "Miracle Man" among French Air Fighters

By A. H. PRITCHARD

**T**HIS month's biography is that of a man who probably had more narrow escapes from death than any other pilot or observer in the entire French Air Service—Lieutenant Georges Madon, whose forty-one victories over German aircraft place him fourth on the list of air fighters of France. But for his habit of fighting far over the enemy lines his score would have been much higher, for he claimed an additional thirty-seven victories that could never be officially confirmed.

Georges Madon was born at Bizerte, Tunis, in French North Africa, and was sent to Paris to finish his schooling. Once away from paternal control he joined *L'Aviation Militaire*, and was one of the very few men who joined the service at its inception and lived through the four terrible years of the Great War. Enlisting in the service early in 1911, he was sent to the great flying school at Etampes, and soon obtained his brevet on a Bleriot 39.

Upon the outbreak of war, Corporal Pilot Madon was assigned to Escadrille Bleriot 30, stationed at Soissons, and it was in December, 1914, that he experienced the first of his long series of narrow escapes. While flying over the rapidly advancing enemy, his machine

was hit by a stray shell, which, luckily enough, failed to explode. Madon just managed to effect a landing before the tail booms buckled, and the whole machine collapsed. After this initial experience all went well for a few weeks, but, transferring to a Farman squadron, M.F. 44, in March, 1915, Madon soon ran into trouble again, and while out on a reconnaissance patrol, got himself hopelessly lost. With his petrol tank running dry, he had no option but to make a forced landing and upon asking his whereabouts found that he had come down near Porrentruy, on neutral territory. Needless to say, both he and his observer were soon interned.

Time and again the two Frenchmen tried to escape and on one occasion were actually crossing the Italian frontier when they were caught. After nine months of captivity they were contacted by a French agent and plans were made for a last bid for freedom. Late one night the agent chloroformed their guard, and led them to a waiting motor-boat which soon rushed them to safety. Their return to France did not bring the returned heroes the welcome they expected, for they were tried by court-martial for the violation

## AIR STORIES

of neutral territory and the loss of a French machine. Madon was sentenced to sixty days' solitary confinement, while Sergeant Chattelain, his observer, received sixty days' ordinary imprisonment.

### Transferred to a Scout Squadron

**R**ETURNING to active service in May, 1916, Madon joined Escadrille M.F. 218, and soon marked himself for greater things when he shot down a Rumpler, on June 26th. In September fortune favoured him and he was transferred to the Mecca of his dreams—a scout squadron. The French "Brass-Hats" soon had reason to be thankful for having given Madon his move for, by the end of the year, he had secured four victories, and blasted his way to "Acehood" on January 31st, 1917, when he sent an L.F.G. two-seater down in flames.

His next victory came on February 6th, when he attacked three Albatros D.2's, the machines that were causing the Allies so much grief at that time. After a hectic eight minutes' rough-and-tumble, two of the enemy scouts were "scouting" for home and a smudge of oily black smoke and burning débris marked the end of the third. By May 5th, Madon's score stood at ten, but two days later he had another joust with Old Man Death. Near Falvy he saw six machines from his own escadrille, S.38, engaged with six Albatros Scouts and went down to give his comrades a hand. Intent on one enemy machine that was lined in his sights, he failed to see another that was zooming from beneath him, and his tail cut the Albatros clean in two. With wings and elevators shattered, the Spad plunged down, and Madon's comrades flew home to report that he had been "killed in action." But the tough Frenchman refused to part with his life so early, and escaped an 8,000 feet fall with nothing more serious than a broken finger.

Madon's eleventh victim, an observation balloon, fell in flames on June 3rd, and that same evening he had another

close shave. Returning from a sortie far behind the enemy lines, his engine spluttered and died and he had to make a forced landing. A lightning change of plugs and the Spad was in the air again before a solitary German had appeared on the scene. Two days later Madon again landed in the German lines and again managed to effect repairs and escape.

Madon seems to have had an entire disregard for his own safety, and his method of attacking enemy aircraft, although it proved successful, was looked upon by other pilots as utterly foolhardy and suicidal. Even in 1918, when formation flying was the order of the day, his methods made Madon a real lone wolf. Although he was a wonderful marksman, he never fired unless at point-blank range, and a flashing dive and spiral turn was his favourite tactic—the spiral turn always placing his Spad's nose a scant few inches from the enemy's tail-plane. Numbers, too, had no terrors for Madon, and no matter how large an enemy group, once he had sighted it he hammered away until all his ammunition was gone or the formation scattered. The following are typical examples of the chances he took and, it is doubtful if any other French pilot was so aggressive.

Early in the morning of August 16th, he was flying alone, as usual, when he sighted seven Albatros D.3's intent on the destruction of an old Farman two-seater. He at once dived to the aid of the hard-pressed bomber. One Albatros went down in flames before the pilot knew what had hit him, and in the momentary confusion that followed, the old Farman made good its escape. Recovering from their first surprise, however, the remaining six enemy pilots attacked the lone Spad, and twelve Spandaus spat a hail of leaden death that buzzed dangerously close to Madon's head. Then another Albatros went down and the survivors broke and fled with the Spad in hot pursuit. Front-line observers saw another blazing meteor fall from the

## THE LUCKIEST ACE OF THE WAR

enemy formation before the madly-cavorting machines passed beyond the range of their field-glasses.

An hour later a bullet-riddled Spad landed in the French reserve lines and Madon reported five victories, two machines in flames and three crashed. Two of the latter, however, had fallen too far inside enemy territory for official confirmation, and Madon received credit for only three. Nevertheless, it was a very creditable performance, and brought a deserved reward in the shape of the *Medaille Militaire*. Just two weeks later, Madon attacked two Rumplers and, braving the attentions of seven protecting scouts, sent both observation machines down in flames.

### On Fire in the Air

**D**ESPITE the atrocious weather conditions that prevailed during the closing months of 1917, Madon steadily increased his score, and a balloon "strafe" on January 6th, 1918, brought his "bag" to twenty, and, incidentally, almost ended his career. With his usual point-blank tactics, Madon held his fire until it was impossible to miss the great gasbag, and was quite unprepared for the suddenness of the holocaust that followed his first burst. There came a dull "whoof," followed by the gushing roar of exploding gas and then the Spad was in the centre of a blazing inferno, with a myriad of tiny particles of smouldering balloon silk raining down on its highly-doped wings. But even that terror of all airmen—Fire—could make no impression on this French miracle man, and, despite the loss of most of his left wing fabric, Madon returned home unscathed. And just to show that balloons were no "bogies" he destroyed another on the 12th.

Towards the end of the month the German Imperial Staff was rapidly forming its plans for the great March offensive, and in order to ascertain the disposition of Allied troops, hundreds of reconnaissance and photography machines were dispatched for a "look-see" over the lines. Needless to say,

Madon quickly accepted this offering from the War gods, and shot down an old L.F.G. on February 6th, another on the 18th, an Halberstadt on the 23rd, and ran his score to the quarter century mark with a hard-earned "double" on March 9th.

His first victim on that day was an easy one, a yellow Albatros Scout that was going down in flames before the pilot had even seen Madon, but the second, a new Rumpier, proved a harder nut to crack. The two-seater was at 18,000 feet when Madon spotted it, but before he could open fire the German pilot opened up his high compression engine and left the Spad far below. For over twenty minutes Madon patiently coaxed his labouring engine to a height it was never meant to reach and eventually managed to get in a long burst. Imagine his surprise when a pair of German goggles dropped across the bracing wires of his left wing and stuck fast. Having the goggles shot off his head must have rattled the observer, for the Rumpier suddenly changed its tactics and, with the rear gun banging merrily away, came down from its high perch—the very move that Madon had been waiting for. At the lower altitude his engine picked up speed and he was able to fly rings around the heavy two-seater. His Vickers chattered briefly and a line of tracers disappeared into the oil-soaked fuselage. For a fraction of a second a tiny pin-point of flame flickered near the Albatros's petrol tank, then the whole machine was engulfed in a tremendous burst of fire and the pilot and observer chose the quickest way out—they jumped. Well satisfied with his morning's work, Madon returned home to exhibit his captured goggles, all that remained of a once trim 'plane and two brave men.

### Madon Meets the Richthofen Circus

**T**HROUGHOUT the great offensive, Madon steadily increased his score and by the end of May had secured seven more victories, five two-seaters and two scouts. Then came June and

## AIR STORIES

enemy opposition grew tougher, for the old Richthofen group, Jagdgeschwader One, was hurried up to the French Front, and its pilots soon began to inflict terrible punishment on *L'Aviation Militaire*.

Madon's first encounter with the "Circus" came on June 5th, when he was attacked by nine black and white Fokkers from Staffel 6, and sent down to a crash landing in the French front line trenches with nineteen bullets in his engine. Such a defeat rankled and next day he took his revenge out of a black and yellow striped Fokker, piloted by a certain Leutnant Otto, of Staffel 10. That worthy had just destroyed an observation balloon when Madon appeared and although the German pilot escaped with nothing more than a wounded arm, his machine was a total wreck.

Before the "Circus" returned to the

British Front, late in July, Madon had destroyed five more of their Fokkers, and had sent an A.E.G. two-seater down in flames to make his score thirty-nine.

After this Madon's record is obscure. We know that he destroyed two more enemy machines, and survived the war with forty-one confirmed victories and every decoration his country could bestow, but there the record ends. Like many other pilots, peace meant the end of a great adventure to Georges Madon, and it is believed that he only survived the war by a few years and that the influenza epidemic did what all the efforts of enemy war-birds failed to do—sent Madon across the Last Horizon. If any reader knows the real story of his death, the author would be extremely grateful for enlightenment, for, to his knowledge, the real story has never been told.

# AIR BOOKS

Reviews of the  
Latest Books  
on Aviation

## INTRODUCTION TO AVIATION

*"Why Aeroplanes Fly"*: By Arthur Elton and Robert Fairthorne: Longmans Green: 2s. 6d.

THE purpose of this book, state the authors, is to put the aeroplane into its historical perspective; to explain the first principles of flight—how an aeroplane stays up; and to discuss the social implications of the aeroplane in the modern world. "Why Aeroplanes Fly" admirably fulfils this three-fold purpose and, in concise, untechnical language, the reader is given a thorough grasp of the fundamental principles of heavier- and lighter-than-air flying, and shown their practical applications in the construction and operation of aircraft.

A brief chapter summarises the work of the early pioneers, and the book concludes with an outline of the ground services which form so important a part of modern aviation, and a description of the varied present-day uses of aircraft in peace and war. Beautifully produced and illustrated by a number of striking photographs, this book is the ideal introduction to Aviation.

## MORE THAN A DIARY

*"The Young Airman's Diary for 1937"*: Charles Letts: 1s. 6d.

THIS little book, first recommended to us by an AIR STORIES' reader, is not only an attractive and convenient diary, but is also a veritable mine of useful information on aeronautical matters.

Some 48 pages in the beginning of the book contain short articles on a variety of important subjects, from the conditions governing the issue of pilots' and engineers' licences to the technique of aerial photography, and an explanation of the controls of an aeroplane. The tables of World Air Records, Notable Flights and Air Distances will be the means of settling many controversies, and the list of British aerodromes, aircraft and engine manufacturers, airline operators, flying clubs, and R.A.F. squadrons should be equally useful for reference purposes. There is also a short glossary of aeronautical terms and two handy maps, one showing the principal civil aerodromes in the British Isles, and the other the principal world air routes. Another attractive feature is the series of sketches, one for each week, illustrating and describing aeronautical terms and items of aircraft equipment.

## BOOKS RECEIVED

Reviews of the following new aviation books will appear next month:—

"Aeroplanes and Airships." By W. H. McCormick. A. & C. Black, 5s.

"Flight to Hell." By Hans Bertram. Hamish Hamilton, 10s. 6d.

"Pacific Flight." By P. G. Taylor. John Hamilton, 8s. 6d.

"Aces and Kings." By L. W. Sutherland. John Hamilton, 7s. 6d.

# WINGS IN THE NIGHT

Back from the Seats of Learning in England came T'sai Lio, Rider of the Winds, to Save his Country from the Tungans of the West

By  
**HUGH STANDISH**

**A**LONG the side of the mountain drifted two falcons. Effortless, they circled lazily on extended pinions, taking from the western wind what power they needed to keep aloft.

Flat on his stomach, motionless in the bracken higher up the slope, lay a boy—T'sai Lio. Intently he was watching the birds, watching every almost imperceptible movement of wing and tail as they adjusted their lift to the varying updraught of the breeze.

Behind him, twelve thousand feet high, towered the mountains of T'sung Liang, and beyond them stretched China, far away to the Eastern Seas. Below him lay the gardens of his father's palace, set on the outskirts of the town on the western frontier of the Chinese Government's territory.

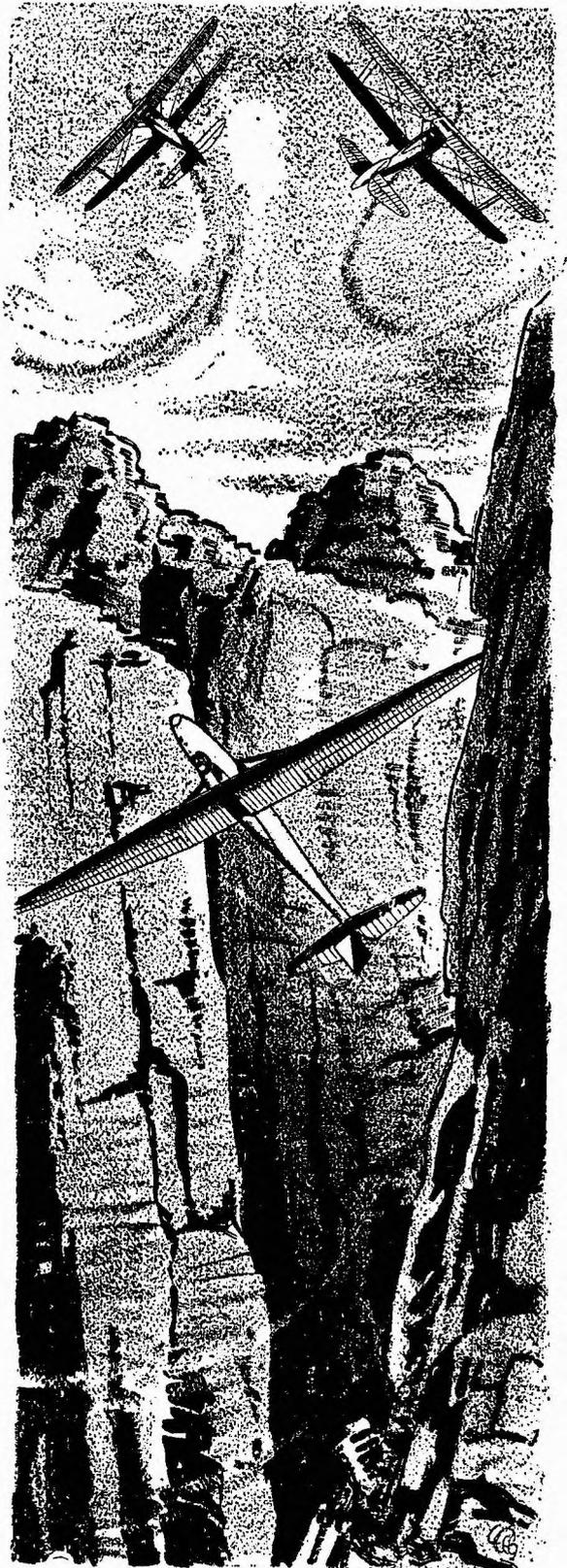
Westward beyond the town lay the territory of the Tungans, a warlike people, and already, so it was said, falling under the influence of Russia and her modern appliances of war.

An uncivilised race, the Tungans, according to Chinese standards, and dangerous. For the natural rampart of the mountains lay to the east, behind the town, instead of between it and the threatening west.

"Some day," said the boy over his shoulder to a servant, also lying motionless at the command of his small master, "some day, O Wang, I, too, shall float aloft on great, still wings."

"To ape the gods," quoted the man sentimentally, "is to act like a fool."

"Bilge," said the boy unexpectedly—he had an English tutor. Then in



*Within a hundred yards of the cliff face the sailplane shot vertically upwards and then over on its back*

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Chinese: "See, how the west wind blows the mists upwards where it strikes the slope."

The servant stirred cautiously; he was getting tired of this cramped watching of a couple of birds.

"Wing-Ho, the joiner," he essayed, "is making a new cabinet."

In one respect only had Lio's father broken with custom; his son had shown an aptitude for using his hands and a passion for woodwork. He had been given full scope to employ them.

But his present absorption in the soaring birds made him deaf to news that would ordinarily have excited him.

The servant tried another approach.

"Thine honourable father," said he irrelevantly, "desires thy presence at the Hour-of-the-Serpent."

The boy's training made him respond immediately. He scrambled to his feet.

"I know. It is about sending me to the seats of learning in England!" he exclaimed miserably.

At heart T'sai Lio was very Chinese.

**I**N due course Lio departed for England. The mountains were circumnavigated by primitive methods of transport; modernism was, as yet, knocking only faintly on the doors of this hidden country. But Lio, in spite of homesickness, was all agog. Beyond the mountains, from an aerodrome of the Chinese Government, he was to fly to Shanghai.

To float through the air like those falcons!

Through the rocky defiles his shaggy pony was always in the van of the caravan. When it debouched on the plains he could hardly be restrained.

It was in the evening of an arduous day that they arrived at the town on the outskirts of which lay the aerodrome, so that it was not until the next morning, within a few minutes of his departure, that Lio saw the craft for the first time.

It was a biplane, powered by a single radial engine with stub exhausts. The engine had already been run up and the pilot was in his seat with the propeller ticking over. The passengers, Lio and his tutor, sat aft in an open cockpit, the

baggage being stowed in a locker case in the fuselage.

The boy was thrilled to the depths of his being, though the rush of the weak slipstream and the clatter of valves and exhaust upset him. He was unaccustomed to the noises of the modern world of internal combustion engines.

The aircraft stood heading into wind. There were no preliminary taxiing bursts from the engine to warn him. One moment he was chattering eagerly to his companion, the next all conscious thought was blasted from his mind by the roar of the engine and the slipstream's gale.

Cowering in his seat he was aware of nothing until they were at a height of some thousands of feet. Then he began to take notice but the noise still unmanned him.

It didn't *feel* like flying—not as he had imagined it.

The bumps were so sudden, and so quick. He had always thought that flying would be like a skiff rising and falling gently on a flat swell.

For some hours they flew. Then the weather thickened.

The pilot lost height to keep in touch with the ground.

Lower and lower they came until they were flying through a fearsome gorge of the Great River. The pilot was casting anxious glances ahead and below. The engine sounded strange. Lio's tutor sat silent and rigid in his seat.

Overhead the clouds had closed down until the cliffs on either side were lost in mist. From the exhausts came a series of devastating explosions and then—silence.

Ahead lay a spit of land which seemed to rush up at them.

There came a rending crash.

Lio sat up on the ground on which he found himself lying. By one of those so common yet so extraordinary twists of fate in air crashes he was unhurt, but the machine was a total wreck. Of his companions there was neither sign nor sound.

Lio struggled dizzily to his feet and began to search the wreckage. There he found for what he was searching.

"T'ssss!"

## WINGS IN THE NIGHT

Faintly he gave the only sign of great distress permitted to a high-born Chinese. It was his first sight of mutilation. And it was a very terrible one.

At that moment there arrived men who had seen the crash and had hurried to the scene.

**B**Y river-steamer and train Lio continued his journey to Shanghai.

There his bookings by Imperial Airways were cancelled and he sailed for England by P. and O. liner. And at Singapore, through the Canal, at Alexandria, wherever and whenever aircraft were to be seen, Lio was never on deck.

In London, the Legation took charge of him and saw to his education. For Lio the years passed slowly until it was time for him to go to a university. The Legation, anxious that he should mix with men of his own age, saw that he took rooms in a lodging-house typical of those which surround the seats of learning in this country.

On the floor below his were two students. Yet Lio made no contact with them. They were an odd pair. They attended the minimum of lectures, and from these they would come hurrying back to their rooms to resume their strange occupation—for the noises that came from behind their door Lio found difficult to connect with any form of study.

More than once he overheard a bitter altercation between them and the landlady, usually followed by the rout of that good lady ejaculating : " Such goings on I never did ! And they calling themselves students ! "

Lio made no friends, but whether this was due to the effect of this new noisy country to which he had been brought, or because of something else, was not clear and the Legation were concerned about him.

One of the particular reasons for his being sent to England was that he should get to know the people. Yet Lio went his own aloof way, mixing not at all. Nor was he happy in his solitude.

One evening, as he was studying in his living-room, there came a knock at the

door. He opened it to find one of the men from the floor below. He was in shirt-sleeves, his hair tousled, face smudged, and hands grimy.

Without preliminary remark he burst out :

" You're doing that course on flow of fluids, aren't you ? I saw you with that book of Prandtl's. D'you know about air flow ? "

" Yes," said Lio, wonderingly.

" Then come down to our room. We've struck a snag."

Now, to say the least of it, this man had been insultingly abrupt according to Chinese standards. Yet something behind the utterly impersonal way in which he had spoken appealed to Lio.

" I will," he said, and followed the amazing young man downstairs.

As Lio entered the room he saw something that made him flinch, for all his Chinese self-control. But he mastered the psychological shrinking and went in.

It was a large room, some twenty-five feet in length, and along one wall was ranged the tapered wing of an aircraft. From this Lio kept his eyes steadily averted.

Along another wall was a bookshelf filled with text-books of the University curriculum, obviously very little used. Over the rest of the room were strewn bits of timber, woodwork in all stages of completeness, blue-prints, dope, varnish. The floor was thick with shavings.

Lio could now understand the landlady's indignation.

At a table the other occupant of the room was poring over some calculation.

As they entered he looked up and at sight of Lio his face brightened.

" Good man ! " he said. And without the slightest excuse or preamble he went on : " We built our wings curved in plan and with a wash-in. Now we find the calculation of the lift is far more complicated than we thought. Fourier's series and all kinds of highbrow stuff. It'll be hell if our work is all wrong. Can you do this Prandtl's stuff and help us out ? "

Both men hung on Lio's answer.

" I can," he said.

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They were all over him. "When?" "How?" "What's the effect?"

"It reduces," said Lio precisely, "to a series of first degree equations which are very tedious to solve without a calculating-machine."

"Jim," said one to the other, "tomorrow you pinch that one in the physics lab."

"I have a Brunsvega upstairs," said Lio incautiously.

They whooped with delight.

"We can do it to-night!"

"It means five hours' work," Lio objected.

They looked at him reproachfully, as if he were a blackleg.

"That's nothing. Let's get it at once!"

The same appalling abruptness, quite impersonal. Yet Lio took no offence. He went upstairs and presently returned with the calculating-machine.

All through that night they worked, Lio writing out the results, the two men at the Brunsvega.

At last it was finished except for the final calculation by Lio which would give the mean lift coefficient for the wings.

Breathlessly they hung over him.

"Nought point six five three two," Lio announced precisely.

They whooped and clung to each other in delight.

"Within five per cent. of what we built the wings to!" they cried.

"Now, Jim, how about finishing that longeron?"

The time was then three in the morning.

"Oke," said Jim and straightway they forgot Lio.

Silently he returned to his own rooms.

Yet all through the following day he carried in his nostrils the clean smell of the silver spruce, bringing nostalgic memories of his home and the joiner's shop. To some extent it drowned the revulsion against anything pertaining to flying which had overshadowed his life since that fateful crash of his boyhood. He knew now what obsessed those men. They were soaring enthusiasts whose mania is only equalled by that of the confirmed drug addict.

The next evening timidly he knocked at their door.

An irritable voice shouted: "Come in, can't you?"

He entered. The two men were now working at the ticklish bit of fairing around a streamlined nacelle.

They stared at him coldly.

"My Brunsvega," he explained.

"Oh that! There, on the table." And they forgot him forthwith.

But Lio lingered.

At last he said: "I could build that—if you like."

With one accord they stood up and stared at him incredulously.

"Streamlined nacelle! But it's the most difficult part!"

"To me," said Lio, "it would be easy."

They looked at each other uncertainly.

"It'd let us get on with the tail unit."

"It'd save us days."

That evening the landlady snorted at certain sounds coming from Lio's room: "So the Chink's gone daft, too, has he?"

But the "Chink", paid too well to be remonstrated with.

**T**HE construction of the sailplane progressed and the smell of silver spruce gave way to that of dope and varnish.

With their goal in sight some humanity returned to the two men. They began to appreciate this silent companion of another race whose deft brain and fingers had helped them so materially. Perhaps they realised some of the loneliness of his life, and as they were normally a decent pair they tried to make amends.

"You ought to try sailplaning, Lio. It's a great sport."

But Lio froze up. Flying, he explained, had no appeal for him.

"Well, at any rate," they suggested, "come out and watch the first launch of our sailplane."

But Lio, it seemed, had a lot of work to do and could not spare the time.

They could make no headway with him.

Yet in the end he had to accompany them. Like most of their kind, the two students had little money, and what little they had possessed had already gone on

## WINGS IN THE NIGHT

material. They were stumped for a means of transporting their craft to the flying ground. True they had managed to borrow a trailer, but, for the time being at any rate, no one could supply a car.

So Lio, who ran a sports Alvis, took out a towing insurance, and one Saturday morning, with an audience consisting of a grinning policeman, some errand boys and an open-mouthed nursery-maid, the sailplane units were lowered from sashless windows. To an hysterical chorus of indignation from the landlady they got the craft stowed away in the trailer and set off for the moors and the flying ground.

It was a good soaring day. As they approached the ridge, on the summit of which lay the launching-ground, craft could be seen in the sky beating backwards and forwards along the hill.

But Lio kept his eyes resolutely on the road ahead.

"Jim!" cried one of the men, "what's that machine away to the left?"

The other looked intently.

"It's a Falcon," he replied. "Not one of our kites. Must be a visitor. Here, Lio, switch off and let's watch."

Lio obeyed and pulled into one side of the road.

With the engine off, the silence of the countryside became evident. In the hedgerow next to the car the breeze sighed and rustled.

From overhead there came—silence.

Slowly Lio raised his eyes. He had stopped the car at the foot of the ridge up which the road zigzagged. Above his head, silent as the falcons in his own mountains, rising and falling with the varying lift, floated the sailplanes.

In Lio a long-suppressed ambition burst its bonds and flamed gloriously.

"Let's get going," said he, and pressed the starter button.

That afternoon, after the sailplane, with the man called Jim in the cockpit, had been launched and soared splendidly away, Lio yielded readily to the suggestions of his companion.

Half an hour later he was afloat in a

two-seater. Around him the breeze sighed as the craft rose and fell, drifted this way and that as it steadily gained height.

"Like it?" asked the instructor from the next seat to him.

"Yes," said Lio, and spoke from the bottom of his heart.

**A**ROUND the cockpit the wind sighed as the sailplane rose and fell in the uncertain air at the upper limit of the hill-lift.

In T'sai Lio's heart homesickness was lulled, in his mind was exultation.

A thousand feet above the hill he beat crab-wise across the sky, meticulously gauging the approaching lift and fall of the wind from the feel of the craft. All around him was silence and peace as he rode the sky, like the falcons in his own mountains at home. Banished for the moment were the noises, the vulgarities and the stupidities of this England.

He glanced at his clock; he had been aloft for just over five hours—and never had time sped so quickly. But now the sun was sinking behind a rampart of clouds, making their summits a rim of living gold. Wistfully Lio eyed the menacing mass. If only it had come up sooner he might have taken lift from it that would have sent his craft soaring thousands of feet higher.

But now it was too late in the day. Reluctantly he eased the stick forward, and with increased control and the wind now whistling past, he circled steeply down to the landing-ground. Over the down-wind hedge he side-slipped off his height and landed close to the hangar.

The towing-car came out and from it descended the instructor.

"Good show, Lio. How did you find it?"

T'sai Lio knew what was expected of him. What did this man, for all his experience, know of the still delights that haunted the upper air?

He answered as curtly as his Chinese tongue allowed:

"Hill lift to one thousand feet. No thermals."

"Huh! You did mighty well, then, to

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get in five hours for your Silver 'C' certificate."

But Lio was unimpressed. He walked to a wing-tip and steadied his craft as it was towed in.

An hour later, as he climbed the stairs of his house, he heard familiar sounds proceeding from the floor beneath his own; the occupants were already engaged on a new craft which was to have a still more wonderful performance than the last.

Lio entered without knocking; he was accepted now as one of the fraternity—if such a word can describe that mania-ridden section of humanity that floats powerless on the winds of heaven.

"Hullo, Lio! Got your five hours completed?" one greeted him.

"Oh, Lio, be a good chap and have a look at this rib," said the other. "It don't seem a rigid structure to me."

"Say, Lio, how *do* you return this strand?" countered the first.

To each in turn Lio attended, deft brain and deft fingers sorting out their troubles. With these young men, obsessed to the point of mania with his own new passion, he found a peace of sorts.

"Oh, Lio, I forgot," Jim suddenly announced. "A cable came for you. It was left with us as you were out." He pointed vaguely towards the mantel-shelf.

Lio went over and opened the envelope. Presently he left the room. The two men went on with their work.

From the hall they heard him telephoning. Disconnected words floated up.

"Imperial Airways . . . to-morrow . . . Shanghai."

In sudden consternation they looked at each other.

Were they to lose Lio?

The receiver clicked back on its rest. Lio returned.

"To-morrow," he announced calmly, "I must return to my home in Western China."

From the two students came a chorus of dismay and sympathy.

"But that will mean the end of your soaring!" cried one.

Lio smiled enigmatically.

"I take with me the drawings and instruments for a sailplane," he said.

IT was to a sadly changed home that T'sai Lio returned.

Everywhere there were troops of the Chinese Government.

His own people went about their affairs with strained, anxious faces. His father was stern and pre-occupied. The threat from the Tungans of the West, reinforced with modern arms, was very imminent.

In this new order Lio, as befitting the son of his father, took his place, not very efficiently it is feared, for to him the pomp and panoply of war had little significance.

The months rolled by and the threat of war did not materialise. In China, trouble arose and troops were gradually withdrawn until Lio's military duties became almost non-existent.

Free again to follow his desire, Lio built his sailplane with the aid of Chinese craftsmen skilled in matters pertaining to woodwork.

But when it came to the launching, and he had need of one of the few motor-cars available, Lio got scant sympathy from his father, who had grudgingly accepted the modernisation recently thrust on him by his Government, and viewed this flying venture with disfavour.

So Lio fell back on the ancient resources of his own civilisation, and a team of six swift horses at the end of a thousand-foot tow rope launched him tumultuously into the air.

Thereafter he was a seven days' wonder to the inhabitants who had only seen power craft—and few of those.

But by degrees they grew used to seeing him float away into the hills, borne aloft by the updraught from the steady western winds.

Then from air and land came disaster, swift and complete.

Early one morning great, black-winged bombers roared down on the town. Unerringly, the telephone line was cut, and the province's one wireless station utterly destroyed. Following this attack came tanks which penned the few

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remaining troops into isolated posts. By noon the palace had fallen and Lio and his father were prisoners.

And all the time, behind the mountains, were their allies the Chinese Government forces, with ample numbers of fighting and bombing craft to deal with the enemy before they could consolidate their position and prepare aerodromes for their own craft. But they had no inkling of the perilous situation of Lio's father, for all lines of communication had been cut.

That afternoon word was brought to the commander of the enemy air force of Lio's sailplane. Contemptuously he went to inspect it with his officers, and then, intrigued, ordered that Lio should be produced to fly it.

At his primitive launching gear the officers roared with laughter, but they were less outspoken when they saw the neatness of construction and the completeness of his instrument board, and they made covetous arrangements amongst themselves.

At a signal from Lio in the cockpit the hooves of six horses tore the turf. Rapidly they gained speed until they were galloping swiftly. At the end of a thousand-foot tow rope the craft lurched forward and then swooped aloft.

At an altitude of some hundreds of feet the climb slackened off a little and the launching rope came tumbling to the ground. Gently the craft turned back to the mountains where lay the up-currents, and once in them it turned again to face the western wind. Silent, almost motionless, it floated in the afternoon air.

The group of enemy airmen stared upwards, quiet now and with some respect showing on their faces.

Imperceptibly to those on the ground the craft gained height, receding with the wind into the hills as its rising altitude allowed it. Soon it was beating from side to side of a rising valley which penetrated deep into the mountains' heart.

Suddenly the face of the commander changed. He roared swift orders. His officers raced away to their landing-

ground from which in a few minutes rose two fighters, their steep climb and deep pulsating roar making a curious contrast to the silent flight of the sailplane.

Straight as a die the fighters climbed up the valley, straight for a deep corrie at the head of which the sailplane was now performing odd antics.

At the foot of the valley, watching and waiting for the end of the sailplane, the enemy commander swore suddenly.

His two craft, while still half a mile from the sailplane, had swooped suddenly upwards one on each side, and coming back on their tracks had once again attempted to close in only to turn away again, foiled, for some inexplicable reason, of their prey.

LIO saw the fighters sweeping upwards, heard the pulsating roar of their engines magnified by the echoing rocks of the high hills. Quick of perception, knowing the mountains and the movements of the air therein like the garden of his own palace, he made his decision in a flash.

Down went the nose of his craft and the sigh of the wind rose to a screech. Over his stick went, and then back into his stomach as the sailplane whirled around in a steeply-banked turn. Then up the valley, down wind, straight into the deep corrie, Lio sent his craft, straight for the great wall at its head, grim, forbidding, towering thousands of feet against the blue sky.

Still lower went the sailplane's nose, the screech of the wind rising in a vicious crescendo. Ahead of him, around him, and rapidly closing in above him was rock, dark and menacing in its nearness.

Then slowly he brought the stick back, the nose of the craft rising higher and higher. At last, when the face of the cliff was not a hundred yards away, the sailplane shot vertically upwards and then over on to its back as the loop continued.

Here the stick went forward a little and right over to one side; for a second Lio's feet steadied the rudder to keep

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the nose level while the craft was on its side, as he half-rolled off the top of the loop into normal flying position.

Now he side-slipped a little in order to drop lower into the corrie and once again facing up wind, he stared down the valley at the fighters.

As if by common consent, both had swerved upwards in climbing turns that were so nearly loops that when they were completed both machines were again heading for the sailplane.

Yet before they could get anywhere near to effective range they were forced to repeat their manoeuvre. The menace of the high rocks closing in so rapidly on three sides was too great for high speed fighters compelled to attack down-wind.

Abandoning the vain attempt they rose far above the vast rim of the horse-shoe and tried diving tactics, but here again, at the top of the corrie, they had to pull out of their attacks long before they were within effective range of the sailplane.

Lower and lower sank the sun in the west. High above the corrie the two fighters now circled, waiting like dogs for a rabbit to bolt. And all the while, deep in the rocky pocket of the hills, the sailplane beat steadily from side to side.

Two more fighters took the place of the first pair now running short of fuel. Pigmy figures far down the valley could be seen struggling with machine-guns over the terrible terrain. But they had little chance of negotiating the difficulties of the rocky gullies that traversed their path.

Evening faded into night.

To T'sai Lio it seemed as if he was alone in infinite space with two circling dull flames, all that was now visible of the fighters. Against the stars the corrie's rim showed as a black, impalpable mass.

His time had come.

Gently he eased his stick back and felt the craft lift.

Gradually the dark rim of the vast horse-shoe sank, louder and more defined grew the roar of the fighters' engines as the echoing rocks were left below.

Assured that he was clear of the corrie, and with watchful eyes on the circling flames of the fighters' exhausts Lio edged away along the range of mountains.

But the pilots of the fighters were blind to the mothlike shape that floated beneath them. Vainly they hoped that their circling presence would keep it penned in its rocky earth.

At a safe distance from them Lio switched on his torch and with eyes now on compass and variometer he set his craft soaring in the vast uplift above the mountains.

At fourteen thousand feet, two thousand higher than the highest peak, he turned down wind and fled into the east.

THE aerodrome of the Chinese Government's western command lay silent in the night, the red boundary lights, unwinking, alone showing that the station was in service.

A sentry of the guard started suddenly, head uplifted, listening.

The next moment a shrill whistle rang out. Shouts came from the tarmac.

Out of the black night glided a shadow, bumped, and slid to a standstill.

"T'sss!" said the Officer of the Watch when he had listened to Lio's tale. "Call Colonel Chang at once."

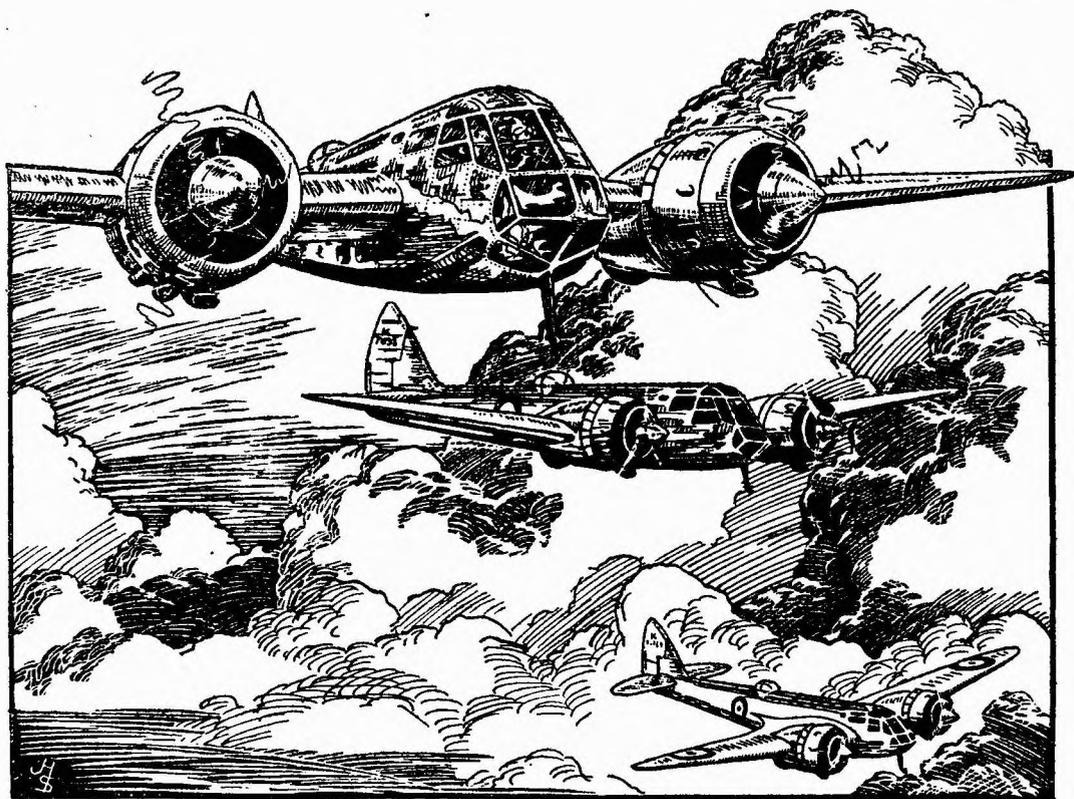
In half an hour the quiet aerodrome had become a seething mass of activity, lights, and roaring, spitting engines—as was every aerodrome within range of the hills.

In another half hour it lay silent once again, for into the lightening night had fled every available machine.

On one side of the aerodrome, with one wing on the ground, lay the sailplane, curiously like a wounded bird.

To it came Lio. Ever so faintly the wind sighed over wing and fuselage. Sensitive fingers touched the leading edge, running over its varnished smoothness.

"Wings so frail, and yet so powerful," murmured T'sai Lio, who was something of a poet.



# A HIGH-SPEED BRITISH BOMBER

A Description of the New Bristol Blenheim Medium Bomber,  
with Full Instructions for Building a Scale Model

By JAMES HAY STEVENS

**M**UCH has been said in recent months about the R.A.F.'s new class of medium bombers, and the name appears to cover a multitude of types, judging by the varied aeroplanes which are classed as such. Medium bombers range from the Fairey Battle and Vickers Wellesley, on the one hand, to the H.P.52, or Hampden, and Bristol Blenheim on the other.

By a process of "guesstimation" and weighing up of rumours (nothing definite must ever be mentioned—one must always be vague; only foreign papers and officials may be authoritative!), the medium bomber seems to be intended to carry a bomb load between that of the day-bomber and the night-bomber farther than the day-bomber, not as far as the night-bomber, but very much faster than

either. Nothing much is said about the armament of this type, but, except in the case of the Vickers Wellington and the Handley Page Hampden, the forward armament would appear to consist only of a fixed gun or guns. The machines are extraordinarily varied in design. The Battle and Wellesley are single-engined two-seaters; the others are all twin-engined machines of which the Hampden requires a fighting crew of four, as it has three gun positions.

To revert to the Blenheim, a great fuss was made about the "Britain First" commercial aeroplane which Lord Rothermere recently presented to the Air Ministry. The "Britain First" was the result of years of careful experiment by the technical staff of the Bristol Aeroplane Company, which developed its own system

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of stressed-skin construction. A portion of the fuselage was exhibited at the Paris Show in 1934, and the machine was expected to be flying by the next summer. Originally two Bristol Aquila sleeve-valve engines were to have been fitted, but these were subsequently replaced by the more powerful Mercury. The machine was bought, before completion, by Lord Rothermere and given its patriotic name in order to help combat a current national belief that British aeroplanes must of necessity be slower than those of other countries. At about the time that the "Britain First" was completing her flying trials, the high speed expansion of the R.A.F. was started, and Lord Rothermere offered his new aeroplane to the Government as a patriotic gesture. It was accepted and was put through service trials in order to investigate the possibilities of the type for use as a bomber.

### Air-liner to Bomber

**F**ROM it has since been developed the Blenheim bomber, very similar in appearance to its famous prototype, although the latter was a low-wing, not a middle-wing, monoplane. The nose has been slightly altered in shape and the engine cowlings are less dumpy than were those on the original. Except for fabric-surfaced controls, the machine is entirely covered with a glittering plating of aluminium alloy which gives it an impressive appearance when flying. Like our modern houses, it is fitted with every modern convenience; the crew is comfortably enclosed; controllable-pitch airscrews improve performance and take-off; split trailing-edge flaps lower the landing speed and a retractable landing-gear increases the top speed.

As only external features of the Blenheim may be described in any detail, it may be said that the wings are pure cantilevers, tapering heavily in plan and thickness. The ailerons are of the Bristol-Frise type and are mass-balanced.

The fuselage, which is of an elliptical cross-section except in the forward portion, is a metal monocoque structure of a type developed by the Bristol Company.

The fin is built integrally with the fuselage. Accommodation is provided for pilot, navigator, wireless operator and rear gunner, though, in service, a crew of three should prove ample. Access to the interior of the machine is gained by a sliding transparent hatch in the roof, which is approached by a walkway on the port-hand wing-root. The nose of the fuselage, as may be seen from the drawings, is mostly composed of transparent panels which give the pilot and bomb-aimer a very fine view.

### Turret for Rear Gunner

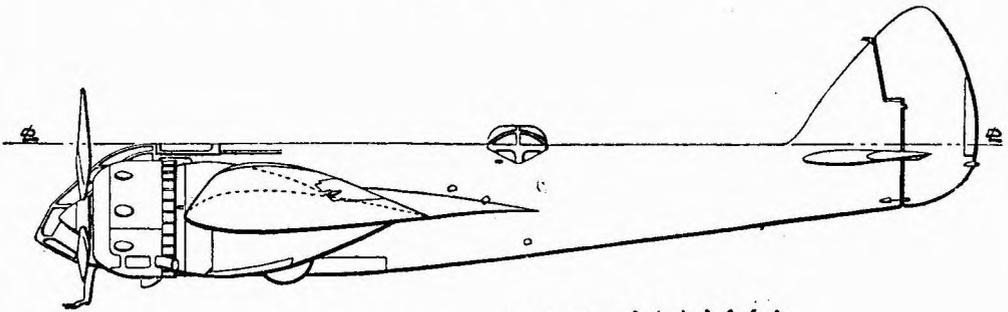
**T**HE rear gunner is housed in a little transparent revolving turret aft of the wings, and the cupola is so made that the crew can enter or leave the machine by this cockpit should it be inexpedient to use the hatch in the nose. All bombs are internally stowed, and traps which open to emit the bombs are arranged along the bottom of the fuselage.

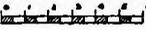
The power units are two Bristol Mercury VIII supercharged nine-cylinder radial air-cooled engines. These engines are the latest of the Bristol radials to be adopted for use with the R.A.F. The Mark VIII Mercury gives 840 b.h.p. at 2,750 r.p.m. at 14,000 feet. The engines are geared and drive three-bladed left-hand tractor D.H.-Hamilton controllable-pitch airscrews. Bristol controllable flap cowlings are fitted, and these cowls incorporate the familiar nose exhaust collector-ring and quickly detachable panels developed by the company.

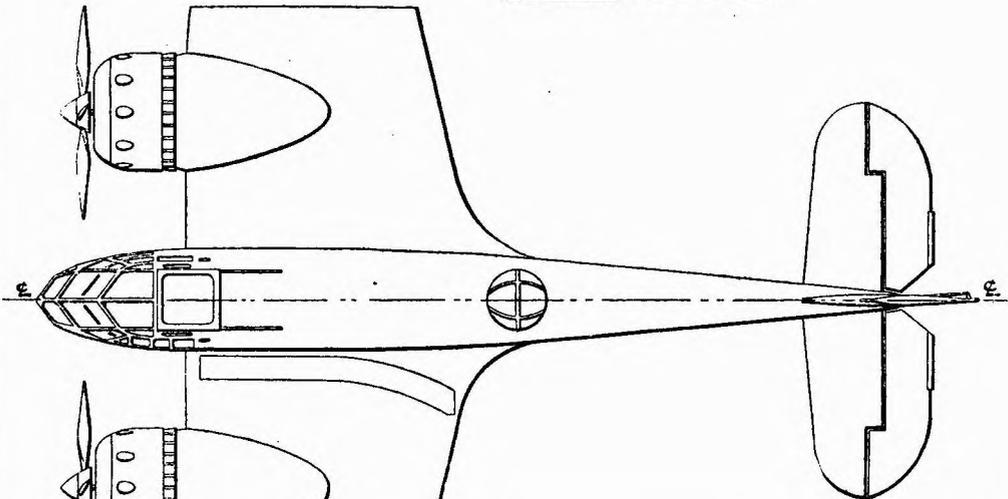
The fixed tail surfaces are all metal-covered, while rudder and elevators are fabric-covered. The controls have tab trimming and are mass-balanced. The undercarriage legs retract hydraulically into the engine nacelles and the tail-wheel also retracts into a trough in the bottom of the fuselage.

No performance figures are available, but the civilian version, the "Britain First," did 280 m.p.h. with two less powerful engines. The Blenheim, despite its gun cupola, looks rather cleaner than its forbear, so students of "form" may draw their own conclusions.

# THE BRISTOL BLENHEIM MEDIUM BOMBER

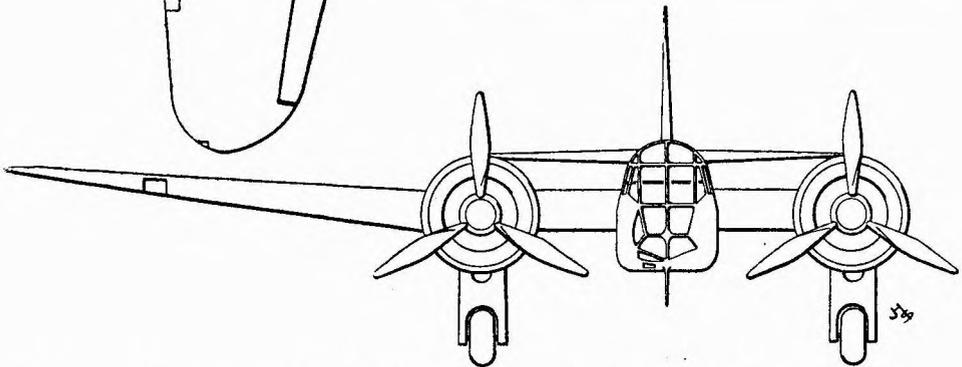


SCALE OF FEET 



## PRINCIPAL DIMENSIONS

Span . . . . .	56' 4"
Length (overall) . . . . .	39' 9"
Tailplane Span . . . . .	16' 8"
Airscrew Diameter . . . . .	10' 6"



*A General Arrangement Drawing showing Three-view Plans of the Bristol Blenheim.  
A side-elevation view, drawn to a  $\frac{1}{32}$ nd scale, appears on p. 266.*

# HOW TO BUILD THE SCALE MODEL

## A Detailed Description of the Methods of Construction and Assembly

OWING to the size of this model it is impossible to reproduce the General Arrangement Drawings to the usual  $\frac{1}{2}$ nd scale. However, the side elevation of the fuselage on p. 266 is to this scale, and all dimensions for materials and measurements of parts are also given for  $\frac{1}{2}$ nd model.

### Materials and Tools

A  $\frac{1}{2}$ nd-scale model requires the following materials from which to make the parts: a block of wood,  $6\frac{1}{2} \times 1 \times \frac{3}{4}$  in., for the fuselage; a piece of wood,  $3\frac{1}{2} \times \frac{7}{8} \times \frac{7}{8}$  in., from which to carve the two engine nacelles; the wing requires a piece of wood,  $9\frac{1}{2} \times 2\frac{1}{4} \times \frac{5}{16}$  in.; the tail-plane and rudder units need a sheet of fibre  $6 \times 2 \times \frac{3}{32}$  in. Some odd lengths of 20-gauge brass wire are required for the undercarriage.

Methods of construction of radial engines in general have been described frequently in former articles in this series,\* and it is not proposed to repeat the instructions. It may be added, however, that excellent  $\frac{1}{2}$ nd-scale models of a Mercury are obtainable from most model dealers or toy shops, and there is also a casting of the cowling to go with it. Wheels are similarly obtainable in a cast or turned form. Unfortunately, we know of no cast  $\frac{1}{2}$ nd-scale three-bladed airscrews in production as yet.

The following is a list of essential tools:  $\frac{1}{4}$ -in. chisel; small plane; penknife; oil-stone (not a tool, but very much an essential); small half-round file;  $\frac{1}{16}$ th in. bradawl; fretsaw; small long-nosed pliers; plastic wood; tube of cellulose glue; a penny ruler measuring in  $\frac{1}{16}$ ths,  $\frac{1}{12}$ ths and  $\frac{1}{10}$ ths of an inch.

### Method of Construction

TRACE the outline of the side elevation of the fuselage given on p. 266, lay the tracing on the fuselage block, pin-prick

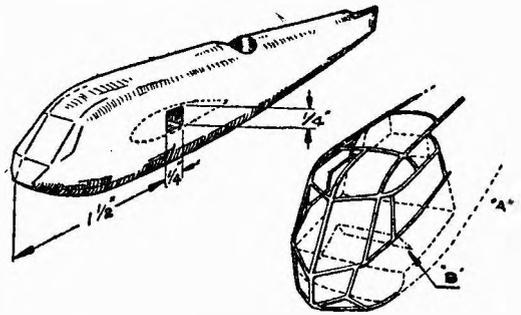


Fig. 1.—The carved fuselage block and ("A") the framework of the nose cabin

the outline, line it in with a pencil, and then cut away the surplus wood. Draw a centre-line down the top and bottom surfaces of the block, mark out the plan of the fuselage and once more remove the surplus wood. The result is now a cubist representation of the fuselage. Careful perusal of the General Arrangement Drawing and the sketches will give a good idea of the shape of the nose. In the plane of the wing the fuselage has an ovoid section similar to that of an inverted egg which has been stood rather heavily upon its head. This shape is shown in the front elevation on the General Arrangement Drawing. The section from the gun cupola aft is elliptical, gradually merging into a knife-edge at the sternpost. The shaping of the fuselage is done with plane, file and glass-paper. Note the hole which has to be made in the sides to take the wing roots.

Should it be intended to make a hollow cabin, the following will be found to be a satisfactory method: finish the fuselage normally, then mark the outline of the cabin window-frames and cut grooves along the lines. Use the grooves in the fuselage as a jig for shaping and soldering up the brass wire which forms the framework—use 24- or 26-gauge wire. Do not outline all the panes, only the main ones as shown in Fig. 1A. Having soldered the frame together (it is quite in order to solder on the model, as the burnt wood will be cut away), the various panes

\* See article on "How to Build the Bristol Bulldog" (June, 1936, issue).

## A HIGH-SPEED BRITISH BOMBER

may then be cut from thin sheet celluloid and fitted. Do not glue them in place; leave that until later. Next, slip the soldered framework off the fuselage and cut away the wood, as shown by the dotted line in Fig. 1A.

It is not permissible to give details of the interior decorations beyond saying that the pilot is seated on the port side, with his controls and instrument board in front of him; this instrument board is marked by the chain line "B" in Fig. 1A. Very effective seats and other fittings may be made from cardboard and short lengths of wire. Now replace the cabin framework, line it up and glue it. Fit any cabin furnishings desired and then glue the celluloid panes in place with cellulose glue. Panels of thin fibre, or thin sheet brass, are required for the lower parts of the sides and the bottom of the nose. The outlines of the smaller panes of the windows are indicated by paint when completing the model.

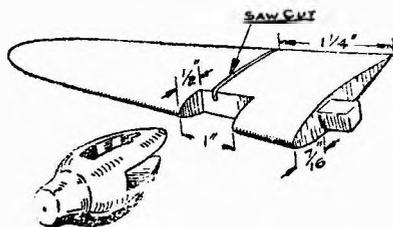


Fig. 2.—Details of the wing and engine nacelle. Note that both wing and nacelle are shown inverted

### The Retractable Undercarriage

NOW carve the engine nacelles in a similar manner to the fuselage. Fig. 2 shows how to cut the nacelles to interlock with cut-outs in the wing. This figure gives an inverted view of one wing and a nacelle. A hole has to be cut in the bottom of each nacelle to accommodate the retracted undercarriage. Fig. 3 shows details of a unit of the undercart. This is a simplified retractable version made from brass wire; only the main essentials are shown. The other details shown in the side elevation of the fuselage can easily be made and added in dummy form. Wheels can be made or purchased. The fairing attached to the front of the

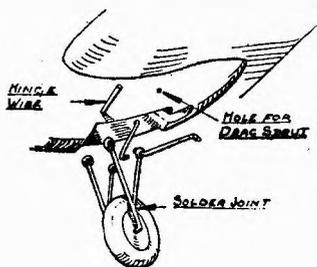


Fig. 3.—The main component parts of a simple form of retractable undercarriage

undercart can be made from card or, more satisfactorily, from sheet brass.

The wing is made in two halves fixed to the fuselage by projecting dowels; a slot is sawn in the under-surface where the dihedral starts—the slot should be about two-thirds the thickness of the wing in depth. Steam the wing thoroughly and bend it to the correct dihedral; fill the slot with plastic wood and rub it down smooth. Mark the outlines of the ailerons by scoring with bradawl and ruler.

The tail unit is cut out from fibre, which is cambered with file and glass-paper. Tail wheel and fork consist of a purchased wheel and brass wire fork—do not forget the trough into which the wheel retracts. The cupola is brass wire-framed and cellophane-(not celluloid) covered. Fig. 4 shows how to make the airscrew from wood and plastic wood. If a lathe is available to turn the spinners, they may easily be drilled and either wood or metal blades fitted.

### Method of Assembly

ASSUMING that the fuselage is now complete, the first step in assembling is to glue the wings firmly into the fuselage. When they have set, fair them in with plastic wood or paste. Note the shape of the wing fillets. Beneath the wing and over the front third of the top surface there is no fairing; it is only on top of, and behind, the rear two-thirds of the top surface that the fairing is extensive.

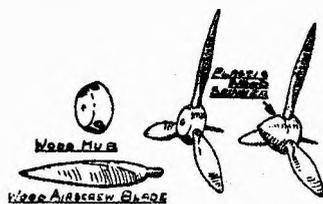


Fig. 4.—Showing the construction of the airscrew from separate blades set in a wooden hub

## AIR STORIES

Glue the engine nacelles in place and fill up any cracks with plastic wood. Fit the undercarriage and tail wheel units. The undercarriage unit, already described, should be pretty firm, either opened or closed, if the joints are not made too loose.

Glue the rudder and tail-plane to the rear of the fuselage and fair them in with plastic wood. Glue the engines and their cowlings to the nacelles and fit the air-screws. Fit all the final sundries, gun cupola, control and trimming-tab operating levers, etc., and the model is finished.

### Painting and Colour Scheme

THE original Blenheim is left a glittering aluminium all over, but the production machines may be painted. The control surfaces and the engine cowlings are doped silver and do not glitter. R.A.F. cockades are borne on both sides of the fuselage and on the top and bottom surfaces of the wing. The original machine bears the serial number "K.7033" in black on the sides of the rudder and fuselage and beneath the wing. The exhaust rings at the noses of the engine cowlings are grey. If a solid cabin has been made, the windows are represented by light blue paint.

(NEXT MONTH: *The Bristol Bullet*)

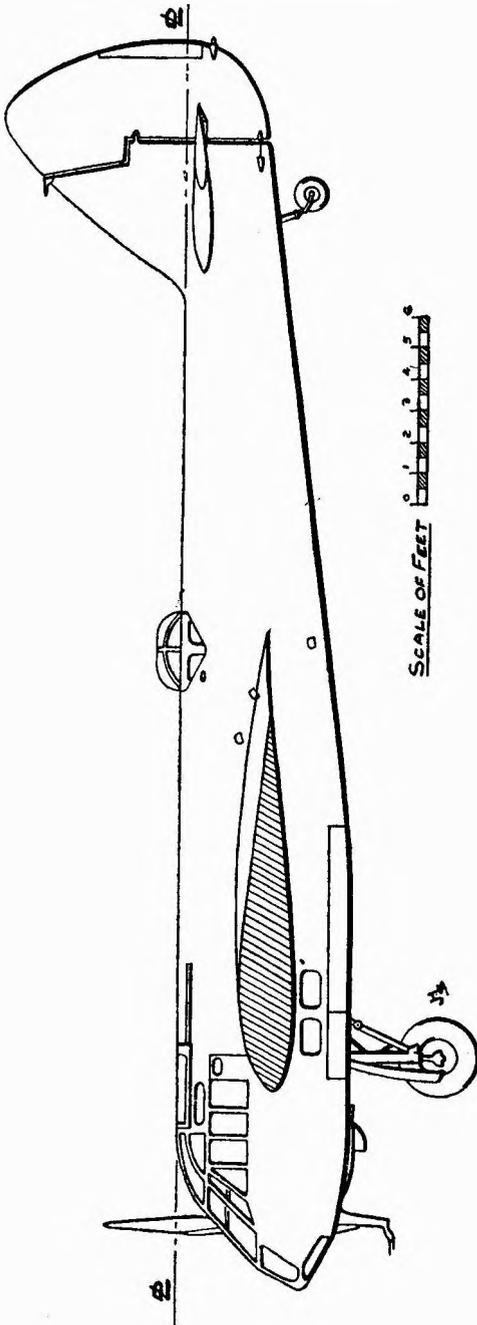
## MODEL NEWS NOTES

SCALE model aircraft accessories of every description, from balsa wood to rubber and petrol-driven model kits, are featured in an interesting 18-page catalogue issued by the Model Supply Stores, of 46 Derby Road, Prestwich, Manchester. The catalogue, which is well illustrated and contains much useful information, is obtainable, price 2d. post free, by readers of AIR STORIES.

REMARKABLE accuracy is the keynote of the wide range of scale model kits (1/48th full size) marketed by Aeromodels Ltd., of No. 5, 1st Floor, Wellington Buildings, Liverpool 2. Specially attractive are the many modern military types, such as the Hawker Hind, Demon and Osprey (price 3s. each) and the Hawker Fury (price 2s. 6d.) with an 8½-in. wing span. Illustrated literature will be sent on receipt of a 1½d. stamp.

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A side elevation plan of the Blenheim drawn to a  $\frac{1}{72}$ nd scale

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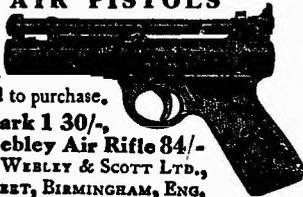
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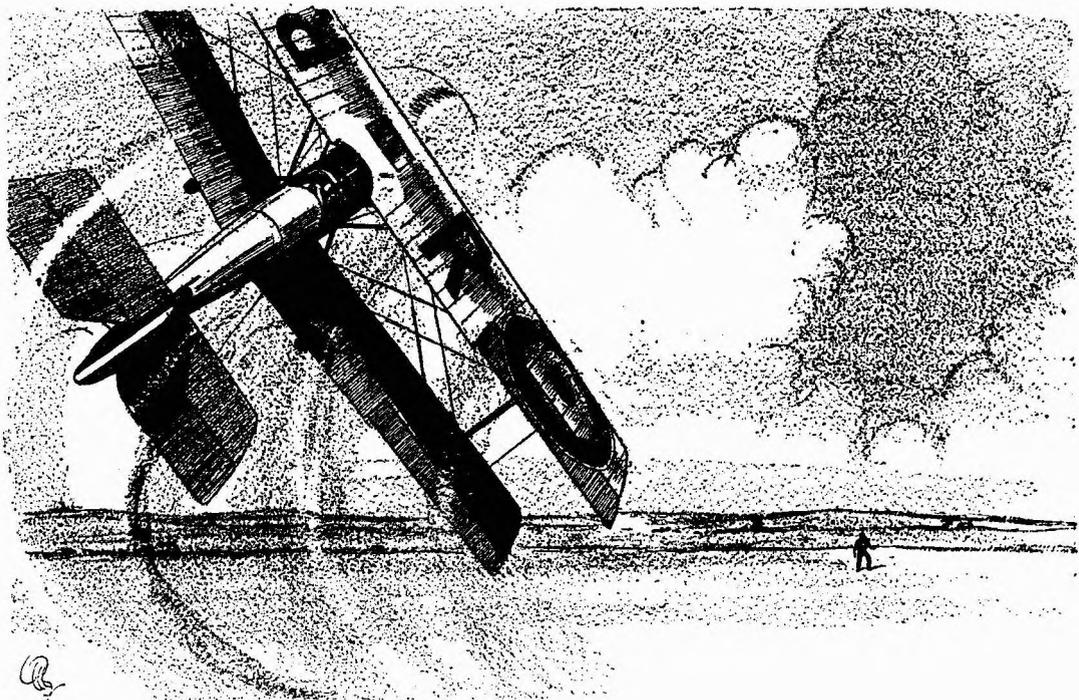
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EXAMINATIONS, state which.....

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*Gerry slammed over the controls and roared round in a climbing turn . . .*

# CHALLENGE TO COMBAT

*A Dramatic Air Story of the Army of Occupation*

By **RUSSELL MALLINSON**

## CHAPTER I

### Explosive Bullets

**T**EN thousand feet over Renaix, Gerry Renshaw pushed forward the stick and went hurtling down the sky to the orchestration of twanging wires and humming fabric and the deeper tone of the air wash in the Clerget-Camel's wake.

The shadow of his helmeted head jizzed on the tilted dashboard, for Gerry was diving out of the strong glare of the rising sun which played an important part in those early morning solo patrols which invariably provided good hunting.

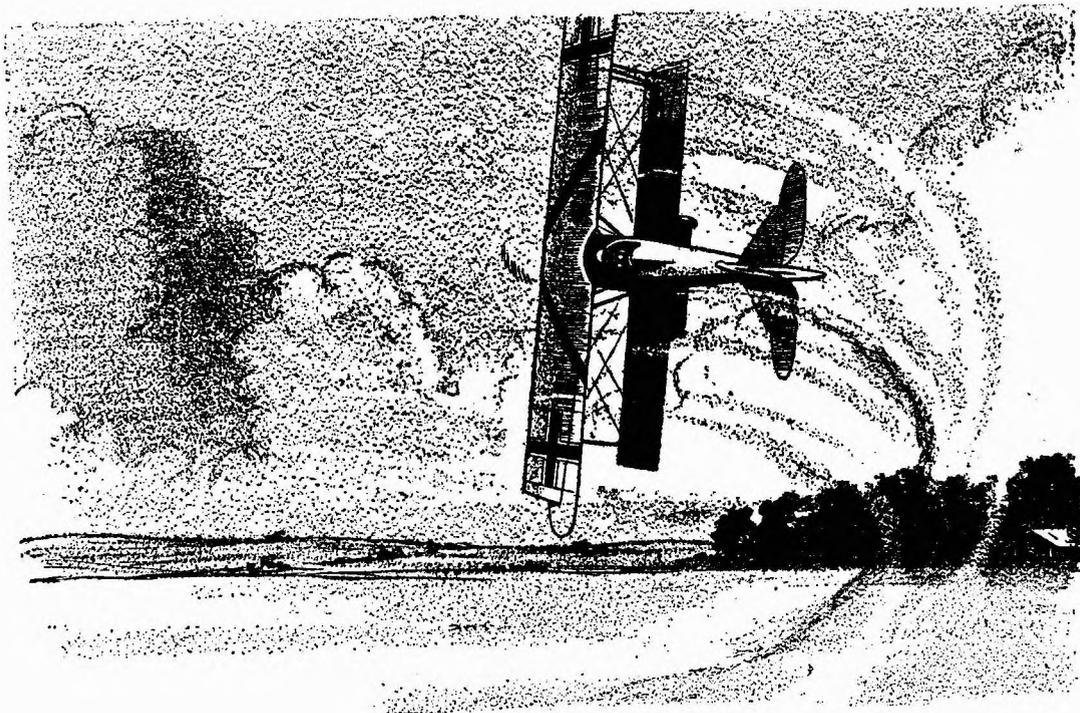
It was difficult to spot a lone machine with the sun's dazzling rays behind it, and the pilots of the trio of Fokker D.7's cruising sedately some two thousand feet below were blissfully unaware of the spot

of bother swiftly materialising out of the cloudless sky.

Gerry opened fire from two hundred yards. He knew he was too far away, but he had learnt the psychological value of a surprise burst which was liable to scare an inexperienced pilot into swerving away from the formation. And occasionally veteran pilots with cracking nerves—and there were many breaking under the strain of constant combat in those high-pressure days of air fighting in the autumn of 1918—were prone to behave in an equally erratic fashion.

Gerry braced himself in the cockpit as he saw the Fokker on the right of the leader dive away from the formation. With a touch on the rudder, he swept down on the straggler like a plunging hawk.

The Fokker grew in his ring-sights and



. . . the Fokker banked vertically and the two fighters spun round in head-on attack

### **A Bitter Hatred Born above the Battlefields of France had its Grim Post-war Sequel when Two Warbirds Met again in Mortal Combat above the Rhinelands of a Germany at Peace**

Gerry let loose a flaming burst. But the Boche slide-slipped wildly and Gerry saw the tracer curve harmlessly past a tilting wing.

He pulled up in a zoom and half-rolled to get back on the Fokker's tail. Out of the corner of his eye he saw the Boche, who appeared to have recovered something of his nerve, hanging on his prop. and letting fly with chattering Spandaus.

The Camel shuddered and Gerry saw a spar shatter and disintegrate before his eyes under the unmistakable impact of explosive bullets. His face went grim. If there was anything that was liable to send a fair-fighting airman berserk it was explosive bullets.

"The dirty swine!" He swore savagely, as he wrenched the Camel round and dived at the swerving Fokker below. Immediately there was a snarl of Spandaus behind him and, for a critical

moment, he was caught between two fires.

The Boche on his tail represented the greater danger, and Gerry went up on one wing with the controls hard over.

The iron-crossed wings of the Fokker, whose pilot was diving to his compatriot's aid, whirled into Gerry's ring-sights. But his hand faltered on the grips and he withheld his fire as, astonishingly, the pilot flung his arm across his face and crumpled up in the cockpit.

"QUEER," thought Gerry, as he watched the single-seater fall away into an uncontrolled spin. "Must have stopped a bullet from one of his own machines, probably from that nervous wreck who's spraying lead round the sky. . . ."

He searched for the erratic Boche who,

## AIR STORIES

gratuitously, had reduced the odds a trifle and spotted him far below, making eastwards at full revs. Relieved, Gerry turned his attention to the surviving D.7 which was now lashing viciously down at him, a flame of tracer rippling from its nose. Bullets tore through the glistening sheen of the Camel's top wing and Gerry eased the rudder to swerve away from the leaden stream and to deflect his own flaming bursts on to the D.7's cockpit. The hurtling Fokker swelled in his ring-sights with alarming rapidity as it bored in relentlessly as if to ram him. At the last second it turned away and, catching his breath with relief, Gerry heeled over in a vertical turn, his nerves tense. The grim-faced pilot, whose lean features he had glimpsed as the Fokker flashed past, was of very different calibre from the nervous wreck now fleeing homewards.

The German had followed his vertical turn with a lightning manoeuvre, and now Gerry found himself hurtling round in a circle with the vertically-tilted D.7 whirling behind him in a manner which gave Gerry an unpleasant feeling in the vicinity of his solar plexus.

He had no illusions as to the superior turning radius of the D.7. He could imagine the Camel's tail sliding into the Boche's ring-sights while he was powerless to edge his guns on to the dark green fury holding him in that deadly circle. His hand clenched convulsively on the stick as he heard the whip and crack of bullets. The Camel's tail assembly shuddered.

He hung on for a few moments longer with all the spine-chilling sensations of providing a sitting shot, then desperately he cartwheeled over and slammed the nose down in a spin. There was just a chance that his swift manoeuvre might deflect the Boche's aim and give him a few moments of reprieve to bring the fight back to something approaching level terms.

Tracer flashed perilously close to his head and sliced the starboard wing fabric into ribbons. Then suddenly the chattering hell ceased, and as Gerry pulled out of the spin he saw the Boche hammering with both hands at his gun, which had evidently jammed.

With a grin of relief Gerry yanked the Camel round and cut loose. A stream of tracer lashed across the Fokker's propeller like a steel whip and its shining arc blurred and disappeared in a medley of splinters.

The Boche went down in a long flat glide eastwards and Gerry dived in pursuit. But, with a sudden screech of outraged metal, the Clerget gave up the ghost and the prop. stopped dead. The Boche's last burst had crippled the engine.

It was a subdued Gerry who pushed forward the stick on a long glide back to the lines. He was well over Hunland, but his height enabled him to squeeze into No Man's Land with a dead stick.

He crashed in a shell crater near Vierstraat and crawled into the British trench line through a species of glue known as Flander's mud, a somewhat inglorious ending to a scrap which Gerry little dreamed was destined to involve him in one of the grimmest jests of the War.

## CHAPTER II

### The Army of Occupation

GERRY'S crashed Camel was not shelled by the Boche artillery. The offensive spirit was waning with the German armies, fighting a rearguard action as the final Allied offensive relentlessly rolled them back to the Rhine.

Gerry's squadron moved up to the old German aerodrome at Courtrai, and ground "strafing" the retreating armies became the order of the day.

It was the beginning of the end. On the eventful morning of November 11th, 1918, Gerry led his flight on its last war patrol. He had orders not to cross the front line, but to fire upon any enemy machine that crossed the British outpost line.

There was not a single German machine in the air, but five thousand feet below the wings of the patrolling Camels the roads were congested with grey armies trudging eastwards towards the Fatherland.

Gerry watched the hands of the dashboard clock creep round to eleven, and when at last a strangely moving silence

## CHALLENGE TO COMBAT

fell upon the sombre desolation of the battlefields it seemed to Gerry that the heart of a war-mad world had momentarily stopped beating.

He was not conscious of any sense of reprieve. He felt vaguely depressed as his thoughts dwelt on the future. A new world lay before him, a peace-time world which would probably have little use for a man whose only recommendation was that he had learned to live dangerously.

With a whirr of wings, Tony Vincent flew abreast of the streamered Camel and grinned as he jabbed a pointing finger down to where a khaki-clad column was advancing across the mud to the outpost line.

Gerry waved his hand and went down in a power dive, his depression forgotten in the exhilarating swoop earthwards. When he was a hundred feet above the troops, he bent forward and his hand fastened upon a circular object on the cockpit floor. Then he straightened up, and a football he had scrounged that morning from the Sports Officer went swirling away in the slipstream.

With an amazing bounce the ball landed in the path of the Tommies. Gerry grinned as he watched a boisterous khaki-clad throng fling themselves upon it, and saw, a few moments after the end of the greatest war in history, the troops playing football with rifles stuck in the mud as goal posts.

Somehow the sight of those men, who had lived in the shadow of death for so long, behaving like an irresponsible pack of youngsters let loose from school snapped the tension in Gerry's brain, and he turned for home with a lighter heart.

**T**HAT flight was Gerry's last glimpse of the war areas over which he had spent a considerable portion of his young life watching for specks in the sun and dodging Archies and flaming Spandaus.

A few days later No. 231 Squadron moved up to the Rhine and was attached to the Army of Occupation. The Camels were housed in the great camouflaged sheds on the old German aerodrome at Bickendorf on the outskirts of Cologne.

It was a rest cure for war-weary F.O.'s.

Through four Flanders' winters and almost as many summers Gerry had alternately shivered and sweated beneath the corrugated iron roofs of the sanguinary elephant huts which had earned for the Office of Works a Hymn of Hate from long-suffering aviators. Now Gerry luxuriated in a billet which had a tiled bathroom leading from the bedroom, and a sitting-room whose windows overlooked the stately trees and lawns of Lindenthal, the Hyde Park of Cologne.

Life was a cheery round of tennis and fishing and shooting in deer forests within easy range of the squadron Crossley. There were rationed seats for the Opera House, and the less æsthetic attractions of the Rosenhof or the Wintergarten cabarets and re-unions with bibulous wallahs in the Officers' Club.

Yet Gerry was conscious of a certain restlessness, which he put down to reaction from living almost from minute to minute with Death at one's elbow. And he had an uneasy feeling that things were a little too good to last, that the fruits of victory weren't quite so ripe for plucking as they seemed. Subsequent history proved that Gerry was wise in his generation.

**O**NE Spring morning a bored Gerry ootooled backwards and forwards over the Rhine on the customary "police" patrol which was the main flying duty of the British fighter squadrons. Two thousand feet below, the twin steeples of Cologne Cathedral and the square watch-towers of the Hohenzollern Bridge thrust their Gothic spires through the haze.

Gerry leaned out of the cockpit and surveyed the wide symmetrical arches of the bridge with thoughtful eyes. Last night in the mess he had bet Tony Vincent a bottle of Scotch that he would fly under that bridge. It was one of those foolish wagers which, on the morning after the night before, prove the insidiousness of Bacchus.

Remembering the few feet of clearance between the steel archways and the swollen Rhine waters, Gerry told himself that he would be wise to call the bet off and buy the bottle of whisky.

## AIR STORIES

But, urged on by a certain obstinacy and the fact that he was bored stiff with the monotony of watching the clock until it was time to go down to lunch, he manœuvred closer to the gleaming buttresses flecked with white foam from the swift running waters.

"Here goes," grinned Gerry. "*Allez oup. . .*"

He pushed forward the stick and his feet moved on the rudder-bar.

With screaming wires he sent the Camel down in a power dive, and the wide metal archways seemed to leap up at him with dizzy speed.

As he eased the controls a trifle to lift the Camel's oil-flecked nose, Gerry caught a fleeting glimpse of dwarfed figures scurrying across the bridge out of the path of the roaring machine. A white tramcar jolted along the lines, lumbering for safety like a trumpeting elephant.

The shadow of the central span swept across Gerry's face. The little machine bucked violently in an up-draught and the steel buttress wall loomed perilously close to the starboard wing. Gerry's hand tightened on the stick as awful visions of a mighty crash sped through his brain.

More by luck than by judgment he shot beneath the arch, his wheels clearing the water by inches. With a gasp of relief he zoomed up into the sky and, waving to the gaping crowd on the bridge, swung eastwards to Bickendorf.

Ten minutes later, he was side-slipping on to the 'drome over the heavily-camouflaged sheds, keeping a watchful eye on the postal D.H.9 from Boulogne gliding in over the trees.

### CHAPTER III

#### A Waiter is Startled

WHEN he sauntered into the bar at the Officers' Club for a lunch aperitif, he was greeted with derisive hoots from Tony Vincent and George Sandys.

"That bottle of Scotch will cost you more," grinned Tony over his beer. "Colonel Carthew rang up the Squadron Office from Wing half an hour ago and demanded the name of the lunatic who

was attempting suicide under the Hohenzollern Bridge this morning."

Gerry grinned feebly.

"That means I'm on the carpet."

"Afraid so," said Sandys. "The Colonel got the number of your machine. Tough luck, old man."

"Oh, well, I'll have plenty of time to drink that bottle of Scotch you owe me, Tony," said Gerry philosophically. "I suppose I'll be confined to billets for dangerous flying. Hell's Bells, the Colonel didn't worry over us risking our necks when the blinkin' war was on."

He beckoned to a passing waiter and ordered a lager.

"Very good, Oberleutnant . . . directly . . ."

The little German waiter, in the short black coat and flapping white apron of his trade, hurried off to the service counter.

"It beats me," mused Tony, "why these German fellows are so docile. They've good reason to hate us for what's being handed out to them at Versailles."

"Scratch a Frenchman and you find a Tartar. Scratch a German and you find a sheep," misquoted Gerry.

George Sandys looked up from the paper on his knees.

"The *Cologne Post* is a pretty dull rag," he grumbled. "If they're so hard up for news I wonder they don't put you in the headlines, Gerry. Captain Gerry Renshaw shoots the Hohenzollern Bridge . . ."

His voice stopped suddenly as the waiter at his elbow dropped his tray with a splintering crash, and Gerry swore lustily as a cascade of beer from the broken tankards splayed over his elegant field boots.

"You ruddy *dummkopf*," he spluttered.

The offending waiter clicked his heels and bowed stiffly from the waist.

"Pardon, Oberleutnant . . ." he apologised.

"All right, old landsturmer," Gerry laughed goodnaturedly. "But remember next time that good beer is for drinking and not for swabbing floors. And now I'll still have a beer please."

When the man moved out of earshot Tony Vincent said curiously, "Queer

## CHALLENGE TO COMBAT

sort of bird, that waiter. I happened to notice the expression on his face when George mentioned your name, Gerry. He jumped as if you'd dropped a 20-lb. Cooper behind him, and he glared at you as though you were his special Hymn of Hate."

"Really," smiled Gerry. "I don't see why he should be annoyed with me unless it's because I'm an Englishman and this particular Fritz doesn't happen to be—a sheep."

Gerry lit a cigarette and promptly forgot the matter. He was blissfully unaware that there was a certain cause and effect between his stunting that morning and the subsequent ham-fistedness of Fritz Hauptman, waiter, and that those apparently irrelevant incidents were destined to influence profoundly his immediate future.

LATE that evening a tram deposited Fritz Hauptman at the corner of Lindenstrasse and, as fast as his trench feet could carry him, he hobbled along the pavement until he found a door bearing the number "20."

It was a tall, gaunt house, with peeling paint and dingy shutters. Fritz rang the bell and waited, pulling down his coat and straightening his tie.

There was no response and he jabbed his blunt thumb against the bell push and held it there. A pealing clamour echoed through the silent house and was rewarded a few moments later by the sound of footsteps crossing the hall.

The door was cautiously opened and a none too friendly feminine voice demanded his business.

"Bitte," Fritz Hauptman lifted his shabby Homburg, the heels of his boots clicking slightly. "I wish to speak with the Oberleutnant Ernst von Braurich on a matter of importance."

The portly *frau*, whose ample features were flushed with her kitchen labours, regarded him suspiciously. Then she drew back the door and motioned him to enter.

"Wait here," she said as Fritz walked into the hall. "I will enquire if the Oberleutnant von Braurich will see you."

"*Ich danke . . .*" said Fritz. An aggrieved expression flitted across his sallow face as the woman paused to lock the hall bureau on her way to the stairs.

"These women," Fritz muttered. "They still think we scrounge . . ."

He wandered across to where a Mercedes cylinder, converted into a gong, hung from the wall, and regarded it affectionately. He was transferring his attention to the Fokker prop. which served as a coat-stand when the sound of descending footsteps stiffened him to attention.

A lean Prussian, in a shabby lounge suit, came across the hall, screwing a rimless monocle into his eye. The dim light of the overhead lamp touched his close-cropped head and the scar which ran from his temple down his left cheek. He looked pale and rather ill, and there were heavy shadows beneath his restless eyes.

His appearance gave the loyal Fritz Hauptman a shock. But it was not for a former mechanic of the 81st Staffel to comment on the health of his late staffel-leader.

Von Braurich's dark eyes gazed at Fritz Hauptman a moment.

"I remember," he said with a bleak smile. "You are Hauptman. You served with the 81st, isn't that right?"

Fritz fingered his shabby Homburg nervously.

"Ja. I am Hauptman who had the honour to serve under your command. I trust I do not intrude, Oberleutnant. But I have news which I think you will thank me for bringing."

"So. What news, my good friend?"

Fritz bent forward, spluttering a little in his eagerness.

"Captain Renshaw is in the city, Oberleutnant."

Immediately von Braurich's lean face hardened.

"You are sure?" he rasped, his dark eyes glittering.

"I do not waste your time, Oberleutnant," Fritz said ponderously. "This morning I serve Captain Renshaw with lager in the Officers' Club. I hear his name and I think—I must at once acquaint the Oberleutnant von Braurich.

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I have not forgotten. I remember that when your brother Otto was killed flying with the 81st you swore if ever you met his killer, Captain Renshaw, you would avenge your brother."

Von Braurich did not answer for some moments. He stood staring into the fire, and something gleamed in his sunken eyes like a flame.

Fritz Hauptman saw that light and thought :

"Assuredly the Oberleutnant is a little mad, but it is not my place to mention it."

Von Braurich lifted his head, the fire-light glinting on his rimless monocle.

"You know the staffel of this cursed Englishman who fought with explosive bullets ? " he snapped.

"The 231st . . ."

"Good. It is at Bickendorf. I will find him." He bent forward and laid an august hand on Fritz's shabby shoulder. "You have done well, my friend. I have waited a long time for the information you have brought me to-night."

Fritz's round honest face beamed at such praise from one whom, when the Kaiser fled, he had elevated to the heights of the *Allerhochst*. His loyalty to his revered staffel-leader had not passed unrewarded.

Fritz paused at the door and allowed himself an unprecedented indulgence.

"Good-night, Oberleutnant von Braurich. May I wish you good hunting ? "

Von Braurich laughed, and his laugh was not that of a sane man.

"Assuredly it will be good hunting, my faithful Fritz. This time I shall not miss. . . ."

### CHAPTER IV

#### Invitation to Shoot

GERRY'S prophecy that he would be on the carpet was speedily fulfilled.

For ten minutes the next morning a subdued Gerry stood in Colonel Carthew's room while his superior officer discoursed explosively on the necessity for the strictest discipline in a city that was filled with troops who had too much spare time in which to get into mischief.

"I rely on my officers to set an

example," the Colonel snapped. "The order forbidding stunting at low altitudes over the city was circulated to all squadrons. You must be well aware of that order, Renshaw, yet you deliberately disobeyed it. You will be confined to billets for seven days, and no doubt your C.O. will see that you are given additional orderly officer duties."

Bumping back to Bickendorf in the side-car of a P. & M., Gerry reflected on the difficulties of the Colonel's job. The unrest in the city was largely psychological. Men who had been taught to live dangerously could not be expected to adapt themselves easily to peace-time's monotonous routine.

During the week that followed, Gerry kicked his heels in the draughty squadron office on Bickendorf's vast aerodrome, waiting to inspect the guard and to carry out the other routine duties of the orderly officer.

The arrival of the Post Orderly in the chugging P. & M. side-car-combination was the one bright spot in the general gloom.

Sorting out the letters one evening, Gerry found an envelope addressed to himself which to his surprise bore the local post-mark, "Köln."

He tore open the thin foreign envelope curiously and read the words written in sharp German handwriting :

*Dear Oberleutnant Renshaw,*

*Some months before the War I visited England with a student party and I remember meeting you as one of our hosts at Oxford when we made a tour of the Colleges. If you will permit me, I would like to return your hospitality, now that you are in my unfortunate country, by offering you a day's shooting at Schloss Marixsdorf, where I am now living. It is within easy flying distance of Cologne and there is a good landing-ground on the estate to the south of the forest, where the deer are plentiful. I can promise you a good day's sport.*

*ERNST VON BRAURICH.  
Late German Imperial Air  
Service.*

Gerry stared down at the letter with lifted brows.

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"I don't remember the fellow," he murmured. "But it's pretty evident that he knows me and in some way has discovered that I am in Cologne."

Ernst von Braurich. He pondered over the name for some minutes, but he searched his memory in vain. Yet it was quite feasible that he had met this amiable German. In his Oxford days, Gerry had helped to entertain several student parties.

His spirits rose at the prospect of a day's shooting. And why not? He could fly over to Marixsdorf without anyone being the wiser. It was a little irregular, of course, in view of the orders forbidding fraternisation. But where the flying services were concerned, Gerry decided that to regard fraternisation as *verboten* was so much hot air.

The British and German pilots had never displayed any particular personal animosity. On the contrary, a comradeship of the air had existed which had found expression in the hospitality offered in the mess to enemy airmen who had crashed and been taken prisoners, and the interchange of messages giving details of the death and burial place of flying officers who had fallen in enemy territory.

A spot of deer shooting would be excellent. And it would also be amusing to interchange experiences with an officer of the German Imperial Air Service whom, for all he knew, he might have met in aerial combat.

Gerry opened the drawer of the desk and rummaged amongst the squadron returns for a German dictionary.

For some minutes only the slow scratching of his pen broke the silence as laboriously he wrote a letter to the effect that he would be pleased to accept Herr von Braurich's invitation but, owing to circumstances over which he had no control, he would be unable to fly to Marixsdorf until the following week.

So did Gerry blissfully walk—or rather fly—into the trap that had been set for him.

**T**HERE was no strict ban on joy-riding in the squadrons attached to what

Tony Vincent satirically described as "the Army of No-Occupation."

Gerry, therefore, had little difficulty in obtaining permission from Major Barker to fly over to Marixsdorf for a day's shooting. It was especially easy as the C.O. was afflicted with a deep dislike of Wing Colonels, from which squadron-commanders were wont to suffer, and secretly sympathised with Gerry's ill-luck in having shot the Hohenzollern Bridge at the precise moment when Colonel Carthew's car happened to be crossing it.

Thus it was that on the morning Gerry's period of confinement to billets officially ended, he took-off from Bicken-dorf at an early hour and, climbing light-heartedly over the camouflaged sheds, swung the Camel's oil-spattered nose eastwards.

For some miles he followed the winding course of the Rhine. Like a giant chess-board of green and brown the Rhinelands spread beneath his wings. The ploughed fields and picturesque farm-houses and dark pine woods seemed a little unreal after the sombre desolation of Flanders over which he had flown for so long.

Outwardly Germany appeared unscathed by the havoc of war. But as he glanced at his fully-primed Vickers, Gerry remembered that to a certain degree war conditions still prevailed. It was a Wing order that all machines flying, for whatever purpose, over the occupied areas, must carry war armament.

It was an ideal day for flying. The distant horizon was etched clearly against the blue rim of the cloudless sky, and Gerry located Marixsdorf without difficulty, and was soon circling the grey Schloss with its slender towers and mul-lioned windows gleaming like diamonds in the sunlight.

It was a picturesque place, standing on the slope of a pine-clad valley through which the river twisted.

Gerry throttled back and dropped lower as he searched for the landing field. He spotted it near the wood with a white cloth arrow pegged on the grass pointing into the wind.

Side-slipping in over the pines, he

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touched with a neat three-point landing and the Camel rolled to a standstill. As he climbed down from the cockpit, he saw a tall lean figure in civilian clothes emerge from the doorway of a large shed almost hidden by the trees.

He turned off the petrol and walked towards his host with some curiosity. He was prepared to be amiable, but somehow the German's stiff figure and lean unsmiling face struck a vaguely hostile note.

The German paused with a faint click of his heels and bowed, a little short Prussian bow.

"You are Captain Renshaw?" he said, haltingly, in English.

Gerry nodded.

"I presume you are von Braurich," he answered, unconsciously adopting the Prussian's brusque tone. "I do not remember having met you before."

Yet that lean scarred face with its dark penetrating eyes stirred a vague memory in Gerry's brain.

"Ja . . . we have met before, Captain Renshaw," von Braurich smiled cryptically. "It is possible that you do not remember. Come along and take a drink, and perhaps I may also refresh your memory."

"Good idea," responded Gerry more cheerfully, and fell into step with his host as they walked beneath the trees to the Schloss.

AS they walked, von Braurich relaxed and spoke in more pleasant tones of his game preserves and of how the forest had been despoiled by the peasantry whilst the men of the house and most of the gamekeepers had been away at the War.

"But I think I can promise you a good day's sport," von Braurich ended, and again Gerry noticed that queer hard smile which did not reach his eyes.

Certainly, there was something odd about the fellow. Probably war nerves, thought Gerry. Yet he had recollections of captured German flying officers whom he had helped to entertain in the mess being far less restrained and gloomy, even with a prison camp ahead of them.

Von Braurich led the way into a big square hall where the sunlight, streaming through high stained-glass windows, dappled the dark panelling with light and shadow.

Crossing to a side table, the German poured out two glasses of wine. Handing one to Gerry he lifted his own glass and said with a twisted smile:

"Good hunting—Captain Renshaw."

"Soft landings," replied Gerry, grimacing a little as he sipped the sour Rhenish wine.

He was conscious now of a definite hostility about von Braurich, and he was beginning to wonder if he had not been rather foolish in accepting his invitation so lightheartedly. The war was still too close for antagonism altogether to have died.

He had thought that von Braurich would entertain him as captured British airmen had often been entertained in the mess as friends and comrades of the air before being sent to a prison camp. He had anticipated an interesting exchange of their mutual air fighting experiences over the Western front.

But it was not working out to plan.

Gerry was convinced that the bitterness of defeat rankled in his host's mind when, with a rather arrogant gesture, von Braurich waved his hand towards the massive oak sideboard where a line of small silver cups gleamed in the sunlight.

"My souvenirs," he said with that satirical laugh which was getting on Gerry's nerves.

"Most interesting," murmured Gerry politely, and felt himself grow hot under the collar. Only his obligations as a guest restrained him from expressing his candid opinion of a man who collected silver cups as personal trophies of his victims.

Moreover, to flaunt them in front of a former enemy seemed the height of bad taste. None the less, he was intrigued to notice the number of those engraved examples of the jeweller's art. Evidently von Braurich was no mean performer with the Spandaus.

Von Braurich drained the contents of his glass and, walking round the table,

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brought his queerly flushed face close to the Englishman's.

"There is one cup I still hope to add to my collection," he said slowly.

Gerry laughed dryly.

"Haven't you left it a bit late?"

"You do not understand," von Braurich said, and Gerry stiffened as he detected the unmistakable note of hostility in the German's harsh voice. "I hope that shortly I shall be able to instruct my jeweller in Berlin to engrave a cup with your name—Captain Renshaw."

"Dead or alive?" enquired Gerry with a smile, and then became suddenly serious as he looked more closely into the eyes of the German and saw a gleam of madness in their depths.

### CHAPTER V

#### A Duel is Arranged

**S**LOWLY the truth was penetrating Gerry's brain. He was dealing with a borderline lunatic, a man unhinged by the strain of war and the bitter aftermath of defeat.

"You think I am joking," von Braurich's sinister laugh broke in on Gerry's thoughts, "but I do not jest, my friend. I asked you here to-day so that I might repay a debt—how do you say—an old score."

A rather bewildered Gerry said impatiently:

"What the devil are you talking about?"

Von Braurich's restless hand screwed the rimless monocle into his eye. The scar on his cheekbone seemed to grow more livid.

"Let me refresh your memory, Captain Renshaw. We last met over Renaix on the morning of October 21st. You will remember, perhaps, diving on three Fokker D.7's? My brother, Otto, was flying one of those Fokkers. You shot him down and when I tried to avenge him my guns jammed. Before I could remedy the trouble your last burst smashed my propeller and I had to dive out of the fight."

"Why, yes . . . of course! I re-

member that scrap," said Gerry in surprise. "I'm sorry about your brother. But it was the fortune of war. It might have happened to either of us." He stopped abruptly, startled by the expression of anger distorting the German's face.

"You lie," he hissed vehemently. "You killed my brother—with explosive bullets."

Gerry paled.

"You're talking utter nonsense," he said in angry denial. "I have never used an explosive bullet in my life. It does not happen to be a custom of English airmen."

Von Braurich waved his hand in a disparaging gesture.

"I saw my brother after he was lifted from the wreckage of his Fokker." His voice faltered, but in a moment he regained his composure. "Perhaps you have never seen a man who has been mutilated by an explosive bullet? It is something one cannot forget. My one thought was to kill the man who destroyed my brother with methods unworthy of the code of the air."

"It was a fair fight," Gerry protested, "and I used no explosive bullets. Your brother would have killed me if I had not killed him first."

"You can drop that pretence," von Braurich said curtly. "The facts are beyond all possibility of doubt. That morning we fought over Renaix I memorised the letter and number of your *Kamel* . . . We had an agent on your side and in time he dispatched a carrier pigeon with the details we sought of your identity and the squadron to which you were attached. You fought with 231 Squadron, is it not so?"

Gerry bowed ironically.

"I had that privilege. But I did not fight with explosive bullets . . ."

The German waved his words aside.

"I waited in the hope that I might meet you over the lines, Captain Renshaw. The Armistice came and it seemed that the fortune of war had granted you a reprieve. Then I heard that you were in Köln, and I realised that it might yet be possible to settle this matter of honour. In my country such

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affairs are decided by a duel. But we will not fight with swords or revolvers."

He stiffened to attention and bowed ceremoniously.

"We will use weapons to which we are both accustomed. You will understand now why I wished you to fly here in your *Kamel*. I have a Fokker D.7 hidden in the shed in the wood. I had meant to destroy it rather than surrender it. Now I shall fly it once more and the spirit of Otto will be with me."

Von Braurich lifted his flying helmet and goggles from the table.

"If you are ready, Captain Renshaw, we will go out to our machines. I trust your guns are well loaded."

"**D**AMMIT," Gerry said explosively. "I'm beginning to understand why they call you Prussians pig-headed. You've got this all wrong, von Braurich. I'm not denying that your brother was killed by an explosive bullet, but I know jolly well that I didn't fire it."

The German, who was drawing his black leather helmet over his close-cropped head, gave the Englishman a penetrating glance.

"I do not understand you," he said curtly.

"It's a bit involved, admittedly," said Gerry, drawing an uncertain hand across his forehead as he sought to revive his memory of the details of those hectic moments on an October morning when three fighting Fokkers had whirled around him eight thousand feet over Renaix. "I remember now. One of your staffel seemed to have lost his nerve and was spraying bullets all round the sky—explosive bullets. One smashed a strut so unpleasantly close to my head that I saw red and dived after that nervous wreck. But one of your fellows—it must have been your brother—got on my tail. I yanked my Camel round and it was then that I saw the pilot of the second Fokker crumple up in his cockpit, his hands covering his face. I hadn't fired a shot at him. I'll swear to that."

Ernst von Braurich laughed ironically.

"Then how did Otto die, might I ask?"

"Don't you see?" said Gerry impatiently. "The fellow who had lost his nerve and was firing wildly must have hit your brother's machine as I banked away from his Spandaus. Your brother stopped the explosive bullet that was meant for me. It's as clear as daylight . . ."

But Gerry read cynical disbelief in the German's restless eyes.

"I might have believed your story, Captain Renshaw," he said harshly, "were it not for the fact that no pilot of my *staffel* carried explosive bullets. It would have been an unforgivable crime."

Gerry shrugged his shoulders. He saw that it was hopeless to try and convince von Braurich of the truth. The man's mind was unbalanced, he was more than a little mad.

And in a measure, Gerry realised that he was a victim of von Braurich's smouldering resentment at defeat and the bitterness which pervaded the pilots of the Imperial Air Service at having to surrender their machines under a clause in the Treaty of Versailles. This crazy duel was not only to avenge his brother but was also a rather pitiful effort to resurrect that pride which defeat had crumbled in the dust.

Von Braurich's curt voice broke in on his thoughts.

"We waste time, Captain Renshaw. We will go to our machines. You will please walk in front of me and lest you should be tempted to behave foolishly I must impress on you that I am carrying a loaded revolver."

Gerry lifted his glass and, draining its contents, walked towards the door.

"I'm ready," he said. "But all the same you're making a priceless ass of yourself, von Braurich. It's enough to make your respected brother turn in his grave."

Intentionally, Gerry walked slowly along the path through the wood with von Braurich's measured footsteps close behind him. He wanted time to think out certain pressing details. Although, to Gerry, there was an atmosphere of unreality about the melodramatic scene, he knew he would be a fool to underrate the seriousness of the situation. It was

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obvious that von Braurich was resolved to force him into a desperate air duel, with death the penalty of defeat.

He felt strangely calm. For all his memory of that row of silver cups, like miniature tombstones evidencing von Braurich's combative skill, Gerry by no means anticipated the worst. He was an old hand at the fighting game, and the war hadn't been over so long that he had lost his skill of hand and eye. . . .

But it was the thought of his position as a flying officer attached to the British Army of the Rhine that troubled Gerry. Officially, he supposed, he ought to make some endeavour to escape and preserve his machine. If Oberleutnant Ernst von Braurich wasn't a case for a lunatic asylum he was certainly qualifying for a court-martial or its civilian equivalent. Yet Gerry knew instinctively that if he tried to escape when he took the Camel into the air von Braurich would undoubtedly endeavour to ram him.

He would just have to let things rip and rely on his air fighting skill to extract him from a desperate situation.

**B**EHIND him, von Braurich stared at the Britisher's broad back, his attention momentarily wandering. He was thinking of Otto, his blonde handsome brother, who had loved life, Otto with his slow smile and deep laugh. On their last leave together they had walked through these silent woods talking of the great honour that had befallen Otto. For on the next day he was to report to *Jagdgeschwader* No. 1 to fly under the illustrious command of none other than the great *Rittmeister* Manfred von Richthofen.

And now Otto was dead, his brains scattered by this accursed Englishman who fought with explosive bullets. . .

Von Braurich's strong flexible hands compressed as though he felt already the Spandau grips beneath his itching fingers.

As he neared the fringe of the wood and the shed housing the Fokker came into view, Gerry heard, to his surprise, the rumble of a Mercedes ticking over.

Next moment he saw a dark green D.7 warming up before the rough hangar. A little man, whose close-cropped Saxon

head barely showed above the cockpit rim, was tinkering with the gadgets. His face was shadowed as he bent forward watching the instrument dials or Gerry might have recognised a certain Fritz Hauptman, waiter—the faithful Fritz—who was spending his afternoon off in a manner that violated at least half a dozen clauses of the Treaty of Versailles.

Fritz was happy. He had never thought to experience again the joy of tuning his beloved commander's machine for combat. The rhythm of tappets and the purr of valves were as music in his ears. His melancholy face creased in a smile as his hand lingered over the Spandaus and he assured himself that they were well oiled and primed.

Von Braurich walked with Gerry to where the Camel stood at the opposite end of the field. The German motioned to the Englishman to climb into the cockpit.

"If you will switch on," von Braurich said with formal politeness, "I will start your propeller. We will take-off in opposite directions—there is little wind—and then turn and fire."

"In the best duelling tradition," laughed Gerry, slipping his foot in the stirrup and hoisting his lean body upwards.

He felt oddly calm. His old fighting instinct was quickening his blood. He was living dangerously again and the boredom of the last weeks of inactivity fell away from him.

"Contact."

Von Braurich's curved hands heaved down on the poised blade and the Clerget spluttered and then raced into life.

The German stepped back and with a click of his heels saluted.

"*Gardez*—Captain Renshaw. . ."

Gerry's cool voice came from the cockpit.

"*Allez*. . ."

With swift strides von Braurich reached his machine and swung himself into the cockpit. The faithful Fritz was hobbling round the wing to yank away the chocks as fast as his trench feet would allow.

The sonorous roar of the Mercedes filled the still air with its strident clamour. The shriller note of the Clerget blared in

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response as two vibrating tails lifted almost simultaneously and the two fighters flashed past each other, rocking in the propeller blasts as they gathered flying speed and then leapt off the turf.

### CHAPTER VI

#### Camel versus Fokker

**A** MOMENT after he had left the ground Gerry slammed over the controls and roared round in a climbing turn. His head turning from side to side, he saw the Fokker banking vertically as the two fighters spun round to attack as though operated by the same controls.

*Rat-tat-tat-tat . . . !*

A flame of tracer rippled from the Fokker's nose and Gerry heard the whip and crack of bullets close to his head. His lips tightened as he pulled back the stick and clawed for altitude. It had been risky, but he had withheld his fire intentionally, waiting for the German to be the first to attack. Now his conscience was clear. Von Braurich was the aggressor and his blood was on his own head.

After that first whirlwind attack discretion tempered the pilots' tactics. They circled warily, both jockeying for a favourable position.

The Fokker turned in a fast bank and Gerry heard something click on the right hand centre-section strut. He waited no longer. That insignia of death on the splintered pine warned him that von Braurich was skilled in the art of deflection. He flick-rolled almost before he realised that his muscles had obeyed the swift warning of his brain, the instinct of self-preservation working faster than his senses.

The Fokker flashed beneath him and, registering his quarry, Gerry swooped with his Vickers chattering. He had a fleeting flash of tan wing surfaces through which his bullets sliced a jagged line. Then the Fokker's nose reared and it spun over in a quick Immelman to dive like an arrow on the Camel's tail.

Gerry tore at the stick as the clanging Spandaus echoed perilously close. He felt his tail assembly shudder as he pulled up

vertically and heeled over at the top of a ragged loop.

Again von Braurich, in his eagerness, had overshot his quarry.

A rather pale Gerry kicked the rudder and fanned round to watch the circling Fokker. He was glad of those brief moments of respite. This slim, black-haired Prussian could certainly fly. He was setting a cracking pace. . . .

Yet there was something unreal about this crazy duel with its chessboard manoeuvres of aerial warfare, a duel that was not being fought over the grey desolation of shell-scarred ridges with uplifted faces beneath shrapnel helmets watching from the trenches, but in a clear blue sky, where larks were singing and over peaceful woodlands where smoke drifted lazily from the chimney of a shepherd's cottage.

The snarl of Spandaus brought Gerry back to grim realities as the Fokker came boring in relentlessly. The blunt nose of the hurtling D.7 leapt into Gerry's ring-sights and his hands clamped down on the gun grips.

The Fokker faltered and wheeled dizzily on one wing away from the path of the flaming burst. Von Braurich, his head turned, flashed into a tight circle, and grimly Gerry hung on to his tail.

The circles narrowed as Gerry strove desperately to force his ring-sight on to the D.7's tail assembly. His temples were throbbing with centrifugal pressure, his mouth was hot and dry. He could imagine the half-crazed Prussian smiling derisively at his success in trapping him into this deadly circle where the odds were all in favour of the Fokker. A D.7 could turn inside a Camel even if it were not handled by such a veteran fighter as von Braurich.

For what seemed an eternity Gerry waited for the crack and lash of bullets relentlessly mounting up the fuselage towards the cockpit. Desperately he wrenched at the stick, striving to tighten the circle. Then, astonishingly, the Fokker's tail planes slid into his ring-sight.

**I**F Gerry had but known it, Ernst von Braurich was sitting tight-lipped and as

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straight as a ramrod in his cockpit, cursing the hapless Fritz for not having checked the rigging of the Fokker's wing incidence. For with a cold sense of defeat he knew that the faulty rig had robbed him of just that fraction of superiority in the turning axis which would have kept the elusive Camel in the Spandau's sights.

For another moment Gerry let the Fokker's tail slide gradually into the Vickers' ring. Then he let drive with both barrels. The single-seater faltered as the flaring tracers slashed the tail assembly into a jumble of fluttering fabric and disintegrating spars. The Fokker's nose went down and it rolled into a juddering spin.

Gerry pulled out of his vertical bank and circled above the crippled machine. Mingled with his relief was the hope that his opponent's skill might yet save him from a fatal crash. He was a stout fighter and a brilliant pilot, and for all the insensate folly of this crazy duel he had staged, von Braurich had acted under a genuine sense of enmity.

Gerry saw the spinning outline of the Fokker dwindle as it fell earthwards. Then, faintly, he heard the throb of the Mercedes and saw the flashing arc of the propeller glitter momentarily in the sun. The nose lifted convulsively, and for a moment the machine hung poised. Then it slammed down into the pine trees and slid to a standstill with disintegrated spars and torn fabric draped across the branches.

Gerry grinned as he saw a convulsive movement in the cockpit, and next moment the German crawled over a tilted wing and clawed down through a tangle of branches to safety.

"Hoist with your own petard, my lad," murmured Gerry. "But you asked for it."

He felt suddenly tired and chilled. Reaction was setting in after the strain of the last hectic hour. But had it been an hour? He glanced at the dashboard clock as he swung the Camel westwards and saw that he had been in the air for a bare ten minutes!

Gerry made a sketchy landing on

Bickendorf aerodrome. Second Air Mechanic Skedge, hanging on to the Camel's wing-tip as Gerry taxied in, gasped as his incredulous gaze rested on the torn and tattered fabric.

"Blimey, there's 'oles in this wing, sir. . ."

Gerry laughed weakly.

"You keep your mouth shut about that, Skedge, or—you'll start another war. . ."

"Very good, sir," said Skedge, who was wise in the ways of F.O.'s. "If the flight-sergeant asks any blooming questions I'll tell him—it's mice."

## CHAPTER VII

### An Error of Judgment

GERRY went in search of Major Barker, wondering what the C.O.'s reactions would be to a story which would sound pretty incredible.

He felt no personal animosity against Ernst von Braurich, but he supposed that something ought to be done to restrain him from charging about the sky with loaded Spandaus and a strong sense of grievance.

But Gerry found the squadron office deserted, except for the orderly-room sergeant, who informed him that the C.O. had left for England by air an hour earlier in response to a telegram announcing the serious illness of his father.

As senior flight commander, Gerry took over temporary command of the squadron.

He did not feel inclined to report the von Braurich affair to Wing without first discussing its possible repercussions with Major Barker. For all he knew he might precipitate a first-class diplomatic rumpus.

He had his Camel repaired in a quiet corner of "C" Flight shed without attracting undue attention, and decided, partially influenced by his admiration for a stout fighter, to keep his own counsel for the present.

The night before the Major was due to return from special leave Gerry sat in the mess ante-room, his thoughts wandering from the noisy chatter around him. He sipped his whisky and soda with a pre-

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occupied air as he thought of the morrow when he would have to tell Major Barker the story of the strange duel over Marixsdorf, which Gerry now looked back upon with a sense of unreality.

At that moment George Sandys, sauntering across from the notice-board, tossed an envelope on to Gerry's knees.

"A letter for you," he said.

Gerry opened the envelope and stared at the letter he unfolded. For some moments he studied the sharp German handwriting with puckered brows.

Then with a smile he tossed it over to Sandys.

"You might translate this, George. You're the linguist of this party."

**S**ANDYS hoisted his long legs over the arm of a chair and studied the missive for some moments.

"I can't quite make this out," he murmured at last. "It's a letter written by a bloke called Fritz Hauptman to Oberleutnant Ernst von Braurich, whom, I gather, was his staffel-leader in the War."

Gerry sat up in his chair, his expression one of intense interest.

"What does it say, George?" he asked, after a perceptible pause.

"Cutting out the flavoured bits," Sandys replied, "it reads something like this:

*"I have the honour to draw Oberleutnant von Braurich's attention to the following facts. Last night I met Willi Esser in the Neumarkt Bierhalle and being a little drunk Willi talked a great deal. You will remember he was ser-*

*vant to Leutnant Schwartz of the 81st Staffel. When Leutnant Schwartz crashed, Willi Esser was ordered to collect certain things from his hut to take to the hospital. Willi Esser told me that, by accident, he found a number of packets of explosive bullets hidden in Leutnant Schwartz's locker. Esser did not understand these things until he went to the hospital that night. Leutnant Schwartz was dying, and in his delirium Esser heard him reveal that he had shot your brother, the Leutnant Otto von Braurich, by accident with an explosive bullet when fighting with an English Camel over Renaix last October. He had been carrying explosive bullets because he had lost his nerve and . . ."*

Gerry's unsteady voice broke in, as he bent forward and took the letter from a perplexed George:

"I'll puzzle out the rest, thanks," he said quietly.

His gaze rested on a more cultured handwriting at the foot of the letter. And enlightenment came to him as he read the brief message that Ernst von Braurich had added:

*"To Captain Gerry Renshaw with profound apologies and in admiration of a gallant adversary . . ."*

"What the devil is it all about?" interrupted a curious Sandys.

Gerry smiled as slowly he tore the letter into shreds and tossed the pieces into the fire.

"Just a gesture of a good sportsman who's willing to admit—an error of judgment," was Gerry's cryptic reply.

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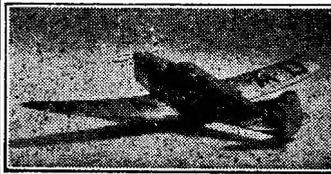
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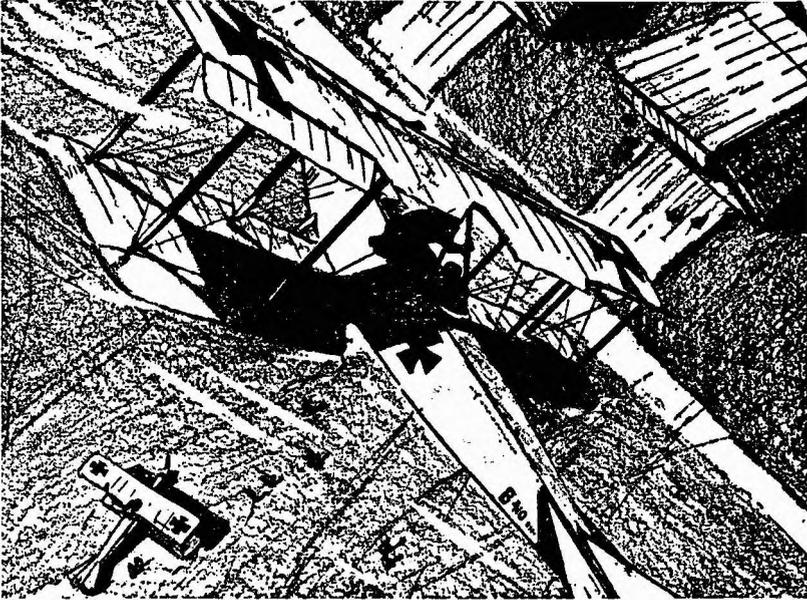
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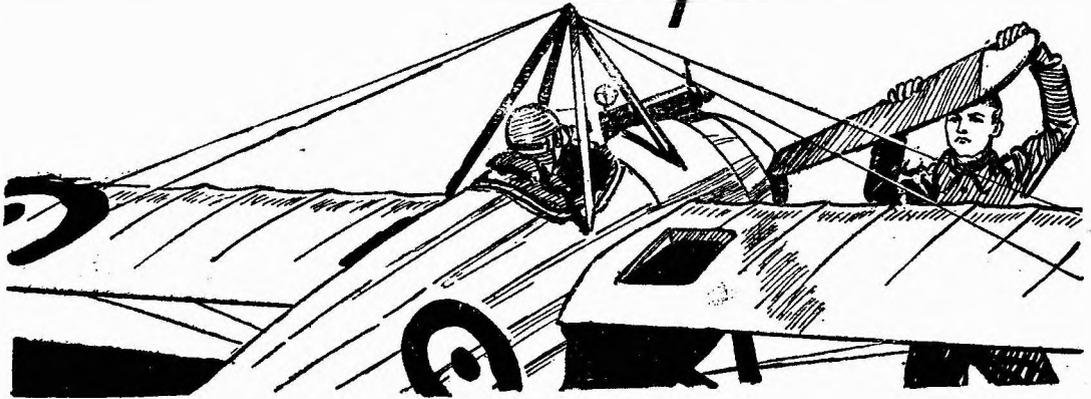
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**NEWNES : LONDON**

# CONTACT *by the* EDITOR



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**T**HE possibility of stopping the engine of an aeroplane in flight by means of a powerful radio-electric ray acting on the ignition system is one that has for long occupied the attention of inventors. From time to time come rumours of success and, as is to be expected when the threat of war stalks the world, such rumours have been more than usually persistent of late. So much so, that several readers have recently written to inquire whether there is any truth in the stories they have been hearing about an anti-aircraft ray with which "certain foreign Powers" are stated to be experimenting.

On the authority of a very famous radio expert, we have assured them that any such ray, considered as a serious menace to aircraft, was quite impracticable and that scientists generally regarded the whole idea of a "death ray" as fantastic. But since we received the following letter from a reader, we have been wondering whether, after all, the idea is really as improbable as some scientists believe :

"You have doubtless heard the usual rumours about a ray that could paralyse aero-engines," writes Mr. James Lowther of Kingston, Surrey, "and no doubt you were as sceptical of the whole idea as I was until a recent experience in the course of a business motoring tour of the Continent gave me something to think about. Just after Christmas, we were motoring along the main road between Mainz and Karlsruhe when, in the open country some 30 miles from Mannheim, the engine of our car, an Austin "Twenty," spluttered and finally

stopped. I got out to locate the trouble, and was fiddling unsuccessfully with the engine when a car going in the opposite direction passed me and then stopped, also with engine trouble. To cut a long story short, within five minutes there were no less than eight cars stranded on that small stretch of road, and the sight of eight exasperated drivers all with their heads beneath the bonnets of their cars would have been vastly amusing if it hadn't been so confoundedly annoying. Ten minutes after I had stopped, I tried my starter for the umpteenth time. The engine started at once, and one after another the other drivers found that their 'trouble' too had vanished.

"I reported the incident to the police at the next town I came to and was told that particular part of the country was notorious for the prevalence of a magnetic ore in the ground. I politely accepted the explanation at the time, but I am still wondering why the 'ore' so conveniently switched itself off, and whether Germany is not secretly developing a new anti-aircraft weapon of infinite possibilities."

## Protecting Aircraft from Rays

IT certainly seems as though our correspondent and his fellow victims did encounter an electro-magnetic field of considerable power, but, even assuming it was radio-transmitted, there is, fortunately, a big difference between stopping a car engine at possibly short range and the engine of an aeroplane flying at a great height. Further, aircraft may well be less vulnerable than cars, as is pointed out by another "ray-minded" reader, Mr. Philip Cutler of Norbury, London, who, in a letter received prior to the one printed above, writes :

"While it has been stated that several foreign powers are developing a radio-electric device to interfere with the ignition systems of aero engines, some prominence has also been given to the neces-

## AIR STORIES

sity of screening aero-engine ignition systems so as to prevent their interference with the now widely-used short-wave radio apparatus. Such interference is caused by waves sent out by the unscreened ignition system on the same frequencies as are employed by the receiving set, so if by screening one can prevent the transmission of these waves, surely the same screening would also stop any other waves transmitted by an outside source and intended to interfere with the ignition? "

We are advised that this is, in fact, the case, and that there is no known ray capable of piercing an adequately screened magnetic system, particularly at radio frequency, such as is now fitted to the engines of most R.A.F. aircraft. It should also be remembered that any form of electro-magnetic ray could only be effective when directed against an engine employing an electrical ignition system—a fact which may or may not have some bearing upon the marked preference that the new German Air Force is showing for bombers fitted with oil-burning or compression-ignition engines.

### A Difference of Opinion

MR. ROYSTON-MATHER'S recent complaint that AIR STORIES publishes too much war-air fiction brought us a deluge of protests from readers, none of whom, it seems, shares his opinion. Typical of the general view on the subject is the following expression of opinion from Mr. E. L. Poulton of Hythe, Kent :

" I for one," he writes, " most definitely do not agree with Mr. Royston-Mather. My view is that you combine the ideal balance of fiction and fact desirable in a magazine of this nature and that to alter that balance at the expense of the fiction would be to make AIR STORIES attractive only to the technical-minded, who are already well catered for by numerous specialist publications.

" Such semi-technical articles as are at present printed in AIR STORIES are, however, excellent, and I would like particularly to record how much I enjoyed the recent article on guns by ' Armourer Sergeant.' I hope, too, that he will forgive me if I point out what appears to be a slight error in the published diagram of the aerial Lewis. I suggest that the cup-shaped affair attached to the muzzle and described as a ' Hazelton muzzle attachment ' was actually the ' barrel-mouth-piece,' and that its sole function was to drive the air out of the fore-radiator casing (when assembled for ground use with radiator and casings), the partial vacuum thus caused inducing a flow of cool air to enter the rear of the radiator and thereby

assist in the cooling of the gun. The diagram is also at fault in that the round fed from the magazine with the bolt back, as shown, would be quite clear of the magazine with the bottom edge of the base of round slightly below the top extractor on the bolt. Otherwise the bolt would slide under the round and cause a stoppage in the ' 3rd ' position.

" I hope ' Armourer Sergeant ' will forgive my criticisms, but I knew the Lewis rather well and regret its passing to make way for the more modern Bren. Many thanks for your book as a first-class publication and good wishes for its continued success."

As it happens " Armourer Sergeant " had nothing to do with the Lewis gun diagram, and has already expressed a sergeant-major's opinion about our carelessness. Next time we shall get " Armourer Sergeant " to draw the sketches and the artist to write the article—then neither will be able to blame us !

As regards the contents of AIR STORIES, we feel sure Mr. Royston-Mather will accept the majority verdict, and those many other readers who have written to us on this subject may rest assured that the present proportion of fact and fiction in the magazine will continue unaltered.

### R.N.A.S. Story Next Month

NEXT month's issue will be notable for a splendid long complete story of the Royal Naval Air Service, a branch of our Air Arm about which we have published all too little in the past, yet one which figured in some of the most exciting and dramatic incidents of the Great War in the Air. " Raiders of the North Sea " is the title of this fine adventure story, and the author, Mr. H. C. Parsons, is a former R.N.A.S. officer who has given his story an authentic background of the war-time life of the R.N.A.S. which, compared with the better-known conditions of service in the R.F.C., provides a contrast of unusual interest.

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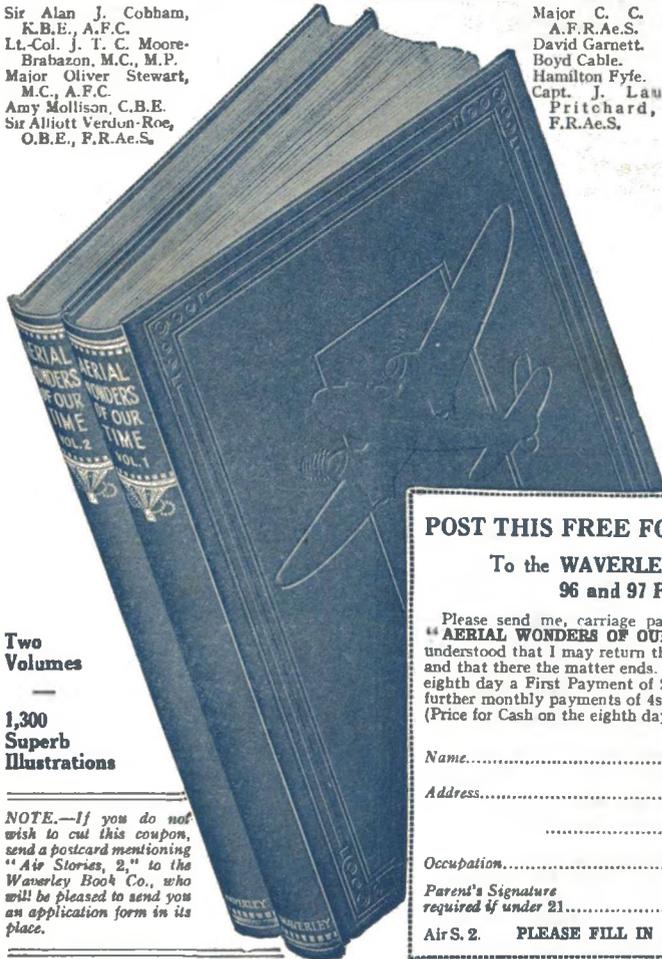
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