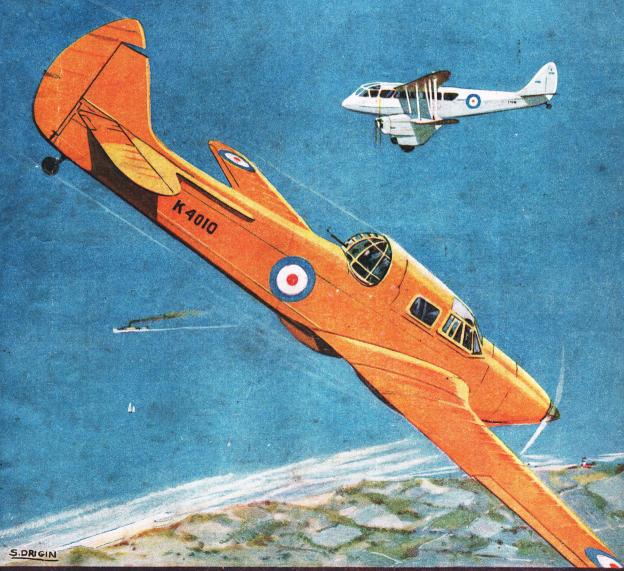
ACE OF TWISTERS: By Wilfrid Tremellen

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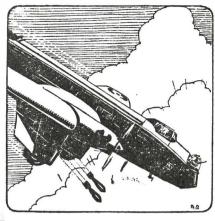
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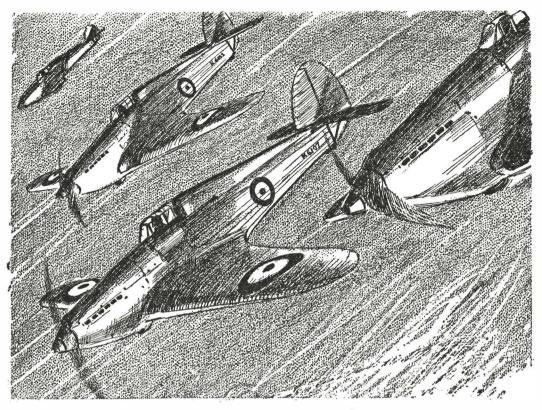
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Spitfires and Gladiators, squadron upon squadron, tore down to engage the massed bombers

A Vivid Story of Aerial Warfare as it might be Waged over England To-morrow



. . then came the Hurricanes, hurtling with blazing guns at the peak of the formation

War over England! The Winged Armadas of a Mighty Foe Converging upon the Empire's Capital—Aerial Incendiaries Kindling a Conflagration that Threatened to Set All Europe Ablaze—this was the Menace against which a Re-armed Britain First Showed Her Strength, Pitting her Great and Peerless Air Force Against the Invaders, to Win Respite for Civilisation

## By J. H. STAFFORD

(Late of the Royal Air Force)

## CHAPTER I The Voice of Warning

Well, hardly war, but it might have been. It might easily have settled into a long torturing war of exhaustion similar to that of 1914—1918.

There are some who declare that English espionage on the Continent, by sowing seeds of discontent, wrecked the war in its infancy. There are others who are convinced that the overwhelming superiority of the Royal Air Force, evident in the first violent encounter, proved beyond all doubt the utter futility of the attempt. It is a debatable point, but it does not alter the facts.

With as great an accuracy of detail as diligent searching could achieve, the following is an account of this conflagration that so nearly set the whole of Europe alight, and which, incidentally, settled a feud between two men that could only have ended in the death of one of them.

For months that amalgamation of European Powers known as the United States of Europe, had glared at Britain with sullen, avaricious eyes, flinging their taunts and abuse with supreme recklessness, like children teasing a sleeping giant. The masses of Europe, lashed to insane frenzy with propaganda, howled for the flesh of the giant.

An ultimatum had been issued to Britain, the terms of which were nothing more than an open insult to the nation, and at last the giant had stirred in the quiet, considered way of one who is slow to take off his coat and slower still to put it on again.

A week had passed since the ultimatum had expired and the giant stood stripped and poised—waiting.

From the loud-speakers in every home, at every street corner, and from moving police vans comes a voice. It is not the formal, precise tones of the announcer, but the voice of authority issuing orders—commands:

"Do not hang about in the roads, but go home. Go home! Keep your wireless set switched on. Follow all instructions immediately."

There followed a list of precautions, and descriptions were given for blackingout and gas-proofing rooms, similar to those which had already been thoroughly impressed on the nation by the same means during the last few weeks.

"All holders of Air Raid Precaution Emergency tickets will report to their units and squads," the voice continued. "Do not use your gas-masks until you are advised. Do not leave your houses after the warning. Stand by for further instructions."

The stream of outgoing traffic from the city of London had long ago been stopped after dark to leave the roads clear for the sudden movement of troops, ambulances, and fire brigades; nevertheless, crowds on foot, clutching a few personal treasures, broke through the cordons and streamed away, heading for the open country. THE volunteer corps went about their duties quietly, methodically; without undue haste, without confusion, their masks strapped to their chests at the "ready," their gas-proof suits kept handy for immediate use. Hydrant stands stood fixed and fitted with hoses ready either for fire, or for spraying the roads with their special de-contamination nozzles.

At a thousand points in the city men sat with headphones adjusted and fingers resting on maroon triggers, factory sirens, and the new rocket screechers that raced across the sky with a high wailing scream that sent a shiver of apprehension down the spine. Everywhere men were but waiting for the signal to act.

And in the Control Room at Adastral House sat another man with headphones adjusted and with one hand resting lightly on the switch that controlled the master-signal. He, too, waited.

Territorial anti-aircraft gunners stood around or leaned against the mounting of their guns, while N.C.O.'s of the Royal Artillery studied the dials of their Vickers Predictors. And, close by, a signaller sat on a shell-case with headphones adjusted—waiting.

Searchlight crews watched a test beam flash into the sky, measured the square grid that was reflected on the scurrying clouds, and wondered what chance a machine would have once it had been caught in the grid and its height, speed and direction instantly plotted. renewed interest, they gazed at the twin grid that linked up with it from their opposite station some three miles away. Slowly the twin beams swept round the heavens, rested for a moment on the balloon aprons, passed quickly over the aerial minefield, and snapped out as. suddenly as they had appeared, leaving the sky darker than before. Then they, too, settled down to wait.

At a hundred points around the coast the great mechanical ears swung ceaselessly back and forth across the sky, probing the silence, fastening on some distant drone, while the crew watched the lights in the indicators glow and fade as the sound grew or diminished,

or was checked by its neighbouring ear and its path plotted and dismissed. And behind each listener sat a figure with headphones adjusted—waiting.

And beyond them the huge flyingboats lie quietly to their sea anchors ten miles off the coast, in flights of three, and each flight ten miles from its neighbour. Their hulls dip and rise with the gentle swell, their gunners fuss with their machine-guns or check once again the shell runway and sights of their cannons. Occasionally, a head lifts and a pair of eyes strains into the darkness away out over the sea to where the motorised kite-balloons hover at ten thousand feet, while those strangelooking cones sweep the sky as the operator manœuvres his mechanical ear, and his companion sits silent with headphones adjusted—listening and wait-A hundred miles from Adastral House, but a hundredth of a second from that Master Key.

## CHAPTER II

## The Stranger from Canada

In strange contrast to all this tension and turmoil was the atmosphere of No. 900 (Fighter) Squadron, Kenley. True, the station was somewhat overcrowded as a result of the sudden strengthening of the squadron, but the "Happy 900" had absorbed its newcomers with the cheery hospitality for which it was noted, gathering them all under its wings with a warm friendliness to which the strangers readily responded. That is, all but Baxter.

Tall and powerfully built, with pale blue eyes that seemed to drift dreamily as he talked and shoot back with disconcerting suddenness, brows that met in a grey snarl, and a mouth that was little more than a thin, colourless slash, Flying Officer Baxter had come to 900 Squadron less than a month ago.

"Owner pilot, grabbed for the duration," had been Holmes' verdict after watching Baxter's first flip. "I expect he had a balloon. He'll never pilot a Hurricane—only spoil it."

In view of the fact that Holmes had

joined the squadron a few days after Baxter and was undoubtedly the worst pilot of them all, little attention was paid to his disparaging remarks about Baxter's prowess as a pilot.

Ouiet, sociable and obliging, but infinitely distant. Baxter remained as he had begun—a stranger. It was not that he was cold-shouldered by any of the others, but just that each seemed to sense around the man a subtle, indescribable cloak that was proof against even the inquisitive nature of Holmes. interfered with no one and no one interfered with him, and it was an arrangement that seemed to be entirely satisfactory to him. Nobody ever called him by his Christian name, a significant fact in the R.A.F., and certainly nobody would ever dream of giving him a nickname. He wasn't that sort of man.

The mess of 900 Squadron at that time resembled an overcrowded schoolroom. There were those whose faces reflected with a grotesque seriousness the gravity of the position; there were others whose bright eyes and impulsive speech were a challenge to fate. Laughing, daring boys, they were greedy for fame and glory, with little idea of the price. Impatiently they awaited the call to action, eager and confident.

Typical of the latter was Trent. "Casualty Forms," with their usual delightful evasion of details, merely stated that Flying Officer Trent had transferred from the Royal Canadian Air Force to Home Defence, and that he would be attached to "C" Flight. Nothing was said of his experience or ability; they were things that "C" Flight would have to find out for itself. And "C" Flight did.

IT was shortly before lunch that Trent arrived. Little notice was taken as he stepped from the tender; there had been too much coming and going recently for the arrival of one more flying officer to cause any sort of stir.

Neil, commander of "C" Flight, still suffering from the disappointment of his last two gifts from "Postings" and anxious to inspect the third, hung around the orderly-room until Trent arrived. His first sight of the newcomer aroused his interest, his second aroused his enthusiasm. So far, so good; all that mattered now was the man's ability. Could he fly? Neil ran a swift eye over those broad shoulders, that clean, athletic figure, the large, powerful hands and laughing blue eyes. Certainly Trent was no chicken, but—could he fly?

"TRENT, I believe?" said Neil, smiling his welcome.

He offered his hand and as Trent took it he found himself wondering what that hand would be like clenched in anger. Neil prided himself on his judgment of men, but for once he was undecided—boy or man? There was something appealing about the eyes, like a boy desperately anxious to please and yet something in the set of the head, the general poise, suggested tremendous reserves of speed and strength.

"You're coming into my flight," Neil continued as Trent nodded. "Dump your stuff here, they'll take it over. I'll run you over to the mess and perhaps after lunch you'd like to try out a Hurricane. I like to get people sized up right away; never know when we're going to be wanted these days."

"No, of course," said Trent. "I think I'll pass all right."

Neil shot him a swift glance, for there was a confident quality in the voice that was unusual in an untried pilot. American "gas," Neil wondered, or had he struck something out of the ordinary? There was little accent in the voice, just a faint trace that might have been West Country, but none of the "Say, Bo," kind of stuff. A pleasant drawl, that was all but, like his appearance, Trent's voice suggested hidden qualities.

"Who's the Commanding Officer here, and what's he like?" asked Trent suddenly.

"Wing Commander Grey," replied Neil. "Splendid chap—if he likes you. God help you if he doesn't. You'll know the first time he looks at you."

"I say, Holmes," Neil said, as two

flying officers approached them from the tarmac. "This is Trent—just arrived. Coming into 'C.' This is Baxter and Holmes, both of 'C,'" he added, turning to Trent. "Holmes will take care of you now. By the way, they call him 'Sheer-luck,' you'll know why the first time you see him land."

Neil paused uncertainly as he realised that neither Trent nor Baxter was listening to him; instead, they were eyeing each other in a way that Neil felt was singularly unusual for strangers. Neither gave any sign that he recognised the other, yet Neil was instantly convinced that the two had met before.

Then Trent spoke and, despite his smile, there was nothing friendly in his voice; rather was there a suppressed satisfaction, as though the man had suddenly discovered something he had long sought. Neil, watching closely, fancied he caught a gleam in the blue eyes, like the flash of drawn steel.

"How do—Baxter?" said Trent at

"How do—Trent?" replied Baxter.

"You two know each other then?" asked Neil.

"Yes, we're old friends, aren't we, Baxter?" Trent was laughing now, an icy, menacing laugh, that was in distinct contrast to his rather pleasant features.

"That's fine," said Neil without conviction and stared wonderingly from one to the other.

Even Sheer-luck seemed to notice something unusual. The beam on his round face wavered, and a keen observer would have noticed his eyes narrow suddenly as he spoke.

"That's all right, Neil," he said.
"I'll take care of Trent." He touched Trent's arm. "Come on, then, I'll show you to the roost."

"That fellow over there—the big chap—'B' Flight's Commander," Sheerluck continued as they walked across to the mess. "They call him Red Kelley. Nice chap, but he was born in a volcano—Irish, you know. The other one is the Old Man."

"And what do you call him?" asked

Trent, emerging from his silence.

"Call him?" said Sheer-luck, as though the idea of giving the C.O. a nick-name shocked him. "Call him the Great White Chief, because that's what he is round here. But he's a pilot though; gosh, yes! he can fly. Neil and Grey are both old hands, but Grey is the man for flying."

As was usual when a new pilot was due for his first test, most of the Squadron had discovered a host of minor reasons for hanging around the tarmac after lunch. If Trent was aware of the discreetly-watching eyes he showed no sign of it as he climbed aboard Neil's Hurricane. With a friendly pat on the shoulder Neil had suggested that Trent

—"Showed them what he could do," and after explaining cockpit details, had retired to the watch-tower to measure his new man.

Within five minutes of the take-off, eighty per cent. of 900 Squadron were grouped around the 'drome staring into the sky in awed amazement.

Twice Trent had circled the 'drome with the precise carefulness of a novice and Neil had begun to despair. Then, at five thousand feet, the Hurricane had flattened out and flicked over in a complete roll with an alarming suddenness that brought a gasp from the watchers. For a moment there had been doubt as to whether it was deliberate or accidental. Two minutes later there was no possible doubt whatever. If the Devil himself in a frenzied rage had taken possession of the Hurricane he couldn't have given a more terrifying, breath-taking exhibition of air-madness.

No. 900 Squadron gasped, shook itself, rubbed its eyes and gasped again. It was awful. Work stood still. Time stood still. All the world, it seemed, stood still to stare in silent horror at the spectacle of a man hurling himself with brazen defiance to within a split second of death. 900 Squadron was shocked. It was horrified.

Sheer-luck, dancing frantically from one foot to the other, repeated the stock phrase of the Squadron.

"Can he fly? Can he fly? Oh, Boy. Can he—. Oh, my God!"

His voice broke suddenly; something seemed to rush up from his stomach to choke the sound as the Hurricane, tearing across the 'drome inverted with its cabin roof scarcely ten feet from the ground, shot up over the hangars in a rolling climb.

Two minutes later, Trent touched down and taxied across to the tarmac. As he climbed from the cockpit, Wing Commander Grey marched grimly across to him.

"What in the name of blue, blazing Hell do you think you're doing, man?" he shouted, in a voice in which anger and anxiety were about equally mixed. "What do you think you're doing, I say?"

Trent stared at him in silence, and in his eyes was an expression that was not fear, not anger, but intense surprise. Then he spoke—just one word:

"Flying," he said.

The word seemed to hit the C.O. between the eyes. He almost staggered, but his wrath evaporated in waves that were nearly visible.

"I'll see you in my office later on," he snapped out, and turning abruptly, he stamped away to the orderly-room.

## CHAPTER III The R.A.F. Stands By

WHAT happened during that interview only two men will ever know, but the unspoken impression that crept round the Squadron was that Wing Commander Grey had at last met his equal. A man who was proof against his violent outbursts was a man he was compelled to respect. And Grey, despite his cast-iron discipline, was ready and willing to respect such a man. He even went so far later as to congratulate Neil, and Neil smiled quietly, for he, too, had found something about the new man that he admired.

Thus it came about that within six hours of his arrival at Kenley, Flying Officer Trent became "Tiger" Trent. One of the chief delights of the R.A.F.

## AIR STORIES

is to re-christen its personnel. If the new name fits, it sticks regardless of whether it appeals to its owner or not. 900 Squadron decided that the nickname fitted, and Tiger Trent he became, although a somewhat amiable tiger.

Later that afternoon the whole Squadron took the air with a complete strength of twenty aircraft. Trent, hard on the starboard tail of Neil, watched the formation closely. They circled the tangled congestion of Croydon; gave a really creditable exhibition of tactical formation flying over Croydon Airport for the benefit of the crews of the mass of military aircraft concentrated there, and landed without mishap in time for dinner.

"C," BEING Duty Flight for the night, were confined to the 'drome, their job being to have every aircraft ready to leave the ground within minutes of an alarm. The machines being temporarily housed in portable hangars a little way from the flight sheds, the hangars themselves had taken on the appearance of gigantic guard-cum-mess-cum-barrack rooms.

Gathered round a coke brazier, half a dozen men discussed, even as ten million others were at that moment discussing, the recent turn of events, and again the question was asked—"What will happen?"

"You want to know what will happen," said Neil, speaking in Trent's general direction. It was not often that Neil could be drawn into a discussion, but when he did start talking the quiet sincerity of his voice was at once a challenge and an appeal.

They listened in silence. Even Baxter seemed interested, although Trent, watching him closely out of the corner of his eye, fancied he caught the shadow of a sneer sweep across Baxter's face.

"Don't misunderstand me," Neil began. "I'm not pining for war. I hate the very thought of it far more than I could hate any living enemy, but I know that war now is a struggle which neither side can win and only one side can survive—what's left of the loser

won't be worth conquering.

"They'll come, maybe in wings of fifty machines, maybe in whole armadas of anything up to a hundred. Probably in waves—armada after armada—hour after hour. High explosives first—block the roads and hamper the rescue workers and fire fighters. Then thermite bombs—little things weighing a few pounds and capable of burning through stone or steel. One squadron could carry enough to start a thousand fires—an armada could——"

"Yes, that all sounds very terrible," a voice interrupted, "but what do we do while all this is happening?"

As though he had been waiting for the question, Neil answered quickly.

"That's the point," he said, "what do we do? I'll tell you what we do. We stop 'em. Whatever the cost in men, machines or money, we stop 'em. If they get through—and some of them must—then they can count their bombs and know it's just half the number we'll drop on them.

"War," continued Neil, warming to his subject, "is no longer a matter of sending your army to fight the enemy's army and sitting at home in comfort waiting for the results; it isn't even a matter of going up in a fighter and tackling your man in single combat. It's nation against nation, every man, woman and child; getting hit and hitting back—doing your damndest to hit harder and more often than the enemy."

A slight movement in the dimness beyond the circle of light caused Trent to glance towards Baxter. This time there was no doubt about it. Baxter was definitely sneering. Trent's glance returned to the group as Sheer-luck spoke.

"Happy little soul, isn't he?" he remarked. "Bucks me up no end."

"War isn't a very happy subject, is it?" Trent observed.

"Oh, agreed, agreed," said Sheer-luck. "But everything possible has been done. The Fighter Command has taken over the Inner Defence Circle with three wings of fighters——"

"Fighter Command hasn't taken over

Inner Defence," protested "Thorny" Rose.

Sheer-luck ignored the interruption, not even bothering to glance at Thorny. His eyes rested vacantly on the shadows beyond Baxter. Then he continued rather hurriedly as though unwilling to defend his statement:

"Number I Air Defence Group have taken command of four wings of interceptors, so, without counting the Coastal Command, that's over two hundred aircraft standing-by to defend an area of four hundred square miles."

"Yes, that's certainly a more comforting way of looking at it," said Trent. "By the way, what are those small sheds out on the hills over there?"

"It's a sham town," Neil explained.
"The idea is that if a raiding squadron can be broken up some of them will mistake it for a town; you see, it's half lit. From the air at night it looks like the real thing, too—a town not completely blacked-out."

## CHAPTER IV Air Attack!

At that exact moment, a man sitting quietly in a small gondola slung beneath a motorised kite-balloon fifteen miles out over the English Channel, suddenly sat up very straight and spoke in an excited whisper.

"There they are!" he breathed. "There they are! Hold it!"

His hands tightened on the parallel grips of his sound-locator as he swung it slowly to the south-east until the light in the indicator glowed.

His companion raised a hand.

"K.B. 6, got it. K.B. 4."

He flicked over a switch, bent to the mouthpiece strapped to his chest, and while his pencil raced over a record pad, he repeated into the mouthpiece the observations of the other.

"K.B. 10 calling," he said quickly. K.B. 10 calling. E.A. square E. 143. Altitude, 18 degrees."

Before he had finished writing those few words, the message was being repeated in his headphones. One minute and twenty seconds after the first listener had clutched his grips and muttered—"There they are!" the Master Key in Adastral House had snapped over.

Already the altitude and direction of the raiders had been plotted. Gun crews sprang to sudden activity, ready to pour their shattering barrage into the sky. Searchlights, working in pairs and operated automatically by the sound locators, were sweeping the heavens, striving to penetrate the clouds. on a score of 'dromes and emergency landing-grounds around London, fighters and interceptors strained at their chocks: while over it all hung the grim, awful spectacle of a nation on its toes ready to come to grips with its enemy in a deadly struggle.

Then the message flashed out:

"E.A. square E. 87. 17,000. Proceeding N.N.W.," it ran.

Immediately, the sky over the Kentish coast was brilliant with a score of fantastic swords of light.

Elsewhere, at the sound of the first crashing maroon, ten million people sprang to their feet, peered cautiously from behind blanketed windows at the sweeping beams of the searchlights, and turned drawn faces to the loud-speakers as a commanding voice boomed out.

"Air attack! Air attack!" it warned. "Extinguish all lights. Extinguish all lights. Close all windows and doors. Take cover in shelters. Hurry! Hurry! Public shelters close in ten minutes. Follow the instructions you have been given. Keep calm and stand by for further orders."

If the brazier in "C" Flight shed had suddenly become a live bomb about to explode, the men gathered round it could scarcely have moved quicker. Each man rushed to his appointed task and did it with all the speed of which he was capable. And he did nothing else, hence, despite the frantic haste, there was no confusion. No orders were issued, hardly a word was spoken. Except for the grim determination of the players, the scene might have been a silent film. Then with a shattering roar,

the first "Merlins" split the night like a mighty challenge.

As Trent reached for a 'chute, a hand fell on his arm and a voice spoke from behind him:

"My 'chute, I think, Trent," it said.

Trent glanced round at Baxter. For a moment he hesitated, then: "What does it matter which 'chute?" he snapped testily.

"My 'chute, I said." There was something suspiciously like a challenge in the voice, and Trent eyed the other curiously in the dim light.

But there was no time to argue then, and Trent passed along the hangar with a growling: "Aw, all right, get hold of it."

In the light of subsequent events, Trent was to realise the enormous significance of that peculiar demand of Baxter's, but in the excitement and thrill of the next hour the incident passed completely from his mind.

As he ran from the hangar, half in his flying suit and with his 'chute under his arm, he bumped full into Wing Commander Grey.

"Just a minute, I want you," said Grey. "You and Flight Lieutenant Neil will follow me. Stick close on my tail, understand?"

"What about my position in the squadron, sir?" Trent asked in some surprise; but Grey had not waited for questions; he had moved off towards the machines.

"Do as he says, Tiger," warned Neil. "Secret tactics. Kelley's taking the Squadron. We're after scouters. We shall link up with the rest later."

"Scouters?"

"Yes." Neil helped him into his suit as he spoke. "They're sure to send down a scout to hop the roofs and signal directions; we've got to get him. We'll contact the Squadron all the time."

"But why didn't you tell me before?"
Trent demanded.

"I didn't know. We're acting on information, I expect," Neil replied, but he said it in a way that entirely failed to convince. Obviously, Trent decided, he had been called on to replace

someone else at the last moment.

"Here, wait a minute, where's your corset?" Neil asked.

"Forgot it," Trent answered. Shan't need it. Too late now, anyway."

"Well, take it steady when you pull out of a dive, then," Neil warned him.

SCARCELY two minutes passed from the time Trent ran from the hangar and the time the three Hurricanes tore away into the darkness with a mighty, thunderous roar.

Despite the absence of navigation lights, which were used only until they were in position, the three machines kept a perfect formation. Trent had no time to see what happened to the rest of the Squadron. With his eyes glued on the exhausts of Grey's machine, he pushed forward until his port wing-tip was scarcely ten feet from Grey's tail unit.

At a thousand feet, Grey eased the stiff climb and flattened out while he adjusted his oxygen equipment and plugged in the electric heating leads of his suit. As though tied with invisible cables, the aircraft on his port and starboard kept their close formation. Then the climb began again, and with throttles full open they shot up—up for five minutes until the altimeter registered nearly twenty thousand feet—well above the recorded height of the raiders.

Only then did Grey ease his pull on the stick and tune in to "Signals." Almost immediately the message came through:

"E.A. square E. 37. Proceeding N.W. by N. Diving. 16,000. 15,000. 14,000."

A muttered, unprintable exclamation came from Grey. They must be close on his port. He banked slightly and peered down at the carpet of cumulus far below.

Then the shadow of a layer of altostratus drifted by, and the moon shone, and he saw them, in silhouette against the fleecy billows. Not in a giant "Vic" \* formation as he had expected,

<sup>\* &</sup>quot;Vic": R.A.F. code-term for "Vee" formation.—EDITOR'S NOTE.

or even in wings stepped up in layers, but in three groups. The centre one in "Flights Astern," the other two groups in "Echelon Port and Starboard." \*

He wondered at this peculiar arrangement. Kelley must be warned of the enemy's position. No need to call other units, for it was more than probable that this formation beneath him was only one of a number. He tuned in to the Squadron.

"Grey calling 900 Squadron. Grey calling 900 Squadron. Watch for signal. Grey signalling. Over."

He waited, and when no answering call came through he began to swear. Then, looking down, he noticed something that he had missed in his first flashing glance. The group in Flights Astern was smaller. Fighters, perhaps—no, light bombers. Fast, yes, very fast, but not so fast as the machine he was flying. Rumour had it that the Hurricanes could squeeze out 320 at twenty thousand feet, but only those who flew them knew definitely how very fast they really were.

They were now almost over the enemy and something like seven thousand feet above. Grey glanced to his rear portyes, Neil was there. Good for Neilten years a test pilot and as good a gunner as he'd ever met. Trent? Yes, of course, this sort of thing would be kid's play to a man like that. Again he glanced down. The centre group was diving away from the main formation -the remainder were closing in to form "Vic." Good God! Why hadn't he thought of that? The smaller machines were scouts—the very men he had come up to get.

He cursed Kelley for not answering his signal. What the devil could be the matter with the Squadron? Where could they have got to? He had no time to consider the point now. He measured the gap between the closing groups of bombers. Could he get through and after those scouts?

### **CHAPTER V**

### Hurricanes in Action

WING COMMANDER GREY was too old a pilot to hesitate while he meditated on a move. He believed a pilot fought by instinct like an animal, not by judgment. Besides, there is no time for considered judgment with aircraft moving at five miles a minute.

The tails of the Hurricanes whipped up and the little flight roared down in a vertical dive. As the speed of that headlong plunge increased, Trent bitterly regretted the moment he had ignored a corset. The crash pad lifted off the rest ahead of him and floated on its string before his eyes as the velocity of the dive exceeded the pull of gravity. airspeed needle swung round alarmingly-325-350-375-400, then it steadied a little, and as the speed became more constant Trent breathed again. He felt no discomfort at constant speed, it was only during acceleration and change of direction that the awful strain occurred. Yet they must change direction again soon. They must pull

Surely they were through! He glanced at the altimeter; but it was moving too quickly for him to note any definite height.

Ten thousand—nine thousand—eight thousand. Yes, they were through, although he had seen nothing as they passed. Now it was time to pull out. He wondered how Grey and Neil felt. With the caution of experience, they were wearing corsets and probably yelling at the top of their voices to tauten their stomach muscles, a trick he knew test pilots to use. He must yell too.

Gently, very gently, he eased the stick back. Would the wings stand up to it or would they sheer off? Would they split? Would she break her back? Gently, oh, so gently.

As he swept under in a gigantic curve, following almost blindly the vague light ahead, Trent felt himself crushed down into the cockpit with unbearable force. The blood rushed from his head; a strange dizziness seized him and for a

<sup>\* &</sup>quot;Echelon": a stepped-up formation with the machines in a long diagonal line.—EDITOR'S NOTE.

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moment he was completely blind. He was yelling—shrieking almost—but still his stomach was tearing away from him. His ears drummed maddeningly; they felt damp—hot and damp—blood—nothing, of course, it often happened during a 6 G. dive. His opinion of the stamina of the pilots of 900 Squadron was suddenly enhanced. He did not realise that he was flying with two of the most experienced and skilful pilots in the R.A.F.

Then the tension eased, the weight lifted, and he was tearing across the sky on a level keel.

Something dark loomed ahead seemed to be rushing towards him. Now there were several of them—just dark blurs. Subconsciously, he snatched at the cannon grip. His mind was steady now, alert. Once again he was Trent, star pilot of Regan's Aerial Circus, the man they had christened "Tiger"; master of himself, master of his machine; supremely confident, deadly and dangerous.

There came a series of spurting flashes on his port. Neil, to whom speed and strains meant little, had recognised those dark shapes. Then they were on them.

Trent could not tell how many there were, probably a dozen, maybe less. There was a blinding flash almost under his nose as an enemy machine exploded and filled the air with flying fragments. Against the flaming wreckage he saw a dark, grey monoplane rear up before him.

In the sudden light he had a distinct vision of the emblem of the United States of Europe blazoned on its side. It was a large machine with the narrow tapered wings typical of long-distance craft. The light glittered on the glass panels of its cockpit cover directly before him and, acting instinctively, he pulled the trigger of his cannon. He just had time to zoom madly as a sheet of liquid flame enveloped the domed craft less than thirty feet before him.

It was this incident that caused Grey to bank savagely and peer back. Could that be—no, Neil was out here on his starboard. Must be the new fellowhe'd forgotten his name for the moment—but it was only a madman like him who would put his prop. boss in his enemy's cockpit before he fired.

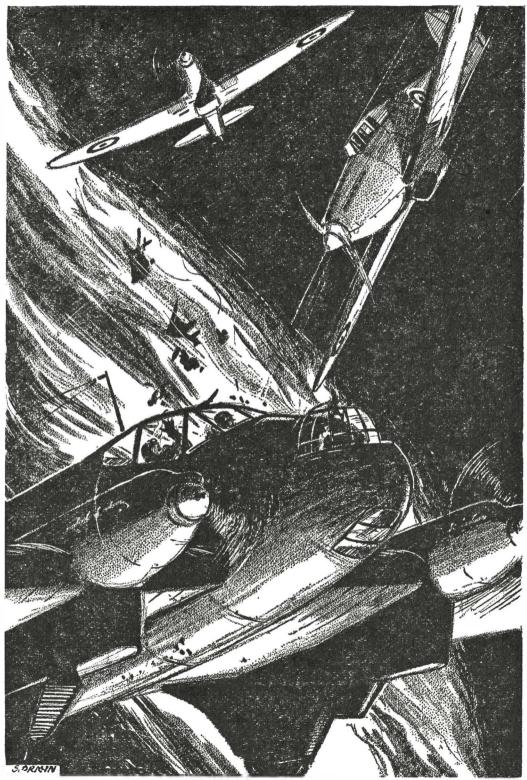
He stared in amazed horror as Trent flashed over in a terrifying cartwheel on to something he had seen. A collision seemed inevitable. Trent was firing—all four machine-guns—the flames practically licking the other's fuselage. Then, with that lightning half-roll that had been his first stunt at Kenley, he screamed past Grey's nose with the fearless daring of a man who has spent half his life hand in hand with death and had taken its measure to the fraction of an inch.

Trent might not be so accurate with his guns as Neil; he might have a complete disregard of flying tactics; but—by God!—the man could fly, and he was using his astounding ability to its utmost.

Grey began to fear for this reckless fiend. He knew that neither man nor machine could survive many moments at such a pace. He wondered what the enemy pilots thought of this screaming, flashing demon that had sprung on them from nowhere; this hate-crazed maniac who charged to within inches of them and fought with such inhuman savagery. And in that moment Wing Commander Grey felt very proud of the man who had staggered him with a word.

As to what the enemy thought, the question was answered for him a moment later with a burst of gunfire through the corner of his cockpit cover. It was no use looking back—Hurricanes were not made for people who want to look back—but the flash of a bursting shell close on his port quarter told him that the man on his tail had been seen through a gunsight. He never knew until afterwards that it was a long shot by Neil, and that with that man's uncanny accuracy, the shell had struck a split second after the enemy machine had opened fire.

WHETHER the flight of enemy scouts at last realised the startling superiority of the Hurricanes, or whether they broke up on the commands of the huge formation above, will never



A sheet of liquid flame enveloped the domed craft less than thirty feet ahead of him

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be known, for of those who were shot down only two men survived. One was completely insane when found, while the other was an observer, whose head wound had rendered him unconscious almost before the fight started. But, whatever the cause, the result was precisely what Grey most desired. As though by a prearranged plan, each Hurricane chose its target and proceeded to chase its quarry to earth.

Grev was the first to get his man. In a desperate effort to rejoin its companions. above, the enemy machine stuck its nose at the sky and clawed madly for height. But its pilot had underestimated the amazing capabilities of the Hurri-Slowly, but surely, Grey overtook it, holding his fire until he was certain of his mark. He thought of that other pilot feverishly urging his machine towards that protecting blanket Hoping—praying perhaps of cumulus. -that he would reach it before that formidable shape behind. Then Grev fired.

He throttled back sharply, Immelmanned, and glanced down to where two machines were flashing about in full moonlight. Then he caught a glimpse of two others converging on to the spot with sinister determination. Even as he slammed his throttle full open and pointed his nose at them, they opened fire. Who could it be their guns were trained on? Not Neil. Neil would get his man with the first round. Must be the new chap, that human eagle, and a man he could ill afford to lose.

"Hell!" Grey almost shouted the word. It was Trent. No other man would do a thing like that. The Hurricane had literally ducked beneath those spitting guns in the closest inverted loop Grey had ever seen.

Then the sudden alarm that had brought sweat to his eyes changed to a wild exhilaration, for hard on the tails of the enemy machines was a third Hurricane. He wheeled over in a savage bank and followed his men, but before he could overtake them Neil had fired. His guns were pouring a flaming river at the tail nearest to him,

and Grey well knew the deadly accuracy of that firing.

Then the firing ceased suddenly and almost simultaneously two larger flashes came from Neil's Hurricane. Grey, screaming down in the wake, fancied there was a slight change in the direction of the fire. The next moment he knew, as a burst of flame well ahead and a little to port lit up the scene.

Two seconds later he was flying level with Neil and searching a sky that had in some mysterious way been cleared of all aircraft but their own. Together, they joined Trent and the little flight, headed again by Grey, went into a steep climb, each man's eyes raking the heavens for some sign of the missing squadron.

A SCORE of searchlights traced a feathery pattern on the clouds, while far away to the south A.A. shells told that a group of enemy aircraft had been located by the ground defence units. A sharp clicking in his headphones told Grey that either Neil or Trent was calling. He tuned in for inter-'plane communication and found his companions carrying on a conversation as coolly and easily as though they were sitting in a lounge.

Neil, the imperturbable, was speaking: "—haven't seen them; haven't even heard 'em," he was saying. "I expect they're sitting up there waiting for something to happen. God help Kelley for this. If they'd been there we could've wiped up the whole lot of those fellows. Yes, it was a wicked dive. Missed them by a few yards, I think. They didn't see us. I'm calling the C.O. Over."

Grey spoke into his mouthpiece: "Grey calling. All right, Neil? Trent My cockpit cover was hit, all right? nothing serious. I've signalled Inner Signals report E.A. square Defence. E. 41. 22,000. Proceeding E.S.E. Must be going back. Number 5 Wing signalled—' Engaging E.A.' Number 14 Wing from number 3 Group linking up. Nobody's heard from the Squadron. Signals have been calling them, but no reply. Can't make it out. Closing down."

They flew on above half a dozen fires that marked where bombs had fallen. Searchlights continually picked them up, held them for a brief spell while powerful binoculars were trained on them, then, satisfied of their identity, swept on across the sky.

By now the batteries of the inner defence ring had closed down and, except for the searchlights, it might have been a peaceful demonstration. Heading as they were, back to Kenley, they could see in the distance an occasional burst of flames that lit the sky in the east and told of the grim battle that was raging over Maidstone as the invaders struggled to break through the ring of fast interceptors that was slowly but surely closing in on them, while the terrific gun barrage of the outer defence ring kept the enemy at a safe height.

Over the 'drome, the three Hurricanes circled to signal their identity, and in the answering light beam that flashed across the ground they slid in to land. Trent was the last down, and as his machine rumbled to a halt the light snapped out leaving the 'drome in almost complete darkness.

Meanwhile in the skies over Kent a terrific aerial battle was being waged between the rest of 900 Squadron under Flight Lieutenant Kelley and a small formation of raiders. Blindly groping around in the darkness, completely cut off from communication with either the ground or their C.O., the Squadron had, purely by chance, located this small group of enemy aircraft.

Kelley, disgusted and enraged with the confusion, and with nearly a third of the Squadron missing, had fallen on the luckless invaders with all the violent ferocity of his volatile nature. But under such conditions it was a hopeless task. As Kelley said later: "It was like looking for a mosquito in a dark cellar with your eyes shut."

By some amazing fluke, there were no collisions, and after the first dive the fight developed into a game of "blindman's-buff." Kelley's repeated and frantic signals for searchlights brought no response. The high-pitched whining

that greeted him every time he switched on his wireless drowned any message that might have helped him and drove him to the edge of insanity.

## CHAPTER VI The Man Called Baxter

NEIL and Trent were on the tarmac leaning against the radiator of the fire-tender when the Squadron roared by overhead. Davis, the Signals Officer, was speaking.

"It seems that they knew all about the dummy town over there," he said, nodding towards the hills, where the faint glow indicated the half-lit sham buildings.

And as the first 'plane glided into the light path he continued: "Just wait until the Old Man gets hold of Kelley. There's going to be fireworks. He's been in the wireless cabin since you got back, and you can't see across it for bad language."

"Did nothing at all come through from Kelley?" Neil asked.

"If he's been listening to that screeching all the time there's quite a lot come from him, but not to us."

Of the fifteen machines that had left under Kelley only eight returned. Two drifted in during the next hour, while two others had attached themselves to a formation of Gloster Gladiators from No. 800 Squadron, and had returned with them to Northolt. Blake and Fisher of "A" Flight, and Gordon of "C" never got back at all.

Sheer-luck was the last to touch down and, with his usual dainty perfection, made a faultless three-point landing just ten feet from the ground. As he bounced twenty feet into the air, Neil grinned.

"That's Sheer-luck all right," he said. "It's really amazing how he ever gets down at all to stay down. First he thinks his prop. is a shovel, then he decides he ought to have come in backwards. Here," he exclaimed suddenly, "what's the matter with Kelley?"

As they moved towards the machines

they could hear Kelley passing from one to another of the pilots demanding aggressively:

"Who's forty-eight thirty-seven? Forty-eight thirty-seven. Who is he, eh?"

"Forty-eight thirty-seven?" said a voice. "Why that's Baxter. Baxter of C. That's him over there."

Curious eyes watched the huge Irishman as he strode across to where Baxter stood against his machine, his 'chute under his arm.

"Are you forty-eight thirty-seven?"
Kelley was shouting now, and several
men joined the group around him.
Obviously, the man was in a vile temper
and lashing his mood with every word.
The group closed in, for Kelley in such a
state could be dangerous.

"That's the number of my machine,"
Baxter answered, calmly eyeing the other.

"Oh, so you're the one, eh? Come here, I want you." Without waiting for Baxter to comply, Kelley grabbed him by the shoulder and practically dragged him to his machine.

Still holding him, Kelley pointed to the peppered tail unit of his 'plane.

"Take a look at that," he said, his voice rising again. "My machine, see it? Have a good look at it so that you'll know it again. Three times you sat on that and hammered it."

"Just a minute," Baxter said sharply. "You're talking as though I fired on you deliberately. I may have done so once by mistake, I can't say. Neither can you."

"Oh, yes, I can!" Kelley said quickly. 
That wasn't a mistake."

"Don't be so utterly ridiculous," Baxter said heatedly. "You're mad." With a savage wrench he tore Kelley's hand from his shoulder.

Before any of the startled spectators could interfere Kelley's left fist shot out and landed with a thud between Baxter's eyes, sending him sprawling at the feet of the crowd that had gathered.

Often it had been said of Kelley that one day his temper would overcome his common sense, and just as often it had been said that he would be too exhausted after shouting to act. Yet, now that the thing had happened, the very men who had said those things stood and stared in amazement.

POR a moment there was a hushed silence. Then, with a swift glance at the crowd who had flocked to the spot, Neil stepped quickly to Kelley's side.

"What the devil's the matter with you, Kelley?" he snapped.

"Out of the way, you," Kelley snarled. For a moment it almost seemed that Kelley would strike the older man; until Trent stepped swiftly between them.

"Don't be so damned silly," Neil said. "Think what you're doing. The man's right, you are mad. Go and sit down and let that filthy temper of yours cool off a bit. We'll talk this out later."

By now the gathered pilots had surged forward and surrounded Kelley. There were murmurs of—"Take it steady, Kelley." "Don't be a fool, man." Everybody, it seemed, had suddenly realised that half the eyes in camp were watching this deplorable exhibition.

As rapidly as it had arisen, Kelley's temper subsided.

"If he ever gets within half a mile of my tail again," he growled in a somewhat quieter tone, "I'll fight him up there and I'll put so many holes in his 'plane that he won't know he's got it with him."

As Kelley moved off in the centre of a gesticulating and muttering crowd Neil turned sharply to a couple of flightsergeants.

"What are you doing? What are all those men doing?" he demanded. "Get a move on. Get these machines in and filled up. Shake that mob up a bit."

In a moment the discipline of years had been restored. Swift orders were barked across the 'drome, and fitters scrambled frantically for points beyond the vision of the N.C.O.'s—for it is an understood thing in the R.A.F. that if a man cannot be seen he must be working.

"THERE'LL be some trouble when the C.O. hears about this," Neil remarked to Trent some few minutes later as they stood on the tarmac. "Kelley's over with the Old Man now. After that muddle during the raid, and then this, it ought to be an interesting interview."

Trent stared thoughtfully across the 'drome as Neil continued.

"Serve Kelley right if he gets it hot. He asked for it. Baxter's a complete novice in the air. He wouldn't have got through but for the fact that he's got some ability as a navigator. He probably got scared and fired at the first tail he saw. Easy to make a mistake in the dark."

"Mistake?" Trent murmured.

"Of course it was a mistake. You don't think he did it purposely, do you?"

"I don't know," Trent said absently. Then, as though speaking to himself, he asked: "What's the number of Kelley's crate?"

"Crate? You mean—. Why—er— Kelley's aircraft number is seventynine twenty-two."

"Oh. And mine's ninety-seven twenty-two. Queer isn't it?"

"Queer? What's queer? I don't understand you, Tiger," said Neil. "What's queer about it?"

"Nothing now. It's all very clear. As you said, Baxter made a mistake."

"Well, don't you think so too?"

"I'm sure of it. He thought it was me."

"But I don't see—. What? What was that you said?"

"I said Baxter made a mistake. He thought he was firing at me."

"But—. Good God, man! You surely don't think——"

"I don't have to. I know."

"But, I say, Trent. This is a bit far-fetched, you know. After all, this isn't the wilds of Canada."

"And that man isn't Baxter—and he isn't a novice," Trent said deliberately. "He's the finest pilot you've got in this Squadron and the most dangerous man you'll ever have. Twelve months ago, Kelley would have died just two seconds

after he struck him, but as you say, this isn't Canada. No. Listen to me, Neil. I mean that, and I know. I flew in the same circus with him for three years all over Canada and the States. He can fly, as you people say."

"But, if he isn't Baxter," Neil interrupted, "who the devil is he? Why does he pretend to be a novice? And what's he doing in the Service? It's all very confusing. I say," he added, reverting to a well-worn question, "you don't think he's a spy, do you?"

Trent shrugged. "No. Though I wouldn't put it past him. I'm going to tell you something, Neil."

"If it's anything personal you don't have to tell me, you know," Neil hastened to assure him.

"I know." Trent touched the other's arm as he spoke, and the gesture seemed to say more eloquently than words: "I can trust you, I see." Aloud he said: "If you know, it will help you to understand anything unusual that may happen."

NEIL was silent a moment. He felt himself out of his depth in this melodramatic atmosphere. But that some terrible tragedy lay behind it all he had not the slightest doubt.

"I fancied you two had met before," he said after a pause. "I didn't realise that you had quarrelled in quite this way."

"Oh, we've never quarrelled," Trent corrected him. "But two years ago I swore I'd kill Baxter. I've been looking for him ever since."

"Kill him!" Neil was visibly shocked. "Good Heavens, man! You can't be serious."

"Neil," said Trent quietly, "I was never more serious in my life." And somehow Neil knew that the man meant it.

"But, my dear fellow, you can't murder people here in England. Why they hang you for that. You can't get away with things like that here." Neil was evidently alarmed.

"Baxter thinks you can," observed Trent.

And Neil remembered the incident of Kelley's tail unit with something of a shock as the sinister significance of it occurred to him.

"Look here," he began. "Consider the position, man. Is it worth it? What's it all about? A woman, I suppose."

"Yes. Just a woman."

"Well, these things happen to everybody," Neil said with what he felt was a brilliant effort at careful casualness. "My dear chap, such things never warrant murder. You think about it first."

"I've been thinking about it for two years, Neil. I swore I'd get him—and I will." Trent paused a moment, then suddenly swinging round to Neil, he asked: "Have you any sisters, Neil?"

Mentally, Neil stumbled. "Sisters?" he said. "Why—er—no, I haven't."

"Neither have I—now. You don't want the details of it. It was pretty grisly. Killed my dad just as surely as it killed her. Ann wasn't the first—oh no. But she'll be the last. Yes, she'll be the last, Neil."

For a moment Neil's hand rested gently on the other's shoulder.

"I'm sorry, Tiger," he said, and was conscious of the inadequacy of the remark. "I just don't know what to say," he ended lamely.

A faintly ironic smile played round the corners of Trent's pleasant mouth.

"It's your duty to go and tell the C.O. that he's got a couple of men waiting to kill each other," he said. "Give him a chance to tell us how foolish we are."

Neil ignored the bitterness of the words and patted him affectionately on the back.

"Come and get a drink instead," he suggested. "It'll do you good—do me good, too," and as far as he himself was concerned, Neil felt he had never spoken a truer word or experienced a more urgent need.

And as they walked in silence across to the mess Neil mentally resolved that, whatever the circumstances, whatever the conditions, he would fly with one eye on Trent's tail in the future. DESPITE the fact that the remainder of the night passed in peace, the whole of Britain's vast defence organisation remained on duty, for everybody, from the child in the East End to the Secretary of the Air Council, believed that this first raid was but a small "feeler" for the great armadas that were to follow.

That a number of enemy aircraft had penetrated the defences to the south of London, dropped their bombs, and made good their escape, was proved when the kite balloon listening-posts out at sea reported aircraft travelling at a high altitude in an E.S.E. direction. Several squadrons from the Coastal Command were patrolling the area, but, like the fighters, they had little chance of locating their quarry in the dark. In fact, a later comparison of reports showed that two squadrons passed within a few miles of the raiders without seeing them.

As dawn approached, millions of newssheets were rushed through to the waiting masses, and London made the surprising discovery that only small areas had suffered. No gas had been dropped, no thermite bombs even. A number of high-explosive bombs with incredibly violent destructive power had fallen; sixty-three civilians had been killed and a hundred and seventeen injured, but in actual damage to life and property the raid had been little worse than those of 1017.

The terrifying consequences of air attack; the wholesale slaughter by gas; the nightmare vision of a burning city, it seemed, was just so much morbid pessimism.

## CHAPTER VII Parachute of Death

THAT was the first raid. Bad enough, but hardly what had been expected. And London shook itself and smiled with new confidence—new hope. For had not twenty-one of the enemy machines been brought down before they had even reached the balloon aprons? Had not the defence squadrons turned the raiders back and chased

them far out to sea, finally scattering them?

Well, that is what the reports said. That is what the newspapers and the Air Ministry said. And London congratulated itself.

At Kenley the following morning, immediately after the first working parade which had taken the place of Colour Hoisting Parade, there was a rush to scan "D.R.O.'s" and "Casualty Forms" on the notice-board outside the orderly-room.

It was with something of a shock that 900 Squadron learned that both Blake and Fisher of "A" Flight had succumbed to their injuries during the night.

The news brought home with startling reality the grim, awful finality of the game they were playing. Both were old pilots of 900 and well liked in the mess and in the flight sheds. Throughout the morning, the Squadron went about its duties with a quiet, thoughtful frown which presently changed to a grim, earnest desire that was admirably expressed in the words of one, L. A. C. Adams.

"Blimey," he muttered. "Poor old Fishy, copped the first packet. Let's ope the ——s come to-night."

Thus was born the thirst for vengeance. The whole of the morning was occupied in examining thoroughly every aircraft in the Squadron in an effort to locate the strange whistling that had so confused orders the night before. Nothing was discovered. Aircraft were taken up separately and tested, and again by flights and tested, and finally, the whole squadron took the air, and still nothing Communication, both was discovered. inter-'plane and with Signals, was established. Nothing had apparently been altered, yet the wireless of each aircraft now functioned perfectly. The thing was a complete mystery.

Numerous explanations were put forward to account for it in the mess during lunch. Mostly they were flatly ridiculous; some deliberately, as for instance, Jackson's "solution."

"What struck me was that the noise got louder each time that I edged nearer to Sheer-luck," he declared. "I thought it was his prop. coming off at first, but afterwards I came to the conclusion that it was his teeth chattering. With the cold," he added quickly as Sheerluck picked up a book and poised it threateningly.

"A thought is about the only thing that would strike you in a fight," said Sheer-luck maliciously. "You'd be too far away for anything else."

As Jackson was one of those who had lost contact with the Squadron before their engagement with the enemy and had returned to the 'drome an hour after everybody else, the thrust sent a snigger round the mess.

As Trent and Sheer-luck stood on the tarmac after lunch they were approached by Corporal Weston of "C" Flight.

"I've got something 'ere what you ought to know about, sir," said Weston.

He glanced towards Sheer-luck as though hesitating to speak before another. Trent caught the glance.

"That's all right, Corporal," he said. "What is it, anything wrong?"

"Yes, sir. Y'see, I was shifting your 'chute—the 'chute that was in your cockpit——'

"There was no 'chute in my cockpit," said Trent.

"Well, there was, sir," Weston persisted. "I was just shifting it when I noticed the ring sticking out, y'see, an' when I touches it, it comes right out."

He held out the ring.

Trent and Sheer-luck stared at it in silence. Certainly it was the ring of a parachute, and attached to it were some six inches of cord, but that was all. The end had been cut—neatly, deliberately.

Weston paused a moment before continuing: "I was lookin' at it when Mr. Baxter comes up to me——"

- "Came up to me," corrected Trent.
- "No, to me, sir."
- "All right." Trent acceded the point. "What happened then?"
- "Well, Mr. Baxter says to me: 'Everybody 'as to leave their 'chutes in their cockpits, Corporal, understand?'

Well, I didn't know, so I says 'Yes,' y'see."

"Did you show Mr. Baxter that?" asked Trent quickly, pointing to the ring.

"No, sir. I 'adn't made up my mind about it, y'see."

Trent pondered a moment.

"Look here, Corporal," he said at last. "Leave this with me. Say nothing about it to anyone—not a word. You understand? Whoever did this will be watching the aircraft; maybe we'll catch them."

"Yes, sir. S'right, sir. I'll keep away from your 'kite' an' forget it, y'see."

At a nod from Trent he saluted and passed back into the hangar.

For a long while Trent and Sheer-luck stood staring at the 'chute-ring and inspecting the cut cord. Then Sheerluck met Trent's gaze and a faint amusement flickered across his face.

"Y'see?" he said.

Trent failed to respond to the smile; instead he nodded slowly.

"Yes—I see," he replied. "So that's how things are, is it? If I'd been shot down, I was to have no chance of saving my neck."

"Probably worse than that, Tiger," Sheer-luck suggested calmly, "I rather imagine that whoever fixed your 'chute intended to shoot you down during the next raid. Not shoot to kill, of course, that would be too crude. Just disable your machine. You would have snatched that ring, found it loose, and dropped it as you searched for the rest of the cord. That ring doesn't belong to your 'chute at all. The ring to your 'chute is probably still inside the case, but you wouldn't be able to get it out until the case burst, and it wouldn't burst until you landed. Accidental death—'chute failed to open -easy, isn't it?''

Trent gasped at the amazing ingenuity of the plot. That Sheer-luck's explanation was correct he had not the slightest doubt. Strange, he reflected, that Sheer-luck, with all his innocent simplicity, should have hit upon the explanation to such a subtle scheme as this.

He watched his companion closely as

he spoke.

"You seem to know all about it, Sheer-luck," he remarked.

"Seems obvious enough to me," Sheer-luck shrugged. "But who did it, that's the question?"

Still, Trent was not quite satisfied.

"I've my own ideas about that," he said quietly, "and, by the way, you were in the hangars this morning, Sheer-luck; mind if I ask what you were doing?"

Sheer-luck laughed easily.

"Looking for a whistle," he said.

As he turned away, Trent took his arm.

"One moment, Sheer-luck. What I said to Corporal Weston about keeping this mum goes for you, too, understand?"

"Oh, perfectly—perfectly. My one virtue is discretion !"

"Yes, I should rather imagine it was," said Trent quietly.

THROUGHOUT the afternoon, Trent found himself watching Baxter with an interest that he felt would surely arouse the man's suspicions. Even during the squadron patrol, when the whole squadron took the air, his eyes continually flashed from the tail-plane on his starboard side across to the opposite wing of the formation, where Baxter trailed Thorny Rose.

During the flight, he inspected his 'chute and with something of surprise found it was precisely as Sheer-luck had described. The original ring was jammed inside the case in a way that would make it practically impossible to get it out during a drop.

After dinner, he drifted around until dusk, watching from the security of the watch-tower the few who, with special passes, were allowed to leave camp for a few hours. An hour after darkness, his patience was rewarded as the heavy, powerful figure of Baxter strode through the gates and was lost in the darkness of the blacked-out streets.

Two minutes later, he was mounting the steps that led to the officers' bunks over the mess, when he almost collided with Sheer-luck.

"Hullo, going out?" he asked, eyeing the gloves and cane.

"Just a stroll," Sheer-luck answered.
"Fetch me if the dear old United turn
up."

• "Yes, I will," Trent said, and passed on. At the top of the stairs he leaned over the rails and called softly: "Don't lose your whistle, Sheer-luck."

Trent's spirits rose. The two men he most wished out of the way had both obligingly gone out. With a cautious glance along the verandah, he walked casually towards Baxter's room, paused, and fell heavily against the door. As he had expected, it was locked. Again he bumped, harder this time. The door shook and opened.

Apparently the sound had disturbed no one and, hurriedly closing the door, Trent began a methodical search of the room.

Ten minutes he spent alone before he heard footsteps on the stairs. Then, slipping out on to the verandah, he saw Neil's head in the soft glow of the painted lamp.

"I say, Neil, just a minute," he called, and as Neil approached, he continued in a subdued whisper: "Come in here. Never mind what made me come in, but just take a look at this."

Neil took a look, and another, and then he whistled. In the centre of the floor lay Baxter's parachute with the case wide open. But no swelling profusion of silk filled the room; instead, a neat electrical arrangement, similar to a small wireless set, stood exposed, and trailing from it were two leads obviously intended to fit the generator switch of a Hurricane.

"By Jove, man. Can you beat it?" Neil fingered the set. "Here, I say, this is serious. Grey must know about this. What the devil did he use it for?"

"Can't you see? He could jam our signals—isolate the Squadron and at the same time contact the raiders. Relay all ground signals to them. That's why they didn't bomb that imitation town on the hills—that's why the Wings didn't get them; they were warned of our movements."

"He could have done that with the

set in the machine or from the ground. Why should he take the risk of using this?" Neil objected.

"He'd be detected in no time on the ground," Trent explained, "whereas the last place to be suspected would be a squadron in action. I expect this thing radiates a beam that they could follow, so he would have to be in the air. Whatever it is, our job is to get him."

If Neil and Trent were amazed, Wing Commander Grey was astounded. He paced his office with a jerky, agitated step, pausing every now and then to stare at that sinister-looking 'chute.

"Good Heavens!" he muttered. "To think of that rat living here among us. Well, it won't take long to round him up, anyway. I'll get on to Intelligence and Scotland Yard immediately. Leave this thing here, and you'd better not say too much about it; we don't want this in the Press. We'll get him all right."

But for once in a way Wing Commander Grey was wrong. When Baxter did return he did so in his own way, and left again with the aid and best wishes of the aerodrome staff.

## CHAPTER VIII

## The Coming of the Armadas

It was shortly after eleven o'clock that night when the first listener clutched excitedly at his grips and whistled at the volume of sound.

Within a minute, the position of the approaching raiders had been plotted, and the maroons and factory sirens were screaming their warning. Althost at the same instant, the naval guns laid their deadly barrage of bursting shells round the coast. The sky to the east was lit with thousands of flashing stars that appeared from nowhere, hung a moment like rapidly expanding opaque balls, and were swallowed up in the darkness.

From the land batteries, massive rockets soared twenty thousand feet into the air, lighting up the sky until the whole heavens seemed to be ablaze over the Channel. Certainly, if any aircraft had

come within that range of light the waiting gunners could not fail to have detected them. But they did not come into that flaming, tortured area. And still the thunderous roar continued, audible from the ground by ear now during the lulls between gunfire.

As though controlled by a master hand, the firing ceased, all except the light rockets. Then a hundred search-lights reached tentatively into the darkness, their peaks lost in the vacant upper air. A low moon hung just above the horizon as if peeping over to see what all the bother was about while, far above, the stars glittered needle-bright in a naked sky. And still that mighty, menacing roar rolled on, challenging the light rockets to reach the tremendous height at which the raiders were travelling.

Hardly had the message—"E.A. square E. 91. 24,000. Proceeding N.W. by W.," been flashed from Air Defence Control Room at Adastral House, than four mixed squadrons of Super Furies and Gloster Gladiators, comprising the 12th Wing of No. 5 Group, were clawing savagely for height, while twenty miles away, on the inner edge of the outer defence ring, flight after flight of Spitfires and Fairey Feroces deafened the population as they took the air and linked up with neighbouring Wings.

On the 'drome of 900 Squadron, Trent grabbed at Neil's arm as he passed.

"The C.O. leading?" he asked, and as Neil nodded in the dim light, Trent went on: "How about Baxter, what's he doing about him?"

"It's all right," Neil replied hurriedly. "Grey's put Stennings on the gate with a double guard; they're arresting him the moment he comes back. No explanation, of course, just orders to arrest him and hold him. No need to worry, they'll fix him."

"If he comes back."

Less than five minutes after that short conversation, Baxter slipped through the hedge at the back of the mess and, keeping to the shadows, made his way on to the aerodrome. Calmly walking in on a group of surprised fitters, he ordered his machine to be got ready immediately.

As nothing was known to them of the earlier incidents of the evening, little notice was taken beyond the usual comments among the fire picket on 'drome duty. It was only after he had left and an orderly from the guardroom had strolled casually over to the flight sheds to inquire about him, that the amazing audacity of the coup was discovered. Frantic signals were dispatched to Wing Commander Grey, warning him of the circumstances but, once in the air, little could be done towards arresting the man.

WITHIN minutes of Trent's conversation with Neil, the Squadron had shot away by flights down the beam of an Aldis-lamp, screamed up to a thousand feet, and flattened out to gain formation and adjust oxygen supplies. Then on again and up, to where the air was clear and cold, to where the searchlights traced a nebulous pattern of their own.

Star-shells and parachute flare-rockets were filling the sky, hanging like balls of flame at ten thousand feet, and dying long before they fell to earth. Inside this ring of flashing light, Grey and his formation circled ever upward, their eyes straining to catch a glimpse of the enemy.

Far above, a pair of searchlights picked up a huge formation. Immediately, half a dozen other lights swung over and focussed on the machines, but in the first glance they were recognised as Supermarine Spitfires racing east in the hope of intercepting the raiders. They well knew that the safety of millions of people below now depended upon the Air Force. Well, they had watched for this night, waited for it, trained for it, and now it had come, and a hundred men in the skies above London gritted their teeth and prayed that the moon would rush up and betray the enemy.

But the moon is no respecter of nationality; and it crawled stealthily into the sky, indifferent to the needs of men.

A sudden, belching brilliancy to the

north over Enfield told that some, at least, of the defence units had contacted an enemy, but whether it was a chance shot from an A.A. gun or not was impossible to tell. After the flaming wreckage had burned its way to earth, the night sky again took on its nightmarish complexity of probing searchlights and bursting light-shells.

So far no bombs had been dropped, and the continual instructions issued over the radio to the people, warning them of the enemy's approach on different districts, served rather to hold the population in a state of terrified anxiety than to comfort and warn. It is possible that this playing on the morale of the people was the object of the raiders; if so, it was a very effective method of terrorising the masses without actually slaughtering them. It is more probable that, once through, they were determined to paralyse the city by striking at its weakest points, and those weakest points would be the workers.

But this game of hide and seek between groups of aircraft of such vast numbers, with a thousand searchlights raking the sky, could not go on indefinitely in the limited space over the city. Something had to happen, and it did.

It began when Grey suddenly spotted a series of spurting exhausts ahead and slightly below. A more careful scrutiny convinced him that those exhausts were not of the familiar colour caused by the special fuel of British engines. Every man in the Squadron was now peering intently, hopefully at that indistinct blur of light.

Vaguely at first they saw them, in silhouette against the floor of starshells below, moving steadily across the sky like a dark, sinister cloud. Coming round behind in a wide sweep, they could see them easily now, their exhausts tracing a glowing arrowhead.

By now, the first bombs were falling, and a sickening fury seized Trent as each fresh glow stabbed the dark abyss beneath. He thought of women and children cowering in terror, surrounded by the grisly evidence of the

fearful destructive force of modern weapons. Of voluntary fire-fighters, ambulance workers, and rescue parties struggling frantically among the awful chaos of wreckage; of the dread with which they paused in their ghastly task to listen for the dreaded gas warning. And of the hundreds of fighting men up here searching vainly, helplessly for their foe. For the first time in his life he found himself getting excited, muttering to himself:

"Go on, Grey. For the love of God, go on!"

Closely watching those shapes ahead and below, he saw the whole fleet swerve suddenly, and marvelled at their accuracy and timing. Despite the mixed nationality of their pilots they had obviously little to learn about formation night flying. Probably, Trent reflected, their whole strength depended on their ability to keep formation, and without a leader most of them would be helpless. Did Grey know that? Was he manœuvring for position dead over the tip of that giant arrowhead?

Again Trent was muttering to himself. "Grey! Grey, man. What are you waiting for?"

But Wing Commander Grey knew his job and did not intend to be rushed into a trap and annihilated before help could reach them.

Anxious eyes were strained on that vague cloud. Hands clutched grimly at control sticks. The world, it seemed, waited and watched with bated breath. Minutes that were years passed, and hands became impatient and moist with the tension.

At last Grey seemed to have reached a decision. Fearing that a concerted dive would cause the enemy to break formation and escape in the darkness, he first fired a white Very light to bring the searchlights to his aid.

By that dim light the Squadron distinguished the tail end of a vast formation of enemy bombers less than five hundred feet below them. Instantly, the spot became the focal point for half the searchlights in London.

Then the Hurricanes were diving—

clean at the very peak of the raiding formation—eighteen screaming demons falling with concentrated fury on an enemy nearly five times their number.

Next instant, the sky was rent with vivid flashes. A dull rumble rolled over the city, and swelled until the whole vast expanse of heaven was filled with a roaring, blasting distortion of sound and lurid, living flame.

Long before the shattering roar had been heard by the masses, a battery of searchlights had added to the awful unreality of the scene. Hundreds of them poured their beams on the spot, turning night into day.

Bombs were falling now in a shattering cascade, but without aim, as though the men who dropped them were anxious to be rid of their load.

Once the raiders had been located, ground signals were ignored; each squadron was determined to get in its blow. Excitement ran to fever pitch, yet wings retained the rigid formation that circumstances and the darkness demanded.

And as if in answer to Grey's silent prayer, a huge formation of Spitfires and Gladiators tore in upon the scene of combat, sent down a shattering wave of lead, and swept up out of danger, still in perfect formation. Hardly had their guns ceased firing than a second formation followed, and yet a third, until it seemed the very sky was pouring down aircraft in thunderous waves on the luckless group of invaders.

Small flights of invaders struggled to dodge the searchlights and to avoid those invincible massed dives, but always, it seemed, a squadron was waiting above for just such efforts, and would fall on the escaping flight with a deluge of concentrated fire that no aircraft could withstand.

## **CHAPTER IX**

## The End of an Assassin

THE result of that night is now history. Everybody knows how the battle developed into a wholesale massacre that only thirty-one enemy machines

escaped. How squadron after squadron fell with merciless, relentless regularity on the remnants of that mighty armada. How the R.A.F. that night showed their fangs and took a terrible toll that will stand for all time as a lesson to the World.

How the masses of Europe, shocked into sanity with this sudden tragedy and fearful of the terrible reprisals that would inevitably follow, turned on their leaders with all the bitter hatred they had previously shown to England; whilst England herself counted the loss of the war indemnity a small price to pay for the safety of the old order of individual states that emerged from the ghastly revolution that swept away the United States of Europe.

But all this was to come later, and it was with grim forebodings of what the future might hold that the battered remnants of 900 Squadron, its fuel almost exhausted, gathered that night into some semblance of a formation and withdrew from the arena.

Trent gazed around at the pitifully small number of machines, scanning each in turn to determine who had escaped and who was missing. caught a glimpse of a Hurricane hard on his tail. That would be Sheer-luck squeezing in for safety. He banked and ruddered slightly to get a better view, and at the same instant the stunning crash of multi-guns directly behind him, and the splintering crash of his cockpit cover, startled him with its awful suddenness. His machine shuddered violently as the engine, freed of its restraining propeller, rose to a vibrating scream.

He cut his switches and wheeled round in a savage bank. As he did so, the dark shape of the Hurricane that had been so close swept by, rolled over, and fell into a tight spin. Behind it and slightly above, another Hurricane loomed, sweeping round in a series of majestic circles. Even as the truth dawned on Trent, Neil's voice came to him through his 'phones.

"Neil calling Trent. Neil calling Trent. Baxter was on your tail, are you O.K.? Over."

Unable to reply by wireless, Trent waved from the open roof of his cockpit, and followed Neil in his circle round the spinning craft.

TEN minutes later, the two men were gazing at the tangled mass of Baxter's machine.

"You were lucky to get down like that without a prop.," Neil was saying. "I couldn't warn you, there wasn't time. He was bang on your tail when I spotted him. I got suspicious when I noticed him creeping up on you; then I saw his number. Well, he didn't get you, and that's all that matters."

"No, he didn't get me," answered Trent slowly, "and I didn't get him either." He paused awkwardly, then his hand went out: "Thanks, Neil," he said quietly.

"That's all right, Tiger." For a moment Neil seemed embarrassed. "I don't know where we are," he said casually, as though anxious to change the subject. "Looks like a common or a park—listen—there's somebody else landing. Grey, perhaps." But as the machine touched down, he added: "There's only one man who could land like that without killing himself."

Standing in the dimness by the crash, they watched Sheer-luck approaching and stared in amazement at the automatic pistol in his hand.

Then Neil spoke.

"It's all right, Sheer-luck," he said.

"Neil and Trent here."
Hastily, Sheer-luck slipped his pistol

into the knee pocket of his flying-suit.
"Hullo, Neil. Hullo, Tiger," he
grinned. "Glad you're safe. Rough
trip, eh?" He nodded at the still

figure stretched at their feet. "Dead?"
Neil and Trent stared hard at Sheerluck, for the voice was not that of the
man they knew. There was a crisp
precision about it that was new to them.

"Yes, he's dead," said Neil. "I had to open fire on him—he tried to get Tiger."

"Yes, I saw it. I've been following him. He got off the 'drome before I could get down."

Trent eyed him curiously.

"Why the gun, anyway, Sheerluck?" he asked.

"Gun?" said Sheer-luck. "Oh, I wouldn't be without that. It's an immense comfort to me sometimes." He bent over the body of Baxter as he spoke and ran swift searching fingers through the pockets. "You know you've saved him from a firing squad, I suppose," he continued. "And, incidentally, finished my job for me, for which I'm duly grateful. I don't like flying. Too dangerous—much too dangerous."

Neil and Trent gazed at each other in blank surprise.

"Just a minute, Sheer-luck," said Neil. What are you talking about? What do you know about Baxter?"

"Quite all right, Neil. Quite all right. I know all I want to know about him now," answered Sheer-luck, straightening up and pocketing a package of papers. "I may as well tell you now that we've known for some time there was an enemy agent at Kenley. We narrowed it down to your squadron, but just who it was we couldn't discover. So we've been watching every one of you, waiting for somebody to make a slip. Just one slip. And Baxter made it when he interfered with your 'chute, Tiger, for the ring he used was out of his own."

"Then you knew about his 'chute?"

enquired Trent.

"Yes, I had a look at it just before you broke into his room. That's why I went after him, but he gave me the slip.

A great light suddenly dawned on Neil, and he turned to Sheer-luck.

"Intelligence Officer, eh?" he said quietly.

"Yes. Intelligence, Neil."

"Good lor!" Neil's customary imperturbability seemed to have deserted him. "Did Grey know about you?" he asked.

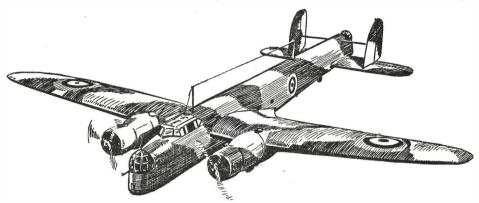
"Certainly not!"

"Secret Service," Trent muttered. "Well, I'll be hanged!"

"Oh, no." Sheer-luck seemed to be enjoying himself. "But you might very easily have been, Tiger. Yes, you might very easily have been."

## ROYAL AIR FORCE EQUIPMENT—

Modern British Warplanes which have been Adopted



## THE ARMSTRONG-WHITWORTH WHITLEY III

THE R.A.F.'s fastest heavy bomber, the Whitley III has a top speed of 215 miles an hour at a height of 15,000 feet and a normal range, in still air, of 1,500 miles. A mid-wing type of cantilever monoplane, its normal crew comprises pilot, second pilot (who also acts as navigator, front-gunner and bomb-aimer), wireless operator, and two gunners. There is a rotatable gun-turret in the nose, and a cat-walk inside the fuselage leads to another gunturret in the extreme tail. Aft of the trailing-edge of the wing there is a third gun position, in the form of a retracting cupola, or "dustbin" which

can be lowered to project beneath the fuselage floor. A heavy bomb load is carried internally in a false floor-bottom and also in the wings, the apertures being normally kept shut by spring-loaded trapdoors.

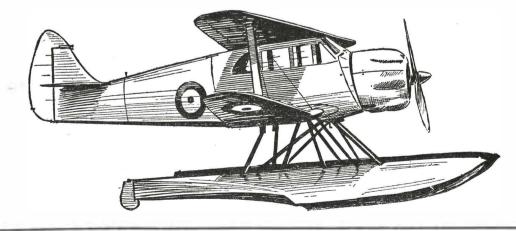
Power plant comprises two 805-h.p. Tiger radial engines, giving a cruising speed of 184 m.p.h. Landing speed is about 60 m.p.h., and the service ceiling 19,200 feet. Principal dimensions are: span, 84 feet, length, 69 feet 3 inches, height, 15 feet, and loaded weight is 21,660 lb.

## THE AIRSPEED QUEEN WASP

THE R.A.F.'s latest type of wireless-controlled target aeroplane, the Queen Wasp, is built by Airspeed Ltd., of Portsmouth, and is a larger and more powerful craft than the earlier de Havilland "Queen Bee "target 'plane. A single-seater cabin biplane, the Queen Wasp is of wooden construction, and mounts a 340-h.p. Armstrong-Siddeley Cheetah radial engine. The fixed undercarriage is designed to carry either a pair of floats or two "spatted" wheels, so that the machine may readily be converted into either seaplane or landplane form. A

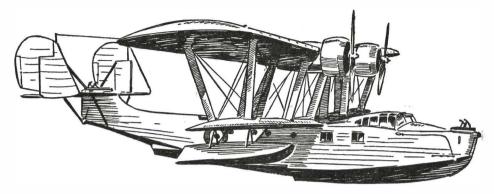
fixed-pitch airscrew is fitted, and camber-changing flaps in the trailing-edges of the wings contribute to a low landing speed.

No details of performance or equipment have yet been divulged, but the machine is stated to be considerably faster than the Queen Bee, and likely to prove a far from easy target for the Navy's anti-aircraft gunners. Chief dimensions are a span of 31 feet, a length of 29 feet, and a height of 13 feet. Loaded weight is 3,550 lb.



## -PRESENT AND TO COME

for the Use of Britain's Expanding Air Force



## THE SARO LONDON

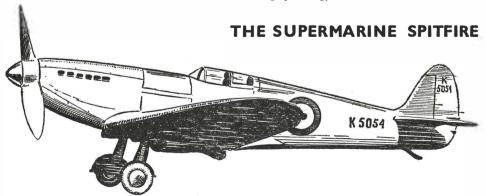
A TWIN-ENGINED open sea reconnaissance type of flying-boat, the Saro London is a product of the Saunders-Roe works at East Cowes, and forms the equipment of several R.A.F. squadrons. Largely of metal construction, the roomy hull has a gunner's and bomb-aimer's cockpit in the extreme bows, aft of which is an enclosed compartment for two pilots. Behind and below this comes the officers' wardroom with two bunks and the navigator's table, then a compartment for the engineer and wireless operator, followed by sleeping and living quarters for the crew, complete with cooking-stove, ice-chest and crockery cupboards. A midship gun position, with Scarff ring,

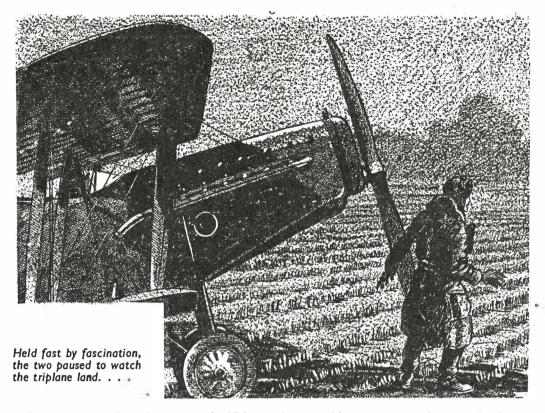
is above the galley, and there is a third gun position in the extreme tail between the twin rudders. Space is also provided aft for the stowage of a collapsible dinghy, spare airscrew, and engine maintenance platforms.

Driven by two 820-h.p. Bristol Pegasus engines, and with an all-up weight of 18,400 lb., the London has a top speed of 155 m.p.h. at 6,500 feet, lands at 64 m.p.h. and has a service ceiling of 19,900 feet. Five of these craft, standard in all respects, and belonging to No. 204 Squadron, R.A.F., are at present engaged on a 30,000-miles' formation flight from England to Australia and back.

CLAIMED to be the fastest military aeroplane in the world and adopted by the R.A.F. for early issue to its fighter squadrons, the Supermarine Spitfire owes much of its remarkable performance to the experience gained by its makers in the design and construction of high-speed seaplanes for the Schneider Trophy contests. Of particular interest is its flush-riveted stressed-skin method of construction, which gives the wings and fuselage exceptional cleanliness and strength for a structure weight lower than any previously attained in this class of aircraft.

A retractable undercarriage and split trailing-edge flaps are fitted and the power-plant is a Rolls-Royce Merlin engine developing 1,025 h.p. at 16,250 feet. The pilot is accommodated in a glass-enclosed cockpit, access to which is gained viâ a sliding section of the front covering. The Spitfire is a day and night fighter, and carries several fixed machine-guns. Its speed, known to be well in excess of 300 miles an hour, is a closely-guarded official secret, and the only information yet released concerning its dimensions is that it has a wing-span of 37 feet.





A Dramatic Story of War-time Adventure in a Bristol Fighter Squadron by a Writer whose Pen-name Conceals the Identity of an R.F.C. "Ace" with Twenty Victories to his Credit

## By O. P. F. LANDERS

### CHAPTER I

## The Unmentionable Bristol

N Major von Hagen's opinion there was no sport like shooting down Englishmen. Next to that he favoured chess.

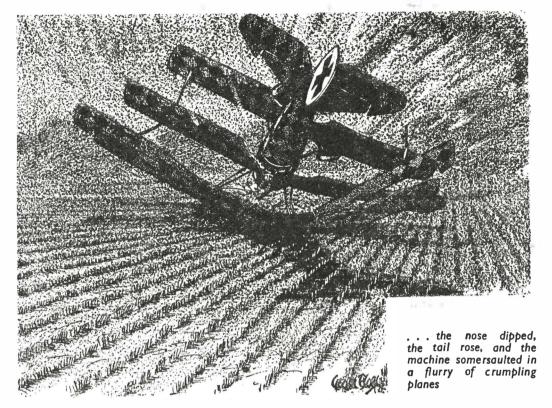
Both pastimes, so he found, admirably suited his cold, clear intellect. His skill as a killer was proved by the decorations on his faultlessly fitting tunic; his fondness for the chequered board found expression in the black and white squares which made his Fokker Triplane hardly less conspicuous than that of the Red Baron himself.

At seven o'clock, however, on this January morning, the Major found himself disgruntled. He barked for his servant, demanded coffee, and fell to brooding.

Three weeks had passed since his last kill. Three interminable weeks of abominable weather and exasperating mishaps. Sipping the coffee, he reviewed his grievances—the luscious R.E.8 over Cambrai, which escaped because both his Spandaus jammed at the critical moment; the lone D.H.4 near Lille, which had proved to be acting as bait for a singularly offensive S.E.5; and, finally, the Unmentionable Bristol near Arras, which had actually had the audacity to round on him and shoot half the Maltese cross off his rudder.

Pricked beyond endurance by the memory of that outrage, Major von Hagen sprang from his bed, bellowing for hot water.

While he shaved, sweeping the razor with swift strokes over his firm jaws, the Major found his sombre views grow



## BAD MEDICINE

When a Lone Patrol Meets a German "Ace" who is Notoriously "Bad Medicine" for Stragglers, the Best Way to Avoid a Fatal Dose of Spandau Lead is to Shoot the Doctor

brighter. Something seemed to be telling him that to-day his luck would change.

The weather, of course, still baffled all description, but, he mused, there was a chance—just a chance—that some verdammter Engländer would be taking the morning air. A stray Camel, perhaps. He liked Camels. They always burned so satisfactorily. Or even a Bristol.

His toilet completed, he surveyed himself in the mirror, smiling with satisfaction at the spruce, trim figure which it showed, then collected his flying kit and opened the door of his quarters.

Freezing drizzle whipped his face, and he stood on the threshold to address the skies in terms which, if words could have fulfilled his wishes, would have changed the gentle rain from heaven to a deluge of fire and brimstone upon every British aerodrome in Flanders.

Almost, then, he gave up hope, but the nagging memory of that Unmentionable Bristol stirred the anger within him afresh.

The clouds might clear about time o'clock, and there was a chance—just a chance. . . . Some straggler, perhaps, who had lost his formation.

As he passed out into the wetness and blackness, Major von Hagen licked his lips as though he were licking blood.

THAT same chill rain, sweeping across desolate fields, was hissing against iron walls when Second Lieutenant Fare, R.F.C., woke up.

For a moment he blinked at the bluegrey light which filtered feebly through the squares of oiled fabric that served as windows. It all seemed familiar yet strange; familiar because at home he had slept for many months in Nissen huts; strange because he could not at first remember where he was.

When memory returned it came with a flash, and he sat up so suddenly that his camp-bed groaned. From the opposite corner of the hut there rang out an ear-splitting peal of piercing yaps. Three other beds creaked, three heads emerged, snail-like, from sleeping-bags, and three voices joined in a sulphurous chorus of comment. The yaps died down to strangled snorts as an unseen hand gripped the protesting muzzle.

"Sorry," said Fare contritely. "Didn't mean to wake everyone up."

A match spluttered and was held to the wick of a candle which weltered in its grease on an upturned box. The light, wavering in eddying draughts, revealed a tousled mop of carrot-coloured hair, and a round red face now split by a cavernous yawn. The yawn ended with a click, and the apparition spoke.

"Morning," it mumbled. "You're Fare, aren't you?"

"Yes."

"Thought so. They told us you were expected from the Pool yesterday, but you were sleeping like a log when we rolled in last night. Been having a spot of dinner in Boulogne. Didn't get back till late."

Another alarming yawn made speech impossible. Fare watched the performance with fascinated eyes, wondering whether or not the gape would reach to the ears. Again the jaws clicked and the speaker continued, while a hand waved vaguely towards the far end of the hut.

"Permit me to effect introductions. The gentleman with the hound—or the bloke with the tyke, if you prefer it—is a notorious cardsharper who calls himself Sherman. Never play poker with him. The other bad hat—the one with a snore like a rusty saw—is known hereabouts as Rackham. He is one of Sherman's confederates, and poses as an observer. In fact, on occasion they may be seen flying together—purely for the sake of

appearances, of course. You would be well advised to lock up your silk socks whenever you leave the hut."

A voice hissed in the gloom.

"Seize him, Cocker!"

With a torrent of canine challenges, and a scrabbling of claws on boards, a mongrel like an animated mat leapt into the light thrown by the candle. The vaguely waving hand reached down lazily and offered itself to be bitten. The front end of the mat rested two paws on the bed, while its stern vibrated and wriggled in an ecstasy of friendliness.

Chuckling, Fare drew his knees up to his chin.

"And you?" he prompted.

"Eh?"

"You. Your name, I mean."

"Oh, me. My name's Stubbs—a very old, and very distinguished Anglo-Norman name. My ancestors came over with Hengist and Horsa, and stayed until somebody noticed them; after that they sneaked in with William the Conqueror, only to get turfed out by the Customs at Dover; in nowise discouraged they smuggled themselves . . . but why ask me all these questions? The only thing which matters, my good Fare, the one outstanding point upon which hinges the whole of your astounding good fortune, is this—that I, Wilfred Aloysius Stubbs, have been appointed, by special request of G.H.Q., to fly with you, guide you, and protect you against all the manifold dangers---''

"You mean," interrupted Fare, "that you're going to be my observer?"

The red head nodded gravely.

"I have accepted the appointment," Stubbs admitted with simple dignity. "I have agreed . . . oh, hell!"

THE crash of the opening door cut him short, and a blast of icy air blew the candle out. Looking up, Fare saw a tall, lean, black silhouette outlined against the morning greyness. Although he had only seen Frampton, his flight commander, for a few minutes on the previous evening, he at once recognised the intruder. The door slammed shut, and

again a match flared close to the candle's wick.

Leather-clad, helmeted, and glistening with tiny raindrops, Frampton beamed around him, while Cocker, the mongrel, sniffed joyously at his fleece-lined boots.

"Well, well," he observed genially. "So the little birds are already stirring in their nests."

"Tweet, tweet," piped Stubbs from under his blankets.

Frampton rubbed his gauntleted hands together.

"Soon," he announced, "we are all going to fly away together."

A red head shot up as though propelled by a spring.

"Fly?" croaked Stubbs.

"Fly," affirmed Frampton gently. "In aeroplanes. Leaving Mother Earth at nine ack emma precisely. According to the Met. people it's going to be a nice, bright, sunny day by then."

"Hell!" breathed Stubbs bitterly, and disappeared once more from sight.

Frampton turned to Fare.

"I came along myself," he said, "because I wanted to ask how you feel about joining the show this morning. It isn't usual, of course—in fact as a rule a newcomer has got to do a few specimen landings and so forth—but I've been going through your log-book, and I see you've already done something like fifty hours on Bristols, so you ought to be all right. For Mike's sake, though, don't think you've got to come if you feel you'd sooner spend a day or two learning the country. So far as this morning's show's concerned you can please yourself and nobody'll care a damn."

"What about me?" demanded Stubbs, suddenly reappearing.

Frampton regarded him thoughtfully.

"I should have said 'Nobody who matters,' "he corrected. "Well, Fare, what d'you say?"

Already Fare was out of bed and hunting for his razor.

"T-thanks awfully," he stuttered through chattering teeth.

Stubbs moaned.

"I've got a cold coming on," he wailed. "My rheumatism's crool bad.

My chilblain—I call him Bursting Bertie, and I've had him for years . . . ''

He ceased abruptly as Frampton picked up his kitbag and emptied it over his head. The flight commander was still smiling as he turned to Fare again, but his tones were brisk and businesslike.

"Good enough," he said. "Come along to my office in 'A' Flight hangar as soon as you've had a spot of breakfast. Stubbs'll show you where it is. There's a pretty good 'bus you can have and we'll go over the maps then. Meanwhile just keep our squadron motto in mind——"

"What's that?" asked Fare.

"' Never straggle.' In other words, stick to the formation like a bobby to a burglar. There's a blighter buzzing about these parts in a black and white Fokker Tripe. He's bad medicine for stragglers, that chap. Damn bad."

## **CHAPTER II**Bad Medicine

WHEN the patrol left the ground at nine o'clock, the sky overhead was a washy blue, and watery sunshine was seeping through the higher mists. Away to the west and south, however, grey clouds still trailed their mantles of rain, and the speed of the wrack showed that a south-westerly gale was blowing in the upper reaches.

Eyeing the wrack, as he led his formation of three, Frampton wondered whether he had been wise to take an inexperienced pilot on Offensive Patrol on the very first morning after he had joined the Squadron. All the same, he reflected, the youngster's unblemished log-book proved that he could fly a good bit better than most, and with Stubbs in his 'bus he could hardly get lost if he tried. Also, with Sherman and Rackham on the other flank, not a Tripe in the sky would have a chance to take them by surprise, rain or no rain. He was glad, though, that he had only brought the three machines, instead of following the usual practice of perching the newcomer away back on the tail of a diamond four. A compact little group, the three. A diamond took some holding.

### AIR STORIES

Reassured in his mind, Frampton turned south at five thousand feet and headed for Lens. In the back of his machine his veteran observer—Williams by name, and known as William the Silent—kept alert guard over the east, while also watching how Fare was keeping formation. Not too badly, he decided. Close together, and climbing steadily, the three Bristols soared over Lens and crossed the lines.

It did not begin to sleet until they were nearly ten miles over. As the first icy pellets stung his cheeks, Frampton looked up and swore without heat at the drifting cloud overhead. Quite a small cloud, it was, and scarcely worth bothering about. Five minutes would see them past it.

The judgment was sound, and, ninetynine times out of a hundred, would have been justified by events. This case, though, was the hundredth, for coincidence intervened.

In a loosely-linked bunch, five Pfalz scouts suddenly loomed down through the murk. One glance at their idly twirling propellers told Frampton that they had not meant to attack but were simply gliding, and probably making for home. Sheer bad luck, and nothing else, had decreed that they should glide into his Bristols with all the advantage of a thousand feet in height and ten guns to six.

Though they must have been just as surprised themselves, the Pfalz soon showed that they knew their job. As though moved by a single throttle their five propellers blurred into furious power, while their tails cocked high, and their cowlings dipped, and the tracer leapt down in a spray of scarlet points that trailed thin blue threads.

Utterly absorbed in keeping formation, Fare never knew what was happening until he simultaneously saw the tracer, received a clump on the head from Stubbs, and heard the Lewis savagely stuttering behind him. Like any other novice he then promptly made every possible mistake—tried to look all ways at once, opened fire without the slightest idea of a target, and snatched at his stick as though

he wanted to wrench it out of its socket.

The moment of bewilderment only lasted a few seconds, but they were enough. Like a maddened horse, the Bristol reared up so violently that Stubbs nearly bit through his tongue as his nose caught the drum of his gun. While she hung on the point of stalling, Fare glimpsed a Pfalz wildly skidding up and away to one side. The sight made him whoop with laughter, for he guessed that the pilot had just had the scare of his life. Thoughtlessly he twisted round in his seat to yell at Stubbs, and in doing so kicked on full left rudder. With a determined flip of the wing the Fighter dropped, and began flailing the air like the arms of a windmill.

The world only rotated a few times, but before Fare could check the spin and pull out of the dive, the face of the sky had changed. Anxiously he looked all around. No sign of Frampton or Sherman. No sign even of a Pfalz. In all directions nothing but mist and clouds. And it was a cloud then which engulfed him, like a whale engulfing a shrimp.

Its cold wetness swept the last traces of confusion from his brain. Cursing himself for an incompetent fool, he opened the throttle to its widest, trimmed the tail, and set about climbing back into clear air; but although he cursed, it also seemed as though new confidence were thudding through his veins, telling him that a test had been passed and that henceforth he would not only fly but fight. The days of his apprenticeship were past.

AFTER ten minutes of throbbing ascent, the veil of vapour wore thin and was suddenly rent. Like a flying fish leaping from water, the Bristol burst through the ceiling of the cloud, and Fare found himself in an ivory world dazzlingly lit by the sun.

On all sides the walls of mist rose up in tumbled bastions and battlements, to enclose at their zenith a far-off canopy of blue. With the swiftness of a passing thought the ray of sunshine fled, leaving the cloudscape wet and grey once more; but the strange upward shaft of air still

stayed clear, and Fare knew that he had emerged into a rising current which was tunnelling its way through the clouds like a volcano's central vent.

He throttled back and grinned over his shoulder. Abruptly then the smile was wiped from his face, for Stubbs was standing up and glaring at him, his head bowed over a crimson and dripping handkerchief. Fare felt his heart turn cold.

"Are you hurt?" he shouted.

Stubbs shook his head while drops of blood whirled away in the slipstream. Above the wail of the wires and the engine's rumble Fare caught muffled, disjointed words.

"What—hell—do that—for? ... Fool trick. . . . Blast you!"

"What?" howled Fare, not quite catching the words.

Stubbs removed the handkerchief to reveal an awful, goggled countenance of wrath.

"Blast you!" he screamed, and this time made his meaning very clear. "Likewise—"

Silence clapped a hand upon his mouth, for he wanted to sneeze, and had thrown his head back. One hand shot out to grip Fare's shoulder while the other stabbed at the sky.

"Look!"

Following his pointing finger Fare saw three parallel lines etched against a cloud. Each line was longer than the one beneath it; struts joined them close to their tips, and at their centre a propeller glittered, set in a horseshoe cowling.

As he stared, the Triplane banked on vertical wings to lose height in a reconnoitring spiral. With the turn, the chord of the wings flashed into view, and light gleamed on a chequered pattern of black and white. Fare remembered Frampton's warning.

"Cripes!" he muttered. "Bad medicine!"

## CHAPTER III Fighting Fare

To Major von Hagen, it all seemed too good to be true.

Five minutes earlier he had been conscious only of coldness, peevishness, and an emptiness of the stomach which proclaimed that his usual hour for breakfast had long since passed. With the sudden appearance of a solitary Bristol he forgot all such afflictions. This, he told himself, was a just reward for early rising and unconquerable offensive spirit.

But, for all his gleeful anticipation, the Major tackled his task with caution.

The affairs of the D.H.4 and the S.E.5 had made him most gravely suspicious of all apparently lost two-seaters. Scrupulously, he scanned the little patch of clear sky above him. No circling speck or specks disturbed its placidity. He grunted with satisfaction, deciding that this was a genuine case, and no tricky matter of bait and trap.

Next he turned his attention to the victim itself, and again he grunted. Flight Commanders, he knew, flaunted two streamers fluttering from the tails of their machines; deputy leaders wore one. This Bristol, however, was innocent of all such display; therefore, he argued, its pilot could not be so very experienced. Truly his luck had changed.

Not for an instant, though, did he let his enthusiasm run away with discretion. Many a brush with Bristols had convinced him, beyond all need of further demonstration, that their sting could be just as dangerous as their bite. In fact in the affair of the Unmentionable Fighter it had been the man in the back seat who had blown half his rudder away. Wisdom, therefore, advised the shunning of open attack from the rear or flank.

What, then, remained? A frontal dive, down upon the centre-section, at an angle not steep enough for the rear gunner to fire up on a turn-away shot, and yet too steep for the pilot to use his Vickers without stalling; and, because of its heavy engine, a stall would put the Bristol out of action for many vital seconds.

A perfectly judged Immelmann and a half roll brought him into position. Unconsciously, he bared his teeth as he leaned forward to his gunsight and his thumbs felt the firing trips of his Spandaus. The dive steepened, then steadied. Watching the manœuvre from a thousand feet below, Stubbs growled viciously, and fired a few rounds to warm his Lewis. As long as the Triplane could hang on to that front dead angle, he himself was helpless. All now depended on what Fare did; and this was Fare's first fight.

To Fare, though, it did not seem as if he were facing any special ordeal. The fact that his life, and the life of Stubbs, were hanging in the balance of the next few moments was a truth which never even crossed his mind. He settled down to his job as methodically as though he were entering a practice scrap with camera-guns at Ayr, or about to take a few shots at a towed target over the sea near Turnberry.

A final tug pulled the handle of the synchronising gear up to its limit. A squeeze of the grip of the Bowden control caused his Vickers to chatter a challenge. His eyes were fixed on the chessboard attacker as he waited and watched, with every muscle and sense alert, and a brain that was coolly calculating.

FARE'S plan of action came to him without any conscious weighing of pros and cons. It came, in fact, like a self-evident conclusion—as though it were the only thing to do.

When he felt in his bones that the next split shaving of time must bring a bullet, he slammed the rudder-bar hard athwart its pivot, pulling the stick back and to the right until it bit into his thigh. Madly the clouds swung barrel-wise as the Bristol rolled; then came a weaving of controls, a silence from the engine, a swoop, a snarl of renewed power, and a soom. Clinging to the spade-grip of his gun, Stubbs found that the Triplane was no longer in front but behind, and breaking away in a climbing turn.

Exultantly shouting, he sent a spatter of builets aloft, but the range was already too great and he cut the burst short.

Fare levelled out and banked to follow the Triplane's course. He looked back and grinned as the beaming Stubbs banged him on the shoulder, then resumed his study, wary watch. A bloke as venomous as "Bad Medicine," argued Fare, would hardly be put off by a little set-back like that. In fact, he mused, with much inward enjoyment, the blighter was probably feeling as sore as a boil. Good enough. Getting mad might make him careless.

It was a vain hope. Although naturally annoyed, Major von Hagen was too old a hand at aerial fighting ever to lose his temper. Circling at a safe height he pondered, ready to pounce like a hawk if the Bristol tried to escape into the clouds.

His next move took even Stubbs by surprise.

One moment the Triplane was hanging on to its height in the balance of a perfect vertical turn; a second later its rudder had flicked and the machine was falling as though an invisible cord had snapped.

So steep was the sideslip that the force of the wind tautened the chequered fabric until the shadows of spars and camber ribs stood out through the wings like bones on an X-ray screen.

But the direction of the slip was not straight. It curved down past the Bristol's nose, the three planes flashing across Fare's gunsight in a flicker of colour. He lost them then as his own bottom plane cut through the line of vision. Stubbs caught a glimpse of black and white, quite close now and climbing again, which shot from under the trailing edge to vanish once more beneath the blind spot formed by the tail.

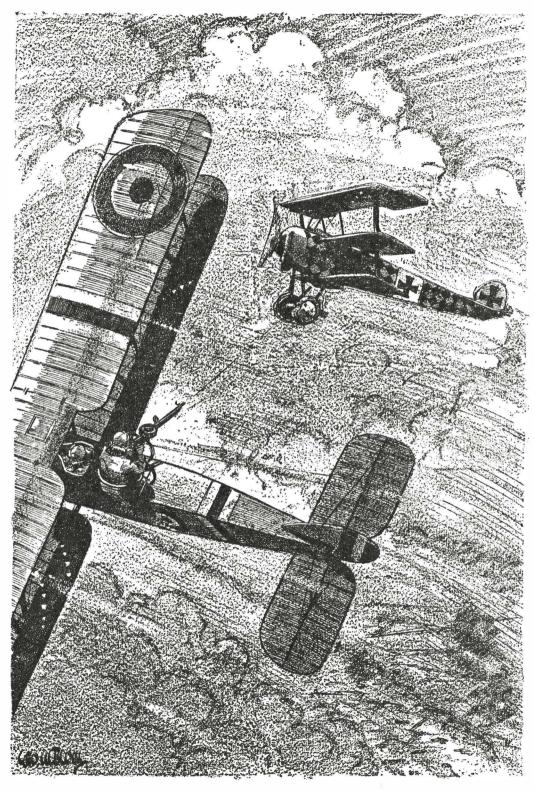
That told him what to expect. Violently he seized Fare's shoulder, yelling "Rudder" at the top of his voice.

Only a skidding flat turn, he knew, could uncover that deadly spot in time.

The wind whipped the word away as von Hagen fired, nuzzling close up under the elevators.

In front of Stubbs' eyes, tiny gaping holes flipped open as the bullets ripped through the tail plane and fuselage. Fare felt the jar of a struck longeron, and heard the twang of a bracing wire cut from its turnbuckle. Not by reasoning but by instinct—the instinct of a born fighting pilot—he kicked full rudder on, with a touch of opposite bank.

# **BAD MEDICINE**



He saved his life by a bare three feet, for the Lewis burst hit low, splintering the port undercarriage strut and buckling the wheel

Shuddering, like a racing car skidding on a greasy bend, the Bristol shot sideways, dropping her nose and whipping her tail round. A shower of pointed sparks sped up past the starboard wing.

With that twist and inevitable stall he saw the Triplane, away to one flank and soaring towards him like a bubble. Cheated once more, von Hagen was using every ounce of power to regain his lost height.

It was the first time that Fare had ever seen a Fokker's astonishing climb, and for a moment he could hardly believe what he saw. Surprise, though, did not paralyse action.

Scarcely had the controls responded again before he was pulling out of the stall, and turning away on a gentle bank so that Stubbs could bring a steady gun to bear.

Breath hissed between Stubbs' clenched teeth as he swung his Scarff mounting round, and forced the spade-grip of his Lewis hard against his chest. With chin tucked down and right forefinger hooked round the trigger, he delicately toyed with his gun until the fluctuating bead of the Norman foresight was held where he wanted it, and the ring of the backsight was cutting the Triplane's cockpit.

Unhurriedly, then, his right hand squeezed.

Von Hagen saw his danger just in time. His tail dipped as he pulled back his stick to rise yet quicker. The movement saved his life by a bare three feet, for the burst from the Lewis hit low, splintering the fairing from off the port undercarriage strut, and buckling the wheel.

Growling disgustedly, Stubbs aimed higher and fired again.

Twice the gun barked before an ominous screech struck it silent. Grimly efficient, Stubbs wrenched at the case of the return spring whose breaking had disarmed him. With luck he might replace it with a spare in time to get the gun going again. With lots of luck, though, because of his frozen gauntleted hands, the ceaseless battering of the slip-

stream, and the incalculable stunts of fighting.

Wise in the ways of the air, von Hagen divined at once that the Lewis was out of action. The glow of that knowledge tempted him to take a risk. Already eight hundred feet higher, he stall-turned to attack from the front flank.

Fare watched the horseshoe cowling dip until he could see the two tiny dots which marked the mountings of the Spandaus. Back came his stick then, and the tail-trimming lever also went back to the limit of its arc. Perched on her elevators, the Bristol hung poised while the Triplane shied nervously up and away to avoid collision. Grinning sardonically, Fare gripped the Bowden control.

Like a clamouring storm the Vickers erupted, punching a peppered patch through one black and white wing, before its rattle ceased as abruptly as the stammer of the Lewis. Instantly Fare ducked beneath the windscreen to diagnose the cause of the stoppage from the position of the cocking handle. The glance sent decisions flickering through his mind like lightning before the coming of a tornado.

Double feed. A live round jammed into the breech on top of a spent case. Impossible to remedy it before the Triplane dived again—and dived this time on an utterly defenceless target.

Yet still Fare grinned. In the matter of diving, a Bristol could hold her own against anything in the sky. And a bit more.

The cheesecutter tail lever rasped on its ratchets as Fare rammed it down to the floor. His stick shot forward beneath the dashboard. Flicking her tail to the sky like the flukes of a sounding whale, the Bristol fell headlong.

# CHAPTER IV "Dive Like Hell"

A WILD grab at the gunsight just saved Stubbs from being catapulted over the centre-section. Lying painfully wedged between his seat and the back of Fare's cockpit, he looked up along the vertical fuselage, towering skywards like

a steeple, at a three-barred outline which furiously pursued.

For the moment, however, Stubbs had lost all interest in the Triplane. One of his legs was held aloft in an undignified position by a buckle of his boot, which had fouled a bracing wire. The other was so bent beneath him that he felt certain his hip must be dislocated. Both arms seemed to be clamped in invisible vices. and his nose had again begun copious bleeding. In fact, during the whole of a crowded career as observer, he had never been put through such hideous experiences as those inflicted by this callow maniac, who was now standing on the rudder-bar, and falling feet first as though being chased to the bottomless pit by all the devils in Hell.

Struggling madly to free himself, he vowed that, if ever they emerged from this nightmare alive, there would be such a reckoning with Fare that the Squadron would speak of it with bated breath for many moons to come.

Freeing himself at last with an effort of insensate strength, he knelt on the back of Fare's seat and peered over the side.

# "Gormighty!"

The croak froze in his throat, for he just glimpsed the ground before a cloud blotted it out, and the widening patchwork of woods and fields appeared to be on the point of bursting around them.

"Fare! Fare! Pull out!"

Not a word of the frenzied appeal reached Fare's ears, but he acted as though he had heard them because his eyes were fixed on the altimeter needle, and the needle's message was becoming just as urgent. If he did not stop the dive soon, hard earth would do it for him. From height he glanced at speed. There, however, he could learn nothing definite, for the airspeed indicator had long since passed its maximum mark, and was already well on its way round the dial for the second time.

"No pull, no bon," muttered Fare, and firmly hauled up the cheesecutter's handle.

As the tailplane trimmed, the dive began to flatten. Still staring down at the ground, Stubbs saw the upwardrushing surface tilt, and choked in the excitement of relief. Through vaporous wisps that seemed to shriek as they tore past the wings, he looked all round for landmarks.

In the front seat, Fare tightened his grip on the stick, and gently, steadily pulled. The tilt of the earth increased, and a skyline dropped into view between the centre-section and the radiator cap.

A smudge away to the right attracted Stubbs' attention. For some seconds he stared at it doubtfully, wondering what town it could be, then banged the Scarff ring with his fist as he recognised two converging roads.

Douai. Far enough over the lines, therefore, but not too far for a low dash home. Low, very low, contour chasing along the fringe of poplars that lined the Cambrai road, and zigzagging in crazy flat skids whenever they saw a sign of life. Then one last plunge through the inferno of the lines, and a restful bummelling home on the shady side of Arras. Most fervently he wished that he could yell this advice to Fare, but the scream of the gale and the shuddering of the wings made the mere hope fantastic.

TUBBS need not have worried.

During the whole of that hurtling fall through space, Fare had been repeating to himself the words of a famous fighting instructor at home: "If you get in a jam in a Bristol, dive like hell till you're a foot off the floor, then scoot like a cat who's sat on a hornet."

Fare, in fact, had done more than make up his mind on that point. Without, of course, recognising the town, he had spotted the road with the poplars, and knew, from the slant of their feeble shadows, which way he must fly to get home.

Still straining the stick he ruddered round, and the dive, though steep, was well in hand when the altimeter showed two thousand. He drew a deep breath of gloating success as he opened out the engine again.

The exhaust snorted, snarled, coughed

explosively, and relapsed into mulish silence.

"Cripes!" ejaculated Fare.

His eyes flickered over the instruments.

Petrol pressure O.K. Ditto oil. Temperature——?

Reading the engine thermometer he groaned. In a dive like that it was easy to forget to close the radiator blind. He had forgotten. An excusable mistake, but a bad one when it resulted in half-frozen cylinders.

Gripping the stick between his knees, he flipped the butterfly nut of the radiator control with one hand, and slammed it shut; with the other he retarded ignition and thinned the mixture: throttle, then, half back and three lusty pushes on the hand pump; a bellow from the engine, a tearing rip of power, a sneeze, a sigh, and a flat refusal.

Eight hundred feet below, a broad expanse of stubble steadily rose. Only the humming of the wires and the swish of the propeller broke the menacing silence.

Stubbs' voice rang out, hoarse and cracked.

"What the devil are you doing?"

Physically sick with rage and disappointment, Fare hunched his shoulders in an exasperated shrug. Scarcely thinking, he headed away from the road towards a fog-filled hollow of open country.

"Landing," he barked. "Engine's conked."

As though to confirm him beyond all shadow of doubt, the propeller itself twitched sullenly to a standstill. Staring ahead along the cowling, Fare automatically eased back the stick as the ground loomed blurringly through the mist, streaming steadily closer; but his eyes saw neither the mists nor the russet stubble; they were picturing instead a prison camp, and walls of wire.

Prisoner of war. For years to come. After one glorious scrap. Just one.

The shock-absorber on the undercarriage grunted, while the tail skid cut its gritty groove. As the wheels rumbled to a standstill all sounds became magnified —the breathing of the morning wind through the wires, and the crackling drone of a rotary engine cruising about in the clouds overhead.

"I'll bet that's that blasted Tripe," growled Stubbs, rummaging in his cockpit. "Looking for us, the blighter. I hope his rabbit dies."

Scarlet with exertion, and streaked with caked blood, his face rose again above the level of the gun-ring.

"Well," he announced grimly, "we're sunk, and that's that. I suppose though," he added with a touch of wistfulness, "I suppose it's no use trying to nip away before we're grabbed? We seem to have struck a pretty desolate spot, and it doesn't look as though anyone's heard us or spotted us yet. This mist, of course . . ."

Spitting and blipping, the unseen rotary suddenly roared into life close at hand. A shadowy shape flitted across a thinning patch of vapour. Although its three planes were shrouded and grey there was no mistaking their garish squares.

"Ba goom!" breathed Stubbs. "It is the Tripe." He disappeared once more to emerge clutching a Véry pistol. "That settles it. No nipping away for us. We've got to burn this 'bus, and a rocket in the juice tank is as good a way as any. Which one have you been using? Back or front?"

Fare said nothing. His jaw had dropped, and he was gaping fixedly at the change-over dial in front of him. Stubbs shook him impatiently.

"Wake up, man. We'll be nabbed in a second."

Convulsive energy seized upon Fare.

"Quick!" he gasped. "Hop out!... Swing her... Front tank's still full... Forgot to change over.... She's dry... That's all... Gosh!... Move!"

SPEECHLESSLY Stubbs scrambled out of his seat and ducked under the wing. His thoughts, indeed, were too rich and ripe for speech.

Forgot to change tanks!

Panting, he seized a blade and viciously swung it.

Gormighty!

Fitfully yet persistently, the Triplane's

engine crackled and droned, dropping ever lower and lower.

Forgot to change——!

"Dope her," he howled. "Dope her, you boob!"

From Fare's cockpit there came sounds of frantic clanking as he banged the handle of the dope pump up and down. Dripping with mingled mist and sweat, the stocky little figure of Stubbs leapt about as he grappled with the stubborn blades. Never, so it seemed, had cold and compression combined so stickily.

The Fokker's engine spluttered and ceased, and the air became filled with the wailing of wings.

"He's spotted us," panted Stubbs. "She ought to—go—now... Twiddle while I—heave."

Fare twisted round in his seat brushing the engine throttles with his elbow, and whirled the hand magneto while Stubbs flung all his weight and strength on an obstinate blade. The exhaust exploded like a gun, the propeller lashed back, and Stubbs struck the stubble flat with his face.

"Frightfully sorry," roared Fare. "Must have knocked the ignition forward. Try her again. She'll go next time."

Silent and terrible, Stubbs picked himself up. Mud and straw had mingled with the blood to turn his face into a devilish mask. The singing of approaching wings rang louder. A three-barred shadow skimmed earthwards through the mist. Held fast by instinctive concentration, the two paused to watch the Triplane land.

It was a beautiful exhibition of skill and judgment, and would have been a perfect three-pointer if the machine had had three points to land on. But the wheel which Stubbs had hit was leaning drunkenly out from its axle. At the first touch of the ground it collapsed; an undercarriage strut ploughed deep and stuck; the nose dipped, the tail rose, and the machine somersaulted to subside in a flurry of crumpling planes.

"Oh, very pretty," crowed Stubbs.
"Very pretty indeed. Do it again."
With the last word he sat down hard

in the mud, for the whole world had turned red before his eyes, and was spinning insanely round his head.

"You hurt?" bellowed Fare, in quick, cold anxiety. The answer came faintly and haltingly.

"Not a—bit. . . . Only slipped. . . . Lumme! . . . Look! . . . He's coming for us!"

Scarcely believing his eyes, Fare watched a small form, clad in black leather, which crawled out from the wreckage and ran towards them.

"Lord!" he breathed. "The man's got guts!"

In this Fare did no more than justice to Major von Hagen. Although he was overpleased with himself and his powers, and therefore inclined to strut or preen, the German not only knew how to fly and fight, but did both with a courage which quite literally never even admitted the existence of fear. Shaken as he was now by a most unnerving crash, he none the less rushed single-handed to tackle two men who might, for all he knew, be waiting for him with guns.

But even in that berserk fury he never lost his head. Twice, while he ran, his own revolver cracked as he fired into the air to attract attention and summon help.

The echoing shots galvanised Fare into action, for he instantly guessed their purpose. So far, he and Stubbs had enjoyed an immunity due to the mist and the rare good fortune which had brought them down in an isolated spot. This immunity had, perhaps, already lasted five minutes, and many of the enemy must therefore be searching for them. The crack of the revolver would bring the pursuers hurrying from all directions.

He flung aside the halves of his safety belt and jumped to the ground, shouting at Stubbs.

"You stay here. Swing her again if you can. I'll see to him."

Unarmed as he was, he could only rely on speed and luck to bring him to grips before a bullet laid him low. Ceaselessly zigzagging, yet never slowing up, he raced ahead. Von Hagen stopped dead in his tracks, took aim and fired.

### AIR STORIES

Fare heard the whine of the bullet close to his ear. A second shot splashed the mud at his feet; a third and a fourth sang wide.

"Good," he thought. "Getting rattled. He can't have more than another two in that clip."

As though snatching victory in a closerun sprint, he strained every nerve and muscle to lick up the few remaining yards. Twice more von Hagen's weapon barked, then Fare was upon him.

No clear recollection of that lightning fight remained with him afterwards. Vaguely he remembered knocking aside a smashing blow from the gun butt, then his right flashed across and his whole arm jarred as his knuckles caught the goggled face on the point of the jaw.

He saw von Hagen fall and lie still, then he was racing back to Stubbs, with the breath rattling and tearing at his throat. At some later second, so it appeared, he had tumbled into his cockpit, for he found himself spinning the hand magneto while Stubbs had one last desperate wrestle with the propeller.

From somewhere out in the mists there came gutteral shouts and rifle fire. The engine awoke at that instant with a shattering roar like a beast of prey disturbed in its lair. Already the wheels were lumbering forward when Stubbs dived under the bottom plane, hurled himself at the ring of his cockpit, and found a foothold with one kicking boot.

Tiny, stabbing flames sparkled in the fog, and the rattle of rifles followed the vicious whining of unseen death; but Stubbs and Fare heard nothing, for each was crouched in his seat, filling his lungs with deep gulps of air, knowing little but that the ground had fallen away and steady wings were bearing them home.

IN the Mess that night the Squadron songs were roared with more than ordinary gusto.

Slightly dazed, Fare sat back in a chair jammed between the piano and the door. The agonised instrument was almost deafening him, because the pianist—an amateur heavyweight of considerable

distinction—was punishing the keys as though fighting for a knock-out. Also Fare was feeling uncertain as to whether he had done well, or had let himself in for a court-martial.

Most probably the latter, he thought glumly. The C.O., for example, had spoken at length on the criminal iniquity of hazarding a valuable machine through the imbecile idiocy of forgetting to change tanks. Frampton's pithy comments on the subject of straggling still rang in his ears. Although ostentatiously polite and sympathetic, both Sherman and Rackham had made it clear that the best he could expect was to be sent home for further instruction. And Stubbs had expressed blistering views about pilots who tried to spill their observers.

Fare's spirits, in fact, were rapidly sinking to zero when he chanced to look up and catch a friendly grin and "cheerio" from a puffy-nosed Stubbs. He knew then that all was well with the world, and that the Squadron had accepted him as one of themselves.

The knowledge made him feel warm inside, and he lifted up his voice to join in the song with a sudden raucous bray which made the heavyweight slaughter eight simultaneous wrong notes.

The warmth was still with him later, when he and his three friends blundered through the darkness to their hut.

Stubbs suddenly stopped to watch the gun flashes as they lit the distant lines.

"Glory!" he breathed. "It does me good to think that Tripehound got a personal sock on the jaw. I'll bet he's more like poison than medicine now. And I'll bet too, that he's thirsty for your blood, my lad."

When they entered the hut, Cocker, the mongrel, was dozing peacefully in front of the stove. Suddenly he lifted his head and growled, sniffing the air to the east as though he could scent the smell of the hate, deadly and charged with purpose, which was simmering at that moment in Major von Hagen's mind, as, in his quarters fifty miles away, he savoured the humiliating bitterness of defeat.



The Hurricane ahead staggered for an instant, then fell over and dived headlong for the ground

It was from one of these chairs that a

conveyed gin-pink gin-to an appre-

ciative home.

pair of long legs, clad in the blue of the Royal Air Force, protruded. The rest of the recumbent body was hidden by the tall back of the chair from which a languid voice addressed the assembly. A lieutenant-commander, who had just entered the room, leant against a cardtable to listen.

"After wearisome months cooped up in this tin fish," announced Flight Lieutenant Peter St. Maur Mohune (which is, of course, pronounced Seamore Moon), "a feeling of relief suffuses me at the thought that I shall soon be leaving you. I leave without regret and, for one blessed month, I shall go into seclusion, scrape the barnacles from my mind, cease from calling rooms cabins, and try to forget such epithets as 'Shore Leave,' Grog Allowance,' 'Hard Lying Money'. None the less, your many falsehoods will always amuse me in my declining years."

"Shut him up, someone," demanded a youthful-looking two-ringer; but nothing could dam Mohune's oratory.

"The number of dresses you wear will worry me no more. I intend to take leave, long leave, browse by a river, flick a fly across its rippling surface, drink beer at the local tavern—and forget."

The lieutenant-commander who had entered the wardroom at the beginning of Mohune's soliloquy, and who was now perched with one leg resting on the cardtable, broke into the discourse.

"Ungrateful as you are, and parasite though you be," he remarked, "I hope you'll enjoy your leave."

"Oh! Man of Many Rings, I shall," Mohune assured him. "As soon as I set my foot on Swampton's strand I'm a free man. I'll shake off the influence of bell-bottomed trousers——"

"Not in the High Street, I hope," put in a sub. "The Watch Committee might object. Consider the reputation of the Senior Service."

"There you go again," started Mohune, when the lieutenant-commander interjected a stentorian "Silence!"

"Mohune, my pet affliction," he continued, "you're wrong on all counts.

There is no Strand in Southampton, you're not even going there, and you won't be free."

"Just try and stop me," Mohune invited.

"I don't have to. I've been waiting for your diatribe to end. I have a message for you."

"If it's offering me the command of the Home Fleet I must decline. I don't like . . . "

"It isn't, and you won't," rejoined the lieutenant-commander, "I'll now tell you the precise itinerary of your leave," and unfolding a message slip he read:

"'From Admiralty to Polglase. Flight-Lieutenant P. S. Mohune is to proceed by air to Felixstowe forthwith'."

"Oh no," said Mohune, sitting up with a jerk.

"Oh yes," his tormentor replied.

The mist is clearing and you will leave as soon as possible. Your baggage will be sent on from Southampton."

Mohune lay back in his chair and shut his eyes.

"Brandy," he murmured, "bring me brandy. I had congratulated myself that I was free from all catapults, and that in future my flying would be gentlemanly and sedate—and now this! Well, 'theirs not to reason why,' and so on; the Air Force was ever the hardest-working Service. Who goes with me?"

"Nervous?" grinned the lieutenant-commander.

"No, fool! To bring your adjectival Osprey back."

"Oh! Sellars can do that. He'd like a night in Felixstowe."

"So be it."

TEN minutes later Peter St. Maur Mohune climbed up to the catapult platform of His Majesty's cruiser "Polglase." Above him, the graceful lines of a Hawker Osprey gleamed coldly in the pale sunlight. Tugging at the strap of his helmet he addressed the naval officer at the catapult's control.

"For the last time," he announced, "and this is a far, far better thing that I do now."

Ignoring the ribald retort, Mohune

climbed up to the Osprey to find Sellars already installed.

The mist had certainly lifted, yet the sea looked cold and uninviting, a green expanse over which the fine tracery of foam appeared in irregular patches. He slid into his seat and an A.B. adjusted his harness. The Kestrel coughed twice and roared into life, sending a quiver through the aircraft.

"O.K behind?"

"O.K.," answered Sellars.

The throttle moved forward and the Kestrel's note rose in defiance, all its power exerted to tear itself free from the binding shackles of the catapult. Satisfied with the test, Mohune withdrew his hand and nodded to the officer at the control.

The lieutenant pursed his lips into a thin line. To his mind, this particular job was comparable with a hangman's; one slight movement of his hand and the victim was shot, not into eternity, it was true, but certainly into a position in which no human aid could avail him. His eyes fastened on the pilot's head.

"Brace yourself, Sellars," warned Mohune.

"Bet your sweet life."

Mohune forced his head back against the head-rest. A slack neck might mean a broken one in the catapulting game.

The Kestrel roared again as he opened the throttle, roared until it seemed that nothing could hold the Osprey down—then, they were off. A jerk like the kick of a mule, and an instant of sudden breathlessness was followed by a swift drop towards the green water as the machine came clear of the catapult's influence. Next moment the Kestrel had taken command, and they were climbing steadily in search of the sun.

Mohune heaved a sigh of relief as he turned to the north-west.

"Damnable contrivance," he muttered.

Now they were above the last vestige of mist which hung like a grey curtain beneath them, and, ahead, the sun danced invitingly on the rippling blue waters of the Channel. From time to time they saw craft trailing a white wake behind them, but the sky was theirs alone.

Soon the flat Kentish coast came into view, the cluttered houses of Ramsgate and Margate, the wide expanse of Manston aerodrome, nearby Birchington, and then they were out over the water again. A cruiser outward bound from Chatham slipped by beneath them. A pleasure steamer with the last of the summer's holiday-makers on board, then a barge with broad russet sails was caught and left behind. The Essex coast, Shoeburyness, Foulness, Clacton crept by beneath their wing-tips until at last Felixstowe with its cluster of flying-boats riding to their moorings came into view.

"Here we are," announced Mohune, and pushing the Osprey's nose down, he throttled back.

The roar of the Kestrel died away and a series of gently-banked gliding turns brought the Osprey nearer to the water. A final turn into wind and the aircraft settled down. A slight burst of engine which sent a wave of water over the twin floats, and they were taxying over towards the anchorages. A black-hulled speedboat nosed its way out from the shore, and a stentorian voice, magnified almost to incoherence by a megaphone, assailed them.

"From 'Polglase'?" came the hail.

Mohune pulled the pin which released
his harness and stood up.

"From the Polglase'," he called back, and as the speedboat came alongside to embark them he turned to Sellars:

"See you in the Mess later. I must go and make my number with the Adjutant as soon as we land."

# CHAPTER II The Man from F.I.7

JUMPING ashore, Mohune hurried towards the Headquarters Buildings, while, behind him, that foghorn which groans incessantly at Felixstowe, let out its discordant bleat into the uncomplaining air.

As he entered the Adjutant's office he saluted, not because the Adjutant was senior to him, but because of that Service custom which demands that the Adjutant shall be saluted, be he pilot officer, flight

lieutenant, or squadron leader. It is similar to the honour that is paid to the quarter-deck aboard one of His Majesty's ships, except that an adjutant usually returns the salute, whereas a salute to the quarter-deck is more often than not wasted on a passing fishing vessel or a piece of driftwood.

"I'm Mohune," the newcomer reported.

The Adjutant looked up from the pile of forms which nearly submerged him.

"From H.M.S. 'Polglase'?' he enquired.

"Verily."

"Then have a tube?"

A cigarette case was proffered and a lighter flicked into action.

"The C.O.'s flying at the moment," the Adjutant remarked. "Should be back in about an hour. Take a pew."

- "I thought I'd go and see the Mess Secretary about a room," Mohune suggested, adding plaintively: "Does that damned foghorn of yours ever stop?"
- "Hardly ever; but it won't worry you for long this time. You're not staying here."

Peter Mohune raised an eyebrow.

"Tell me more," he urged.

"Sorry, the C.O.'ll have to do that. All I can tell you is that you're not stopping here."

"Hospitable lot of blokes you boatmen," Mohune complained, "you tear me from my gin on the 'Polglase' and make me risk my neck flying through the murk just to play shuttlecock with me. Ah well, is there anything I can do while I wait?"

The Adjutant laughed.

"You can read the 'Foghorn' if you like," he suggested.

"Read it?" Mohune retorted, "I can't help listening to it, but I'm hanged if I'll read it."

- "I meant our station magazine; we call it the 'Foghorn'. Rather neat, eh?" Mohune winced visibly.
- "Oh, very," he replied, "obviously, you not only read, but eat, drink and breathe foghorns in this place. Why, man, a battleship's a quiet place compared with your menage."

A buzzer sounded.

"That's the C.O.," explained the Adjutant, "back earlier than I expected. I'll take you in right away."

He led the way along an empty corridor, and motioning Mohune to wait, disappeared through a door at the end. A moment later he reappeared and beckoned Mohune into the sanctum.

The C.O. looked up from the desk at which he was seated.

"You're Mohune," he announced as the Adjutant slipped out and shut the door behind him. "You've come from . . . ," the C.O. consulted a file whose conspicuous colour notified the world that its contents were secret, "the 'Polglase'. And now you're to leave for Martlesham at once by Staff car."

"Am I posted there, sir?" Mohune enquired in obvious bewilderment.

"I'm afraid I don't know. Here, read the signal yourself."

He passed a message form across the desk, and Mohune read its cryptic text:

- "'To Felixstowe from Air Ministry— Priority—Secret—Flight Lieutenant Mohune to proceed to Martlesham by road on arrival from Polglase'."
  - "Informative," commented Mohune.
- "Very," agreed the Group Captain. Good-day."

A QUARTER of an hour later Peter St. Maur Mohune was on the move again; this time alone in the back-seat of a Hillman Hawk. His destination was Martlesham Heath, the Holy of Holies of flying men; officially known as the R.A.F.'s Aircraft and Armament Experimental Establishment.

On his arrival, Mohune once again saluted an adjutant, and once again he was ushered into the presence of a commanding officer.

- "Mohune? Oh yes. You've got your flying-kit with you?"
- "Yes, sir. But it's about all I have got."
- "Never mind that now. Come along."
- "What have you been flying?" demanded the Group Captain, as the two men left the office and made their way to the hangars.

"Ospreys, sir."

"Hum. Well, it might have been worse."

They rounded a corner of one of the hangars and reached the tarmac where an aircraft stood with its engine ticking over. It was a two-seater whose clean lines and closed cabin filled Peter with instant admiration.

"What a beauty, sir," he exclaimed.

"Glad you like her," commented the C.O. "You're going to fly her. Get in 1"

They clambered into the narrow fuselage and the Group Captain took over the controls.

"What is she, sir?" Mohune enquired.

"Hawker's latest. No name yet. Just a P.V.\* number."

The chocks were whisked away and the silver aircraft moved forward out on to the aerodrome. Another second and they were off and climbing like a rocket into the afternoon sky. The rate of ascent was greater than Mohune had ever encountered, and for a while he was silent. The climb ceased at six thousand feet.

"What do you think of her?" demanded the pilot; and Mohune was amazed anew, this time at the comparative ease with which conversation could be carried on in the unusually well-silenced cabin.

"She's grand. Marvellous!"

"Good. Well you can take her. You're a fencer, aren't you?"

"I am, sir. But why?"

"Just a theory of mine that fencers, horsemen and pianists make the best pilots," laughed the C.O. "They've got hands'. That is, if they're any good at the game. Rightho, take my place. Treat her lightly, she's apt to be a bit restive."

Mohune slid into the seat as the Group Captain vacated it, and for a few moments he was content to fly straight and level.

"All right. Turn to the right."

Hands and feet moved together and the P.V.818 screamed into a turn.

"Steady the Buffs!" gasped the Group Captain, "I told you she was restive."

Rather flushed about the ears, Mohune straightened out again with a muttered apology.

"Sorry, sir."

"That's all right. Try it again."

The manœuvre was repeated, this time with more success, and after a short while the Group Captain demanded aerobatics. Half rolls, flick rolls, spins and stalled turns were all tried, until at last Mohune was told to take her home.

"Watch her as you land, she floats a bit," warned the C.O.

The landing was effected without mishap, and Mohune taxied the machine up to the hangars.

"When do I start work?" he asked, as the C.O. led the way back to the Mess.

"I don't know, but you leave here after tea."

"Leave, sir!" gasped Mohune. "Then I'm not posted here?"

"Good Lord, no! As a matter of fact, I don't know what you're going to do. My instructions were just to try you out on P.V.818."

In bewildered silence, Mohune followed the C.O. into the ante-room which was deserted save for a grey-haired man in civilian clothes who was reclining in a deep armchair perusing a paper. At their entrance the lone reader discarded his paper and rose to his feet.

"Hello, Mohune," he remarked, glad you got here so soon."

Then, seeing the look of bewilderment on the Group Captain's face, he added: "I don't think we've met, sir. I'm Vye, more generally known as F.I.7. I want Mohune."

A mock expression of cringing fear contorted Mohune's smiling face.

"I didn't do it, honest I didn't, guv'nor," he bleated. "They swung it on me. S'truth, guv'nor."

"Shut up, you young idiot," laughed Squadron Leader Vye of the Foreign Intelligence Department of the Air

<sup>\*</sup> P.V.: Private Venture, a military machine built at a firm's own expense in anticipation of an Air Ministry order.

Ministry, and turned apologetically to the startled Group Captain:

"Sorry to be such a nuisance, sir," he said, "but I want this young ass to do a job for me, and to do it we must borrow your P.V.818. More than that I'm not at liberty to tell you for the moment."

"Oh, don't mind me," replied the C.O. with heavy sarcasm. "Take the whole damn station for all I care, but," his amiability coming to the fore, "will I be admitted to the secret when the job's over."

"I should certainly think so, sir," Vve assured him.

"Good. Well, have dinner with me on that date."

"Gladly. And now, sir, if you don't mind, we must be off. Ready, Mohune?"

"Don't I get my tea?" was the plaintive reply. "I've had no lunch, and now no tea."

"Sorry, no time," Vye retorted. "We're flying to Mildenhall, and we've a stop to make on the way."

"Only to Mildenhall! Ah, well, never mind—but I expect when we get there I shall meet the Warden of the Tower of London, who'll want me to pilot him to Shanghai in a submarine. Lead on, Macduff, I'm yours to command."

TEN minutes later Mohune and Vye were speeding away from Martlesham Heath in the P.V.818.

"You're a brave man, F.I.7," Mohune remarked as he steadied the machine on its course. "I've never touched this kite until this afternoon."

"I know," his companion replied.
"Can you fly her safely and listen?"
"I'll try."

"There's an International Air Meeting being held at Mildenhall," Vye went on, "and nearly every country is sending aircraft. The programme of events includes aerobatic competitions, both for individuals and teams, an air-gunnery display, and, of course, a race. We've got three Hurricanes up there. Well, the situation is this: things have been going wrong, aileron controls have been found frayed, petrol has been doctored, and at the moment we can't trace who's

responsible for these curious and quite un-funny happenings."

"Is it so very important?" Mohune interrupted, "I mean apart from the usual worry and danger to pilot's lives and whatnot."

"Yes, it is," Vye answered in serious tones. "Quite apart from the possibility that our pilots may be killed and whatnot, as you so aptly put it, this show has been put on as a demonstration to the World at large. As an air power we've hidden our light under a bushel far too long, and now we're going to show them just what we have got. A polite lesson, as it were. If we can convince any likely aggressors that our aircraft are now as good or better than any they've got, peace may last out the year. That's our objective. Another year and the aircraft of the Continental air powers will be growing obsolete, and no one will risk a scrap. Meanwhile, it's up to us to convince them that we're too good for 'em even now. Which, of course, we are, barring accidents—and that's where you come

"Me!" gasped Mohune, and the P.V.818 staggered.

"Even you," Vye assured him. "The scheme is this. You are arriving as a test pilot of P.V.818. You are to enter for the aerobatics competition."

"Thanks a lot," interjected Mohune with heavy sarcasm.

"Don't worry, you won't have to fly. I want you there for other reasons. You tackled that balloon show and the Empire Air Day tomasha fairly successfully, although you killed your man each time—which is a Bad Thing—and I thought you might also manage this show for me."

"But I was pitchforked into those. Just a moment!"

The P.V. went into a vertical dive and the engine screamed as the wind tore at the aircraft. Down, down, at breathtaking speed it plunged, Mohune with a smile on his lips and Vye grimly clutching his seat. The ground seemed to shoot towards them, then they were climbing again, roaring up like a rocketing pheasant assisted by a charge of dynamite.

"What was all that in aid of?" asked Vye when they straightened out again and he had recovered his breath.

"Just trying her out," was Mohune's calm reply. "Besides, I knew a lass that lived in that house back there, and I just dropped down to see if she's remained faithful to me while I was in China. Didn't see her; must have been out. You were saying?"

"I was saying that I want you to stop this sabotage, if sabotage it is. You'll be looked upon as a test pilot, so you'll be able to mix with the crowd without suspicion."

"Oh, easy," Mohune replied airily. "I appear in uniform without a tooth-brush. A perfect disguise, and quite unsuspicious!"

"Idiot, I've thought of all that," laughed Vye. "Your clothes are waiting for you at Norwich. You drop me there."

"But the Air Force List," Mohune objected. "Anyone can look me up in that."

"Yes, that's a snag, but you'll just have to get over it as best you can. Make up your own story—and however weak it is you, as a test pilot, obviously have a good reason for being at the show, whereas if any of my men were seen hanging about someone would certainly smell a rat."

They were nearing Norwich now, and Mohune shut off his engine and lost height. Gliding in on the final approach, he eased the stick back a moment too soon and at once the P.V. shot up into the air.

"A bit ham-fisted for an alleged test pilot," Vye remarked as Mohune opened out and went into another circuit.

The second attempt was more successful, and no sooner had they landed than a man hurried towards the aircraft carrying a suitcase.

Squadron Leader Vye leant over his companion's shoulder.

"Here comes your baggage," he announced. "You carry straight on now for Mildenhall, and, by the way, if this sabotage is an inside job the man you want is probably Trebitch, although, of course, he won't call himself that. He's

a tall, dark fellow with a scar behind his left ear that's hidden by his hair."

Mohune was unimpressed.

"Thanks for the tip, but what am I supposed to do about it? Open a barber's shop."

Vye laughed as he clambered out of the machine.

"Off you go, and good luck!" he called. "Oh, and by the way, you're entered for the Aerobatics Competition for experimental types."

"Well, I'm ——" began Mohune, and then more adequately expressed his feelings by swinging P.V.818 round on her brakes and smothering his superior officer in a cloud of dust from the slipstream.

# CHAPTER III Introducing Cardinal Huff

To Mildenhall!
The throttle was opened and P.V.818 skimmed across the green expanse of Norwich aerodrome and up into the sky. But Mohune did not immediately head for Mildenhall; at first he turned towards the open fields on the outskirts of the city. He was a test pilot about to enter an aerobatic contest, and some concentrated practice was obviously necessary, particularly after that last landing.

For close on half an hour Mohune threw the P.V.818 about the sky, now in a slow roll, now in an atrocious turn; at one moment flying like a C.F.S. instructor, at another like a lunatic pupil. Reasonably satisfied at last, he resumed his course, and very soon the wide expanse of Mildenhall's aerodrome was in sight. The throttle was closed for the last time that day, and with an eye on the orange windsock Mohune started his approach.

The aerodrome was fringed with aircraft of many countries. American Boeings ticked over next to German Heinkels, and the slipstream of a Douglas lashed a Mew Gull. In serried rows stood other new types, and around each was a little group of men, the worshippers of speed.

Mohune's arrival drew the attention of all. Here was something altogether new and every eye was turned to watch its landing. Mohune sensed the interest and laughed aloud.

"Funny if Martlesham's star testpilot crashed on arrival!" he thought.

But luck was with him. His landing was perfect and, turning for the hangars, he taxied up to Reception Flight. The necessary formalities concluded, Peter Mohune made for H.Q., and in due course a third Adjutant was that day saluted and a third C.O. interviewed.

"Mohune, sir, reporting from Martlesham Heath. I'm entered to fly the P.V.818 in the Experimental Type Aerobatic Competition."

The C.O. leant back in his chair and laughed. Mohune raised his eyebrows.

"Never heard of it" said the Group Captain.

"What, the P.V., sir?" Peter's tone was reproachful.

"No, the Experimental Type Aerobatic Competition. There's no such event on the programme; still the idea's good. Stick to it, it'll be a good excuse for your being here. You've got your orders?"

"Er, yes, sir!"

"Good! Well, the team you've got to watch is the Hurricane flight; Jefferson, Jalden, and Jarrold are the pilots." Mohune's face brightened.

"The Starlings, sir?" he enquired.

"Oh, so you've heard of 'em, too, have you?" smiled the C.O. "Good. Well, I want them alive and their 'planes intact at the end of this show. That's all. Your room has been fixed up for you; you'd better see the Mess Secretary."

Mohune saluted and swung out of the office. Once outside he jerked his hat on to one side of his head and grinned ruefully. So Vye had been pulling his leg about the flying and all his laborious practising had been in vain. Now he would have to concentrate on the far less interesting job of finding comrade Trebitch, who was using an assumed name, owned an invisible scar behind his left ear, and had slipped past the watchful Intelligence Department into

the Air Force. He shrugged his shoulders resignedly and set out in search of the Mess Secretary.

HALF-AN-HOUR later, having found his room, dumped his bag, and washed, Mohune set out for the village in search of a snack and some beer.

The lounge bar of the small pub was full, but Mohune's arrival was not unnoticed, and a fair-haired giant, test pilot to a famous aircraft firm, at once elbowed his way through the press.

"What ho! Young Mohune!" he greeted him. "And what's brought you up here?"

"A slip-up by Air Ministry," laughed Mohune. "They've entered me for a non-existent aerobatic show. Brought my craft up from Martlesham, only to find there's nothing for me to do."

"Efficiency, old boy, efficiency. Have a drink?"

"A slice of rough might trickle down nicely," Mohune agreed.

With grim determination, they edged their way to the bar where an overworked barmaid was dispensing drinks to blond Germans, dark Italians, spruce Frenchmen, and the many English pilots who were gathered around. In one corner of the room a group were laughing at a flow of sallies from a short man perched on the bar itself.

"Say, Pincher," someone called to him. "See who's just blown in. Can you make a limerick up on him?"

"Cross my mouth with beer, fair sir, and I'll try. Who is it?"

Pincher looked round and, catching sight of Mohune, gave a whoop of joy.

"Bless my soul, if it isn't our Peter St. Maur Mohune," he cried. "Bring me paper, I must write this one down."

Paper was obtained, and without the slightest hesitation Martin wrote:—

"A dashing pilot called Mohune,
Held up a drinking salohune,
If he'd taken less liquor,
He might have shot quicker;
Now his name's engraved on a tombhune."

"Rotten I" cried his audience.

Ordering a drink to be passed to the

poet, Mohune raised his own tankard and looked about him. Any of these cheerful drinkers might be the man he was after—always providing that there was a man to be after. His gaze roved around the room, past the noisy throng standing at the bar to the groups seated at the tables by the walls.

His glance was resting meditatively on one small group when he noticed one of the men nudge his companion and nod towards the door. Peter turned to see the three crack stunt pilots of the R.A.F., Jefferson, Jalden, and Jarrold, better known as "the Starlings," just entering the room. Looking back at the group, he thought he must have been mistaken for they now seemed to have lost all interest in the newcomers.

Nor did they again attract Mohune's attention until some time later, when Toby Jarrold, now the centre of an admiring group at the bar, started to demonstrate the ritual of Cardinal Huff.

"Here's to Cardinal Huff for the first time," he announced, holding a glass of foaming beer between finger and thumb. Then came the ritual: one sip of his drink, the glass placed down on the bar, one tap on the bar with the index finger of his right hand, then one with his left; one tap on his right knee, and one on his left; a tap with the right foot and a tap with the left; one nod of his head.

"Here's to Cardinal Huff, Huff for the second time," he announced, and the ritual was solemnly repeated in duplicate.

"Here's to Cardinal Huff, Huff, Huff, for the third and last time."

He repeated the movements in triplicate, finishing up by placing the now empty glass inverted on the counter.

"Wind in the glass?"

One of the men from the little group which had showed a fleeting interest in the Starlings' arrival, had thrust himself in front of Jarrold. He was a broad, and burly figure, in striking contrast to the slightly-built R.A.F. officer he confronted.

- "I beg your pardon?" said Jarrold.
- "I said 'wind in the glass'?" the man repeated.
  - "I don't know what you're talking

about, but you're probably right," Iarrold replied.

Instantly the stranger swung a balled fist at Jarrold's head, but somehow, Mohune was in the way. With a provocative smile on his face, he intercepted the blow, the force of which swung the stranger round.

"Doucement," murmured Mohune, Doucement, mon vieux."

The stranger glared at him.

- "You keep your face out of this if you don't want to get hurt," he rasped. "That whippersnapper put his glass bottom-up on the table, which means that he thinks he's the best man in the room. I'm going to show him where he gets off, see?"
- "I assure you you're quite wrong," Mohune told him. "My friend here was merely demonstrating a trick."
- "Boloney! I said 'wind in the glass,' and he said 'yes.' Get out of my way."
- "Wait!" Mohune's open hand rested on the man's shoulder to restrain him. "This officer is not the best man in the bar."
- "Just what I says. I'm going to knock hell out of him."
- "Oh, no you're not," Mohune interrupted. "At least, if you are you're going for the wrong man. You see I happen to be the best man in the bar. Shall we go outside?"
- "Stow that! He's the man I'm going to slosh . . . "said the tough, pushing forward.
- "He's the man you're not going to slosh."
- "I say, old man," Jarrold broke in.
  "This is my show really."
- "Pipe down, youngster," Mohune advised him. "This man annoys me. I don't like his face or his smell. You fellows might see that his other indecencies don't interfere. And now, if you're ready, my friend?"

GATHERED in the yard at the back of the inn was the entire population of the bar, which had emptied as if by magic at the promise of a scrap.

Mohune removed his coat and handed it to Jarrold.

"Are you ready, my swashbuckling friend?" he enquired.

The answer he received was a wild rush by his opponent, his balled fists flailing the air.

Mohune, an interrogative eyebrow raised and with a smile on his lips, moved easily away. A vicious left swing was aimed at his ear, blocked, and in return Mohune's left sank into the plump stomach of his opponent. The man grunted, but bored in again, catching Peter a glancing blow on the side of the head. Again the man attempted to get to close quarters, but a beautiful right from Mohune landed on an ear, a left on his mouth, and another right met his The man was shaken, and stomach. seizing his advantage, Mohune sprang in. A flashing left landed on the man's Adam's apple, and he was out by the most powerful blow known to boxers.

Mohune looked about him, but the friends of his late enemy had mysteriously vanished.

"My coat," he murmured, turning to Jarrold. "Thanks, and now a little beer would do us no harm."

Mohune caught the arm of the local constable who had been a late but interested spectator, and whispered in his ear. The constable nodded.

"Good scrap," said the tall Jefferson as they led the procession back to the bar, but why did you want to take him on?"

Mohune shrugged his shoulders.

"Jarrold has a job to do," he explained,
"and a broken nose is not exactly a help
to aerobatics. And now isn't it about
time we returned to the Mess?"

A counter-proposal by Jalden of "one for the road" was unanimously carried, and after this final drink the three Starlings and Mohune set out for the aerodrome. But the excitement of the evening was not yet over.

Their way back to the station lay down a long and quiet road, and they had covered less than half the journey when, without warning, five men sprang from behind the cover of a hedge and hurled themselves to the attack.

Their reception was prompt and

efficient. One met Mohune's fist and lost all interest in the proceedings. Another closed with Jefferson who treated him to a painful exhibition of Jalden, whose long arms had earned him the soubriquet of the "Ape," seized a third, but Jarrold, with the remaining two to contend with, found the going hard until Mohune, seeing his plight, ran to his assistance. An axelike cut which Mohune delivered with the edge of his palm on the nape of the neck, sent one man to the ground, whereupon the other remembered an urgent appointment elsewhere and made a hurried escape.

Mohune dusted himself down.

"All set," he began, and then caught sight of Jarrold's white face and bleeding knuckles. "Hi, what's wrong, Toby?" he asked.

"A broken bottle," replied Jarrold, rather unsteadily. "He held it by the neck and jabbed my knuckles as I punched. It's made a bit of a mess of things, I'm afraid."

A closer look at Toby Jarrold's hand showed Mohune that it was badly mangled, and the knuckles deeply lacerated. They bandaged the wounds up as best they could, and leaving Jefferson to mount guard over their unconscious opponents until the police should arrive, set off for the aerodrome, where Jarrold was at once handed over to the M.O.

# CHAPTER IV Aerobatics Extraordinary

ONLY two Hurricanes turned out for practice the next morning, for Jarrold, much against his will, was detained in hospital.

It was a glorious morning. The October sun shone brilliantly, flashing on the gleaming wings of the assembled aircraft, and from the tarmac Mohune watched the competitors tuning up. Overhead, the air was filled with the highpitched whine of powerful engines as aircraft were thrown about by their pilots.

"Good morning!" said a voice at

Mohune's elbow, and he turned to find a fair-headed German pilot beside him.

"Hello!" he replied. "Not flying this morning?"

"Not yet. What bad luck about one of your Hurricanes."

"Oh, what's that?" Mohune enquired with interest.

"Why, haven't you heard? One of them has developed a serious fault ignition or something—and can't be flown."

"Who told you that?" enquired Mohune, his eyes glittering frostily.

"But it's common knowledge," the German protested, "besides only two have taken off this morning."

So that was the game, thought Mohune. Rumours were being spread that the reason for Jarrold's machine being grounded was that it was unserviceable.

"You've got hold of the wrong end of the stick," he assured his informant, "it's the pilot who's crocked, not the aircraft."

The German was still sceptical.

"Really?" he said. "I'd heard that the ignition was faulty and that there was a danger of fire."

"Lord, no! Why, they haven't even got the engine down. Come and have a look," Mohune invited.

They entered the hangar and gazed at the idle Hurricane, on whose already gleaming metal a fitter was busy with a polishing rag.

"There you are, see," Mohune told his companion. "She'll be in the air again to-morrow."

"Glad to hear it," said the German, and sauntered away, still unconvinced.

When he had left, Mohune turned to the fitter.

"What's this rumour about ignition trouble?" he asked.

The fitter shrugged his shoulders, "I don't know, sir. There's nothing wrong with this engine, but Jackson was complaining about his this morning. Said a feed pipe was choking or something."

At that moment an aircraft roared over the roof, and Mohune rushed out to see the Starlings land.

But though his eyes watched the skilful

approach and polished landings, his thoughts were far away. The situation which it was his job to prevent had arisen. Rumours of the inefficiency of the R.A.F. machines were being spread abroad. Turning his back on the aircraft, Mohune made his way to the sick quarters and sought out the M.O.

"Morning, Doc.," he greeted him. "How's young Jarrold? Can he fly to-morrow?"

"No, he cannot," was the decisive reply. "He'll be lucky if he can fly inside two months. Blood poisoning has set in."

"My God, what a mess-up," cried Mohune, aghast at the news. "He's in the team contest, and there's no spare pilot up here."

"Can't help that. I say he's not fit to fly, and he's not going to. Why, man alive, his arm's swollen up like a prize marrow, and he's running a temperature fit to boil a kettle on. Sorry, but there it is."

In desperation, Mohune sought the Station-Commander, but he received no help from him. The Starlings were trained as a team. Their display was the dream of perfection. No pilot could be expected to pick up their show in twenty-four hours. It was a deadlock; an advertised show by three machines and only two available to compete. Official assurances would not stop rumours, and it was little use declaring that the pilot was sick when the World wanted to believe that it was the aircraft that was unwell.

By the afternoon, the rumours of ignition trouble, and worse, had spread like a prairie fire, and Jefferson's firm denials did precisely nothing to stem their progress.

THE morning of the great event had arrived.

Aircraft were wheeled from the hangars, gas-starters coughed and spluttered, and mighty engines roared into life. The sun glinted on whirling airscrews and polished spinners. Everything was ready.

The three Hurricanes were wheeled

out, and to let the World see that they were all in good order, it was arranged that all three would be flown. In the individual aerobatic demonstration Jalden would fly Jarrold's aircraft, instead of his own.

Mohune carefully inspected the three craft in turn, and so far as he could tell, nothing had been tampered with. Jefferson's engine started up with a magnificent roar, no cough, no splutter, a perfect specimen of engineering genius.

Jefferson taxied out and took-off on his test flight, closely followed by Jalden. A few minutes later Mohune, who had received official sanction, climbed into Jalden's aircraft, while the fitter clambered up to his side and adjusted his harness.

"All set, sir?"

"O.K."

Mohune looked about him, waved the chocks away, and roared into the centre of the aerodrome. A final look round, and he waved the fitter away from his wing-tip and opened the throttle.

For ten minutes Mohune threw the Hurricane about with effortless ease that gave evidence of a master-hand at the controls. Then he turned back to the aerodrome. A steady approach, a flashing sideslip, a jaunty swish of the tail, and he was down to a perfect three-pointer.

As he switched off in the lee of the hangars Jefferson approached.

"I say, why don't you fly in the aerobatic show?" he suggested.

Mohune grinned, and thought for a moment.

"That's up to you, old man," he said at last. "I'd like to, if you're agreeable."

"Suits me. We'll be able to put three aircraft in then."

New arrangements were quickly made. Mohune was to fly in the second event of the afternoon. The first event was a race, and the English entry, a Spitfire, went away as a dazzling streak in the company of the other competitors. Two hours would elapse before the winner would appear, and meanwhile, fourteen entrants for the aerobatic competition

lined up on the aerodrome. No. I, a German in a Heinkel, roared into the sky, and no sooner was his display over than the next machine was off in an endeavour to rival the performance.

Mohune, fourteenth on the list of starters, was the last to leave, and treated the spectators to an even better spectacle than he had put up in the morning. Having exhausted his not inconsiderable repertoire, he finished off his programme with a sustained falling leaf, and glided in to land.

# CHAPTER V Mohune Makes a Discovery

BACK on the tarmac, Mohune flung off his harness with a sigh of relief and stood up. As he did so, his cigarettecase, which had been in the knee-pocket of his Sidcot suit, slipped to the floor of the cockpit.

With a muttered curse he doubled himself up and grovelled on the floor, his fingers groping blindly under the rudderbar. Suddenly they stopped and moved back to examine an unfamiliar obstruction. The fingers clutched, pulled, and the object came away in their grasp.

Mohune straightened up, and in his hand was a glass cylinder. He hurriedly slipped it into his pocket on seeing figures moving towards him and dived once more for his cigarette-case. He had just retrieved it when Jefferson strolled up.

"Well done, old man!" he cried, "I think you're third. It's either you or that German laddie. Jalden won it."

"Good show," Mohune grinned. "I thought it'd be either you or him. You were second, I suppose."

"Er... yes. Well, I must be off; we've got our little stunt now. Damn shame poor old Toby can't be in it. Cheer-ho!"

"Good luck!" Mohune called after him, and then turned to stare in amazement at a pilot who was strolling across the tarmac.

The figure advanced towards him, and by the time he had reached the side of the aircraft Mohune had recovered his voice

- "Jarrold!" he gasped. "What in hell are you doing here?"
- "Shut up, man. Give me a leg up, will you?"
- "But you can't fly . . . " " Mohune protested.
- "Shut up, will you? It's my left hand that's crocked, isn't it, and I don't need fingers to work a throttle."
- "But listen to reason," pleaded Mohune. "You've got blood poisoning, a temperature . . ."
- "But I don't need a wet nurse," finished Jarrold rudely.

Mohune laughed.

- "I should be doing my duty if I lugged you straight back to hospital, my lad," he said.
- "You'd be acting like a fool. Give me a leg-up. I'm all right, I tell you, and I'm going to fly, and neither you nor anyone else will stop me."
  - "But . . . "
- "There are no 'buts'. Just look at me. Do I look as though I had a fever? Help me in."

Mohune gave in.

- "All right," he said. "I'll help you in, but you're asking for trouble."
- \* Jarrold's slight figure, assisted by Mohune, struggled into the cockpit, and his harness was adjusted about his shoulders. Obviously, it took more than blood-poisoning to separate the Starlings.

THE flight aerobatics event called for a display of formation stunting, after which the team landed for a brief rest and then took-off again to attack a drogue target towed by another aircraft.

Mohune watched anxiously as the three Starlings left the ground, then remembering his find, tore himself away and entered the hangar to examine the glass cylinder. Sitting before a plain table, of the variety known to R.A.F. Stores Lists as "Tables—Airmen—Six Feet," he saw that the cylinder was about the size of a sauce bottle and was secured at the top by a screw-cap. It appeared to be almost full of some liquid, and to have a solid core at its centre.

Carefully unscrewing the cap, he found that the cylinder had two others inside, but it was the familiar smell of petrol that came from the flask as soon as the cap was removed that most alarmed Removing the two internal cylinders from the petrol, he carefully extracted the centre tube, which was also of glass, and had white crystals at its base. A plug of cotton wool was stuffed halfway up, and the tube had then been topped up with liquid. One sniff at the tube was enough to send him bounding to the door and out on to the tarmac, where he emptied the liquid on to the It sizzled as it touched the concrete. ground.

"Sulphuric acid," breathed Mohune.

Back at the table again, he examined the second tube which contained blackish granules. Sprinkling a few of them on top of the stove, he applied a match and was rewarded by a brilliant yellow flash. The contrivance was, in fact, a simple but devastating time-bomb.

Inside a glass tube containing petrol had been inserted another glass tube containing gunpowder. In the centre there was a third tube, the bottom half of which held a salt, probably potassium chlorate, which was separated from the sulphuric acid by the wad of cotton wool.

Mohune suddenly felt cold. If the sulphuric acid had soaked through the cotton wool while he was in the air, its action on the potassium chlorate would have generated enough heat to explode the gunpowder, and blazing petrol would have splashed over the cockpit of the Hurricane.

"Lucky I dropped that cigarette-case," he mused. "Poor old Toby would have caught this packet. Not a trace would have been left, and the rumour of faulty ignition would have been accepted as gospel. Distinctly ingenious!"

Then a terrifying thought came to him. What if the other Hurricanes had been similarly fitted? In a cold sweat of fear, Mohune dashed out of the hangar and stared up at the Starlings, their three aircraft now moving as one. He watched them fascinated, there was nothing he could do now, nothing at all. If either Jefferson or Jalden were sitting over a bomb no power on earth could save them.

Up, until they were climbing vertically, went the three fighters, then over and down in a screaming dive. Below, every eye was fastened on them, the spectators spellbound at the exhibition. Mohune. too, was spellbound, but with the agony of suspense, expecting every instant to see one of those hurtling monoplanes suddenly enveloped in flames. A backfire from a passing lorry made him jump, and then he saw that the exhibition was at an end, and the Starlings were gliding in to land. But he did not breathe freely until he saw them taxving towards him. Then his stupor left him, and he ran forward.

"Get out, man, get out," he cried as he ran towards the leading 'plane.

Leisurely, Jefferson slid out of the cockpit.

"What's up?" he demanded with a grin.

"You'll be in a moment, if you don't get out," Mohune panted. "There's probably a bomb under your rudder-bar."

Jefferson leapt from his seat while Mohune ran on to warn Jalden, but though both cockpits were minutely examined, there was no trace of a bomb. With one accord they ran over to the third 'plane just as Toby Jarrold had slipped out of his Hurricane into the arms of the waiting M.O.

"Grand show, Toby."

"Well done, old boy."

"How do you feel?"

"Grand show, indeed," spluttered the M.O., "the man's nearly killed himself—and you call it 'a grand show '!"

# CHAPTER VI The Man with the Scar

WHEN Jarrold, extremely white of face but grinning cheerfully, had been led away to the waiting ambulance, Mohune hurriedly described his discovery of the bomb to his two companions.

"You're flying again now, aren't you?" he concluded.

"Yes," Jefferson replied thoughtfully, the guns are being loaded now."

"Well, keep a close watch on your aircraft until you leave the ground,"

warned Mohune. "Don't let anyone you aren't sure of get near them."

"You bet I won't," Jefferson assured him. "But, all the same, I'd like to know how you come to be mixed up in all this, Mohune? I mean what . . . "

"I know what you're driving at J.J.," Mohune broke in, "but just leave it for the minute, will you? I'm rather anxious just now to have a word with one of your fitters, his name's Jackson, I think. Would you send for him, old man, I'm going over to have another look at Toby's aircraft."

He sauntered away and, reaching the Hurricane, leapt up its side with a lithe spring. The fitter who had told him of Jackson's fears about the ignition was sitting at the controls.

"Hop out a moment, will you?"
Mohune called above the noise of the engine. "I want to have a look-see."

The fitter throttled down and climbed out, and after a brief examination of the cockpit, Mohune dropped down beside him.

"You ought to have chocks put in front of those wheels," he suggested, and as the man turned to observe the unprotected wheels, Mohune added: "And get your hair cut, too, it's a damned disgrace, hanging all over your ears."

A sudden thought struck him.

"Just a minute," he said as the fitter turned back and faced him. "What's the matter with your face? Toothache?"

"No, sir, why?" came the surprised reply.

"It's swollen. Come here. Teeth all right? Open your mouth. Wider! Let's have a look."

Mohune's hand slipped behind the fitter's head as if to turn the man's head to the light. His fingers found the scar he half suspected.

"All right, Trebitch," he said quietly. "You certainly foxed me pretty well. And now it's the guard-room for you."

Instantly the fitter lashed out, and then sprang for the Hurricane. Mohune was close behind him, but as Trebitch leapt up the gleaming side he kicked out viciously, catching his pursuer on the

shoulder and sending him sprawling. In a split second the spy was in the cockpit, his hand moved forward, and the Hurricane leapt out on to the aerodrome.

Picking himself up, Mohune sprinted for Jefferson's aircraft from which an armourer corporal was leisurely descending. Pushing him roughly to one side, Mohune leapt at the Hurricane and shouted for the chocks to be pulled away. He felt his trousers rip as he climbed into the seat, then his hands were on the controls, and with a bellowing roar of power the Hurricane was charging across the aerodrome in pursuit of the fast diminishing 'plane ahead.

A THOUSAND feet up and with the stop, Mohune edged himself into a more comfortable position. A mile ahead Trebitch flew on a straight course; and at first Mohune could do nothing to lessen the distance which separated him from his quarry. But his eyes, sheltered by the screen, were happy, for the excitement of the chase had gripped him.

When Trebitch climbed, Mohune gained a little, but it was obvious that he could not make up the distance. What would the result be? Would the spy fly straight ahead until his petrol gave out and then land? Mohune fervently hoped so, for he wanted nothing so much as a chance to avenge the kick he had received.

Five, ten minutes sped by, and still the two aircraft kept their position. Then, suddenly, Trebitch turned.

Ha-Ha-Ha-Ha! Ha-Ha! Ha-Ha!

The guns of the oncoming Hurricane spoke jerkily, and Mohune, taken by surprise, swung quickly into a turn.

"God! What a fool I am," he gasped. "These damn guns are loaded, and I'd clean forgotten."

Frantically he worked at the Constantinesco gear as the two aircraft sped back along the course they'd flown, Mohune still behind, but closer now.

Once more Trebitch spun round. But Mohune was ready for him this time, and turning on the instant, depressed his gun triggers. Ha-Ha-Ha: Ha-Ha, chattered the Vickers, and then Trebitch was up in a stall turn, and down again, but with Mohune still as close behind him as though he were bound to the tailplane ahead by an invisible rope.

Again the guns cracked, and the windshield of the leading Hurricane shattered. Desperately now Trebitch strove to elude him, but twist and turn as he might, Mohune was always behind him, his bullets snaking like whiplashes past his head.

# Ha-Ha-Ha-Ha! Ha-Ha!

Mohune's thumbs were hard down, and the Hurricane ahead jerked up on its tail, hung for an instant as Mohune shot past it, then fell over and dived towards the ground.

Turning his head, Mohune saw it screaming towards the green fields below. He throttled back and glided down after it, grimly noting the frantic attempts that Trebitch was making to right his craft. But on each occasion it fell back into its headlong dive, and it was only when he was a few hundred feet from the ground that he managed to ease out of what would have been certain death.

For nearly a mile he staggered on half out of control, until at last he was forced to seek the ground. The wheels hit, the tail shot up, and the Hurricane crashed over in a cartwheel.

With a burst of engine Mohune turned and glided in to land within a few yards of the wreck. He was just in time to see the pilot stagger from his cockpit with his right arm hanging limply at his side and go stumbling towards the hedge which bordered the field.

Leaping to the ground, Mohune set off in pursuit and had almost reached the spy when there came the sudden crash of an explosion, and the man's right arm was bathed in orange fire. Screaming hideously, he fell to the ground, but was quiet when Mohune reached him. There was no need of a close examination. The blackened flesh of the man's right side, horribly charred, and the grotesque angle of his left hand dug into the grass, were mute evidence of his final agony.

Mohune straightened up and sought,

shakily, for a cigarette as a third Hurricane flashed in to land.

The burly figure of Jalden dropped to the ground and came running towards him

"Nice work, Peter St. Maur," he remarked. "You certainly treated the rubbernecks to an artistic display of gunning. How's your bird?"

"Very dead." was Mohune's laconic reply.

The Ape nodded.

"Certainly looks like it. Poor devil. How did it happen?"

"Must have had one of his pet bombs in his pocket," Mohune replied. "He was Trebitch, a spy I was sent here to find."

"A spy!" Jalden gasped. "So that's why you're here. And that also accounts for the excitement the local police were showing just before I left. They've rounded up your thugs of last night. Good work, Peter, you should certainly get a pat on the back for this!"

"More likely a kick in the pants," smiled Mohune, starting back to his aircraft. "You see my man's dead—and F.I.7 are rather keen on having 'em brought back alive. Still, at least I've got one consolation to look forward to." "What's that?" Jalden asked with

"What's that?" Jalden asked with interest.

"A dinner I'm owed by the Group Captain at Martlesham," was Mohune's laughing retort.

# 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 and no letter should contain more than three separate questions

AUSTIN TRIPLANE (A. E. Bacon, Southall, Mddsx). (1) The War-time triplane built by the Austin Motor Co. was fitted with a 320 h.p. A.B.C. Dragonfly engine and did about 125 m.p.h. It was 22 ft. long, 9 ft. 6 in. high, and had a span of 32 ft. 9 in. (2) The Vickers Vampire, with a 200 h.p. Bentley engine, did 121 m.p.h. (3) The Beardmore W.B.I (the Adriatic type of 1917) had a top speed of 91 m.p.h. with a 230 h.p. Beardmore engine. Span was 61 ft. 6 in., length, 32 ft. 10 in., and height, 14 ft. 9 in.

WAR-TIME STRENGTHS (A. Arthur, Capetown, S. Africa). The total personnel, R.F.C. and R.N.A.S., in August, 1914, was 197 officers, 1,647 other ranks. At the Armistice, R.A.F. personnel totalled 30,122 officers, 263,410 other ranks. Squadron strength in August, 1914, was 5 Service and 3 Training; and on October 31st, 1918, 200 Service and 199 Training.

SLUGS (B. C. Drew, Leicester). Sorry, but we've never heard of a Sopwith Slug, Sopwith Snake or Sopwith Sea Lion. Are you pulling our leg, or has someone been pulling yours?

PARACHUTES (R. Cleeton, Bradford). Yes, it is quite correct that every occupant of an R.A.F. aeroplane is required to wear a parachute when flying.

LEWIS GUN (P. J. Brady, Northwood, Mddsx.) Thanks for pointing out that the land-type Lewis was air-cooled and not water-cooled as we stated in a careless moment. No, we're not arguing with a man like yourself who went into action with one of the first Lewises to reach the Front, had 16 to look after, each with 174 parts, and was still handling a Lewis at the Armistice. And we'll be mighty careful on the subject of Lewises in future !

POUR LE MERITE (J. G. Jordan, Plumstead, S.E.18). The "Pour Le Merite" is the highest German decoration for military bravery. It owes its French title to the fact that its originator, Frederick the Great, founder of the German Empire, would speak only French. Max Immelman and Boelcke were the first German airmen to win the decoration.

FASTEST SCOUT (J. A. McKenzie, Ongar, Essex.) The fastest British aeroplane produced during the War period was probably the Martinsyde F.4, which, with a 300 h.p. Hispano-Suiza, did 144½ m.p.h. at 6,500 ft. Very few were built and none saw active service. Span was 32 ft. 9 ins., length, 25 ft. 3 ins., and height, 8 ft. Ceiling was 26,000 ft., and it could reach 6,500 ft. in 4 minutes.

INDEPENDENT AIR FORCE (G. E. West, Cowley, Oxford). The I.A.F. was formed on June 6th, 1918, under Major-General Sir Hugh Trenchard, and originally comprised bomber squadrons Nos. 55, 99, 100, 104 and 216. In August, four more squadrons were added, Nos. 96, 115 and 215, all equipped with Handley Page bombers, and No. 110 Squadron, equipped with D.H.9a's. A Camel squadron, No. 45, was added to the strength of the force on September 22nd, 1918.

SPEED RECORD (G. H. Hunt, Plymouth). The present world's landplane speed record stands at 379.66 m.p.h., and was set up on November 11th, 1937, by a Messerschmitt Bf. 113-R., piloted by H. Wunster, of Germany. A supercharged Mércèdes-Benz engine of unspecified power was used and a special fuel employed to enable the engine to develop full power at sea level. The Bf. 113-R. is a special high-speed version of the standard Bf. 109 single-seater fighter, five hundred of which are stated to be going into service with the German Air Force.



Remarkable Facts about the Aircraft Bombs of 1914-1918 are Disclosed in this Grimly-Fascinating Account of the Evolution of Air Bombing During the Great War

O-DAY, when air bombing has reached such a high stage of development and become one of the most dreaded features of modern warfare, it is interesting to recall that on the outbreak of the Great War, twenty-four years ago, its possibilities were so little appreciated that our total supply of aerial bombs consisted of about two dozen

20-pounders. These were lying in store at East-church R.N.A.S. station, and had to be hurriedly supplemented by a large number of 6-inch shells which were fitted with tail-vanes and used as aerial bombs.

The bomb shortage caused no great alarm, however, for at that time little importance was attached to the aeroplane as a military weapon, and certainly there were few who foresaw that the

day would soon come when it would far outrival the long-range gun as a means of bombarding distant targets.

There was, too, some excuse for scepticism, for, in 1914, the art of bombdropping was still very much in its infancy, and less than two years had passed since Commander Samson had, as an experiment, dropped a 100-lb.

DID YOU KNOW

THAT the R.F.C.'s first incendiary bomb contained two gallons of petrol?

THAT R.F.C. bomb-sights early in 1915 were made of nails and wire?

THAT the Zeppelins of 1918 each carried 3 tons of high explosive?

THAT the heaviest bomb dropped on England came from a Gotha Giant?

Read this article and learn other surprising facts about the aerial bombs of the Great War

a Short bomb from pusher biplane, and been agreeably surprised to find that the effect on the flight of the machine was hardly noticeable. Encouraged by this result, the Naval Wing of the R.F.C. tried a further series of experiments in December, 1913, to determine the lowest height at which bombs could safely be dropped from an aeroplane. No bombs of suitable weight were available, so, instead.

### AIR STORIES

floating mines, filled with charges varying from  $2\frac{1}{4}$  lb. to 40 lb. of high explosive, were set adrift and fired electrically from a destroyer, while Maurice Farman seaplanes flew at various heights above each explosion. Once again the effect on the aircraft was much less than had been anticipated, and it was decided that an aeroplane flying at a height of 350 feet or more could drop a 100-lb. bomb, containing at least 40 lb. of explosive, without danger of being capsized by the air disturbance caused by the resulting explosion.

But to drop a bomb and to hit a target with it are two very different things. The course and speed of the machine, its height from the ground, the shape and air resistance of the bomb itself and the strength and direction of the wind are all factors which must accurately be known if an object is to be dropped from a rapidly-moving aeroplane with any likelihood of its landing on, or about, a particular spot on the earth's surface. Obviously, all these factors could not be calculated with pencil and paper in the air, and the very earliest bomb-dropping experiments soon showed the urgent necessity of some kind of device which would do the calculations automatically. In this country the Air Department of the Admiralty were from the first the pioneers in the development of bombsights and release gears, and in March, 1913, they appointed a naval gunnery lieutenant, Lieutenant R. H. Clark Hall, to the R.N.A.S. to specialise in armament duties, with particular reference to bombing.

Other countries had been making similar experiments and among the most practical and successful types of bombgears that had been produced by 1914 were the German Zeiss telescopic sight, the Workman liquid-damped inclinometer, and a sight invented by Lieutenant Scott, U.S. Navy, with which he had won the first prize in the Michelin bombdropping competition of 1912.

Despite these experiments, however, the outbreak of the Great War found air bombing still very much in its infancy. The only bombs immediately available were 20-pounders of the Hale type, and one or two 100-pounders which had been designed and built as an experiment by the Royal Laboratory at Woolwich.

The Hale bomb, which had been used by naval airmen at Eastchurch since 1913, was a high-explosive impactdetonating type designed by Mr. F. Marten Hale, who had also been responsible for the Hale rifle grenade, which he had patented in 1908. Orders were immediately placed for the production of large quantities of both the Hale 20pounder and the Royal Laboratory 100pounder bombs, and when Mr. Hale produced designs for a new type of 100-pounder, and got a large order for it, the Royal Laboratory followed suit with a II2-pounder, with similar results.

# The First Incendiary Bomb

ALL these bombs were of the high explosive kind, but a few days after the declaration of war, successful trials were made with an incendiary bomb which had been invented by Flight Lieutenant Finch-Noves of the R.N.A.S. This bomb consisted of a light casing holding two gallons of petrol and fitted with a detonator and means for igniting the At that time, the incendiary petrol. bomb was still in the experimental stage and the results obtained with Finch-Noves' invention were so impressive that it was soon adopted, and large numbers were supplied for the use of the naval and military air services.

The only standard types of bomb-carriers then available—and those in very limited quantity—were a single and a double rack gear for carrying one or two 20-lb. Hales, and both were of such a primitive pattern as to be about as unreliable as the detonating gear with which the bombs themselves were fitted. So "chancy" indeed were these 1914 bombs that the usual practice among R.N.A.S. pilots returning home with their eggs unlaid was to drop them in the sea rather than run the risk of exploding them by the jolt of landing.

On one occasion, in November, 1914,

Flight Lieutenant Lan-Davies, accompanied by Petty Officer Telegraphist Hendrey, was following this practice preparatory to alighting on the water opposite Great Yarmouth air station when he came so low that one bomb, exploding on hitting the water, blew the greater part off the tail of his seaplane and sent the machine nose-diving into Hendrey was thrown clear, the sea. but the pilot, trapped in his seat and rendered unconscious by the impact, would have been drowned had not Hendrey dived into the wreckage, pulled him out of the seat and supported him in his arms until they were rescued, some considerable time later, by a steamdrifter. For this gallant act Hendry was awarded the Albert Medal.

# Bombing the Zeppelins

BUT if Great Britain suffered from the unreliability of her early bombs and bomb-gear, the plight of Germany in this respect was still worse. In their case, their earliest types proved so ineffective that they were altogether discarded and replaced, in the Spring of 1914, by bombs of a type known as "Carbonite." These bombs, which were to be used throughout the early part of the War, were pearshaped and solid, with a pointed nose and a propeller-actuated pistol. Instead of fins they had a kind of inverted tin cap attached to the tail of the bomb by stays. The smallest type weighed 4½ kg., or about 10 lb., and the heaviest 50 kg., about 110 lb. Small incendiary bombs of similar design were also employed, as well as a grenade-like projectile weighing about  $1\frac{3}{4}$  lb., but both of these were generally regarded as being too small to be of much use.

They were, however, probably no less effective than the flechettes or pencil-darts with which, in the early days of the War, we supplemented our own meagre supply of bombs. These flechettes were small steel rods pointed at one end and metal "feathered" at the other, and could be released to fall in showers upon enemy troop concentrations and horse lines. They were not very extensively used, however, as it was impossible to aim them

with any accuracy, though they were deadly enough weapons when they did score a direct hit. There is a well-authenticated case on record of one piercing the steel helmet of a soldier, passing through his body and the body of his horse and burying itself deep in the ground.

During the first few weeks of the War, more hand-grenades than bombs were carried and used by British aircraft, and it was not until November, 1914, that the air service—had its first opportunity of showing how effective a weapon the aerial bomber could be, and incidentally, giving the military experts on both sides a vivid warning of the shape of things to come.

But on November 21st, three Avro biplanes of the R.N.A.S., flown respectively by Squadron Commander Briggs, Flight Commander Babington and Flight Lieutenant Sippe, and each carrying four 20-lb. Cooper bombs, set out from Belfort aerodrome to launch a surprise attack on the Zeppelin sheds at Friedrichshafen. A 125-miles' flight, above the clouds for a great part of the way, brought the raiders to Lake Constance, and then, coming down to within 700 feet of the ground, they swept in over Friedrichshafen air station. Within the space of a few minutes they had planted nine bombs in an area of 700 square yards round the works and sheds. One of Flight Lieutenant Sippe's bombs became stuck in its rack and could not be released, but two more scored direct hits, one falling on one of the airship sheds and greatly damaging the Zeppelin inside; the other hitting the nearby gasworks, which exploded and sent flames leaping sky-high.

Though taken by surprise by the totally unexpected attack, the airship station's crew soon got their mitrailleuse section into action and, concentrating on Squadron Commander Briggs' machine, riddled his petrol-tank and forced him to land on the aerodrome. The moment he alighted from his machine he was set upon by the infuriated ground staff and was nearly fainting from his injuries when he was rescued by a military guard

# AIR STORIES

and taken to a hospital in Friedrichshafen. There he was given every attention and constantly visited by German flying officers, all anxious to express their admiration of a daring and brilliant feat of pilotage.

Briggs' two companions both returned safely to Belfort, having flown for four hours non-stop and covered a total disstance of 250 miles. Theirs was a remarkable feat of navigation and pilotage, as well as a great tribute to the little Avro and its diminutive engine, and the success of their mission made it abundantly clear to both sides that, henceforth, air bombing would have an important influence on the strategy of the War.

# Bigger and Better Bombs

was soon after this convincing **L**demonstration that R.F.C. quarters arranged for the transfer home of Second Lieutenant R. B. Bourdillon, an Intelligence officer on the staff of the 3rd Corps who had shown a keen interest in bomb-dropping problems and who, in co-operation with Lieutenant Strange of No. 6 Squadron, had already evolved a simple but effective bomb-sight in the form of an odd-looking arrangement of nails and wire. Bourdillon was transferred in December, 1914, to the Central Flying School at Upavon and given every facility to work out his ideas for an improved bomb-sight. His selection was well justified, for a few months later, working with Second Lieutenant G. M. B. Dobson, a meteorological officer at the School, he produced the now famous C.F.S. bomb-sight, which was immediately standardised in both the R.F.C. and the R.N.A.S.

The principal feature of the sight was an ingenious timing-scale which enabled a pilot in the air, with the help of a stopwatch, to measure his exact speed over the ground by two sights taken on one object. To obtain the correct angle for bomb-dropping, the movable foresight was then set on the timing-scale to correspond with the observed time interval between the two sights. Minor improvements were subsequently made

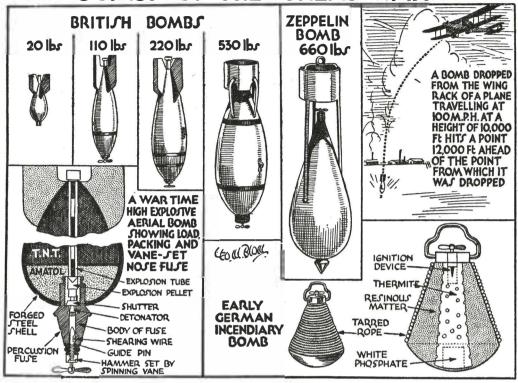
on the original sight, and a special model was produced for use over the sea, but so sound was its basic principle, and so far was it in advance of its predecessors, that the C.F.S. bomb-sight kept its paramount position on the Western Front until the end of 1916.

Meanwhile, developments had also been taking place in the production of the bombs themselves, both in improving on existing types and in the evolution of new kinds of missiles. The most satisfactory among the several newcomers of 1915 were those designed by the Director of the Admiralty Air Department, in cooperation with the Chief Superintendent of the Royal Ordnance Factory. result of this collaboration was the appearance of an entire new series of 16-, 65-, 100- and 520-lb. "light case" bombs and a 550-lb. "heavy case" model. Another very effective series of bombs which appeared at much the same time was that produced by the Cotton Powder Co. Ltd. This series included a 112-pounder, a size which, having been found to be the best at about that weight, replaced the 100-pounder in October, 1915, and became the standard heavy bomb of the R.F.C. until November, 1916, when it, in its turn, was replaced by a 230-pounder.

Coincident with the improvement in bombs and bomb-gear was the evolution of a definite strategical plan for the conduct of bombing operations on the Western Front. In this connection, a conference between representatives of the British and French air services was held on August 7th, 1915, at which a joint policy for bombing was considered.

Among the points of agreement reached were that every opportunity should be taken to disorganise the enemy's railway traffic, and that this could best be brought about by the continual bombing and derailment of trains on the move, thus probably blocking that particular line for several days. It was realised, however, that even temporarily to dislocate the whole of the enemy's railway movements a large scale attack on several lines at the same time would be necessary and the conference agreed

# BOMBS OF THE GREAT WAR



The widely-used 20-lb. fragmentation bomb was employed on troop concentrations and machine-gun nests, the 110-pounder against reinforced concrete shelters, the 220-pounder on bridges and roads and the great 530-pounder against buildings and heavy bridge supports. The 660-lb. Zeppelin bomb, illustrated above, was 5 ft. 7 in. long

that, in the event of such an attack being ordered, the two Services would combine. Meanwhile, they decided to interchange information about the enemy's railways, the training of their pilots in bomb-dropping, and the development of bomb-sights.

This new policy of co-ordinating the bombing activities of the two Allied air services was first put into effect a month later at the battle of Loos, and with startlingly successful results. and British bombers each concentrated on their allotted sections of the enemy's railway lines and, from September 23rd to 28th, a series of intensive attacks was launched up to a distance of thirty-six miles behind the German front line. Almost continual rain and low visibility made difficult the accurate observation of the results of the bombing, but certainly the enemy's railway lines were seriously damaged in fifteen different

places, signal cabins were destroyed, sheds set on fire, and five trains, including two loaded with ammunition, were wrecked. Altogether in those six days the R.F.C. bombers dropped eighty-two IIO-lb., one hundred and sixty-three 20-lb. and twenty-six small incendiary bombs, or nearly five and a half tons weight in all. Their casualties were-two aeroplanes missing and two pilots who returned wounded.

The bombers were now beginning to make themselves felt in grim earnest, and not a little of the success of their efforts during the battle of Loos was due to the fact that supplies of the new C.F.S. bomb-sight had just been received at the Front.

# Phosphorous Bombs

IMPORTANT developments in aerial bombs and bomb-gear were recorded

### AIR STORIES

during 1916. The rapid improvement in aircraft performances allowed greater bomb loads and heavier bombs to be carried, and the 336- and 530-pounders made their appearance in growing numbers. Both types were heavy-cased bombs, and the former, though containing only 70 lb. of explosive, had thick metal strips, fragments of which, on the explosion of the bomb, were thrown off radially with a velocity of some 2,000 feet a second. A single one of these outsize "eggs" made up a full bomb load for an R.E.8 of 1916.

Incendiary and phosphorous bombs of various shapes and sizes were also now in common use, and a particularly deadly model of the latter kind was the one designed by Lieutenant R. B. Bourdillon, of bomb-sight fame, in co-operation with two other officers. The Bourdillon bomb contained a load of specially treated phosphorous and the deliveries of eighty-five bombs, complete with special carriers, arrived in France in June, 1916. Ten days later they claimed their first victim, a German kite balloon on the Somme front and, thereafter, became a serious rival to the Le Prieur rocket as a weapon against lighter-than-air craft. The Bourdillon bombs were easier to load than the Le Prieur rockets, which had to be attached to the interplane struts of an aeroplane and fired electrically by the pilot. Furthermore, they did not suffer from the limited range of the rocket, whose curved trajectory made accurate aim impossible at anything over 400 feet.

The bombs used by the R.N.A.S. also underwent a change about this time, as the ones they had hitherto been using, being mainly intended for the destruction of submarines, had been constructed on the "mine" principle, that is, the explosion under water of a light case containing a heavy charge of high explosive—a kind of miniature depth charge. The bombs used by the R.F.C., on the other hand, were designed more on the "shell" principle of a heavy case with a small charge whose destructive effect depended mainly on the deadliness of the flying fragments of the casing.

The R.N.A.S. pilots soon found that while their special bombs were effective enough against a submarine, their "mine" principle rendered them of little use against a surface-craft, such as a cruiser or destroyer. And as they never knew which type of target they might meet on patrol, a compromise was effected during 1916, and thereafter R.N.A.S. bombs combined the two principles and could be used with equally deadly effect on underwater and surface targets.

# Bomb-Carrying Methods

IMPROVEMENTS also took place in aircraft bomb-gear, notably in the introduction of a new and lighter type of bomb-release and carrier gear known as the Skeleton pattern, and the adoption of a new method of vertical stowage of bombs inside the fuselages of bombing aircraft. The Skeleton type of carrier was made in three sizes, for the II2-lb., 250-lb. and 530-lb. bomb, and was much lighter and of lesser head resistance than any then in use. The 530-lb carrier, for example, weighed only 16 lb. as against the 90-lb. weight of the Woolwich type carrier it replaced.

The methods of carrying the bombs on aircraft varied considerably in the early stages of the War, but by 1916 the more or less standard practice, in single and two-seater machines, was to attach them horizontally to racks beneath the wings and fuselage. In the larger, twinengined types of aircraft, the bomb load, or a part of it, was often carried inside the fuselage where it offered no resistance to the air. At first, such bombs were stowed horizontally, but in 1916 the vertical stowage method was introduced, the bombs being hung by the nose on release clips and guided during their fall in cellular compartments. On large bombing aircraft these release cables, or "toggles," were operated by a member of the crew inside the fuselage of the bomber in obedience to the signals of the officer at the bomb-sights, but in the smaller, single-engined machines, the release cables were usually duplicated so

that they could be operated by either pilot or observer.

The end of 1916 also saw the first introduction into France of the 25-lb. Cooper bomb, a simpler type than the 20-lb. Hale which it eventually superseded, though issues from the large existing stocks of 20-lb. Hale continued up to June, 1917.

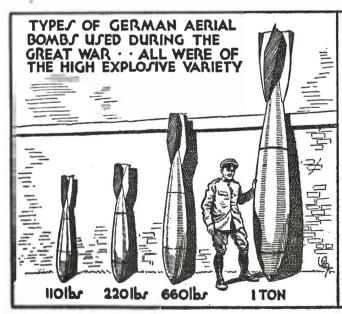
# "P und W"

BRITAIN, however, was by no means alone in her development of air bombing, and on the other side, German pecialists were more than keeping pace with the progress we were making.

Early in 1916, they had replaced the "Carbonite" bombs previously used (these were carried in baskets under the observer's seat and dropped by hand) by an altogether different type known as the "P und W." The new bombs were torpedo-shaped and fitted with slanting vanes which not only acted as an airdrag to keep the bomb nose down, but also gave it a rotary motion as it fell and so enabled the German designers to replace the propeller as an arming device with centrifugal bolts, on the same principle as those of gun fuses. As the height at which bombs were being released had by that time greatly increased, owing to the improved types of bomb-sights available, the extra time needed for the arming of the fuses was no great disadvantage. Time fuses were also used, chiefly for obtaining delayed action after impact.

The "P und W" bombs were produced in five standard sizes, the 12½-kg. (27 lb.)—a heavy case bomb with an instantaneous fuse, and the 50-, 100-, 300- and 1,000-kg. "mine" or light case bombs, fitted with bursters respectively of 23 kg., 60 kg., 180 kg. and 680 kg. The length of one of the 300-kg. (660-lb.) bombs was about 4 feet without its loop and stabilising cap; its greatest diameter was 21 inches and it carried an explosive charge about three times as great as that of the heaviest of German naval high-explosive shells. So successful did these "P und W" bombs prove that they remained in use to the end of the War.

Similarly, great advances had also been made by Germany as regards bomb-sights and 1916 saw the introduction of a much improved version of the Zeiss telescopic sight. One new model was called an "aircraft aiming tube," and an observer had only to note by his stop-watch the time in which a wave or landmark below the machine passed



# BOMB LOADS OF WAR-TIME 'PLANES

DE HAVILLAND 4 ..... 300 lbs

DE HAVILLAND 10 .... 1,000 lbs

HANDLEY-PAGE 9/400 ... 3,000 lbs

HANDLEY-PAGE 1/1500 ... 6,000 lbs

BREGUET 16 B.2 .... 2,000 lbs

CAUDRON R.II ..... 600 lbs

GOTHA ..... 3,000 lbs

L.V.G. ..... 3,000 lbs

FRIEDRICHSHAFEN ..... 800 lbs

ZEPPELIN (5erigines) ... 9,000 lbs

ZEPPELIN (4engines) ... 4,000 lbs

across a certain part of the scale of the sight when, knowing also the height at which he was flying, he could, by consulting a table, at once set his sights for the correct aim. For night-bombing operations, the Germans employed a special type of Goertz sight and, towards the end of the War, they evolved what was perhaps the most ingenious bomb-sight of all, the Goertz-Borjkow "aiming tube," in which a clockwork mechanism automatically determined the correct moment at which to release the bomb.

The average bomb load for a German seaplane of 1916 with a 150 h.p. engine consisted of about ten 5-kg. bombs, and when hunting submarines it was a pilot's usual practice to drop five at a time in quick succession to make sure of a hit. When seaplanes with engines of 200 h.p. appeared, the 5-kg. bombs, which were really too small to be of much use, were replaced by the 10-kg. size and proved very much more effective.

#### Three Tons of Destruction

THE bomb loads of German aircraft, **I** however, were but puny things in comparison with the huge amounts of explosive that were being carried by the Zeppelins in their raids on England. In April, 1916, for example, the famous Zeppelin commander, Mathy, led a fleet of five airships in a raid on the British Isles with each raider carrying an average load of over two tons of either high explosive or incendiary bombs—a total for the fleet of more than ten tons of death-dealing "hate." Considering these figures, it is amazing that the damage wrought by the Zeppelin raiders was so comparatively slight.

Each new and improved class of Zeppelin produced carried, of course, a larger bomb load than its predecessor, and, by 1918, airships of the L.60 class were visiting England with loads of nearly three tons of explosives. In practically all cases, their loads were made up of high explosive and incendiary bombs, and star shells.

The explosive bombs weighed 110-, 220- and 660-lb., and inside their pear-shaped iron cases they had the same type

of explosive charge as was used in the German naval shells, mines and torpedoes. The length of a 220-pounder was about  $47\frac{1}{4}$  inches and it had a maximum diameter of nearly 20 inches.

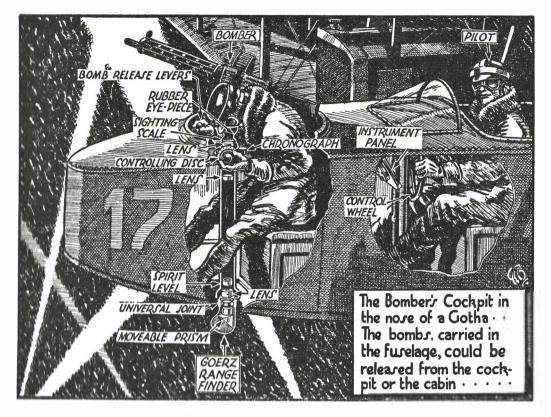
The incendiary bombs were cylindrical in shape,  $15\frac{3}{4}$  inches long by  $6\frac{3}{4}$  inches in diameter, and contained a charge of solid carburetted hydrogen and thermite paste. Each one weighed about 24 lb., and its exterior was covered with fibre soaked in resin—a highly inflammable material. On impact, these bombs burnt with an intense white flame which was very difficult to extinguish and were so light that as many as 80 or 100 could easily be carried in each airship.

The star shells were carried in order to illuminate the ground, either for the purpose of a forced landing or to reveal a target. Their fuses could be timed to make the charge burst at any desired height above the ground and, on bursting, they released a parachute to which a powerful magnesium flare was attached.

With the exception of the star shells, which were thrown out by hand from the side windows of the control-car, all the other bombs in a Zeppelin were hung along the corridor of the ship and were released electrically from the control-car. A panel on the wall of the car regulated the number and type of bombs dropped. They could be released singly or in salvoes, and the type and weight of each bomb was indicated by coloured lights on the panel, a blue light, for example, indicating a 660-lb explosive bomb, and a red light a 220-pounder.

Similar types of bombs were carried by the Gotha aeroplanes which, from 1917 onwards, supplemented the Zeppelins in raiding the British Isles. The first 300-kg. (660-lb.) bomb to be dropped from an enemy aeroplane over England came from a Gotha Giant in the course of a sixteen-machine raid on London on December 18th, 1917, while a few days earlier a raiding fleet, consisting of nineteen Gothas and two Giants, had dropped a total of 395 incendiary bombs on London as against only 28 of the high explosive type, an unusually small proportion to the amount normally carried.

# HOW GOTHAS DROPPED THEIR BOMBS ON ENGLAND



It was a Glant, too, that carried the heaviest bomb that had ever been dropped on English soil, a huge 2,000-pounder which, on February 16th, 1918, fell on a corner of Chelsea Hospital, killing five people and badly damaging many neighbouring buildings, including Chelsea In the following month Barracks. another 2,000-pounder was dropped in Paddington, killing twelve people and wrecking the greater part of a street, but such huge bombs were exceptional even for a Giant whose normal total bomb load of some 2,400 lb. seldom included anything larger than two or three 660-pounders.

It was a high-explosive bomb of this weight that was responsible for one of the worst disasters ever caused by a single bomb during the War. In the course of a night raid on January 28th, 1918, one of these bombs exploded on a printing works in Long Acre, London, which were being used as an air raid shelter. By an unhappy chance, the bomb fell straight through a pavement

light alongside the building, and the whole force of the explosion was concentrated in the basement. The lower part of the main walls and the supporting piers of the building were shattered, the superstructure caved in and the three upper floors, made of concrete 9 inches thick, came hurtling down. To add to the horror of those imprisoned by the falling débris, fire broke out, and before the tragic tale of that one bomb was finished, 38 people had been killed and 85 more either injured or seriously burnt.

Trench-mortar shells were also occasionally dropped by raiding Gothas, particularly towards the end of 1917 when the supply of high explosive bombs in Germany was running dangerously low. As air bombs, however, they were not a success, as they usually failed to explode.

# Bombing a U-Boat

RETURNING now to the British bombers, our greatest bomb loads were being carried in the Handley Page

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# AIR STORIES

o/400 type of twin-engined night bomber, and by 1917 these craft were carrying a load of fourteen 112-pounders—a total bomb weight of some 1,600 lb. Later on, with the advent of more powerful types of Handleys, this bomb load was to rise to the 3,000 lb. mark and over.

Single bombs of 520 lb. were frequently carried by Short seaplanes in 1917, and on May 20th of that year the first direct sinking of a U-boat by aircraft was achieved by an R.N.A.S. flyingboat by means of its two 230-lb. bombs. Piloted by Flight Sub-Lieutenant C. R. Morrish and with a crew of four, the flying-boat was on patrol east of the North Hinder when a submarine was sighted running on the surface some five miles away. The pilot dived on it and, when his recognition signals went unanswered, promptly dropped both his 230-lb. bombs, each of which exploded in front of the conning-tower. The U-boat sank at once, but though patches of oil came to the surface, it was not known until the German records had been consulted after the War that the victim had been the U.C. 36.

On the Western Front, meanwhile, air bombing had developed to a stage of unprecedented intensity and was playing a vital part in the fluctuating fortunes of both sides. Some idea of the scale on which this weapon, despised less than three years earlier, was now being used, is afforded by the bombing returns for one week during the great German offensive against Arras in March of 1918. The approximate amounts of bombs dropped by the R.F.C. during that period were, March 22nd, 21 tons, and on the following six days, 23 tons,  $36\frac{1}{2}$  tons, 33 tons, 29 tons, 50 tons and 40 tons respectively, a total of no less than 232½ tons of bombs dropped on one theatre of war in the space of a week.

In June, 1918, a special large-scale bombing scheme was put into effect as an experiment with which to test the practicability of hindering the enemy's concentration of troops at any given time by directing all bombing operations on a few specially selected points of his communication lines. Four important railway junctions were chosen as the targets and five day-bomber and three night-bomber squadrons were detailed for the task of destroying them. The bombs used were mostly of 112-lb. weight, and in a typical attack by day some 30 bombs of this weight were dropped. The night-bombers carried a similar load, except the Handley Pages of No. 207 Squadron, which in a single night dropped a total of 160 112-lb. bombs.

A total weight of some 106 tons of bombs was dropped during the course of this experiment, the results of which were held to show that the most effective interruption of the enemy's communications could be caused by bombing important junctions rather than by merely destroying lengths of railway lines which could quickly be repaired—a direct reversal, curiously enough, of the verdict reached by the first Anglo-French Joint Bombing Conference of 1916. Another important deduction made from the experiment was that, in day bombing, the best results were obtained when the bombers unloaded in formation on a signal from the leader rather than for each pilot to take his own aim, as had previously been the usual practice.

#### Bombers for Berlin

DURING the last eight months of the War, British aeroplanes on the Western Front dropped the huge total of over five thousand tons of bombs. The most commonly used type of heavy bomb was probably the 112-pounder, though towards the end of the War a few bombs of as much as 1,650-lb. weight were being used by Handley Pages of the Independent Air Force against objectives far inside the enemy's territory.

Of the Allied bombing operations as a whole, however, it may truthfully be said that, in comparison with the huge quantities of high explosive dropped, the amount of damage done was surprisingly small. This was due in some part to the handicaps imposed by the elementary bomb-sights of the time which resulted in a high percentage of misses and, in the case of the Independent Air Force—an organisation created for the sole purpose

#### ROMRS!

of air bombing—to the extensive use of bombs, mostly of the 112-lb, type, which were not heavy enough to destroy the targets on which they fell. Also to be considered was the high percentage of bombs, sometimes as much as 25 per cent. or more, which failed to explode.

But of the devastating effect of a constant succession of bombing raids on the morale of the civilian population behind the lines there can be no question. In this respect, the people of England, badly shaken though they were for a time by the persistent attentions of the Zeppelins and Gothas, suffered no more than the inhabitants of many great industrial centres in German territory where, in the autumn of 1918, the terror of the Independent Air Force had become

such that the German authorities feared that a general collapse of morale would inevitably follow any intensification of the bombing attacks which, almost nightly, were being launched by the reckless bombers of the Independent Air Force.

And had the War endured but a little longer that terror would surely have spread to the very heart of Germany, for only a few days before the Armistice was signed the Independent Air Force had taken delivery of three giant fourengined Handley Pages of a new, V.1500, type, each capable of carrying some 6-7,500 lb. of high explosive—the forerunners of a fleet of 225 which had been designed and ordered for the specific purpose of bombing Berlin.

where, in the autumn of 1918, the terror of the Independent Air Force had become purpose of bombing Berlin.

Starting next month, AIR STORIES will publish a story of adventure unprecedented in the history of our race—the story of Britain's air services, the R.F.C., R.N.A.S. and R.A.F. during the Great War. Not only will this epic narrative provide a comprehensive account of British War-time flying from 1914 to 1918—written in the vividly descriptive style of which the author is a master—but it will also throw new light on the heroic deeds of hundreds of British airmen who flew and fought—and died, makers of air history whose names the public has never known. Their story, as well as that of their famous comrades, will be told, for the first time in

WARRIORS OF THE AIR

The Epic Story of the Empire's Part in the War in the Air

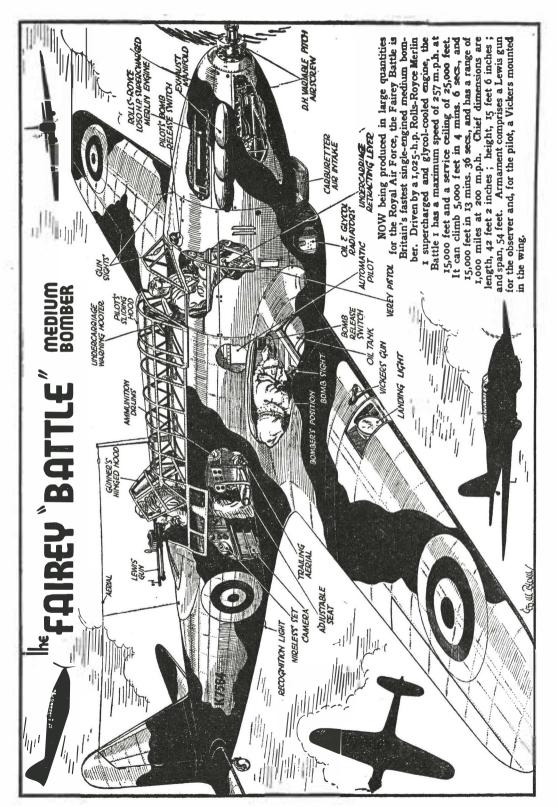
By A. H. PRITCHARD

Author of "Wings of The Black Eagle," "Falcons of France," etc.

For more than fifteen years Mr. A. H. Pritchard has been amassing his data for this great work and to-day has verified, from varied and unimpeachable sources, the names and records of over 350 pilots and observers, officers and men, who gained five or more air victories. This list of British air heroes is the largest and most complete ever compiled and, together with a table of all the principal types of British aircraft used during the War, giving dimensions and performance details, will be published as part of "WARRIORS OF THE AIR," the dramatic year-by-year account of British air achievements during the Great War.

STARTING IN NEXT MONTH'S "AIR STORIES"

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# The

Hauptmann Reinhard—a sketch from a War-time
photograph

Reinhard is well known to students of air-war history, for it was he who succeeded to the command of the famous Richthofen "Circus" after the Red Baron had plunged to his death on April 21st, 1918. But, apart from students and historians, few know the details of Reinhard's remarkable record, for, like so many great fighters who served under Richthofen, he was eclipsed by the dazzling fame of his leader and received very little publicity.

Born in Prussia in 1892, Reinhard held a commission as Unterleutnant in the Prussian Artillery Regiment No. 14, when the invasion of Belgium began, and was slightly wounded a few days before Christmas, 1914. In July, 1915, he was transferred to the Air Service, and proceeded to the Verdun Front as an observer in Flying Section 205. He flew on this front for over a year and was three times cited for carrying out valuable observations. In August, 1916, he was sent to Darmstadt to be trained as a pilot, and so began a career that was probably unequalled by any pilot of any of the warring nations.

# The Ace who Inherited a "Circus"

Designated by the Red Baron to succeed him as Leader of the Richthofen "Circus," Willy Reinhard scored Twenty Victories in the course of a Remarkable Fighting Career on Five Fronts

Ву

# A. H. PRITCHARD

In October, 1916, he was flying an old L.V.G. two-seater over the fever swamps of Salonika; his next move was to Russia, then to an Albatros C.3 squadron stationed near Constanzo, Italy. reached Italy in March, 1917, and two months later was back on the Western Front with Flying Section 28. before he had even had time to learn the names of his comrades he was withdrawn from the Front and rushed off to a Jastaschole, or fighting school, in Germany and put on instructional work. So well, however, did he handle the school's obsolete scouts that he soon attracted the attention of the authorities, and on July 4th, 1917, he was back once more on the Western Front, posted to Staffel II of the newly-formed Richthofen Jagdgeschwader No. 1. For a man who had been flying clumsy observation machines and obsolete scouts suddenly to find himself a member of the most famous flight in the Imperial Air Service was remarkable promotion, even for war-time, but then Reinhard was an altogether remarkable

Writing to a friend on July 16th, he reported:

" After flying everuwhere. including Salonika, Italy, Braila, in Rumania, Warsaw. in Russia, and back to Valenciennes, in France, by great luck I am now with the Richthofen Geschwader (Staffel Wolffe) flying Albatros D.5's. These are clean, speedy machines. High season in the air hunting comes here soon. with the great counter-attack on Ypres."

# Three Claimants to One Victory

REINHARD scored his first victory on Sunday, July 22nd, when eight Albatros scouts attacked a flight of Sopwith One-and-a-Half Strutters, and sent three of them down. Reinhard and two companions attacked the leading Sopwith and forced it to land behind the German lines with a shattered propeller.

Reinhard had considerable trouble in obtaining confirmation of this victory. for his companions, Leutnant Deilmann and Sergeant Küllmer, both claimed to have fired the fatal burst. However, at the "inquest" that was always held when more than one pilot claimed the same machine. Richthofen gave the verdict to Reinhard. Incidentally, this is a typical example of the care that was always taken to credit confirmation to the right man, and should effectively kill the old story that the German "aces" piled up their scores by unfair means and counted a two-seater as a double victory.

The pilot and observer of the vanquished "Strutter" were both captured. and in his report of the fight Reinhard stated that the pilot, a captain, claimed to have destroyed seventeen German machines, and the lieutenant observer fourteen. Unfortunately, Reinhard did not mention their names in his report, or we might have been able to identify his prisoners.

While on a lone patrol on August 13th, Reinhard shot the wings off a Camel, the wreckage falling on the outskirts of Grotenmolen, and he followed this with "double kill" on the following morning.

On that occasion a mixed patrol of Staffels 10 and 11, flying near Boesighem, ran into a formation of "Strutters," protected by a strong patrol of Spads, and within eight minutes three British

machines had tumbled earthwards. Reinhard dived at a "Strutter" that was lagging behind the main group and riddled both its occupants with a single burst. A Spad then attacked him, and for a moment bullets whistled and cracked around Reinhard's head. quick turn, a few rapid bursts and the Spad turned over and went down completely out of control to crash within a few yards of the splintered wreckage of the two-seater. The third victim in this fight, another "Strutter," went down near Dixmude, to rank as number two Oberleutnant Weigand's victories.

An old R.E.8 fell near Bixschoote on the 26th to bring Reinhard's score to five, and this was followed by a Camel on But September was September 1st. destined to be a bad month for Staffel II. its leader, Wolffe, being killed, and three other members, Bockelmann, Groos and Reinhard wounded. Reinhard got his wound on the 4th, being badly hit in the thigh during a hot fight with nine Camels over Houthulst Forest. He just managed to land his machine before he fainted.

# A "Bag" of "Brisfits"

ATE in November, Reinhard was back in action, but though he was appointed C.O. of Staffel 6 on November 26th he failed to increase his score until the following year. He re-opened his scoring with a Bristol Fighter, which went down in flames on January 4th after a particularly hard fight. Gone were the days when the Richthofen men dismissed the "Brisfit" as easy meat, and Reinhard had opened his attack with care. Coming up beneath the two-seater's tail, he opened fire, only to beat a hasty retreat when the British observer shot away one of his wing-tips and stitched a line of holes halfway across his upper wing. Reinhard then attacked from directly below and his second burst found the Bristol's petrol-tanks. There was an audible hiss as petrol vapour poured through the ruptured tank, a loud report, and then the whole machine burst into flames.

#### THE ACE WHO INHERITED A "CIRCUS"

Reinhard's next two victims were also Bristols, one falling in flames on February 16th, and the other collapsing in the air on March 18th after Reinhard had riddled its wing-struts with lead. On March 27th he sent down an R.E.8 near Morcourt for his tenth victory, and so entered the ranks of "aber-Kanone" or "Aces." April 1st saw him promoted to the rank of captain, and shortly after midday he celebrated the occasion by destroying an S.E.5 near Martinpuich. A Spad was his next victim, but nine days after this victory the Imperial Air Service suffered a blow that was almost over-Richthofen, Germany's whelming. greatest "ace" and hero, went down to his last landing.

#### Successor to Richthofen

ON the evening following Richthofen's death, the German war-birds assembled to witness the opening of their dead leader's private papers, and among them was found one, dated March 10th, 1918, which read: "Should I not return, Oberleutnant Reinhard (Staffel 11) shall become the leader of the Geschwaders.—Manfred v. Richthofen."

Even in death the "Red Knight's" will was law, and, on April 22nd the commander of the Imperial Air Service confirmed Reinhard's appointment. One hardly dares to think how many fits our own "Brass Hats" would have had if one of our C.O.'s had drawn up a will designating the successor to his command!

Reinhard was not a good leader, in the German sense of the word, for where Richthofen had maintained strict discipline and taken great pains to weed out pilots who did not come up to his high standard, Reinhard was inclined to be a little lax in discipline and was not so particular about his replacements. number of inferior pilots consequently found their way into the squadron, and during the first three weeks of Reinhard's leadership casualties were alarmingly high. Weiss and Scholtz of Staffel 11 went down on May 2nd; Just was wounded on the following evening, and up to May 20th three pilots had been killed,

#### REINHARD'S VICTORY LOG

- 3 Bristol Fighters.
- 2 Sopwith Camels.
- 3 Sopwith 13 Strutters.
- 2 R.E.8's.
- 1 S.E.5.
- 5 Spad two-seaters.
- 4 Spad single-seaters.

three wounded, and two listed as "missing." On May 21st, however, the Squadron was sent to Laon, on the French Front, where its pilots found the Spads and Breguets easier meat than had been the British Camels and Bristol Fighters. No less than seventy victories were recorded for the month.

Reinhard, in particular, found much good shooting over the French Front, for he destroyed seven machines in thirteen days—and it had taken him seven months to destroy the same number on the British Front. After destroying a Spad on the evening of May 31st, he returned to find that two of his pilots were missing, including one of the best men in Staffel 4, Leutnant Rautter, who that same afternoon had sent down a Breguet for his fifteenth victory.

#### Fokker Fodder

N June 2nd, shortly before 6 p.m., Reinhard's squadron ran into a large formation of Spad single- and twoseaters. The Spad two-seaters, of the S.II type, were very inferior machines, and the German pilots had little difficulty in downing four of them. One of them fell to Reinhard, who was immediately attacked by one of the protecting scouts. The Frenchman was a good shot, for his first burst severed one of the Fokker's fuel pipes and shattered the instrument board. His second burst had begun to creep dangerously close to Reinhard's seat when another machine-gun joined in the chorus and the Spad went down minus its left wing. Loewenhardt had seen his commander's danger, and had attacked his opponent in the nick of

Reinhard headed his damaged Fokker

for the lines and just scraped over before his engine gave up the ghost. The moment his wheels touched earth, the triplane heeled over drunkenly, and examination showed that the spreaderbar had been completely severed by bullets. Later that evening Reinhard, in a borrowed machine, led his men down on the same Spad formation, now reinforced with Breguets in place of the lost Spads. Reinhard sent one Spad two-seater down in flames, and claimed yet another in the long chase that followed.

Reinhard's eighteenth victim, another Spad S.II, fell on June 4th, when the Squadron found a dozen French machines "ground-strafing" the German trenches, and Reinhard killed the pilot of one of them. The observer was taken prisoner by the jubilant infantrymen and had to watch four more of his countrymen's machines crash only a few yards away.

On June 9th the 18th German Army Corps launched a large-scale attack and Jagdgeschwader I was reinforced by Jagdgeschwader 3 and ordered to keep the air clear. The French were up in large formations, but were hopelessly outfought by the combined German groups. Twelve Spads were attacked by seventeen Triplanes shortly before 9 a.m., and seven French machines went down, one, a "flamer," falling to Reinhard. Three days later Reinhard shot down another Spad for his twentieth victory. It was destined to be his last.

THE STORY BEHIND THE COVER:

#### Disaster in Mid-Air

HE great offensive fizzled out after a few days, and on June 18th Reinhard and Hans Kirchstein were summoned to attend a great flying meeting at Aldershof, Berlin. At a similar meeting held in January it had been decided to hold a competition for new types of machines and prominent pilots were withdrawn from the Front to test them. The two "aces" spent an enjoyable week at Aldershof, and on July 3rd Reinhard expressed a desire to try the new Friedrichshafen D.2.A, a machine which was expected to outclass the Fokker D.7, winner of the original competition.

All went well for the first twenty minutes, and then Reinhard decided to try a steep dive from a height of two thousand feet. Watchers saw the nose point earthwards, but hardly had the machine commenced to dive when the top wing broke off, the fuselage buckled and a tiny black object fell from the cockpit. With bated breath, the watchers waited to see the parachute open, but Reinhard's body hurtled on down at ever-increasing velocity. There came a sickening thud, and the second leader of the Richthofen "Circus" had passed on.

It was a cruel irony of Fate that the man who had flown and fought on almost every Front should meet his death amid the peaceful surroundings of the German capital.

#### THE R.A.F.'S LATEST TRAINER DOES 223 M.P.H.

THE latest type of advanced trainer to be adopted by the Royal Air Force forms the chief subject of this month's striking cover painting by S. R. Drigin. Known as the Don and produced by the de Havilland Aircraft Company, this speedy-looking trainer serves as an intermediate step between the comparatively slow types of aircraft on which Service pilots learn to fly and the high speed new warplanes which are now being supplied to R.A.F. squadrons. Its very complete equipment also makes it an ideal training machine for air gunners and bomb-aimers.

A large number of these trainers has been ordered by the Air Ministry, and they are easily recognisable by their distinctive yellow colouring, a colour scheme used on all R.A.F. training-type aircraft as a warning to other pilots that the machine is probably being flown by a learner and should be given a wide berth.

A low-wing monoplane, fitted with a 500-h.p. de Havilland Gipsy-King engine, the Don affords

side-by-side seating, with full dual control, for two pilots in an enclosed cockpit. Behind the pilots there is a wireless compartment. Farther aft, a bomb-sight, with prone position, is located in the floor, while above it is a rotatable gun-turret. A Browning fixed forward-firing gun is installed in the starboard wing, and in the port wing there is mounted a cinema-gun, which takes a series of photos of any target against which it is aimed. Two bomb-racks are also mounted under each wing.

Fully loaded, the Don weighs approximately 6,000 lb. and attains its maximum speed of 223 miles an hour at a height of 8,000 feet. It cruises at about 190 m.p.h., and can do 207 m.p.h. at sea level. Its chief dimensions are a span of 47 feet 6 inches, a length of 36 feet 10 inches, and a height of 9 feet 5 inches.

The other aircraft depicted in the sketch is the de Havilland Dragon Rapide air-liner which was recently acquired by the Air Council for the rapid transport of its members on their official visits.

## PIRATE PATROL

The Gunnery Officer of H.M.S. "Westmoreland" of the China Squadron had No Use for Flying—until the Fleet Air Arm Snatched a Red-headed "Chinaman" from the Pirates of Bias Bay

By M. O. W. MILLER

#### CHAPTER I

#### A Bet is Made

R.N., the observer of H.M.S. "Westmoreland's" catapult seaplane, climbed moodily up to the seaplane platform.

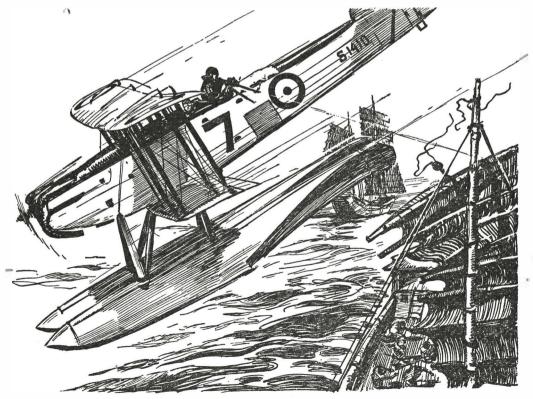
He had had a dull morning. His ship was lying in Back Bay, behind Hong-Kong, where the China Squadron had assembled for harbour drills and the Fleet pulling and sailing regattas. The competitive drills had kept everyone else in the ship busy all the forenoon and, with his machine undergoing a 100-

hour overhaul, he seemed to be the only person on board with nothing to do.

On the seaplane platform he found his pilot busy superintending the fitters, and he clambered into his cockpit to see if there was anything to be done. Finding all his instruments in perfect order, he leaned over the edge of the cockpit to see how the engine overhaul was progressing.

"John," he called out to the pilot, any chance of flying to-day?"

"Not at the moment, old boy," came the answer. "We're trying to trace a leak in the water cooling, and it takes some finding."



Raising his sights just in time, James fired into the junk's rigging. . . .

James climbed out of the machine, down the vertical steel ladders to the deck and made his way down to the wardroom where he found the remainder of the ship's officers slaking their thirsts after a hard forenoon's drills.

"Have a gin, James," called out Hickey, the ship's gunnery officer. "Not that you've earned it like us hard-working blokes, but it might do you good."

For some reason, the mild taunt touched James on the raw. "Guns" was always "chucking off" against the fliers.

"No thanks," he snapped. "Might have to fly this afternoon. We"—and he accented the "we"—"have to keep sober for our work."

"Well, that won't worry you very much, will it?" countered Guns. "Seeing that you never seem to do any. I must say it beats me what the Admiralty pay you flying blokes six bob a day extra for. I've never seen you do any work. All you seem to do is to clutter up a nice clean upper deck with your oily engine parts and then stand about looking at 'em."

"You gunnery jacks don't exactly break your backs with overwork," James retorted. "I've never known you do anything but go on leave. That redheaded brother of yours in the 'Somerset' is over on the mainland duckshooting now and you're off on leave to-morrow. We seem to be well able to spare you, anyway."

The Chinese steward arrived opportunely to pour gin on troubled waters, but Guns was not the man to leave well alone. He was a red-headed, hottempered Irishman and came from a gunnery family. With an ex-gunnery officer for a father and a brother a gunnery officer in the same squadron, he was quite convinced that a ship was nothing but a floating gun-platform, and any hint to the contrary roused him to a hot-blooded fury.

"I can't think what makes you blokes go in for flying," he went on. "Nasty uncomfortable job. I wouldn't like to be in a ship commanded by an ex-flying captain, You chaps spend so much of your time at aerodromes ashore that you can't possibly be seamen. Don't give yourselves the chance. I must say I've got no use for flying in the Navy. No use whatever."

The "come-backs" to this were so many that James hesitated which to start with, and, hesitating, was lost, for at this moment the Navigator entered the Mess. As the officer in charge of the ship's boats, he was arranging for people to sail in the Wardroom Officers' race that afternoon.

"Guns," he called out across the Mess, "are you sailing the Captain's galley this afternoon? Good. That only leaves the gig. Any offers for the gig? Come on, James, what about you?"

James looked at Hickey. The gig was an exactly similar boat to the galley; they would have the same handicap so that they would cross the starting line together. It would not be his fault if the gig did not cross the finishing line first.

"Yes," he said thoughtfully. "I'll take the gig. Guns, I'll bet you a bottle of bubbly I beat you!"

"Done," said Hickey. "I'll lay you two to one if you like."

"No, thanks. Evens will suit me."

"I tell you what," went on Hickey, a fighter to the last. "I'll bet you a bottle of champagne I beat you in the race this afternoon, and I'll throw in the other one when I've found some use for the Fleet Air Arm."

James turned on his heel and walked out of the Mess. These deep-sea sailors were too much for him. A sailor himself and a seaman to his finger-tips, he yet knew the value of flying to the Navy and, if the truth were told, had a shrewd suspicion that, at the end of the next war, the ships and the aeroplanes that used the sea would find their present relative importance reversed.

JAMES bolted down his lunch and got his gig away from the ship early. He had a crew and a boat that he did not know, and less than an hour before the race in which to get acquainted with them.

But the warning gun, fired fifteen minutes before the first class of boats was due to start, found him well satisfied with both, and he sailed down to join the crush of boats jockeying for position near the starting line.

As he saw the flags flutter to the flagship's masthead to warn the gigs and galleys to stand by, he looked round for Guns and, making a couple of short tacks to windward, sailed right through Hickey's wind as they both approached the line, leaving the galley standing and giving himself an invaluable twenty yards lead.

He started the first leg of the triangular course well pleased with himself. He had a long reach to make the first turning point and, making his crew come right aft, settled down to keep his lead over the galley.

He rounded the first buoy well ahead, and found himself tacking against a strong headwind. At the end of his second tack, he found that the galley had made up much of her leeway, and, hanging on the wind as he went about, had the agony of seeing her shoot up to windward under his stern and set off on what was obviously her best tack. He settled down to the chase, thanking his stars that he seemed to be a bit faster on a reach and that, unless the wind changed, he would have two reaches to one beat.

The galley rounded the next mark well ahead of him, but on the reach James rapidly overhauled her and was only a few yards astern when he gybed round the buoy on the completion of the first round. Straining every nerve to get the last ounce out of his boat, he kept his eyes on the sails, hauling in a sheet here, checking one there, as he saw the wind coming across the surface of the water and was thankful to see that he was overhauling the galley yard by yard. He would need every yard he could get if he wanted to keep close enough to be able to pass her on the last leg, as he had little doubt that Hickey would increase his lead again on the beat.

Suddenly he was brought back to the outside world by a shout from his cox'n.

"Signal up in the 'Westmoreland,' sir! Something to do with boats."

James looked round and read out the string of coloured flags at the "Westmoreland's" masthead.

"Look it up in the signal-book," he ordered.

The cox'n reached for the boat's signal bag and digging out the signal-book, rapidly turned over its pages until he found what he wanted.

"All boats return to the ship, at once," he interpreted.

James cursed. Here was he, twenty yards astern of Hickey and all boats had been recalled. He would never be able to convince Guns that he would have overhauled him on the last reach, so the race was as good as lost as far as proving his superiority over the gunnery world was concerned. He looked up to windward to see if there was any bad weather approaching to account for the recall, but could see none, and regretfully gave the order to aft sheets as he put his helm up.

Hardly had he settled down on his new course when all regrets over the race were banished from his mind by the sound of a gun and the sight of smoke issuing from one of the "Westmoreland's" saluting guns, followed by the Blue Peter being run up to her masthead. Something was up. There was no doubt about that. The firing of a gun and the hoisting of the Blue Peter was the general recall for everyone out of the ship, and a signal used in the Royal Navy only in a real emergency.

# CHAPTER II The Pirates of Bias Bay

AMES' heart quickened as he approached the ship. She was obviously being made ready to go to sea; awnings were being furled, ladders hoisted inboard, boats secured and hands were working about the cables, getting ready to unmoor. The China Station was a good one for excitements, and a sudden order to go

to sea might mean anything from a major war to a local earthquake.

He brought his boat under the aircraft crane to be hoisted inboard, sent his crew up a rope and, hooking on the boat tackle, was rapidly hoisted inboard. Then, turning his boat over to a midshipman to secure for sea, he made his way aft to the quarterdeck to find out the cause of all the excitement.

It sounded a very mild and usual one. A Chinese coasting vessel had been attacked by pirates not far from Bias Bay and, after looting the ship, the pirates had decamped, taking with them the only European passenger on board, believed to be an Englishman, whom they would, presumably, hold for ransom. These raids had been distressingly frequent in recent months, and at last, it seemed, the British authorities had decided to teach the pirates a lesson and were sending the "Westmoreland" out in an attempt to find them before they reached their base and scattered.

After hearing the news, James went down to his cabin to clean into uniform. Hardly was he ready when a bugle, sounding off the call for "Special Sea Dutymen," summoned him to the bridge to take over his duties as officer of the watch for leaving harbour.

THE ship weighed and proceeded to sea and, as soon as she was clear of the anchorage, James handed over to the sea officer of the watch and went into the charthouse to study the chart. Inside, he found the Captain and Navigator in conference over the situation. The Chinese coaster had been attacked about five hours earlier, and the Captain decided to make straight for Bias Bay, the pirates' base, in the hope of cutting them off before nightfall.

Thoughtfully James made his way aft and sought out his pilot from whom he learned that the Fairey III. F was now ready to fly, although she had not yet carried out the test flight prescribed by the regulations after an overhaul. Together, they made for James' cabin where, taking out his folio of flying charts, James selected the one for the mouth of the Canton River and spread it out on the bunk.

Studying it, it seemed to him that with the east wind that had been blowing all the afternoon, the pirates would be fools to make for Bias Bay to the northeastward. They would be much more likely, he argued, to run straight to the coast and lose themselves among the thousands of creeks and inlets between Bias Bay and the Canton River where nothing bigger than a boat could follow them and where they would be safe until the trouble had blown over.

The only way in which these creeks could be searched quickly was from the air, and if only the Captain could be persuaded to allow the III. F to fly, they would be able to make a thorough search of the creeks before dark without in any way interfering with the Captain's own plan of proceeding straight to Bias Bay to place himself between the pirates and their base.

The chance was too good to miss, and, greatly daring, the two officers made their way to the bridge where they laid their plan before the Captain. They had not very much hope of succeeding in their request. At that time, the majority of cruiser captains had had little or no experience of aircraft, and were inclined to adopt the view that to go up in the air at all was so dangerous that it was not fair to ask airmen to take any additional risks that could be avoided.

To their surprise, however, the Captain, once he had realised that their plan would not interfere with his own, was quite enthusiastic about it, and readily gave them permission to fly. His only stipulation was that they must go by themselves and not take their telegraphist with them.

Ordering the bosun's mate to pipe the seaplane party and catapult's crew to close up, James and his pilot rushed jubilantly aft. They had plenty to do and not much time to do it in if they wished to make a thorough search before approaching darkness forced them to return to their ship. Sending for his telegraphist air-gunner, James ordered

#### PIRATE PATROL

him to ship the Lewis gun in the rear cockpit and provide ammunition for it, at the same time breaking the news to him that the Captain had said that he was not to fly. He then hurried into his flying-kit, folded his chart on to his chart-board and went up to the seaplane platform.

INSTALLED in his cockpit, James adjusted his parachute harness, stowed his instruments in their racks and then examined his gun. He did not, as it happened, know a great deal about Lewis guns, but he had read that observers during the War always examined their guns before taking-off, and felt that he ought to do the same. Also it impressed the onlookers who always gathered to see the machine catapulted off, in the hope that there would be a crash.

When he felt that he had made a sufficiently warlike impression, James turned forward and looked about him. The pilot was already in his cockpit and running up his engine. The catapult was trained over to starboard into the wind, and the machine had been run back to the extreme inboard end so as to give the cradle on which it was supported its maximum run before it collapsed and released the machine. Over on the starboard side, the seaboat's crew, in their life-belts, had manned their boats, ready to be lowered in case of an accident to the machine in taking-off.

James saw the catapult officer signal to the bridge that all was ready for catapulting and settled down in his seat, facing aft. He buckled his broad catapulting belt round him and grasped the bar that stretched across the cockpit just abaft him. The machine was going to attain a speed of sixty-five knots within a distance of some sixty feet, and he had to brace his body to take the strain of this terrific acceleration.

Presently he heard the pilot open up his engine to full-throttle. Pulling with all his strength on the cross-bar, he braced his legs and pressed his body into the belt, then felt a stupendous jolt as the machine shot along the catapult and up into the air.

As the pilot levelled out, he cast off his belt, took up his chart-board, and set to work to plot on the chart the ship's position, course and speed. This done, he told the pilot to head for the coast, giving him a course that would take him due east of the position where the coaster had been attacked. Then, after settling the pilot on his course, James turned to his wireless, unreeled his heavily-weighted aerial and opened up communication with the "Westmoreland."

By the time he had succeeded in obtaining acknowledgment of his report, they had arrived over the coast, and James turned north. The pirate junks would not have had time to go very far inland, he argued, and would most likely be found hiding in some winding creek not far from the sea.

Climbing into the after end of the cockpit so as to obtain a maximum field of view unobscured by the wings, James adjusted his goggles and settled down to search the mudflats which stretched in endless desolation to north and west, drained by innumerable creeks meandering their muddy way between high swampy banks.

He had not long to wait. A shout from the pilot, who had a better view ahead, attracted his attention and, looking over the port bow, he saw a dark mass standing out against the mud-coloured bank of a creek, a mass which soon resolved itself into a cluster of Chinese junks.

Putting the nose of the machine down, the pilot was about to descend and investigate from close quarters when James stopped him to discuss a better plan of action. The boats were in a position where they could not be approached even by a destroyer, so that the only way in which the "Westmoreland " could take any action against them would be to lower boats and send them in on a "cutting-out" expedition. This would take time, and the pirates, who probably knew that the aeroplane had sighted them, would certainly scatter before the ship could reach the coast. It seemed that the only thing to do was

to take the necessary action themselves.

But first it was essential to establish the fact that these were pirates and not some harmless fishing fleet sheltering from expected bad weather. The best way to make sure was to fly low over the boats and see if they were fired on. If they were, it could be taken as a sure sign that the men in the junks had guilty consciences.

# CHAPTER III The Red-headed Chinaman

WHEN the seaplane was directly over the junks, the pilot put its nose down and dived almost vertically upon them, pulling out less than a hundred feet above the water. As they roared over the largest junk, James could see the men running about with rifles and, as he watched, a man who was taking careful aim at the machine suddenly threw up his hands, staggered wildly forward, and seemed to be almost pulled over the side of his boat into the water. As no one had actually fired a shot, this phenomenon seemed inexplicable to James; until he realised he had forgotten to wind in his wireless aerial, and that the weighted end must have caught the Chinaman and given him a disabling blow.

Searching feverishly in the wireless locker for a spare aerial, James suddenly remembered that he had had to use it a few days previously and had forgotten to have it replaced. With dismay he realised that he was no longer able to communicate with the ship, and that if there was any rescuing to be done it would have to be on their own initiative.

After a shouted consultation over the voice-pipes, they decided that the only way they could rescue the kidnapped Englishman was to alight on the water and trust that he would be able to escape from whichever junk he was imprisoned in and swim over to them. To give the man a chance to reach the seaplane, they would have to keep the junk covered with a machine-gun while he was in the water and, as the pilot's gun was fixed, while the rear-gun could be swivelled

round on its Scarff ring, they decided to alight slightly ahead or astern of the junks so that the wings would not mask James' field of fire.

The first thing to do was to show the pirates that they had a rear-gun, a fact that the simple Chinese probably did not know. So, diving on them again, the pilot put a burst of fire into the water just clear of the leading junk, then turned to give his observer a chance.

James decided to send a short burst into one of the junks to show the pirates that they were in earnest and would stand no nonsense. Taking aim at the largest one, he was about to press his trigger when he saw a struggle on her decks and a red head, that could not possibly belong to a Chinaman, appeared at the end of his sights. Raising his sights just in time, he fired into the boat's rigging and was both pleased and surprised to see the sail on her mainmast come down with a run.

As the machine climbed quickly out of range of the pirates' rifles, James congratulated himself on the success of his manœuvre. He had discovered which junk held the kidnapped man, and a plan of action had also been suggested to him by his good luck in shooting down the junk's mainsail. Hurriedly, he gave the pilot his instructions. There was no time to waste if the man was to be rescued alive and the pirates must be kept too busy to interfere with him until the seaplane was on the water and ready to receive him.

Again and again the III. F swooped down and flew level with the junk's masts while James poured burst after burst into her to bring down her remaining sail. To his relief, he saw that his plan was succeeding and that the remaining boats were scuttling away round a bend in the creek and had even got out their sweeps to take them away as quickly as possible from their doomed comrades.

As soon as the other boats were safely out of the way round the corner of the creek, the pilot, making a tight turn, brought the seaplane down on the water and headed straight for the junk,

#### PIRATE PATROL

keeping her covered with his gun as he taxied. From time to time he sprayed the junk's upperworks with bullets, and then gave a sudden shout of encouragement as the prisoner, realising the significance of the seaplane's manœuvre, seized the opportunity to jump overboard while his captors were taking cover.

Taxying all-out towards the frantically swimming man, the pilot kept up a running fire, while James clambered down on to the floats to help the swimmer on board. And as he half-pulled, half-dragged the dripping man to safety he recognised him as Hickey's brother, whom, he learnt later, had been returning to Hong-Kong from his duck-shooting expedition on the mainland when his ship had been attacked by the pirates.

Losing no time in taking-off, the pilot made a climbing turn to clear the bank of the creek, and headed for the open sea. As soon as they were clear of the coast, James set him on a course to intercept the ship which, he hoped, had meanwhile maintained her course and speed. There was a risk, though, that, as she had not received any signals from her aeroplane for some time, she might have turned round to search for it.

But their luck held good, and shortly before sunset he sighted the "Westmoreland," still steaming full speed to the northward. As they approached the ship, James took out his signalling lamp and, calling her up, asked permission to land. The ship slowed down and turned so as to bring the wind on her port bow.

As soon as the "Affirmative" signal was hoisted close up, the pilot circled round and brought the III. F on to the water a few yards astern of the crane which had been trained over the starboard side ready for them to hook on.

The seaplane lost her way as she

touched the water, and the pilot opened up his engine to keep station on the ship which was still steaming ahead at about ten knots. James jumped on to the upper plane and, slipping back the zipfasteners, released the hoisting tackle from its stowage. Holding the ring of the tackle in his hand, he balanced on the upper plane waiting for the pilot to bring the seaplane under the crane. With a burst of engine that nearly blew James over the tail, the seaplane came under the crane, the swinging hook was slipped into the ring of the hoisting tackle and the engine switched off as the machine was rapidly hoisted inboard.

The crane swung the III. F amidships and lowered it gently on to its cradle. James helped the rescued man to climb out and, after savouring the surprise on the face of Guns as he recognised his brother, settled down to re-stow his gear and see that his gun was safe before handing it over to the telegraphist airgunner to unship and clean.

When everything was shipshape in his cockpit, he climbed out and made his way forward to the bridge along the port side of the ship, avoiding the crowd that had assembled round the rescued Hickey and his brother. Arrived on the bridge, he saluted the Captain.

"Returned on board, sir!" he reported.

The Captain looked at him keenly.

"Very good, James," he said quietly.

Better go and have a rest now and make out your report in the morning.

You look pretty tired. Good work."

A few moments later, James was in the wardroom, pushing his way through the crowd that surrounded the two Hickeys. With a grin, he approached the Gunnery Officer.

"Well, Guns?" he said significantly. Guns reached for the bell-push swinging above his head.

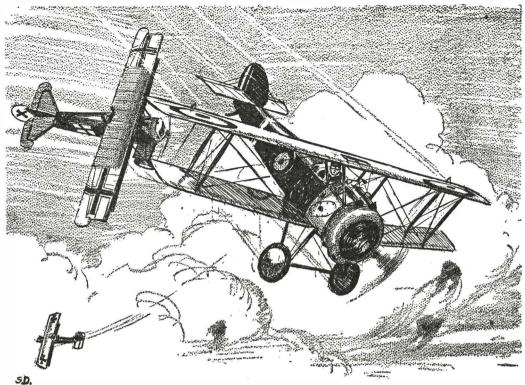
"A bottle of champagne, steward!" he shouted.

Remember to Read-

#### THE SILENT SKY-TERROR

By G. M. BOWMAN

-in Next Month's AIR STORIES



"Seizing an opportunity, I got on to the tail of one of the Huns . . .

# THE ACE OF TWISTERS

The Best Evidence that the Biggest Liar in the Three Squadrons could Produce in Proof of an Ordeal as Terrible as Any Man could Suffer was—a Pretty Piece of Ribbon

#### CHAPTER I

Who Killed von Oberdorf?

OUEER physiological phenomenon comes into this chapter in the history of the "Three Squadrons '' that may be new to many. Before I met Captain Walsingham and "Darkie" Romanez it was new to me, too; I should have said that such a thing was impossible. But since then I have been assured by friends in the medical profession that this phenomenon has been recorded on several occasions in the last hundred years—and testified to by witnesses of indisputable integrity.

It happened to a Forest Officer in India, for instance. He fell out of the machan he had had built in the trees,

almost on top of the tiger. The brute sniffed at him as he lay there unconscious and, thinking him dead, started dragging him off to its lair. When he recovered consciousness it was dark. Only a small patch of star-lit sky framed in blackness told him that he was in a cave. His shoulder was pulp and he was half suffocated by the stench of carrion around him. He lay there all through the night, waiting for the tiger to come back. The tiger never came back. The fellow Forest Officer who shot it came instead. And when he entered the cave and peered down at his friend, he thought at first that he had found some other man.

Then again, it happened, this queer phenomenon, to a traveller who passed

# Another Exciting War-time Adventure of The Three Squadrons

#### By WILFRID TREMELLEN

Lieutenant R.A.F. (Retd.)

a fearful night in an old, haunted castle in Poland. While rambling over the place one cold sunny afternoon he slipped on the ice and broke his ankle by falling to the bottom of a dungeon. They did not find him till next day. He would never say what he saw that night. In this case, too, his friends did not at first recognise him.

It happened also to ——. But we are concerned with the case of "Darkie" Romanez. In this affair, I was merely a witness, but I shall remember every detail to my dying day. The horror of that sudden change! The horror that must have been the cause of it! May such a thing never happen to you; may it never happen to me.

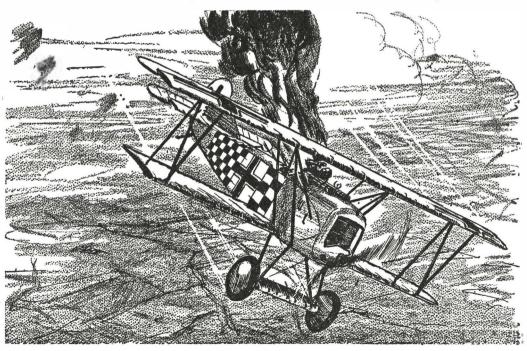
This story is not a very pleasant one; but you have had your warning.

My part in the story began when, returning to the Three Squadrons from the base one afternoon, I found

"Woggy" Wane making tea. Woggy was of the opinion that the Squadron cooks, whatever their ability in transforming tins of bully beef into more or less appetising dishes, were miserable failures at the simple art of making tea.

"Either they start pouring the water on before it's come properly to the boil, my dear," he used to say, "or else they use water that's been stewing for hours. In fact they'll use any old water if it's more or less hot. Nunno. Not good enough!"

So Woggy kept his own tea-making apparatus in our Nissen hut—primus stove, kettle, an immense tea-pot, and all the rest of it—and every day provided tea for a wide circle of privileged persons precisely half an hour after the return of the afternoon patrol. Woggy's teaparties, as I look back on them, were one of the "good things" of the Great War. I can still see his chubby cheeks behind that out-size tea-pot. Solemn



whit him with a lucky burst, and saw him go down, trailing smoke."

as an owl, he dispensed tea, good sense and Christian kindness to all who dropped in. Incidentally, Woggy's tea-complex had a certain indirect influence in discrediting the worship of the great god Bacchus in the Squadron. Which was all to the good; since more than one of our promising youngsters had been "shot down in flames the night before the dogfight"—to parody a present-day advertisement.

I HAD been away from the Squadron on some course of instruction. I believe it was a wireless course, but I'm only sure that it was something perfectly useless to a scout pilot of those days. But it had lasted for three weeks, and I listened eagerly to the other teadrinkers as they told me the local news.

I found that the talk was principally of von Oberdorf. Had he, or had he not, been shot down? That was the burning question. Von Oberdorf, of course, was the great von Oberdorf, who at that time was credited with having sent nearly half a hundred British mothers into mourning; a brave man and a ruthless killer. If he had been shot down, then his conqueror had done a great service to the Allied cause.

But had he been shot down? The Camels all swore that he had; that Captain Walsingham, their new flight-commander, had engaged the Graf von Oberdorf, and after a duel lasting more than three-quarters of an hour, had shot him down in flames on his own aerodrome. But the S.E.5 Squadron and the R.E.8's were not nearly so cocksure about it. I listened eagerly to what was said above the clatter of teacups.

"I suppose," remarked Woggy, "that if Walsingham says he shot him down, it must be true. After all, Walsingham's not the sort of fellow to——"

"Ah! But what about that fellow Darkie Romanez?" Naylor reminded him.

"Yes! What about Darkie?" clamoured someone. "All Camel pilots are liars, anyway."

"All of them can't be!" objected Woggy.

"Darkie is!"

"Darkie's different. Darkie's a well-known twister."

"All the Camels are twisters!"

"You're talking rot!"

"Of course he's talking rot!" supported Braithwaite. "If Walsingham says he's killed von Oberdorf, then von Oberdorf is as dead as pressed beef!"

"I certainly can't imagine Walsingham telling whoppers," agreed Haltrick thoughtfully.

"Have some more tea," suggested Woggy pacifically.

The axiomist set the ball rolling again. "All Camels are twisters. Look at Darkie Romanez!"

''Darkie's an exception; most Camels play fair.''

"I say all Camels are twisters," reiterated the S.E. merchant.

"No, only Darkie," his neighbour insisted.

I turned to Woggy Wane. "What's all this about Darkie Whatsisname?"

It was Naylor who answered. "Since Darkie Romanez joined the Camels we take everything they say with a large pinch of salt," he explained. "He's a twister."

"All Camels are twisters," chanted the familiar voice.

"Stop him!" someone protested loudly, "the man must think he's a cuckoo-clock!"

I leaned over to Naylor, shouting to make myself heard above the chorus of protests that had broken out. "Can't you tell me something about him?"

Naylor blew out his cheeks, as though the subject of Darkie Romanez were a big one. "Why not take a stroll over to the Camels and ask them?" he suggested. "You won't find Darkie himself there, though. I understand that at the present moment he's illegally enjoying the pleasures of the French capital. In other words he's sloped off."

"D'you mean he's gone off on a jaunt—without leave?"

" Just that."

#### THE ACE OF TWISTERS

"Phew!" Tea was finished. I decided I would take Naylor's advice and stroll over to the Camel hangars. "See you later," I called out to Woggy.

When I opened the door of the hut, the argument was still going strong.

"A man like Walsingham wouldn't tell a whopper like that!" Braithwaite was insisting. "Von Oberdorf's been downed!"

"Any Camel pilot would tell any whopper!"

"Quite right!" shouted the oneidea man. "All Camels are twisters!" I closed the door.

#### CHAPTER II

#### The Return of "Darkie" Romanez

ON the Camel side of the aerodrome I ran into a sophisticated gentleman named "Tubs" Fuller. Taking me by the arm, he led me in the direction of the hangars, in front of which two Camel pilots were talking, one, a tall spare fellow with the look of a cavalryman about him and the other, a much shorter man.

"Come on," Tubs announced. "I'm going to introduce you to our Gloria Mundi—the glory of our Camel world."

" Is this——?"

"Walsingham. Who else? A pukka sahib straight out of Kipling—frozen blue eyes and all. He transferred from the Central India Horse—or maybe it was the Guides—something quite dazzling, anyway. Now he's what the Yanks call a 'grade one killer-man.'"

"Oh yes?"

"By the way, the little fellow he's talking to is quite another cup of tea. Not fit to be Walsingham's dhobie. Nauseating little pipsqueak. Nobody understands how Walsingham can abide him. Still, it takes all sorts to make a B.E.F." \*

"And Walsingham's the fellow who's supposed to have shot down von Oberdorf?"

Tubs Fuller coughed. "Walsingham is the fellow who shot down von Ober-

dorf," he modified. "And on his own aerodrome, mind you. Can you beat it? Imagine an S.E. pilot even going so far across the Line!"

I sniffed. Extravagant boasting and the belittling of superior achievement in other squadrons are well-known characteristics of the Camels. I thought of the tempestuous arguments I had just been listening to in our Nissen hut.

"Is this—er—victory duly accredited?" I asked.

Tubs Fuller turned his head and looked at me with one of those "How much do you know?" kind of looks.

"What do you mean?" he parried.

"Well——" I was just about to answer when the sound of a distant aero engine came to our ears. By that time we had almost come up to Walsingham and the other fellow, Crawshay. They had stopped talking and were searching the eastern sky, but turned when Tubs began to introduce me.

"This is Trevelyan. He's a Cornishman and he's in the S.E.5 squadron, but he can't help either—Walsingham—Crawshay."

I shook hands with both and read lazy friendliness in the blue eyes of Walsingham and instant dislike in the hurried glance-and-turn-away of Crawshay. He reminded me, that fellow, of the genet, an unpleasant little animal you find in the small mammal house at the Zoo. Eyes set much too close together.

Then we all turned and searched the sky for the machine we could hear approaching.

"It's a Camel!" announced Tubs Fuller suddenly.

"Bit too early for any of the patrol," murmured Walsingham in his lazy voice.

I looked at him with interest as he spoke, noting that his collar badges were unfamiliar—of some cavalry regiment of the Indian Army, I supposed—and that he wore the campaign ribbon of one of the minor Frontier wars. I liked the look of him immensely. Two minutes of his company had been enough to convince me that if Walsingham had said that he had killed the Graf von

<sup>\*</sup> B.E.F.: British Expeditionary Force.— EDITOR'S NOTE.

Oberdorf, then the Graf von Oberdorf was most certainly a dead man.

"Much too early for any of the patrol," agreed Crawshay.

Tubs Fuller wouldn't have that—not from Crawshay, anyway. "How do you know? P'raps he's a whitelighter."\*

The Camel began losing height and showed obvious intention of landing. A minute later its pilot shut off his engine at the leeward end of the aerodrome, banked round, and nosed down to land.

Suddenly Tubs Fuller slapped his right fist vigorously into his left palm.

"D'you know what?" he exclaimed excitedly. "It's—it's that young beggar, Darkie Romanez!"

"Oh, come!" drawled the big cavalryman. "If he had the nerve to slope off to Paris at all, he'd surely make a week of it. Sheep and lamb, y'know!"

"It is, though!" shrilled Crawshay.
"I can see the number now. It's that little brute, Darkie Romanez!"

He began to rub his hands together, and I looked at him with distaste. His voice had the exultant note of one who rejoices at the prospect of someone else getting into trouble.

"You're quite right," decided Walsingham, shading his eyes. "It's that young fellow-me-lad, Darkie Romanez. Cheek o' the man!"

"Now there'll be fireworks in the Squadron Office!" grinned Tubs Fuller.

Crawshay was still rubbing his hands. "By George, yes!"

He was in an ecstasy of delight.

WE stood there watching. I felt that the air was electric with excitement. The reveller had returned to face the music. And now what? Here undoubtedly was a case for cashiering.

The Camel, with propeller flickering lazily, was gliding over the turf at a height of six or seven feet. Four critical

spectators, we watched to see how the pilot would put her down.

- "Too slow!" growled Tubs Fuller.
- "Careful now, young fellow! Ah!"
- "Ease your stick forward, you damn fool!" yelled Crawshay. "Told you so!"
  - "Phew!"
  - " Oh, come!"

We all blew out our cheeks as the Camel, with sudden loss of air-speed, bumped down heavily from a height of four feet and bounced to a standstill.

"Lost his prop!" chuckled Tubs. "Oh la la !"

"That's what Paris does for you!" Crawshay saw fit to point out.

An ack-emma emerged from a hangar behind us and was just about to double out to the assistance of the stranded pilot, when Walsingham waved him back.

"All right!" he called. "We'll look after him."

Later on, I was more than a little glad that no gossiping mechanic had been an eye-witness of the strange scene that was to follow.

Walsingham began walking out towards the middle of the aerodrome, and Crawshay started in his wake, hurrying his aggressive, stabbing little footsteps to keep pace with the lanky cavalryman. Tubs Fuller and I brought up the rear.

"This is the finish of Darkie's career," Tubs said to me. "He played this Paris game once before, you know. What a man! What a nerve, eh!" He shook his head. "And to look at him you'd think that butter wouldn't melt in his mouth. What Scotland Yard would call a born 'con man."

- "A born——?
- "Confidence trickster."
- "Why?" I asked.
- "''Cause he's got the gift of making people believe the most astonishing whoppers you ever heard. That's his main line—apart from cheating at cards and passing dud cheques—telling whoppers. The things he did across the Line when nobody was looking! Phew! And the funny thing is that for the first two weeks we all believed him. The yarns he

<sup>\*</sup> In our squadron, machines dropping out of the formation on account of engine trouble, or for any other reason, fired a white Very light to indicate their intention.

told about his scraps with Huns were so full of likely detail that we couldn't help ourselves. The man's an artist, I tell you!"

"Must be," I agreed wonderingly. Here was a type I had never met before. I let Fuller run on:

" He'd convince anybody, Darkie He's got the congenital liar's would. trick of being able actually to kid himself. Consequence is his most appalling whoppers sound like truest Gospel-till you know him. You wait and see; he'll have some beautiful story to account for his absence—and have it off pat. Last time he said he shot his prop. away and came down amongst the Yanks. This time, likely as not, it'll be a forced landing on a French aerodrome—and the Adjutant'll wear out the seat of his pants on the telephone-stool ringing up half the Froggie squadrons on the Western Front to try and check up on him." Tubs paused for breath. "Believe me." he finished, "our Darkie is no ordinary prevaricator."

"SO it seems," I said thoughtfully.
"I suppose that there's no doubt that he has been to Paris—this time, I mean?"

Tubs grinned. "By no means. Quite likely he's been on a trip back to England. I can quite imagine him strolling up and down Brighton front in his little British warm with the fur collar—that he bought with a dud cheque—and never giving a thought to the day of reckoning."

" I mean--"

"If you mean, is there any doubt that he gave his formation the slip and buzzed off somewhere for a jaunt on his own, there's absolutely none. We know our Darkie Romanez by this time."

"Why do they call him 'Darkie,' by the way?" I inquired.

"Because," answered Tubs promptly, his hair's as black as jet and his heart's blacker still. Gipsy, if you ask me. He's got that sallow complexion, too. You'll see in a minute."

" Has he brought down any Huns?"

"Has Darkie brought down any Huns!" Tubs Fuller sighed deeply.

Then he put a hand under my elbow and pointed with the other. "See that fellow ahead—Walsingham?"

"H'm."

"Well, three days ago Walsingham actually shot down—and destroyed—von Oberdorf."

"So you told me."

"There's no doubt about it, my dear fellow. The Hun finished in a blazing pile-up right in the middle of his own aerodrome."

"Good!" I murmured politely.

"Not so good, though. Because, owing to the activities of our little friend Darkie Romanez, Walsingham gets no credit for the victory. And when you consider von Oberdorf's reputation in the local skies as a butcher-bird, it's pretty tough luck."

"What's Darkie Romanez got to do with it?"

"Everything. When our new C.O. came to take over the Camels a month ago, he washed out all that annoying confirmation business and allowed Huns to be credited 'On simple note of hand,' as the sheenies say—just the signed statement of the victor. Well——"

"Phew! No wonder--!"

"Not at all," said Tubs, grinned good-humouredly. "It worked very well until Darkie joined us—all Camel pilots being little gents."

I coughed. "And Darkie Romanez comes along, starts collecting a large pile of paper Huns, and the whole scheme falls through. Is that it?"

"That's about it."

"H'm. Queer bloke your C.O. must be," I mused. "Why didn't he hoof out this Darkie-bird when he sloped off to Paris the first time?"

"Case wasn't cast iron, for one thing. And for another he was new to the Squadron—and full of ideals, I suppose."

"M'yes. Well, a month with the Camel Squadron would soon cure him of that."

Tubs Fuller countered this with some mild insult of a similar nature, but I really wasn't listening. By this time we had nearly come up to the stranded

Camel, and my attention was all for that.

## CHAPTER III Darkie Tells the Tale

THE lanky Walsingham, a smile of quiet amusement on his face, was standing with his hands in his pockets watching the pilot get down. Crawshay was systematically stumping round the machine examining everything, his head poked aggressively forward, his ferrety little eyes inspecting every square foot of the fabric, every inch of the control wires.

Full of curiosity, I stared at the man who had come from Paris. So this was the Darkie Romanez I had heard so much about! So small and so insignificant, and yet, it seemed, so full of guile! For the life of me I could not believe, now that I was looking at him, the things they said of him. this humble, apologetic little man with the pain-drawn mouth and the long black eyelashes couldn't be such a double-dyed scoundrel? He looked like a little Italian waiter, of the kind you see in Soho restaurants-not the bluejowled ruffians whose plunder eventually enables them to set up for themselves, but the miserable little fellows destined to spend the rest of their lives supporting a tray on the palm of each hand and kicking swing doors open with their feet as they crash their way into the kitchen. Darkie Romanez was like that. Nothing, except the "Darkie," seemed appropriate to what I had been told about him.

He was wearing the R.F.C. buttonless tunic and looked dirty and dishevelled.

"He's left his Sidcot suit in Paris," murmured Tubs Fuller. "What a man!"

And then I saw the man's eyes. And when I saw those big dark eyes of Darkie Romanez, my mind went back at once to a gipsy mother I had met one afternoon when rambling on the Sussex Downs. Stretching out a skinny brown hand from underneath the baby she was swaying in her arms, she had captivated me with that same pleading look that

I now saw in the eyes of the penitent reveller. "Something for the baby, kind gentleman! Something for the little mite!" Her tale was probably quite untrue, and the bob I gave to her quite undeserved, but those dark pleading eyes of hers had a beguiling effect on me; they made me want to believe her—out of very pity.

WHEN Darkie dropped wearily to the ground and began to give some explanation of himself, I noticed that his words were for Walsingham, and him alone. Doubtless he felt that Walsingham was the least ill-disposed towards him. He kept his dark pleading eyes almost entirely on the big cavalryman. So might a fag about to be beaten present himself before a prefect.

"I know you are going to say I'm a liar," he began in a low voice, "but I've had a hell of a time."

Walsingham smiled. "I bet you have. Nice in Paris?"

"I've not been there."

"Liar!" yelped Crawshay from the other side of the Camel.

Darkie Romanez's long black eyelashes flickered, but he never turned his gaze from Walsingham. "I swear I haven't!"

"Oh, come!" Walsingham said. "You're not going to tell us you've been over the Line?"

"No, don't tell us that I" supported Crawshay shrilly.

"I have been over the Line, and I've brought down two Huns," said Darkie in a dreary voice. "I brought down two Huns; I had a forced landing in Hunland; and I spent an awful night in a——"

"You brought down two Huns, eh?" drawled Walsingham pleasantly.

"Brought down two Huns!" echoed Crawshay furiously.

"But I did really this time."

"Observe the 'this time,'" murmured Tubs Fuller to me behind his hand. "Speaks volumes, eh?"

Crawshay came striding round from behind the Camel. "Look here! If you brought down two Huns, why are

#### THE ACE OF TWISTERS

there no bullet-holes in your machine?" he shrilled triumphantly. "I've been all over it; there's not a sign of one anywhere. What do you say to that?"

Darkie's eyelashes did some high-frequency flickering. His mouth opened, but no words came. He turned his head hopelessly from side to side. "Is it my fault if no Hun managed to hit me?" he asked.

Walsingham smiled. "You don't find 'em so thick over Paris," he pointed out.

"No, you don't!" came Crawshay's supporting yap.

Drearily, Darkie repeated what he had said before. "I brought down two Huns; I forced-landed on the other side; and I spent——"

"Oh, come!" chided Walsingham.

"Liar!" said Crawshay.

Tubs Fuller tugged at my sleeve and grinned. "Now the fun's going to begin," he whispered. "I am now going to press the button. You see!" He turned to Darkie. "Suppose you tell us the whole story, Darkie."

"Tell us what you've really been up to, young fellow," suggested Walsingham.

"Yes, spit out your lies and get it over!" Crawshay added venomously.

THE miserable fellow began wearily undoing the chinstrap of his helmet. Then with a hopeless gesture he changed his mind, and, leaving the two straps dangling, he let his hands fall like dead weights.

"Can't we go and sit down some-

where?" he pleaded.

"Oh, come! We did want to hear where you'd been!" drawled Walsingham.

"You don't budge from here," said Crawshay menacingly, "until we've heard the whole pack of lies. So now!"

The wretched little man backed a few paces and leaned against the fuselage of his Camel for support.

"I left the formation to go down after a Hun photographic machine I spotted east of Meneuil," he began.

Suddenly Walsingham raised his head

and sniffed. "I say isn't there a bit of a niff round here?"

I had noticed myself that there was an unpleasant smell about, but I was too interested in Darkie Romanez to pay much attention.

So was Tubs, who frowned at Walsingham for interrupting.

"Go on, Darkie," he ordered.

"I went down after this two-seater," repeated Darkie in a weary monotone, and just when I was getting into position to attack it from under the tailplane, I realised that tracers were whizzing past me, and——"

"That's a lie! There's not a scratch on your machine!" cried Crawshay.

"Shut up, you!" Tubs snapped. "We want the yarn."

"I looked round and found that two Hun scouts were diving down on me. The two-seater had been a trap. I threw myself into a steep left-hand bank, and they dived past me. One had yellow-and-black chessboard markings and the other was blue with green wings and tail."

Here Tubs Fuller nudged me vigorously to draw my attention to the highly circumstantial nature of Darkie's yarns.

"Yes?" he murmured encouragingly.

"The photographic machine cleared off then, and I climbed as steeply as I could and turned in time to meet the attack of the two scouts. They came at me both at once, and both of them were good. The fight seemed to last for hours. Most of the time I was going round and round in a vertical bank with the stick right into my chest, while they took turns at diving at me and putting in bursts."

"Yet neither managed to hit you with so much as a single shot!" sneered

Crawshay. "A fine yarn!"

"You shut up!" said Tubs again.

"You know what the wind was like yesterday," Darkie went on. "It was blowing half a gale from the southwest and——"

"Quite right, it was," agreed Walsingham.

"—And the consequence was that while the two scouts kept me immobilised,

I was being blown farther and farther into Hunland. I realised that unless I did something pretty soon, I shouldn't have enough petrol to get me back across the Line, so I came out of my vertical bank as soon as I saw an opportunity and managed to get on to the tail of one of the Huns."

Tubs Fuller shot out a schoolmaster's finger. "Which one?"

Darkie's eyes flickered. "The—the green one with blue wings."

"Hoy!" Tubs Fuller cried out.

"Oh, come!" murmured Walsingham.

"Got him!" came the triumphant snarl from Crawshay.

Tubs shook his head sadly. "Not so good to-day, Darkie! You're usually more careful than that. When we first heard of that Hun, his 'bus was blue with green wings."

The poor wretch made a gesture of hopelessness.

"Does it matter?" he pleaded.

"It does rather," murmured Walsingham drily.

"Of course it matters, you lying swine!" shouted Crawshay.

"Go on, Darkie!" ordered Tubs. Then he looked at me and winked. What have I been telling you? 'that look seemed to say. But such was the beguiling effect on me of those pleading eyes of Darkie Romanez that I was perfectly willing to put the discrepancy down to a slip of the tongue. To him, I was as easy a victim as I had been to the gipsy mother on the Sussex Downs. I sympathised with him, even; this baiting seemed to me carrying things too far.

Walsingham must have noticed that I wasn't exactly enjoying myself because he threw out a crumb of justification.

"You don't need to be too much upset," he murmured with his friendly smile. "This fellow's a well-known twister—been like it ever since he first came out. Got some mental kink, y'know. It'll do no harm to jolly him a bit."

I wasn't altogether satisfied; the

wretched liar seemed in such mental anguish that he might collapse at any minute. The certain prospect of being cashiered can't be very pleasant in itself; to be systematically baited into the bargain must be unendurable.

"I stuck to my man," Darkie went on, "and after a bit I hit him with a lucky burst and he went down trailing smoke."

"Hurray!" Crawshay jeered.

"That left me with the other one to deal with——"

"Which one?" snapped Crawshay, trying to trip him again. "The yellow-and-blue chessboard one?"

"Let him get on," drawled the cavalryman. "He's tired. Wouldn't you be if you'd just got back from Paris?"

The look, reproachful and hopeless, that Darkie gave Walsingham then was enough to melt the flintiest of hearts, I should have thought. It almost convinced me that the yarn he was telling was true. I turned to Tubs Fuller.

"I believe he may be telling the truth," I said in a low voice.

Tubs's smiled broadened. He put a comforting hand on my shoulder. "You're no bigger fool than we used to be," he assured me. "We used to lap it all up too. Goes down smooth, eh? The man's a consummate actor, I tell you. We know him."

# CHAPTER IV A Piece of Ribbon

DARKIE'S narrative continued in the same low monotone. His pleading apologetic eyes never left Walsingham's face the whole time. His story was punctuated by explosive snorts of disbelief from Crawshay, while occasionally Walsingham broke in lazily with an incredulous "Oh, come!"

Poor devil! I thought. Whatever he's done, he's paying for it now. The wretched man's eyes were ringed with black; his olive complexion had turned almost grey; he swayed as he spoke, with utter weariness. His story had

#### THE ACE OF TWISTERS

become taller and taller and, forced to change my mind, I regretfully began to realise that the whole thing was a pack of lies—and not very well put together at that. It ran something like this:

Forced into an endless series of tailchasing circuits by the Hun with the chessboard markings, Darkie found himself being blown by the gale farther and farther into Hunland. The fight with his opponent went on and on and on. (" He must have been a rotten shot!" -from Tubs.) Until chancing to look below him. Darkie saw that he was over the German aerodrome at Courdel-le-Manoir. He knew then that he would never have enough petrol to get home. Moreover from the hangars below other machines were being run out to send up against him, and he decided to make a last desperate effort before they arrived. He risked everything, broke circle, and flung himself against the chessboard Hun. He was successful in sending him down with a splintered propeller. (" Hurray ! ")

But no sooner did Darkie turn and head for the Line, than his engine gave a cough, spluttered, and conked out. He had less petrol than he had thought, even. He must land.

The only suitable place he could see within gliding distance was the aerodrome itself. He chose the end farthest from the hangars, glided down, and landed on the borders of a wood. By this time men were running out from the hangars with rifles, and some of them dropped on one knee and opened fire at him. ("Oo! the dirty dogs!"—from Tubs again.)

He jumped out of his machine and ran for cover in the wood, and as soon as he was out of sight, he tore off his Sidcot suit which was hindering his flight and left it on the ground. ("O-o-oh! So that was it! And we were thinking all the time you had left it in a Paris cloakroom!")

He spent an hour or two crashing through the undergrowth, and then realised that lorries full of men had been sent out by road and that a cordon had been thrown round the whole wood. ("Lousy rotters! Why couldn't they let a poor little fellow escape!")

So Darkie retraced his steps till he was almost back at the aerodrome, and just when he began to hear his pursuers crashing along behind him, he came upon a hut. ("Oh, but how convenient!")

He pushed open the door and found himself in a large room with nothing in it but a rifle rack, some chairs, and a long box on trestles. ("Ha! That was a bone-box, I bet!")

At this point Darkie covered his face with his hands. His whole body was shaken by a series of hiccough-like sobs. For a moment he seemed on the point of breaking down completely. Then he recovered himself. "It—it was a coffin," he said—("Didn't I tell you?")—" and when I lifted the lid there was a hideous body inside, all burnt up. I—I could hear the people looking for me coming nearer and nearer—"

"Stop!" Tubs Fuller held up an imperative hand. Wonderingly, I turned to look at him. "Stop!" he repeated. "Let me go on with this yarn. I know how it goes—read it in the 'Skull and Crossbones' Library years ago—or was it in the 'Not at Bedtime' series? I shall only need a little help from Darkie. Now then!" He pointed a commanding finger at that unfortunate little man, and acted like an American detective "grilling" a victim.

"Now then! Your pursuers were approaching nearer and nearer, hey? You could hear their curses and their savage cries? So, quick as thought, you pushed open the lid of the bone-box and snuggled down beside the grisly corpse. Am I right?"

Darkie had covered up his face with his hands again and was weeping convulsively.

"B-but I did!" he moaned. "I did!"

At this point I was morally certain that the story he had been telling us was the truth. No actor on earth, I told myself, could play a part so convincingly. The man was sincere; I was dead certain of it. I decided to intervene.

#### AIR STORIES

I actually stepped forward and opened my mouth to speak. I was going to say—I don't know what I was going to say, but it was going to be something that at least would persuade those three tormentors to cease their baiting and leave the wretched man to the judgment of his C.O.

And then I suddenly noticed about Darkie Romanez something that I had not noticed before—something that caused me completely to reverse my opinion and once again to put him down as an unprincipled liar.

T was a little thing.

From the left-hand pocket of his tunic a piece of coloured ribbon was peeping. Not more than an inch of it showed, but it was obviously something that no pilot on active service would carry about with him in the ordinary way. It was something that a man of a certain type might well have brought from Paris—a flimsy feminine trifle, souvenir of some sordid adventure in a night-club.

It was enough, that fragment of ribbon, to convince me that the wretched Darkie had never so much as crossed the Line, much less shot down two of the enemy and forced-landed in Hunland. From that moment on, he got no sympathy from me.

"There you are, gents!" With the gesture of a circus acrobat inviting applause, Tubs Fuller flicked up a hand behind his head. "He nipped into the bone-box! Didn't I say so? I've got second sight, I have!"

Amid much hilarity, he continued Darkie's imaginary adventures. "No sooner does he let down the lid than the pursuers all come tumbling in, and seeing nobody about, they all go tumbling out again. All except one," Tubs qualified dramatically holding up a single finger. "And what does that one do? Why, the annoying fellow fishes a packet of fags out of the back pocket of his pants and squats himself down on the doorstep for a quiet smoke. So poor old Darkie has to stay in the bone-box with his niffy companion for a full quarter of an hour. That right, Darkie?"

At this point the wretch seemed suddenly to go crazy. I stared at him in astonishment. Rushing up to Tubs with his helmet straps dancing, he shook both fists in his face and yelled at him like a man demented.

"I—I had to stay in that coffin all night, I tell you! The Guard came in! I had to stay there all night! They played cards!" He was foaming at the mouth. He looked a ghastly spectacle.

The effect of this outburst on the three Darkie-baiters was precisely nil.

Tubs Fuller raised his knee and smote it with a resounding slap. "Played cards on the coffin-lid! Of course they did! Fancy me forgetting an old and crusty situation like that! No penny blood is complete without it! Played cards on the coffin-lid! And that brings us to dawn. Now lemme see——" He scratched his head in perplexity. "How did you manage to get another fill of petrol to come back here? That's a puzzler. How did you, Darkie?"

"Oh, come! That's simple enough!" drawled Walsingham, joining in the fiction game. "The Hun C.O. thinks he'll try out the English 'bus, and has her filled up. Then, just when he's climbing into the cockpit, Darkie rushes out from somewhere, seizes him by the slack of his pants, knocks him for six, nips on board the Camel, and makes off. That right, young fellow?"

This, coming from Walsingham, was the last straw. Darkie covered his face, turned and broke into a stumbling run.

"Hi!" yelled Crawshay indignantly.
Come back and taxi your 'bus in!"

But Darkie, running as though he would never get there, was making for the hangars.

THE four of us strolled off in the direction Darkie had taken.

"The funny thing is," Tubs said to me as we walked, "that my yarn must be very much on the lines of the alibi Darkie invented himself. That's why he got in such a stew. Believe me, he usually carries things off better than that. Sorry you didn't see our prize liar at his best."

#### THE ACE OF TWISTERS

"I say! Look!" said Walsingham suddenly. "He's come a cropper."

Looking up I saw the small running figure stumble, fall and lie still.

Crawshay gave tongue at once. "He's foxing, the dirty twister! Trying to attract pity! Yah!"

But the big cavalryman had already quickened his strides, and Tubs Fuller and I hurried to keep pace with him.

A minute later Walsingham was kneeling beside the unconscious form of Darkie Romanez. He pulled him over on to his back, and then suddenly raised his head.

"I say !—the niff !—his clothes !"

"Gum, yes!" Tubs agreed wonderingly. "There's a deuce of a stink of burnt——"

And then the three of us looked at each other; the same thoughts were passing through all our minds. Was it possible that——?

Suddenly Crawshay sniggered. "Here! Look what he's brought back from Paris. Look!" And he began pulling at the end of ribbon that I had already noticed sticking out of Darkie's pocket.

But if he expected to bring to light some rubbishy trifle of feminine apparel he was wrong—just as I had been wrong. The thing was a medal, or rather an Order, one of the kind attached to a big ribbon to be worn round the neck.

"Why that—that's the German Pour le Mérite," said Tubs quickly. "How the deuce—?"

We stared, and as we stared, Crawshay turned the thing over. I saw his eyes widen with astonishment. Suddenly he gave a yelp.

"Look at this! Look at it! By——!"
We crowded round him and read over
his shoulder what was engraved on the
back of the decoration.

Hauptmann Graf Hjalmar v. Oberdorf 12 Okt. 1917.

TUBS FULLER whistled.
"Phew! It—it's true, then!"
he said almost in a whisper. "He must
have got it—out—out of that coffin!"

We looked at each other speechless as

the full implications of the discovery began to sink in. The wretched Darkie had actually spent a night in a coffin in close contact with a half-burnt corpse, and we had baited him as though——! But why hadn't he shown us this medal? Perhaps in the excitement of his escape he had forgotten that he had ever taken it.

Walsingham, looking more distressed than I have ever seen him since, was on his knees again, unhooking the collar of the unhappy Darkie's tunic.

"Poor kid!" he muttered. "Unpardonable! Unpardonable!"

"Walsingham!"

The nauseous Crawshay was suddenly on his feet again, yelping like a puppy, triumph in every gesture. "I've only just realised! Von Oberdorf! Don't you see! This is your Hun! This is the confirmation you want!"

The big cavalryman made no sign of having heard. He had taken off his tunic, folded it, and was now sliding it under Darkie's head before removing the helmet.

"Will one of you go for the ambulance," he asked, and gently raising Darkie's head, he began pulling off the helmet.

I was just about to trot over to the hangars on the errand, when that helmet came away. And the sight that I saw then made me halt in my tracks and stare in incredulous amazement. There was a sudden silence, and then Crawshay, white to the lips, began giggling hysterically.

And Walsingham, the imperturbable Walsingham, exclaimed softly, "My God!"

And Tubs Fuller, from the depths that were in him, muttered an awe-struck, "Oh, Lord!"

As for me, moved by horror and pity, I felt the tears pricking in my eyes.

The roar of six Bentleys came down to us on the wind. It was the return of the patrol, but of the four of us, no man looked up. We stared and stared and stared at the unconscious man at our feet.

For the hair of Darkie Romanez was as white as snow.

THESE GREYS ARE VERY GOOD CIGARETTES

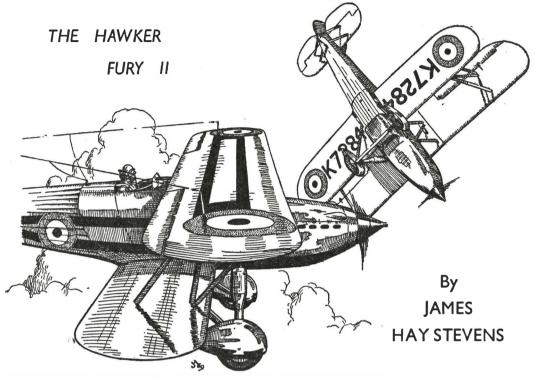


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# The R.A.F.'s First Interceptor



# A Description of the Hawker Fury Interceptor Fighter, with Full Instructions for Building a Solid Scale Model

Aero Show was held in this country, there appeared a single-seater fighter, the Hawker Hornet. This aeroplane was among the first of its class to use the newly-introduced Rolls-Royce Kestrel water-cooled engine and was one of a number of designs entered for a contract competition to a new specification—that of the Interceptor Fighter. The Hornet won the contest and, on being put into production for R.A.F. use, its name was changed to the Fury.

In 1937, eight years after the birth of the prototype, an improved production version of the Fury was issued to No. 25 (F) Squadron. The illustration heading this article shows two aeroplanes of this squadron in flight. The squadron marking consists of two parallel black bars painted on the top plane and the sides of the fuselage. Readers who were at the R.A.F. Display last year will remember the spectacular performance that was given by this squadron.

The Hawker Fury II is sometimes popularly known as the "Super-Fury," but this is incorrect; the real "Super-Fury" was a very much modified machine with small tapered wings and a steam-cooled engine, produced some four years ago. The Fury II, on the other hand, is a standard type, and, except for minor structural improvements, spats and a compositely-cooled engine, it still closely resembles its predecessor of nine years ago.

#### "Semi-Evaporative" Cooling

THE wings of the Fury II are built on the Hawker patent system of metal construction. Their arrangement, with the large dihedral on the lower planes and the very heavy stagger, is reminiscent

#### AIR STORIES

of the old Sopwith Camel. The ailerons are Frise-balanced in order to give light controls.

The fuselage is constructed with four steel tube longerons, steel tube upright and cross struts and diagonal bracing by tubes and high-tensile wires. The aluminium engine cowling and large side panels on the fuselage aft are detachable for inspection and access to the main structure. The pilot, seated high up and well aft of the upper plane, has about as good a view as it is possible to get in a tractor biplane.

The engine in the Fury II is a Rolls-Royce Kestrel VI, a vee-shaped twelvecylinder supercharged engine, generally similar in design to the others of its series. It has, however, been re-rated to give a very much higher output than that of the earlier engines, and also incorporates what is known as a "semievaporative " cooling system. Thus, instead of the usual water-cooling where boiling arrangement, trouble, the cooling in this engine is arranged so that under certain arduous conditions, such as very rapid climb at low air speed, the water is allowed to boil. The piping of the system is proof against the resultant steam pressure, and the excess steam is collected and cooled in a small condenser on the leading-edge Under ordinary of the centre-section. conditions, the water does not boil and is cooled normally in the tunnel radiator

on the belly of the fuselage. The total, dry, weight of the Kestrel VI is 955 lb., and its normal output is 600 b.h.p. at 11,000 ft. Maximum output is 640 b.h.p. at 14,000 ft., and it develops a take-off power of 695 b.h.p.

#### Two-Way Wireless

THE tail unit of the Fury II is the same as that on the earlier type. The tail-plane is adjustable for trim in the air, and the elevators, but not the rudder, are horn-balanced. The undercarriage is a plain "vee" type, with oleo shock-absorbers on the front legs. The spats are a fitting peculiar to the Fury II.

The original Furies were not equipped with wireless, as they were supposed to wait on the ground until the raiders were sighted, and they were then to use their remarkable climbing powers and speed to intercept and engage the enemy. It was soon found, however, that the contemporary bombers were much too fast to be caught in that way, whereupon the Furies were fitted with two-way wireless and sent up on patrol like their humbler brethren, the day-and-night fighters.

The latest data regarding the Fury II are as follows:

Weight, empty.		2,745 lb.
,, loaded		3.609 lb.
Speed at 3,280 ft.		191 m.p.h.
" 9,840 ft.		211 m.p.h.
,, 16,400 ft.		223 m.p.h.
" 19,680 ft.		220 m.p.h.
Climb to 19,680 ft.		8.6 mins.
Service ceiling		20.500 ft.

#### HOW TO BUILD THE SCALE MODEL

# Details of Materials, Tools and Constructional Methods for Building a Solid Scale Model

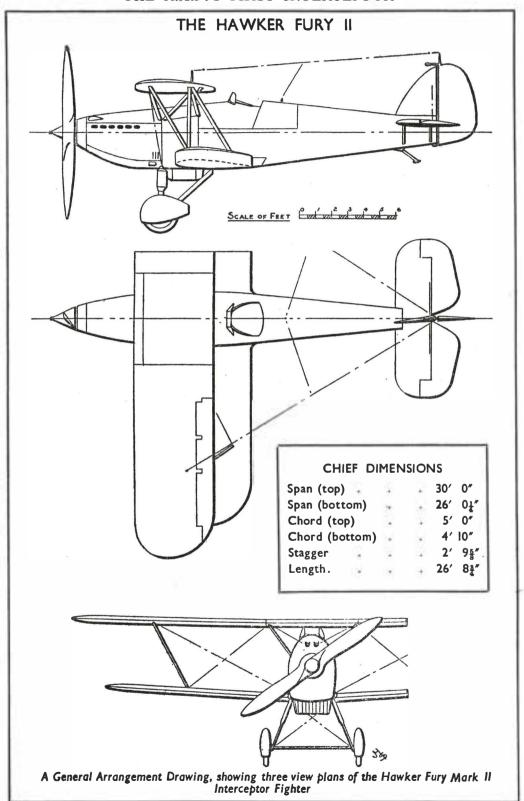
REPRODUCED opposite is a  $\frac{1}{72}$ nd scale General Arrangement Drawing of the Fury II. The scale is uniform with that of the previous models in this series, and all dimensions of materials mentioned in this article are for a model to this scale. If another scale be preferred, it is advisable to re-draw the side elevation of the G.A. to the full size of the new scale.

#### Materials and Tools

AS a guide to the newcomer to modelling,

the following is a list of the principal materials, with their approximate sizes, needed for building this model: block of wood,  $3\frac{3}{4} \times \frac{3}{4} \times \frac{9}{16}$  in., from which to carve the fuselage; a sheet of fretwood,  $5 \times 2 \times \frac{8}{32}$  in., from which the main planes are cut; a piece of fibre,  $6 \times 6 \times \frac{1}{12}$  in., for the tail surfaces; some 18 in. of 20-gauge brass wire for the undercarriage, interplane, centre-section and tail-plane struts. It is advisable to purchase airscrew, wheels and spats from

#### THE R.A.F.'S FIRST INTERCEPTOR



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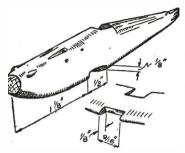


Fig. 1. — The shaped fuselage block, showing cut-out for the lower plane

some model dealer; most local toyshops keep a supply of  $\frac{1}{\sqrt{2}}$ nd scale accessories which are accurate models. The modeller who prefers to make everything himself will find that methods of making these parts have been fully described in past articles in this series.

The most useful tools are:  $\frac{1}{4}$ -in. chisel; small plane; penknife; oilstone; small half-round file;  $\frac{1}{16}$ -in. bradawl; archimedean drill; plastic wood; tube of cellulose glue; a penny ruler measuring in  $\frac{1}{10}$ ths,  $\frac{1}{12}$ ths and  $\frac{1}{16}$ ths of an inch.

#### Method of Construction

FIRST make a tracing of the side-elevation of the G.A. Drawing. Then lay the tracing on the block of wood for the fuselage, pin-prick the essential details of the outline, remove the tracing and line-in the pin-pricks with a pencil. Now cut away the surplus wood with chisel and plane.

The plan of the fuselage next requires attention. Draw a centre-line down both the top and bottom surfaces and, on the top surface, draw out the plan of the fuselage. Again the surplus wood is chopped away and the rounding has to be started. The cross-section of the fuselage at its widest point is clearly shown on the G.A. Drawing; sections both fore and aft of this point are of the same general form. From the line of the front undercarriage legs the section gradually assumes a circular shape to meet the spinner. Two points require to be remembered when shaping the gun troughs and the cylinder block projections on top of the nose: these are shown in Fig. 1. The final job on the fuselage is to hollow-out the cockpit.

Note in Fig. 1 the cut-out for the lower plane and the dimensions giving its position.

The outlines of the planes are marked out on the sheet of wood and are then cut out with a fretsaw. The camber is bi-convex; that is, both top and bottom surfaces have to be curved with a plane and glasspaper—the correct section is shown dotted on the G.A. Drawing. Holes are made for the interplane and centre-section struts, and the outlines of the ailerons scored-in with a ruler and bradawl. The dihedral angle is produced by warming the wood of the planes in the heat of a candle flame and then very gently bending between fingers and thumbs.

The tail-surfaces are made in a similar fashion to the main planes. A tracing of the G.A. Drawing may be laid on the fibre and the outline pin-pricked, as was done with the fuselage. The camber is symmetrical and can be produced with a file and glasspaper. Holes should be made for the tail-plane struts.

Fig. 2 shows how the interplane struts and the undercarriage "vees" are made from lengths of brass wire. The shockabsorbers on the undercarriage are made from folded strips of paper glued round the wire.

#### Method of Assembly

GLUE the lower plane beneath the fuselage and then glue a piece of waste wood into the break in the line of the bottom of the fuselage. When the glue has set, the waste wood may neatly be trimmed off with a penknife. Fit the interplane struts and centre-section struts (the latter are, of course, plain lengths of wire) without glue. Put the top plane in place and adjust the struts until the alignment and stagger are correct. Then dismantle, re-assemble with glue and allow the whole to set.

Fig. 2.—An interplane strut (left) and an undercarriage "vee," with shock-absorber



#### THE R.A.F.'S FIRST INTERCEPTOR

Glue the undercarriage "vees" in place and adjust them until they are symmetrical about the centre-line of the model and their height and track are accurate. Thread the axle wire, wheels and spats, burring the ends of the wire to keep the latter in place. A spot of glue will be needed to prevent the spats from turning. Glue a small block of wood beneath the fuselage to represent the radiator.

The tail-plane and rudder units are next glued in place. The tail-plane struts (short lengths of wire) are fitted, and the tail-skid is glued into the fuselage. The fitting of the airscrew completes the assembly of the model.

#### Colour Scheme and Painting

THE Fury II's of No. 25 Squadron are painted all silver and have polished aluminium engine cowlings and spats. The interplane struts are stainless steel tubes, and the airscrew is grey. R.A.F. cockades are borne on the wings and sides of the fuselage, and the machine number is painted in black on the sides of the fuselage and beneath the lower planes. The black bars of this particular squadron's marking are painted across the top plane and along the sides of the fuselage—on the fuselage these converge from the cockades until they meet at a point beneath the leading-edge of the tail-plane. There is a gap in the marking where the machine number is painted.

FOR ADVANCED MODELLERS:

# THE SOPWITH CAMEL The Most Famous British Scout of the Great War

THIS, the first number of the enlarged and improved AIR STORIES, sees the start of a new series of aircraft models for advanced modellers. This second model will not necessarily be any more difficult than the one which is fully described each month, but only the essential information will be given. Nevertheless, an inexperienced modeller, if he studies the article on the Fury II intelligently, should have no difficulty in adapting the same methods to the Camel, and so producing a good model from the



Fig. 3.—The crest of No. 25 Squadron, as carried on the fins of their Furies

The squadron crest (shown in Fig. 3) is painted on the fin.

The chief painting materials needed are a No. 5 paint brush, a liner's brush and some 3d. pots of enamel. Keep the model free from greasy finger marks (washing in petrol removes these), apply the paint thinly and evenly, allow plenty of time for a coat to dry before adding another and, above all, do not be afraid to give an extra coat if necessary. The cockades should be bought as transfers and applied; they are much more satisfactory and infinitely less trouble than hand-painting.

The final operation, if detail is to be carried so far, is the fitting of bracing wires. These are made from fine florist's wire. The kinks are removed, each wire is cut dead to length, the ends touched with glue and then offered up with a pair of tweezers or wireless pliers. A gentle touch and patience are essential qualities for this work.

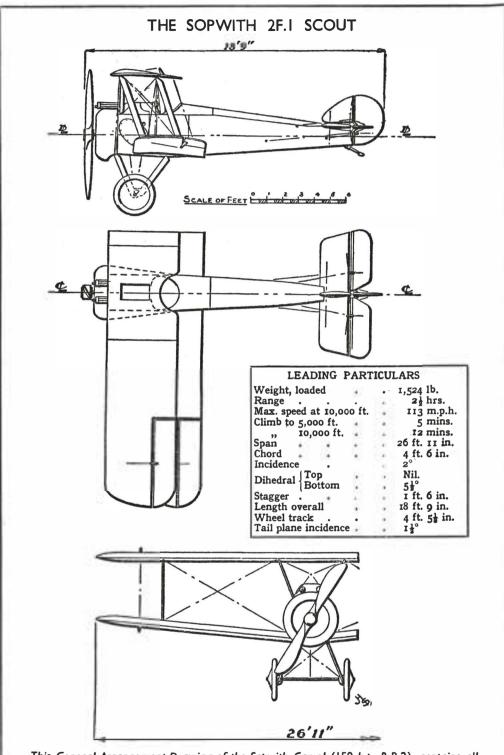
G.A. Drawing reproduced on the next page.

There were two Camels— the F.I and the 2.F.I, the latter being the one featured in these drawings. This type had a foot less span than the earlier model and a number of minor differences in rigging. The F.I was fitted with the I30 h.p. Clerget rotary, while the 2.F.I had an alternative power unit in the I50 h.p. B.R.2. The B.R.2 Camel was largely used by the R.N.A.S., and its armament consisted of one Vickers gun in the cowling and one Lewis gun on the top plane, instead of the two Vickers guns mounted by the F.I type.

(NEXT MONTH: The B.E.2c and the Curtiss P.36A Pursuit 'Plane.)

287 K

#### AIR STORIES





Editorial Offices: Tower House, Southampton Street, Strand, London, W.C.2.

HIS enlarged number of AIR STORIES is the first to appear at the new price of 9d. The increase of 2d., as explained last month, has been made necessary by the recent great rise in the cost of paper supplies. Strictly speaking, the selling price of the magazine should have been increased to a fraction over 81d. in order exactly to meet the extra costs of production. Such a price, however, is obviously impracticable and, instead, the small surplus has been devoted to the improvement of the magazine by enlarging its size and so making possible the inclusion of more stories, articles and illustrations.

The result of this new policy is reflected in the increased size and many notable contents of the present issue, and as future numbers will be equally as good, we venture to think that most readers will consider the bigger and better magazine adequate compensation for the higher price.

Already, following our announcement last month, many readers have been good enough to write and assure us of their continued support of the magazine at its new price. These letters were far too numerous to allow of individual replies, but we should like here to express our thanks to the writers for their generous expressions of that loyalty with which AIR STORIES has been favoured since its inception, and to which it owes so much of its success.

#### Brickbat-and Bouquet

AMONG our good friends we have, however, some stern critics, as evidenced by the following indignant protest from a reader in Bromley, Kent:—

"I am disgusted. I used to enjoy reading AIR STORIES and do still when the stories are good and DO NOT include the everlasting female who has appeared in one or two of late and utterly spoilt them for me. I am fed up and tired of the footling words 'girl' and 'attractive' and all such romantic drivel. I've torn out the offending pages and put them on the fire and I hope that in future you will tell your authors to leave out all references to these confounded females."

Perhaps it is just as well that our correspondent's signature is indecipherable and that he omits his full address; otherwise we might have been tempted to persuade some of our "confounded female" readers to call on him!

After that brickbat from Bromley we were quite glad to hear from Mr. Cecil W. Murrie, of Langley Park, Durham, who wrote:—

"I must thank you for the pleasure I get from AIR STORIES, especially the War-time yarns. You see, I was 'out there 'and saw the R.F.C. in action. I went to the recruiting office in 1914. Unfortunately, I didn't run across your magazine until last May, but I haven't missed an issue since.

"I am also greatly interested in building scale-models of 'planes used during the Great War, and already have an S.E.5, Bristol Fighter, Spad, Albatros, Hannoveranner and a D.H.4. Would it be possible to include in your model-making articles such old types as the R.E.8, B.E.2c and F.E.2, etc.?"

Both the R.E.8 and the F.E.2 are among the famous "old timers"

scheduled for early inclusion in the Model Section which, now that it has been enlarged, will contain plans for a Great War 'plane every month instead of every other month as hitherto. B.E.2c will be featured next month.

#### How Hall Lost His Teeth

TO a reader in the Dutch East Indies. Mr. E. H. Coorde, of Batavia, Java, we are indebted for the following documented correction of an inaccuracy which we appear to have perpetrated in a recent issue:

" In an article you published some time ago on the Lafayette Squadron," writes our correspondent, "Mr. A. H. Pritchard stated: 'The usual pigeon message came and Bert Hall went over . . . etc. As he landed in the pre-arranged field, three machine-guns opened up a withering fire from a clump of bushes and one bullet struck Hall in the mouth, knocking most of his teeth out.'

"This is not correct. In Hall's own autobiography, 'One Man's War,' he gives a different version of the accident. He states that, in the course of an air combat, he was attacked by two scouts and a two-seater. He shot down one of the scouts, saw the other make off for home with engine trouble, and then turned to deal with the two-seater. 'The observer was holding his gun on me with a cool, steady hand,' Hall writes, 'and we must have begun firing at exactly the same moment. Suddenly everything went black before me and I felt a terrible pain in my mouth. . . . I had undoubtedly been shot in the mouth.'

"Please believe that this correction is sent only in friendliness, as I like Mr. Pritchard's articles on the 'Aces' the best of all the magazine's contents, and am a regular and enthusiastic reader of AIR STORIES which, I daresay, is one of the finest magazines in the world."

Reader Coorde's correction is as welcome as his compliments; our information came from the French records of the Lafavette Escadrille but, presumably, the autobiography of the man concerned is the better authority. Unfortunately, whichever way you take it, poor Bert Hall seems to lose a lot of teeth.

#### Bombers versus Fighters

SUBJECT which, in its many implications, must be troubling many air-fighting tacticians to-day, is raised by Mr. W. Mullings, of Bristol, who writes:

"I see in a recent issue that the Bristol Blenheim bomber is equipped with only two machine-guns, one for the pilot and another in the turret for the use of the observer. On the other hand, one is continually hearing of new multi-gun fighters, mounting four and more machine-guns, and often a motor-cannon as well, and I am wondering just what the result would be if a Blenheim came up against one of these more heavily-armed machines. "Surely, now that speeds generally have increased so much, the aeroplane mounting the heaviest armament stands much the better chance of surviving a combat?"

Not necessarily. Speed and manœuvrability are just as important factors as armament in air fighting, and the faster machine, even though it may be considerably less-heavily armed than its opponent, has the advantage of being able to accept or refuse combat at will. And if it does attack, its superior speed may well outweigh the advantages of its opponent's heavier guns.

Where, for example, would be the advantage of a 255-m.p.h. four-gun Gloster Gladiator-our fastest fighter in general use to-day-if opposed to a 279 m.p.h. Blenheim bomber with the latter's remarkable manœuvrability and backward-firing gun? True, there are the "300 m.p.h.-plus" Hurricanes and Spitfires coming into service, which will temporarily restore to the fighters their former speed supremacy over the bombers, but, even so, modern medium bombers are still a lot too fast for the peace of mind of those who have to rely upon fighters to catch them.

#### Next Month's Great Feature

THOSE who have already seen the announcement on page 257 of the start, next month, of Mr. A. H. Pritchard's remarkable history of the British air services during the Great War will need little further assurance of the exceptional interest of the April issue. "Warriors of the Air" represents the result of many years of careful research and is, without any doubt, the finest and most enthralling narrative that this popular air historian has ever written-and certainly the most valuable.

The same issue will also contain a number of other outstanding features, equally notable in their own fields. In particular, mention should be made of a grand long war-flying story by G. M. Bowman, another fast-moving adventure of Flight Lieutenant Kinley of the Secret Service, by Captain J. E. Gurdon, and a sectionalised drawing of a new British warplane.

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