

*Silent Flight*

# SILENT FLIGHT





*Still rising slowly, Jane found herself in a world of shining beauty (see page 81)*

# SILENT FLIGHT

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# Contents

CHAPTER	PAGE
I. MYSTERY MODEL . . . . .	I
II. THE FIRST FLIGHT . . . . .	II
III. HOPPERY AND CRASHERY . . . . .	17
IV. CROSS-COUNTRIES AND RETRIEVING PARTIES . . . . .	23
V. C STANDS FOR SOARING . . . . .	34
VI. AUTUMN AND THE FIRST WINCH LAUNCH . . . . .	39
VII. FIVE HOURS . . . . .	46
VIII. THE FIRST DEPARTURE . . . . .	55
IX. AERO-TOWING . . . . .	65
X. LOOPS AND LAUNCHES . . . . .	72
XI. THE THUNDERSTORM . . . . .	78

# List of Plates

STILL RISING SLOWLY, JANE FOUND HERSELF IN A WORLD OF SHINING BEAUTY (see page 81) . . . . .	<i>Frontispiece</i>
	<small>FACING PAGE</small>
THE CAR DREW, SQUEALING, TO A STANDSTILL . . . . .	12
“ THESE ARE CALLED THE AILERONS ” . . . . .	21
THE KITE LEFT THE GROUND . . . AND SWEEPED STEEPLY UPWARD . . . . .	24
THEY WERE ALLOWED TO FLY THE FALCON . . . . .	31
“ I THINK I’VE BROKEN MY SPINE ” . . . . .	34
WOODERS HAD STARTED TO ASSEMBLE ONE WING . . . . .	41
SHE FOUND LIFT, . . . AND WAS ABLE TO CIRCLE AS WELL . . . . .	57
HE TURNED AWAY AND FLEW TOWARDS THE ZOO . . . . .	60
THE SAILPLANE WAS TOWED UP TO 2,000 FEET . . . . .	69
BRIAN ALSO TRIED LOOPING ON THE WAY DOWN . . . . .	76
SHE HAD BEATEN THE BRITISH HEIGHT RECORD . . . . .	81

## CHAPTER I

# Mystery Model

JANE held the model up nose into wind, and swung it gently into the air. The rubber motor whirred smoothly as it climbed away.

“Look, you haven’t even set it right; it’s going to stall.”

The model was still climbing in large circles, bucking about in the slight turbulence of the air, when a stronger gust caught it. As the motor ran out the nose reared up, and it stalled, diving into the ground.

Jane and Brian, the sixteen-year-old twins, ran over to the scattered components. Brian picked them up and made a critical examination.

“You’ll never be a good pilot; look at the way you flew that; and you’ve damaged it—see this hole in the wing?”

“I flew it jolly well; it was only because the engine cut, and that might happen to anybody. We can easily put a patch on the wing.”

“And who is going to do that? Me, as usual, I suppose,” said Brian sarcastically.

They carried the monoplane back to the repair box, and laid it reverently on the ground. Brian got out the dope, while Jane cut a patch of tissue paper.

It was a very warm day, and the air above the grass shimmered in the heat. The sky was a brilliant blue, with little white clouds wandering slowly over, far above. The massive elms at the end of the paddock stood silent and still, overawed by the oppressive warmth.



## *SILENT FLIGHT*

The twins, bending over the model, concentrated on the careful fitting of the flimsy patch. In appearance they were alike, both having dark, curly hair, and healthy, tanned complexions. Both were slim, yet strongly built ; but Brian was just one inch taller, and usually plastered his hair flat with water and some exceedingly sticky substance, as he thought that curls were too effeminate for one of his importance. Jane, on the other hand, was more easy-going and, in her carefree way, never worried about her appearance, or the self-confidence of her brother. They were very fond of each other, but always tried not to show it.

“ Dad’s furious about our half-term reports ; he’s threatened to forbid us to have any more models if we don’t improve.”

“ I know, but I hate Maths. How can I help it if I always get a bad report ? ”

“ Well, how can I help it with Science, in a smelly room, doing smelly experiments ? And I’m sure old Phillpots doesn’t like me.”

“ Well, old Miss Pinner hates me ; she’s always telling me not to look out of the window, and that all aeroplanes are the same, anyway, which they are not.”

“ Going to school isn’t going to help me when I’m in the Air Force.”

“ What about your entrance exam. ? ”

“ Oh yes, I’d forgotten about that. Here, careful with that dope, it’s a shilling a bottle, and we’ve only got ninepence between us. I’m always short in term-time.”

The new panel in the wing grew smooth and taut as the strong-smelling liquid dried and evaporated. Brian fitted the wings over the fuselage stubs and, giving them a professional twist, pronounced the little aeroplane airworthy. Jane wound up the airscrew, breathfully counting the turns as she flicked the prop over with her finger.

## *SILENT FLIGHT*

When it was ready, Brian took it from her, holding the airscrew still with his hand. He raised it above his head, released the motor, and with a slow swing forward of his arm launched it into the quivering air; nicely trimmed, it settled down and circled busily upwards.

“It’s going jolly well,” said Jane.

“Well, I told you girls couldn’t fly. It wants a man’s touch. Look, it’s higher than the elms.”

“But the engine’s stopped, and it’s still climbing.”

“Gosh, so it is. It’s even drifting over the top of the trees.”

The little monoplane was, in fact, getting higher. The airscrew was dead, but it was still being drawn towards the dazzling blue, the gently moving air wafting it slowly nearer the solid elms. But it was high, a mere speck in a sea of spotless brightness, and as it neared the trees, it floated quietly over the top.

“Come on, we’ll lose it if we don’t see it land; this hay is awful for finding anything.”

They ran through the long grass, leaving a trail of buttercup petals and pollen heavy in the air behind them. Jumping the ditch at the far end, they broke a way through the hawthorn hedge, shielding their faces with an upraised arm. It was cool in the eternal shade of the elms, and Jane paused for breath before leaping the farther ditch; but Brian had jumped across and was gazing into the blue.

“Look, it’s still flying. It’s frightfully high,” he shouted.

Jane took a flying leap, and landed in a heap at her brother’s feet. He helped her up and remarked that girls couldn’t jump, anyway. But the usual retort was forgotten as they both gazed at the little ghostly object high above.

“It looks a bit strange,” said Jane. “It seems to have got longer wings.”

## *SILENT FLIGHT*

“ It does look funny. I wonder what’s happened.”

“ That’s not our model, it’s an aeroplane, a real one. The sky is so dazzling it is difficult to see.”

“ Don’t be silly, it’s going too slowly, and, anyway, there’s no noise. It’s getting lower, and it’s turning. Looks as though it doesn’t want to go over the sea.”

“ It’s a lovely machine, but why hasn’t it got an engine ? It just seems to be floating on the air.”

“ I think it is going to land here,” breathed Jane.

“ I rather think you’re right for once.”

The big bird floated silently over their heads about 600 feet up, and turned lazily towards the windward side of the field. The sun was flashing and glinting on the wings, and it seemed transparent against the deep-blue sky. It came lower, then, pointing one shining, tapered wing earthward, slipped steeply in to the field. When the dark old elms became its background, it levelled up and after a few seconds’ glide came to rest with a gentle swish in the heavily scented hayfield.

Jane and Brian stood transfixed, and for the space of several seconds the immediate world was silent, motionless. Then, with a yell, they dashed across the field to the machine.

They arrived just as the pilot had taken off the transparent cockpit cover and was getting out. He was tall, with fair hair and a sun-burnt face, and Jane liked the look of him very much, but Brian was too much taken up with the white, gull-like machine to notice.

“ Could you hold that wing tip down,” the pilot said, “ until I can get a weight for it ? ”

“ I will,” said Jane. “ Brian, go and get that log from the ditch.”

“ Do you know where I can telephone ? ” he asked, smiling at Jane.

“ You can use ours, if you like; it’s about the nearest.”

## *SILENT FLIGHT*

“ Thanks. Will my Kite be all right here ? ”

“ Oh yes; there’s no one within miles of us. All these fields belong to my father.”

“ You’re very lucky.”

Brian staggered up with the heavy piece of wood over his shoulder. The pilot helped him lay it gently on the wing tip.

“ Thanks; not even a tornado would lift it now,” he said.

“ He wants to telephone,” said Jane.

“ If I may, please.”

“ Oh, sure; you come with me,” said Brian.

“ How did you get here ? ” asked Jane.

“ I came on the wind, supported by the sun,” the pilot said quizzically.

“ You what ? Anyway, what’s happened to your engine ? ”

“ Engine ? I have none. I told you, I flew on the wind, hitched to a cloud.”

“ Don’t be silly; all aeroplanes have engines.”

“ Yes, but my birdie isn’t an aeroplane, it’s a sailplane—a glider if you like.”

“ But gliders are stupid-looking, stringy things, like five-barred gates.”

“ Only the primary machines on which you learn. Sailplanes are super gliders. Mine’s a sailplane. You can go hundreds of miles in them.”

“ Hundreds of miles without an engine ? Anyway, where have you come from ? ”

“ Only Branchester, about sixty miles.”

“ You’ve come sixty miles in that ! ”

“ Yes, why not ? It was easy to-day.”

“ How ? ”

“ I told you, I hitched on to the clouds.”

## *SILENT FLIGHT*

“ I know, but—— Oh, well, here’s the telephone.”

They had walked across the paddock and the lawn, and were entering the big cool hall of the house. Jane led the way across the floor in the suddenly dim light.

“ Thanks. Hullo, Branchester 419. . . . Hullo, Mark, Bill here. I’m at—here, you two, where am I ? ”

“ Elton, near Maybury. This house is called Elton Lodge, and it’s three miles out of Maybury on the main road.”

Bill told his friend all the details and rang off.

“ Thank you; Mark’s coming to collect me with the trailer about half-past nine.”

“ Well, you’d better stay and have dinner with us; Jane, go and tell cook to get some more food, while we go and have a look at the machine.”

“ Hang on, old chap, we might wait for your sister; anyway, I would very much like you both to help me take it to bits, if you would ? ”

“ Yes, rather. Hurry up, Jane.”

Five minutes later they were back beside the machine, having collected the gardener on the way.

They removed the wing root fairing, and Brian started taking out all the safety-pins and split-pins. Bill was wrestling with the tailplane fittings. Jane was admiring the interior of the cockpit, and the gardener was gazing in mute wonder.

All the split-pins out, Jane and the gardener held the wing tips, while Bill knocked out the heavy pins which held on the wings. Brian was standing ready to take the weight. A few more taps with the hammer and the wing was free, so while Brian held the fuselage upright, Jane and Bill carried the wing over to the shade of the hedge and laid it carefully down. Fifteen minutes later the other wing lay beside it. Then came a slow procession of fuselage,



## *SILENT FLIGHT*

tailplane, cockpit cover, and struts, until everything was tucked away under the hedge.

“ There’s a lane on the other side, down which a car can get, so it should be all right here. Now let’s go and have dinner,” added Brian.

They walked back to the house through the still heated air; the shadows across the lawn were lengthening slowly, and gnats played round the trees.

“ I’m afraid that dinner’s rather early,” said Jane. “ But it is half-term, and Mother likes us to keep the same meal-times as school, in case we get indigestion or something.”

“ I like it early,” said Brian. “ Then we have a chance to pinch some cake or apples before going to bed.”

Jane led the way into the dining-room, where their parents were already seated, in evening dress. Bill felt rather embarrassed in his open-necked shirt and flannel trousers. Jane, however, was not at all abashed.

“ Come and sit here,” she said. “ Oh, Mother, this is Bill; he’s just flown here.”

“ In a sailplane,” added Brian. “ Here, Bill, come and sit beside me.”

Jane glared at him fiercely, and Bill, noticing it, went and sat beside her.

“ I must apologise for my appearance and intrusion,” he said. “ But your son very kindly asked me to stay. I hope you don’t mind.”

“ Oh, not at all, we’re delighted to have you. Brian’s always asking people in.”

“ Is it right that you flew here ? ” asked their father. “ Where did you land ? I didn’t hear anything. Did you have engine trouble ? ”

## *SILENT FLIGHT*

“ It’s true that I flew here; I landed in one of your fields. But I have no engine. I came here in a sailplane—a glider.”

“ You came in a glider? Where from? ”

“ Only Branchester.”

“ Only Branchester? But that is sixty miles.”

“ That’s no distance; people have done over four hundred miles in gliders.”

“ Have they, though? How do you stay up? ”

“ Well, the theory is that if you are flying in air that is rising faster than you are gliding down, then you can stay up in the air. You see, machines have been made very efficient, so that you get a very flat angle of glide—about one in twenty or twenty-five average, and a sinking speed of only two or three feet per second; then if you can get into any air that is rising at more than two or three feet per second, you will go up with it.”

“ What sort of air goes up? ” asked Brian.

“ Well, for instance, if a hill or ridge faces the wind, the wind cannot go through it, so it has to go over the top, and in doing so, it has to rise; so if you fly up and down in front of the ridge and keep in the air that is continually going over the top, then you will stay up.”

“ But you didn’t come here on a hill.”

“ No. On hot days you also find rising air over villages, corn-fields, or contrasting bits of landscape. The air above these parts gets hotter more quickly than that over water and woods, and rises in big columns up to about three or four thousand feet—we call them thermals. Sometimes clouds like cauliflowers form at the top of them. To-day was a very good day.”

“ It sounds great fun; but what happens if the air goes down instead of up? ” asked their mother. “ You crash, I suppose? ”

“ Oh no; it only makes you sink a bit faster. You always have

## *SILENT FLIGHT*

control. If you don't think that you will get another thermal when you are down to about 600 feet, you look for a field and land in it. Like I did here to-day."

"How high can you get?"

"Well, to-day, my highest was five thousand six hundred feet, but gliders have been up to twenty-five thousand feet."

"But that's about four miles high."

"I know, but it usually means a lot of blind flying in clouds."

"Could I glide?" asked Brian.

"Of course. Why not? People learn every day. You could too, if you wanted, Jane."

"Father, can we learn in the holidays?"

"You try to do some work at school first, then we'll see."

The front-door bell rang just as they had finished coffee.

"That's Mark, I expect; he's coming to fetch me with the trailer."

They walked over to the front door, to find Mark and a friend standing on the step, while the maid eyed them suspiciously.

"They say they've come to fetch an aeryplane, Ma'am. We haven't got no aeryplanes here."

"That's all right, May," said their father. "Come in, you two. The remains are down in the field."

"You haven't broken it?" said Mark.

"No, but it's all derigged and ready," grinned Bill.

"Thank goodness for that! Has he been behaving himself?" Mark asked their mother. "He hasn't been trying to make you take up gliding, or eating all your sugar, or anything?"

"He's been very interesting, but I think the children are definitely converted. I suppose that means that we shall hear nothing but gliding for months now."

"Well, let's get the sailplane," said Brian impatiently.

## *SILENT FLIGHT*

“ Well, thank you for a very welcome dinner, and I’m sorry I appeared so suddenly.”

Brian led the way down the little cart track, the car and trailer following, bumping slowly over the ruts. The others walked behind, shouting directions. Reaching the field, they detached the trailer and pushed it through the gate. In the gathering dusk the machine, glinting dully, was fitted snugly inside. And as the last pale-green light faded from the dark horizon they departed, with a wave and a shout, to go home, driving into the night.

## CHAPTER II

# The First Flight

**T**HE beginning of the summer holidays were black days for Brian and Jane. The effect of the wandering sailplane, and its happy-go-lucky pilot, Bill, had been simply to make them more than ever mad on flying, and their school work had suffered in consequence.

The exam. results had produced their names almost at the bottom of the lists, and their reports had been, "Inattentive," or "A good brain, but no interest in her work," or merely "Lazy." They had both failed in Maths., but Jane had managed to get 90 per cent. in Literature, which was the only bright spot on a very dark horizon. Their father was furious with them, and even more so as they were continually worrying him to let them go to the Gliding Camp which was to be held at Branchester in the course of the next few weeks. Not unreasonably did he refuse, and it was only the quiet voice of their mother, who had said, "There is only one way to make them tired of it, and that is to make them sick of it," that made their father give the idea further consideration. He had never worked at school himself, and it was only when he had got right away from it all that he realised what a mistake he had made. He would try it on them before it was too late. So he wrote to the club, entering their names, by the next post.

Jane and Brian were so excited that they packed and repacked their things every day until the Friday, when they threw everything in and left by the 4.15 train, with the words of "Break all records" from their father, and "Don't do anything rash" from their mother, ringing in their ears.



## *SILENT FLIGHT*

Brian bounced up and down on the carriage seat, and Jane hit an old gentleman on the head with a chocolate aimed at her brother.

As they got nearer, the twins quietened down. It had been great fun thinking about it all, but now it was to come true, what would it be really like? Their thoughts were mutual, and they knew it, but tried not to show anything.

The train slowed into Branchester; so, picking up their cases, they stepped soberly on to the platform.

A single-decker bus, which went within half a mile of the club grounds, was waiting in the station yard. They climbed in and rumbled off in a cloud of dust. It set them down at a little cross-roads which was signposted to Pigly Parva, and the Gliding Club towards the west. Brian picked up the cases and Jane carried the raincoats, and they set off down the lane.

Coming round a bend, they saw the hill, and high above the hill, floating silently against the stately sky, were seven sailplanes. Brian dropped the cases and cartwheeled into the ditch, then picked them up and started running down the slope. Jane followed until they were both out of breath; then they sat down on the grass verge and watched the machines wheeling and circling.

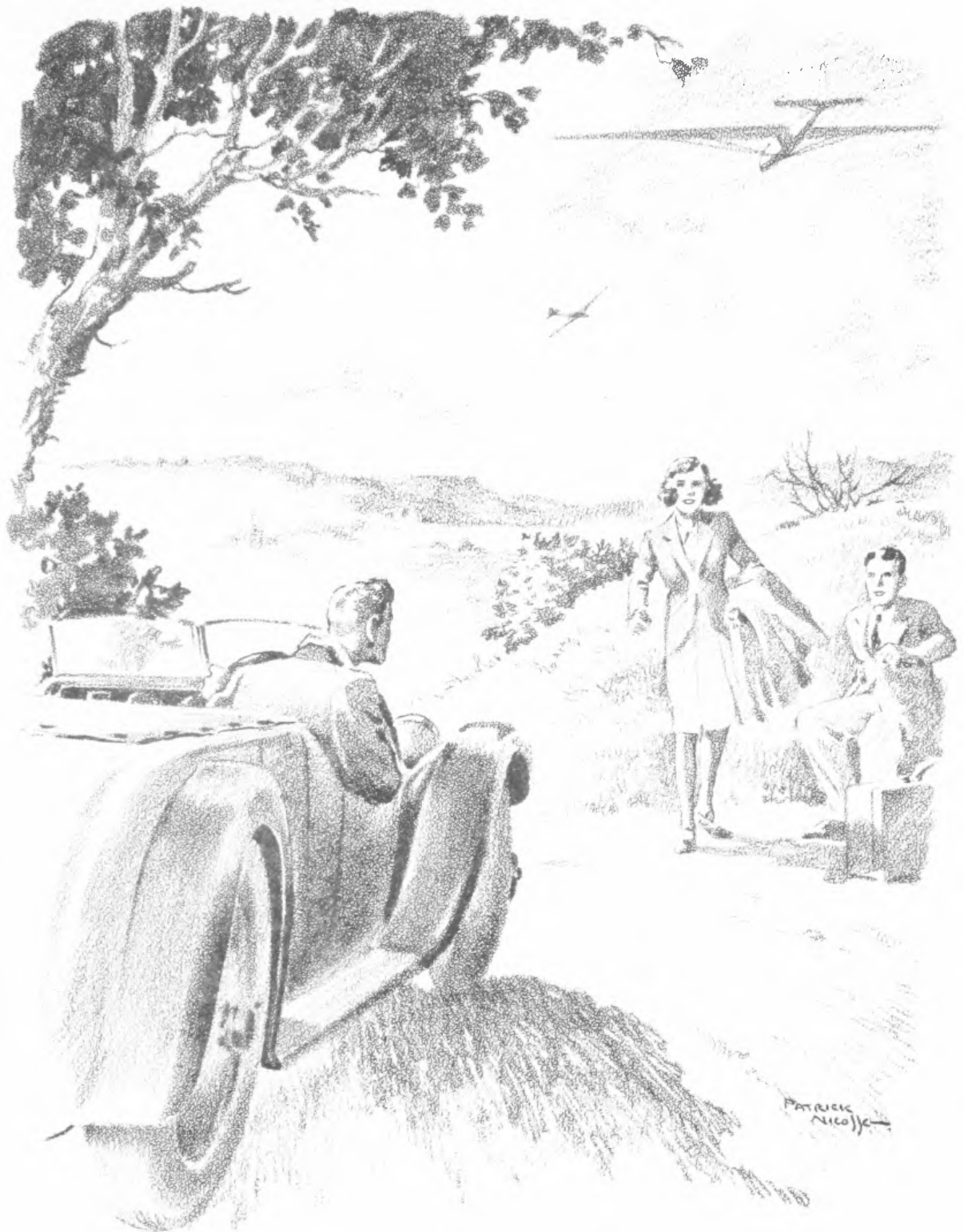
A car roared past with eight feet of wire cable trailing and bouncing behind. It drew, squealing, to a standstill. A fair-headed man leaned out.

“ Going to the club ? ”

“ Yes, we’re joining the camp.”

“ Well, hop in then.”

He drove at a furious rate down to the gates, and, turning in, roared up the short but steep hill to the clubhouse. They all got out, and their friend shouted at the back view of a broad-shouldered man wearing corduroy trousers.



*The car drew, squealing, to a standstill*

## *SILENT FLIGHT*

“ Mac, here are two of your new death dicers.” And giving them a smile he departed inside a trailer.

“ Hang on to that tip a minute, will you ? ” Brian looked round, and, seeing one untenanted wing tip, dropped the cases and grasped it.

“ Can you hold this rope while I take up slack ? ” said someone else to Jane. So she dropped the coats and held it up.

Mac arrived from the depths of the hangar and looked at the heap of coats and cases. A whistle made him look round. It was Brian from the distant wing tip.

“ Hullo, so you’re for the camp, are you ? My name’s Mac; I’m instructor here. I’m glad you’ve arrived all right; that makes the lot. Come on, I’ll show you the bunkhouse.”

Brian handed the tip over to the owner and followed Mac and Jane to the big army hut where the members slept.

They went first to a small room at the end, which Jane and another girl member would share. Jane put her case on the empty upper bed, and they went round to the main entrance and into a large, cool room with about twelve double-decker beds in it. Many had cases or clothes on them, but Brian found an empty one near a window, and left his case thereon.

“ There won’t be any training to-day, but if you are lucky the list on the two-seater may be nearly through and you could have a ride in that, if there is time before supper, which is at eight o’clock. Brown here will take you over to the launching place.” He put his hand on Brown’s shoulder. “ Get these two a ride in the two-seater to-night if possible.”

Brown was tall and thin, wearing a blue shirt and blue corduroy trousers; he had a cheerful smile and a small scar on his chin.

“ You two camp members ? ” he said.

“ Er—yes; we’ve only just arrived. I’m longing to start.”

## *SILENT FLIGHT*

“ What gave you the idea of gliding ? ”

“ Well, Bill—we don’t know his other name—landed in one of our fields about two months ago, and, well, we’ve always been keen on flying, but this seemed too good to be true.”

“ What! Bill with the white Kite? You must be the people who gave him such a good dinner. Did he eat all your sugar ? ”

“ No, but he had a white machine.”

“ Well, he’s two-seatering now. He’ll be taking you up. Does he know you are coming ? ”

“ Not unless he’s heard from Mac.”

“ Oh, Mac never tells anybody anything. Still, here you are; that’s the beautiful beast coming in now.”

A huge machine with swept-back wings slipped steeply in over the hedge, and landed gently a few yards away, right by the launching point. Bill and his passenger got out.

“ Well, that’s all for to-day, thank you,” he said, stretching.

“ I think you’re wrong, Bill, old boy. Here are two more for you,” shouted Brown. Bill turned, frowning, and looked towards them.

“ Oh, hello. Have you really joined? Good for you. Hop in, I’ll take you up; you won’t ask silly questions like some of the others.”

They both walked forward, each trying surreptitiously to get in first. Jane glared at Brian, who said,

“ In you get, Jane, but I’ll get my Silver C first.”

Bill climbed in again and did up their straps. The winch cable had been brought from the other side of the field, and was hooked into the quick release just under the nose of the sailplane.

“ O.K., we’re ready. One flag,” shouted Bill.

Brown was standing ready to run on one wing tip, and someone else was waving a yellow flag up and down to the right of them.

## *SILENT FLIGHT*

The winch started slowly winding in the cable on a drum, until it became taut, making the machine rock gently on its skid. Then it started to move forward.

“Two flags,” roared Bill.

The big machine ran forward a few yards until it became airborne. Then suddenly the earth fell sharply away underneath them, leaving only the blue sky ahead—the whistling air flowed past the wings, shrieked dully round the struts. Jane held on to the cockpit side and glanced at Bill, who was holding the stick back with his right hand and grasping a little ring on the instrument board with his left.

It was like going for a ride in a tipped-back arm-chair.

As they rose higher, Bill eased her down a little, and a flattened strip of earth became visible under the nose. After a few seconds he pulled the release ring, and there was a click as the cable fell away. Banking gently the pilot brought her round on an even turn.

“I’m afraid there won’t be much lift now; it’s getting rather late, and the wind’s slacked off a lot. Still, we’ll see what can be done.”

They flew along parallel to and above the ridge, floating on the gently rising air, which felt alive and buoyant. Everything was quiet save for the soft swish of the cool, fresh breeze, which blew Jane’s hair back from her face. They flew quietly up and down the ridge several times, Bill enjoying the view, and Jane thrilled with her first flight.

“We must go down soon if your brother wants to fly to-night; there won’t be any lift left soon.”

“I suppose we’d better, then; he’d be furious if I’d been up and he hadn’t.”

“O.K. Here we go then.”

Bill flew out from the hill and turned in over the road. Away from the lift they were sinking fast, and soon, helped by a slight sideslip, floating along just above the ground. The long grass



## *SILENT FLIGHT*

brushed the skid, then two gentle bumps on the hard, rough earth, and they were sitting at rest, almost in position for the next launch.

Brian ran up. "How did you like it?" he asked. "It looks grand; hurry up and get out. I want my turn too."

"All right, don't be impatient. You won't want to get out once you've been up; it's absolutely marvellous."

Brian took Jane's place, and the cable was hooked in again. The winch engine roared in the distance, and they were off, climbing steeply.

Bill released the cable and flew along the hill; the lift was slowly subsiding, and they found great difficulty in keeping up in the air. Bill was working hard, flying the big machine as near into the hill as he dare, turning steeply right in the big bowl at the end of the beat, and scraping back just above the ridge. Brian was enjoying himself, waving and shouting at sightseers standing on the top of the hill, almost beside them, and looking down the long wing into the gulleys as they turned. They stuck it for twelve minutes, and then heard the supper bell ring distantly. Bill gave a hearty cheer and the same sort of sideslip, and within a minute they had landed outside the clubhouse. Someone walked over with a sandbag. They turned the machine wing into wind and left the sandbag on the tip. Then went into the clubhouse, from where there issued the savoury smell of fried eggs and bacon.

## CHAPTER III

# Hoppery and Crashery

THE next morning, the slumberers in the bunkhouse were awakened at the early hour of six with brilliant sunshine streaming in at the window, and the song of many larks. Being very keen to start, they hastily got up and had every machine out of the hangar by seven-thirty. The new camp members were supplemented by several old hands, and soon learnt how to handle machines on the ground, without pushing holes in the fabric. The next half-hour was occupied by the experienced members giving the gliders their daily airworthiness inspection, and signing for them in the book. Others were at the back of the hangar, starting up the old retrieving cars. By eight o'clock everything was ready on the primary slopes, so they all trooped in to a large breakfast.

The instructor arrived soon afterwards, so swallowing down the last few hard crumbs of toast, the new members went out on to the sunlit field. Only the old hands, viewing the light north-east wind with distaste, stayed on, eating and talking.

Arriving at the far side, Mac started telling his charges the whys and wherefores of this new sport.

“These machines, Daglings, are not very efficient, as you can see,” he started. “But they are especially designed like this, so that you will not get into any difficulties by being blown into the wrong field, or floating into the clubhouse. They have not got any cockpit, so that if you do go and break it, you won't get hurt. Also they are cheap to repair, which is a very important point.

“These control surfaces on the wings are called ailerons.

## *SILENT FLIGHT*

These give you lateral control, or bank. You see, one goes up as the other goes down. Now, the airflow pressing on the one that rises above the wing makes the wing go down, and the airflow against the down-going aileron makes that wing go up, and so the machine tips on one side.

“ Next, there is the rudder, which is opposite to the handlebars of a bicycle, but simpler; right foot for right rudder, and right turn. And left foot for left rudder. In a turn, you use both rudder and bank together. If you don't bank, you skid out; and if you don't use rudder, then you slip inwards. Now last, but most important of all, the elevator, which as its name suggests, is for climb, and dive. On these machines, the elevator is the most sensitive of the three controls, so you must be very gentle with it. To lift the nose, and so climb, pull the stick slightly back; the elevator goes up and so presses the tail down, which lifts the nose. To dive, ease the stick forward, and the elevator goes down, and so does the nose. Above all, never be rough with the controls; the gentler the better.

“ Now, Baker, you sit on the seat here, and put your feet on the rudder bar, right. Now hold the stick, so that the elevators are straight out behind the tailplane. That is the position for normal level flight, but, to begin with, we will only do slides without leaving the ground, so the stick must be kept forward.

“ So remember, stick left and right to keep the wings level, forwards for dive, a little back to slow up. And rudder left and right for direction. The rest of you get the bungee rope out, and I'll do a test hop to show you what it is like. Right, hook the ring in the middle of the bungee on to the open hook on the nose, and take the two ends out in front of the machine, making about a thirty degree Vee. Baker, you hold the wing tip level. Jane and Peters, you hold back on the tailbooms, at the top, please. The rest of you go and pull, four a side on the rope. I shall shout 'Walk,' and

## *SILENT FLIGHT*

the bungy crew walk forward. 'Run,' and run as fast as you can, and go on running until the ring drops off. Then, 'Let go,' and you two on the tail, just stop holding back. O.K.?' "

"Walk—Run" came almost immediately. The crew, heads down, were putting their best into this everyday test hop of the instructor.

"Let go." And Jane and Peters, who had been digging their heels into the ground to get a good grip, released the tail. The primary shot forward, rising to about twenty-five feet from the power of the launch, then, settling into a steady glide, floated gently to earth. The crew stopped running and began to haul the bungy back to the starting-place. Roberts, another camp member, with Brian on the running board, went to fetch the machine back, with the rattling retrieving car.

In turn, they all had slides, gentle launches which took them about twenty yards without leaving the ground. Some were quite straight and good, others just skated along on a wing tip.

Three days later, most of them were on to strong hops lasting about ten seconds, from a slightly steeper slope. Both Jane and Brian were among these advanced hoppers, egged on by the competitive feeling between them.

It was on this afternoon that Brian broke the primary; he described it as a gust under his tail, but everyone else said that they had heard that tale before. He had just been launched off the mantelshelf slope, and finding himself higher than he'd ever been before, about thirty feet up, he dived and followed the slope down until he came to the familiar nearness of the ground, then realised that he was going much too fast, so pulled the nose up, then decided he was going too slowly; but it was too late, he had it stalled, and from eight feet the Dagling dropped like a stone. Crump! It landed heavily on a tip and the front part of the skid. The landing wires broke,

## *SILENT FLIGHT*

and the wings drooped like a bedraggled bird; there was also some fabric torn on the wing. Brian got off and surveyed the cock-eyed machine. The others walked up, Jane grinning broadly, Mac saying nothing, but with an amused, questioning look on his face. And the others took it as the best joke for a long time until Mac told them that they would all have to dismantle the machine and carry it to the workshop before they could fly again. But they set to it with a will, and were hopping again before tea-time.

They all slowly improved as they discovered that it was not necessary to move the controls at all violently, and, anyway, the Dagling seemed to fly itself much better than they could.

The camp also began to string out according to ability, and Mac had said that on the following day five members could try for their A certificates, weather permitting.

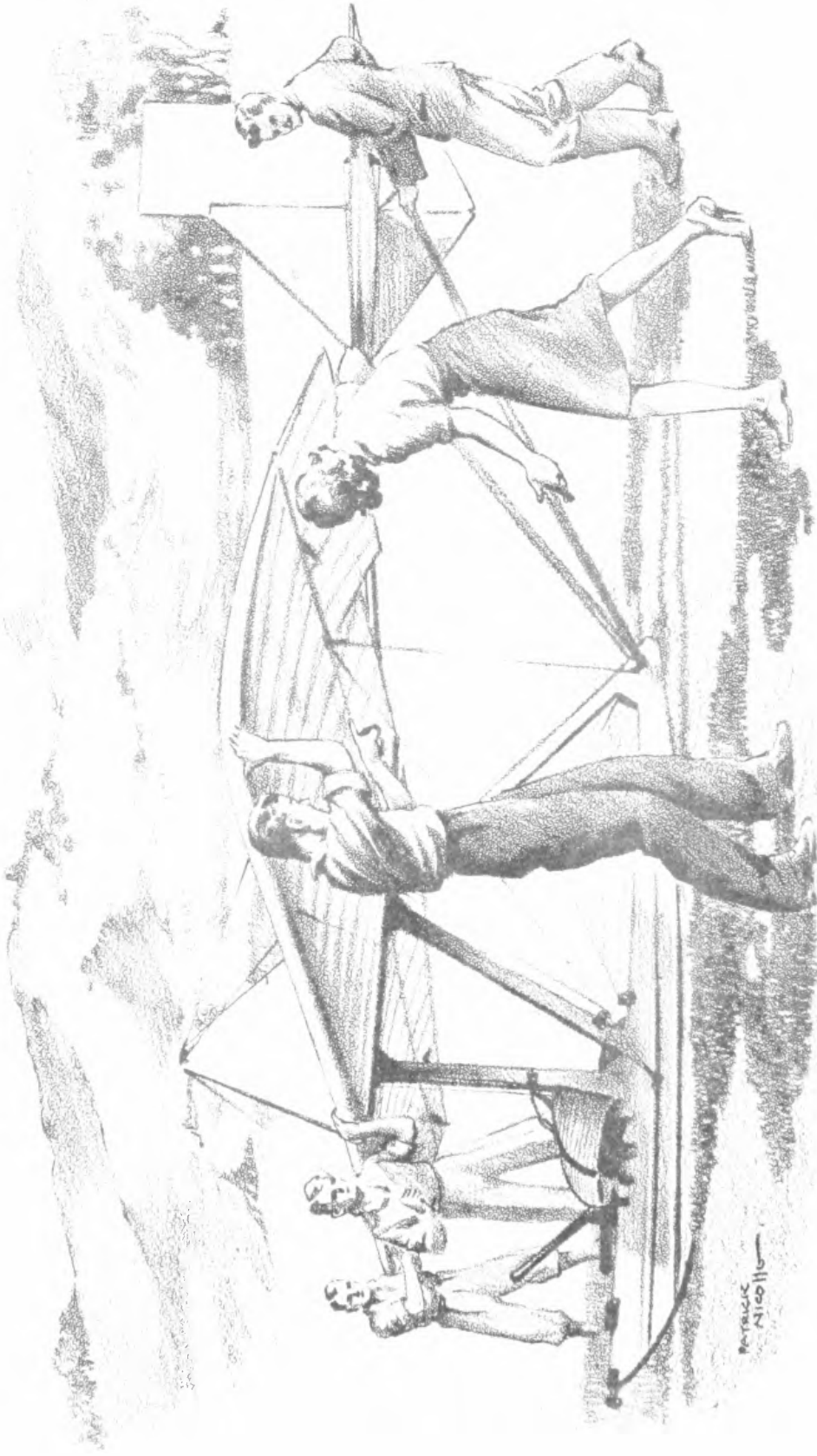
They were lucky, for the next day was almost ideal; a very light breeze was blowing on to the hill, with a thin sheet of high cloud dulling the sun.

The five each had a long hop off the mantelshelf, and then took the primary to the top of the hill. Brian was first to fly down, and Mac told him that it would feel very much higher than usual, and to resist the temptation of following the contours down.

“Just keep a gentle summer breeze on your face, and you’ll be quite all right. And don’t try to stretch the glide; it’s quite easy to get your thirty seconds to-day.”

The crew stretched out the bungy, and he was off. It was a good launch and took him well clear of the hill. But it did feel high, and as Brian took a quick glance down between his legs, the earth seemed very far away, and he rather longed to get back to it. Down went the nose, the wind rushed past his ears and whined in the wires. The ground came up to meet him; this was better, more what he was used to. He flattened out and made quite a





*“ These are called the Ailerons ” (see page 17)*

## *SILENT FLIGHT*

neat landing. But there was no reassuring cheer from the top of the hill. Through going too fast he had landed short of the half-minute. The old car came and fetched him, and Baker said: "Better luck next time, I shall probably do the same." But Brian was annoyed, and more so when Jane made a very even flight of thirty-three seconds.

The other four, through watching Brian's faults, and resisting the temptation to dive, all got their A's easily. Later in the afternoon, when his turn came round again, he made the longest flight of the day, forty-one seconds, and felt better.

Three days later, four of them had their B certificates, for which they had to do two forty-five-second flights, and one of a minute duration with left and right turns.

The turns were the difficult part, and the amount of bank to go with a certain degree of rudder had to be discovered by experience, and some of them found a tendency to get very slow on a right turn, due to the fact that they unconsciously pulled the stick towards them when putting on right bank.

However, they were slowly improving, and the weather remained almost ideal. Would it be possible for them to get the C Soaring Certificate at the camp? There were three days more to go, and Mac had promised them that if they were good they could do ground hops on the Nacelle Dagling—a primary with a cockpit built around the pilot to improve the streamlining—that evening, and do practice descents the next day.

They all liked the Nacelle—the controls were more evenly balanced, and there was no draught to whistle up the trouser legs. It also had a flatter glide and care had to be taken not to overshoot the landing-ground into the far hedge of the car park.

The four of them, Brian, Jane, Baker, and Michael Peters, made descents from the hill-top for the whole day, and in great style, so

## *SILENT FLIGHT*

in the evening Mac told them that if their heads hadn't burst by the next good west wind, they could try for the C.

At last they would be able to soar on the wind, and wander across the country with the clouds. They would really be able to fly. How they wanted that west wind!

## CHAPTER IV

# Cross-countries and Retrieving Parties

THE next day, Saturday, was hot and calm, so that there was no chance of the great flight. But as crowds of members had turned up to try to catch thermals, there was plenty of work to do, rigging private machines, helping to launch and retrieve, and picking up tips from the experienced pilots. Bill was one of the first to be ready with his white Kirby Kite, and they plied him with questions on the way to the launching point. This was a different launch from the catapult bungy starts that they had been used to. It was called a winch launch, the same as they had had on their first two-seater ride. The winch was placed on the windward side of the field, and about 2,000 feet of cable was paid out right across the field and hooked in the nose quick release of a sailplane facing into wind on the leeward side.

Bill climbed in with his parachute on and did up the straps. The streamline cockpit cover was fitted on and sandwiches wedged into a corner. The map was pushed down by his left hand, and Brian got ready to run on the wing tip.

“Where are you going?”

Bill grinned. “I haven’t the vaguest idea,” he said.

Jane gave the signals to the winch driver with the yellow flags. One for “Take up slack.” The cable rustled across the grass, grumbled in the release hook as it became taut. The Kite rocked on her skid, and then moved slowly over the ground.

## *SILENT FLIGHT*

“Two flags,” shouted Bill.

Jane hurriedly waved both flags, and the winch engine speeded up with a distant roar. The machine left the ground, and, with the stick almost hard back, swept steeply upward in a graceful arc, the sun glittering on the polished paint. About 700 feet up the cable dropped, and the white bird passed silently overhead in a gentle turn.

“Look, I think he’s caught a thermal,” said Jane as the Kite began to circle above the next field.

They were both rather hazy as to the nature and use of a thermal—they knew you circled in them and went up, and Bill had said something about getting them over cornfields and villages. It was a column of rising hot air caused by the irregular heating of the earth on sunny days that really caused them. But it looked like magic to Jane and Brian.

They looked at the Kite again, shading their eyes from the sun. At first they were unable to find it, the sky was empty save for a hovering hawk waiting for its prey. Then they saw it, very high, a miniature bird immovable against the vast expanse of brilliant blue, a transparent ghost that disappeared even as they looked.

“It’s lovely!” said Jane.

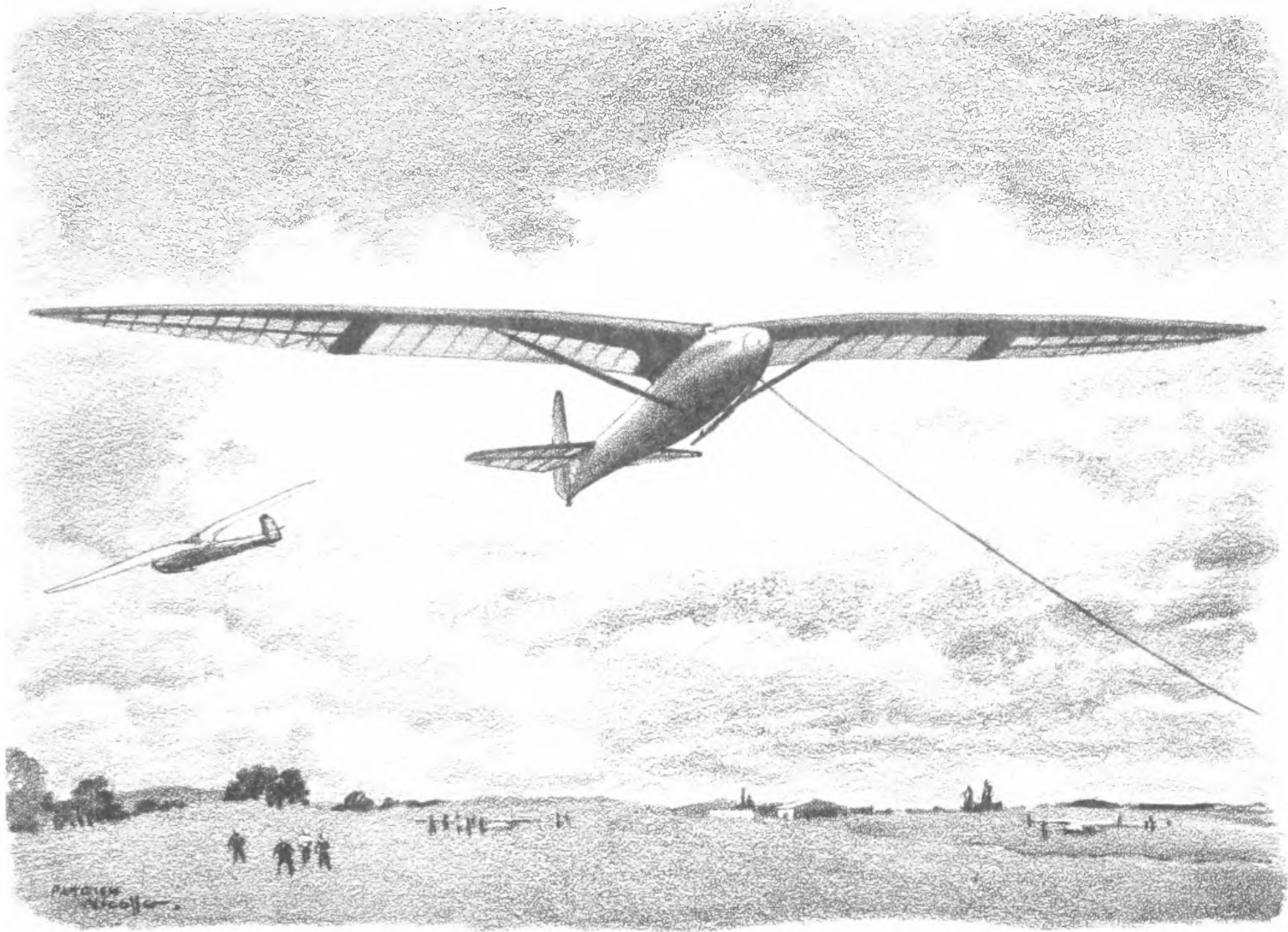
“Hey, come and flag for me,” a voice cried. They woke from a single dream; there were more people to get away, a car had brought the cable back, and another machine was ready to depart into the unknown.

It was a Grunau Baby II, like the club sailplanes. It didn’t have the sleek lines of the Kite, but looked strong and workmanlike.

Two flags, a grin, and up he went, climbing steeply to get the maximum height from the launch.

Releasing, he turned by the clubhouse and started circling.

“There might be something there,” said a voice at their elbow. For a few turns he held it, then slowly lost height.



*The kite left the ground, and swept steeply upward*



## *SILENT FLIGHT*

“Just too late, he’s fallen out of the bottom of that one,” the voice went on, “I doubt if he will get anything this flip now.”

He was right, as a few seconds later the G.B. swished through the long grass and came to rest a few yards away. They went over to drag the machine back to the launching point, and found the disappointed pilot eating his sandwiches.

The sun was hot and a few little detached cumuli lazed slowly far overhead, showing the existence of strong thermal lift. It was lunch-time, but much too warm to walk right back to the clubhouse, so they ate a couple of borrowed apples and lay and sunbathed, only getting up to launch off various machines that arrived with their parachuted and bemapped pilots.

They had flagged off nine sailplanes up till now. Five had missed thermals and were waiting to try their luck again. The rest had disappeared. Where, no one knew, or how far. Some may have reached the coast nearly a hundred miles distant. Some might at this very moment be gently settling in a distant field, to smell the hay and the heavily scented earth, still exhilarated with their silent passage through the uncharted blue.

They would sit, for a few minutes after landing, the sun hot on their heads, the stick slack in their hands, until awakened into reality again by the sound of voices, to find the faithful sailplane surrounded by a crowd of curious onlookers who had appeared from nowhere in the space of a few seconds.

There was still no news of Bill.

By half-past two a slight breeze had sprung up. It was blowing on to the hill and bringing with it grand, dazzling white cumuli which wandered across the sky in stately peace.

They sent up more sailplanes, some of them flown by people they had never seen before, but who treated them as though they had

## *SILENT FLIGHT*

been members all their lives, and were the most experienced pilots instead of a couple of enthusiastic hoppers.

One machine was flown by a girl; it was a pretty machine, called a Rhonsperber. It caught a thermal soon after the launch, and, still circling evenly, passed beyond the hill and away, making Jane feel very envious.

Three or four machines staying up in the gentle hill lift were trying to catch clouds. As a phantom mountain rode across the sky towards the hill, Brian and Jane, lying on their backs, would watch a sailplane, almost transparent against the heavy blue, fly out from the hill towards it, then slowly grow smaller and, wheeling as a gull, sail away beyond the hill in company with its ghostly benefactor.

They longed to see the land behind the hill, to soar far above the ridge alone, to harness the wind, the sun, and their own skill to fly high over the expanse of fields and villages which lay to the east, watching the shadow of their own protective cloud drift slowly over the land. Others were doing this now, this minute. Some with the thrill of the first cross-country. Others, more experienced, working their way across wind to where they expected better weather conditions or a greater distance before reaching the coast.

Another machine was being towed out to the start. It was bigger than the others with a heavily tapered wing and clean lines, the smooth varnished wood shining in the afternoon sun. They got up to turn it into wind and help in the pilot.

“Gosh, this is a beauty! It’s much the best so far. What is it?”

“I think it is called a Rhönadler,” said Jane. “I should love to fly it.”

“You would probably break it,” said Brian hardly.

The pilot had fixed himself into the tiny cockpit, and as there was not much room for him to move his arms about, Jane did up



his safety straps. There was more tucking in of maps and sandwiches, then the cockpit lid was fitted on, and the cable ring fixed in the release, tested, and rattled to make certain that it would not jam at the top of the launch. Brian gave one flag.

“Where are you going?” Jane asked again.

“I thought I’d have a crack at a return flight to Maidenhead, but I shall probably land on the golf course behind the hill. The bunkers are—— Two flags.”

The Rhönadler bumped slightly on the hard ground and, pulling up at a steep angle, the great bird rode slowly to the top. Then turned and flew along the hill.

“She is awfully slow.”

“No, I think it’s only because she’s so big; but isn’t she a beauty? I’m going to own her one day.”

“If he is a sensible man he won’t sell. I wouldn’t—a beauty like that.”

Jane did not answer; she just watched a massive snow cloud pass over the hill with the graceful outline of the Adler silhouetted against it.

The strong lift began to die slowly away with the sun, and the Adler was the last to be able to leave the site. About six-thirty the monumental cumulus had given way to a sky, clear, save for some wispy cirrus threads at immense height.

They wandered over to the hangar and helped derig some of the less fortunate pilots’ machines.

“It must be great fun to live in your trailer,” said Brian as they stowed the last one away.

They went into the club. Someone had just rung through from Hornchurch. He had been given a huge tea by the farmer in whose field he had landed, and would his partner go and fetch him, please? He was in the field next to the cemetery. His

## *SILENT FLIGHT*

partner laughed and, calling a friend to come and help, went out, a coat in one hand and three bars of chocolate in the other. Their car rumbled off down the road.

Two others had already telephoned, and their friends had left to retrieve them. Their distances were only nine and twenty-one miles, not even enough for the Silver C distance test.

There were still seven more machines to report. The club was crowded with people, eating, waiting for the telephone, and talking over the day's flying, in a language that neither Brian nor Jane yet fully understood. Most of the trailers were already attached to the cars. People had on overcoats. Everything and everybody was waiting, laughing and talking, but waiting. Where were the seven? How far had they gone? Over a hundred miles, and there wasn't going to be much sleep for anybody that night. There probably wouldn't be, anyway, for those staying in the club. A car in second gear coming up the hill, the crunch of gravel, a flash of headlights across the bunkhouse window, voices and the slamming of car doors, then dozing off until the same performance was repeated about an hour later.

To-morrow there would be late breakfast and everybody talking at once. One by one more people left. They could be heard talking and laughing outside, then the car engine roared into life, and faded away down the road. Others had gone to bed.

It was getting late, and there was still no news of Bill or the owner of the Adler. Jane and three others were playing bridge. Brian was just sitting, half-asleep, stroking the club cat. Conversation had died, the monotonous calling of the bridge players and Whiskey's loud purring were the only sounds that broke the stillness of the warm evening.

The telephone bell jangled, jarring harshly into the quietness. Everyone jumped up, then sat down again.

## *SILENT FLIGHT*

“ Three spades. Answer the 'phone someone, I expect it's Bill.”

The only someone left was Brian, so, holding the cat under his arm, he walked over to the telephone.

“ Hullo. Hullo, Bill. Why didn't you ring before, and where are you? Eastbourne? Why did you take so long? Where? Who's where? Oh, there; no. Jack! On the cliff near the ruined tower. O.K., we'll come right away.”

He turned round; they were all standing looking at him, some with coats already on.

“ Bill and Jack, with the Adler, are both at Eastbourne. Bill thermalled via every town in the south of England as far as I can see, and Jack found a north wind at three thousand feet and went straight there under clouds. Can we come and help fetch them? ”

“ Yes, do, then I can get to bed early for a change,” said one of the bridge players.

So Bradwell, Bill's friend, and a tall fair man with a slight stoop and a seaman's sweater, called Dick Byrd, bought some chocolate, and went out with Brian and Jane.

It was dusk, and very warm and still. The trailers were fixed to the cars and loomed dark against the sky. Brian went with Bradwell in Bill's open Bentley, and Jane followed with Byrd in his Ford V8 two-seater.

Engines were running, the Bentley with a slow heavy throb, and the big Ford with the powerful quiet of its breed. After a few delays they were off. The lights clicked on and they ran down the slope on to the road to London, the Bentley leading.

They spoke hardly at all, as they drove fast down the bypass, the windscreen flat, and the cool evening air playing with their hair. Brian looked back when he thought about it to see if the Ford was still following. They ate some chocolate and idly watched

## *SILENT FLIGHT*

the moths and insects dance madly their dance of death into the headlights.

“We are not supposed to do more than thirty miles per hour with a trailer,” said Bradwell as the needle crept up to sixty-five.

They ran through London at eleven o'clock. The roads were still busy, but the pavements empty. In all the cars and taxis they could see the gleam of white shirts and women's evening dresses. Brian wondered what sort of a party or show they had been to, and wondered what they thought when they saw the big green Bentley with two windswept youths in the front seat, and the mysterious trailer on the back, and then the Ford, the same, behind them. He also wondered what his family would think if they could see him now.

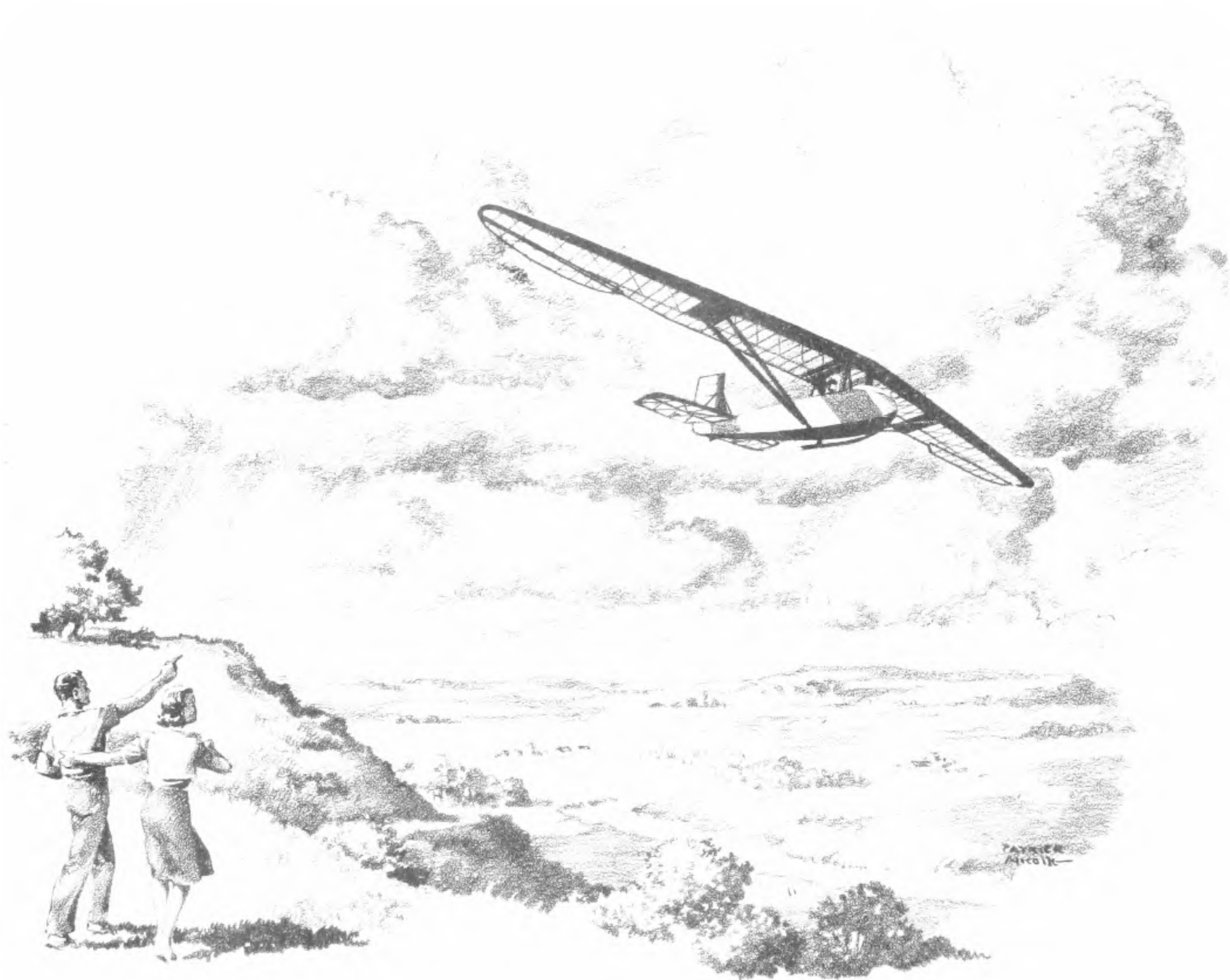
The traffic had slowed them up a great deal, and they were glad to get out on to the wide straight road, which was signposted in reflector letters, “To the Coast.”

Bradwell drove fast and well, Brian glanced back at the Ford rounding a bend and waved to Jane.

They drove on in silence. The moon was just rising over the flat fields of Kent, a big yellow moon, rising out of the shadowy streamers of mist that crept silently over the landscape.

“It's been a terrific day,” said Bradwell; “it's very seldom we're as lucky as that at the week-end. We've never had so many machines go away before.”

They ran through two large towns and several small villages, the noise of the cars reverberating in the narrow cottage-lined streets. Near Eastbourne they left the main road and rattled over a roughly made sunken lane towards the dark outline of the ruined tower and the sea. It seemed to go on between high tamarisk hedges for miles, and to be completely without finish, until they went round a bend, and suddenly out on to the grass of the cliff-top, where they stopped.



*They were allowed to fly the Falcon*

## *SILENT FLIGHT*

The sea, glittering and gilded by the moon, stretched out to a distant horizon, and grumbled gently on the pebbles far underneath them. The sky was clear and dark, and thrift growing among the short turf rustled dryly in the cool breeze. A little dull orange light winked at them from far out to sea.

“It’s a wonderful night, but I wish I knew where they are,” said Bradwell, being practical.

The Ford had drawn up beside them and Byrd was lighting a cigarette, which smelt like incense in the fresh salt air. Jane was sitting up on the back of the seat, quietly surveying the scene.

“What’s that over there?” she said, indicating a gleam of light pointing to the sky in the next field.

“It’s them. That’s the moon shining on the Adler’s wing. Come on.”

They slid down into their seats and bumped slowly over the grass. As they got near they could make out the outline of the Adler. One wing reared dark, like a spear, to the sky.

“Bill. Hullo there,” Brad shouted. There was no answer. They stopped beside the Adler and the derigged carcass of the white Kite.

“Funny, leaving the machines like this; I wonder where they’ve gone? I suppose it’s no good looking for them; we’ll only lose ourselves. They are probably making whoopee at the house of one of Jack’s friends. He used to live near here.”

Brian looked at his watch. It was two-twenty, and would soon be light. They wandered over to the remains of a haystack and sat down. There was a loud yell, and two dark shapes rose up from the pile.

“You take all night to get here, and then wake us up by jumping on us; that’s the sort of friends we’ve got.” Bill looked at Jack, who nodded in approval.

## *SILENT FLIGHT*

Bradwell said, "You had better remove some of that straw; you look like a couple of scarecrows."

"Well, thanks a lot for coming. Isn't it a marvellous night? You know, parachutes and hay make an extremely comfortable bed. Hullo, Brian. Hullo, Jane, you too; it's frightfully nice of you to come all this way."

They walked over and started to derig the Adler.

"I'm sorry we couldn't do this before you came," said Jack, "but it takes at least five people to lift the wing off and on; that's its disadvantage—its only one."

It was three-thirty before they were ready to leave for home. A cobweb of very high cloud had spread like a spectre over the dark sky, and the haloed moon was peering dully through it. The air had become cold and everybody was very sleepy.

"What you wanted to come all this way for I don't know," said Brad.

"Well, you would have," was Bill's retort as they banged on the trailer door.

"Oh, shut up."

"Same to you."

"I won't fetch you again."

"Then you won't fly my machine."

"I'm tired."

"So am I."

"Let's have breakfast at Lyons on the way through London."

"I'd rather have a bath."

"Well, there is the sea."

They climbed in the Bentley, backed it up to the trailer, and got out to hitch on the tow bar, but it was the wrong end, so, glaring fiercely at each other, they got into the car again and roared round the trailer to the other end in bottom gear, making as much noise as possible.

## *SILENT FLIGHT*

When it was hooked on, they turned round carefully, remembering the ditches, took a last glance at the cold grey sea, and plunged into the dark, narrow lane.

Brian thoroughly enjoyed the ride back; he was no longer sleepy, but was excited and very happy. Here he was, in a powerful open car, with his friends, two brilliant pilots, one asleep beside him, towing the big narrow trailer, which held the beautiful white sail-plane, back home at four o'clock in the morning through a quiet empty England, with the expectant sky pink and clear before the sun.

He wondered if Jane was thinking the same.

They drove through London. A different London from what they were used to—a quiet, empty London with washed and shining streets. The only occupants, the cats that would dash across the road and disappear over a wall just as suddenly.

It was quite light now, and the sun, low and bright, dazzled Brian as it flickered on the steering wheel and lowered windscreen.

Brad was still asleep.

They drove back up the bypass in the brightening daylight, while formations of duck flew low overhead, and milkcarts rattled along on the morning round. They came to the familiar town and the two cars turned left down the lane towards the club.

The few passers-by looked disparagingly at them, as if to say, "These mad flyers; do they ever lead a normal life?"

As they turned through the entrance gates, Brian felt suddenly very tired. There was nothing more to do. It was six-thirty a.m., the machines were retrieved, ready again to soar high among the lonely spirits of the sky, to fly far across the country to distant villages or the sea, only to be retrieved again. Brian laughed, and putting his arm on Jane's shoulder, the two of them wandered slowly off to bed.



## CHAPTER V

# C Stands for Soaring

“**T**HE wind’s west, it’s west; come on, you chaps.”

“Oh, go away, it’s too early, it’s only—— What, a west wind? Why didn’t you say so to begin with?”

A turmoil arose in the bunkhouse, people grabbing trousers and toothbrushes and running for the wash-room. The old hands peered out from under the blankets.

“H’m, it should be good about eleven o’clock when the thermals get going,” they grunted, turning over.

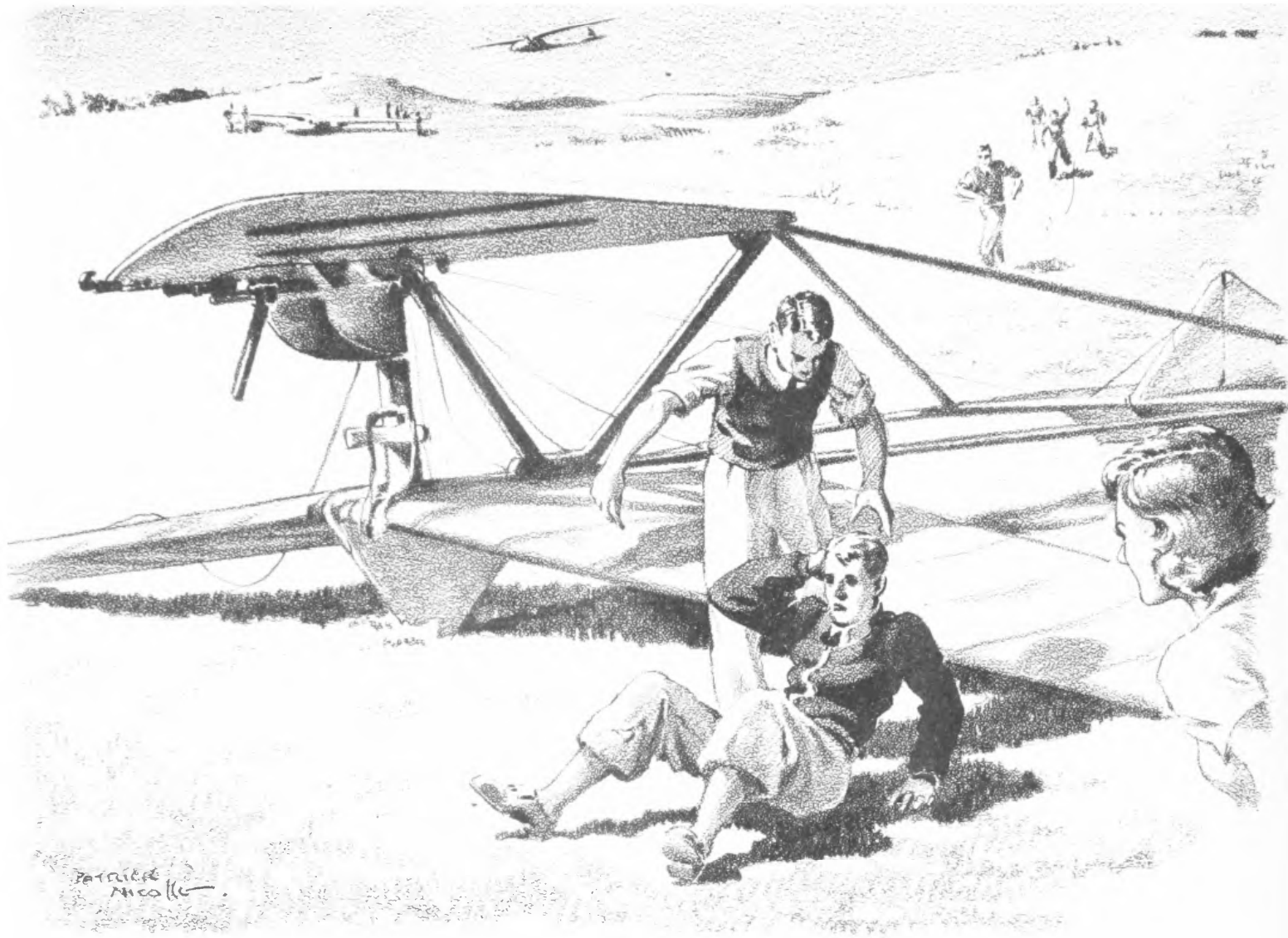
After breakfast Mac gathered the five eligibles together on the hill-top.

“Well, I think you can try for your C’s to-day.” He smiled. “Now, look at the hill. When you are launched, turn along to the right; then, when you reach the bump in the hill just before the bowl, do a left-hand turn, not going too slow, and fly back along the beat, turning again over the launching place. Don’t go beyond either of these two points, and don’t get too far behind the hill, as there is a downdraught there, which will plant you on the golf course.

“If you fly too far out from the hill, you will sink down to the bottom and have to land. But, above all, do not try to stay up by pulling the stick back. If you see you are sinking below the top, come and land and try again later. If you try to soar by stretching the glide, you will come down very quickly indeed.

“All right, Jane; ladies first; you try.”

Jane got into the Nacelle and did up the straps. The bungy crew got ready.



*“ I think I’ve broken my spine ” (see page 38)*

## *SILENT FLIGHT*

Mac was at the wing tip. "O.K.?" he called. "I'll wave from here with my handkerchief. If it is held in my right hand, you are flying too far away from the hill. If it is in my left, you are too far over the path. When I wave it above my head, it is time to come down. Understand? Well, good luck."

The bungy was stretched out, and away she went. Clear of the hill the Nacelle turned, and started its beat along the ridge.

"It's not staying up very well," said Brian anxiously.

"No, she's flying a bit far out from the hill," said Mac. "Still, it's a better fault than being too far over."

The Nacelle turned. It was a nice, even turn, but rather large, and in making it Jane flew right out of the lift. She banked in towards the hill again, but it was too late, she was below the top. The Nacelle turned away out over the field in a wide sweep as it approached in to land.

"Well, I'm glad she's sensible about it, anyway," said Mac. "But now, there is no excuse. You all know what to avoid, and Jane can try again when you all land—if you don't break it."

The pulley on the hill-top, round which the endless rope of the pull-up winch ran, rattled as the rope trundled round, and soon Jane's curly head appeared over the crest, with the Nacelle.

She was feeling annoyed with herself and would not speak to anybody.

Michael Peters was the next away, and made a very smooth flight of fifteen minutes, which made Jane more annoyed than ever. Baker and Campbell, a non-camp member, also made good flights without incident, but Brian's flight was rather hectic. Remembering Jane's fault, he was determined not to do the same, so erred the other way and flew too much over the path.

Mac was looking grim, waving his left arm furiously. Suddenly Brian found himself well and truly over the golf course at the top,

## *SILENT FLIGHT*

and sinking like a brick. He turned violently, diving for the edge but making no progress against the wind. He got lower and lower, and was just about to hit the edge of the hill with a resounding crack, when a sharp gust just lifted him up and over. Out in front again, the lift was very strong, and he was able to soar once more, flying up and down very carefully while he recovered from the fright he had given himself. He landed in one piece after sixteen minutes.

He brought the machine to the top once more amid black looks from Mac and Jane, and wide grins from the others.

Jane got in to try again, and was just about to be launched when there was a shout from the crest and a ginger head and freckled face rose up over the top.

“Mac, can I try for my C?” it shouted.

“Oh, is that you, Leather? Yes, I think you might, it’s about time you got it. But don’t break the Nacelle again. Jane will bring it up for you.”

Leather was very out of breath and red in the face. He smiled at Jane as he went to hold on to the tail. She hadn’t seen him before, but gathered that he was quite a well-known figure by all the waves and shouts he received.

Jane was determined to make a good flight, and was still a little cross with herself. The lift was better now, and she had profited by watching the others, consequently making quite a nice flight. It was a wonderful feeling to be actually floating along, supported entirely by the wind, and her own hands. She felt so happy and confident after twelve minutes that she dived down at the launching crew, pulling up into the lift again with a steep climb. Two more beats and she saw that Mac was waving his handkerchief above his head. So away from the lift for the landing. In over the linches, sinking fast across the little hollow before the hangar ridge; stick back a bit—no, too much, easy now, flatten out. A slight bumping,

## *SILENT FLIGHT*

and the Nacelle sat lightly on the grass. Jane took the machine to the top again, feeling pleased with herself, and whistling loudly.

The other four were delighted that Jane had got her C, but Mac suggested that it might be a good idea not to try to decapitate her crew, as they might not appreciate it, for Mac himself had gone flat when Jane dived on them.

Leather got in, smiling all over his freckles, and was launched off with a shout of agony when the skid hit a bump. Everyone laughed, but Mac looked serious.

“This is the fifth time that he’s tried; I hope he doesn’t break it. He does such crazy things.”

The Nacelle sailed away down the beat, diving and climbing as Leather decided that he was going too fast or too slow. At the end, the nose went down and the machine screamed round in a whistle of wires. Up again over the launching point, still pitching with uncertainty. A large skidding turn and away again.

Mac was still serious. “He’ll never be able to fly,” he muttered. “I wish he’d give it up. Still, he can’t come to much harm in the Nacelle.”

Leather was feeling ambitious; he had done two beats and was still in the air—he would go a bit farther and see what it was like. Nearly into the bowl, and he saw he was being drifted backwards. Full rudder and bank to turn quickly back along the beat. The machine gathered a lot of speed and whistled round in a diving turn. He then got tied up with the controls and put on full opposite rudder to come out, not realising that when banked beyond an angle of forty-five degrees the tail controls changed places—the elevator becoming the rudder, and the rudder the elevator.

With the controls in this position he just came swiftly to earth in a perfect text-book sideslip. The wing hit the ground with a crunch,

## *SILENT FLIGHT*

and the whole machine turned over on its back, shedding bits of plywood in all directions.

Mac, whose expression had to be seen to be believed, and the five new C pilots walked and ran down the steep slope and broke a way through the crowd of hikers and spectators.

Leather was lying on his back beside the wreck.

“I’m dying,” he said as they approached. Mac gave Brian a sidelong glance.

“That means he’s O.K.” he whispered. “I’ve heard that one before.”

Mac felt Leather all over. He had a small scratch on one eyebrow, so Mac got out his iodine pencil and put a drop on it. Leather sat up immediately and shouted.

“I think I have broken my spine,” he added.

Mac helped him to his feet. “No, I think you are all right in that respect, but you’ll probably have to stand up to breakfast to-morrow.”

Various club members were dismantling the bits, and carrying them over to the workshop. Leather was taken to a doctor just in case, which was very annoying, as he wanted to tell everybody his version of the story before they formulated any ideas of their own. He was still more annoyed when the doctor could find nothing wrong with him.

The other five, however, got congratulations all round and were feeling exceedingly pleased with life. They had actually got their C’s in the fortnight’s camp, which was a very rare occurrence. But they had been lucky with the weather. Smooth and easy for the first ten days, and westerly winds for the last three days, with a first-class C day to finish up with.

It had been a marvellous fortnight, the best they had ever spent, and as the twins departed for home with their overfilled suitcases, their last words were, “See you next week-end.” Branchester was that sort of place.

## CHAPTER VI

# Autumn and the First Winch Launch

“WOULDN'T it be fun if we could have a machine of our own?” said Brian, longingly.

“It would be lovely! What do you think is the best sort to get?”

“They're awfully expensive; we haven't nearly got enough money, not even between us.”

“There is something called an H17, which you can buy and build yourself for about thirty pounds,” Jane suggested.

“Yes, but we haven't even got three pounds, let alone thirty pounds.”

“Here's Father; let's ask him.”

“You ask, Jane; you're a girl.”

“Father, can we have a sailplane, please? It works out cheaper in the long run, and it means that you can get the Silver C, which is practically impossible on club machines, and we could buy the parts for not much money and build it ourselves.”

“And it's very good for our Maths., because we'll have to work things out,” added Brian, with an air of cunning.

“Well, if you have to mend it, you probably won't break it.”

“We'd be awfully careful with it, and then we could sell it for more than it cost us,” said Jane.

“Yes, I know; I've heard all that before. But, anyway, when and where are you going to build it?”

“We could use the shed at the end of the garden, and Wooders, the carpenter, could help us; he used to repair aeroplanes in the Air Force.”

## SILENT FLIGHT

“ Yes, but who is going to pay for the machine ? It'll probably cost about a hundred and fifty pounds.”

“ Oh no; if you buy it finished it would. But you can buy the parts, ready to assemble, for about twenty-five to thirty pounds,” Brian said.

“ What is the machine like ? Is it any good ? ” asked their father doubtfully.

“ Oh yes, it's very small, but quite efficient, and very strong.”

“ Well, I don't think it is a good idea.”

“ Oh, but it is really. You do want us to be good at flying, don't you ? ” Jane's tone was beseeching.

“ Yes, but not in a rattletrap that you've built yourself.”

“ But it'll have a certificate of airworthiness, and be inspected by a proper inspector,” said Brian.

“ Well, look, I'll make a bargain. I'll buy you the parts and pay Wooders to help you build it, on one condition, and that is, for the next two terms—your two last terms—you must each be in the first four in your class. If either of you are lower, or if Brian fails in his Cranwell entrance, or you fail in Matric., then I sell the machine at once, and I won't buy another one. Understand ? ”

“ Yes, thank you; you are an angel. We'll be top, anything you like. Come on, Brian, let's go and see Wooders.”

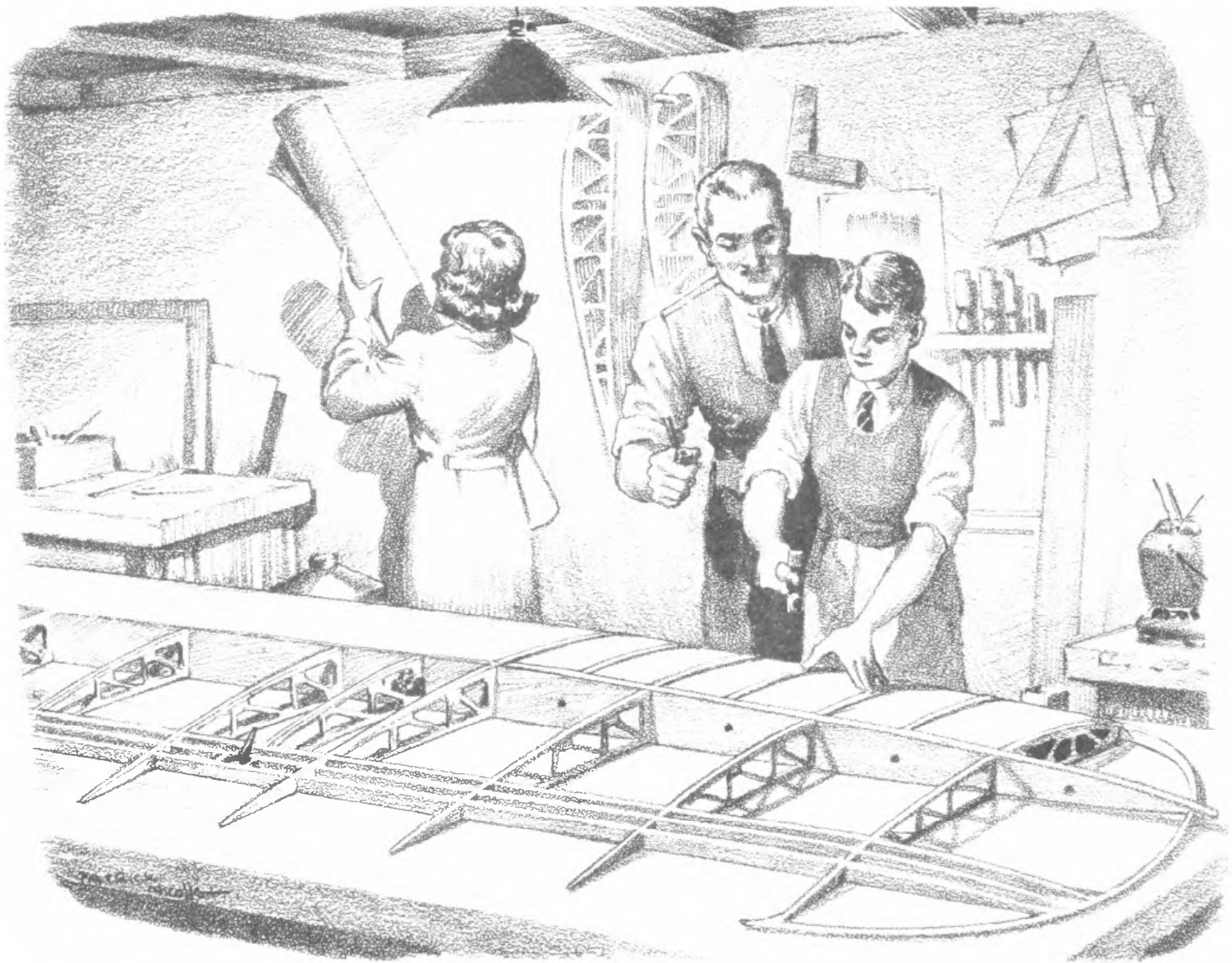
“ If you get the address of the builders, I'll write for the parts,” added their father.

Brian ran off to get a copy of the *Sailplane*, which contained the advertisement, while Jane stood grinning at her father, who twiddled the knobs on the radio without a smile on his face.

Brian sailed down the banisters and positively threw the cutting at their father, then ran out of the house and down the lane, followed by Jane.

The parts arrived four days later, and were taken straight to the





*Wooders had started to assemble one wing (see page 43)*

## *SILENT FLIGHT*

shed, which had been swept out and fitted with a bench and tools. Wooders helped them unpack the huge parcel and lay out the parts. They stored the plywood sheets on planks across the roof.

The ribs had been made and finished and the spars were built up, but there was still a lot to be done, so, storing the cans of dope and varnish away in a corner, they spread themselves and the blue-prints all over the floor and started to work things out.

“ Let’s start on a wing,” said Brian.

“ No, the fuselage is much more fun,” argued Jane.

Wooders put in, “ Why not start with the rudder, which is simple, till you have got your hand in ? ”

So they started on the rudder.

At the week-ends they went over to the club, where they were allowed to fly the Kadet secondary.

The second Sunday was a good soaring day, and there were often fourteen new machines in the air together. The twins were still launched off the hill-top with the bungy, and watched with envy the people who were being winch-launched from the bottom.

The wind was square on the hill, so Jane decided to go and investigate the bowl. She made two or three tentative attempts, getting nearer every time. She had been warned of getting into the curl-over of the wind, just behind the bowl, through getting too far in before starting the turn out again.

While she was beating up and down, she saw the beautiful Adler launched. This was the first time that she had seen it fly since they had fetched it from Eastbourne. It climbed steeply on the invisible winch wire and sailed along the hill just beneath her, like an immense, mysterious bat. Jane thought it was the most beautiful thing she had ever seen.

She watched it finish the beat, and turn, rising fast above the Kadet. As it neared the Bastion, it started to circle, large, lazy

## *SILENT FLIGHT*

circles, slowly becoming a mere spectre far behind the hill. Jane nearly ran into the two-seater watching it.

After half an hour she landed, for Brian was the next on the list.

When he had been launched, she went down to the winch, where they were calling for someone to come and chop.

Chopping on the winch, although always spoken of as a joke, was a very responsible job, the pilot's life depending on the man with the little axe, for if, when the pilot had gained the maximum height from the launch and pulled the release wire, nothing happened, as the ring had jammed (a very rare occurrence, but not entirely unknown), then the man with the axe had to sever the wire between the rollers on the winch. If he failed, the sailplane would still be attached to the winch, which would be still winding in the cable on the overrun, and the machine would be brought quickly to the ground. His only chance would be to fly round the winch in small circles and then slip in on one wing, and break that rather than anything else. It had never happened so far, and probably never would, but the realisation made Jane hope that she would never have to chop.

Brown was driving the winch. They watched the next machine being turned into wind, then a little yellow dot moved up and down beside it.

"One flag," said Jane, measuring the distance between the swing of her arm and the slithering cable. The engine roared, and clouds of blue haze surrounded them; the machine was almost above her; would he—could he—release that glittering wire? She glanced at the driver's face, mouth tight shut and eyes screwed up as he stared into the sky. The next second seemed a hundred years, and then a flash of light ripped earthwards—it was free. Jane loosened the axe in her moist hand, the cable battered on the ground, sending up a streamer of dust, and rushed bouncing in past her feet.

## *SILENT FLIGHT*

Brown grinned. "I thought you'd have to cut that time," he said. "He left it very late; wanted to get as much height as possible, I suppose."

In the meantime, Wooders had been working very hard on the machine, having started to assemble one wing, leaving the rudder for the twins to finish.

They were very excited when they saw it, and worked without stopping until bedtime every day until the following week-end, when they had the wing finished and covered on one side. Jane had done the covering, as Brian thought it was girlish to fiddle with fabric, and Wooders was too busy, anyway.

Jane was getting quite good at putting in the fabric panels, doping the ribs and ply-covered main spar, pressing the fabric down hard into the sticky substance and waiting until it was dry, then repeating the same for the trailing edge and the next rib, then painting on a coat of dope and watching the whole panel grow smooth and taut; it was like making their models, only many times more thrilling. Dope was horrible stuff on the fingers, though—it formed an extra stiff skin, and was almost impossible to remove.

Sometimes, the whole job would have to be redone; if the fabric had been stretched more one way than another, it had a tendency to pull away from the ribs as it tightened, or to produce mysterious ripples from corner to corner.

On Wednesday Bill came over in Bradwell's old Bentley and gave them a hand. He was very enthusiastic, and spent the entire day building a jig for the fuselage and setting up the bulkheads. The fuselage had to be built upside-down, resting on the two straight top longerons, so Brian and Jane were not able to sit in the skeleton and admire themselves. They thought it a great honour that Bill, one of the most experienced members in the club, should come

## *SILENT FLIGHT*

over and spend an entire day helping them, so they regaled him with a huge supper in return.

School started on the following Friday, and the twins felt terribly shut in after their wonderful holiday; but they settled down to work, in order to keep to their side of the bargain. Jane, at a day school, was able to get away to the club at week-ends, and work on the machine in the evenings. Brian was only able to get away on Sunday afternoons, and by special permission of his father was allowed to go over to the gliding club, where he would meet his sister and do as much flying as was possible in the time.

By half-term they were flying the Falcon intermediate machine, which was bigger and sturdier than the Kadet. It had swept-back wings, and looked like a little two-seater. It was very strong and could stand up to any amount of hard landings.

One afternoon, late in October, Jane was flying it and, not allowing for the very strong wind of the day, undershot the landing-ground. She could see the hedge ahead and knew that she would not be able to clear it, so dived straight at it, as she had been told to, and at the last moment tried to jump it, but was not going quite fast enough. The speed dropped off as she tried to hop over and amid a loud rustling she sat heavily on the middle of the hedge. The Falcon had several rents in the fabric, and also some damaged leading edge plywood. But Jane was quite unharmed save for a large thorn which had found its way through the bottom of the machine.

And so it went on; they gradually became more sure of themselves in the air, and flew the Falcon in great style. And soon the great day came when they were allowed to fly the Grunau Baby, the best but one sailplane that the club possessed, down from the top. Then, a week later, soar it. After the Falcon it was a lovely machine, light and sensitive to handle, and with a very good performance.

## *SILENT FLIGHT*

They flew it as much as possible until they had done the hours necessary before attempting a winch launch, which they were able to do two days before Christmas.

Brian tried it first. It was the same as they had done in the two-seater, only much more fun alone. The G.B. was turned facing the wind and the winch, which was on the far side of the landing-ground. The cable was unwound from the winch drum and drawn across the landing-ground up to the machine, where it was fixed into the quick-release hook in the sailplane's nose. Brian was ready in the machine, his left hand tightly gripping the release ring, his right holding the stick.

The cable was tightened, then the second flag waved, and he was pulled rapidly into the air. Leaving the ground, he pulled the stick almost hard back and sailed upwards. The angle was very steep, but Brian was much too busy and interested to be frightened by this method of launching. In fact, he enjoyed it. When almost above the winch he lowered the nose to normal position and "pulled the plug," as releasing was normally called. He felt the wire fall away, then, free in the air, he floated along above the hill.

As winter drew on, the H17 in the shed at home grew and developed. At the club they made many friends, people who were more than mere companions and acquaintances—they were friends who made the sport of gliding worth-while, friends who, with their generosity, cheerfulness, and unselfishness, had made gliding what it was. And at school their work improved; no one was going to have that H17. It was theirs. The way to the love of their life—flying.

## CHAPTER VII

### Five Hours

“THIS party to-night should be rather fun. What are you wearing?” said Jane.

“Ah, I’m going to make my face up so you won’t recognise me—I’m going to be a first-class tramp,” Brian replied.

“You are already. But it certainly is going to be great fun not having to be clean and tidy. A tramps’ party’s a great idea.”

“Well, let’s help get these machines into the hangar, and then go and change.”

It was New Year’s Eve, and the celebration at the club was to be in the form of a tramps’ party, in which everyone would dress up in their oldest clothes and dirty their faces with burnt cork. Nearly all the members were staying at the club that night, and the bunkhouse was crowded out.

There was a band and a certain amount of dancing and streamer-throwing. Others, including Brian, were trying to outdo each other with feats of strength and agility and other well-known tricks. A minority were just sitting, talking gliding—the endless subject—working out new theories and exploding old ones.

There was a great deal of noise, and it was a very good party, and it was well on to three in the morning before everyone had made the wild dash across the slippery chalk ground to the bunkhouse in the gently falling snow, tripping over trailer tow-bars in the dark.

A little earlier Jane had announced her intention of trying for the Silver C duration, a flight of five hours, the following morning.

## *SILENT FLIGHT*

Several people had laughed, telling her not to be too ambitious; others had pointed out that the wind was south, not west. But she was determined, and somehow felt that the wind would be west by the morning, and a few people whom she had quietly asked to help had promised to launch her.

It was 4 a.m. before the last people had got to bed and stopped talking, and the three other girls in their bunkhouse had gone to sleep. Jane, however, could not; she could hear the wind whining round the big wooden hut, and the windsock flapping and cracking outside. There was certainly enough wind, if only it would veer west. She dozed off under her heap of nine blankets, then wakened with a start and sat up in bed. It was still dark outside, and her watch showed just after five o'clock. She lay back, listening. There was still plenty of wind battering against the walls, but somehow it seemed to have changed its note; had it veered—enough? She climbed out of bed, treading on the icy floor, and tried to see the windsock, but it was just out of sight round the corner. She crept back and lay listening to the wind, then dozed off for another hour. Another start as she woke up, it was still almost dark, but the low clouds tearing across the sky showed rifts and patches of gloomy light. Jane lay on her back, rubbing her eyes in an endeavour to stay awake, not daring even to relax in case, when she awoke next, it would be to the sound of the breakfast bell.

Slowly, from the grey depths outside, trailers, like gaunt monsters, became visible against the lightening sky, growing larger and blacker as the minutes dragged on.

At quarter to seven Jane got out of bed. Pulling a pair of borrowed sheepskin flying boots on to her bare feet, and a big coat over her pyjamas, she went to the door to see where the wind really was. Turning the handle as silently as possible, nothing happened—it was loose in her hand. They had forgotten to tell



## *SILENT FLIGHT*

the last in not to latch the door as the handle had broken on the inside! She would have to get out by the window. Unfortunately the lower half was not meant to open and there was only a small gap eight feet from the ground. She reached for a chair and inspected the upper catch, which seemed to be caught up with the curtain wire. It made a loud twang as she freed it, but the slumberers remained undisturbed. Carefully she opened the upper window and got one leg through, sitting astride the sill. Transferring her weight to the window, the chair fell over with a crash. She held her breath, but it woke up only one person, another Jane.

“What’s the time?” she whispered loudly.

“Seven o’clock. I’m just going to see where the wind is. Some poop’s latched the door and I can’t get out.”

“If it’s west, I’ll come and help you.”

“Thanks,” said Jane, disappearing on to the top of a trailer. She jumped to the ground, slithering in the mud and snow round to the end of the hut.

The windsock was flying out and bucking about in the gusts, and it was west, blowing hard towards the hill.

Jane skated around with excitement and dashed back to the bunkhouse; opening the door from the outside was easy, and she found the other Jane nearly dressed.

“It’s west,” she said hoarsely. Then she went across to her brother’s room, tapping quietly on the door. There was no reply, so she crept in, to see rows of beds with heaps of blankets on them, queer, shapeless masses with no heads. At last she found one whose head was just showing; it was Brown, so she pulled his ear and whispered, “The wind’s west. Where’s Bill? He promised to launch me.”

Brown pointed to a heap of blankets on the other side of the room, Bill’s broad shoulders showing unmistakably.

## *SILENT FLIGHT*

“ I’ll come and flag for you,” Brown whispered as she tip-toed across the room.

Bill grunted and turned over, then sat up just as abruptly and stared at her, eyes blinking as he worked things out.

“ It’s west,” she said.

“ O.K., I’ll be out in a few minutes.”

“ Thanks; I’ll go and get the hangar doors open.”

She crept out, to find the other Jane dressed and ready. It was bitterly cold, and the hill and landing-field were covered with a thin layer of snow. The sky was grey-white, with low, racing clouds. The air and ridge seemed to merge as one.

They pushed open the hangar doors and started up one of the retrieving cars, by which time Bill, Brown, Michael Peters, her brother, and two others had come to help them, trousers, sweaters, and coats pulled on over their pyjamas. Jane felt very gratified that all these people should have got up so willingly after such a late night, just to help her do something that she wanted.

While Bill and Michael got out the winch and Brown inspected the Grunau as airworthy, Jane went back and put on all the clothes she could find over her pyjamas; then with two large scarves and an extra overcoat, she collected some sandwiches and a large raw carrot. She liked raw carrots, and had brought a big bunch to the tramps’ party for fun, and had just one left.

By the time that she was ready, the winch was set and the cable had been laid out across the ground.

“ You ride on the car; I’ll take the wing tip,” said Brian. So Jane stood on the running board of the old retrieving car as they chugged across the snow-covered ground. She was busy sorting out her pockets, putting sandwiches and the carrot in one, and her handkerchief and gloves in the other.

She was feeling a bit sick with excitement, and everything seemed

## *SILENT FLIGHT*

like a dream. Having longed for this moment, the first part of her Silver C, for so long, now that it had come, she did not want to do it a bit. But when she heard Brian's voice telling her to get in before he turned the Grunau into wind, she automatically did so, doing up the straps less tightly than usual, so that she could move when she got tired. Mike fitted on the transparent cockpit cover and wished her luck; Brian put his hand through the circular air-hole in the lid and pulled her hair.

"I wish I had thought of this first," he said with a grin.

"I'm going to give one flag," shouted Mike.

Jane hooked her finger in the release ring and got ready for the launch; it would only be her second winch launch, and still required a certain amount of thought and attention. The cable rustled up taut, and the release clicked as it straightened up. The familiar cloud of blue haze surrounded the distant winch. The Grunau started the usual gentle rocking.

Michael gave two flags, and the machine moved forward; as the skid left the ground, Jane pulled the stick hard back, and gripped the release ring tightly. She was climbing very steeply, and the machine started to buck up and down as the cable swung and jerked; easing the stick gently forward to stop it, she intently watched the winch, and as it got farther underneath her, she eased the nose down a little more and got ready to pull the plug. She waited, then tugged at the ring. The machine bobbed up a little as the weight of the cable fell away, but soon settled into a normal glide as she turned towards the hill.

She had not flown a machine with a transparent lid before, and found it much easier than she expected, in spite of the fact that it created a habit of flying on the airspeed indicator, instead of by the feel of the machine.

It was a mournful scene that surrounded her as she beat up and

## *SILENT FLIGHT*

down the ridge, several hundred feet high. The earth was snow-bound and grey, deepening to the hard sombre line of the horizon. Above, the sky was grey, with fragments of darker cloud torn by the wind racing along a hundred feet above her head. The chimneys of the village away to the north gave evidence of Sunday-morning breakfast-time, as more and more belched smoke, which became invisible as it rose above the horizon into the grey sky. Occasionally the tinkle of distant church bells rode past on the wind.

Jane looked down on the landing-field, searching for the others, but the ground was empty, and the winch stood forlornly by the hedge; their tracks to the launching-point showed clearly, also the disturbance caused by the falling winch cable. She flew up and down, venturing right along the ridge over the power cable slope to the zoo, two miles away.

Arriving back over the home ridge, she saw five little dots dragging something behind them, moving towards the hill; slowly they pulled it to the top—a toboggan made from old skids and bits of broken sailplane. The five clambered on and, pointing straight at the bottom, the overcrowded sledge whistled down the steep slope. Near the bottom it hit a bump and the five little dots flew off in all directions; Jane laughed loudly to herself and watched them examine the remains of the toboggan.

The first hour went quite quickly, then another Grunau, with Bill piloting, was launched and sailed past. Bill waved, then flew out over the clubhouse and threw a couple of loops. The two-seater also came up and flew around, while the passenger shouted something which Jane could not hear.

The second hour was a bit monotonous and the seat beginning to feel hard, so, for something to do, Jane sang at the top of her voice everything she knew from the "Merry-Go-Round Broke

## *SILENT FLIGHT*

Down ” to “ Abide With Me.” She also whistled a few tunes, but found that it steamed up the inside of the celluloid roof.

The snow was slowly melting, and the patches of dirty grey-green destroyed the smoothness of the landscape. Somebody landed a Kite on the top of a slight slope, and slid very, very slowly all the way to the bottom without being able to stop, the skid acting as a very efficient ski; again Jane laughed loudly.

Her right hand was getting stiff, so she opened it from the clenched position, but found that it had got so set, that if she spread her fingers out they would not go back to the holding position for some time; so she just had to leave them gripping the stick, uncomfortable as they were.

During the third hour the watch on the dashboard seemed to move slower and slower, and Jane was getting very bored, the seat extremely hard, and she had to move about every three or four minutes to avoid getting cramp. There were several machines flying around by this time, and Jane watched with a mixture of amusement and sympathy the excited efforts of the Nacelle dashing up and down beneath her, as newer pilots tried to get their C's. She also amused herself by trying to recognise members' cars as they turned up at the club.

The fourth hour was the worst of the lot. The seat grew harder and sharper, her feet got colder and colder, and her hand more and more stiff. She tried flying with her left hand, but merely wallowed about the sky; and the feeling of complete boredom was awful, so she started yodelling as loudly as possible to relieve her feelings.

The wind remained westerly and strong, but was accompanied by several showers of sleet, which made flying interesting, if a trifle unpleasant. Jane didn't feel at all hungry, but nibbled the carrot and sandwiches just for something to do.

At long last the clock passed the midday and four-hour mark,

## *SILENT FLIGHT*

and all at once everything seemed easier. It would not be long now.

The wind had strengthened, so it was possible just to face into it and remain poised, several hundred feet in the air. There was also lift out over the landing-field as far as the clubhouse, and it was fun to fly fast into wind until above the hangar, then pulling the nose up a little, so that the airspeed of the sailplane was just less than that of the wind, float gently backwards until once more above the hill.

Jane spent some time flying about in this manner, and suddenly found that the five hours were up, it was just one o'clock; she shouted with joy, and shot up the hill-top launching point, flying along the ridge for another five minutes just to make certain of the time; then out over the road for the approach in. It had been sleeting quite hard for the last ten minutes, and the front of the cockpit cover was covered with slush and snow. Jane was so pleased at having completed the five hours that she did not take much trouble over the approach and came in too high; she threw a circle to lose height, and then found that she was too low to turn into wind, so had to make a cross-wind landing, and as the snow blocked out her view ahead, she made this manoeuvre three feet up. There was a loud bump, followed by a series of small bumps, which felt very hard through the seat; bits of dust shot up from the floor, and the watch fell off its hook on the dashboard.

Jane did not get out at once; she knew that the skid was broken, and was feeling very much annoyed with herself for being so careless. If she had taken a certain amount of trouble over the approach, instead of being so pleased with herself, she need not have broken anything; but on the whole, she was rather glad that she had—it would certainly prevent her getting a swelled head.

A car bounced across the ground, its two occupants, Brian and Mike, bobbing up and down like the pips in a variometer. Jane

## *SILENT FLIGHT*

got out and leaned against the nose, stretching the stiffness out of her right hand.

“Jolly good show,” they shouted.

“I’ve broken the skid,” she answered.

They carried the machine into the hangar, underneath the room where everyone was having lunch. They all congratulated her, and did not seem to notice the skid or the landing; even the people who were next on the list, and who would now lose their flights, congratulated her. It had been rather fun, and made her realise what good friends she had at the club.

But it was only several months later that she found out that the instructor had wanted to call her down, as there were so many people waiting to fly, but that the other Jane had threatened never to speak to him again if he did!

## CHAPTER VIII

# The First Departure

**B**Y the Easter holidays Wooders had finished the H17. Jane had built the tailplane entirely on her own; Brian had fitted up the control assembly, made the seat and mounted the instruments; and they had built the rudder between them. Wooders had done all the rest while they had been at school.

The trailer was not yet finished, but Bill had come over to take the machine to the hangar for them, in exchange for which they gave him another good meal. It was almost impossible to keep equal with Bill—he was always helping people; retrieving, launching, or crewing somehow; and yet he still found time to be one of the best pilots in the club.

They had the machine ready for the start of the Easter advanced camp, spending the first few days test-flying it. This was done by giving the machine a weak, then a strong, bungee launch from the primary slopes where they had started. Then taking it to the top of the hill for another launch and about twenty minutes' soaring. If there was any adjustment to be made, or anything wrong with the machine, it would become apparent on the ground hops, only ten feet up, where the pilot was in a comparatively safe position. After the hill soaring test, it might be necessary to tighten the control wires slightly, giving the ailerons, for instance, a half-inch droop below the wing while on the ground, so that the airflow would bring them up flush with the wing while in flight, which gave better control.

When it had been flown to the pilot's satisfaction, the machine



## *SILENT FLIGHT*

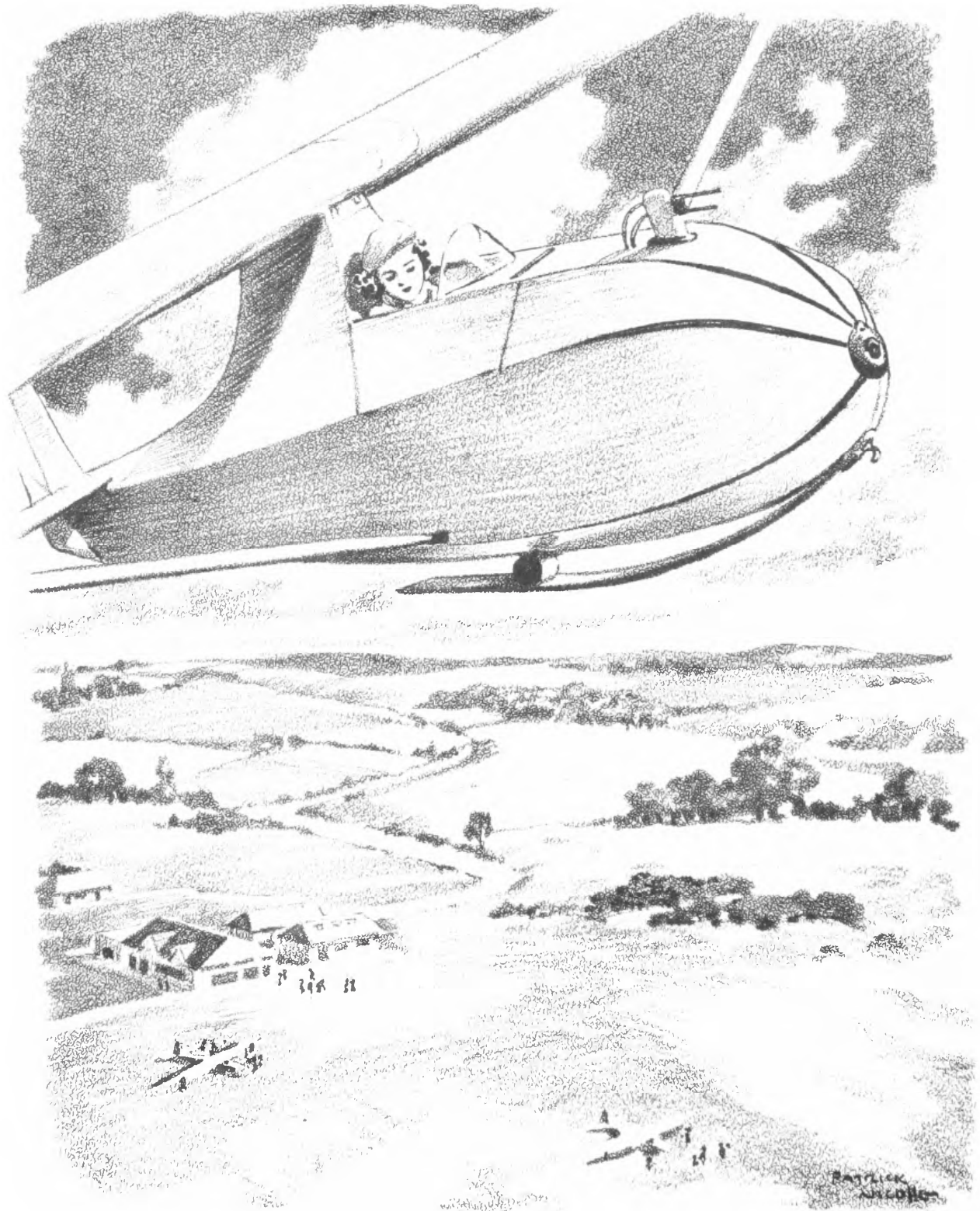
would be given a winch launch, after which it would be ready for any further flying.

Two days after the twins and Bill had test-flown it, Brian tried for his five hours. As he would fly their own machine, it was not necessary to start as early as Jane had, which was unfortunate, because then it would have been easy.

He was launched at 2.30 in the afternoon into a strong westerly wind, and a blue sky with scattered cumuli; three hours later all strong thermal conditions had ended and the sky was clear. Brian was enjoying himself—it had been rather fun throwing a tentative circle or two in the strong lift of the early afternoon, and now the air was smooth as cream, and it was possible to fly a whole beat without moving the controls at all, in peace and quiet.

At 6.30, four hours after the start, Brian found himself quite a lot lower than he had been previously; then he saw the Kadet go to the bottom, unable to soar; and began to get rather worried; the wind was slowly dying. Would it last long enough for that fifth important hour? With thirty minutes to go, he was down to fifty feet above the hill-top. Ten minutes later the H17 was making its turns inside the bowl, below the top. Jane was watching this last half-hour in a frenzy of concentration. Not once did she cease gazing at the little sailplane as it flew up and down, struggling to keep in the air. Others were watching too, others who had been let down by the same fickle wind, almost with their goal in sight.

Suddenly the breeze freshened, and the machine once more rose above the towering ridge. Jane relaxed; she knew how awful it would have been if she had been let down; she would have screamed with disappointment and the knowledge that she would have to do the same boring business all over again. Ten more minutes to go, and Brian was still just holding it, flying with all the knowledge and



*She found lift, and was able to circle as well*

care that he could muster; but the wind was dying; it could not last. His friends all had watches out, willing the wind to remain, for it was going to be a very near thing.

The H17 was sinking, flying well below the top; it turned down towards the bowl, light against the dark of the sunburned grass, and it turned again with just enough height to scuttle back to the club grounds and sit down on top of the linches just beside the actual landing area. Brian had been in the air four hours and fifty-six minutes, but there was nothing that he could have done about it, so when they came to fetch him in and wish him better luck next time, he smiled and just said that he would still get his Silver before Jane.

The next day the wind blew again from the west, but it was Jane's day to fly. She was launched about eleven o'clock in the morning, just as the early ragged clouds were growing into good cumulus, with fluffy, rounded tops and dark, flat bases. By half-past twelve the clouds were tending to street formation, forming into long lines across the sky. Two machines had already gone away, and Jane very much wanted to follow their example, and was carefully waiting for her chance, when she saw a Kite start rising rapidly over the Bastion; she flew down to get in the same patch of lift, and arrived just as the Kite started circling 300 feet above her. She found the lift, however, and after a short time was able to circle as well; she lost no height over the first one, so threw another, which also worked, and gave her enough height to enable her to cease worrying about being too low behind the hill, although she knew that it would be practically impossible to fly back to the site against the wind if she continued much farther; but Jane did not mind that—she did not want to go back, she wanted to fly across the country like the other pilots, like the machine whose thermal she had borrowed.

## *SILENT FLIGHT*

The Kirby Kite above her was very high, and had left the lift to fly cross-wind to a likely cloud street. Jane, however, clung to the lift she had and knew was certain, circling frantically. It was her first thermal, and she was determined not to lose it. At nearly 2,000 feet it began to get very rough, having the effect of suddenly stopping the turn, and leaving the machine on its side. Jane managed to hang on the lift until the altimeter read 2,600 feet, where she found that she was circling half in and half out of the thermal. In trying to get back to the centre, she lost it altogether, finding herself in a four-foot-per-second downdraught instead. She had not reached cloudbase, but was higher than she had ever been before, and found it a very pleasant sensation.

Pointing the nose downwind, she tried to get as far as she could from the hill in case she did not get any more lift. It was only when she was down to 400 feet above the ground that she eventually gave up hope—all the prospective crops and villages just would not help. She saw a good field, so flew round it to get a better look; it seemed to be smooth enough and had quite good approaches. Jane floated in between the oak trees at the end and sat down in the middle.

The H17 had hardly come to rest before crowds of onlookers rushed up and surrounded her; some stood silent, just looking, others asked her questions, while a few started examining the machine. She got out and turned the tip into wind, feeling like Bill must have felt when he landed in their field; then asked for a telephone.

Soon Brian and Bradwell arrived to fetch her, and almost before she had realised that she had really made a cross-country flight by sailplane, Jane was back at the club, with the usual scenery and the usual people.

She had only flown a distance of six miles, which had taken about

## *SILENT FLIGHT*

twenty minutes, but every second was stamped on her memory as the most thrilling episode of her life.

The camp passed happily enough, but the weather was not as good as that of the previous summer's camp: for three days after Jane's flight it rained; then the wind blew unceasingly from the south-east, down the hill. Members staying at the club spent their time in wax-polishing their machines and fitting or refitting their instruments, and talking or wandering out to look at the windsock.

The last two days, however, were all that could be wished for. A depression, which had been forecast two days before, was crossing the British Isles; and the cold front which brought cloud and rain had passed, and Branchester was in the cold sector of polar air in the rear of the depression. The wind blew from the west-north-west, bringing cumulus which formed long streets right across the sky.

Jack's Adler and a new high-performance machine which had just been brought over from Germany, called the Minimoa, had already gone away. Bill was feverishly putting a new landing skid on the white Kite, the result of a slight argument with a sandbag that someone had left in the grass, so that he could fly before conditions deteriorated.

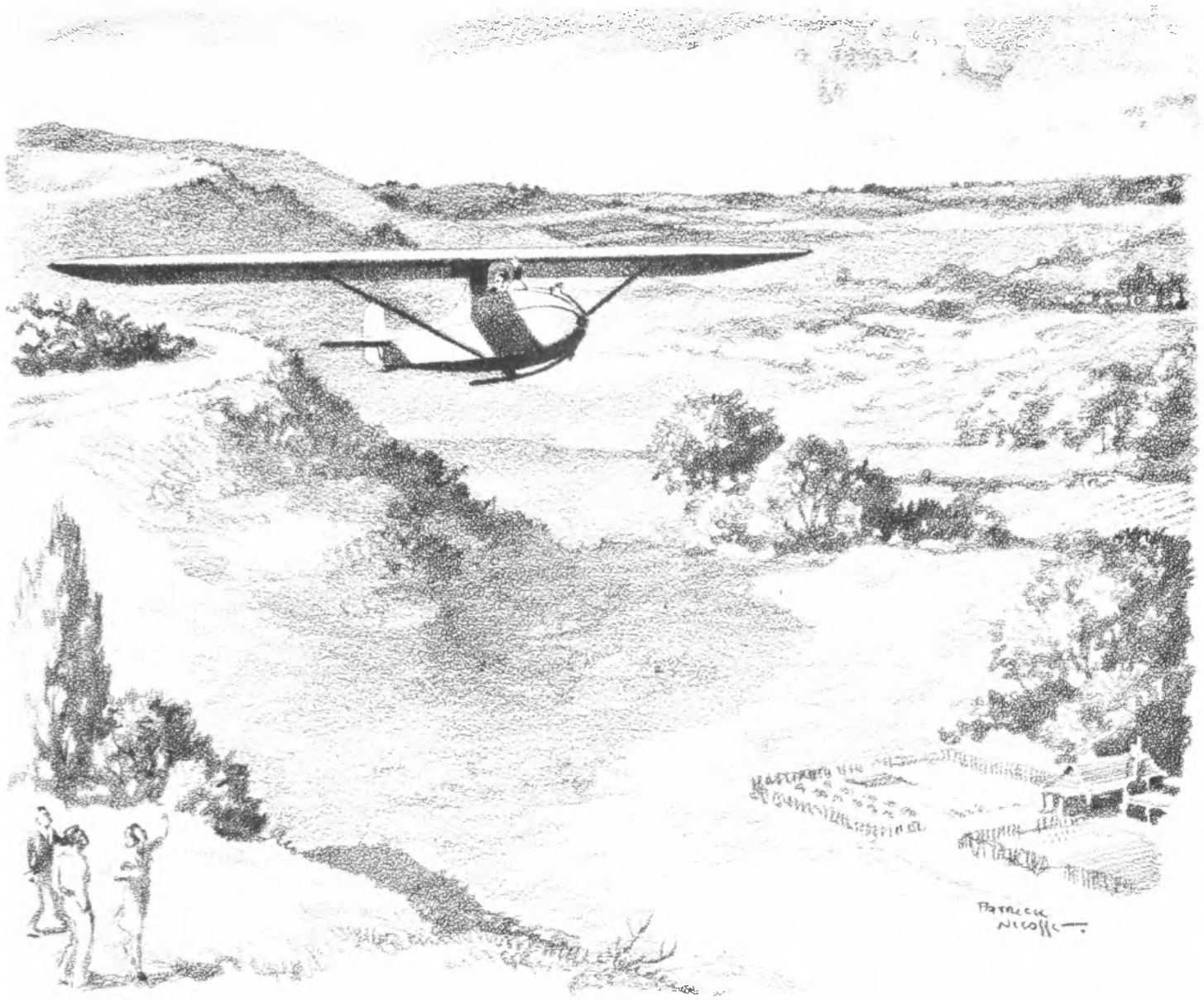
Brian was dashing up and down the ridge, wondering just how he would cope with a thermal at that height if he was lucky enough to get one; he was lower than nearly everything else, through flying faster than necessary, for fear of stalling while so near the ground. But he got into a thermal, and, not realising what it was, thought that something had gone wrong with the machine when it started bucking about: he could feel a sudden pressure under his seat and the whole air seemed to sizzle around him, but lack of experience told, and he flew right through it without taking his opportunity; and only when he flew out of the back of it, and stood

## *SILENT FLIGHT*

on his nose when the air became flat again, did he recognise what it had been. Turning quickly, he flew back along the beat, but the thermal had gone, and with it the Rhonsperber, and the Petrel, a new efficient sailplane of British design; Brian glared at them furiously as they circled far above him.

Bill had told him that thermals usually had a frequency of ten to twelve minutes, so he noted the time, determined to be near the Bastion when the next thermal took off. He flew up and down in the simple hill lift where the thermal had been such a short time ago; the air was quite smooth again and seemed incapable of providing such power. Ten minutes dragged by, then twelve—he had missed his chance; he flew another beat for luck—nothing. He turned away and flew down towards the zoo; maybe the air would be kinder to him there. Over the pit of splashing Polar bears he banked round again to beat back, just in time to see the Nacelle at 600 feet on a C flight! Shouting with annoyance, he pushed the nose down and dashed back to the Bastion as fast as possible. Three machines were rising rapidly; the thermal off the chalk slopes and the clubhouse had come again, late. As Brian flew into the lift, the now familiar symptoms made themselves apparent—the rocky feeling of the machine, and the increased reading of the airspeed indicator; he was rising fast, and soon had enough height to throw a circle; the variometer still showed rise, so he still continued to circle; he took a quick glance at the hill, which seemed to have shrunk to miniature proportions. The altimeter was reading 1,800 feet and the variometer still showed on the credit side; Brian gripped the edge of the dashboard tightly with his left hand in excitement, licking his lips incessantly, as his mouth felt dry. This was terrific, the greatest moment of his life. He looked again at the club far behind; he had definitely burnt his boats, he could never go back now; he looked ahead at the towns and fields spreading across the





*He turned away and flew towards the Zoo*

## *SILENT FLIGHT*

inland; it would be in one of those fields that he would land. This was the moment that he had been waiting for since his first ground hop.

Another machine had got away with him, and was slowly out-climbing him on the outside. The same as Bill's machine, it was painted pale grey, being universally known as the Grey Kite, spending more time in the air than probably any other machine in the club. Brian waved to its pilot, whose sunburnt face was just visible above the cockpit fairing. He shouted something back, but Brian was too intent on flying the H17 in the rougher air near the clouds to notice. The grey Kite was now above him and very near cloud base, occasionally disappearing into the lower wispy vapour, the presence of which marks an active cloud from a dead one.

The cloud above them was one of a long street which stretched across the sky, its purple shadow on the ground denoting it to be almost fifteen miles in length.

The grey Kite circled a few times under the big cloud above them, then turned downwind and flew away fast under the street, his speed over the ground being in the region of eighty miles per hour, as he could afford to dive slightly with the strong lift continually drawing him up towards the clouds. Brian imitated his actions absolutely, and soon found himself sailing downwind under the powerful street; at last he was really away, and the grey Kite a mere dot in the distance. He could see London, far away to the left, which was strange, as he had left the site in a north-west wind—London should be on his right. Suddenly he remembered that Bill had told him something about wind veering with height; the wind must be due north up here at 2,800 feet.

All too soon the street ended and he was left floating along above millions of little houses, factories, roads, and tiny little playgrounds. He edged away to the west, where the country seemed more open.



## *SILENT FLIGHT*

At 1,500 feet the variometer showed rise again, and Brian started automatically circling, then looked for the source of the lift; a large factory about a mile behind him appeared to be the most likely place.

The thermal took him to 3,000 feet, then left him to dash downwind again; the country underneath seeming very crowded and unfriendly, Brian edged even more to the west. The country was now sprinkled with reservoirs and lakes, with London even more huge and unlandable than ever.

Brian sailed over an aerodrome and thought of landing on it, but the variometer insisted on showing rise again, so he flew on, leaving his chance behind. There was no sign of the grey Kite.

Another aerodrome, Hanforth, was passed on the left, and another chance of a safe landing passed as it was left upwind. As soon as it became impossible to reach, the lift gave out. Brian looked round at it with longing eyes, but knew that he could not reach it against the wind. He turned away and flew on, looking for a field. Suddenly he saw the familiar white circle, and realised that here was yet another aerodrome; a new one, still in the course of construction, with strips of harrowed and seeded earth, still brown.

Brian whooped with joy, diving and zooming about the sky; he could easily reach this one. He chose a green patch near the new skeleton hangars, and glided in to land. The workmen strolled up and, pushing their caps on the back of their heads, stood looking at the little H17, scratching their foreheads.

“What’s happened to your engine, mate?” asked one.

“That never had none; that’s a glider,” added another.

Brian went to a telephone box across the road and rang up the club. He was thrilled, as he had achieved Silver C distance, for Rooklane, where he had landed, was thirty-nine miles in a straight line from Branchester.

## *SILENT FLIGHT*

The workmen helped him dismantle the machine, and he had lunch with them, huge slices of bread and cheese.

During the afternoon, he helped the surveyor take measurements for yet another field that had to be levelled and added to the landing area. By tea-time, Jane and Mike Peters had arrived with the trailer, so it was not very long before they were once more back at the club.

Supper that evening was a very cheery meal. Brian was in the best of spirits, and Jane was firing questions at him as fast as she could between mouthfuls; but Brian was not in the mood for serious talk. He was just crazy with delight; this cross-country business was the finest thing yet discovered. Half-way through the meal, the pilot of the grey Kite came in. He was greeted with a shout from Brian.

“ Thank you for showing me how to use those clouds; I have never enjoyed myself so much in my life. How far did you get ? ”

“ Oh, only just south-east of Horsham. Oh, by the way, congratulations on the Silver distance.”

“ Thanks; but come and have something to eat.”

“ Well, to-morrow’s the last day of the camp and the family expect us home in time to change for dinner to-morrow night,” Jane announced sadly.

“ Well, I’m going to do my five hours somehow before we go,” said Brian.

“ You’ll have to start jolly early, but I think there will be a west wind,” said the grey Kite pilot. “ I hope you have better luck than last time.”

“ So do I,” said Brian, with a short laugh.

He was up at six the following morning, wandering about the landing-ground by himself; the wind was west, but yet too light to be soarable; but it was a wonderful morning, a clear pale sky

## *SILENT FLIGHT*

with rippled cirro-cumulus at immense height, forming an arch for the rising sun; shadowless, it paled slowly from gold to the purest white.

The larks were singing in their thousands, rushing heavenwards with the life of the morning.

By seven o'clock quite a strong breeze had arisen, and Brian thought it worth while getting the machine out. He pushed back the hangar doors and started inspecting the sailplane. This done, he woke up his sister and Mike Peters, and went out again to start up the retrieving cars. At quarter to eight he was in the air for the duration. This time the lift lasted, and at one o'clock he landed, a tired and hungry but happy man.

Jane came out to fetch him, and they took the machine back to the club. It had been the H17's last flight of the Easter holidays, for in two days' time the twins were due back at school. They derigged the machine, greasing the control pulleys and rubbing linseed oil into the skid. Then they tucked it away into the trailer for the last time until half-term; for during school time, with only Sunday afternoons at the club, there was not time to keep rigging and dismantling the machine, it would be easier to fly the club G.B.s.

The twins had tea with all their friends and started the old argument about upwind and downwind flying. This question, although thoroughly thrashed out years ago, never failed to start a heated controversy between the many theory kings who abounded in the club.

At five o'clock they left the tea-table and the earnest talk. The others looked up to say good-bye and good luck, then returned to their diagrams on the tablecloth. The twins blew the H17 a kiss, then drove off home in their father's car, which they had borrowed.

## CHAPTER IX

# Aero-towing

“**H**OW about getting an aeroplane over? The wind’s north-east and unsoarable, but it should be a good thermal day. How many will guarantee to have a tow?”

It was Bill who had asked, and several people, looking up from their breakfasts, mumbled an assertion. Brian said,

“We’ll have one each, if Mac will let us.”

“Oh, he’ll do that all right; an aero-towed launch is easier than a winch launch, and far less strain on the machine.”

So Bill rang up the Banner Towing Company and arranged for the aeroplane to come and tow sailplanes into the air at eleven o’clock.

Jane and Brian hurriedly rigged the H17 and inspected it, signing their names in the passing-out book; then towed it over to the end of the line of waiting machines. Eleven machines were ready, as it was the only chance of a cross-country flight on such a day.

Jack’s Adler and the new Minimoa were there, also a little sailplane they had not seen before, called the Scud II, which was entirely unlike any of the other machines. The fuselage was of square section, set upon one edge, diamond fashion, and the long, narrow wing was supported above it by thin struts which continued the vee shape of the bottom half of the diamond. The pilot sat in a cut-away cockpit right underneath the wing. The whole machine looked light and nippy to handle.

Bill’s white Kite and, of course, the grey Kite were there, also the pretty Rhonsperber, two G.B.s, a Buzzard, the new Gull, and the twins’ little H17.

## *SILENT FLIGHT*

Soon after eleven o'clock the aeroplane arrived; a big old Avro 504, with its powerful engine, and a great capacity for flying slowly. Sideslipping in just over the power wires, it touched down before reaching the hangar ridge.

Bill laid out the 300-foot cable and hooked one end into the tail release of the aeroplane; to the other he linked a Grunau.

Someone gave the signal to take up slack, as with a winch launch, then with a roar the aeroplane started moving. The G.B. took off almost immediately, climbing to a position about fifteen feet above the level of the towing machine. Here it flattened out, letting the cable go slack, to enable the aeroplane to take off. Maintaining its height a little above the aeroplane, with the cable just not taut, the procession sailed away, climbing slowly. The twins watched carefully, and four minutes later saw the G.B. wheel away in a right-hand turn, and knew that it was free.

The aeroplane also turned, diving straight for the club. At two hundred feet over the landing-ground it dropped the cable, pulling up into a steep climb, and a stalled turn, to a landing in position for the next launch.

In turn they all went off, the big Adler and heavy Minimoa steady on the wire, the little Scud jumping about in the bumps.

Brian won the toss for which of them should go first, and clambered into the machine; there were still two sailplanes to go before it was his turn, but he wanted to be ready. Bill came over and gave the twins some hints.

“Take off as soon as you can, and get into a position about fifteen feet above the level of the aeroplane. A good check is to keep the aeroplane's top wings on the horizon; then let the cable go fairly slack while the aeroplane takes off. Never get below it, or by pulling its tail down you will make it stall; also, don't get too high above it.

## *SILENT FLIGHT*

“ If the cable gets very slack, an almighty jerk will result, as you will be slowing down, and the aeroplane continuing on; the only thing you can do is to sideslip gently to tighten it, then just before the jerk comes put the nose right down in line with the cable, so that the sailplane absorbs the shock with the least frontal area to the airflow.

“ If everything gets too bad, just release and either come home or see what lift you can get from the height you are at. The pilot always drops you upwind from the landing-ground. Anyway, it's very easy if you just watch the wire. Oh, another thing: the aeroplane will only give a little bump as it flies through a thermal; you, on the other hand, will shoot up a hundred feet or so and get right above the aeroplane, so as soon as that happens put the nose down, and swishtail a bit with the rudder to prevent yourself getting too fast. It's very easy really, and certainly very pleasant. I'm after you; see if you can stay up longer than I can.”

The big Avro started moving, and the H17 took off. Climbing in a wide sweep, the little caravanserie grew smaller and smaller, until at 2,000 feet the sailplane released.

Immediately after pulling the plug Brian thought that something had happened to the machine, as the controls seemed non-existent. Then he realised that with the higher speed of fifty miles per hour on the aero tow the controls became heavier and tighter, and now with the normal slow speed of thirty again, the controls felt very much lighter; it was a thing to be remembered, as it made everything feel rather strange for a moment or two.

Brian played around in a gentle thermal, until he saw Bill's Kite launched and rise swiftly to his level. The white sailplane released, flying about a mile upwind from the H17, and sinking slowly. Brian was exultant, he was staying up, while Bill, experienced, brilliant Bill, was sinking back into the earth; already he had lost

## *SILENT FLIGHT*

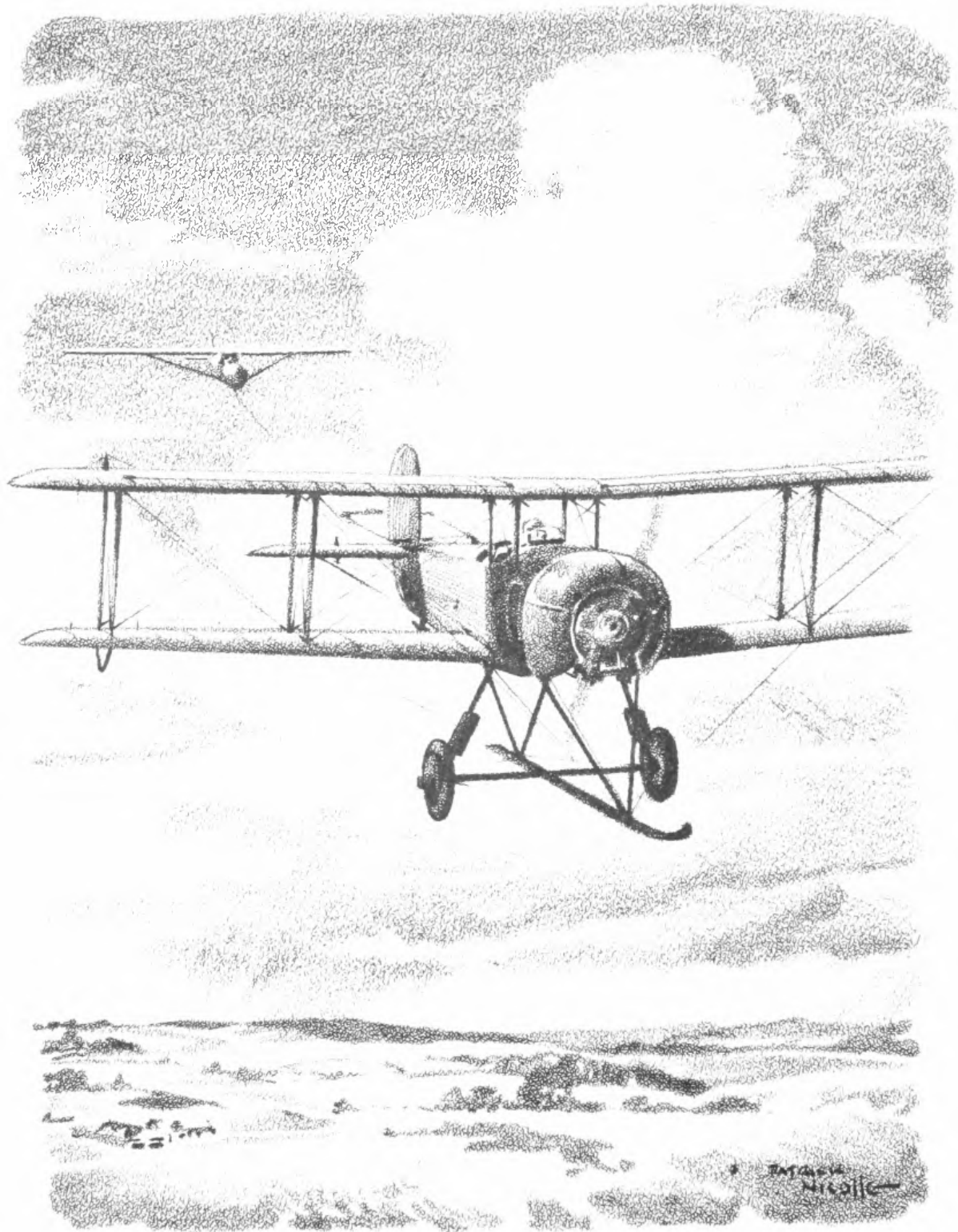
1,000 feet. Brian gave a loud cheer and continued circling. Ten minutes later the lift gently died out, and Brian was forced to look for other support. He flew cross-wind to a village near the club, which he hoped would provide a thermal. As he arrived, he got the surprise of his life, for there was the white Kite, circling tightly and climbing above him; the machine he thought had departed from the sky. He dashed after it and circled in the same place, but the air was dead. Bill had just got into the bottom of the lift. The H17 sank lower and lower and finally turned for home, landing up the gully. Brian lay on his back, shoulders across the wing tip, and watched the white bird slowly disappear into the oblivion of the deepening sky.

Jane had her first tow directly after lunch, when conditions had improved, and was lucky in getting a really good thermal before sinking below 900 feet.

She was so determined not to let Brian stay ahead of her in their struggle for the Silver C, that she seized her chance and made good use of the lift. The base of the scattered clouds was high, and the thermal took her to just under 5,000 feet before petering out. The wind was very light and she had difficulty in tracing the path of the cloud shadows over the ground in order to see which way to go. Apart from this, hers was a very easy flight, as the air above 3,000 feet seemed to be full of lift, and comparatively smooth; so only once, when she sank to little more than 1,500 feet, did she really have to worry; her progress was very slow, however, and it took nearly three hours to cover forty-two miles, by which time the best of the day had gone and the air become quite flat.

She landed in a large field between a pinewood and a stream, a little picture-book cottage nestling in one corner enclosed by a low bramble hedge, and in the porch were two occupied deck-chairs; Jane turned the machine wing into wind and weighted it

68



*The sailplane was towed up to 2,000 ft. (see page 67)*



## *SILENT FLIGHT*

with some clods of earth, and walked over to the cottage. The occupants of the deck-chairs were asleep. One was a tall man with blue corduroy trousers, sandals over bare feet, a pink open-necked shirt, and dark curly hair and beard. The other, a woman of short stature, also bare-legged with sandals, was wearing a rough Harris tweed skirt and an embroidered Russian blouse; she had little gold ear-rings and an Eton crop. The man was snoring, and a purring cat lay on the sleeping woman's lap. Jane coughed and stood watching them with some interest, but feeling rather embarrassed.

The man opened one eye. "Issie, at last your successor has come. Hullo, my fairy Queen; the day is beautiful, is it not?" was his extraordinary comment.

Jane stuttered a little. "Hullo, I'm very sorry, but I've landed in your field."

"A fairy Queen in all senses. Where are your magic carpet and team of dragonflies?"

"If you mean the H17, it's over there," said Jane dryly.

Issie woke up. "Don't listen to him. Rabbit talks awful tripe. What do you want, anyway?"

Jane explained about her flight, and asked if she could use the telephone.

Issie said, "You'll find it in the eating-room," and settled down to sleep again. Rabbit, however, leapt to his feet and paced up and down the lawn.

"At last. At last," he muttered to himself.

Jane got on to Dick Byrd, who was waiting to hear where the big Adler had landed; he took down the message and promised to give it to Brian. Jane glanced hurriedly through the window. "Tell him to hurry; they're all mad here," she whispered. Byrd laughed and rang off. Jane went out again.

"Where is thy faithful steed?" Rabbit said, wagging his beard.

## *SILENT FLIGHT*

“Over there,” said Jane. “Do you think that you could help me dismantle it, so that it will be ready when my brother comes to fetch me?”

“All right,” said Issie, without a smile.

“We are slaves at your feet,” said Rabbit.

They walked across the field, Issie taking the same size strides as six-foot Rabbit.

They found a small crowd round the machine, people who were only too willing to help, and soon the parts were safely stowed away under a hedge.

Rabbit had hit his thumb twice with the hammer, but was in raptures with himself over an inspiration the H17 and Jane had given him for a new and modern fairy story. Issie, on the other hand, was very strong and reliable, in spite of her lack of speech.

When it was finished, they went back to the cottage for a meal; Rabbit set the table while Jane was given a heap of fairy-tale manuscripts to read and give an opinion on. Issie shortly appeared with the food, which consisted of rough brown-grey bread, lettuce leaves, raw carrots, cheese and butter, wild strawberries and cream, and dandelion wine. Jane liked the strawberries and cream the best.

Brian and Mike Peters arrived shortly afterwards, and soon everything was ready to leave.

“Good-bye,” said Issie.

“Farewell, spirit of the air,” called Rabbit.

When they were well on the way home, Brian said, “Well, now you’ve got your distance, we’re both equal, with only the height to get.”

“I got it to-day, but had no barograph, so it does not count for the Silver.”

“Ha, that proves I am going to get mine first, as I said.”

## *SILENT FLIGHT*

“ You know,” said Jane reflectively, “ this thermal stuff is nothing more or less than what we learn at school; hot air rises, and all that. I think it’s worth learning up.”

“ Yes, I think so,” said Brian. “ It seems that the extra bit of theory just makes the difference between a good and a first-class flight. I’m going to read it all up before the summer holidays, then I shall be certain of getting my Silver before you.”

“ We’ll see about that,” said Jane.

## CHAPTER X

# Loops and Launches

THE beginning of the summer holidays saw the twins arriving with laden suitcases at the club. They were in good spirits, and also had with them a bulky canvas bag containing a parachute, given to them by their parents, because at last they had managed to leave school with a good report. The Matric. and Cranwell entrance results had not come through yet, so the twins were going to make the best of their holiday in case they had failed. If they had, Brian was destined for his father's office, and his sister to a secretarial college, instead of the Royal Air Force for him, and the writing of flying stories for Jane.

They arrived just in time to get the beloved H17 rigged for a winch circuit each before supper. It was good to see all their friends again, for during exams. it had been impossible to get over to the club. All the usual faces were there, wearing the usual clothes, and the same assortment of funny hats. Dick Byrd had got a new scar across his nose from another motor smash, and the owner of the Viking had bought some bright-green silk overalls, with zip fasteners in all possible places, which he resolutely wore while flying, saying that they kept him warm.

It seemed years since they had been at the club, but everything appeared to be exactly the same; there was still a large pile of broken secondaries in the back of the hangar, still the same pile of magazines in the clubhouse.

The next day was calm and hot, showing evidences of strong

thermal lift, so Brian and Jane settled down to try for the Silver height straight away.

Brian was still determined to get his first, but Jane was equally determined to beat him.

Two days later, Jane got a thermal off the winch, and climbed rapidly; would she get that magic 3,000 feet? She fingered the barograph in its locker lovingly, and went on turning. The altimeter crept up slowly to the 3,000-foot mark, then 3,100 feet; Jane felt very excited, while Brian watched, a blank stare on his face, saying nothing.

The variometer was still showing rise, and soon the little H17 was calmly floating at just under 4,000 feet. Jane was so thrilled that she decided to throw a loop, the thought of which sobered her down immediately. She had seen Jack do one in the Adler, and had asked him afterwards how it was done. He told her it was just too easy.

“Just dive to about sixty miles an hour, then pull the stick right back firmly, but not all at once, and wait. When everything appears normal again just go on flying as though nothing had happened,” he had said.

Jane took a deep breath and pushed the stick forward; the airspeed needle rushed upward—sixty miles an hour. Jane pulled the stick back, harder and faster as the load fell away. She held it in her stomach, while wide expanses of blue sky and brown earth whistled about in all directions. She felt herself being pushed through the seat, then everything went quiet; opening her eyes, she found herself the right way up, and just on the point of stalling. Easing the nose down, she said in a loud and deliberate voice,

“I enjoyed that; I must do another one.” The second one did not feel nearly so frightening, and by the third one, Jane had found looping a very pleasant sensation; after all, it was only a case of getting used to it.

## *SILENT FLIGHT*

Ahead of her was a quiet glide back to the club, so she ate some chocolate and dug the barograph out of the pigeon-hole; she looked in the little window to admire the inked graph, but the chart was clean and new; she had forgotten to put any ink in the pen! She put it back, feeling very silly; she had just given the Silver away to her brother.

The following day, the big Avro came up to the club again to give aero-tows; the wind was blowing down the hill, strongly enough to make the height obtainable from winch launches useless for thermal catching, due to the downdraught all over the club grounds.

The aeroplane was towing the sailplanes to 2,000 feet, and Brian in his turn was lucky to connect with lift almost immediately. He circled quite unconcernedly, climbing at five feet per second in air that was quite smooth. At 4,800 feet the thermal gently died, but Brian was quite satisfied although rather cold; he also tried Jane's evolution of the day before on the way down. Jane met him on landing.

"I've got my Silver all right," he said. "Look, 4,800 feet on the chart."

"Less 2,000 feet on the wire, that makes 2,800 feet," observed Jane with a smile.

"Oh, I'd forgotten about the height of the tow not counting; looks as though you'll get it first after all." Brian looked so miserable that Jane could not help laughing.

Three days after this occurrence, the wind had veered round to west, and was blowing just enough to be soarable. Good cumulus had formed by quarter to eleven, although cloud base was rather low, at 2,600 feet.

Just before lunch, Jane got some good lift over the Bastion, and after some hectic circling low down managed to reach cloud base, which by this time had gone up to 3,000 feet. Only 200 feet more

## *SILENT FLIGHT*

to get, and could she cloud-fly long enough without getting into trouble? Cruising around slowly, she let herself be drawn up into the swirling grey mist; it was more bumpy inside the cloud, but Jane avoided making any more control movements than were necessary. The H17 had not any blind-flying instruments, but Jane stroked the parachute harness instead with confidence.

The altimeter read 3,158 feet; not much more now. Jane turned to keep in the slowly weakening lift, fog deadening the sound of the machine. The needle of the airspeed indicator slowly went up to forty-five miles per hour, so Jane eased the stick back in order to slow up; the needle flickered up to fifty, then fifty-five miles per hour; Jane pulled the stick right back—sixty miles per hour, and the wind shrieking in her ears tearing her hair. She noticed the same sinking feeling as in her first loop. Sixty-five miles per hour, the stick would not go any farther back; she tried a little rudder to see what would happen; the H17 reared up into some violent position like a startled horse, then everything went silent; Jane gripped the edge of the dashboard even more tightly. The airspeed indicator read nothing, the needle lying idly below stalling speed.

She was wondering what to do next when a brilliant flash of light dazzled her. She blinked and looked round. The sky was serene and blue, the earth peaceful far below, and she was spinning gently down. Correcting, she levelled out and glared at the clutching grey monster above her. She flew around quietly for a while to calm herself and look for the club grounds; finding them away to the north-west, she flew back and landed to tell Brian of her experiences; the barograph chart resolutely reading 3,150 feet.

For the next few days the twins did winch circuits incessantly in their efforts to beat the other. The friendly rivalry between these two was causing a great deal of interest among the other club members, one of whom had made a book on the race. The twins also came

## *SILENT FLIGHT*

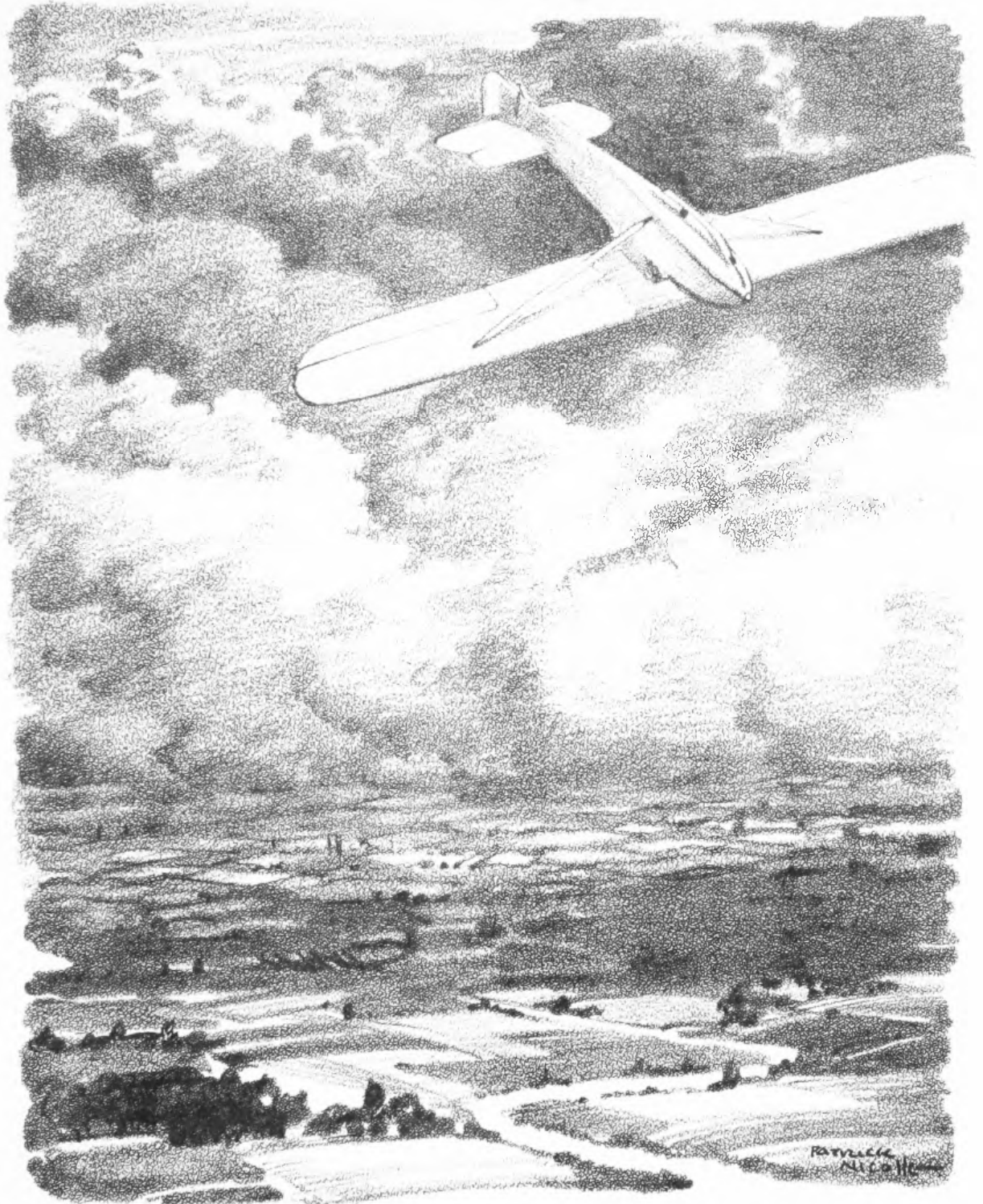
in for a certain amount of teasing, which was given and taken in good part; at any rate, it was a change from the everlasting shop of the theory kings.

Neither of them had any luck at all until nearly a week later, when Brian happened to be soaring in the warm-sector weather of a small depression, and was in the air when the fragments of the following cold front came along. He found that suddenly, for no apparent reason, he was higher than he had been, in spite of the complete lack of thermic activity. The sky had been overcast with high cirro-stratus and ragged alto-cumulus since about 10 a.m., and the cold front had rather the same untidy appearance. Brian realised its significance only just in time, and managed to cling on to an extra black mass. He wandered round, exploring the regions of lift, finding the best area on the front edge of the cloud, and a horrible downdraught in the rear. He had read a great deal about the theory of cold fronts, how the cold air from the poles undercut the warmer air from the equatorial and temperate regions, throwing it upward with great violence; it was on this line of aerial upheaval that it was possible to soar.

The lift was powerful, but did not extend very high; Brian struggled for about an hour to get that 3,200 feet, flying as slowly as he dare to get as much help as possible from the machine. The ground, however, was rising slowly underneath him, becoming fairly hilly, and it may have been this factor that gave him that extra boost up. Anyway, he just got it; the altimeter gave him 3,400 feet, and the barograph about the same. He was extremely pleased, and landed as soon as possible so that Jane should not have so far to come and fetch him. The front had been moving very slowly, and he was only about twenty miles from home.

As soon as Jane heard his voice over the telephone, she knew that he had won, and was both glad and sorry at the same time. She





*Brian also tried looping on the way down (see page 74)*

## *SILENT FLIGHT*

would have liked to prove to him that she was just as good a pilot as he was; and yet she had really achieved her Silver height with her distance flight, only she had no barograph. She had really won by a long way; it was only a matter of luck, but luck plays a big part, even in the finest sport in the world.

## CHAPTER XI

# The Thunderstorm

“GOSH, look at that!” cried Brian, leaping to his feet.

The others sat up slowly, brushing the grass from their hair and clothes.

“What is the matter?” asked Bill.

“Well, look at that thunderstorm over there; it seems to be coming this way too.”

“Hm, not too bad, if it doesn’t float away to the north and pass us by.”

“Not bad! It’s terrific, the top must be at least 18,000 feet high! I’m going to have a crack at it, anyway.”

“Even if it’s my turn to fly?” asked Jane.

“Oh, yes, so it is; but remember, I’ll never forgive you if you muck it up.”

Jane gave Brian a patient look, and got up to help him out with the machine. The day was hot and sultry, although the sky had been fairly clear since early morning, and now on the troubled south-west horizon lay a storm; still small with distance, it nevertheless looked as hard and menacing as a solid row of snow-clad mountains; and rising from its midst was the anvil cloud—the heart of the tempest—like an eruption from a giant volcano. As the storm approached, growing blue-black and furious, a slight breeze sprang up, blowing in sharp short gusts; while the anvil, spreading up the sky like an evil octopus, groped at the sun, swallowing it.

People were rushing about, sweat glistening on their foreheads, getting machines out before it was too late, and launching others;

## *SILENT FLIGHT*

two were in the air, beating up and down the hill, then flying slowly towards the boiling, dazzling cloud, rising imperceptibly as the unquenchable fury moved on.

Jane was the next away, followed as quickly as possible by the Buzzard. She tailed the Adler and the white Kite, like a puppy dog on a lead, until she felt sure of her position. The Buzzard, however, was just too late, being launched into the heavy rain and downdraught which followed the upthrust of the storm front.

Brian and the others retrieved him, then made a dash for the hangar, where they shook off as much wet as possible and tried to peer through the heavy curtain of water to get a glimpse of the three human birds wheeling and circling high above the earth in the sunshine.

They went into the clubhouse.

“ Letter for you, sir,” said the steward; “ it’s just come.”

Brian tore it open, recognising his father’s handwriting. It informed him, in the usual short, quiet style of his father’s letters, that he had passed into Cranwell, and he might also tell Jane that she had managed to scrape through Matric. Brian let out a howl of joy, and danced round the room, while his friends looked on in mild astonishment.

Meanwhile, Jane had lost sight of the other two sailplanes and was scuttling round like a frightened rabbit in and out of the little ragged cloudlets which kept forming suddenly all around her. After a while she got above them and flew up and down on the edge of the mass, not daring to enter it, after her previous experience. The other two were apparently inside.

Jane could not see much of the cloud formation from where she was, so contented herself with just floating up and down in a patch of good lift in front of the swirling vapour. After a while, she decided to continue along the front, in order to see how long the

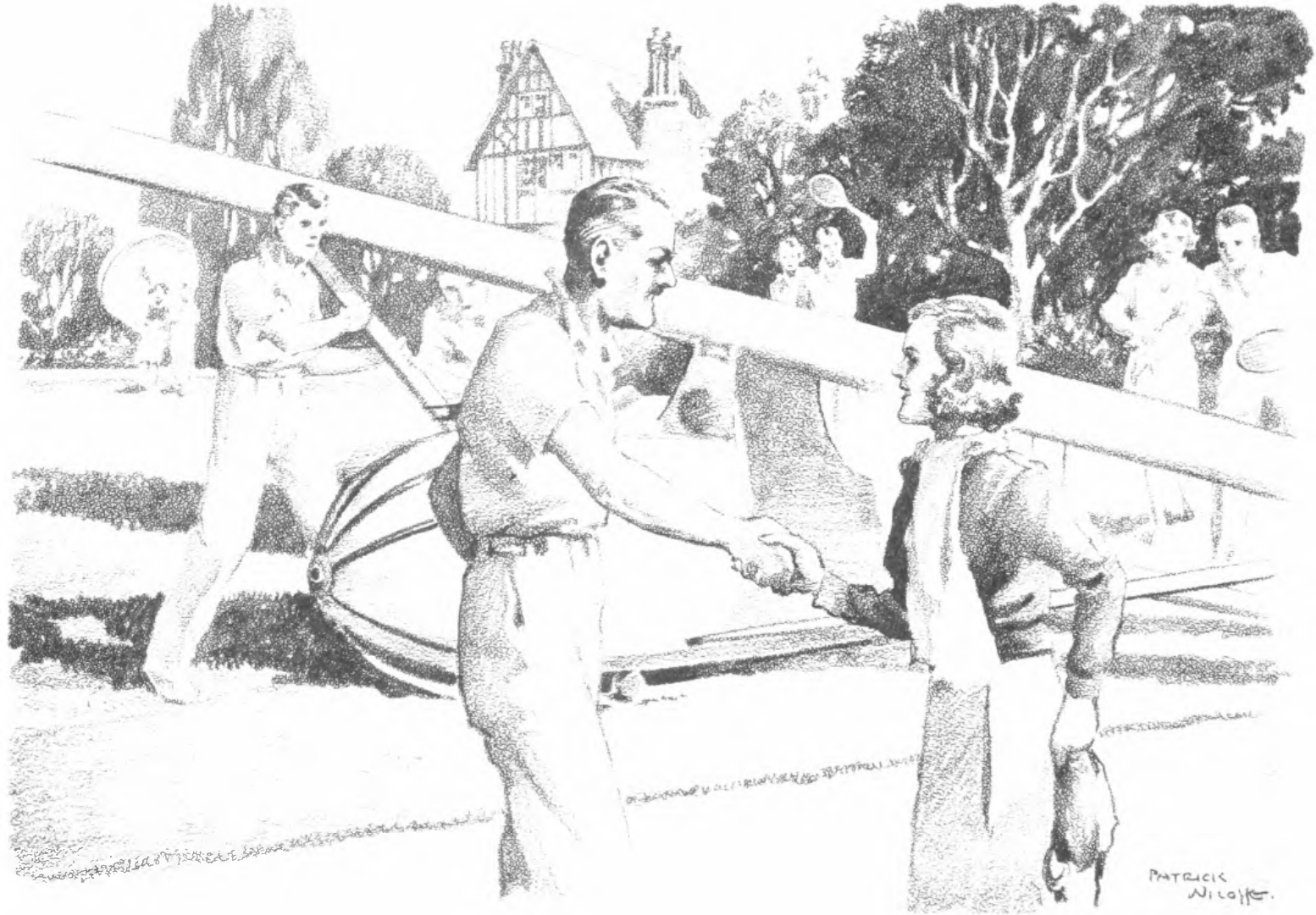
## *SILENT FLIGHT*

beat was; she turned north-east, flying at 5,000 feet, well over Silver C height, in reasonably smooth air. Five minutes later Jane found herself climbing rapidly in an atmosphere that was unpleasantly rough. She flew out ahead of the lift to get a better view of what was happening, and found that the cloud into which they had been launched was only a subsidiary part of the storm, which even now was slowly breaking up. The real heart of the thundercloud was the part that she had just flown away from. She turned back into the powerful lift, bucking about like a dinghy in a rough sea, listening to the violent thunder, and starting every time the lightning flickered on the glass of the instrument dials. The variometer showed fifteen feet per second rise, and again wisps of cloud were rapidly forming and disappearing all round her.

She looked quickly at the earth through a gap below her. It seemed very, very far away, and made her feel extremely lonely; she glanced back at her friendly, hateful cloud. It was very cold, and Jane sat shivering as her breath frosted on the windscreen. The altimeter was reading 9,000 feet, and she was still being drawn rapidly, roughly, upwards. Would it never stop? She wanted to land and smell the grass, and talk to people again, instead of being bounced about nearly two miles above the earth.

Suddenly cloud formed all about her, swallowing the machine; Jane flew straight, hoping to get out, but the cloud was growing faster than she was flying. The variometer rose to twenty, but the air seemed to be a little smoother. Jane was determined not to turn or let the altitude of the machine change to any marked degree, so as not to get into the difficulties of last time; she held the rudder with both feet, pressing down as hard as possible, and jammed the stick by holding her elbows stiffly against the cockpit sides. The altimeter crept up to 14,000 feet, then slowed down. Jane felt terribly excited, miserable, and happy. The cloud grew





*She had beaten the British height record*

## *SILENT FLIGHT*

light, then darkened again. The variometer had sunk to five feet rise, and the air was quite smooth. Suddenly the cloud broke and, still rising slowly, Jane found herself in a world of shining beauty. Cloud mountains rose on all sides, with dove-grey valleys and rifts; the sky was brilliant and clear above, the clouds dazzling white, with blue-mauve shadows behind the snowy peaks; the anvil still rose as a wall of swirling mist far above, glistening faint rainbow colours. Of the earth there was none. Jane was very cold, and although not in any mood to appreciate the scene could not help gasping at its magnificence. She turned away, flying with the sun behind her, hoping to get ahead of the storm front again. She neared the bank of clouds ahead and, silently rising, floated over the top, to see the ground. Very far below, and seeming strangely clean and tidy, while away to the right lay the sea; a blue-green sea, with great depth of colour, the sky above it pale and clear.

Jane flew out ahead of the cloud, sinking only very slowly, and in patches still maintaining her height. She flew on, the storm receding again into solidity behind her.

At 7,000 feet again, her rate of sinking increased, and soon she began to feel warm once more.

A short time later she had sunk low enough to be able to choose a large even field, towards which she flew, cheerfully disregarding a nice fat thermal on the way. She threw a loop, and circled around several times losing height; then floated into the field and landed. Just as she touched down, a piece of wire from a no longer existent fence caught on the launching hook; the H17 reared up on its nose, then toppled gently over, coming to rest inverted.

Jane hung upside-down in the straps, not knowing whether to laugh or cry; she groped for the barograph and read it. Dropping it on the grass above her head, she laughed. She had beaten the British height record, unless Bill or Jack had in turn beaten her.

## *SILENT FLIGHT*

She laughed loudly, pleased with what she had done, and happy to be on the earth again, even if the wrong way up.

A voice asked, "Are you all right?"

Jane stopped laughing and said, "Yes, thank you, but I can't get out."

"O.K., hang on; we'll soon have you the right way up."

"Don't pull on the trailing edge," said Jane nervously.

"That's all right; I fly aeroplanes myself."

"Sorry," said Jane, "but I couldn't tell that from your voice."

The man laughed, and Jane felt the H17 being tipped upwards. She could hear her rescuers breathing heavily as they strained to lift the tail. Once vertical, it was easy, and soon she was able to get out and see her helpers. There were about ten of them; women in smart summer dresses and tennis clothes; men wearing flannels, with beautifully brushed hair; an elderly man with a white moustache, and, obviously his wife, a still pretty woman, completed the group.

"Thank you," said Jane. "It was that piece of wire that did it, catching in the launching hook."

"Bad luck," said one of the men. "I can't think why you weren't hurt."

"Come and have some tea, my dear," said the elderly lady. "You look very cold."

"I was, but it's warm enough down here."

They all sat down to tea on the lawn, in front of the big white stone house, and insisted on Jane telling of her adventures.

She told of the storm, of the glorious moments above the clouds, and the frightening moments within. She told of the record, and the two other machines, and her friends at the club; and when she had finished answering all the questions asked her by the interested party, the elderly man said, "I own a paper which is



## *SILENT FLIGHT*

supposed to cover all the sports in England, and I have been looking for someone to do the Gliding section each week. If you can write as well as you can fly, then you are just who I want. What about it? ”

Jane was speechless with excitement; this was even better than writing flying stories. She would be putting on record real flights, real achievements, for those to read who would take up soaring in perhaps many years to come.

She had just managed to stutter her thanks when the butler arrived on the lawn, accompanied by Brian and Michael Peters. The two were given tea, cakes, and ice-cream, and Jane had once again to recount her adventures and proudly display the record barograph chart, with the purple-inked line just crossing the 15,000-foot mark.

“ And I’ve been asked to write on gliding for Colonel Barrows’s paper,” she finished triumphantly.

Brian grinned. “ And you’ve passed Matric. and I’ve got into the R.A.F.,” he said, handing Jane their father’s letter.

THE END

