



# The Project Gutenberg eBook of Sixty Squadron R.A.F.: A History of the Squadron from its Formation, by A. J. L. Scott

This ebook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this ebook or online at [www.gutenberg.org](http://www.gutenberg.org). If you are not located in the United States, you'll have to check the laws of the country where you are located before using this eBook.

Title: Sixty Squadron R.A.F.: A History of the Squadron from its Formation

Author: A. J. L. Scott

Release date: November 22, 2014 [EBook #47416]

Language: English

Credits: Produced by Brian Coe, Charlie Howard, and the Online Distributed Proofreading Team at <http://www.pgdp.net> (This file was produced from images generously made available by The Internet Archive/American Libraries.)

\*\*\* START OF THE PROJECT GUTENBERG EBOOK SIXTY SQUADRON R.A.F.: A HISTORY OF THE SQUADRON FROM ITS FORMATION \*\*\*

On some devices, clicking a map will display a larger version of it.



**BALLOON STRAFING.**  
**Attacking an enemy kite**  
**balloon with incendiary**  
**ammunition.**

By Capt. W. E. Molesworth, M.C.

*[Frontispiece*

# SIXTY SQUADRON R.A.F.

A HISTORY OF THE SQUADRON  
FROM ITS FORMATION

BY  
GROUP-CAPTAIN A. J. L. SCOTT,  
C.B., M.C., A.F.C.

WITH A PREFACE BY  
THE RT. HON. LORD HUGH CECIL, M.P.

LONDON: WILLIAM HEINEMANN  
NEW YORK: GEORGE H. DORAN COMPANY

PRINTED IN GREAT BRITAIN

---

DEDICATED  
TO THOSE WHO WERE  
KILLED WITH THE SQUADRON

“Clean, simple, valiant, well beloved,  
Flawless in faith and fame.”

KIPLING

---

# PREFACE

This book tells the story of Squadron No. 60 of the Royal Flying Corps, afterwards of the Royal Air Force.

When the war began, in August 1914, the Royal Flying Corps was a very small body which sent four squadrons on active service and had a rudimentary training organisation at home. In those days the only functions contemplated for an airman were reconnaissance and occasionally bombing. Fighting in the air was almost unknown. The aeroplanes were just flying machines of different types, but intended to perform substantially the same functions. Gradually as the war continued specialisation developed. Fighting in the air began, machine guns being mounted for the purpose in the aeroplanes. Then some aeroplanes were designed particularly for reconnaissance, some particularly for fighting, some for bombing, and so on. It was in the early part of this period of specialisation that Squadron No. 60 was embodied. And, as this narrative tells us, its main work was fighting in the air. It was equipped for the most part with aeroplanes which were called scouts—not very felicitously, since a scout suggests rather reconnaissance than combat. These machines carried only one man, were fast, easy to manœuvre, and quick in responding to control. They were armed with one or two machine guns, and they engaged in a form of warfare new in the history of the world, and the most thrilling that can be imagined—for each man fought with his own hand, trusting wholly to his own skill, and that not on his own element, but in outrage of nature, high in the air, surrounded only by the winds and clouds.

The embodiment of the fighting scout squadrons was part of the expansion and organisation of what became the Royal Air Force. Among all the achievements of the war there has been, perhaps, nothing more wonderful than the development of the Royal Flying Corps and the Royal Naval Air Service, and their amalgamation in the great Royal Air Force which fought through the last year of the war. When the war opened, the Royal Flying Corps and the Royal Naval Air Service were bodies of few units, ancillary to the Army and the Navy, of which the control was in the hands of the Army Council and the Board of Admiralty. It was not realised that warfare in the air was a new and distinct type of warfare. Generals who would have laughed at the idea of commanding a fleet, Admirals who would have shrunk from the leadership of an army corps, were quite unconscious of their unfitness to deal with the problems of aerial war. Every step, therefore, of the organisation and expansion of the flying services had to be conducted under the final control of bodies, kindly and sympathetic indeed, but necessarily ignorant. That the Royal Flying Corps attained to its famous efficiency and was expanded more than a hundredfold should earn unforgetting praise for those who were responsible for leading and developing it. The country owes a great debt, which has not, perhaps, been sufficiently recognised, to Sir David Henderson, whose rare gifts of quick intelligence and ready resource must have been taxed to the utmost in his dual position as head of the Flying Corps and member of the Army Council; to Sir Sefton Brancker, who worked under him in the War Office; and to Sir Hugh Trenchard, who, from the date that Sir David Henderson came back from France to that of the amalgamation of the flying services in the Royal Air Force, was in command in France. It was the administrative skill of these distinguished men that stood behind the work of the squadrons and made possible their fighting or bombing or reconnaissance. And this background of administrative skill and resource must not be forgotten or suffered to be quite outshone by the brilliant gallantry of the pilots and observers.

But in this book we read, not of the organisation of the Flying Corps or the Air Force, but of the actual work done in the field. We catch glimpses, indeed, of the expansion and organisation which was going on, in the mention of new armament, new machines, new units; and we are able to gauge the importance of the work done at home and at Headquarters in France by the effect produced on the fighting capacity of Squadron No. 60. For example, we hear how machines supplied from France at one point proved untrustworthy in structure, and how the fault was detected and put right. But in the main attention is concentrated on the thrilling story of the achievements of No. 60 against the enemy. I think every reader will agree that he has seldom known a story more moving to the imagination. Many people even now feel apprehensive at flying at all, although familiarity has produced a juster estimate of the degree of risk attending that operation than used to prevail. But to fly and fight, to sit alone in an aeroplane thousands of feet above the ground, to catch sight of an enemy, to go to attack him, flying faster than an express train moves, to venture as near as may be dared, knowing that the slightest collision will cast both helpless to the ground, to dodge and dive and turn and spin, to hide in clouds or in the dazzle of the sun, to fire a machine gun while not losing mastery of the control and rudder of one's aeroplane, to notice the enemy's bullets striking here and there on one's machine, and know that if a bullet hits the engine it means either death or a precarious landing and captivity, and if a bullet hits the petrol tank it means being burned alive in the air, and yet to fight on and, escaping, go forth afresh next day—surely to read of this is to realise with new and penetrating force the stupendous measure of what human skill can do and human courage dare.

The picturesque effect of the fighting is enhanced by the security and comfort in which the pilots rested when they were not in the air, and from which they went up day by day to their terrific duties. Anyone who visited the Flying Corps while the war was going on must have been struck by this poignant contrast. The visitor saw a comfortable mess and billets, roughly organised indeed, but for young men in the height of their strength a pleasant place to live in. Good food and drink, cigarettes to smoke, newspapers to read, and all the fun and merriment that are natural to a group of young men between eighteen and thirty years old. And for most of such squadrons the surroundings seemed peaceful: around were the smiling, highly-cultivated fields of France—perhaps the most evidently civilised country in the world—with nothing to witness of war except the distant booming of its guns. Yet from this abode of youth and ease and joy the dwellers went forth into the abyss of the air, to face danger at which imagination quails and of the reality of which they were grimly reminded by missing week by week some familiar face, gone for ever from their circle. This was what was done and felt by Squadron No. 60, and here is the story of it.

I am sure this book will interest those who read it, but I would have it do something more. Even already the memory of the war is beginning to fade. And it is happy that it should: may its orgy of hate and blood pass from our minds as from our lives! Yet, while the healing, deadening waters of oblivion are only drawing near, let us save from them with careful hands some jewelled memories, that by them we may be profited; and, amongst them, this of the men of No. 60, who fought a new warfare with old but unsurpassed courage and found the way

of glory among the untrodden paths of air. Many died and many suffered, but they bought for us the unpriced treasure of their example. This is like sunshine to us, giving us life and killing all diseases of the soul. Let us, then, read these pages that we may learn from our hearts to honour the fighting airmen of No. 60, and grow ourselves in honour as we read.

HUGH CECIL.

21 ARLINGTON STREET.  
*July 1920.*

---

# AN ACKNOWLEDGMENT

It has only been possible to produce this book at all by reason of the help that so many old friends have given me.

My thanks are due to many of them, but in particular to Flight-Lieut. G. W. Dobson, who has himself contributed the account of the squadron at Savy, and has assisted with much of the more arduous work in connection with the preparation of the appendices, which we both hope are now correct in every detail, though we really know quite well that errors will, in fact, be found.

Capt. W. E. Molesworth also has helped very greatly by allowing me to use his vivid letters and by giving the four drawings by himself, which, I venture to think, are of considerable merit. To Mr. R. J. Maclennan, Mr. W. A. H. Newth, and Mr. W. T. Howard, and also to Mr. G. S. Armstrong, father of the late Capt. D. V. Armstrong, perhaps the finest pilot the Flying Corps ever produced, I owe letters and photographs which have been invaluable.

In conclusion, I would ask those many others whom I have not space to mention to believe that I am sincerely grateful for their help. xiv

J. S.

4 WILTON STREET, S.W.1.  
*June 28, 1920.*

# CONTENTS

	PAGE
PREFACE	vii
AN ACKNOWLEDGMENT	xiii
AN EXPLANATION OF TECHNICAL TERMS USED	xix
CHAPTER I	
THE FORMATION OF THE SQUADRON	1
CHAPTER II	
THE SOMME	11
CHAPTER III	
ARRAS	30
CHAPTER IV	
PASSCHENDALE AND THE NORTHERN BATTLES	65
CHAPTER V	
THE MARCH OFFENSIVE (1918)	92
CHAPTER VI	
DEMOBILISATION	125
APPENDIX I	
A LIST OF THE OFFICERS WHO SERVED IN 60 SQUADRON DURING THE WAR	128
APPENDIX II	
A LIST OF BATTLE CASUALTIES	134
INDEX	139

---

# LIST OF ILLUSTRATIONS

## BALLOON STRAFING

*Frontispiece*

	FACING PAGE
PATROL OF MORANE "BULLETS" ABOUT TO LEAVE THE GROUND, VERT GALANT, JUNE 1916	6
H. BALFOUR AND D. V. ARMSTRONG, JULY 1916	8
CLAUDE A. RIDLEY, D.S.O., M.C., IN A MORANE "BULLET"	8
SUMMERS STANDING BY HIS MORANE "PARASOL"	16
MAJOR R. SMITH-BARRY IN A MORANE "BULLET"	16
BROWNING-PATERSON WITH HIS MORANE "PARASOL"	20
CAPT. D. V. ARMSTRONG	20
SOME OF THE OFFICERS OF 60	24
MORANE "BULLET" CRASHED BY SIMPSON. BOISDINGHEM, JUNE 1916	24
"A" FLIGHT AWAITING SIGNAL TO PROCEED ON PATROL, MAY 1917	28
THE KAISER DECORATING VON RICHTHOFEN, WHOSE AEROPLANE APPEARS BEYOND THE GROUP	28
MOLESWORTH, BISHOP, AND CALDWELL, APRIL 1917	40
BISHOP, CALDWELL, AND YOUNG, APRIL 1917	40
THE HARD TENNIS-COURT AT FILESCAMP FARM, MAY 1917	58 <span style="border: 1px solid black; padding: 0 2px;">xviii</span>
60 SQUADRON'S NIEUPORT SCOUTS LINED UP IN THE SNOW AT LE HAMEAU AERODROME, NEAR ARRAS, JANUARY 1917	58
A DOG-FIGHT	100
"ARCHIE"	100
GERMAN MACHINES	112
AN S.E.A. WITH LIEUT. ROTH, A PILOT OF 148 AMERICAN SQUADRON, STANDING	118
S.E.5A. WITH 200 H.P. HISPANO SUSA ENGINE, ARMED WITH ONE VICKERS AND ONE LEWIS GUN	118

## MAPS: ON THE WESTERN FRONT

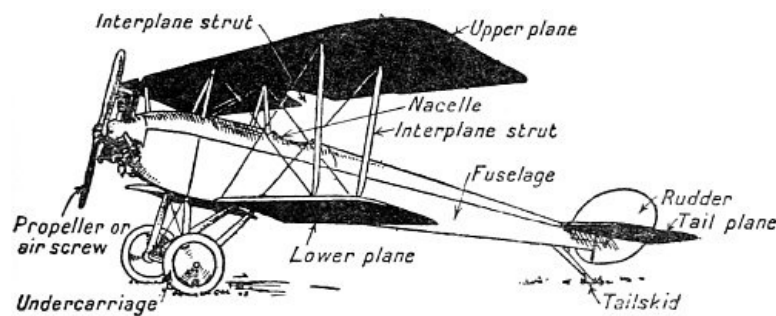
SITUATION ON SEPTEMBER 25, 1918	116
THE BATTLES AND THEIR EFFECTS	126

---



# AN EXPLANATION OF TECHNICAL TERMS USED

The line drawing below of a typical tractor biplane will explain to the non-technical reader the meaning of many terms used hereafter which are difficult to describe without the aid of a diagram:



A monoplane has no lower planes, while the top planes sprout from the side of the body like the wings of a bird, but are rigid.

In either type of aeroplane it is the action of the air on the wing surfaces, both upper and lower, when the machine is travelling forward at a minimum speed of about forty miles per hour that keeps it in the air. If the speed is allowed to drop below this minimum (known as the flying speed) the machine "stalls," i.e. becomes uncontrollable, drops its nose and dives to regain flying speed. If this happens near the ground—within a hundred feet—a serious, and often fatal, crash is the result. xx

Among the types of aeroplanes used in France during 1916-18, and mentioned in these pages but not described in detail, are:

## **B.E.2C., R.E.8, AND OTHER TYPES OF TWO-SEATER MACHINES**

All two-seater machines carrying one pilot and one observer which were chiefly used for artillery observation, i.e. correcting, by observation from the air, the fire of batteries on the ground.

These were tractor biplanes, i.e. the engine and propeller were in front, while the observer and pilot sat tandem in two cockpits, or nacelles, in the fish-shaped body.

## **F.E.2B.**

A two-seater fighting biplane of the "pusher" type with the engine behind the pilot, who with the observer sat in a cockpit which protruded beyond the leading, or forward, edges of the planes. This aeroplane was used for day and night bombing, for fighting in 1916 and the first half of 1917, and also for reconnaissance and photographic work.

## **DE HAVILLAND 4**

A high-speed tractor two-seater biplane used for bombing, reconnaissance work, and photography.

## **NIEUPORT, S.E.5, AND SOPWITH CAMEL**

Single-seater fighting scouts, all tractor biplanes.

---

# SIXTY SQUADRON

R.A.F.

## CHAPTER I

### THE FORMATION OF THE SQUADRON

To create a new flying unit is a task which entails much thought and labour, and the formation of 60 had been a matter for the careful consideration of the R.F.C. authorities for many months before the squadron number could appear on any of those manifold returns, without a bountiful supply of which no country seems able to go to war. Vital points for preliminary consideration are: The type of aeroplane and the numbers of this type likely to be available in the future; the engines, and, no less important, the spares which must be procured in adequate quantities if these engines are to be kept in running condition. The training units, too, must be increased in order to keep the new service formation up to strength in pilots. A sufficient number of trained mechanics must be got from somewhere, and these have usually to be wrung from the commanders of other units, themselves already short of trained personnel, and as a rule most reluctant to part with good men.

All these matters were at last decided, and 60 Squadron was formed on May 1, 1916. At that time there were in the Royal Flying Corps about thirty-five service squadrons all told, of which by far the greater number were in France. The Royal Naval Air Service had at this date considerably fewer service units. When the Armistice was signed, there were well over two hundred service squadrons in the Royal Air Force, which had come into being as an independent entity distinct from the Army or the Navy on April 1, 1918. During the months previous to the formation of 60, the Germans, with the aid of the Fokker monoplane, which they produced in the autumn of 1915, had begun seriously to interfere with our artillery observation machines. At this period of the war—early 1916—we had no complete single-seater fighting scout squadrons, but achieved the protection of the artillery machines, mostly B.E.2C.s, by having a few Bristol and other scouts in each two-seater squadron.

As a result of these losses, General Trenchard decided to form some new scout squadrons, of which 60 shortly became one, and also to re-equip some of the existing squadrons with scouts. No. 1 Squadron, for example, was given Nieuports (a French machine), at that time the equal of any German fighter.

No. 60 was formed from No. 1 Reserve Aeroplane Squadron at Gosport. Major F. Waldron, known to his friends as "Ferdy," was the first commander of the new unit. He had previously commanded No. 1 R.A.S., and was a cavalry officer who had been seconded from his Hussar regiment (the 19th), some time before the war, to the R.F.C. He was one of the earlier military aviators. He had been an instructor at the Central Flying School at Upavon and was a first-class pilot. The three original flight commanders (Capt. R. Smith-Barry, A. S. M. Somers, and H. C. Tower) were all three old Etonians. The original flying officers were: Capt. D. B. Gray; Lieuts. H. A. Browning-Paterson, J. N. Simpson, G. F. A. Portal, H. H. Balfour, H. Meintjies, A. D. Bell-Irving; 2/Lieuts. C. A. Ridley, D. V. Armstrong, H. G. Smart, and G. D. F. Keddie.

The observers were: Lieuts. R. H. Knowles and G. Williams; 2/Lieuts. L. L. Clark, H. J. Newton, H. H. Harris, H. Good, C. F. Overy, J. I. M. O'Beirne, W. E. G. Bryant, J. Laurie-Reid, J. N. O. Heenan (A.E.O.), and J. Bigood (A.E.O., wireless).

Usually a new squadron received its machines in England at its home station and flew them over to France. 60 Squadron, however, was to be equipped with Moranes, French machines which were not built in England at that time. Consequently the squadron, with its motor transport, stores, etc., crossed to France by sea, and went to St. Omer, where its equipment was completed.

An R.F.C. squadron had two sergeant-majors: one disciplinary, the other technical. Waldron, when forming 60, chose these warrant officers with considerable discretion. Sergt.-Maj. Aspinall, an old Guardsman brought into the Flying Corps by Basil Barrington-Kennet in the very early days, was the disciplinary warrant officer. He had qualified as a rigger and had tried to learn to fly, but it was as a disciplinarian that he really shone. He played no inconsiderable part in the achievement of whatever success the squadron may have had. He was a first-class soldier, and his instructions to flight commanders in the form of little typewritten lectures were gems of their kind. It should be remembered that at times the casualties in the squadron were very heavy, and officers became flight commanders at an age which would have been regarded as absurd before the war. "The Great Man," as we called him, would explain with profound respect to a captain promoted, most deservedly, at the age of nineteen the necessity for assuming a judicial demeanour when an air mechanic was brought up before him on some minor charge; he would, further, instruct the young flight commander most carefully in the punishments appropriate to each offence, and all this without in the smallest particular transgressing that code of military etiquette which regulates so strictly the relations between commissioned and warrant officers. Only his successive commanding officers know how much of the tranquillity and contentment of the men was due to "the Great Man." The technical sergeant-major, Smyrk by name, was a wizard with an internal combustion engine. He had been employed at the Gramophone Co.'s factory at Hayes in civil life before joining the R.F.C. in 1912, and had a gift for teaching fitters their business. During almost all the war, two fitters a month had to be sent home to assist in the manning of new units, while the squadrons in the field had, in consequence, always to carry a percentage of untrained or partially trained men, who had to be made into experts on the engines with

which they were equipped. The technical sergeant-major had to train these men, and was also the specialist who was called in whenever one of the flights had an unusually refractory engine which had baffled both the flight commander and his flight sergeant. Smyrk was always equal to every call upon him, and a long line of pilots should, and no doubt do, remember him with gratitude, for, after all, the degree of efficiency with which the engine was looked after often meant the difference between a landing in Hunland and getting home.

After a few days at St. Omer we received our machines, which were Moranes of three different types: "A" Flight had Morane "bullets," 80 h.p.; "B" Flight, 110 h.p. Morane biplanes; and "C" Flight, Morane "parasols."

Of the "parasol," a two-seater monoplane, it is unnecessary to say very much, as they were soon replaced by "bullets," and "C" Flight did practically no work on them. The machine is best, perhaps, described as a biplane without any bottom planes, by which is meant that the wings were above the pilot's head, a feature which suggested its nickname. It had an 80 h.p. Le Rhone at that time, almost the best air-cooled rotary engine. They were good for artillery registration, as the view downward was excellent; they were very stable also, easy to fly and to land, and, in fact, were "kind" machines, giving their pilots the sort of feeling afforded by a good-tempered, confidential old hunter.

The Morane biplane had a more powerful engine, the 110 Le Rhone, also an air-cooled rotary, and was quite an efficient "kite," as the R.F.C. called them, with its inveterate habit of inventing pet names for its aeroplanes. It was draughty and cold to sit in, but was light on the controls and had a reasonably good performance. This machine was also a two-seater, like the "parasol," with the observer's seat behind the pilot's.



**PATROL OF MORANE "BULLETS" ABOUT TO LEAVE THE GROUND, VERT GALANT, JUNE 1916.**

The Morane "bullet," with a 80 h.p. Le Rhone engine, was quite a different proposition.

This was a monoplane with a fuselage (body) of the monocoque, or cigar-shaped, type and very small wings, giving, therefore, a very high loading per square foot of lifting surface. The speed near the ground was not too bad for 1916, being about ninety to ninety-five miles per hour, but, owing to the high loading on the wings, the machine became inefficient at a height. It had the gliding angle of a brick, as a pilot moodily complained after an unsuccessful forced landing. It is obvious that, if a machine has a very small wing surface, it must be kept going fast, when gliding without the engine, to preserve its flying speed, and this can only be done by keeping the nose well down; hence the unfriendly description quoted above.

Above 10,000 feet it was difficult to turn a "bullet" sharply and steeply without "stalling"; moreover, in bad weather it was very uncomfortable to fly, giving the impression that it was trying its best to kill the pilot all the time. The lateral control,<sup>1</sup> of the "warp" type, was to some extent responsible for this. The armament was a fixed Lewis gun firing through the propeller, which was fitted with a metal deflector—a steel wedge which prevented the propeller being shot through. There was no synchronising gear on any of the Moranes. By this is meant the device by which the detonation of the gun was harmonised with the beat of the propeller; actually the gun is blocked when the blades of the propeller are in the line of fire.

Later on we were given some "bullets" with 110 h.p. Le Rhones, but these were no better, as the loading was even higher with the heavier engine, and their performance above 8,000 feet was consequently poor. The climb for the first few thousand feet was wonderful, as the engine seemed almost to pull the machine straight up.

Generally speaking, the "bullet" was not a success, as it was too difficult to fly for the average pilot. Nevertheless, as several of our pilots, notably Smith-Barry, Gilchrist, Foot, Grenfell, Meintjies, and Hill, and in particular D. V. Armstrong, were considerably above the average, some useful work was accomplished on these machines.

The equipment having been completed, we moved to Boisdingham, between St. Omer and Boulogne, for a few days' practice with the new machines. This was very necessary, as hardly anyone had flown Moranes before.

On June 10 we were ordered to Vert Galant, an aerodrome astride the Doullens-Amiens road, and joined the 13th Wing of the 3rd Brigade R.F.C., operating with the 3rd Army. War flying was started a few days later, and it at once became apparent that our anti-aircraft batteries found difficulty in distinguishing our "bullets" from the Fokkers. In consequence the black cowls of our machines were painted red to help the "archie"<sup>2</sup> gunners, who had been assiduously firing at 60's machines.



**H. BALFOUR AND D. V. ARMSTRONG, JULY  
1916.**



**CLAUDE A. RIDLEY, D.S.O., M.C., IN A MORANE  
"BULLET."**

The work at this time chiefly consisted of offensive patrols, which were supposed to keep the air clear for our corps and bombing machines. Numerous reconnaissances were also carried out. In these days scouts usually worked in pairs, but larger formations of five and six machines were becoming more common; later in the war it was the rule to send out a whole squadron, or as many of its machines as were serviceable, over the line at once; but in 1916 aeroplanes and pilots were, usually, too scarce to send more than two off the ground at once. 9

On August 3, 1916, Claude Ridley had a forced landing near Douai through engine failure when dropping a spy over the lines. His adventures were remarkable. His spy got out, told Ridley to hide for a little, and presently, returning with civilian clothes and some money, told him that he must now shift for himself. Ridley did so with such address that he eluded capture for three months on the German side of the line, and eventually worked his way via Brussels to the Dutch frontier and escaped. This was a good performance, none the worse because he could speak neither French nor German. The method he adopted was a simple one—he would go up to some likely-looking civilian and say, "I am a British officer trying to escape; will you help me?" They always did. He had many interesting adventures. For example, he lay up near the Douai aerodrome and watched the young Huns learning to fly and crashing on the aerodrome; here he saw one of our B.E.s brought down, and the pilot and observer marched past him into captivity; later the conductor of a tram in the environs of Brussels suspected him, but, knocking the man down, he jumped into a field of standing corn and contrived to elude pursuit.

This method of landing spies was not popular with R.F.C. pilots, as there was always quite a chance that one might not be able to get the machine off again, and, anyhow, it was a nerve-racking experience to have to land in a field after a necessarily hurried survey from the air, and wait while your spy climbed slowly—very slowly—out. Later, different and, from the pilot's point of view, improved devices were adopted; the spy was made to sit on the plane with a parachute and to jump off when told. Occasionally they refused to jump, nor is it easy to blame them, so a further improvement is said to have been introduced by which the pilot could pull a lever and drop the wretched agent out through the bottom of the fuselage, after which he parachuted down to earth. 10

They were very brave men, these French spies who voluntarily entered the occupied territory in this hazardous manner. They were usually dropped either in the late evening or early morning.

---

## CHAPTER II

### THE SOMME

Sixty had not to wait long for its first taste of serious fighting. The "aerial offensive," which always precedes any "push," was already well developed when the squadron commenced war flying. Casualties were heavy, and on July 3, two days after the official commencement of the Somme battle, Ferdy Waldron was shot down and killed on the "other side." He considered it his duty to try and do one job per day over the line, and on this particular morning he led "A" Flight's 80 h.p. "bullets" over at 4 a.m. in perfect weather. The other members of the patrol were Smith-Barry, Armstrong, Simpson, and Balfour. The last-named thus describes the fight: "Both Armstrong and Simpson fell out, through engine trouble, before we reached Arras. Armstrong landed by a kite balloon section and breakfasted with Radford (Basil Hallam, the actor), whose kite balloon was attacked a few days later, and who met his death through the failure of his parachute. Waldron led the remaining two along the Arras-Cambrai road. We crossed at about 8,000 feet, and just before reaching Cambrai we were about 9,000, when I suddenly saw a large formation of machines about our height coming from the sun towards us. There must have been at least twelve. They were two-seaters led by one Fokker (monoplane) and followed by two others. I am sure they were not contemplating 'war' at all, but Ferdy pointed us towards them and led us straight in. 12

"My next impressions were rather mixed. I seemed to be surrounded by Huns in two-seaters. I remember diving on one, pulling out of the dive, and then swerving as another came for me. I can recollect also looking down and seeing a Morane about 800 feet below me going down in a slow spiral, with a Fokker hovering above it following every turn. I dived on the Fokker, who swallowed the bait and came after me, but unsuccessfully, as I had taken care to pull out of my dive while still above him. The Morane I watched gliding down under control, doing perfect turns, to about 2,000 feet, when I lost sight of it. I thought he must have been hit in the engine. After an indecisive combat with the Fokker I turned home, the two-seaters having disappeared. Smith-Barry I never saw from start to finish of the fight. I landed at Vert Galant and reported that Ferdy had 'gone down under control.' We all thought he was a prisoner, but heard soon afterwards that he had landed safely but died of wounds that night, having been hit during the scrap.

"About twenty minutes after I had landed, Smith-Barry came back. He had not seen us, but had been fighting the back two Fokkers, which he drove east, but not before he had been shot about by them, one bullet entering the tail and passing up the fuselage straight for his back until it hit the last cross-member, which deflected the course of the missile sufficiently to save him." 13

This was the end of a first-class squadron commander, and, coming so early in our fighting career, was a heavy blow. If he had lived, Waldron must have made a great name for himself in the R.F.C.

Smith-Barry now took over the squadron. He was a great "character"—an Irishman with all an Irishman's charm. A trifle eccentric, he was a fine pilot. He had crashed badly near Amiens in the retreat from Mons, the first Flying Corps casualty, breaking both his legs, which left him permanently lame. Although beloved by his squadron, his superiors sometimes found him a little trying officially. It is often said, half admiringly, of a man by his friends that "he doesn't care a damn for anyone." I believe this to have been almost literally true of Smith-Barry. He could do anything with an aeroplane, and delighted in frightening his friends with incredible aerial antics. He was a fine, if original, squadron commander, almost too original, in fact, even for the R.F.C., where, if anywhere in the fighting services, originality was encouraged. At a later stage (in 1917) in Smith-Barry's career he rendered a very great service to the Corps and to the country by bringing his contempt for precedent and genius for instruction to bear on the question of teaching pilots to fly. It is no exaggeration to say that he revolutionised instruction in aviation, and, having been given almost a free hand by General J. Salmond, he organised his Gosport School of Special Flying, which afterwards developed into a station where all flying instructors were trained. 14

He has been seen to walk down the Strand in full uniform with an umbrella.

When promoted in 1918 to the command of a brigade, he, having come into conflict with authority, dispatched the following telegrams on the same day to his immediate superior: (1) "Am returning to Gosport. Smith-Barry, Brig.-Gen." (2) "Have arrived at Gosport. Smith-Barry, Lieut.-Col."

Smith-Barry's batman was a French boy named Doby, a refugee from Lille, whom Nicolson, sometime private secretary to General Seely and one of the early pilots of the R.F.C., had picked up during the retreat from Mons and taken back to England with him. When Nicolson was killed at Gosport, Smith-Barry appointed Doby as his batman and, in order to take him to France, dressed him in R.F.C. uniform and called him Air Mechanic Doby. This boy was most useful, being competent to bargain with his compatriots for the goods which the mess required. When a year had gone by and there had been several changes in command, nobody knew his history, and he was regarded as a genuine member of the Corps. History does not relate how he was eventually "demobilised." 15

This, then, was the kind of man who took over the squadron on Waldron's death—at a critical point in its career.

Those who were most conspicuous during the battles of the Somme were: Ball (who joined from 11 Squadron in August), Summers and Tower (two of the original flight commanders), Gilchrist, Latta, Grenfell, Meintjies, A. D. Bell Irving, Phillippi, Hill, Foot, Vincent, Armstrong, and Walters. Foot, as one of the most skilful pilots, was given a "Spad," on which he did great execution during the autumn.

The fighting was mainly over places like Bapaume, Courcellette, Martinpuich, Busigny, St. Quentin, Cambrai, Havrincourt, etc.

Ball began to show very prominently about this time, several times destroying two or more hostile aeroplanes, and hardly a day passed without at least one Hun being added to his bag. Much has been written

about Albert Ball, so much that at this date it is difficult to add anything of interest to the accounts which are already so widely known; but this at least can confidently be said, that never during the war has any single officer made a more striking contribution to the art of war in the air than he, who was the first to make what may be called a business of killing Huns. He allowed nothing to interfere with what he conceived to be the reason of his presence in an aeroplane in France—the destruction of the enemy wherever and whenever he could be found. He was a man—a boy in truth—of a kindly nature, possessed by a high sense of duty and patriotism. These months (August and September 1916) saw Ball at his best, and though it is true that he was awarded the Victoria Cross after his death in an heroic fight in the spring of 1917, when he was a flight commander in 56 Squadron, yet it was in the summer and autumn of 1916 in 11 and 60 Squadrons that he began to show the Flying Corps what fighting in the air really meant. The copy of a report rendered to R.F.C. H.Q. is given below:



**SUMMERS STANDING-BY HIS MORANE  
"PARASOL."**



**MAJOR R. SMITH-BARRY IN A MORANE  
"BULLET."**

"Lieut. Ball has had more than twenty-five combats since May 16 in a single-seater scout.

"Of these thirteen have been against more than one hostile machine.

"In particular, on August 22, he attacked in succession formations of 7 and 5 machines in the same flight; on August 28, 4 and 10 in succession; on August 31, 12.

"He has forced 20 German machines to land, of which 8 have been destroyed—1 seen to be descending vertically with flames coming out of the fuselage, and 7 seen to be wrecked on the ground.

"During this period he has forced two hostile balloons down and destroyed one.

17

*"(Sgd.) J. F. A. HIGGINS,  
"Brigadier-General,  
"Commanding 3rd Brigade R.F.C.*

*"IN THE FIELD,  
"Sept. 1, 1916."*

Of the others, Latta became a wonderful pilot; Gilchrist, a gallant South African, commanded 56 at the end of the war and became one of the very best instructors under Smith-Barry at Gosport; Roderick Hill, a fine pilot, is also an artist of no small reputation; A. D. Bell Irving worthily upheld the traditions of an heroic Canadian family whose name will always appear prominently in any history of the Air Force; while Meintjies, also a South African, though young, himself displayed an infinite patience, together with a wisdom far beyond his years, in the introduction of new pilots to the hazardous game of aerial fighting as practised on the Western Front, of which he himself was a first-class exponent.

As for D. V. Armstrong, a South African, who was killed in a crash just as the war had ended, and who after leaving 60 became a brilliant night-flying pilot, the following letter from Col. Small will give some slight idea of the work done by him in 151 Night Fighting Squadron.

"At 10.40 on the night of September 17/18, whilst on patrol east of Bapaume, Capt. Armstrong observed a Gotha biplane caught in a concentration of searchlight at 8,500 feet, with a Camel machine behind it.

18

"Seeing the Camel was not engaging the E.A. (enemy aeroplane) from a sufficiently close range, this officer dived down, coming in on the E.A.'s right. He closed right up under its tail and fired 100 rounds into it. The E.A. then burst into flames and dived to the ground, where it burst into pieces just east of Bapaume.

"On the night of September 10/11, 1918, on receipt of a report that E.A. was over the 4th Army front, Capt. Armstrong volunteered to go up, although the weather was practically impossible for flying, the wind blowing at about fifty miles an hour, accompanied by driving rain storms. In spite of this, Capt. Armstrong remained on his patrol 1 hour 5 minutes, although his machine was practically out of control on several occasions. On landing, his machine had to be held down to prevent it being blown over.

"On the night of August 6/7, 1918, Capt. Armstrong attacked Estrées-en-Chaussée aerodrome. After dropping three Cooper bombs on the hangars from 600 feet, he observed an E.A. coming in to land. Capt. Armstrong then closed under the E.A.'s tail and opened fire from fifteen yards' range when at 700 feet. The E.A.'s observer answered the fire, and then suddenly ceased altogether. Capt. Armstrong continued firing until the E.A. suddenly turned to the right with nose down and crashed on its aerodrome, bursting into flames as it struck the ground. This officer then dropped his fourth bomb on the wreck and fired a further burst into it, returning to his aerodrome with all ammunition expended.

19

"On the night of August 8/9, 1918, although the clouds were at about 500 feet, this officer flew to the same hostile aerodrome, but finding no activity there and seeing no lights whatever, he flew to Cizancourt Bridge, dropping his four bombs upon it from 500 feet.

"On this night he was unable at any period to fly at over 800 feet, owing to low driving clouds and a very strong wind.

"Capt. Armstrong attacked aerodromes as follows on the dates shown:

"MOISLANS, 3.15 a.m. to 3.30 a.m. on August 21/22, 1918, dropping two incendiary and two Cooper bombs from 400 feet on hutments and tents, although subjected to the most accurate and fierce machine-gun fire from the ground and his machine being brightly illuminated in the glare of the incendiary bombs.

"ESTRÉES-EN-CHAUSSÉE, on the night of July 31—August 1, 1918, dropping four bombs on landing lights from 500 feet.

"Capt. Armstrong took part in the defence of London against all but three raids by E.A. between September 1917 and June 1918.

"This officer has been the right hand of his squadron commander since the formation of his squadron, and has, by his wonderful flying, taught the pilots of 151 Squadron more than any other instructor could possibly have done. He has demonstrated to all pilots daily the only successful method of attack at night against E.A. by personal supervision of their flying.

20

"As a flight commander I cannot speak too highly of him and his wonderful spirit at all times. His bravery as a pilot at all times and in all weather conditions cannot be surpassed, and I am unable to recommend him too strongly for this decoration.

*"B. C. D. SMALL,  
"Lieut.-Colonel,  
"Commanding 54 Wing R.A.F.*

*"Sept. 19, 1918."*





**BROWNING PATERSON WITH HIS  
MORANE "PARASOL."**



**CAPT. D. V. ARMSTRONG.**

It was about this time that "balloon strafing" was invented by Headquarters. Three Le Prieur rockets of the ordinary type were attached to the interplane struts on each wing; these were fired by means of an electric bell-push in the nacelle (or pilot's seat), and if they hit the hostile kite balloon, were guaranteed to send it down in flames. The effect of this extra load was to make the machine singularly unhandy when fighting, but it must be admitted that they did effectually set hostile kite balloons alight if the pilot was sufficiently resolute to restrain himself from pressing the button until he was within 150 yards of the object balloon. This sounds much easier than, in fact, it was, as hostile balloons were usually found as low as 2,500 feet, and the wretched pilot had to contend with heavy gunfire from the ground, while always remembering that he was some considerable distance over the line and had sacrificed his height in order to approach the balloon. The aeroplane of those days would glide about one mile per 1,000 feet in still air, and, remembering that the balloons were usually at least two miles behind the line and that the wind was almost always from the west, it will be obvious that, if the engine was hit, there was very little chance of gliding back over the trenches. Hence it will be readily understood that balloon strafing was not enormously popular among junior flying officers.

Nevertheless, Gilchrist, Bell Irving, Summers, Phillippi, and Hill all successfully brought down hostile kite balloons during the Somme battles (September 1916).

Later, in 1917, Buckingham incendiary ammunition was used for destroying balloons. This change was greatly appreciated by the R.F.C., because the handiness of the machine was not impaired, as was the case when the Le Prieur rockets were carried.

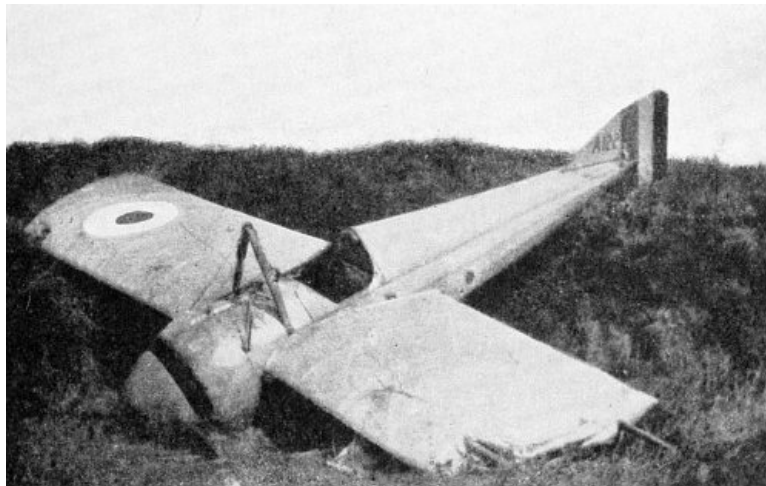
From Vert Galant the squadron moved to St. André on August 3, 1916, to refit, having only five pilots left. There the first flight of Nieuport scouts was received and, after a fortnight, another move was ordered to Izel le Hameau on August 16. This was an aerodrome we were destined to occupy again during the Arras battle. We here became a homogeneous unit completely equipped with Nieuport scouts, and moved three miles away to Savy, midway between Arras and St. Pol, early in September. Here, during November, little flying was possible owing to continual rain and fog, and the squadron settled down, almost in the Roman manner, into winter-quarters. Savy Aerodrome stood just above the village of that name, and while "C" Flight were accommodated in huts on the aerodrome so as to be near their machines in order to deal quickly with any Huns who were bold enough to cross the line, the remainder of the squadron were billeted in the Mayor's château in the village itself, some half a mile away. Here pigs and turkeys were kept, out of which the mess made a good profit, and which, in addition, provided both an excellent Christmas dinner for the men and the material for the farewell banquet to Smith-Barry, who was posted to Home Establishment early in December. This dinner was somewhat memorable. The guests included General Higgins (the brigade commander), Pretzman (the wing commander), Col. Lewis and Barnaby of the "archie" gunners, Robert Loraine and several other squadron commanders. The squadron band, organised by Vincent, performed during dinner with great vigour. Led by Sergt. Nicod at the piano and conducted by Vincent himself, it helped to enliven the evening very considerably. 22

In addition to the band, the squadron ran at this period both a Rugby and an Association football team. The Rugby side was for a time invincible, the leading players being Middlemas, the wing machine-gun officer, an old Cambridge Blue and a fine three-quarter; D. Bell Irving and Giles, a first-class pair of halves; and Meintjies, a tower of strength at full back. The Soccer team also won many matches, captained by the "Great Man," Sergt.-Maj. Aspinall; while the stores sergeant, a league player, was the star performer at centre-forward. Matches were very difficult to arrange, as they had to be postponed if the weather was fine, and could only take place, therefore, on thoroughly "dud" days, to use the inevitable R.F.C. expression. 23

Smith-Barry was succeeded by Major E. P. Graves, a regular gunner, young in years, who had crashed a Gnome Martinsyde scout at Netheravon early in 1915 and spent many months in hospital, emerging towards the end of that year permanently lame but quite fit to fly. He had been staff captain and brigade major to General Higgins at home when recovering from his injuries, but as soon as he became fit gave his General no peace until he was allowed to go to France in a fighting unit. He got posted to 20 Squadron as a flight commander early in 1916, and had been sent home again on promotion to command a training squadron after six months of very good work in France. Soon after he had taken over, the squadron was moved from Savy back to Izel le Hameau, the correct name of the station being Filescamp Farm. Here, with the aid of the local R.E. and thanks to Graves's tireless efforts, an almost ideal little station was created in the orchard adjoining the great grey walls of M. Tetus's demesne. This was a very old and picturesque house, half farm and half château, and was removed some two miles from a main road or railway line, a circumstance which prevented the aerodrome being bombed at night for a very long time, as it was hard to see from the air. An admirable mess, with a large brick fireplace, corrugated-iron hangars, together with Nissen huts for the officers and N.C.O.s and good accommodation for the men, were all built by the sappers. At this station in M. Tetus's orchard the squadron found a quiet retreat when not actually engaged with the enemy. It is, perhaps, appropriate here to observe that every pilot at this time did, on the average, three patrols in two days over the line, and seldom returned to the aerodrome without a brush of some kind with the Boche. The contrast between our quarters and those occupied by the infantry and gunners in the line was striking. We had cream at every meal, and a hot bath—made by digging an oblong hole in the turf and lining it with a waterproof sheet—whenever we felt inclined. That the mess was good was largely due to Dobson, a 19th Hussar, partly paralysed as the result of a fall when riding in a steeplechase before the war, who was the recording officer at this time, having vainly tried to qualify as an observer in spite of his disability. 24 25



**SOME OF THE OFFICERS OF 60.**  
*Front row: Bell Irving, Reid, and Meintjies.*



**MORANE "BULLET" CRASHED BY SIMPSON.  
 BOISDINGHEM, JUNE 1916**

During the early months of 1917 there was a very hard frost, which made it difficult for the Germans to start their engines, most of which were water-cooled stationaries, but did not affect 60's air-cooled rotaries, though both sides found that their machine guns were almost useless owing to the extreme cold. This frost lasted till mid-February.

Below will be found the first of a series of letters written by Molesworth, who joined the squadron at this time. They have been inserted as far as possible whenever the narrative reaches the events which they describe.

"60 SQUADRON R.F.C.,  
 "B.E.F., FRANCE.  
 "March 1917.

"It has been snowing hard all day, so at last I have a chance of sending you a scrawl.

"Well! old bean, I had my first trip with my flight commander over the lines on the 2nd. My word! it was some trip too, I can tell you. I was posted to 'A' Flight and allotted a machine. Having interviewed my C.O. with much fear and trembling, I was told that he would take me up to the lines to have a look round. My job was to watch and follow my leader, look out for any Huns and get a good idea of the ground. By this time I had got well acquainted with my machine, or 'grid,'<sup>3</sup> as it was generally called by one of our Colonial flight commanders, and felt quite confident that, if we met any Huns, I could give them a pretty hot time.

"We started off late in the afternoon, climbing to about 8,000 feet. The view was wonderful—the ground covered with a thin coating of snow, while far away one could see the incessant flashing of the guns near the battered old town of Arras. White clouds floated in the ground mist over the eastern horizon like great icebergs, their tops tinged with a wonderful pink which one only sees in the air.

"I shall never forget that first impression of the battle-field from an aeroplane; it was so different to the

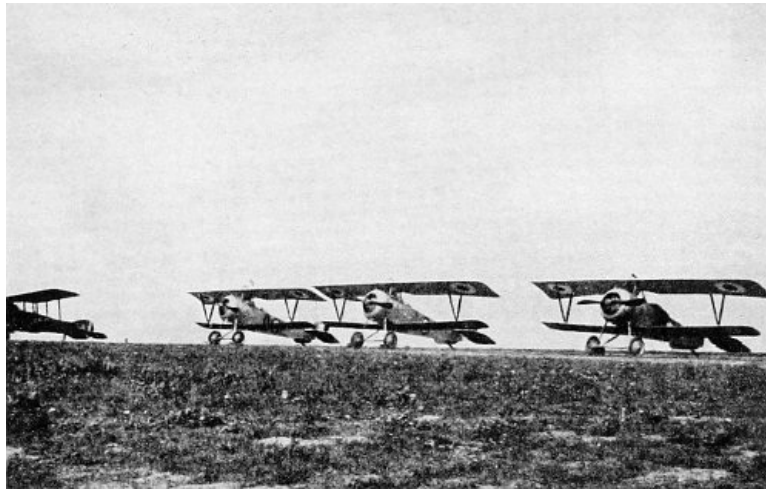
sights of war on the ground. No Huns were on view, but a few of our artillery machines were still working. We turned home and landed in the dusk.

"I don't think I told you about a Boche we brought down last week. We got him quite near the aerodrome—apparently he had lost his way in the clouds. He appeared out of them at about 3,000 feet over our heads. Of course, every available machine dashed off in pursuit, and caught him up in a few minutes, as he was forced to turn from the lines by some old F.E. Birds.<sup>4</sup> They all went for him, and he had to land in a ploughed field near-by. He put the machine down quite well, without crashing anything, but one of his pursuers, who belonged to the squadron next to us, turned upside down in his excitement when landing. However, he did not hurt himself, and managed to prevent the Hun from setting his machine on fire, by holding a Very pistol<sup>5</sup> at his head.

"Afterwards I had a chat with the prisoner in French, and found out that he was a star pilot, having a number of our machines to his credit and the inevitable Iron Cross.

"I am all out for getting a Hun now, and hope to be able to tell you, when I next write, that my name has appeared in *Comic Cuts*."<sup>6</sup>

The Nieuport scout deserves a short description, as it was on the successive types of this aeroplane that nearly a year's work was done, from September 1916 to July 1917. This single-seater fighter was a French machine, and one of the most successful in its day which our allies ever produced. The various types of this make with which the squadron was at different times equipped—15, 16, 17, 21, 24, and 29—showed a continuous improvement in performance, though all had the same engine, 110 h.p. Le Rhone, which itself was modified slightly and converted into a 120 h.p. engine by the substitution of aluminium for cast-iron pistons. Through all the modifications introduced in each successive type the machine preserved its essential characteristics. It was a biplane, but its lower planes were non-lifting and only operated to stabilise the machine to some extent in flight; the top planes were streamlined with the pilot's eyes, giving him the free view which is essential in a fighting scout. It may be said that it was mainly this characteristic, that it was good to see out of, that made the Nieuport, in 1916, the best fighting machine on either side. Strong in construction and very handy, it could turn inside any German aeroplane we ever encountered. It was not very fast, but, with an exceptionally good climb to 10,000 feet, it was no bad "grid" on which to go Hun-hunting between the sea and the Somme. It was armed with a single Lewis gun carrying a double drum with ninety rounds of .303 ammunition and two spare drums. The gun was mounted on the top plane and fired over the propeller at an angle slightly above the horizontal. The earlier Nieuports were all treated with a bright silver-coloured "dope"—the substance used to tighten the fabric—and when properly turned out had a very smart appearance.



**"A" FLIGHT AWAITING SIGNAL TO PROCEED ON PATROL, MAY 1917.**



**THE KAISER DECORATING VON RICHTHOFEN,  
WHOSE AEROPLANE APPEARS BEYOND THE GROUP.**

Hindenburg and the German Crown Prince figure in the group on the left.

Another characteristic of all types was the V-shaped interplane strut, which, although the Germans also used them in their D3 Albatros, made the machines easy to recognise in the air. 29

In conclusion, the Silver Nieuport was a good machine to fight in, but a bad one either for running away or for catching a faint-hearted enemy, as its best air speed, even near the ground, rarely exceeded ninety-six or ninety-seven miles per hour.

---

## CHAPTER III

### ARRAS

With the beginning of March 1917, the Boche became very active in the air. The D3 V-strut Albatros appeared in numbers on the 3rd Army front, and about the same time a squadron of red-painted machines of this type, known to the R.F.C. as "the Circus," did a good deal of damage to British machines and annoyed us very much. One aeroplane in particular, called the "Pink Lady" on account of an absurd story that it was flown by a woman—the machine itself was coloured bright red—was often seen between Arras and Albert. It is thought that the pilot was Freiherr von Richthofen the elder. This machine it was that, venturing well over our side of the line on March 6, 1917, crashed an F.E. and went on and engaged and shot down Evelyn Graves, whose machine caught fire. When picked up, he was found to have been shot through the head, so that he was spared the pain of death by burning.

After Evelyn Graves's death, A. J. L. Scott, of the Sussex Yeomanry, was appointed to succeed him. He was a flight commander in 43—a Sopwith two-seater squadron—and was also lame as the result of a crash during the early part of the war, being the third lame squadron commander in succession appointed to 60. 31

Scott took up his appointment on March 10, 1917, about the time that the aerial offensive precedent to the Arras battle began to develop.

There had been, on the 3rd Army front, a lull during January and February, and by a lull is meant that pilots were doing one job a day instead of the two that they were almost certain to be called upon for when business was good. The casualties lists show this clearly, as, though E. O. Grenfell and Gilchrist were wounded in December, there were only two more casualties until Evelyn Graves's death in March—R. Hopper, killed on January 11; and E. G. Herbert, wounded on the 28th. February passed without the loss of a single officer. This was due mainly to the month of hard frost referred to above, which kept the Hun machines on the ground. Even when machines did meet in the air at this time, it was very difficult to get the guns to fire, so that on several occasions the pilots, after manœuvring round one another for a while, waved hands and went home. A non-freezing gun-oil was brought out before the next winter, which put an end to these not altogether unwelcome interludes to the sterner business. Mention of Grenfell's wound calls to mind the occasion on which he received it. An O.P. (offensive patrol) led by him, and consisting of Caldwell, Daly, Whitehead, Weedon, and Meintjies, met a two-seater Albatros over Dainville on our side of the line. All our machines opened fire, and the Hun hurriedly landed. Grenfell, anxious to get down and claim him, crashed and broke his leg, while all the other five machines landed, and three of these also crashed, not so seriously as to injure the pilots, but enough to prevent them taking off again. Thus the Hun in one field was flanked by a crashed Nieuport in every adjoining enclosure, while, to make matters worse, the Boche observer—who, unlike the pilot, was not wounded—set fire to his machine to prevent it falling into our hands. The machine shortly exploded, seriously injuring the observer and several of our own infantry who by that time were standing by. If these had grasped the situation a little more quickly they could easily have prevented the destruction of the machine, which it was important to preserve. 32

The battle of Arras, as it came to be called, was now imminent, and would probably have commenced before April 10 but for an unexpected move on the part of the enemy. On March 30, the first clear day after a spell of bad weather, the first patrol to land reported thirty or forty fires in the tract of country east of the Arras-Albert sector. Every village for ten or fifteen miles back was alight. At first we could not understand what it meant—for although an R.F.C. squadron knew a good deal more of what was happening than a battalion in the line, still we did not always fully comprehend the meanings of the incidents we reported, which the G.H.Q. Intelligence Staff could, no doubt, interpret with the help of reports from their numerous other sources of information. 33

The German retreat of March 14 came, therefore, as a complete surprise to us. For, even at this stage of the war, we had become so used to hearing that the enemy's *morale* was undermined, and that their troops were unwilling to fight, etc., that we had ceased to take much notice of these stories, the truth of which—for they were true—only became manifest nineteen months later.

The next two days, the 14th and 15th, were days of stormy weather, in spite of which patrols were continually sent out to try and ascertain the depth of the withdrawal and to locate the new German positions. The rough-and-ready way in which this was done was to fly low until we came under fire from anti-aircraft guns or rifles and machine guns on the ground. Molesworth, in a letter, gives quite a graphic account of this retreat as follows:

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"March 1917.

"No luck for me in the Hun line yet, although the beggars seem to be running on the ground all right.

"Three of us went out the other day, and had the most hectic time. The clouds were about 3,000 feet and very dense, with gaps here and there. We crossed the lines and expected to get it pretty hot from Archie,<sup>7</sup> but, strangely enough, nothing happened. Heading towards Croisille, we came out of a thick cloud and saw a most extraordinary sight. For miles around every village was a blazing mass with smoke columns, like great water-spouts, ascending upwards to the clouds. Along the roads one could see lines of retreating men making for the Hindenburg defences, which we could plainly distinguish owing to the amount of barbed wire entanglements round them. Suddenly we were met by a perfect tornado of bursting 'archies,' and so were forced to turn into a cloud. This cloud was so thick that we all promptly proceeded to lose ourselves. I looked at my compass<sup>8</sup> and saw that it was pointing west, so carried on. At last, after about half an hour's flying, I found myself alone in an opening in the clouds. Below me were dozens of shell-holes filled with water; round about, black clouds and sheets of driving rain. I knew I was somewhere near the lines, and yet could not decide in which direction to turn. Trusting to the compass I still pushed on west, and at last the 34

shell-holes disappeared. Just as my petrol was giving out I spotted some hangars. There was nothing for it, so I decided to land. Coming down to about 200 feet I did a half-circle to get into the wind, and to my utter disgust saw a large party of Germans on the ground. I therefore made up my mind that it must be a Hun aerodrome. No machines were out, owing to the 'dud' weather, so I landed, jumped out of the machine, seized the Very pistol, and was just going to fire it into the grid when I saw, to my amazement, two mechanics in khaki coming across to give me a hand. I tell you, I have never been so bucked to see anyone in khaki before. Evidently the party I had seen were German prisoners. When the old kite had been filled up I pushed off again, and got home after about an hour's run. On arrival I heard that the other two had lost themselves as well, but had managed to get back. In future I shall take jolly good care to get to know the country better before playing about in clouds."

35

On the 17th and 18th the weather became too bad to fly, and an "excursion" was organised in tenders to the nearest points of the old front line, Ransart and Monchy-au-Bois, near Adinfer Wood; this last-named had been the home of a peculiarly accurate enemy "archie" gun for many months past. At the latter place skeletons of French soldiers still hung in the wire, where they had been since September 1915 at least.

The systematic and deliberate devastation of the evacuated country made a great impression on all our pilots, who were also thrilled to see the very trenches which the enemy's troops had occupied only a few days earlier. It seemed wonderful to see the marks in the muddy sides of the trenches made by German feet and elbows, and the clips of rifle cartridges laid on the fire steps by their sentries less than a week before. Absorbingly interesting, too, to explore their dugouts, and to trace the routes by which their troops came up into the line from the rest billets behind. All the roads had been blown up, and every house in each abandoned village was most efficiently destroyed, except in a few cases, like Bapaume town hall, where delay action mines had been prepared.

36

One of the most impressive sights was the German cemetery, which was to be found in almost every hamlet, carefully laid out and extremely carefully tended, with monuments, cement steps, and ornamental shrubs symmetrically disposed amid the ruins of the houses among which it stood.

There were souvenirs enough for an army, let alone a squadron, and we were fortunate when collecting them not to fall into a single "booby trap," such as a helmet which exploded when picked up. This expedition is also described by Molesworth in another letter:

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"March 1917.

"The rumour about leave is true, so my turn ought to come in a few days as my name is next on the list. The weather has been hopeless lately for aviation. Yesterday some of us decided to go and have a look at the old Boche trenches. We chose the ones west of Adinfer Wood, as they were less likely to be mined than those further north.

37

"Having seized a tender, we pushed off after breakfast towards the line. We got to our front trenches at about ten o'clock, and left the tender here, as the road was still in pretty bad repair. No Man's Land was dotted about with shell-holes. A few broken stumps of trees lined the road—war-worn veterans that had stood the test of battle. (Amongst other souvenirs, I am bringing you back a walking-stick made from a branch of one of these.) There was a wood, or what remained of it, to our right front, as this part of the line had been very quiet, and was nothing compared to the utter desolation of the Somme or 'Arras' battle-fields.

"The German system of trenches consisted of thick belts of barbed wire, behind which was a trench about 10 feet deep, with platforms and machine-gun emplacements to shoot from. About every 50 yards or so square openings led down to the underground dugouts. The old Hun seems to have lived fairly comfortably, as there were beds and tables here and there, with store-rooms and passages connecting each dugout.

"We went about collecting souvenirs very gingerly, as warnings of booby traps were posted up everywhere we went. But luckily no one was caught out. We managed to collect some tin hats, bombs, Very pistols, and a few other odds and ends, which we loaded into the tender.

38

"I am bringing some of these home.

"Orders have just come through for us to go on another balloon strafe, so I will finish this when we come back if old Fritz doesn't stop me.

\* \* \* \* \*

"(Two hours later)

"Here I am back again, with a Hun and a 'sausage'<sup>9</sup> added to my bag. I am fearfully bucked with life, as the Major has just told me that I have been made a 'flight commander.' No time for any more, as I am just off to have a cheery time with the other lads, who seem to have done pretty well too."

That the enemy knew that the British intended to attack was evident, because the numbers of the aforementioned V-strut Albatros scouts had obviously increased on this front. The performance of these machines was considerably better than the Nieuport, and they had two Spandau guns firing through the propeller; and, moreover, the circus of red machines led, so they said, by Richthofen, was functioning freely throughout the month of March 1917. It is perhaps unnecessary to repeat that the offensive in the air commences always before the push on the ground, and though the latter was timed to commence on April 10, 60 had a hard month to go through before this date arrived. We were short of scout squadrons at this time, and though 48, the first Bristol fighter squadron, and 56, another new squadron equipped with the S.E.5s, had arrived from England, these were to be kept as a surprise for the Boche, and were not to cross the line until "zero day," as the day fixed for the first assault was called. With 56 Ball had come out again from England, and

39

it was during this battle that he was killed, on May 7, 1917, after a severe engagement in which Meintjies, who also had been posted to 56 after a period of rest at home, was badly wounded; the latter is one of the best pilots, and almost the most popular officer, 60 ever had.

The flight commanders at this time, mid-March 1917, were: K. L. Caldwell, who when on leave fell sick and did not return till June. He was a New Zealander, a great friend of Meintjies, and was beloved by everyone. He was a curious instance of a fine and fearless fighter, but a bad shot at this time, who in consequence did not get many Huns; he afterwards remedied this defect and made a great reputation both in 60 and when commanding 74 in 1918. The other two were Alan Binnie, an Australian who had fought with the 9th Division in Gallipoli, and Black, who went sick and was subsequently posted away.

At the beginning of this month (on the day before Graves's death, to be exact) W. A. Bishop joined. The son of a well-known family in Montreal, he had passed through the Royal Military College and had joined the Canadian Cavalry, coming over with his regiment with the first Canadian contingent. On arrival in England he very soon applied to join the Flying Corps, and was posted as an observer to No. 7 Squadron. After a tour of duty in France in this capacity he went home to learn to fly, and was posted to us almost as soon as he had got his wings.



**MOLESWORTH, BISHOP, AND CALDWELL, APRIL 1917.**





**BISHOP, CALDWELL, AND  
YOUNG, APRIL 1917.**

It was curious to notice how quick the mechanics of the squadron were to recognise Bishop's quality. Only a few days after his arrival at the squadron the sergeants gave a musical evening to which the officers were invited, and it was observed that one of the very few toasts which were proposed by them was that of Bishop's health, although at this time he had only destroyed one enemy machine, and none of his fellow-officers had, as yet, any idea of the brilliant career that was in store for him. This occasion, on which he got his first Hun, was remarkable for the fact that his engine failed, and forced him to land very near the front-line trenches. He only, in fact, just succeeded in scraping over. The failure of the engine was due to his inexperience in allowing it to choke while diving. Having landed in a very unhealthy spot, he got rapidly into a dugout occupied by some field gunners, and, with their help, moved his machine every half-hour to prevent the German artillery shelling it. During the night he borrowed a toothbrush from the gunner officer, and with this contrived to clean the sparking plugs of his engine. Having heard nothing of him, the squadron had already reported him missing, when he succeeded in getting a telephone message through to say that he was safe. 41

Our Corps machines, the eyes of the artillery, were being shot down every day in the valley of the Scarpe, despite our efforts and those of 29 (also with Nieuports) and 11, an F.E.2B. squadron. The ground on both sides of the river was littered with B.E.s. The scouts, whose losses were much heavier, fell usually far over the lines in hostile territory.

The work at this time still consisted mainly of offensive patrols (whose business it was to operate east of the artillery machines and to keep the air clear of hostile scouts), reconnaissances, and sometimes escorts to bombing and photographic patrols. On April 7 M. B. Knowles, C. S. Hall, and G. O. Smart—the latter was originally an N.C.O. pilot who had but lately been commissioned for gallantry in the Field—all failed to return after an engagement with a much superior force of the enemy. At this time it was very hard to get all the photographs wanted by the army owing to the enemy's activity in the air, and when special information about some point was required, 60 was sometimes given the job of taking the photographs. It was thought that the Huns would not expect a scout to be doing photography, and they were not over-keen, even at that time, on attacking a scout formation. It was no easy task this, to fly a sensitive single-seater, look out for Huns, and expose plates at the same time, but it was done with some measure of success. Here follows Molesworth's description of a fight: 42

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"April 1917.

"A Hun at last!

"We started out this morning, led by our new squadron commander, who seems one of the best. Our late C.O. was brought down in flames, this side of the lines, in a scrap. He was a very great loss to the squadron, and we buried him, with full military honours, in a little village cemetery near-by.

"There were five of us on the patrol, my position being the rear one on the left. We got to the lines at about 10,000 feet, and crossed them, making towards Douai. Soon we sighted a small patrol of Sopwith<sup>10</sup> two-seaters, north-east of Arras, flying towards the lines as hard as they could go, with a large pack of Huns chasing them. The latter managed to get the last machine in flames, the poor devils going down burning like a furnace. 43

"The Major immediately dived for the Huns, and I knew that I was in for my first real big scrap. The

leader saw us coming, and turned east with his nose well down; however, we soon caught him up and started scrapping. Then ensued the usual dog-fight.<sup>11</sup> I managed to get well behind a Hun two-seater which was a little way out of the scrap. He didn't seem to mind me plugging him a bit, and went calmly on. In my excitement I lost my head, and started spinning madly to the ground. Coming out, I saw an Albatros scout<sup>12</sup> about 50 yards ahead, so loosed off at him and saw him spin<sup>13</sup> and crash on the ground, much to my delight.

"Having lost the rest of the formation<sup>14</sup> I headed for home, and found out, on landing, that we had accounted for three Huns. The two-seater which I had been trying to worry was known as the 'Flying Pig,' owing to the likeness of the observer to that rotund animal.

"Talking about casualties, we have had a pretty hot time the last few days. However, twenty Huns have been accounted for during this time, and many more sent down out of control,<sup>15</sup> so we hope to put up a record in the R.F.C."

From the last week in March to the last week in May our losses were very severe (see Appendix II); in fact, counting those who went sick and those injured in crashes on our side of the line, we lost thirty-five officers during these eight weeks, almost twice the strength of the squadron, which consisted of eighteen pilots and the squadron commander. One week-end in April, the 14th, 15th, and 16th, was especially unlucky, as on Saturday "A" Flight went out six machines strong (full strength) and only one returned. Binnie was leading, and was hit in the shoulder when trying to extricate two of his patrol from a cloud of enemies. The blood from his wound spurted all over the nacelle, obscuring the instruments, and in addition his machine caught fire. He extinguished the flames and then fainted when gliding homeward. The machine must have turned west after this, for he woke up in a little park in Lens, having hit the ground while still unconscious, without further serious injuries. He lost his arm at the shoulder, and was a prisoner till the spring of 1918, when he was repatriated, and immediately commenced flying again. He was a very great loss to the squadron, as he was a first-class flight commander, who had already destroyed several Huns and would have got a lot more. On the next day, Sunday, "B" Flight, five strong, lost two pilots: one, Milot, a French-Canadian Major, who was killed; the other, Hervey, who had already gained two Military Crosses as an observer and promised very well, was forced to land on the other side by anti-aircraft fire. On this patrol Bishop, who had just been promoted captain, got two Huns and a balloon, having had five or six combats. On Monday "C" Flight (Bishop's) went out without the flight commander, and only one, Young, returned; this meant that in three days ten out of eighteen pilots were lost, and had to be replaced from England by officers who had never flown this particular type of machine, because there were none in England. Our new machines were collected from Paris, and the chance of a trip to fly one back was eagerly looked forward to by every pilot. Some of these new machines were not well built, and began—to add to our troubles—to break up in the air. Lieut. Grandin's fell to bits while diving on a hostile two-seater, though this may have been due to injury from machine-gun fire. Caffyn's and Brackenbury's collapsed when practising firing at ground targets on the aerodrome, and the former was killed; while Ross's wings folded upwards when pulling out of a dive after firing a burst; he was badly injured, but has since recovered. A good show was that put up by Penny, who, when his left lower plane came off while diving on a Hun, contrived to fly the machine back and to land at one of our aerodromes, and quietly reported to the squadron commander as follows: "My lower plane came off, so I thought I had better land. Sorry I left the patrol, sir." The reason for these accidents was that badly seasoned wood was being used by the French manufacturers, who also allowed a lot of little screws to be inserted in the main spars, thus weakening them considerably. H.Q. were informed and the matter was put right.

During this battle the R.F.C. began to take a hand in the ground operations by machine-gunning support troops during an attack. "C" Flight led by Fry, who was given an M.C. for this, did well on May 11, by shooting up the enemy in a cutting east of the chemical works at Roeux, in the valley of the Scarpe. These pilots came back, having exhausted their ammunition, refilled with petrol and 300 rounds, and dashed off again to the chemical works without waiting for orders. One of them, E. S. Howard, who was killed seven days later on an escort to machines doing photography, thus described this adventure:

*"May 13, 1917.*

"On Friday night the infantry made an attack east of Fampoux and we were told off to assist them. When they went over the top, we dived down and emptied our machine guns into the Hun trenches. Our people put up a wonderful barrage; it was good to see, but not at all nice to fly over, as the bursts from the shells threw the machines about. We have just come back from a show, chased four Huns away over their lines, and then flew round keeping our eye on them so they could not come back."

This "low flying," as it was called, became more popular with the higher command, though not with the pilots, as the war went on, and in fact, during the German offensive of March 1918, it was said to have very materially helped to stop the Boche advance on the 5th and 3rd Army fronts.

Hostile balloons also were constantly attacked during April and May, and Bishop, Ross, Molesworth, and Penny did considerable execution. Others who were doing well at this time were Langwill, Hall, J. Elliott, Smart, and F. Bower; the last-named on April 2 pursued, with his patrol, six hostile scouts a long way east of Douai in a very strong westerly wind, and though shot through the stomach and with his intestines hanging out, he flew west and landed his machine near Chipilly, completely undamaged except from enemy bullets. He died next day, and his machine was flown back to the squadron without having had to be repaired by another pilot. A fight as a result of which R. B. Clark, an Australian, was killed on April 30 is well described below:

"60 SQUADRON R.F.C.,

"B.E.F., FRANCE.

*"April 1917.*

"We are all feeling rather down in our luck to-day, as news has come through that one of our chaps has 'gone west' in hospital. He put up an awfully 'stout' show against the Hun.

"It was on one of our big balloon shows. He was attacked by three Hun scouts just after firing at the 'gas-bag.' He scrapped them all the way back to the lines, crashing one of them, and holding the other two off. As he crossed the trenches, one of them plugged him in the petrol tank, and his grid caught on fire. As he was only about 50 feet up, he managed to get her down in the shell-holes, or rather a strip of ground between them, without burning himself badly. Luck was all against him, however, as he just tumbled over into a trench at the end of his run. A few men who were in an advanced dressing-station near-by quickly came to his rescue, and hauled him clear of the burning wreckage, but the poor devil was by this time badly singed about the legs. He insisted on giving his report before allowing the doctor to attend to his burns, and the men told me afterwards that he was extremely plucky.

49

"The day after this occurred, I was detailed to find the machine and see if it could be salvaged. The weather was absolutely vile. We started for Arras with a tender and trailer,<sup>16</sup> got there about noon, and commenced making inquiries as to where the machine had crashed. One place was pointed out to us where there was an old 'quirk,'<sup>17</sup> which had obviously been brought down doing artillery work. Then we were sent off in another direction, only to find the remains of an old Boche two-seater. At last, after an hour's wading in trenches with mud up to our knees and shells bursting near us, we arrived at the advanced dressing-station. Here we were given a full description of the fine way in which our pilot had fought.

"The machine, needless to say, was a total wreck, and so, after a cup of tea with a drop of gin in it to warm us up, we pushed off home, followed by some heavy shells which we knew meant the commencement of the 'evening hate.'"<sup>18</sup>

Hardly a day passed during April and May without Bishop destroying at least one Hun machine, and on June 2, 1917, he visited an enemy aerodrome near Cambrai—a long way over—by himself at dawn and found seven machines on the ground with their engines running. They began to take off and he destroyed four, returning safely with his machine considerably shot about by machine-gun fire from the ground. For this exploit, after three months of remarkably fine work, he was awarded the Victoria Cross. Others who were prominent during the battles of Arras and Vimy Ridge were: Pidcock, "Red" Lloyd and "Black" Lloyd (the latter, a fine officer, was unfortunately shot down and killed), and Fry (who drove down a Hun on our side and found in the pilot's pocket a ticket for a box in Cambrai theatre dated the day before). Molesworth also was doing well; he afterwards went to 29 on a second tour of duty with the R.F.C. in France (he had already seen service overseas with the infantry), where he did most brilliantly during the winter of 1917-18. His account of a successful balloon attack is given here in full:

50

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"April 1917.

"Still more excitement! I tackled my first balloon yesterday, and consider it even more difficult than going for a Hun; at least, I think one gets a hotter time. We had received orders a week ago that all balloons *had* be to driven down or destroyed, as they were worrying our infantry and gunners during the advance.

"We had been practising firing the Le Prieur rockets<sup>19</sup> for some time—a most weird performance. One dives at a target on the ground, and when within about fifty yards of it presses a button on the instrument boards. Immediately there is a most awful hissing noise, which can be heard above the roar of the engine, and six huge rockets shoot forward from the struts each side towards the target.

51

"We did not think these were much of a success, owing to the difficulty of hitting anything, so decided to use tracer<sup>20</sup> and Buckingham bullets instead. These are filled with a compound of phosphorus and leave a long trail of smoke behind them.

"On the morning we were detailed to attack the balloons the weather was so 'dud' that none of them were up, although we went across twice to have a look. We got a pretty hot time from Archie, as we had to fly below the clouds, which were about 2,000 feet, and dodge about all over the shop. Next day the weather cleared and we decided to carry out our strafe.

"We all went off individually to the various balloons which had been allotted us. I am glad to say most of us managed to do them down. I personally crossed the trenches at about 10,000 feet, dropping all the time towards my sausage, which was five or six miles away. It was floating in company with another at about 3,000 feet, and reminded me of that little song, 'Two Little Sausages.'

52

"I started a straight dive towards them, and then the fun began. Archie got quite annoyed, following me down to about 5,000 feet, where I was met by two or three strings of flaming onions,<sup>21</sup> luckily too far off to do any damage. Then came thousands of machine-gun bullets from the ground—evidently I was not going to get them without some trouble. I zigzagged about a bit, still heading for the balloons, and when within two hundred yards opened fire. The old Huns in the basket got wind up and jumped out in their parachute. Not bothering about them, I kept my sight on one of the balloons and saw the tracer going right into it and causing it to smoke.

"As our armament consists of a Lewis gun,<sup>22</sup> I had to now change drums. This is a pretty ticklish job when you have about ten machine guns loosing off at you, not to mention all the other small trifles! However, I managed to do it without getting more than half a dozen or so bullet-holes in my grid.

53

"By this time the second balloon was almost on the floor. I gave it a burst, which I don't think did any damage. The first sausage was in flames, so I buzzed off home without meeting any Huns. On the way back a good shot from Archie exploded very near my tail, and carried away part of the elevator.<sup>23</sup> Don't you think this is the limit for anyone who wants excitement? I must say I prefer it to the infantry, as one gets decent food and a comfortable bed every night, if you are lucky enough to get back.

"I am afraid these letters are awfully full of my own 'shows,' but none of the other chaps will tell me about theirs, so I can't describe them to you; however, it's much the same for all of us. Please forgive me, and don't think it's swank!

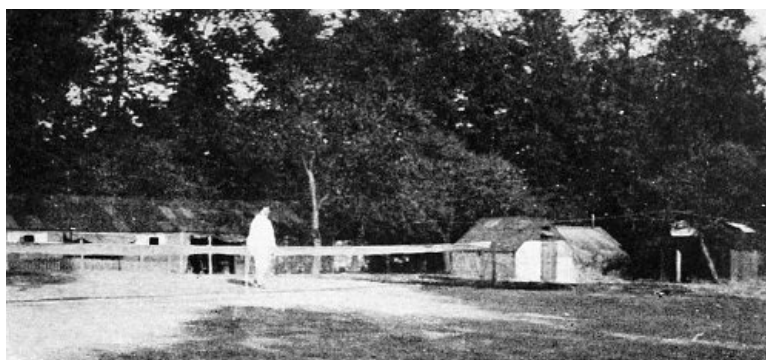
"There are rumours that leave is going to start again soon, so I hope to see you in a few weeks."

One day in early June General Allenby, then commanding the 3rd Army, was to inspect the squadron at nine o'clock in the morning. The squadron commander had gone out by himself in his Nieuport at dawn, unshaved, in pyjamas, a Burberry, bedroom slippers and snowboots, a costume which many of us used to affect on the dawn patrol. The line was unusually quiet that morning, so he ventured almost to Douai, and on turning west saw a formation of eight or nine machines over Vis-en-Artois, near the front line, well below him at about 8,000 feet. They turned, and the sun glinting on the fuselage showed a bright flash of red. This meant that they were Huns, and not only Huns but "the Circus." Having the advantage of height, and as the formation was very near the line, he determined to try and do a little damage. He flew towards them from the east and from the sun, and diving on the top machine, fired a burst and pulled sharply up, being careful to retain his height. After a few dives of this kind without doing much apparent damage, an S.E.5 patrol of 56, which had seen the scrap, hustled up, and a very pretty "dog-fight" ensued, in the course of which one of the Huns detached himself from the mêlée and appeared to be going home. This was the Nieuport's opportunity, so, hardening his heart, he dived right in, making good shooting. The Albatros appeared to take no notice, but flew straight on. (In parenthesis it may be observed that this is a good sign, as it usually means the pilot is dead, for if the opposing machine begins to perform frantic evolutions, the pilot is as a rule very much alive, and not in the least "out of control.") Flushed with excitement, the Nieuport man put the stick (control column) between his knees, and going down on the tail of the Albatros, began to put a fresh drum of ammunition on to his Lewis gun, with which alone this type of machine was armed. While thus busily engaged something made him turn his head to see about twenty yards behind him the white nose of a grim-looking Albatros. Swifter than thought the Nieuport was wrenched to the right, and even as she turned the Albatros's Spandau guns spat out a burst, which riddled the engine and cut the bottom out of the petrol tank, allowing all the remaining petrol to pour on to the pilot's feet. The height of both machines at this moment was about 5,000 feet, the locality just east of Monchy-le-Preux, and but for the attentions of the Boche machine it would have been comparatively easy for the Nieuport to glide back to Arras and perch on one of our advanced landing grounds, or on the race-course; but with a bloodthirsty Hun on one's tail and a dead engine, the problem, however, was not such a simple one. Twisting and turning like a snipe, the Nieuport began to descend, taking care to make his turns as much as possible towards our side of the line. Mercifully the wind was from the east. Close behind followed the Albatros, firing short bursts at frequent intervals, but always wide, because it is not easy to hit a machine whose pilot knows you are there. It was a stout Hun, however, who would not be denied, but continued the chase down to 300 feet, a few hundred yards west of Monchy-le-Preux, when he suddenly turned and flew home to report, no doubt, a British machine destroyed. With a gasp of relief the Nieuport pilot turned his attention to the ground, and, seeing nothing but shell-holes beneath him, made up his mind that a crash was inevitable. Suddenly a strip of ground about a hundred yards long and very narrow, but free from shell-holes, caught his eye, and, putting in a couple of "S" turns, he made a good slow landing. The machine ran on and had almost stopped when a shell-hole appeared, and she ran very gently into it without doing any damage whatever.

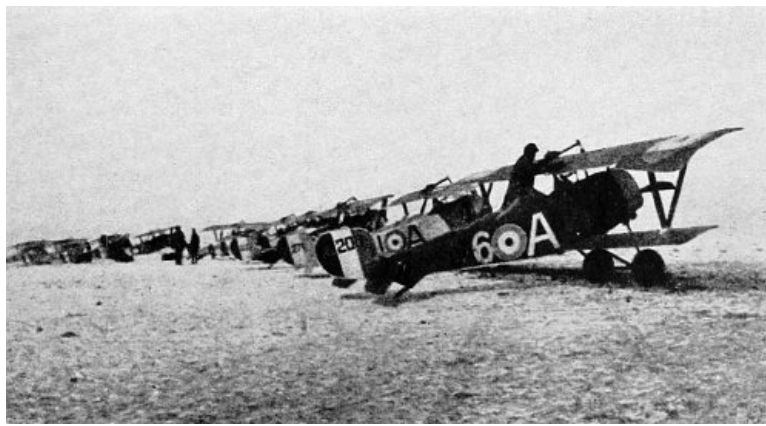
A couple of dusty gunners walked up and before speaking produced a packet of Woodbines, one of which the Nieuport pilot greedily took and lit. Inquiries showed that an advanced anti-aircraft section was near-by, where the officer-in-charge gave the airman breakfast and, better still, produced a telephone, with the help of which he got into communication with his squadron, and ordered a car to come straight through Arras and up the Cambrai road. It was getting late, and an Army Commander's inspection was not a thing to be treated lightly. Further inquiries disclosed an Artillery Ammunition Column in a little valley who lent him a horse and an orderly. There was no saddle, but the pilot climbed gratefully on to the animal, which had very rough paces and a hard mouth, and set out towards the road. In a short time he met the car and drove furiously through Arras and back to Le Hameau, only to see Allenby, the R.F.C. Brigade Commander (General J. R. Higgins), and George Pretzman arriving at the station. His costume being hardly that prescribed for inspections, the wretched officer dived into his hut, did the quickest shave on record, and timidly approached the glittering cortège.

Everyone was furious with him except General Allenby, who was rather amused and very kind. He got, however, a well-deserved and proper "telling-off" from the Brigadier and Wing Commander, and saw the troupe depart with a feeling of profound relief.

The account of this scrap has been given at some length, but it should not be assumed that it was in any way exceptional. It should be remembered that during the squadron's history there have been about 1,500 distinct combats in the air, all of which deserve a detailed description. Within the limits of a book of this kind, however, it cannot be done.



**THE HARD TENNIS-COURT AT FILESCAMP FARM,  
MAY 1917.**



**60 SQUADRON'S NIEUPOINT SCOUTS LINED UP IN  
THE SNOW AT LE HAMEAU AERODROME, NEAR  
ARRAS JANUARY 1917.**

We made a hard tennis-court in Tetus's orchard with red *ierre de fosse* from the Bruay mines, and discovered that Caldwell, Molesworth, Horn, and both Lloyds were all good tennis players. With the beginning of June things quietened down on the 3rd Army front. Colonel Pretzman, O.C. 13th Wing, put the squadron on to wireless interception. This term needs, perhaps, a little explanation. Everyone knows, of course, that both German and British artillery observation machines were fitted with wireless sets, by means of which the pilots corrected the shooting of the gunners for whom they were observing. 58

These wireless messages were "tapped" by our compass stations, and it was discovered that two of these stations could get a cross-bearing on any machines registering for the enemy artillery. By linking up the compass station with an aerodrome by telephone, it was possible to send off a patrol of scouts to chase off or destroy the artillery machine as soon as he began to send down fire signals, i.e. as soon as he was actually directing the fire of the enemy batteries. This was useful, though exhausting work for pilots; for the Hun, who did his registration chiefly in the morning, when the sun was behind him in the east, usually saw the scouts coming before they saw him, and turned and dived three or four miles back behind his own lines, where it was very difficult to attack him, even if he was visible, which usually he was not, as our scouts were looking for a machine at five or six thousand feet in a certain place, whereas it was probably at that moment at a height of 1,500 feet some five miles east of the bearing given. As soon, therefore, as the scouts, seeing nothing, turned back to return to the aerodrome, the Hun swung up again and resumed his registration. The British pilots, on returning to their aerodrome, would find an irate squadron commander who had just got a telephone message from the compass station to say that V.K., or whatever the call sign used by that particular machine might be, was working again quite happily, and, "What the devil was 60's patrol doing, anyhow?" Off the wretched patrol had to go again, only to go through the same performance. It is only fair to say, however, that they did get a good many two-seaters in this way, though the main result was, perhaps, seen rather in the enormously decreased amount of artillery observation the Germans were enabled to do, than in hostile artillery machines shot down by us.

This work, however, was genuinely exhausting, as in order efficiently to answer the compass calls, as they were termed, three or four pilots always had to be standing by to leap into their machines and be off the ground, in formation, inside of two minutes. Nevertheless, they became extraordinarily smart at this manoeuvre, and answered to the hunting horn—doubled blasts of which were the signal at that time—as keenly as a fashionable pack of foxhounds. Only those who know how irritating a thing an aero engine can be when you are in a hurry to start can appreciate the high standard of efficiency attained by 60's mechanics, which made it almost a certainty that the 120 seconds limit would not be exceeded.

The next few paragraphs will show how this manoeuvre struck one of the pilots at this time:

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"July 1917.

60

"The tennis-court we made three months ago is now in topping condition, so we decided to get up a tournament amongst ourselves. Yesterday we drew lots for partners. The unlucky lad who drew me is a 'coloured troop,' that is he hails from South Africa. He is quite good at the 'Willies,'<sup>24</sup> and so I think we have got a fair chance. I expect you wonder where all these weird names come from. They are invented by one of our flight commanders, who is also a 'coloured troop' and one of the leading lights of the squadron. All jobs are washed out to-day as the weather is 'dud,' so two of us are going over this afternoon to the village near-by to purchase articles of furniture for the 'Hôtel de Commerce.'

"You will be pleased to hear that we are getting a new kind of grid. It is supposed to be a good deal faster than the Hun, and can dive to 300 miles an hour, so I'm told. We shall probably have a quiet time while we are getting used to them, and only do 'line patrols' for the first fortnight or so. A French 'Ace'<sup>25</sup> landed here to-day; he says the Huns are getting a pretty bad time down south. Jolly glad I'm not a Hun airman these days, with men up against me like some of our chaps. Most of them are fairly old hands at the game now, and we are really beginning to properly annoy our friends across the way. The work has been fairly hard lately: two patrols in the morning, one generally at dawn and the other about noon, with 'wireless interruption' in the afternoon. The latter is rather a strenuous job. This is how we work it: When a Hun two-seater begins to register on any part of our front, a telephone message, giving his height and locality, is immediately sent through to the wireless squadron. Each scout squadron in the wing takes it in

61

turn. As soon as the Recording Officer<sup>26</sup> receives the message, he sounds a horn. Three of us who are standing by in readiness immediately jump into our machines, and the leader gets hold of the position and height of the Hun. Then we push off as quickly as possible to the lines, and a sort of 'hide-and-see' begins. We try if possible to hide in the clouds and approach the Hun when he is off his guard. He, on the other hand, departs hurriedly into Hunland when he spots us, and as soon as we go he comes back to carry on his job. We then turn on him again, but he is off like a flash, and so it goes on until the next three machines relieve us. It is really quite amusing at times, and, although we do not often bring our man down, we give him such a devil of a time that he hasn't much of it to spare for his companions on the ground. Our 'stunt merchant'<sup>27</sup> is good at this game, and continues to add to his score, seldom coming back without firing his red light. He works by himself a lot now, preferring to surprise the Hun by hiding rather than by trying to get him in a scrap. Wish I could do the same. I always feel so fagged after a patrol, that I haven't got the energy or the patience to sit up in the clouds waiting for a chance to bag a 'lone Hun.'

"You remember the petrol tank which was so shot up the time I was brought down? Well, I am having it made into a topping inkstand. The souvenirs are coming in in fine style, and I hope to have quite a good collection by the time I see dear old 'Blighty' again."

After the battle had died down the sorely tried pilots were given, whenever possible, one day's rest in three, and the following letter shows that the device was appreciated:

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"June 1917.

"It is funny hearing the war again after being on leave so long. We had quite a good crossing, although I had a deuce of a time getting on to the boat at Folkestone. The silly ass of a porter had carted all my baggage on board, including the leave warrant, which was in my British-warm pocket. I had to persuade the A.M.L.O.<sup>28</sup> I wasn't a Hun spy, and, after a long discussion, he let me on.

"The Major seemed pleased to have me back, and they all had great stories to tell about our 'stunt merchant,'<sup>29</sup> who had been putting up a jolly good show by bringing down umpteen<sup>30</sup> Huns. His star turn was the shooting up of an aerodrome. He started off at dawn by himself and arrived over the aerodrome he had planned to attack. Finding that there was nothing doing here, he pushed off to look for trouble elsewhere. Suddenly he saw the hangars of another aerodrome. He attacked these with much gusto, and when the Huns came up to do him down, he crashed two of them and drove another into the trees. He also managed to flatten out a large number of mechanics and put pukka wind up the rest. You can imagine how the fat old Huns ran, as nothing like this had ever happened to them before. I believe his name has been put in for something big in the decoration line.

"It has been arranged that we get one day off in every three, which gives us a bit of spare time. We had ours off to-day. Four of us aviated over to Paris-Plage, near Etaples, this afternoon and tested our grids by firing into the sea. Afterwards we landed opposite the Hôtel Continental and left our machines there under a guard. We wandered about the village for a bit, and then started for home, stunting<sup>31</sup> about to amuse the populace, which had collected on the front to see us off. We all got home safely just as it was getting dark."

---

## CHAPTER IV

### PASSCHENDALE AND THE NORTHERN BATTLES

The centre of interest had now (June 1917) shifted to the North. The Messines Ridge had been taken, though we heard nothing of it till it was over, and many of the Hun *Jagdstaffeln*, as their scout squadrons were called, had moved up to Flanders.

On July 22, Scott, who had been wounded in the arm a few days before, was promoted wing commander and sent to the XI or Army Wing of the 2nd Brigade allotted to the 2nd Army in the Ypres sector. C. K. Cochrane-Patrick, D.S.O., M.C., who had been doing brilliantly in 23 Squadron on Spads, succeeded to the command of 60, who were at that time being re-equipped with 150 h.p. S.E.5s, this being the newest type of scouts, as the Nieuports were by then rather out of date.

Not quite so much fighting was done during July and August, as the change of machines from an air-cooled rotary engine (the 110 h.p. Le Rhone which had served us so well) to a 150 h.p. water-cooled stationary (the Hispano Suisa) naturally took some getting used to. These machines were again replaced in late August with 200 h.p. Hispano Suisa S.E.5s, which, though a more powerful engine than the 150 h.p., was much more difficult to keep serviceable. Nevertheless, Bishop (who was soon posted to Home Establishment—H.E., as the R.F.C. called it), Caldwell, Rutherford, W. Jenkins (afterwards killed in a collision with West-Thompson over Poperinghe), Molesworth, M.C. and bar, Hall, S. B. Horn, M.C. (whose dog Lobo was a squadron pet), and G. Lloyd, M.C. (who was promoted to captain and sent to 40 Squadron as flight commander), were all distinguishing themselves and adding to the squadron's laurels.

66

In the following extract Molesworth again graphically describes a fight in which he was very nearly killed:

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"June 1917.

"Yesterday I had the narrowest shave I've ever had since I first started Boche-strafting. I was properly caught out this time, and really thought things were all up.

"We were just over the Drocourt Switch,<sup>32</sup> near Vitry, when a dozen Huns got what you might call 'uppish.' We tumbled into a proper mix-up and, as there were only five of us, the Huns managed to break up our formation. We had arranged that, should this happen, we were to return to the line independently and re-form, so I started towards Arras, following the Scarpe.<sup>33</sup>

67

"Just as I was passing over Gavrelle I espied three fat Hun two-seaters making south-east.

"'Here we are, my son,' says I to myself. 'We'll just hop down and put the gust<sup>34</sup> up one of these Huns.'

"No sooner said than done. I pushed my nose down and, when within range, opened fire. The next thing I knew was a perfect hail of bullets pouring round me. Here is a rough description of my thoughts during the few minutes that followed:

"Crackle! crackle! crackle!

"'My cheery aunt! There's a Hun on my tail.'

"'By jove! The blighter is making my grid into a sieve. Confound him!'

"'Let's pull her up in a good climbing turn and have a look at him.'

"'Heavens! It's "the Circus."<sup>35</sup>

"'I wonder if old Richthof is the leader. The dirty dog nearly caught me out this time. Silly ass! didn't hold his fire long enough, or he'd have made me into cold meat by now.'

"'Let's give him a dose and see how he likes it.'

"'Here he comes straight at me, loosing off with both guns.'

"'I hope we aren't going to collide.'

"'Missed! Bon! Everything's A1. Wish I'd hit him, though!'

"'I must pull her round quick or he will be on my tail.'

"'Hang! I can't shoot for toffee, but he's pretty "dud," too, thank heavens!'

"'Once again, boys, round with her. Let him have it hot.'

"'No good. Try again.'

"'Confound it! There's my beastly drum empty. I must spin and change it.'

"'Good enough! Now where's the blighter?'

"'My Harry! He has got me stiff this time; here he comes down on me from the right.'

"Crack! crack! crack! bang! zip! zip!

"'There goes my petrol tank; now for the flames.'

"'Cheero! No luck this time, you old swine. Wait till I get you next show.'

"'Here goes for the ground.'

"Luckily for me, my friend and his pals, who had been watching the scrap, thought I was done for. They therefore chucked up the sponge and departed.

"I managed to pull the machine out, just scraping over the trenches. The engine was still running, although the petrol was pouring out all over my legs. A few minutes afterwards the engine conked out

68

69

altogether, and I had to land in a field. I was immediately surrounded by a crowd of men, who had seen the fight. Amongst them were some artillery officers, who took me off to their mess and offered me a 'tot,' which was very thankfully received, while they sent off a message to the squadron. The following is the official list of damage done to my machine:

"Six bullet holes in propeller.

"Cowling<sup>36</sup> shot away.

"Large holes in bottom of petrol tank and sides.

"Main spar<sup>37</sup> right-hand top plane broken.

"Rear right-hand under-carriage strut badly damaged.

"Twenty-eight holes in fuselage<sup>38</sup> and ten in the planes—two or three missing the pilot's seat by less than an inch."

During the 3rd Corps' attack on August 19, 1917, Lieuts. Jenkins, Steele, Thompson, Rutherford, and Sergt. Bancroft did good work shooting up infantry in trenches and by harassing the troops assembling for counter-attacks.

On September 7, 1917, the squadron was moved up to the XI Wing to help in the battles for the Passchendale Ridge, which were already in full swing. Leaving the comfortable Filescamp station and the hard tennis-court with great regret, they were moved into tents on Marie Capelle aerodrome, near Cassel, where 20 Squadron was already stationed. The 2nd and 5th Armies were then attacking almost every day, and 60, in addition to their ordinary work of offensive patrols, wireless interception, etc., co-operated by low flying and firing at troops and transport on the ground. Twenty-five-pound Cooper bombs were carried at this time and dropped on suitable targets. 70

Capt. Chidlaw-Roberts, Lieuts. Rutherford, Whiting, and I. Macgregor were now prominent, while Patrick, himself a brilliant fighter, was always ready to give his squadron a lead.

Chidlaw-Roberts got a lot of Huns during September, and Caldwell and W. Jenkins continued their successes of the summer, while J. Crompton, Young, Capt. Hammersley, Lieut. W. Sherwood, and 2/Lieut. Carter were others who were conspicuous during the October fighting.

It was in September that Capt. J. K. Law, one of the sons of Mr. Bonar Law (another of whose sons had already been killed in Mesopotamia), joined at Marie Capelle. He was a tiger to fight, and, had he come through his first month, would probably have made a great name for himself. He did several "shows" over the line, and his machine was shot about badly in every one of them. On September 21, a patrol operating in the neighbourhood of Roulers, led by Hammersley and including Whiting and Macgregor and Law, saw twenty-four hostile machines and engaged eight of them. A general engagement took place, in the course of which Law was shot down and killed. He had absolutely refused to stay any longer at home, where he was doing most useful work training pilots, but insisted on being sent to France. 71

Life was less easy during the autumn, as the Boche had begun continually to send over night-bombing machines. Our scouts were not very successful in dealing with them, for it is very difficult to see another machine in the air at night even though it may be visible from the ground; and, although several attempts were made at this time by 70 and 29 Squadrons, stationed at Poperinghe, to attack these night bombers, they never succeeded in engaging one. The chief difficulty was that one could not ask pilots and mechanics to work all night as well as all day. If it had been possible to take a scout squadron or two off day work and set them to deal only with the German night bombers, there is little doubt but that they would have achieved some measure of success in spite of the shortage of searchlights. The authorities, however, would not hear of this, as there was too much to be done by day to spare one of our none too numerous fighter squadrons for night work. Much later in the war, July 1918 to be exact, 151 Squadron was sent out equipped with Camels fitted for night flying, and this squadron alone very nearly exterminated the Boche night bombers on the 1st and 3rd Army fronts. It was in this squadron that D. V. Armstrong added so greatly to the reputation he had already gained, and it was with them that he was killed. As things were, however, in 1917 the enemy dropped their bombs nightly almost with impunity, as anti-aircraft fire was not very effective at night, and machine-gun fire from the ground was useless against machines which rarely flew lower than 5,000 feet. 72

During this autumn series of battles a somewhat novel system of message-dropping was tried. All scout pilots were ordered to carry cards conveniently fixed in the nacelle, on which they wrote such information as they had secured during low-flying patrols; special attention was to be given to the massing of enemy supporting troops and to the development of counter-attacks, the symptoms of which were the approach to the "debussing"<sup>39</sup> points of motor transport vehicles or trains from which troops could be seen disembarking and forming up. These cards were slipped into a message bag and dropped in a field marked with a white cross, near Locre Château, not far from the line, which was the 2nd Army report centre. The information thus given occasionally enabled our heavy artillery to direct their fire on to the targets indicated. On one occasion, in October, a pilot reported a big gun being moved along a road near Menin; the Corps heavies opened on it within ten minutes of the message being dropped, and another pilot of another squadron reported, half an hour later, a heavy gun at the same place to have been destroyed by a direct hit. Information of this kind was very necessary, as the German policy at that time was to hold their front line positions lightly against our initial assaults, but to counter-attack very strongly and swiftly about two hours or so after our first attack had been delivered. 73

Lieuts. F. Soden, W. Rutherford, and W. Duncan all distinguished themselves by giving accurate information during these battles, while Selous, a son of the big-game hunter, was also proving himself to be a fine patrol leader and Hun-getter.

The last-named—the worthy son of a famous father—was killed on January 4, 1918, while leading his patrol. He dived at some enemy machines several thousand feet below, and in the middle of his dive, the speed of



which the other members of the patrol estimated at not less than 300 miles per hour, the wings of his S.E.5 came right off.

As good a flight commander as ever we had, he was a very great loss to the squadron. Without, perhaps, the brilliance of Ball or Bishop he, like Caldwell, Summers, Armstrong, Hammersley, Chidlaw-Roberts, Belgrave, and Scholte, to name a few only of the best, played always for the squadron, and not for his own hand. He took endless pains to enter young pilots to the game, watching them on their first patrols as a good and patient huntsman watches his young hounds.

The character of Selous, like those whom I have mentioned, not to speak of many others whom their comrades will remember, attained very nearly to the ideal of a gentleman's character as described by Burke, Newman, and Cavendish in the extracts given below, for which I am indebted to a report by Lord Hugh Cecil on the education of the future R.A.F. officer. These noble sentiments so fully describe the kind of man the British love and admire that it is perhaps not inappropriate to quote them:

### ***“Character of a Gentleman***

“But the age of chivalry is gone. That of sophisters, economists, and calculators has succeeded; and the glory of Europe is extinguished for ever. Never, never more shall we behold that generous loyalty to rank and sex, that proud submission, that dignified obedience, that subordination of the heart, which kept alive, even in servitude itself, the spirit of an exalted freedom. The unbought grace of life, the cheap defence of nations, the nurse of manly sentiment and heroic enterprise is gone! It is gone, that sensibility of principle, that chastity of honour, which felt a stain like a wound, which inspired courage whilst it mitigated ferocity, which ennobled whatever it touched, and under which vice itself lost half its evil, by losing all its grossness.

“This mixed system of opinion and sentiment had its origin in the ancient chivalry; and the principle, though varied in its appearance by the varying state of human affairs, subsisted and influenced through a long succession of generations, even to the time we live in. If it should ever be totally extinguished, the loss, I fear, will be great. It is this which has given its character to modern Europe. It is this which has distinguished it under all its forms of government, and distinguished it to its advantage, from the states of Asia, and possibly from those states which flourished in the most brilliant periods of the antique world. It was this which, without confounding ranks, had produced a noble equality, and handed it down through all the gradations of social life. It was this opinion which mitigated kings into companions, and raised private men to be fellows with kings. Without force or opposition, it subdued the fierceness of pride and power; it obliged sovereigns to submit to the soft collar of social esteem, compelled stern authority to submit to elegance, and gave a dominating vanquisher of laws to be subdued by manners.”

(BURKE: *Reflections on the Revolution in France.*)

\* \* \* \* \*

“Hence it is that it is almost a definition of a gentleman to say that he is one who never inflicts pain. This description is both refined and, as far as it goes, accurate. He is mainly occupied in merely removing the obstacles which hinder the free and unembarrassed action of those about him; and he concurs with their movements rather than takes the initiative himself. His benefits may be considered as parallel to what are called comforts or conveniences in arrangements of a personal nature: like an easy-chair or a good fire, which do their part in dispelling cold and fatigue, though nature provides both means of rest and animal heat without them. The true gentleman in like manner carefully avoids whatever may cause a jar or a jolt in the minds of those with whom he is cast—all clashing of opinion or collision of feeling, all restraint or suspicion, or gloom, or resentment; his great concern being to make everyone at their ease and at home. He has his eyes on all his company; he is tender towards the bashful, gentle towards the distant, and merciful towards the absurd; he can recollect to whom he is speaking; he guards against unseasonable allusions, or topics which may irritate; he is seldom prominent in conversation and never wearisome. He makes light of favours when he does them, and seems to be receiving when he is conferring. He never speaks of himself except when compelled, never defends himself by a mere retort; he has no ears for slander or gossip, is scrupulous in imputing motives to those who interfere with him, and interprets everything for the best. He is never mean or little in his disputes, never takes unfair advantage, never mistakes personalities or sharp sayings for arguments, or insinuates evil which he dare not say out. From a long-sighted prudence he observes the maxim of the ancient sage, that we should ever conduct ourselves towards our enemy as if he were one day to be our friend. He has too much good sense to be affronted at insults, he is too well employed to remember injuries, and too indolent to bear malice. He is patient, forbearing, and resigned, on philosophical principles; he submits to pain, because it is inevitable, to bereavement, because it is irreparable, and to death, because it is his destiny. If he engages in controversy of any kind, his disciplined intellect preserves him from the blundering discourtesy of better, perhaps, but less educated minds; who, like blunt weapons, tear and hack instead of cutting clean, who mistake the point in argument, waste their strength on trifles, misconceive their adversary, and leave the question more involved than they find it. He may be right or wrong in his opinion, but he is too clear-headed to be unjust; he is as simple as he is forcible, and as brief as he is decisive. Nowhere shall we find greater candour, consideration, indulgence: he throws himself into the minds of his opponents, he accounts for their mistakes. He knows the weakness of human reason as well as its strength, its province, and its limits. If he be an unbeliever, he will be too profound and large-minded to ridicule religion or to act against it; he is too wise to be a dogmatist or fanatic in his infidelity. He respects piety and devotion; he even supports institutions as venerable, beautiful, or useful, to which he does not assent; he honours the ministers of religion, and it contents him to decline its mysteries without assailing or denouncing them. He is a friend of religious toleration, and that, not only because his philosophy has taught him to look on all forms of faith with an impartial eye, but also from the gentleness and effeminacy of feeling which is the attendant on

civilisation.”

(NEWMAN: *Idea of a University*, Discourse VIII, Section 10.)

\* \* \* \* \*

“He has besides the principle of common honesty, which would prevent him from doing wrong, a principle of nice honour, which will always urge him to do right. By honour I do not mean a fashionable mistaken principle which would only lead a man to court popular reputation and avoid popular disgrace, whether the opinion upon which they are founded is false or true; whether the conduct which they require is in itself just or unjust, or its consequences hurtful or beneficial to mankind. I mean a quality which is not satisfied with doing right when it is merely the alternative of wrong; which prompts a man to do what he might lawfully and honestly leave undone; which distinguishes a thousand different shades in what is generally denominated the same colour, and is as much superior to a mere conformity to prescribed rules as forgiving a debt is to paying what we owe.”

79

(LORD JOHN CAVENDISH: From speech proposing Mr. Thos. Tounshend for Speaker, 1770. *Parliamentary History*, vol. xvi, col. 737, A.D. 1770.)

On November 8, Pope, an old member of the squadron, who had come through the Arras battle with us, destroyed two hostile two-seaters in one day. This was a good pilot and a popular officer, who for some reason was a long time before he began to get Huns, but, having once found his form, became a very useful and formidable fighter. He went home soon after this, and showed himself to be an exceptionally gifted trainer of pilots, both in flying and fighting.

On November 20 the Cambrai attack was launched by the 1st and 3rd Armies, and the pressure in the air on the Passchendale sector became sensibly less. This meant that the low-flying patrols, which were extra to the ordinary O.P. work, ceased for the time being, a relief which was very welcome because low flying was never popular, the pilot being not only exposed to very severe fire from the ground, but also, being so low, was at a disadvantage when meeting enemy machines, who could dive upon him at their leisure, and frequently availed themselves of this privilege.

80

By this time they had made themselves quite comfortable at Marie Capelle, and the necessary precautions had been taken to give protection against bombs. It is really remarkable how soon a good squadron will make itself at home in a new station, and how, if all ranks work together, messes, recreation rooms, and a theatre rise up like pumpkins. Sixty could always make themselves comfortable, as the following extracts from the letters of 2/Lieut. R. W. MacLennan will show. These letters have been collected and published, after MacLennan's death from wounds on December 23, 1917, by his father, a well-known Toronto barrister, who has courteously allowed them to be reprinted. They describe his arrival at the squadron from the base:

“60 SQUADRON R.F.C.,  
“B.E.F., FRANCE.  
“November 28, 1917.

“When the tender came we collected our kit and started on a long cold ride to the aerodrome, which we reached in three-quarters of an hour. The first thing was to report to the squadron commander, a captain who last summer had been one of my instructors. He was in temporary command in the absence of the Major, who was on leave, but has since returned. When we went to the mess we ran into a lot more of Central Flying School boys, who had been there in our time. There are about twenty-four officers in the squadron, and more than half of these are Canadians, so I feel quite at home. As a new-comer I shall not get much flying during the first fortnight. I shall do all I can round the aerodrome for practice, so that when the time comes for me to go over the line I shall know something about it.

81

“Of all the S.E.5 squadrons in France, we seem to have struck the best. It is one which has done exceedingly well in the past. Both the late Captain Ball and Major Bishop belonged to it, and there have been fewer casualties than in any other similar squadron.<sup>40</sup> Having had so few, the chaps have been in the game a long time, and so have had wide experience, and this is bound to be of inestimable benefit to new people. The aerodrome is a good twenty miles behind the line, and is practically immune from shell fire. None have landed anywhere near for months.

“You ought to see our quarters. I share a hut with three others and we have lots of room. The huts are like half a barrel laid on the ground; the curved roof is corrugated iron and the ends are wood. We have several tables, comfortable chairs, our camp beds, and innumerable rugs on the floor. A coal stove and an oil stove give plenty of heat, and petrol lamps give excellent light. I have not had such comfortable permanent quarters since leaving Canada, and yet we are within sound range of the guns, which never cease. I was able to bring over practically every article of kit I possessed. An infantry officer would have had to leave nine-tenths of it behind.

82

“One great comfort is that here we can wear just exactly what we like. We can come to breakfast in pyjamas and wear comfortable old clothes all day long. Puttees I am discarding for good, and in their place will wear long stockings. They have always been an abomination, as their tightness stops circulation and induces cold. We do not wear belts and can fly in sweaters. In fact, it will be a long summer holiday with lots of excitement thrown in. Leave comes round every three months, and lasts for fourteen days.”

\* \* \* \* \*

"To add to the comfort of the mess, besides dogs, we have a fairly good piano and a gramophone. Every time anyone goes on leave he brings back a few records, and the collection is now quite large.

"The hours for actual flying are of necessity short on account of the shortness of daylight. Consequently we get lots of time for exercise, most of which consists in kicking a Rugby ball around the aerodrome. It is about the best way of keeping warm in these cold days.

"Our tenders frequently run to St. Omer and even as far as Boulogne, so when not flying there are chances of seeing these places. It does seem funny to be able to go from practically the trenches to Boulogne (within sight of England) almost any time we want to. We in the R.F.C. are about the only people who can do this.

"When artillery horses are in need of rest, they are sent back from the front line. We have two or three at the squadron, and I shall probably get some riding if I can pluck up courage enough to try.

"It is bound to be muddy here before the winter is over; at present everything is dry. In preparation for later we have 'duck-boards,' or wooden slat-walks, laid down between all the huts, the mess, the hangars, etc. On a dark night it is rather a problem to keep on these boards. This reminds me that my little pocket flash lamp is almost indispensable out here.

"All the heavy labour in this part of France is now being done by Chinese coolies, brought specially from China for this purpose. They are enlisted as soldiers and wear a peculiar blue padded uniform. They are employed around the aerodrome levelling ground, putting sand-bags about the huts as a protection against bombs, making roads and paths, etc. They are terribly interested in our phonograph, and if we leave the door open they almost come in. To keep them out, the interpreter has painted a large sign in Chinese characters, and it sticks up in front of the mess and gives it quite an Oriental appearance.

"Moving picture shows are given every night or so in a Church Army hut in the camp. We had several good films last night. It hardly seems at all like war yet."

\* \* \* \* \*

"FRANCE,  
"December 3, 1917.

"I am still merely watching operations from the ground. Two fresh pilots have been posted to the squadron since Hemsworth and I arrived, and we shall probably commence flying to-morrow if the weather is suitable.

"Great interest is being shown out here in the coming general election in Canada, and the authorities are endeavouring to have every Canadian register his vote. Quite contrary to army precedent and regulations, the authorities are openly urging everyone to vote against Laurier. Most of us share this view, but it is interesting to see the officials of an army in the field canvassing votes for one party.

"The Canadians are no longer near us. I imagine they needed a rest badly after their recent push.

"You ought to see our strength in dogs. The squadron boasts sixteen canines at present. The officers' mess possesses five. We are very proud of them. Besides these, we have six pigs and twenty-five hens. There is no shortage of eggs about the mess."

\* \* \* \* \*

"FRANCE,  
"December 9, 1917.

"Since last Sunday I have been waiting, waiting, waiting for a flight, and not till last Thursday did I get it. The day was cloudy and the visibility poor. Hemsworth and I were to have a practice flight, and we spent about twenty minutes at it. When we finished, I had lost sight of the aerodrome and so had he, for I could see him flying aimlessly one way and then another, diving on one hill and then on several more. As our aerodrome is near a town perched on a high hill, I knew what he was looking for, but none of the hills seemed to be the right one. After that he flew east for a time, and, although I knew such a course would take us into Hunland, I followed, deciding to go with him as far as the trenches and then turn west again. Just our side of the line I spotted a town<sup>41</sup> which I recognised from the great relief map we had at Oxford. It is a town that has undergone more shelling than any other during the whole war. I never saw such a sight of desolation. Nothing but shell-holes in all directions. Practically all the buildings in ruins, and every now and then a shell would burst in the desolate city with a blinding flash. Of course, I could hear nothing of the explosion. I knew my way back to the aerodrome and felt much relieved, as it is most undignified to get lost on one's first flip. I opened my engine and soon caught up the other machine, and signalled Hemsworth to turn round and follow me. We were at the aerodrome twenty minutes later. I have not been in the air since owing to a temporary shortage of machines.

"... The little town<sup>42</sup> near our aerodrome, perched on a high hill, has a fine square, from which a beautiful church can be seen, and the square and streets are cobbled. The road which leads into the town from the east enters through a short tunnel, which emerges right into the square itself. When I was last there, several howitzer batteries were coming from the line for a rest, and the caterpillar tractors, which haul these huge guns, were grunting and chugging from the tunnel into the town, and through it, making for some spot further to the rear. All units which come out of the trenches for a rest are sent far enough back to be out of earshot of the guns. The Casino, at the highest part of the town, is devoted to military purposes. From it a wonderful view of the Western Front may be had, puffs of smoke in the distance, captive sausage observation balloons, aeroplanes, and roads teeming with hundreds and hundreds of

motor-lorries slowly crawling along. A batch of miserable-looking German prisoners were engaged in cleaning the streets. Their appearance gave the impression that they must have been reduced to sorry straits before their capture, as they all looked white, pinched, and sickly. I think they are pretty fairly treated by our people, and certainly given enough to eat.

"Speaking of food reminds me that you may be interested to know that we do pretty well in our mess. I quote from our ordinary dinner menu: Soup (mock turtle), toast; fish (grilled sole, mustard sauce); entrée (beefsteak, pastry, boiled potatoes, green peas); sweets (stewed prunes, cornstarch pudding); biscuits, cheese, coffee. Does this satisfy you? It does me.

"We have the correct number of machines, six in each flight, and there are three flights, 'A,' 'B,' and 'C.' I am in 'B' Flight. There are eighteen pilots, an equipment officer who is also quartermaster, a recording officer (adjutant) and the commanding officer. So we have twenty-two in our mess.

"Lunch is served at one o'clock. Sometimes I have spent the afternoons walking in the near-by town. Tea is at 4 p.m., and now it is dark at that time. After tea we read or play cards till dinner, at 7.30. After dinner some music. By the way, we have a ragtime band, composed of a piano, a snare drum, two sets of bones, a triangle and brass cymbals, and an auto horn. It is 'some' band. We all go to bed fairly early."

Patrick was transferred to H.E. on December 29, 1917, to take up an appointment in the Training Division of the Air Board—as it was then—and Major B. F. Moore, Royal Warwickshire Regiment and R.F.C., was given the command. 88

It was about this time, also, that General Trenchard went home to become Chief of the Air Staff, prior to the official formation of the Royal Air Force by the amalgamation of the R.F.C. and R.N.A.S. His successor to the command of the R.F.C. in the field was General Sir J. Salmond, who remained in this position till the end of the war.

January 1918 passed fairly quietly. Morey collided in the air with an Albatros scout during a fight and both pilots must have been killed, but as this was some way over the lines, we never heard the German pilot's fate. Up to this time, the Huns had been very good in sending information about the fate of our pilots, nor were we behind them in courtesy. On one occasion, during May 1917, a message was dropped on Douai aerodrome, two hours after his capture, announcing the safety of a German scout pilot whom we had driven down near St. Pol. A study of the lists sent over by the Germans showed that just over 50 per cent. of our missing airmen were alive—wounded or injured most probably—but alive. Later, after March 1918, these amenities were not so nicely observed and information became harder to get. February came and went with the squadron still at Marie Capelle. A. C. Ball, brother of Albert Ball, was missing on the 5th of this month. He was a very promising young officer, but it was too early in his flying career to say that he would have rivalled his brother. Happily he is alive, and was repatriated at the end of the war. Lieuts. H. Crompton and W. Duncan, 2/Lieuts. H. Hegarty and V. Priestly may perhaps be mentioned as fighting most pluckily and well during this month. Soden, by now a flight commander, did a good show on February 5, 1918. He attacked an Albatros scout, which he drove down out of control, and was then attacked by two other hostile machines, who drove him down from 15,000 to 50 feet, eight miles over the line; he came back "hedge-hopping" and banking round trees, and when halfway home saw the leading Hun crash into a tree; he then began to gain on the other, and, finally outdistancing him, crossed the trenches, still at 50 feet, and came home. 89

On February 18, Hammersley, Clark, Evans, and Kent took on four triplanes and got three of them, Evans and Clark sharing one, and Kent and Hammersley taking one each.

During the last month, before moving south, a lot of work was done, and a great many bombs were dropped from a low altitude on rest billets and other targets, this form of annoying the Hun having become fashionable.

Another unusual incident occurred when W. Kent opened fire, one day in March, at an enemy scout with both guns from a distance of about 400 yards. Usually it was considered complete waste of ammunition to shoot at ranges exceeding 100 yards, while 10 or 15 yards was the really effective distance. This scout caught fire all right, however, and crashed in our lines. Bishop did a similar thing once in the summer of 1917, but it was not a practice that was encouraged. 90

Hammersley was still doing very well, while J. A. Duncan, H. D. Crompton, and J. S. Griffiths were all prominent during March. H. H. Balfour, now commanding a flight in 43, but an original member of 60, was adequately maintaining the high standard which was expected of one who had served in the squadron.

The S.E.5A., with which the squadron was equipped from July 1917 till the Armistice, deserves some description. A single-seater fighting scout, it was armed with a Lewis gun mounted on the top plane like the Nieuport, but carried, in addition, a Vicker's firing through the propeller. Its speed, with the 200 h.p. Hispano engine, would reach 130 miles per hour near the ground and was, in consequence, at least 25 miles per hour faster than the Nieuport. This increase of speed made a great difference, as it meant that the enemy could not run away, and, further, that the S.E.5, if caught at a disadvantage, could outdistance its adversaries. Against the advantage gained in speed by this change must be set off a certain loss in respect of power to manœuvre quickly, but, in spite of this, the change was very greatly to the pilot's advantage.

Every machine has its strong and its weak points, and though at first we found the S.E. heavy on the controls and sluggish on her turns, and though some were inclined to regret the silver Nieuports, yet we soon found that the former was a far better fighting instrument. In actual weight the S.E., when fully loaded (including the pilot), was about 700 lb. heavier than the Nieuport—roughly 2,000 lb. as against 1,300 lb. The new machine, too, was distinctly more difficult to land, as the under-carriage was relatively a good deal weaker, and, owing to the extra weight, she would run on much farther on the ground. 91

During the first few months, therefore, a great many machines were crashed on the aerodrome, more particularly after leaving Izel le Hameau, which was a beautiful landing ground, and moving to Marie Capelle, where there was not nearly so much room. There were more crashes in this period than we had had since the days of the Morane "bullets," and from this point of view we often regretted the little Nieuport, which a good pilot could put down on a postage stamp anywhere.



# CHAPTER V

## THE MARCH OFFENSIVE (1918)

Although this chapter treats of the events of March 1918 and after, the following letters, which were written some months earlier, and are all by Molesworth, are reprinted below because they give an accurate picture at first hand of the feelings and emotions of a scout pilot. It must be remembered that these, as well as the preceding letters by the same hand, were all written in the Field, and that they have not been altered or touched up in any way.

The author, who is a regular soldier, has now returned to his regiment, the Royal Munster Fusiliers, but all who knew him in 60 hope that the future expansion of the Air Force will draw him back before long to the service in which he fought so well.

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"June 1917.

"There is no doubt that scout pilots have the most exciting experiences while flying over Hunland, and it sometimes happens that these experiences may be their last. Always they are face to face with death in one form or another, always the thread suspending the 'sword of Damocles' may break and they may be hurled into eternity. However, we do not think of these sort of things in the air, but instead, we are filled with the spirit of confidence in our machines, and the ever-present thought that the best way to defend is to attack. 93

"There is the feeling of joy about it all which is sometimes mixed with loneliness. You are flying between a huge expanse of earth or sea below, merging into the vast spaces of the heavens above. The continuous drone of the engine in front of you and the whistling of the wind through the wires all add to this sense of loneliness, while the bracing air, and the knowledge that you have some of the finest machines and companions in the patrol, make you feel that flying is absolute perfection.

"Sometimes, however, you have a rude awakening, either in the form of a 'wop' from Archie, or the 'rat-tat-tat-tat' of a watchful enemy's machine gun, or again a sickening check in the rhythmic beat of your engine.

"This last experience happened to me a few days ago when I was leading a patrol of five machines about three miles over Hunland, at 12,000 feet. No Huns seemed to be about. Either Archie had forgotten our existence, or there was too much ground mist for him to see us. It was a perfect day up top, with a few light clouds floating about. Away to the north-east we could just distinguish the town of Douai, while far below us the intricate system of the Hindenburg Line, with its Drocourt-Quéant Switch, stretched like a great 'T' over the shell-marked country. 94

"We were cruising along quietly, doing about 1,050 revolutions, when suddenly there was a shattering noise in front of me, and I saw my cowling break away in bits. Parts of it went through the planes, luckily doing no vital damage. Of course the engine stopped dead, and so I had to put her nose down for home. It was quite impossible to reach any of our aerodromes, so I made towards Bapaume, keeping my eyes open for a good landing ground all the time. The needle on my altitude dial began to drop—11,000, 10,000, 9,000—with corresponding wind-up on my part, until we were about 2,000 feet from the ground. I knew it meant a crash if I didn't make a good landing, as the engine was absolutely *hors de combat*. Suddenly I caught sight of a Bessoneau hangar,<sup>43</sup> and near it an F.E. Bird perched on the ground. I did a side-slip,<sup>44</sup> and landed into wind, putting the machine down with rather a bump; however, there was nothing seriously damaged. Luckily the wind was blowing from the north, otherwise I don't think I could ever have got across the lines. 95

"It turned out that the place where I had landed was an advanced F.E.8 landing ground.

"After going over my engine, I found that a tappet rod had broken and stripped the cowling. I telephoned over to the aerodrome and told them to bring out a spare engine and cowl. They soon arrived, and had the machine ready for me by the afternoon, so I pushed off home and arrived safely back soon after."

\* \* \* \* \*

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"June 1917.

"The heat is simply terrific, and the only ways of keeping cool are flying or sitting under the trees in the orchard. We spend most of the day, when not in the air, in multi-coloured pyjamas, some lads even going so far as to fly in them.

"Another awfully good way of keeping cool is to dig a hole about a foot deep and 3 feet long and cover it with a ground-sheet, pegged down at the corners, so as to make a bath. You lie in this with a book and a cooling drink by your side, and if you are lucky enough to escape the bombardment of mud, stones, and various other missiles which are thrown at you by the more energetic and lively spirits in the camp, you can really enjoy yourself. These baths have been such a success that we decided to dig a small bathing-pool about 20 feet square by 3 feet deep. When we got this going the whole population of the nearest village had to come and watch us. This was rather disconcerting, as we used to bathe *tout à fait nude*. Most of the chaps managed to rig up something in the way of a bathing-dress by buying various articles of clothing in the neighbouring village—I was forced to content myself with a type of female undergarment, which seemed to cause great amusement amongst the ack-emmas.<sup>45</sup> 96

"The village maidens were highly delighted, and thought it quite the thing, now that we were decently clad, to watch us at our aquatic sports.

"We three flight commanders have decided to take over a Nissen hut and knock out the partition so as to make it into one room; of course, some wags had to start painting things on the outside. They began by printing on the window in large black letters, 'Saloon Bar'; and ended by naming the hut the 'Hôtel du Commerce,' as most of the squadron seemed to collect there, including Kate and Black Boy (the special pet dogs of the squadron), who made it their abode.

"I don't think I told you in my last letter that one of my pilots nearly finished me off. I was leading a patrol, when, without any warning, he dived about four yards in front of me. We would have collided if I hadn't managed to yank my machine over on her back. He successfully put the wind up me, I can tell you, and I gave it to him pretty hot when we got down."

97

\* \* \* \* \*

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"June 1917.

"I hope it will be 'dud' to-morrow, as I want to supervise the painting of my grids. We have all got the craze of having them coloured. Mine are going to have red, white, and blue wheels. Our crack flight commander<sup>46</sup> has had a spinner made and painted blue, which he says puts the wind up the Huns. I should think they must be getting to know him well now, as he has crashed twenty-five of them, two of which he got in flames yesterday. He always lets us know when he has got one by firing a red Very light over the aerodrome before landing.

"Talking about colours, you ought to see the Huns. They are just like butterflies, with bright red bodies, spotted wings, and black and white squares on their tails, or else a wonderful mauve colour with green and brown patches.

"It was our day off yesterday, so the Major<sup>47</sup> asked me to go for a ride with him. We borrowed horses from a cavalry depot near-by, and set out in his car for the rendezvous where we were to pick them up. We did not intend to go far, but lost our way in a wood. The Major is a keen horseman and, consequently, led me over all sorts of obstacles, such as fallen trees, etc. Not having ridden for three years, I found it rather a job to stick on; however, I got used to it. We went up and down vertical banks, and eventually had to get the nags over a 3-foot jump, which we managed to do with a bit of coaxing. Soon after we arrived at the beautiful old château of Lucheux, where we were to meet the car. This château was used by Marlborough during the Flanders Wars. It is now a Red Cross hospital. We had a talk to the sisters, and wangled some topping roses out of them for the mess. The car was waiting for us, so we got into it and drove home.

98

"When we arrived back, we found the mess decorated with branches of trees, which made it look like a greenhouse. This was to commemorate the Major's M.C., which he has just been awarded for bringing down Huns. We had a tremendous 'bust' in the evening in which the Major joined. Speeches were made wishing him the best of luck, and then we retired to the ante-room and had a good old rag."

\* \* \* \* \*

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"July 1917.

"Rotten luck!

"Everything is black to-day. The Major<sup>48</sup> has been wounded in the arm; one of my best pilots<sup>49</sup> is going off to another squadron as a flight commander, and I missed an absolute 'sitter' this morning on our side of the line. However, every cloud has a silver lining. This time it is in the shape of an M.C. for one of our flight commanders who thoroughly deserves it. He hasn't managed to get a big bag yet, but there is lots of the 'good stuff' in him, in both senses of the word.

99

"We are going to have a great 'bust' to-night to commemorate it, and to cheer things up a bit. The show on which the Major was hit was a pretty hot mix-up. We were in the middle of our tennis tournament when word came through that a large formation of Huns was on the line. It was 'A' Flight's turn for a job, so they pushed off, accompanied by the Major. They got into a big 'dog-fight,' and a Hun, who wasn't in the show at all, took a pot shot at long range and hit the Major in the arm, breaking up his switch at the same time. However, he managed to get back to the aerodrome all right, and went off to hospital soon after.

"We got into another big show on the 11th, and scrapped hard for about twenty minutes over the Hindenburg Line, without any luck. At last one of the Huns, with more guts than the rest, came over and began to attack one of our grids. I nipped in behind him without being seen and gave him a dose of lead. I must have hit his guns or something, as he had no ginger left, and simply flew west across the lines, intending to land on our side. Of course, my stupid old gun had to stop, and I discovered, to my annoyance, that there was no ammunition left. Seeing that I didn't fire, the Hun guessed that something was up and turned back. I felt absolutely wild to see him calmly sneak off into a cloud on his way home.

100

"On another occasion, when three of us were attacking a formation of six Huns, one of us had a most extraordinary escape. We had our noses down, going full out to try and catch the blighters, when suddenly the Hun directly under us did a sharp turn. The chap on my right yanked his grid over after him. He pulled her over with such a jerk that one of his bottom planes came off and fluttered down to the ground in two bits. I couldn't see what happened to him after that, as we were getting to close quarters with the Huns. We tried to scrap them, but hadn't any luck, as they wouldn't put up a fight.

"When we arrived home, I reported that one of my patrol<sup>50</sup> had 'gone west,' as I had seen him break up in the air. Hardly had I finished when, to my amazement, he appeared outside the window. I could not believe my eyes and thought it was his ghost, but he turned out to be flesh and blood, and so we went to the mess and had a drink on the strength of it.

"He told me that he had managed to fly his kite back with great difficulty. Luckily the top planes had held. Of course, when he landed, the machine turned over and crashed, but he crawled out unhurt.

"We three flight commanders went to see the Major in hospital yesterday. He seemed in the best of spirits, and had been trying to 'pump' a Hun observer, who was in his ward, by asking him whether he liked doing artillery work on our part of the front, but the old Boche wouldn't give him an answer.

"We all hope to have the Major back with us soon, as his arm is much better. We miss him 'some,' as he often comes with us on our patrols.

"Charlie Chaplin isn't in it now with us! We were cinematographed the other day. Some of us stood in a row and tried to look pleasant and unconcerned, but this was rather difficult, as everyone else was making rude remarks about us. We then bundled into our new grids, which we have just got, and started off on a stunt formation, nearly running down the old cinema man to put the wind up him. After we had done a circuit, my radiator began to boil, and I was forced to come down. Thank heavens! it was a good landing, as the old man was still at it turning the handle. My part of the show was to be known as 'Pilot landing for more ammunition after fierce fight.'"

\* \* \* \* \*

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"August 1917.

"The new grids<sup>51</sup> are a great success, and we have been hard at work training and doing line patrols.

"Three of us, led by our famous 'Hun-strafer,'<sup>52</sup> used them over the lines for the first time on the 5th. As a rule we only fight in flights, but on certain occasions we volunteer for a 'circus,' that is a mixed formation generally composed of the best pilots in the squadron.

"Our numbers were not overwhelming this time, but we know that the Huns had got pukka wind-up by the way they disappeared when we arrived on the line, so we felt quite confident in taking on twice as many as ourselves. Of course we were all out for trouble, as we wanted to show what the new machines could do. As soon as our leader spotted a formation of Huns, he was after them like a flash. I think there were seven of them, but we were all much too excited to count. Suddenly they saw us coming, and tried desperately to escape, but our leader got into his favourite position, and the rear Hun hadn't a ghost of a chance. The next instant he was a flaming mass.

"We simply had it all over the Boche for speed and, as we had the height, they could not possibly get away. I picked my man out as he was coming towards me, and dived straight at him, opening fire with both guns at close range. He suffered the same fate as his companion.

"A burning machine is a glorious but terrible sight to see—a tiny red stream of flame trickles from the petrol tank, then long tongues of blazing petrol lick the sides of the fuselage, and, finally, a sheet of white fire envelops the whole machine, and it glides steeply towards the ground in a zigzag course, leaving a long trail of black smoke behind it, until it eventually breaks up. There is no doubt that your first Hun in flames gives you a wonderful feeling of satisfaction. I can well imagine what the big-game hunter must think when he sees the dead lion in front of him. Somehow, you do not realise that you are sending a man to an awful doom, but rather your thoughts are all turned on the hateful machine which you are destroying, so fascinating to look at and yet so deadly in its attack."

\* \* \* \* \*

"60 SQUADRON R.F.C.,  
"B.E.F., FRANCE.  
"August 1917.

"Sorry I haven't written for some time, but we have been kept awfully busy as the weather has been so fine. I have been trying hard to get another Hun, and only succeeded the day before yesterday, when we had another great scrap.

"Five of us met eight Huns and attacked them the other side of the line. I missed my man in the first dive, but turned on another and must have hit the pilot, as he spun straight into the ground. One of my patrol also destroyed an Albatros by shooting him up so that he fell to bits in the air. The remaining six Huns put up quite a good fight, and nearly got one of us by doing in his lateral control. However, he managed to land all right, as these machines are fairly stable.

"On scanning my kite, I discovered that it had not escaped scot-free, as a large piece of the tail plane had been shot away.

"There was tremendous excitement in the squadron yesterday, as our 'stunt merchant'<sup>53</sup> has been awarded the V.C. for that aerodrome show that I told you about. We celebrated it last night by one of the finest 'busts' I have ever had. There were speeches and lots of good 'bubbly,' consequently everyone was in the best of spirits.

"After dinner we had a torchlight procession to the various squadrons stationed on the aerodrome. This was led by our Very light experts. Luckily for us, the night was very dull and cloudy, or else I expect old man Boche would have had a hand in it too. We charged into one mess and proceeded to throw everyone and everything we came across out of the window. We then went over to the other squadron. The wretched lads were all in bed, but we soon had them out, and bombarded their mess with Very lights, the great stunt being to shoot one in through one window and out at the other. I can't imagine why the blessed place didn't go up in flames. After annoying these people for a bit, we retired to our own mess, where we danced and sang till the early hours of the morning. I have still got a piece of plaid cloth about 6 inches square, which was the only thing left of a perfectly good pair of 'trouse' that belonged to one of our Scotch compatriots.



"This morning the C.O. sent for me to go to the orderly room. He told me that my name had come through for H.E.,<sup>54</sup> and congratulated me on having been awarded the M.C.

"Later I went round to the sheds to say goodbye to the men, and finally ended up at the mess to have a farewell drink with all my old friends.

"I can hardly realise that the time has come for me to go back to Blighty. I shall be awfully bucked to see you again in a few days, old chap, and yet I can't help feeling sad at leaving this dear old place—full of memories, sometimes tragic, sometimes comic. It is very hard to part with these comrades of mine —'Knights of the Air,' who live from day to day facing eternity with a smile, and laying down their lives, if need be, with such heroism, for the cause of freedom."

\* \* \* \* \*

To return to the squadron which we left at Marie Capelle. On March 8, 1918, orders arrived to move up to Bailleul—a good deal nearer the line—where they remained for over a fortnight. This aerodrome was shelled every day that they were there, and on the last two nights was heavily bombed. On March 27 they were rushed down to Bellevue, near Doullens, to cope with the offensive which, as few will have forgotten, began on the 21st. This move brought the squadron back into the 13th Wing, in which it served, except for the winter of 1917-18, during the whole of its career on the Western Front. After three days at Bellevue another move was ordered to Fienvilliers. 106

On March 30, in the course of one patrol, Hammersley, the leader, destroyed two Hun scouts, putting one on to the roof of a house in Hem, where it burst into flames; while Copeland, Hegarty, Duncan, and Griffiths all shot down hostile machines, the destruction of which was officially confirmed. Bartlett also shot down one out of control. Both Copeland and Duncan were now piling up good scores.

On April 12 there was yet another move, this time to Boffles, where they stayed until September. For some time past they had been in tents, ready to move at a moment's notice, and by now all the household goods which a squadron accumulated during the period of stationary warfare had disappeared: the bronze figures and silver basins, brought back as mementoes (on payment) after celebrations in Amiens and elsewhere; the original of Fleming Williams' picture of a Nieuport scout; the cut-glass reproductions of two of his father's valuable decanters, presented to the squadron by Lord Dalmeny on his departure for Egypt with General Allenby; the German signboards, shell-cases, and other trophies; all had been left behind or were lost long before the March retreat and the subsequent victorious advance were over. This was a pity, but could not be helped.

The losses of the Air Force during this retreat were very heavy indeed. Usually we used to calculate that the Germans lost twice as many machines as the British, according to the reports issued by our Headquarters. This thought was a comforting one. Under the head of hostile machines destroyed are not included, for the purpose of this calculation, those shown as driven down out of control. It should be remembered that Headquarters required very clear confirmation before officially recognising the destruction of an enemy machine, and that many Huns must have been destroyed which were not counted. If one set fire to a Boche machine in the air there was no difficulty, as the whole sky saw it and confirmation was readily forthcoming; but where this was not done, it was not at all easy to watch the victim glide down from fifteen or sixteen thousand feet, and to mark the spot at which he crashed. It takes a long time to reach the ground from nearly three miles up, and there were always plenty of watchful enemies in the sky waiting to swoop on to the overkeen pilot who forgot everything but his presumably vanquished foe. Once a pilot took his eyes off a machine, it was by no means always easy to pick it up again. The best type was always careful not to claim a doubtful Hun, and, though there were plenty who would like to have done so, the other officers of the flight generally knew pretty well when a doubtful claim was put in, and soon gave the offender a hint that such conduct did the squadron no good. It may, therefore, fairly be assumed that we had destroyed the full number of machines claimed. The German method of calculation was somewhat different, as they counted a two-seater machine as two "victories," which made their star pilots appear to be more successful than ours. 107

Throughout the war, on the Western Front, the policy of the R.F.C., as directed by General Sir Hugh Trenchard, was that our fighters should engage the enemy over his territory and never allow him to cross our lines. These orders were never executed with complete success, as it is not possible to erect and maintain an aerial barrage, so to speak, which can completely prevent a resolute pilot from penetrating it if he really means to do so, nor can it be said that our patrols kept, in every case, always on the other side of the line. Broadly speaking, however, we fought over alien territory, the Germans over their own. The effect of this was that many a British machine was forced to land, disabled by gunfire or through engine failure, and the occupants, even though unwounded, were lost to their own side till the end of the war. The German pilot, on the other hand, whose engine was put out of action in a fight might land safely, get another machine, and be fighting again the same day. 108

Another circumstance which, in fairness to the Air Force, should always be borne in mind when the conditions of fighting in the air are under discussion, is that on the Western Front the wind entered very much into all questions of aerial strategy or tactics. The prevailing wind was that west wind which Conrad thus describes in a brilliant passage, and which, though it deals with the sea, is equally true of the air on the Western Front: 109

"The narrow seas around these isles, where British admirals keep watch and ward upon the marches of the Atlantic Ocean, are subject to the turbulent sway of the west wind.

"Call it north-west or south-west, it is all one—a different phase of the same character, a changed expression of the same face. In the orientation of the winds that rule the seas, the north and south directions are of no importance. The north and the south winds are but small princes in the dynasties that make peace and war upon the sea. In the polity of the winds, as among the tribes of the earth, the real struggle lies between east and west. The end of the day is the time to gaze at the kingly face of the westerly weather, who is the arbiter of ships' destinies.

"Benignant and splendid, or splendid and sinister, the western sky reflects the hidden purpose of the royal wind.

"Clothed in a mantle of dazzling gold or draped in rags of black cloud like a beggar, the might of the westerly wind sits enthroned upon the western horizon, with the whole North Atlantic as a foot-stool for his feet and the first twinkling stars making a diadem for his brow."

110

It was this powerful sovereign, this pitiless potentate who, five days out of seven, fought with our enemies against us, and it is to be hoped that he is properly humiliated by the result of the war. How many curses have been levelled at his careless head by pilots who, with trailing wires, with labouring, failing engines, and with tattered planes have tried, and often tried in vain, to reach that brown, smoky strip of battered terrain which marked the lines and safety, after a bitter fight? How often has a patrol, on a day with the wind at fifty to sixty miles an hour, at 10,000 feet fought batch after batch of Huns when on the Mons-Maubeuge or some other "long reconnaissance," only to find that, though every enemy may have been shot down in flames, though no black-crossed machines remained to smirch the sky, inexorable Zephyrus had swept them during the fight so far towards the Rhine that lack of petrol must force them to land on hostile ground? Who has not felt, when turning homewards on a stormy day, that the machine could make no progress at all against the wind, but seemed for minutes that were like hours to stand still over some town or village? Actually headway was as a rule being made, but the change in ground speed from flying down-wind to struggling against it produced this very powerful illusion, and pilots have often thrown their guns, ammunition, and even field-glasses overboard with the frantic hope of lightening the machine and thus increasing her speed.

111

No! Zephyrus, who should have been a Teuton god, and who beyond question wears the Iron Cross, was no friend to the Air Force. We should perhaps have poured out libations to his eastern brothers—Eurus and Aquilus—or at very least have recommended them for the immediate award of the Distinguished Flying Cross in recognition of their invaluable services throughout the war.

The struggle wore on through May, and during the middle of this month the fighting in the air was terrific.

One hundred and thirty E.A. (enemy aircraft) were brought down by the Air Force in France between the 13th and 19th of the month. Belgrave and Scholte were, perhaps, the most successful, but I. M. Davies, A. W. Saunders, Hegarty, V. S. Griffith, W. A. Duncan, were also very prominent. During one patrol, led by Belgrave on June 12, in which he shot down a two-seater, R. G. Lewis, whose engine presumably had failed, went down and landed, breaking his under-carriage. H. A. Gordon, a Canadian whose first trip over the lines this was, landed beside him and got out of his own machine. At this point some soldiers appeared and opened fire. Gordon ran back to his S.E., calling to Lewis to get in with him, but the latter, apparently mistaking the troops for friends, walked towards them. Gordon then took off and circled round, meaning to fire, but, seeing Lewis in the midst of them, refrained, and returned home with his machine very badly shot about. He was killed two months later.

112

An S.E.5 has carried two before now, but it is an unpleasant experience for the passenger, who has to sit with his legs on each side of the pilot's shoulders and to hold on to the top gun-mounting.

By this time, Bishop was back in France commanding No. 85 Squadron and was doing wonders. Much of his success was due now, as always, to his extremely accurate shooting, the importance of which in aerial fighting it is almost impossible to exaggerate.

W. H. Saunders did a very good show on July 2, fighting continuously for forty-five minutes, destroying two Pfalz scouts and engaging five other hostile machines.

At the beginning of July, Barry Moore was promoted to command No. 1 Aeroplane Supply Depot at Marquise, and J. B. McCudden, V.C., D.S.O., M.C., was appointed to succeed him in the command of the squadron. While flying down to take over from Moore, he got his machine into a spin near the ground, crashed, and was killed. Though he never actually joined 60, and though this history is concerned only to describe the exploits of that squadron, a paragraph must, nevertheless, be devoted to McCudden's achievements. He joined the R.F.C. as an air mechanic before the war, fought as an N.C.O. pilot with 29 Squadron during 1916-17, was then given a commission and was posted to 56 Squadron, where he specialised in two-seaters, that variety of two-seater which the Germans would send over very high at 20,000 feet or more on clear days to photograph our back areas, and which were not easy to bring down. The difficulty was that they were first seen, as a rule, at a great height, and our fighting machines had to climb up to them, which would take fifteen minutes at least. During this interval which necessarily elapsed before the attacking machines could get their height, the Rumpler or L.V.G., which would be flying level, could usually outdistance the pursuers; if, however, the British machine contrived, by flying the inside of the circle, to keep between the Hun and the lines, the latter, if he was as cunning as they usually were, would calmly continue his photography while his adversary was climbing until the latter was about 1,500 feet below him, and, when his pursuer was getting close enough to be dangerous, would put his nose down slightly, open up his engine and disappear into Hunland, leaving a streak of blue smoke, but nothing more tangible, behind him.

113

McCudden, however, with great resolution and infinite patience, studied the habits of these folk and shot down dozens of them. In addition, he was a brilliant and successful patrol leader and one whom the Air Force could ill spare. After his death, C. M. Crowe, M.C., who also had a fine record both in 56 Squadron and, earlier in the war, with other units, was given the command. After a few weeks, Crowe had a serious motor accident and was "struck off" the strength, to be posted later to 85 Squadron. He was succeeded by A. C. Clarke, an old Etonian, who remained in charge till the end of the war.

114

On August 1, 60, together with 3, 56, and 11 Squadrons, carried out an extremely successful raid on Epinoy Aerodrome. Sixteen machines were believed to have been destroyed as a result of this operation and two large fires were started, the smoke of which ascended to a height of over 10,000 feet. 60 and 11 did the "upper guard," escorting 3 and 56, who went down and actually shot up the aerodrome, whilst the two former squadrons kept off hostile machines who might have attacked the raiders from above.

Raids of this kind were most successful, but had only lately become possible on account of the much larger number of squadrons which were now available. Up to this time, the number of machines had been only just sufficient to get through the ordinary routine work, i.e. low flying on battle days, offensive patrols for the indirect protection of the artillery machine, by the destruction of the enemy scouts who would have interfered with them, and escorts to bombing raids and photographic reconnaissances. These last two duties the improved types of two-seater fighters now carried out without escorts—the De Havilland 4s, 9s, and Bristol fighters being quite capable of operating without protection by scouts. 115

During August, R. K. Whitney (who had had a great month in July), Doyle, G. M. Duncan, Buckley, and A. W. Saunders (who was now a flight commander), were all fighting well. One patrol led by the last-named on August 9 accounted for four enemy aircraft.

Lieut. A. Beck now rejoined the squadron: he had been with us in June 1917, but was sent home on the representation of his parents, who complained that he was only seventeen. Returning a year later, he speedily showed that his youth was no disqualification. He remained with the squadron till the end, was promoted flight commander, and did extraordinarily good work.

On August 8 we assumed the offensive east of Amiens. 60 did a great deal of low flying and low bombing, as well as the usual "scrapping" up above. The Fokker biplane D.7 first appeared in numbers at this time. This was an original type of machine without any external wiring but with a very thick wing section, which was braced internally. Its performance was very good, alike as regards speed, climb, and power to manœuvre. Their pilots were usually provided with parachutes, which quite often failed to open. From all along the line reports now came in showing that the use of the parachute was becoming fairly general among German pilots. 116

In October, while our advance was proceeding, squadrons of the Air Force dropped some thousands of boxes of rations and ammunition for Belgian troops, whose supplies had been held up owing to the speed of the advance. 60, however, took no part in this.

The map opposite is reproduced by permission of Field-Marshal Earl Haig, and is published, I believe, for the first time. It shows the situation on September 25, 1918, and makes it clear that the enemy feared the Amiens sector more than any other part of their line.

H. C. M. Orpen, I. W. Rayner, S. V. Mason, M. D. Sinclair, O. P. Johnson, G. M. Duncan, and McEntegart were, perhaps, the most prominent and successful pilots during the British advance, which was a time of continuous and sustained effort on the part of every officer, N.C.O., and man in the whole squadron. The strain of sending at least two full-strength squadron patrols daily over the line, while moving continually, severely taxed the endurance of all ranks. They left Boffles for Baisieux on September 17, Baisieux for Beugnatre on October 14, and finally moved from the latter station to Quievy, an old German aerodrome, on October 31.



### Situation on Sept. 25<sup>th</sup>, 1918.

*On this date, the 25<sup>th</sup> Sept., General Pershing was in direct command of the American Armies. Early in October the command of the 3<sup>rd</sup> American Army was entrusted to Lt Gen. Hunter Liggett and command of the 2<sup>nd</sup> American Army to Major Gen. R. L. Bullard.*

By October the Air Force mechanical transport had begun to wear out, nor is this surprising when the work it had done is remembered; the men were always working hard to keep the lorries and light tenders on the road. Moreover, the new aerodromes were always pitted with shell-holes, which had to be filled up, and scarcely was this task completed before orders would arrive to move again. In spite of these difficulties, the supplies of rations, ammunition, etc., were maintained with wonderful regularity by the H.Q. staffs. 117

The German Flying Corps continued to fight hard and well up to the very last day of the war, and, though their armies on the ground were retreating fast, no signs of demoralisation in the air were observed.

During these last days, throughout September and October, a great deal of work was done with 148—an American Camel squadron—most of whose pilots had been trained in England. This unit was also in the 13th Wing, and the two squadrons moved forward together to the various aerodromes mentioned above. They did several good shows together, notably between September 14 and 17, during the attack on Havrincourt Wood, when 60 twice a day did the "upper guard," while 148 flew low, bombing troops and attacking low-flying Fokkers. A considerable amount of damage was done during the progress of these operations. For example, on September 26 one patrol of each squadron, working in the same manner, gave a good exhibition of combined work: 60's patrol, led by Rayner, drove down a flight of Fokkers into the jaws of 148, who tackled them with such effect that three were "crashed" and one driven down out of control. Again, on the next day, during the Bourlon Wood attack, 148, protected as before by 60, crashed two enemy two-seaters, the destruction of which was observed and confirmed by the latter unit. 118

During the whole of the advance towards Cambrai and beyond, the two squadrons did at least one "show" a day together until October 30, when the Americans left Beugnatre, near Bapaume, to go south to join their own army near Nancy, a very long and tiresome journey. On the day before leaving, their last patrol with us "crashed" either four or five Huns.

Their pilots were many of them trained at London Colney, in Hertfordshire, and Lieuts. Springs (who accounted for nine enemy machines), L. K. Callaghan (whose score when they left for Nancy was eight), and J. O. Creech (who had got six Huns), were all good advertisements for the methods adopted at that training station.

Other pilots conspicuous in this squadron were two of their flight commanders (T. Clay and F. E. Kindley) and also Lieut. C. T. McLean, all of whom will no doubt remember a dinner in Amiens, on October 18, in which 201

Squadron also joined with 60 in celebrating the turn of the tide in the Allied fortunes, a change which 148 and 17 American (this latter squadron was also in the 13th Wing) had certainly done their share to bring about. 119

There was great regret on the part of all their British comrades in arms when these two American units went away.

One of the pilots of 148, who had been taken prisoner, told a remarkable story on his return just after the Armistice. This pilot, who had served with 56 Squadron, also in the 13th Wing, some months earlier, was shot down and, after having landed more or less safely in "Hunland," was taken before a German intelligence officer and asked his name and squadron. Having given his name and rank only, his examiner said to him, "But you were in 56—I dined with you in December last," and followed this up by asking the astonished prisoner if he did not remember a French Breguet (two-seater) landing at 56's aerodrome one day with an officer pilot and a mechanic on board. The American did remember, and recollected, too, that the pilot announced that he was coming up from the south to join a French squadron north of our 2nd Army near Dixmude, but that his engine was running badly and he had landed to make some adjustments. No one in 56 at this time knew very much about the French Flying Corps, but everyone knew that their machines had often passed over the intervening British armies in this manner, particularly during the summer of 1917, prior to the Passchendaele battles, and again in April 1918, when Foch's strategical schemes involved the introduction into the middle of our 2nd Army area of a French division, which defended Kemmel Hill after the German break-through on the Lys. The story, therefore, appeared to be quite a natural one, and no one suspected for an instant that anything was wrong. The "repairs" to the 200 h.p. Renault engine, a type with which none of our mechanics were very familiar, took longer than was expected, and the "Frenchman" dined and stayed the night with the squadron, making himself most agreeable but refusing to drink much. Not only did he stay one night, but, the weather next day proving unfavourable, he remained a second, and on the third day flew off, it is believed, to another British aerodrome. There was no question of the truth of the story because the hero of it showed, when talking to his prisoner, a knowledge of the officers in 56, their appearance and nicknames, together with the details of the camp and aerodrome, which could only have been obtained at first-hand. Moreover, the American pilot remembered the visit quite well, and even recognised his interrogator. The German also told him that he had played the same game with the French Flying Corps, pretending, on a captured British machine, to be an English pilot making his way down to our Independent Air Force, which, under General Trenchard, was stationed opposite Metz, a long way from the nearest British unit. 120

It was easier for the Germans to do this kind of thing than it would have been for the Allies, owing to the duality of language on our side of the line; but, nevertheless, it must be reckoned a very fine performance. Presumably, he left the German aerodrome before dawn and flew about on our side of the line until it was light enough to land, but, even so, he was lucky not to have been attacked on his return by German machines and anti-aircraft guns when flying an aeroplane with Allied markings, as it must have been impossible to warn the German aviators that one particular Breguet was not to be molested, mainly because of the impossibility of distinguishing one machine from another of the same type in the air, but also because to circulate general instructions of this kind would almost certainly have given the whole plan away to some of the Allied agents who, on the whole, were much more efficient than the German spies. 121

After the Armistice, when the question of demobilisation began to be considered in the Air Force and particulars of the terms of each officer's engagement were scrutinised, it was surprising to find how many Americans were serving in English scout squadrons. There seemed to be at least three or four American citizens in each single-seater squadron in France, out of a total in such a squadron of twenty-five officers. Moreover, the majority of these wore at least one medal for gallantry, the reason being, no doubt, that these young men were the very flower of the American fighting stock, who felt unable to wait until their country came into the war, but represented themselves to be Canadian citizens in order to join in the contest. Had the war lasted a little longer, most of them would, no doubt, have transferred to their own squadrons, as some few had already done, but at the end of 1918 their own air effort had not yet developed sufficiently to absorb them all. 122

To return, however, to 60. The squadron's last "confirmed Hun" of the war was secured on November 1 by Capt. A. Beck, who had lately destroyed, when flying low, a number of enemy artillery observation machines (two-seaters).

The arrival at Quievy, halfway between Cambrai and Le Cateau, where the squadron remained until after the signing of the Armistice, was most interesting. Here remained some of the German semi-permanent hangars, the machine-gun emplacements on the roofs of the houses surrounding the aerodrome, and here, too, were people who for four and a half long years had lived with the pilots and observers of the German Flying Corps. The questions asked by our officers—usually in extremely moderate French—were endless. "How many jobs a day did they do?" "Were their casualties heavy?" "Were the pilots usually officers or N.C.O.s?" "How many machines did they have in a flight?" are only a few examples. The answers in most cases were disappointing, as the Boche seemed to have taken good care to keep all civilians off his aerodromes.

The plight of the inhabitants of the occupied territory was wretched; the retreating enemy had driven off every single head of livestock, taking even the poultry away over the Belgian border, and the British forces had to feed them for many weeks until the French lorry services began to work and until the railways were restored. 123

Delay-action mines were left everywhere in this part of the world, though there were not, perhaps, as many booby traps as were found after the Boche retreat of March 1917 to the Hindenburg or Wotan Line. The bridge at Caudry station, the railhead from which the squadron drew rations, went up on November 1, killing and wounding twenty or thirty men.

The uncultivated state of the land was very noticeable in this district; for though some poor root and winter cabbage crops showed here and there, grown by the inhabitants under German direction, most of the fields did not appear to have been tilled at all, though this particular tract had been a long way behind the line until August 1918.

The last few days' fighting were marked by no unusual incidents so far as 60 itself was concerned, though it

was thrilling to be forming part of the army which was retaking Valenciennes, Le Quesnoy, Maubeuge, and other towns immediately in front of us. Thrilling, too, to see the long dingy columns, already in Belgium, marching east at last.

On Armistice night, Clarke hurriedly organised a dinner, to which such old members as were in the neighbourhood were bidden. It was a good evening, ending with the invasion of the officers' mess by the N.C.O.s and men, who drank each other's healths—not that there was overmuch alcohol available—and sang over and over again those very ordinary music-hall songs which our people always seem to employ as a medium for expression in moments of emotional stress. Officers and men bellowed together "The good ship Yacki Hicky Doola" and similar classics. 124

60 was always remarkable for the cordial relations between the officers and men, due, perhaps, to the fact that an Air Force scout squadron during the war was, in Lord Hugh Cecil's words, "a natural aristocracy," in that the officers flew and fought twice daily while the men remained on the ground in comparative security.

---

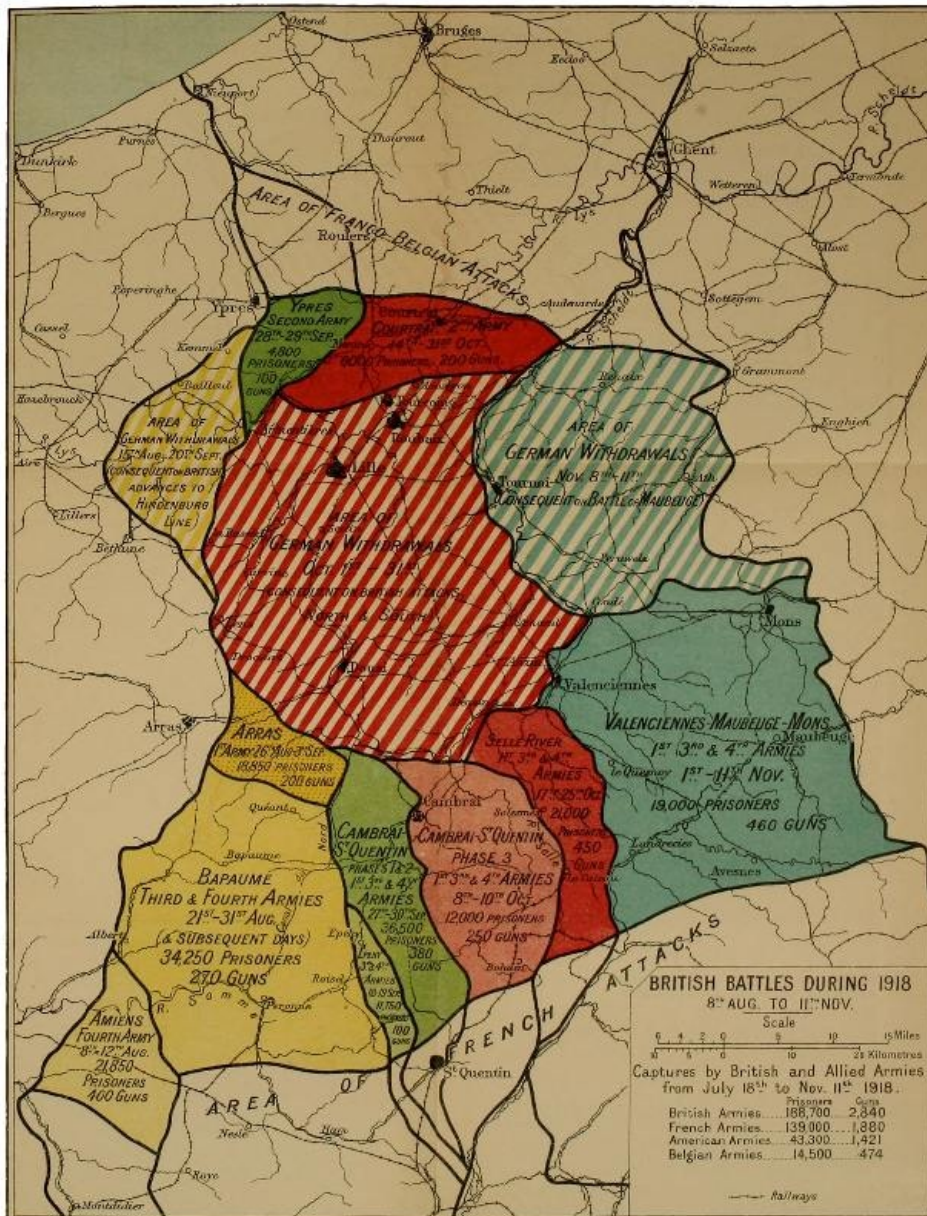
# CHAPTER VI

## DEMOBILISATION

The latter half of November and the first week of December was a period of suspense. No one quite knew what was to happen, nor did the first circulars on the subject, even the famous one beginning, "And Joshua bade the people disperse every man to his own place," clear up the situation very much. It was not, in fact, until Mr. Churchill had been appointed Secretary of State for War and Air, and had laid down the broad principle that men over thirty-five and those who had enlisted before January 1, 1916, were to be allowed to go and that the rest must stay, that we knew where we were at all. It was difficult, also, to find employment from day to day for the men. Association football, however, was always popular, concerts and boxing contests were frequently held, while horses and dogs were borrowed and hare-hunting was attempted.

One form of hare-hunting became very popular: the idea—which originated with Louis Strange, then commanding a wing—was to proceed as follows: All officers and men in the wing who wished to take part assembled, to the number of two or three hundred, at "the meet," and filed away in opposite directions, the leaders of each file turning gradually inwards until a circle nearly a mile in diameter was enclosed by men about twenty yards apart. The circle being completed, they began to walk towards the centre. Usually three or four hares, and sometimes many more, got up within the cordon and ran frantically round until they either broke through or were knocked over with sticks. The shouting and noise arising during the proceedings testified to the popularity of this form of sport. Despite these diversions, time hung rather heavily on their hands until, at last, by the end of February 1919, all the demobilisable officers and men had gone, and those who remained were sent up by train as reinforcements to the R.A.F. with the Army of the Rhine. On a bitterly cold evening this remnant entrained in covered trucks, under sad skies with snow falling heavily, to commence their eastward journey, in typically military fashion, by travelling due west to Etaples. After this nothing remained but to dispatch the cadre with the records back to England, and the two officers and ten men remaining accordingly departed on February 28, bound for Sedgford, in Norfolk.

The squadron remained dormant for a time, but was re-formed towards the end of the year, and is now equipped with De Havilland 10s, large twin-engined machines, and is stationed in India.



## BRITISH BATTLES DURING 1918

8<sup>TH</sup> AUG. TO 11<sup>TH</sup> NOV.

The following diary will help to elucidate the map, which shows the ground gained by the British Allied Armies, and the series of battles from July to November, 1918.

### THE BATTLES AND THEIR EFFECTS.

*8th Aug.-12th Aug.*

13 Inf. and 3 Cav. Divs. defeated  
20 German Divs.

THE BATTLE OF AMIENS disengaged Amiens, until then in range of the German guns, and freed the Paris-Amiens railway. Our attack was then transferred to the north in

*21st Aug.-31st Aug.*

23 Divs. defeated 35 German  
Divs.

THE BATTLE OF BAPAUME which, turning the flank of the German positions on the Somme, compelled the enemy to withdraw to the east bank of the river. His new positions were then turned from the north by

*26th Aug.-3rd Sept.*

7 Divs. defeated 13 German  
Divs.

THE BATTLE OF ARRAS by which the Drocourt-Quéant line was broken and the enemy was forced to fall back on the outer defences of the Hindenburg line. As the direct result of these battles

The LYS Salient was evacuated by the enemy and we regained Lens-Merville-Bailleul-Kemmel Hill and freed Hazebrouck and the important railways there. Then came

*18th Sept.-19th Sept.*

14 Divs. defeated 15 German  
Divs.

THE BATTLE OF EPEHY which broke through the outer Hindenburg defences and brought us into position for attack on the main line in

*27th Sept.-10th Oct.*

35 Inf., 3 Cav. and 2 American  
Divs. defeated 45 German Divs.

THE BATTLE OF CAMBRAI-ST. QUENTIN which in ten days of victorious fighting broke through the last and strongest of the enemy's fully prepared positions, opening the way to a war of movement and an advance on the German main lines of communication. These great assaults fell into three main phases:—

1. The storming of the Canal du Nord on the left of our attack and the advance on Cambrai, followed immediately by

2. THE GREAT BLOW WHICH SHATTERED THE HINDENBURG LINE AND TURNED THE DEFENCES OF ST. QUENTIN.

3. The development of these successes by a general attack on the whole front which broke through the last of the German defences in the rear of the Hindenburg Line, forcing the enemy to evacuate Cambrai and St. Quentin and fall back on the line of the River Selle. These battles, striking at vital enemy communications, created a huge salient in his lines. Meanwhile further north in

*28th Sept.-29th Sept.*

9 Divs. defeated 5 German Divs.

THE BATTLE OF YPRES British and Belgians forced the enemy back from Ypres and drove a salient into his lines which endangered his positions on the Belgian Coast. This success was extended by

*14th Oct.-31st Oct.*

7 British Divs. defeated 6  
German Divs.

THE BATTLE OF COURTRAI which widened and deepened this salient and resulted in the capture of Halluin, Menin and Courtrai. This series of battles north and south had as their immediate result, in the south,

THE EVACUATION OF LAON and the retreat of the enemy to the line of the Aisne, and, in the centre,

THE WITHDRAWAL TO THE SCHELDT in which Lille and the great industrial district of France were freed there, and in the north.

THE CLEARING OF THE BELGIAN COAST, whereby the enemy was deprived of his important submarine bases at Ostend, Zeebrugge and Bruges. The enemy was now back on the line of the Selle and Scheldt rivers.

*17th Oct.-25th Oct.*

26 British Divs. defeated 31  
German Divs.

THE BATTLE OF THE SELLE forced him from the line of that river and drove still another salient into his defences. It was followed by the final blow—



*1st Nov.-11th Nov.*  
26 British Divs. defeated 32  
German Divs.

THE BATTLE OF MAUBEUGE, which struck at and broke the enemy's last important lateral communications, turned his positions on the Scheldt and forced him to retreat rapidly from Courtrai. This victory completed the great strategical aim of the whole series of battles by dividing, in effect, the enemy's forces into two parts, one on each side of the great natural barrier of the Ardennes. The pursuit of the beaten enemy all along the Allied line was only stopped by the Armistice.

Most of the officers and men are new, but such veterans as are available will be drafted back when circumstances allow, and there is no old member of the squadron who is not confident that the new formation will add to that high reputation which 60 has enjoyed from the day of its birth, and which we, who served in it, have helped to build, or, at all events, have tried our hardest not to damage. 127

Though the records, owing to a fire in the squadron office in November 1916, may perhaps be not quite complete, yet the destruction of 274 enemy aircraft can be traced.

The honours gained by officers or men, whilst serving in the squadron, are:

- 1 V.C.
- 5 D.S.O.s.
- 1 Bar to D.S.O.
- 37 Military Crosses.
- 5 Distinguished Flying Crosses.

The map which will be found at the end of this chapter is published by permission of Field-Marshal Earl Haig, and shows very clearly the ground gained and the prisoners taken by the victorious British armies during the last three months of the war.

---

# APPENDIX I

## LIST OF OFFICERS WHO HAVE SERVED IN 60 SQUADRON

TOGETHER WITH THE DECORATIONS GAINED BY THEM, NOT NECESSARILY IN THE SQUADRON; ALL OFFICERS ARE SHOWN IN THE HIGHEST RANK TO WHICH THEY ATTAINED DURING THE WAR.

Name.	Casualty.	Date.
2/Lieut. A. R. Adam	Missing	July 1917
Lieut. J. R. Anderson	Killed	Aug. 1918
Capt. D. V. Armstrong, D.F.C. (151 Sqdn.)	Killed	May 1916
Lieut. J. L. Armstrong.	—	Jan. 1918
Lieut. (A/Capt.) F. L. Atkinson	Injured	April 1917
2/Lieut. W. R. Ayling	—	Nov. 1918
Lieut. J. Baalman	—	Aug. 1917
Lieut. D. H. Bacon	Missing	Nov. 1916
Lieut. C. G. Baker	—	Jan. 1917
Major H. H. Balfour, M.C. and Bar, Croix de Guerre (French)	—	May 1916
Capt. A. Ball, V.C., D.S.O. and 2 Bars, M.C., Order of St. George (Russian, 4th Class), Croix de Chevalier (French)	Killed	Sept 1916
Lieut. A. C. Ball	Missing	Feb. 1918
Lieut. H. J. O. Barnett	—	Jan. 1918
Lieut. J. N. Bartlett	—	June 1918
F/Officer H. F. V. Battle	Wounded	Sept. 1918
Capt. A. Beck, D.F.C.	—	June 1918
Capt. J. D. Belgrave, M.C. and Bar	Missing	April 1918
Major A. D. Bell-Irving, M.C. and Bar, Croix de Guerre	Wounded	May 1916
2/Lieut. I. Bigood	—	May 1916
Capt. A. Binnie, M.C.	Missing	April 1917
Lieut.-Col. W. A. Bishop, V.C., D.S.O. and Bar, M.C., D.F.C., Croix de Chevalier, Legion of Honour, Croix de Guerre with Palm (French)	—	April 1917
Capt. C. T. Black	—	March 1917
Capt. C. L. Blake	—	June 1917
Lieut. R. C. W. Blessley (U.S. Air Service)	Wounded	Sept. 1918
2/Lieut. F. Bower	Killed	April 1917
Lieut. H. S. Brackenbury	Injured	March 1917
Capt. N. A. Browning-Paterson	Killed	May 1916
Capt. W. E. G. Bryant, M.B.E.	Wounded	May 1916
Lieut. H. E. W. Bryning	—	June 1918
2/Lieut. H. Buckley	Wounded	Aug. 1918
2/Lieut. E. A. Burbidge	—	Sept. 1918
2/Lieut. C. M. H. M. Caffyn	Killed	March 1917
Major K. L. Caldwell, M.C., D.F.C. and Bar, Croix de Guerre (Belgian)	—	Jan. 1917
Lieut. K. T. Campbell	Died	June 1918
Lieut. L. H. T. Capel	—	Feb. 1918
Capt. C. W. Carleton, A.F.C.	—	Dec. 1916
2/Lieut. W. M. Carlyle	Missing	Oct. 1916
Lieut. A. Carter, M.M.	—	Sept. 1917
2/Lieut. W. E. Cass	Died	Aug. 1916
Lieut. G. F. Caswell	Missing	Sept. 1918
Capt. J. C. A. Caunter	Missing	Oct. 1917
2/Lieut. L. C. Chapman	Missing	April 1917
Capt. L. S. Charles	Missing	July 1916
Capt. R. L. Chidlaw-Roberts, M.C.	—	Sept. 1917
2/Lieut. E. W. Christie	Missing	April 1918
Capt. S. Clare, M.B.E.	—	Jan. 1918
Capt. F. W. Clark, A.F.C.	—	Jan. 1918
2/Lieut. L. L. Clark	Killed	May 1916
2/Lieut. R. B. Clark	Died of Wounds	April 1917
Major A. C. Clarke	—	Aug. 1918
Lieut. J. H. Cock	Missing	April 1917
A/Capt. E. S. T. Cole, M. C.	—	Sept. 1916
Capt. J. Collier, D.F.C. (80 Sqdn.)	—	July 1917
Capt. W. H. K. Copeland	—	March 1918
Lieut. G. F. Court	—	Nov. 1917

2/Lieut. G. B. Craig	Missing	Feb.	1918
Lieut. F. D. Crane	—	Jan.	1918
Capt. K. Crawford	Missing	April	1918
Lieut. H. D. Crompton	—	Sept.	1917
Lieut. (A/Capt.) J. B. Crompton	—	Sept.	1917
Major C. M. Crowe, M.C., D.F.C.	—	July	1918
Lieut. C. F. Cunningham	—	Jan.	1918
F/Lieut. A. P. V. Daly	—	Nov.	1916
Capt. I. Meredyth Davies	—	April	1918
Lieut. W. B. Day	—	Oct.	1918
Capt. G. C. Dell-Clarke, M.C.	Killed	July	1918
2/Lieut. E. W. C. Densham	—	Sept.	1918
F/Lieut. G. W. Dobson, O.B.E.	—	Oct.	1916
Capt. J. E. Doyle, D.F.C.	Missing	Sept.	1918
Lieut. L. Drummond	—	Aug.	1916
Capt. J. M. Drysdale	Wounded	Aug.	1916
Lieut. G. L. Du Cros	—	June	1918
Capt. G. M. Duncan, D.F.C.	—	Aug.	1918
Capt. W. J. A. Duncan, M.C. and Bar	—	Nov.	1917
2/Lieut. (Hon. Lieut.) J. Elgood	—	July	1916
Lieut. G. F. Elliott	—	Sept.	1917
Lieut. J. McC. Elliott	Missing	April	1917
Lieut. C. D. Evans	—	Jan.	1918
2/Lieut. J. J. Fitzgerald	Missing	Oct.	1917
2/Lieut. H. T. Flintoft	—	July	1918
2/Lieut. J. H. Flynn	Killed	Sept.	1917
Major E. L. Foot, M.C.	—	Oct.	1916
2/Lieut. C. V. Forsyth	—	Nov.	1918
Lieut. C. W. France	—	Aug.	1918
Capt. W. M. Fry, M.C.	—	Jan.	1917
Capt. P. E. M. Le Gallais, A.F.C.	—	Aug.	1916
Lieut. W. P. Garnett	Missing	March	1917
Lieut. F. O. Gibbon	—	July	1917
Major E. J. L. W. Gilchrist, M.C., D.F.C.	Wounded	Dec.	1916
Lieut. W. Gilchrist	Missing	May	1917
Capt. G. A. Giles	—	Jan.	1917
Lieut. H. Good	—	May	1916
Capt. F. E. Goodrich, M.C.	Killed	Sept.	1916
Lieut. H. A. Gordon	Missing	July	1918
2/Lieut. R. J. Grandin	Missing	July	1917
Major E. P. Graves	Killed	March	1917
Hon. Capt. D. B. Gray, M.C.	—	May	1916
F/Lieut. E. O. Grenfell, M.C., A.F.C.	Wounded	Dec.	1916
F/Officer J. S. Griffith, D.F.C. and Bar, Order of St. Vladimir, 4th Class	Wounded	July	1918
2/Lieut. W. H. Gunner, M.C.	Missing	July	1917
Capt. H. W. Guy, Croix de Guerre (Belgian)	—	June	1917
Lieut. C. S. Hall	Missing	April	1917
Lieut. J. G. Hall	Missing	Nov.	1918
Lieut. H. Hamer, A.F.C.	—	Feb.	1917
Capt. H. A. Hamersley, M.C.	—	Sept.	1917
Lieut. H. T. Hammond	Missing	Sept.	1917
2/Lieut. L. P. Harlow	—	Nov.	1918
Lieut. H. Harris	—	May	1916
2/Lieut. R. M. Harris	Killed	June	1917
2/Lieut. J. J. A. Hawtrey	Missing	Sept.	1917
Lieut. J. Headlam	Killed	May	1918
Major J. N. D. Heenan	—	June	1916
Capt. H. G. Hegarty, M.C.	—	Jan.	1918
Lieut. G. W. Hemsworth	—	Jan.	1918
Lieut. C. R. Henderson	—	March	1918
Lieut. N. P. Henderson	Wounded	April	1917
Capt. E. G. Herbert	Wounded	Jan.	1917
Lieut. H. E. Hervey, M.C. and Bar	Missing	April	1917
2/Lieut. F. A. Hickson	—	Sept.	1918
Sqdn.-Ldr. R. M. Hill, M.C., A.F.C.	—	Aug.	1916
Capt. C. Holland, M.C.	—	Dec.	1916
2/Lieut. R. Hopper	Killed	Jan.	1917

F/Lieut. S. B. Horn, M.C.	—	Sept.	1917
2/Lieut. E. S. Howard	Killed	May	1917
2/Lieut. G. D. Hunter	Missing	May	1917
2/Lieut. W. E. Jenkins	Killed	Nov.	1917
Lieut. O. P. Johnson	—	July	1918
Lieut. B. S. Johnston	—	Aug.	1918
Lieut. R. N. K. Jones, M.C.	—	July	1916
Lieut. P. S. Joyce	Missing	March	1917
Capt. R. C. Kean	—	Jan.	1917
Capt. G. D. F. Keddie	—	May	1916
Lieut. S. W. Keen, M.C.	Died of Wounds	Aug.	1916
Lieut C. M. Kelly	—	Aug.	1916
2/Lieut. W. M. Kent	Missing	Feb.	1918
Lieut. J. F. M. Kerr	—	Aug.	1918
2/Lieut. J. L. Kight	—	Aug.	1916
2/Lieut. R. E. Kimbell	Missing	April	1917
2/Lieut. C. H. M. King	Killed	Sept.	1916
Capt. A. N. Kingwill	—	Feb.	1917
Lieut. R. A. Kirkpatrick	—	April	1918
Capt. H. Kirton	—	Jan.	1917
Capt. M. B. Knowles	Missing	April	1917
Lieut. R. H. Knowles	—	—	—
Lieut. T. Langwill	Missing	April	1917
Capt. J. D. Latta, M.C.	—	Nov.	1916
2/Lieut. J. Laurie-Reid	—	May	1916
Lieut. (Hon. Capt.) J. K. Law	Missing	Sept.	1917
2/Lieut. L. H. Leckie	—	April	1917
Lieut. H. M. Lewis	—	July	1917
Lieut. R. G. Lewis	Missing	March	1918
Lieut. D. R. C. Lloyd	Missing	June	1917
Capt. E. A. Lloyd	—	Jan.	1917
Major G. L. Lloyd, M.C., A.F.C.	—	June	1917
Lieut. L. B. Loughran, American Air Service	Killed	July	1918
2/Lieut. J. C. Louw	—	March	1918
Lieut. (Hon. Capt.) R. J. S. Lund	—	Sept.	1918
Capt. J. D. McCall	—	Nov.	1917
Lieut. W. F. McCarthy	Wounded	Nov.	1918
Lieut. E. J. C. McCracken	Missing	Aug.	1918
Major J. B. McCudden, V.C., D.S.O. and Bar M.C. and Bar, Croix de Guerre, Mil. Medal	Killed	July	1918
F/Lieut. B. McEntegart	—	Aug.	1918
Lieut. I. C. MacGregor	Injured	Sept.	1917
2/Lieut. N. C. Mackey	—	Sept.	1918
2/Lieut. C. W. McKissock	Missing	May	1917
2/Lieut. R. D. McLennan	Killed	Dec.	1917
Lieut. J. E. C. MacVicker	Killed	June	1918
2/Lieut. H. E. Martin	Killed	Nov.	1916
F/Officer S. J. Mason	—	Sept.	1918
Major H. Meintjies, M.C., A.F.C.	—	May	1916
Capt. P. Middlemas, M.B.E.	—	Feb.	1917
2/Lieut. S. C. Millar	—	July	1918
Major J. A. Milot	Missing	April	1917
Capt. W. E. Molesworth, M.C. and Bar, Italian Medal (Silver) for Military Valour	—	March	1917
Capt. H. A. S. Molyneux, D.F.C.	—	March	1918
Lieut.-Col. B. F. Moore	—	Jan.	1918
Lieut. A. W. Morey, M.C.	Killed	Jan.	1918
Lieut. D. H. Morris	—	Oct.	1917
Capt. F. J. Morse, Croix de Guerre (French)	—	Dec.	1918
Lieut. A. W. M. Mowle	Injured	July	1917
Lieut. D. C. G. Murray	Missing	June	1917
2/Lieut. W. B. Newth	Killed	Sept.	1918
2/Lieut. H. J. Newton	Missing	May	1916
Lieut. B. Nicholson	—	Sept.	1917
Lieut. J. I. M. O'Beirne	—	May	1916
Lieut. A. R. Oliver	—	Aug.	1918
Lieut. J. A. N. Ormsby	Missing	July	1916

Lieut. H. C. M. Orpen	—	Sept. 1918
Lieut. E. R. Ortner	—	March 1918
Lieut. F. H. Osborne	—	Sept. 1918
Lieut. G. E. Osmond	—	March 1917
Lieut. C. F. Overy	—	May 1916
Capt. G. A. Parker, M.C., D.S.O.	Missing	Nov. 1916
Major S. E. Parker, M.B.E., A.F.C.	—	Aug. 1916
2/Lieut. F. C. Parkes	—	June 1917
Lieut. G. A. H. Parkes	Missing	July 1917
Capt. C. Parry, D.F.C.	Wounded	July 1918
Major C. K. C. Patrick, D.S.O., M.C. and Bar	—	Aug. 1917
Major C. Patteson, M.C., A.F.C., Croix de Guerre (French)	—	May 1917
Capt. A. R. Penny, M.C.	—	June 1917
Lieut. E. W. Percival	—	May 1917
2/Lieut. R. M. Phalen	Missing	May 1917
Capt. G. Phillippi, M.C.	Wounded	Sept 1916
F/Officer G. A. H. Pidcock, Croix de Guerre (French)	—	Jan. 1917
F/Officer S. L. Pope	—	May 1917
Sqdn.-Ldr. C. F. A. Portal, M.C., D.S.O. and Bar	—	May 1916
2/Lieut. O. Price	—	June 1918
Lieut. J. O. Priestley	—	Nov. 1917
Lieut. H. N. J. Proctor	—	March 1918
Capt. E. B. A. Rayner	—	Jan. 1917
Capt. J. W. Rayner	—	Aug. 1918
Lieut. F. K. Read, American Air Service	—	June 1918
F/Lieut. C. A. Ridley, D.S.O., M.C.	Missing	May 1916
2/Lieut. D. M. Robertson	Missing	April 1917
Lieut. N. McL. Robertson	Killed	Oct. 1916
Lieut. H. G. Ross	Injured	May 1917
Lieut. J. A. Roth, United States Air Service	—	Oct. 1918
Capt. B. Roxburgh-Smith, D.F.C. and Bar Croix de Guerre (Belgian)	Injured	Feb. 1917
Lieut. N. C. Roystan	Injured	Feb. 1918
Lieut. W. O. Russell	Missing	April 1917
Capt. W. J. Rutherford	—	May 1917
Lieut. A. W. Saunders, D.F.C.	—	Feb. 1918
Capt. O. J. F. Scholte, M.C.	Killed	July 1918
Grp.-Capt. A. J. L. Scott, C.B., M.C., A.F.C.	Wounded	April 1917
Capt. J. Seabrook, A.F.C.	—	Oct. 1916
Capt. F. H. B. Selous, M.C., Italian Silver Medal	Killed	Sept. 1917
Lieut. W. B. Sherwood	Missing	Oct. 1917
Lieut. R. G. Sillars	—	May 1917
F/Lieut. J. H. Simpson	—	May 1916
2/Lieut. M. D. Sinclair	—	June 1918
2/Lieut. G. O. Smart	Missing	April 1917
Sqdn.-Ldr. H. G. Smart	—	May 1916
Lieut. J. E. Smith	Missing	Sept. 1918
2/Lieut. L. H. Smith	Missing	Oct. 1918
Lieut. R. H. Smith	—	Sept. 1918
Lieut.-Col. R. R. Smith-Barry, A.F.C., Chevalier de l'Ordre de Leopold	—	May 1916
F/Lieut. F. O. Soden, D.F.C.	—	July 1917
2/Lieut. L. V. Southwell	Injured	March 1918
Sqdn.-Ldr. W. Sowrey, A.F.C.	—	Nov. 1916
Lieut. J. M. J. Spencer	Missing	Oct. 1916
Lieut. F. Stedman	Missing	April 1917
2/Lieut. R. B. Steele	Injured	Sept. 1917
2/Lieut. L. G. Stockwell	Missing	Oct. 1918
T/Capt. V. A. Stookes, M.C.	—	Oct. 1916
2/Lieut. H. S. Stuart-Smith	Missing	Sept. 1918
Lieut. E. A. Sullock, A.F.C.	—	March 1918
Capt. A. S. M. Summers	Missing	Sept. 1916
2/Lieut. H. E. Talbot	—	Dec. 1918
Capt. H. S. Taylor	—	Aug. 1916
Capt. G. J. Temperley	Injured	Oct. 1917
Lieut. G. E. Tennant	—	Sept. 1918
Lieut. O. Thamer	Missing	Jan. 1918
2/Lieut. S. A. Thomson	Missing	Sept. 1918
F/Officer E. Thornton	—	Jan. 1918

Capt. H. C. Tower	Missing	May	1916
F/Lieut. E. J. D. Townsend	Missing	April	1917
Lieut. J. W. Trusler	—	Feb.	1918
2/Lieut. F. E. Upton-Smith	—	Feb.	1918
Capt. S. F. Vincent, A.F.C.	—	July	1916
Lieut. B. M. Wainwright	Missing	July	1916
Major F. F. Waldron	Killed	May	1916
Lieut. Walker	—	Aug.	1916
Lieut. A. M. Walters	—	Sept.	1916
Capt. L. S. Weedon	—	Sept.	1916
2/Lieut. A. N. Westergaard	—	June	1918
2/Lieut. M. West-Thompson	Killed	Sept.	1917
Lieut. A. D. Whitehead	Missing	March	1917
Capt. L. E. Whitehead	Wounded	June	1916
Lieut. J. O. Whiting	Missing	Sept.	1917
Lieut. R. K. Whitney, D.F.C.	Wounded	Aug.	1918
2/Lieut. R. C. R. Wilde	—	Oct.	1918
Lieut. C. Williams	Missing	May	1916
2/Lieut. V. F. Williams	Missing	April	1917
2/Lieut. J. Winslow	—	Oct.	1918
Lieut. C. O. Wright	—	Aug.	1917
Lieut. G. C. Young	—	May	1917

## APPENDIX II

### BATTLE CASUALTIES

In this list each officer is given in the rank which he held at the time he was wounded or missing. It is very apparent that it was during April 1917 that the squadron went through the bitterest fighting. There were 20 casualties in this month alone. The worst month after this was September 1917, with 8 casualties, while in July and again in September 1918, 6 pilots "went west."

These figures show clearly the increase in the intensity of air fighting as the contest wore on. In August 1916, when 60 was still a two-seater squadron with only one scout flight, we lost 5 pilots and 2 observers; this was thought at the time to be high, as indeed it was according to the standard of those days, though several other squadrons lost more heavily during the Somme. Nevertheless, the figures show only too clearly that the Arras fighting was far the severest trial 60 ever had, for during April 1917 the losses were 105 per cent. The total number of Battle Casualties is 115, sustained during 29 months of war flying, giving an average of just under 4 per month, or nearly one a week.

An analysis of the figures shows that 76 of these 115 were killed, while 39 are alive, unless, indeed, they were killed with another squadron later in the war: but this could only have happened to the 21 wounded who got back to their own side of the lines.

Of the 72 missing, 54 are dead, 17 were repatriated from Germany, while one, Ridley, escaped.

Though it was true to say that roughly half of our missing in the Air Force were alive, it will be seen that in 60's case the average was much smaller, only 25 per cent. instead of 50 per cent. 135

Name.	Casualty.	Date.	Details.
Major F. F. Waldron	Killed	3.7.16	Died whilst Prisoner of War.
Lieut. N. A.	Missing	21.7.16	Officially reported killed.
Lieut. L. E. Whitehead	Wounded	30.7.16	(Missing 20.5.18—65 Sqdn.) Death presumed.
Lieut. W. E. G. Bryant	Wounded	30.7.16	
Capt. L. S. Charles	Missing	30.7.16	Died whilst P. of W.
Lieut. C. Williams	Killed	30.7.16	
2/Lieut. L. L. Clark	Missing	2.8.16	Death accepted.
Lieut. J. A. N. Ormsby	Missing	2.8.16	Officially reported killed.
2/Lieut. H. J. Newton	Missing	2.8.16	Death accepted 2.8.16.
F/Lieut. C. A. Ridley	Missing	3.8.16	Escaped from Germany 13.10.16.
2/Lieut. J. M. Drysdale	Wounded	25.8.16	
2/Lieut. B. M. Wainwright	Missing	28.8.16	Repatriated P. of W. 1.1.19.
Capt. A. S. M. Summers	Missing	15.9.16	Killed.
Capt. H. C. Tower	Missing	19.9.16	Death accepted.
2/Lieut. G. Phillippi	Wounded	26.9.16	
Lieut. N. McL. Robertson	Killed	17.10.16	Died of wounds.
2260 Sergt. A. Walker	Killed	25.10.16	
Lieut. W. M. Carlyle	Missing	26.10.16	Death accepted.
Lieut. J. M. J. Spencer	Missing	3.11.16	Killed.
Lieut. A. D. Bell-Irving	Wounded	9.11.16	
2/Lieut. H. E. Martin	Killed	16.11.16	
Lieut. D. H. Bacon	Missing	16.11.16	Death accepted.
Capt. G. A. Parker	Missing	27.11.16	Death accepted.
Capt. E. D. Grenfell	Wounded	11.12.16	
2/Lieut. E. J. L. W. Gilchrist	Wounded	11.12.16	
2/Lieut. R. Hopper	Killed	11.1.17	Savy.
2/Lieut. E. G. Herbert	Wounded	28.1.17	While salving a wrecked machine.
Major E. P. Graves	Killed	6.3.17	Rivière.
2/Lieut. P. S. Joyce	Missing	6.3.17	
Lieut. A. D. Whitehead	Missing	11.3.17	Repatriated P. of W. 20.1.18.
Lieut. C. McH. M. Caffyn	Killed	28.3.17	Le Hameau.
Lieut. W. P. Garnett	Missing	30.3.17	Death accepted.
2/Lieut. F. Bower	Died of wounds	31.3.17	Died of wounds.
2/Lieut. V. F. Williams	Missing	2.4.17	Death accepted.
Lieut. E. J. D. Townesend	Missing	5.4.17	Repatriated P. of W. 20.1.18. <span style="float: right;">136</span>
2/Lieut. G. O. Smart	Missing	7.4.17	Killed.
2/Lieut. C. S. Hall	Missing	7.4.17	Killed.
Capt. M. B. Knowles	Missing	7.4.17	Repatriated P. of W. 14.12.18.
Lieut. W. O. Russell	Missing	14.4.17	Repatriated P. of W. 2.1.19.
2/Lieut. L. C. Chapman	Missing	14.4.17	Died of wounds.
Capt. A. Binnie	Missing	14.4.17	Repatriated P. of W. 7.1.18.
2/Lieut. J. H. Cock	Missing	14.4.17	Death accepted.
2/Lieut. H. E. Hervey	Missing	15.4.17	Repatriated P. of W.
Major J. A. Milot	Missing	15.4.17	Reported dead (German source).

Lieut. J. McC. Elliott	Killed	16.4.17	
2/Lieut. D. N. Robertson	Missing	16.4.17	Death accepted.
Lieut. T. Langwill	Missing	16.4.17	Death accepted.
2/Lieut. R. E. Kimbell	Missing	16.4.17	Killed in action.
Lieut. T. L. Atkinson	Wounded	20.4.17	
2/Lieut. N. P. Henderson	Wounded	26.4.17	
2/Lieut. F. Stedman	Missing	27.4.17	Repatriated P. of W. 31.12.18.
2/Lieut. H. G. Ross	Wounded	28.4.17	
2/Lieut. R. B. Clark	Died of wounds	30.4.17	Died of wounds 1.5.17.
2/Lieut. C. W. McKissock	Missing	6.5.17	Repatriated P. of W. 14.12.18.
Lieut. G. D. Hunter	Missing	6.5.17	Repatriated P. of W. 20.1.18.
2/Lieut. E. S. Howard	Killed	18.5.17	Tilloy-les-Hemaville.
2/Lieut. R. J. Grandin	Killed	18.5.17	N. Rémy.
2/Lieut. W. Gilchrist	Missing	25.5.17	Repatriated P. of W. 17.11.18.
2/Lieut. R. M. Phalen	Missing	28.5.17	Killed.
2/Lieut. R. M. Harris	Killed	7.6.17	Le Hameau.
Lieut. D. R. C. Lloyd	Missing	16.6.17	Reported dead (German source).
Lieut. D. C. G. Murray	Missing	27.6.17	Repatriated P. of W. 9.12.18.
Lieut. A. R. Adam	Missing	3.7.17	Killed.
Major A. J. L. Scott	Wounded	10.7.17	
2/Lieut. G. A. H. Parkes	Missing	15.7.17	Repatriated P. of W. 23.12.18.
Lieut. A. W. M. Mowle	Wounded	22.7.17	
2/Lieut. W. H. Gunner	Missing	29.7.17	Death accepted.
Lieut. H. T. Hammond	Missing	14.9.17	Repatriated P. of W. 18.12.18.
2/Lieut. J. J. A. Hawtrey	Missing	16.9.17	Reported died (German source).
19130 Sergt. J. W. Bancroft	Missing	20.9.17	Repatriated P. of W. 19.12.18.
Capt. J. K. Law	Missing	21.9.17	Death accepted.
Lieut. J. O. Whiting	Missing	22.9.17	Death accepted.
Lieut. I. C. MacGregor	Wounded	22.9.17	
89279 2/A.M. H. H. Bright	Missing	23.9.17	Reported killed 19.10.17.
2/Lieut. J. H. Flynn	Killed	30.9.17	
2/Lieut. J. J. Fitzgerald	Missing	5.10.17	Repatriated P. of W. 18.12.18.
Lieut. W. B. Sherwood	Missing	27.10.17	Death accepted.
Capt. J. C. A. Caunter	Missing	28.10.17	Killed.
Lieut. W. E. Jenkins	Killed	23.11.17	
2/Lieut. M. West-Thompson	Killed	23.11.17	
2/Lieut. R. W. McLennan	Killed	23.12.17	
Capt. F. H. B. Selous	Killed	4.1.18	Collision in the air.
2/Lieut. O. Thamer	Missing	6.1.18	Repatriated P. of W. 22.11.18.
Lieut. A. W. Morey, M.C.	Killed	24.1.18	
2/Lieut. A. C. Ball	Missing	5.2.18	Repatriated P. of W. 14.12.18.
2/Lieut. N. C. Roystan	Wounded	18.2.18	
2/Lieut. C. B. Craig	Missing	21.2.18	Death accepted.
2/Lieut. W. M. Kent	Missing	21.2.18	Death accepted.
Lieut. L. V. Southwell	Wounded	6.3.18	Died of wounds 14.3.18.
2/Lieut. E. W. Christie	Missing	2.4.18	Presumed dead.
Capt. K. Crawford	Missing	11.4.18	Presumed dead.
2/Lieut. H. N. J. Proctor	Missing	16.5.18	Presumed dead.
Lieut. J. Headlam	Killed	30.5.18	
Capt. J. D. Belgrave	Missing	13.6.18	Presumed dead.
Lieut. R. G. Lewis	Missing	13.6.18	Repatriated P. of W. 13.12.18.
Lieut. H. A. Gordon	Missing	7.7.18	Presumed dead.
Capt. G. C. Dell-Clarke	Killed	16.7.18	
Lieut. J. S. Griffith	Wounded	18.7.18	
Lieut. J. E. C. MacVicker	Missing	22.7.18	Presumed dead.
Lieut. L. B. Loughram	Killed	28.7.18	
Capt. C. Parry	Wounded	29.7.18	Wounded.
2/Lieut. J. G. Hall	Missing	8.8.18	Presumed dead.
2/Lieut. H. Buckley	Wounded	10.8.18	
2/Lieut. R. K. Whitney	Wounded	11.8.18	
Lieut. J. R. Anderson	Killed	13.8.18	
Lieut. E. C. J. McCracken	Missing	13.8.18	Repatriated P. of W. 14.12.18.
Lieut. S. W. Keen	Killed	21.8.18	Died of wounds at 3rd Can. C.C.S.
2/Lieut. S. A. Thomson	Missing	5.9.18	Presumed dead.
Capt. J. E. Doyle	Missing	5.9.18	Repatriated P. of W. 30.12.18.
Lieut. J. E. Smith	Missing	17.9.18	Reported killed in action.
2/Lieut. H. S. Smith	Missing	15.9.18	Killed in action.
Lieut. G. F. C. Caswell	Missing	20.9.18	Repatriated P. of W. 9.12.18



2/Lieut. H. F. V. Battle	Wounded	20.9.18	
Lieut. L. H. Smith	Missing	26.10.18	Repatriated P. of W. 9.12.18.
2/Lieut. L. G. Stockwell	Missing	28.10.18	Repatriated P. of W. 9.12.18.

## FOOTNOTES

- <sup>1</sup> By means of which the machine is tilted sideways.
- <sup>2</sup> Anti-aircraft or high-angle guns on the ground.
- <sup>3</sup> All flying machines were known as "grids" in the squadron.
- <sup>4</sup> The F.E.8 was a "pusher" machine, that is with the engine and propeller behind the pilot. It was used for reconnaissance work at this time, but later became one of our night-bombing aeroplanes.
- <sup>5</sup> Used for signals. It fired a kind of cartridge from which a flaming ball was discharged of red, green, or white lights.
- <sup>6</sup> The weekly official record of work done by the R.F.C., including all scraps in which the Hun "crashed" or "went down out of control."
- <sup>7</sup> Anti-aircraft guns or shells.
- <sup>8</sup> It is very difficult to fly by compass in clouds for any length of time.
- <sup>9</sup> Kite balloon.
- <sup>10</sup> These machines were some of the first to be used for reconnaissance purposes. They did about ninety miles an hour "all out," and were therefore difficult to handle against the faster Albatros. It is very often the duty of reconnaissance machines not to engage in a fight, as their news may be lost.
- <sup>11</sup> When every machine gets mixed up in a sort of mêlée.
- <sup>12</sup> Either of the D3 or D5 type, which was generally used by the enemy at this time. It was an efficient machine for speed, but could not climb as well as our scouts.
- <sup>13</sup> A machine is spinning when it is diving towards the ground turning in a corkscrew fashion.
- <sup>14</sup> Most fighting is now done in "formation," that is in an organised pack. Either the machines fly in the shape of a wedge or a diamond, or in some order which is most convenient to the "leader."
- <sup>15</sup> It is very often impossible to watch a machine after it has been hit until it "crashes." It is, therefore, counted as out of control. Sometimes this was used as a "blind" by some pilots to escape. They simply let the machine do what it liked, and when near the ground took control again.
- <sup>16</sup> A vehicle used for moving dismantled aeroplanes by road.
- <sup>17</sup> A pet name used for artillery machines of the B.E. type.
- <sup>18</sup> The Huns always used to bombard certain areas in the morning and evening. These bombardments were known as the morning and evening hate.
- <sup>19</sup> These rockets were invented by a Frenchman and used for balloon strafing. They were placed in cases on the struts, and were fired by electricity. The rocket was about 1½ feet long and the stick about 3 feet.
- <sup>20</sup> These are used, generally in the ratio of one to four ordinary or armour-piercing bullets, to show the general direction in which the burst of fire is going. Instead of being filled with lead like the ordinary bullet, they contain phosphorus, which commences to burn as soon as the bullet is discharged from the machine gun, and leaves behind it a trail of smoke and fire to mark its course.
- <sup>21</sup> A number of balls of fire fastened together and shot up into the air in order to fall over the attacking machine and bring it down in flames.
- <sup>22</sup> A type of machine gun. The bullets are fed from a "drum" which is automatically turned when the gun fires.
- <sup>23</sup> The tail plane which is used to direct the machine up or down.
- <sup>24</sup> Tennis.
- <sup>25</sup> A pilot who has brought down five or more enemy machines.
- <sup>26</sup> Corresponds to an Adjutant in an infantry battalion.
- <sup>27</sup> Bishop.
- <sup>28</sup> *A.M.L.O.*: Assistant Military Landing Officer.
- <sup>29</sup> Bishop, who got his V.C. for this.
- <sup>30</sup> An indefinitely large number.
- <sup>31</sup> Trick flying.
- <sup>32</sup> A formidable line of trenches branching off from the main Hindenburg line of Quéant and defending Douai.
- <sup>33</sup> A stream flowing north of Arras.
- <sup>34</sup> Same as wind up, or fright.
- <sup>35</sup> One of the most famous formations of enemy scouts, composed of the "crack" German pilots. Their machines generally had red bodies.

- 36 A piece of aluminium shaped so as to cover the engine.
- 37 A main plane is made up of two spars on which the ribs are fixed.
- 38 Body of the machine.
- 39 A barbarous word invented by the Army, and which means "alighting from an omnibus."
- 40 This, I am afraid, is not quite accurate, as a glance at Appendix II will show.
- 41 Ypres.
- 42 Cassel.
- 43 A type of hangar invented by a Frenchman and generally used on our aerodromes in France.
- 44 A method used to bring a machine down quickly without gaining speed.
- 45 Air mechanics.
- 46 Bishop.
- 47 Scott.
- 48 Scott.
- 49 G. L. Lloyd.
- 50 Penny.
- 51 The S.E.5s.
- 52 Bishop.
- 53 Bishop.
- 54 Home Establishment.

# INDEX

- "Ace," a French, 60 *and note*<sup>25</sup>  
Adam, Lieut. A. R., 128, 136  
Adinfer Wood, 35;  
    German trenches, 37-8  
Aeroplane Supply Depot, No. 1, 112  
Air Board Training Division, 87  
Air Force Mechanical Transport, work of, 116-17  
Albatros machines, 29-30, 31-2, 38, 42 *note*<sup>10</sup>, 43 *and note*<sup>12</sup>, 54, 55, 88, 103  
Albert, 30  
Allenby, General, inspection of 60 Squadron, 53, 56-7;  
    sent to Egypt, 106  
Americans, the, at Beugnatre, 118;  
    men serving in English scout squadrons, 121-2  
Amiens, 13, 106, 115-16;  
    a dinner in, 118  
Anderson, Lieut. J. R., 128, 137  
"Archie" gunners, 8, 22, 34 *and note*<sup>7</sup>, 35, 51-3  
Armistice, the, 90, 122-4  
Armstrong, Capt. D. V., 3, 8, 11, 15, 17-19;  
    death, 72-3, 128  
— Lieut. J. L., 128  
Army of the Rhine, 126  
Arras, 26, 56, 67;  
    battle of, 22, 30-64  
Arras-Albert Sector, the German retreat, 32-3  
Arras-Cambrai road, 11-12  
Artillery horses, 83  
Artillery registration, German, 58-9, 61-2  
Aspinall, Sergt.-Major, 4-5, 23  
Atkinson, Lieut. F. L., 128, 136  
Ayling, 2/Lieut. W. R., 128  
  
B.E. machines, 9, 41  
B.E.2C. machines, 2  
Baalman, Lieut. J., 128  
Bacon, Lieut. D. H., 128, 135  
Bailleul aerodrome, 105  
Baisieux, 116  
Baker, Lieut. C. G., 128  
Balfour, Major H. H., 3, 90, 128;  
    description of a flight, 11-13  
Ball, Captain A., 15-17, 39, 73, 81, 128  
— Lieut. A. C., 88-9, 128, 137  
"Balloon strafing," 20-1, 38, 47-48;  
    account by Captain Molesworth, 50-3  
Bancroft, Sergt., 69, 136  
Bapaume, 15, 17, 18, 36, 94, 118  
Barnaby, Capt. H. O., of the "archie" gunners, 22  
Barnett, Lieut. H. J. O., 128  
Barrington-Kennet, Basil, 4  
Bartlett, Lieut. J. N., 106, 128  
Baths, camp, 95, 96  
Battle, F/Officer H. F. V., 128, 138  
Beck, Capt. A., 115, 122, 128  
Belgian troops, rations and ammunitions for, 116  
Belgrave, Capt. J. D., 73, 111, 128, 137  
Bellevue, 105-6  
Bell-Irving, Major A. D., 3, 15, 17, 21, 23, 128, 135  
Bessoneau hangars, 94 *and note*<sup>43</sup>  
Beugnatre, 116, 118  
Bigood, 2/Lieut. J., 3, 128  
Binnie, Capt. A., 39, 44-5, 128, 136

Biplanes, Morane, 5, 6  
 Bishop, Lieut.-Col. W. A., 40, 45, 47, 49, 61-3, 66, 73, 81, 90, 97, 101-2, 104, 112, 128  
 Black Boy, dog, 96  
 Black, Capt. C. T., 39, 128  
 Blake, Capt. C. L., 128  
 Blessley, Lieut. R. C. W., 128  
 Boffles, 60 Squadron at, 106, 116  
 Boisdingham, 60 Squadron moved to, 8  
 Booby traps, 36, 38, 123  
 Boulogne, 83  
 Bourlon Wood, 118  
 Bower, 2/Lieut. F., 47-8, 129, 135  
 Brackenbury, Lieut. H. S., 45, 129  
 Breguet machine, 119-21  
 Bright, 89279 2/A.M. H. H., 137  
 Bristol machines, 2, 39, 115  
 Browning-Paterson, Capt. H. A., 3, 129, 135  
 Bruay mines, 57  
 Brussels, 9  
 Bryant, Capt. W. E. G., 3, 129, 135  
 Bryning, Lieut. H. E. W., 129  
 Buckingham bullets, 21, 51  
 Buckley, 2/Lieut. H., 115, 129, 137  
 "Bullets," Morane, 5, 6-8, 11  
 Burbidge, 2/Lieut. E. A., 129  
 Burke, *Reflections on the Revolution in France*, quoted, 74-5  
 Burning machine, a, described, 102-3  
 Busigny, 15  
  
 Caffyn, Lieut. C. McH. M., 45-6, 129, 135  
 Caldwell, Major K. L., 28, 31, 39, 57, 66, 70, 73, 129  
 Callaghan, Lieut. L. K., 118  
 Cambrai, 15, 50, 56, 118, 122;  
     attack November 20, 79  
 Camel machines on the Somme, 18;  
     for 151 Squadron, 71;  
     for 148 Squadron, 117  
 Campbell, Lieut. K. T., 129  
 Canada, the elections, 84  
 Canadian cavalry, 40  
 Canadians, first contingent, 40;  
     in the R.A.F., 81  
 Capel, Lieut. L. H. T., 129  
 Carleton, Capt. C. W., 129  
 Carlyle, Lieut. W. M., 129, 135  
 Carter, Lieut. A., 70, 129  
 Cass, 2/Lieut. W. E., 129  
 Cassel, 70, 86  
 Casualties, the first Flying Corps, 13;  
     list of, 134-8  
 Caswell, Lieut. G. F., 129, 138  
 Caudry Station blown up, 123  
 Caunter, Capt. J. C. A., 129, 137  
 Cavendish, Lord John, ideal of a gentleman's character, 74, 78-9  
 Cecil, Lord Hugh, on the education of the future R.A.F. officer, 74, 124  
 Cemeteries, German, 36  
 Central Flying School, Uphaven, 3, 81  
 Chapman, 2/Lieut. L. C., 129, 136  
 "Character of a gentleman," 74-9  
 Charles, Capt. L. S., 129, 135  
 Chidlaw-Roberts, Capt. R. L., 70, 73, 129  
 Chinese coolies, 83-4  
 Chipilly, 47  
 Christie, 2/Lieut. E. W., 129, 137  
 Church Army huts, 84

Churchill, Mr., 125  
 Cinema, the, 101  
 "Circus," the, red-painted German machines, 30, 38, 54, 67 *and note*<sup>35</sup>  
 Cizancourt Bridge, 19  
 Clare, Capt. S., 129  
 Clark, Capt. F. W., 89, 129  
 — 2/Lieut. L. L., 3, 129, 135  
 — 2/Lieut. R. B., 48-9, 129, 136  
 Clarke, Major A. C., 114, 129;  
     Armistice dinner, 123-4  
 Clay, T., Flight Commander, 118  
 Clouds, difficulties of flying in, 34-5  
 Cock, Lieut. J. H., 129, 136  
 Cole, A/Capt. E. S. T., 129  
 Collier, Capt. J., 129  
*Comic Cuts*, 27 *and note*<sup>6</sup>  
 Compass, use in clouds, 34 *and note*<sup>8</sup>  
 Compass stations, 58-9  
 Conrad, on the west wind, 109-10  
 Cooper bombs, 18, 19, 70  
 Copeland, Capt. W. H. K., 106, 129  
 Courcelette, 15  
 Court, Lieut. G. F., 129  
 Craig, 2/Lieut. G. B., 129, 137  
 Crane, Lieut. F. D., 129  
 Crashes, 91  
 Crawford, Capt. K., 129, 137  
 Creech, Lieut. J. O., 118  
 Croisille, 34  
 Crompton, Lieut. H. D., 89, 90, 129  
 — Lieut. J. B., 70, 129  
 Cros, Lieut. G. L. Du, 129  
 Crowe, Major C. M., 114, 129  
 Cunningham, Lieut. C. F., 129  
  
 Dainville, 32  
 Dalmeny, Lord, 106  
 Daly, F/Lieut. A. P. V., 31, 129  
 Davies, Capt. I. Meredyth, 111, 129  
 Day, Lieut. W. B., 129  
 De Havilland machines, 115;  
     60 Squadron equipped with, 126  
 "Debussing," term, 72 *and note*<sup>39</sup>  
 Delay-action mines, 36, 123  
 Dell-Clarke, Capt. G. C., 129, 137  
 Demobilisation, 125-7  
 Densham, 2/Lieut. E. W. C., 129  
 Devastation by the enemy, 35-6  
 Dixmude, 119  
 Dobson, F/Lieut. G. W., 24-5, 129  
 Doby, batman, 14  
 "Dog-fights," 43 *and note*<sup>11</sup>, 54  
 Dogs of 60 Squadron, 84, 96  
 "Dope" treatment for aeroplane fabric, 28  
 Douai, 9, 42, 47, 54, 66 *note*<sup>32</sup>, 88, 94  
 Doullens, 105  
 Doullens-Amiens road, 8  
 Doyle, Capt. J. E., 115, 129, 137  
 Drocourt Switch, 66 *and note*<sup>32</sup>  
 Drocourt-Quéant Switch, 94  
 Drummond, Lieut. L., 129  
 Drysdale, Capt. J. M., 129, 135  
 Duck-boards, 83  
 Dug-outs, German, 36-8

Duncan, Capt. G. M., 115, 116, 129  
— Capt. W. J. A., 73, 89, 90, 106, 111, 129  
Dutch frontier escapes, 9

Eleventh Wing, the, 60 Squadron moved to, 65, 69  
Elgood, 2/Lieut. J., 129  
Elliott, Lieut. G. F., 129  
— Lieut. J. McC., 47, 130, 136  
Engines, air-cooled rotaries, 25, 65;  
water-cooled stationaries, 25, 65-6  
Epinoy aerodrome, 114  
Estrées-en-Chaussée, attacks on, 18-20  
Etaples, 63, 126  
Evans, Lieut. C. D., 89, 130  
“Evening hate,” 49 *and note*<sup>18</sup>

F.E.8 machines, 26 *and note*<sup>4</sup>, 94, 95  
Fampoux, 47  
Fienvilliers, 106  
Fifth Army, 70  
Fighting in the air, conditions, 108-9  
Filescamp Farm, 60 Squadron established at, 24, 57, 69-70  
First Army front, night-bombing, 72;  
the Cambrai attack, 79  
Fitzgerald, 2/Lieut. J. J., 130, 137  
Flintoft, 2/Lieut. H. T., 130  
“Flying Pig,” the, 43  
Flynn, 2/Lieut. J. H., 130, 137  
Foch, Maréchal, 119-20  
Fokkers, produced autumn 1915, 2;  
not distinguishable from the “bullets,” 8;  
on the Somme, 12;  
the D7, 115;  
low-flying, 117-18  
Folkestone, 62  
Foot, Major E. L., 8, 15, 130  
Football teams, 23, 82-3, 125  
Formation, fighting in, 43 *and note*<sup>14</sup>  
Forsyth, 2/Lieut. C. V., 130  
France, Lieut. C. W., 130  
French Flying Corps, 119-20  
Frost, effect on Hun flying, 25, 31  
Fry, Capt. W. M., 46, 50, 130

Gallais, Capt. P. E. M. Le, 130  
Gallipoli, 39  
Garnett, Lieut. W. P., 130, 135  
Gavrelle, 67  
German Flying Corps, 117, 122  
German retreat, March 1917, 33, 34;  
prisoners at Cassel, 86-7;  
courtesy, 88  
Gibbon, Lieut. F. O., 130  
Gilchrist, Lieut. W., 130, 136  
— Major E. J. L. W., 8, 15, 17, 21, 31, 130, 135  
Giles, Capt. G. A., 23, 130  
Gnome Martinsyde scout, 23  
Good, Lieut. H., 3, 130  
Goodrich, Capt. F. E., 130  
Gordon, Lieut. H. A., 111-12, 130, 137  
Gosport School of Special Flying, 2, 14, 17  
Gotha biplanes, 18  
Gramophone Company factory at Hayes, 5  
Grandin, 2/Lieut. R. J., 45, 130, 136  
Graves, Major E. P., command of 60 Squadron, 23, 24;  
death of, 30, 31, 130, 135

Gray, Capt. D. B., [3](#), [130](#)  
 Grenfell, Capt. E. O., [8](#), [15](#), [31-2](#), [130](#), [135](#)  
 "Grids," the term, [26](#) *and note*<sup>3</sup>, [28](#)  
 Griffith, Lieut. J. S., [90](#), [106](#), [111](#), [130](#), [137](#)  
 Gunner, 2/Lieut. W. H., [130](#), [136](#)  
 Gun-oil, non-freezing, [31](#)  
 Guy, Capt. H. W., [130](#)  
  
 Haig, Field-Marshal Earl, [116](#), [127](#)  
 Hall, Lieut. C. S., [41](#), [47](#), [66](#), [130](#), [136](#)  
 — Lieut. J. G., [130](#), [137](#)  
 Hamer, Lieut. H., [130](#)  
 Hammersley, Capt. H. A., [70](#), [73](#), [89](#), [90](#), [106](#), [130](#)  
 Hammond, Lieut. H. T., [130](#), [136](#)  
 Hare-hunting, [125-6](#)  
 Harlow, 2/Lieut. L. P., [130](#)  
 Harris, Lieut. H., [3](#), [130](#)  
 — 2/Lieut. R. M., [130](#), [136](#)  
 Havrincourt Wood, [15](#), [117](#)  
 Hawtrey, 2/Lieut. J. J. A., [130](#), [136](#)  
 Hayes, [5](#)  
 Headlam, Lieut. J., [130](#), [137](#)  
 Heenan, Major J. N. O., [3](#), [130](#)  
 Hegarty, Capt. H. G., [89](#), [106](#), [111](#), [130](#)  
 Hem, [106](#)  
 Hemsworth, Lieut. G. W., [84-6](#), [130](#)  
 Henderson, Lieut. C. R., [130](#)  
 — Lieut. N. P., [130](#), [136](#)  
 Herbert, Capt. E. G., [31](#), [130](#), [135](#)  
 Hervey, Lieut. H. E., [45](#), [130](#), [136](#)  
 Hickson, 2/Lieut. F. A., [130](#)  
 Higgins, Brig.-Gen. J. F. A., [22](#), [23](#), [57](#);  
     account of Ball's feats, [16-17](#)  
 Hill, Sqdn.-Leader R. M., [8](#), [15](#), [17](#), [21](#), [130](#)  
 Hindenburg Line, [34](#), [94](#), [99](#);  
     German retreat to, [123](#)  
 Hispano Suisa engine, [65](#), [66](#), [90](#)  
 Holland, Capt. C., [130](#)  
 Honours gained by 60 Squadron, [127](#)  
 Hopper, 2/Lieut. R., [31](#), [130](#), [135](#)  
 Horn, F/Lieut. S. B., [57](#), [66](#), [130](#)  
 Hôtel Continental at Paris-Plage, [63](#)  
 Howard, 2/Lieut. E. S., [130](#), [136](#);  
     an adventure at Roeux, [46-7](#)  
 Hun *Jagdstaffeln*, [65](#)  
 Hunter, Lieut. G. D., [130](#), [136](#)  
 Hussars, the 19th, [3](#), [24](#)  
  
 Incendiary bombs, [19](#), [21](#)  
 Independent Air Force, [120](#)  
 India, 60 Squadron stationed in, [126](#)  
 Iron Cross, [27](#)  
 Izel le Hameau aerodrome, [21-4](#), [91](#)  
  
 Jenkins, Lieut. W. E., [66](#), [69](#), [70](#), [130](#), [137](#)  
 Johnson, Lieut. O. P., [116](#), [130](#)  
 Johnston, Lieut. B. S., [130](#)  
 Jones, Lieut. R. N. K., [130](#)  
 Joyce, Lieut. P. S., [131](#), [135](#)  
  
 Kate, dog, [96](#)  
 Kean, Capt. R. C., [131](#)  
 Keddie, Capt. G. D. F., [3](#), [131](#)  
 Keen, Lieut. S. W., [131](#), [137](#)  
 Kelly, Lieut. C. M., [131](#)  
 Kemmel Hill, [120](#)



Kent, 2/Lieut. W. M., 89-90, 131, 137  
 Kerr, Lieut. J. F. M., 131  
 Kight, 2/Lieut. J. L., 131  
 Kimbell, 2/Lieut. R. E., 131, 136  
 Kindley, F. E., 18  
 King, 2/Lieut. C. H. M., 131  
 Kingwill, Capt. A. N., 131  
 Kirkpatrick, Lieut. R. A., 131  
 Kirton, Capt. H., 131  
 Kite balloons, hostile, firing of, 20-21, 38  
 "Kite," name applied to the Morane biplane, 6  
 Knowles, Capt. M. B., 41, 131, 136  
 — Lieut. R. H., 3, 131  
  
 Langwill, Lieut. T., 47, 131, 136  
 Latta, Capt. J. D., 15, 17, 131  
 Laurie-Reid, 2/Lieut. J., 3, 131  
 Laurier, election of, 84  
 Law, Capt. J. K., 70-1, 131, 137  
 — Mr. Bonar, 70  
 Le Cateau, 122  
 Le Hameau, 56  
 Le Prieur rockets, 20, 21, 51 *and note*<sup>19</sup>  
 Le Quesnoy, 123  
 Le Rhone engine, 6, 7, 28, 65  
 Leckie, 2/Lieut. L. H., 131  
 Lens, 44  
 Lewis, Col., 22  
 — Lieut. H. M., 131  
 — Lieut. R. G., 111-12, 131, 137  
 Lewis guns, 7, 28, 52 *and note*<sup>22</sup>, 55, 90  
 Lille, 14  
 Lloyd, Capt. E. A., 131  
 — Lieut. D. R. C., 50, 57, 131, 136  
 — Major G. L., 50, 57, 66, 98-9, 131  
 Lobo, dog, 66  
 Locre Château, 72  
 London Colney, in Herts, 118  
 London, defence of, 19  
 Loraine, Robert, 22  
 Losses, calculation of, 107-8;  
     German method, 108  
 Loughram, Lieut. L. B., 131, 137  
 Louw, 2/Lieut. J. C., 131  
 Low flying, 47  
 Lucheux, Château of, 98  
 Lund, Lieut. R. J. S., 131  
 Lys, the, 120  
  
 McCall, Capt. J. D., 131  
 McCarthy, Lieut. W. F., 131  
 McCracken, Lieut. E. J. C., 131, 137  
 McCudden, Major J. B., 112-4, 131  
 McEntegart, F/Lieut. B., 116, 131  
 MacGregor, Lieut. I. C., 70, 131, 137  
 Machines, faulty, 45-6  
 Mackey, 2/Lieut. N. C., 131  
 McKissock, 2/Lieut. C. D., 131, 136  
 McLean, Lieut. C. T., 118  
 MacLennan, 2/Lieut. R. D., 131, 137;  
     his letters *quoted*, 80-7  
 MacVicker, Lieut. J. E. C., 131, 137  
 Marie Capelle aerodrome, 70, 80, 88, 91;  
     described by 2/Lieut. R. W. MacLennan, 81-7  
 Marlborough in Flanders, 98

Marquise, 112  
Martin, 2/Lieut. H. E., 131, 135  
Martinpuich, 15  
Mason, F/Officer S. J., 116, 131  
Maubeuge, 123  
Meintjies, Major H., 3, 8, 15, 17, 23, 31, 39, 131  
Menin, 73  
Mesopotamia, 70  
Message-dropping, novel system, 72-3  
Messines Ridge, 65  
Metz, 120  
Middlemas, Capt. P., 23, 131  
Millar, 2/Lieut. S. C., 131  
Milot, Major J. A., 45, 131, 136  
Moislans, 19  
Molesworth, Capt. W. E., 38, 47, 57, 131;  
    letters of, describing fights, *quoted*, 25-7, 35-8, 42-4, 50-3, 66-9;  
    on the feelings and emotions of a scout pilot, 92-105;  
    honours for, 66, 105  
Molyneux, Capt. H. A. S., 131  
Monchy-au-Bois, 35  
Monchy-le-Preux, 55  
Mons, 13, 14  
Moore, Major B. F., 88, 112, 131  
Moranes (French machine) supplied to 60 Squadron, 3, 5, 6-8, 11, 91  
Morey, Lieut. A. W., 88, 131, 137  
Morris, Lieut. D. H., 131  
Morse, Capt. F. J., 131  
Mowle, Lieut. A. W. M., 132, 136  
Murray, Lieut. D. C. G., 132, 136  
  
Nancy, 118  
Netheravon, 23  
Newman, "Idea of a University" *quoted*, 74, 76-8  
Newth, 2/Lieut. W. B., 132  
Newton, 2/Lieut. H. J., 3, 132, 135  
Nicholson, Lieut. B., 14, 132  
Nicod, Sergt., 22  
Nieuport machines, given to 1 Squadron, 2;  
    60 Squadron equipped with, 21-2, 54-5;  
    description, 27-9, 65, 91;  
    the Albatros and, compared, 38;  
    given to 29 Squadron, 41  
Night bombing, Hun, 71-2  
Night Flying Squadron 151, 17  
Ninth Division in Gallipoli, 39  
Nissen huts, 24, 96  
  
O'Beirne, Lieut. J. I. M., 3, 132  
Offensive, March 1918, 92-124  
Oliver, Lieut. A. R., 132  
"Onions, flaming," 52 *and note*<sup>21</sup>  
Ormsby, Lieut. J. A. N., 132, 135  
Orpen, Lieut. H. C. M., 116, 132  
Ortner, Lieut. E. R., 132  
Osborne, Lieut. F. H., 132  
Osmond, Lieut. G. E., 132  
Overy, Lieut. C. F., 3, 132  
Oxford, 85  
  
Painting the "grids," 97  
Parachutes, 115-16  
"Parasols," Morane, for 60 Squadron, 5-6  
Paris, machines from, 45  
Paris-Plage, 63  
Parker, Capt. G. A., 132, 135

— Major S. E., [132](#)  
 Parkes, Lieut. F. C., [132](#)  
 — Lieut. G. A. H., [132](#), [136](#)  
 Parry, Capt. C., [132](#), [137](#)  
 Passchendale, [65-91](#), [119](#)  
 Patrick, Major C. K. Cochrane, [65](#), [70](#), [87](#), [132](#)  
 Patterson, Major C., [132](#)  
 Penny, Capt. A. R., [46](#), [47](#), [100](#), [132](#)  
 Percival, Lieut. E. W., [132](#)  
 Pfalz scouts, [112](#)  
 Phalen, 2/Lieut. R. M., [132](#), [136](#)  
 Phillippi, Capt. G., [15](#), [21](#), [132](#), [135](#)  
 Photographs taken by 60 Squadron, [42](#)  
 Pidcock, F/Officer G. A. H., [50](#), [132](#)  
 “Pink Lady,” the, [30](#)  
 Pope, F/Officer S. L., [79](#), [132](#)  
 Poperinghe, [66](#), [71](#)  
 Portal, Lieut. C. F. A., [3](#), [132](#)  
 Pretzman, Col., [22](#), [57](#)  
 Price, 2/Lieut. O., [132](#)  
 Priestley, Lieut. J. O., [89](#), [132](#)  
 Proctor, Lieut. H. N. J., [132](#), [137](#)  
  
 Quéant, [66](#) *note*<sup>32</sup>  
 Quievy, [116](#), [122](#)  
  
 R.A.S., No. [1](#), [3](#)  
 Radford (Basil Hallam), [11](#)  
 Ransart, [35](#)  
 Rayner, Capt. E. B. A., [132](#)  
 — Capt. J. W., [116-18](#), [132](#)  
 Read, Lieut. F. K., [132](#)  
 Recording Officer, work of the, [66](#) *and note*<sup>32</sup>  
 Richthofen, [38](#)  
 — Freiherr von, [30](#)  
 Ridley, 2/Lieut. C. A., [3](#), [9-10](#), [132](#), [134](#), [135](#)  
 Robertson, Lieut. N. McL., [132](#), [135](#)  
 — 2/Lieut. D. M., [132](#), [136](#)  
 Roeux, attack on, [46-7](#)  
 Ross, 2/Lieut. H. G., [46](#), [47](#), [132](#), [136](#)  
 Roth, Lieut. J. A., [132](#)  
 Roulers, [70](#)  
 Roxburgh-Smith, Capt. B., [132](#)  
 Royal Air Force, official formation, [88](#)  
 Royal Flying Corps, number of squadrons, [2](#);  
     ground operations, [46](#);  
     amalgamation with the R.N.A.S., [88](#)  
 Royal Military College, [40](#)  
 Royal Munster Fusiliers, [92](#)  
 Royal Naval Air Force, [2](#)  
 Royal Naval Air Service, [88](#)  
 Royal Warwickshire Regiment, [88](#)  
 Roystan, Lieut. N. C., [132](#), [137](#)  
 Rumpler or L.V.G., [113](#)  
 Russell, Lieut. W. O., [132](#), [136](#)  
 Rutherford, Capt., [66](#), [69](#), [70](#), [73](#), [132](#)  
  
 S. E. 5s, [39](#), [54](#), [112](#);  
     60 Squadron equipped with, [65-6](#), [73](#), [81](#), [90-1](#), [101](#)  
 St. André, [21](#)  
 St. Omer, [3](#), [5](#), [83](#)  
 St. Pol, [22](#), [88](#)  
 St. Quentin, [15](#)  
 Salmond, Gen. Sir J., [14](#), [88](#)  
 Saunders, Lieut. A. W., [111](#), [112](#), [115](#), [132](#)

Savy aerodrome and village, 22, 23  
 Scarpe, the, 67;  
     valley, 41, 46  
 Scholte, Capt. O. J. F., 73, 111, 132  
 Scott, Major A. J. L., 132, 136;  
     commander 60 Squadron, 30-1;  
     wing commander, 65;  
     honour for, 97-8;  
     wounded, 98-101  
 Scouts, method of work in 1916, 8-9  
 Seabrook, Capt. J., 132  
 Second Army in Ypres Sector, 65;  
     report centre, 70, 72  
 Sedgeford in Norfolk, 126  
 Seely, Gen., 14  
 Selous, Capt. F. H. B., 73-4, 132, 137  
 Sergt.-Major, technical work, 5  
 Sherwood, Lieut., 70, 132, 137  
 Sillars, Lieut. R. G., 132  
 Simpson, Lieut. J. H., 3, 11, 133  
 Sinclair, 2/Lieut. M. D., 116, 133  
 Small, Lieut.-Col. B. C. D., account of Capt. Armstrong, 17-20  
 Smart, 2/Lieut. G. O., 41, 133, 136  
     — Sqdn.-Leader H. G., 3, 133  
 Smith, Lieut. J. E., 133, 137  
     — Lieut. L. H., 133, 138  
     — Lieut. R. H., 133  
     — 2/Lieut. H. S., 137  
 Smith-Barry, Lieut.-Col. R. R., 133;  
     flight commander, 3, 8, 11-13, 13-15;  
     at Gosport, 17;  
     a farewell dinner, 22-3  
 Smyrk, 5  
 Soden, Lieut. F. O., 73, 89, 133  
 Somers, Capt. A. S. M., 3  
 Somme, the, work of 60 Squadron, 11-29  
 Sopwith two-seaters, 30, 42 *and note*<sup>10</sup>  
 Southwell, Lieut. L. V., 133, 137  
 Sowrey, Sqdn.-Leader W., 133  
 "Spad," a, given to Major Foot, 15  
 Spandau guns, 38, 55  
 Spencer, Lieut. J. M. J., 133, 135  
 Spies, method of landing, 9-10  
 Springs, Lieut., 118  
 Squadron, No. 1 Reserve Aeroplane, 2;  
     3 Squadron, 114;  
     7 Squadron, 40;  
     11 Squadron, 41, 114;  
     17 American Squadron, 118-9;  
     20 Squadron, 23, 70;  
     23 Squadron, 65;  
     29 Squadron, 41, 50, 71, 113;  
     40 Squadron, 66;  
     43 Squadron, 30, 90;  
     48 Squadron, 39;  
     56 Squadron, 39, 54, 113, 114, 119-20;  
     70 Squadron, 71;  
     74 Squadron, 39;  
     85 Squadron, 112, 114;  
     148 American Squadron, 117-119;  
     151 Squadron, 17-20, 71-2;  
     201 Squadron, 118  
 Squadron, 60, formation, 1-10;  
     inspection by Gen. Allenby, 53, 56-7;  
     honours gained by, 127  
 Stedman, Lieut. F., 133, 136  
 Steele, 2/Lieut. R. B., 69, 133  
 Stockwell, 2/Lieut. L. G., 133, 138

Stookes, T/Capt. V. A., 133  
Strange, Louis, 125  
Stuart-Smith, 2/Lieut. H. S., 133  
Sullock, Lieut. E. A., 133  
Summers, Capt. A. S. M., 15, 21, 73, 133, 135  
Sussex Yeomanry, 30  
Synchronising gear, none on the Moranes, 7

Talbot, 2/Lieut. H. E., 133  
Taylor, Capt. H. S., 133  
Temperley, Capt. G. J., 133  
Tennant, Lieut. G. E., 133  
Tennis at Files Camp Farm, 57  
Tetus, M., demesne of, 24, 57  
Thamer, Lieut. O., 133, 137  
Third Army Front, Arras, 30, 31;  
    night bombing on, 72;  
    the Cambrai attack, 79  
Third Corps attack, Aug. 1917, 69  
Thirteenth Wing, 105, 117, 119  
Thomson, 2/Lieut. S. A., 133, 137  
Thornton, F/Officer E., 133  
Tounshend, Mr. Thos., 79  
Tower, Capt. H. C., 3, 15, 133, 135  
Townsend, F/Lieut. E. J. D., 133, 135  
Tracer bullets, 51 *and note*<sup>22</sup>, 52  
Trailers, 49 *and note*<sup>16</sup>  
Trenchard, General, 2, 88, 120;  
    orders of, 108  
Trenches, German, 36-8  
Triplanes, German, 89  
Trusler, Lieut. J. W., 133  
Two-seater fighters, 115

Uphaven Central Flying School, 3  
Upton-Smith, 2/Lieut. F. E., 133

Valenciennes, 123  
Vert Galant, 60 Squadron at, 8, 12, 21  
Very lights, 104;  
    pistols, 27 *and note*<sup>5</sup>, 35, 38  
Vickers gun, 90  
Vimy Ridge, 50  
Vincent, Capt. S. F., 15, 22, 133  
Vis-en-Artois, 54  
Vitry, 66

Wainwright, Lieut. B. M., 133, 135  
Waldron, Major F. F., 2-4, 11-13, 133, 135  
Walker, Lieut., 133  
    — Sergt. A., 135  
Walters, Lieut. A. M., 15, 133  
Weedon, Capt. L. S., 31, 133  
West Wind, Conrad on the, 109-10  
Westergaard, 2/Lieut. A. N., 133  
West-Thompson, 2/Lieut. M., 66, 69, 133, 137  
Whitehead, Capt. L. E., 133, 135  
    — Lieut. A. D., 31, 133, 135  
Whiting, Lieut. J. O., 70, 133, 137  
Whitney, Lieut. R. K., 115, 133, 137  
Wilde, 2/Lieut. R. C. R., 133  
Williams, Fleming, 106  
    — Lieut. C., 133, 135  
    — Lieut. G., 3  
    — 2/Lieut. V. F., 133, 135  
Winslow, 2/Lieut. J., 133

Wireless interception, work of 60 Squadron, [57-62](#)

Wotan line, [123](#)

Wright, Lieut. C. O., [133](#)

Young, Lieut. G. C., [45](#), [70](#), [133](#)

Ypres Sector, [65](#);  
desolation of, [85](#)

PRINTED BY  
HAZELL, WATSON AND VINEY, LD.,  
LONDON AND AYLESBURY.

## Transcribers' Notes

Punctuation, hyphenation, and spelling were made consistent when a predominant preference was found in this book; otherwise they were not changed.

Simple typographical errors were corrected; occasional unbalanced quotation marks retained.

Ambiguous hyphens at the ends of lines were retained.

[Index](#) not checked for proper alphabetization or correct page references.

Page [xviii](#): The five illustrations listed as being on pages 100, 112, and 118 were missing from this book.

Page [50](#): "*had* be to" was printed that way.

Page [125](#): For clarity, Transcriber added a colon after "One form of hare-hunting became very popular".

Page [126](#) (comments about map): Some "3"s and "8"s were indistinguishable.

Page [133](#): "Lieut. E. A. Sullock, A.F.C." may be "Sulleck".

[Footnotes](#), originally at the bottoms of pages, have been renumbered, collected, and positioned just before the Index.

The [Index](#) references to footnotes have been renumbered to match the renumbering of the eBook's footnotes. All "return" footnote links go back to the page on which they first appeared, not back to the Index.

\*\*\* END OF THE PROJECT GUTENBERG EBOOK SIXTY SQUADRON R.A.F.: A HISTORY OF THE SQUADRON  
FROM ITS FORMATION \*\*\*

Updated editions will replace the previous one—the old editions will be renamed.

Creating the works from print editions not protected by U.S. copyright law means that no one owns a United States copyright in these works, so the Foundation (and you!) can copy and distribute it in the United States without permission and without paying copyright royalties. Special rules, set forth in the General Terms of Use part of this license, apply to copying and distributing Project Gutenberg™ electronic works to protect the PROJECT GUTENBERG™ concept and trademark. Project Gutenberg is a registered trademark, and may not be used if you charge for an eBook, except by following the terms of the trademark license, including paying royalties for use of the Project Gutenberg trademark. If you do not charge anything for copies of this eBook, complying with the trademark license is very easy. You may use this eBook for nearly any purpose such as creation of derivative works, reports, performances and research. Project Gutenberg eBooks may be modified and printed and given away—you may do practically ANYTHING in the United States with eBooks not protected by U.S. copyright law. Redistribution is subject to the trademark license, especially commercial redistribution.

START: FULL LICENSE

To protect the Project Gutenberg™ mission of promoting the free distribution of electronic works, by using or distributing this work (or any other work associated in any way with the phrase “Project Gutenberg”), you agree to comply with all the terms of the Full Project Gutenberg™ License available with this file or online at [www.gutenberg.org/license](http://www.gutenberg.org/license).

## **Section 1. General Terms of Use and Redistributing Project Gutenberg™ electronic works**

1.A. By reading or using any part of this Project Gutenberg™ electronic work, you indicate that you have read, understand, agree to and accept all the terms of this license and intellectual property (trademark/copyright) agreement. If you do not agree to abide by all the terms of this agreement, you must cease using and return or destroy all copies of Project Gutenberg™ electronic works in your possession. If you paid a fee for obtaining a copy of or access to a Project Gutenberg™ electronic work and you do not agree to be bound by the terms of this agreement, you may obtain a refund from the person or entity to whom you paid the fee as set forth in paragraph 1.E.8.

1.B. “Project Gutenberg” is a registered trademark. It may only be used on or associated in any way with an electronic work by people who agree to be bound by the terms of this agreement. There are a few things that you can do with most Project Gutenberg™ electronic works even without complying with the full terms of this agreement. See paragraph 1.C below. There are a lot of things you can do with Project Gutenberg™ electronic works if you follow the terms of this agreement and help preserve free future access to Project Gutenberg™ electronic works. See paragraph 1.E below.

1.C. The Project Gutenberg Literary Archive Foundation (“the Foundation” or PGLAF), owns a compilation copyright in the collection of Project Gutenberg™ electronic works. Nearly all the individual works in the collection are in the public domain in the United States. If an individual work is unprotected by copyright law in the United States and you are located in the United States, we do not claim a right to prevent you from copying, distributing, performing, displaying or creating derivative works based on the work as long as all references to Project Gutenberg are removed. Of course, we hope that you will support the Project Gutenberg™ mission of promoting free access to electronic works by freely sharing Project Gutenberg™ works in compliance with the terms of this agreement for keeping the Project Gutenberg™ name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project Gutenberg™ License when you share it without charge with others.

1.D. The copyright laws of the place where you are located also govern what you can do with this work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project Gutenberg™ work. The Foundation makes no representations concerning the copyright status of any work in any country other than the United States.

1.E. Unless you have removed all references to Project Gutenberg:

1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg™ License must appear prominently whenever any copy of a Project Gutenberg™ work (any work on which the phrase “Project Gutenberg” appears, or with which the phrase “Project Gutenberg” is associated) is accessed, displayed, performed, viewed, copied or distributed:

This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at [www.gutenberg.org](http://www.gutenberg.org). If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

1.E.2. If an individual Project Gutenberg™ electronic work is derived from texts not protected by U.S. copyright law (does not contain a notice indicating that it is posted with permission of the copyright holder), the work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase “Project Gutenberg” associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E.1 through 1.E.7 or obtain permission for the use of the work and the Project Gutenberg™ trademark as set forth in paragraphs 1.E.8 or 1.E.9.

1.E.3. If an individual Project Gutenberg™ electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E.1 through 1.E.7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg™ License for all works posted with the permission of the copyright holder found at the beginning of this work.

1.E.4. Do not unlink or detach or remove the full Project Gutenberg™ License terms from this work, or any files containing a part of this work or any other work associated with Project Gutenberg™.

1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in paragraph 1.E.1 with active links or immediate access to the full terms of the Project Gutenberg™ License.



1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg™ work in a format other than “Plain Vanilla ASCII” or other format used in the official version posted on the official Project Gutenberg™ website (www.gutenberg.org), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original “Plain Vanilla ASCII” or other form. Any alternate format must include the full Project Gutenberg™ License as specified in paragraph 1.E.1.

1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project Gutenberg™ works unless you comply with paragraph 1.E.8 or 1.E.9.

1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project Gutenberg™ electronic works provided that:

- You pay a royalty fee of 20% of the gross profits you derive from the use of Project Gutenberg™ works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project Gutenberg™ trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, “Information about donations to the Project Gutenberg Literary Archive Foundation.”
- You provide a full refund of any money paid by a user who notifies you in writing (or by e-mail) within 30 days of receipt that s/he does not agree to the terms of the full Project Gutenberg™ License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project Gutenberg™ works.
- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.
- You comply with all other terms of this agreement for free distribution of Project Gutenberg™ works.

1.E.9. If you wish to charge a fee or distribute a Project Gutenberg™ electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from the Project Gutenberg Literary Archive Foundation, the manager of the Project Gutenberg™ trademark. Contact the Foundation as set forth in Section 3 below.

1.F.

1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do copyright research on, transcribe and proofread works not protected by U.S. copyright law in creating the Project Gutenberg™ collection. Despite these efforts, Project Gutenberg™ electronic works, and the medium on which they may be stored, may contain “Defects,” such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that damage or cannot be read by your equipment.

1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the “Right of Replacement or Refund” described in paragraph 1.F.3, the Project Gutenberg Literary Archive Foundation, the owner of the Project Gutenberg™ trademark, and any other party distributing a Project Gutenberg™ electronic work under this agreement, disclaim all liability to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.

1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND - If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.

1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you ‘AS-IS’, WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or

limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.

1.F.6. INDEMNITY - You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing copies of Project Gutenberg™ electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project Gutenberg™ electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project Gutenberg™ work, (b) alteration, modification, or additions or deletions to any Project Gutenberg™ work, and (c) any Defect you cause.

## **Section 2. Information about the Mission of Project Gutenberg™**

Project Gutenberg™ is synonymous with the free distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project Gutenberg™'s goals and ensuring that the Project Gutenberg™ collection will remain freely available for generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project Gutenberg™ and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at [www.gutenberg.org](http://www.gutenberg.org).

## **Section 3. Information about the Project Gutenberg Literary Archive Foundation**

The Project Gutenberg Literary Archive Foundation is a non-profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation's EIN or federal tax identification number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state's laws.

The Foundation's business office is located at 809 North 1500 West, Salt Lake City, UT 84116, (801) 596-1887. Email contact links and up to date contact information can be found at the Foundation's website and official page at [www.gutenberg.org/contact](http://www.gutenberg.org/contact)

## **Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation**

Project Gutenberg™ depends upon and cannot survive without widespread public support and donations to carry out its mission of increasing the number of public domain and licensed works that can be freely distributed in machine-readable form accessible by the widest array of equipment including outdated equipment. Many small donations (\$1 to \$5,000) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit [www.gutenberg.org/donate](http://www.gutenberg.org/donate).

While we cannot and do not solicit contributions from states where we have not met the solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: [www.gutenberg.org/donate](http://www.gutenberg.org/donate)

## **Section 5. General Information About Project Gutenberg™ electronic works**

Professor Michael S. Hart was the originator of the Project Gutenberg™ concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project Gutenberg™ eBooks with only a loose network of volunteer support.

Project Gutenberg™ eBooks are often created from several printed editions, all of which are confirmed as not protected by copyright in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our website which has the main PG search facility: [www.gutenberg.org](http://www.gutenberg.org).

This website includes information about Project Gutenberg™, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to subscribe

to our email newsletter to hear about new eBooks.