NCO Pilots in the RFC/RAF 1912-18

By Wing Commander 'Jeff' Jefford

Have you ever asked yourself why we take it for granted that all RAF pilots (and, what we used to call, navigators) are commissioned? Since relatively few aircrew are actually required to *command* anything, it is self-evident that it cannot have much to do with the disciplinary requirements of the military hierarchy. The short answer is that we do it as a response to market forces, primarily the need to recruit and retain high grade personnel. Until pay was specifically 'decoupled' from rank by the innovative approach adopted in 2003, this link had always been regarded as being immutable. As a result, it has followed (at least since 1950) that all pilots had to be officers in order to permit the system to pay them something approximating to 'the rate for the job' that was a far cry from what the Air Council of 1946 had in mind.

In the immediate aftermath of WWI it had been decreed that all pilots would be officers (and, conversely, that the vast majority of officers would

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be pilots), some of them Cranwellian careerists, the rest serving on short service commissions. The all-officer policy did not survive for long, however, and as early as 1921 the Service began to train a handful of airmen pilots who were automatically upgraded to sergeant on gaining their flying badges. By 1929, 20% of all RAF pilots were NCOs and by 1938 this had risen to 32%. Entry into the RAF *per se* ceased on the outbreak of war to be replaced by recruiting into the RAFVR and thereafter all prospective aviators were trained as airmen. Commissioning policy permitted up to 33% of wartime pilots to graduate as officers (although the actual figure was usually less than this) with subsequent commissioning in the field permitting the total to rise as high as 50%, the other 50% being NCOs or warrant officers.

Cpl Frank Ridd, the RFC's first non-commissioned pilot, had one of the legendary two-digit Service Numbers (26). Having been awarded RAeC Certificate No 227 on 4 June 1912, he was a flight sergeant with No 3 Sqn when war was declared but subsequently became a PoW

The end of the war was seen to provide an ideal opportunity to 'right a personnel applecart' that had been seriously upset by the pragmatic demands of WWII. Bear in mind that the 50% officer / NCO breakdown applied to navigators as well as to pilots, and that there were similar arrangements (although the proportions differed) applicable to all of the other aircrew trades: none of which had even existed before 1939. The Air Council's early post-war vision of an ideal peacetime flying branch was one which would be run by a small officer corps manned initially by wartime veterans who would gradually be replaced by Cranwell graduates (all of them pilots) with the numbers being topped up as required by commissioning from the ranks. All other aircrew (the vast majority, including most pilots) were going to have non-commissioned status. This scheme was actually implemented, but it proved to be so unpopular, and such a disincentive to recruiting, that it had to be abandoned in 1950 in favour of the now familiar 100% officer policy.

It is plain from this brief survey of the last 80 years or so that the status to be afforded to pilots, and to all other aircrew categories, is a question that has caused a lot of heart-searching in the past. Indeed its origins can be traced back to the earliest days of the RFC, provision for non-commissioned pilots having been made from the outset. At the time of its conception in 1912 the new Corps was expected to have an eventual strength of seven squadrons, each of which was to have had 12 aeroplanes and 26 pilots, half of them officers, half not.[1] The first non-commissioned pilot, Cpl Frank Ridd, gained his Royal Aero Club (RAeC) Certificate on 4 June 1912. Others were to follow but their numbers never actually kept pace with those of officers so that by the time that war was declared officer pilots already outnumbered those without commissions by almost five to one.[2]

Furthermore, in the light of experience, the RFC had refined its requirements by mid-1913 so that it now employed what were known as First and Second Class pilots, the qualification standards being published in September.[3] In practice, some non-commissioned personnel progressed no further than becoming Second Class pilots. In essence, this meant that they had passed the tests associated with the RAeC Certificate and had demonstrated

Sgt Thomas Mottershead originally enlisted as an air mechanic in August 1914. He began flying training in May 1916, gaining his Second Class Certificate a month later and his First Class Certificate on 9 June. In July he was sent to France to fly FE2bs with, first, No 25 and then with No 20 Sqn. He was eventually shot down on 7 January 1917 in an action that earned him a VC, the only one gained by a non-commissioned aviator in WW I. Sadly the award was announced posthumously. The ribbon worn in the photograph is that of a DCM gazetted on 14 November 1916

an awareness of only some of the technical aspects of aviation. First Class pilots had to have passed examinations in a much broader range of topics at the CFS, in addition to having accumulated an adequate number of flying hours.

Even so there were marked distinctions within the First Class classification. Officers had to pass in all eight subjects examined at Upavon, whereas non-commissioned pilots were not tested on the theory of flight or on meteorology. Neither were they required to demonstrate knowledge of troop formations nor an ability to identify warships. Beyond an ability to map-read and use a compass, they were also not required to be familiar with aerial reconnaissance procedures and techniques. Whatever its initial intentions may have been, therefore, it is quite clear that by 1913 the RFC can have had no serious intention of using its non-commissioned pilots operationally.

That this was already *de facto* policy when war was declared is reflected in a contemporary typewritten minute in which the Director General of Military Aeronautics notes that, having been enlisted as 2nd Class Air Mechanics, "certain civilian pilots" were to be immediately given their three stripes, "the intention being to use them as NCO pilots with the Reserve Aeroplane Squadrons".[4] He subsequently added, in manuscript, "or, if found fit, with the Expeditionary Force" but this was clearly an afterthought. None of these men appears to have found their way to France and, although there were inevitably a few exceptions to the rule, this policy remained essentially unchanged throughout the war. Until 1917 there was no prohibition on the training of non-commissioned pilots but the majority of those who did manage to qualify were assigned to second-line units where they served as, for instance, ferry pilots at Aircraft Parks or staff pilots at the School of Aerial Gunnery.

A return of all officers and aircrew serving with the British Expeditionary Force (BEF) in September 1915 noted only two NCOs, both of them with No 3 Sqn.[5] A similar headcount made in February 1916, but reflecting all officers and aircrew serving with the RFC, shows that just over 30 non-commissioned personnel were carried on the strength of UK-based units as pilots, most of them still undergoing training, but there were still only three NCO pilots flying with operational units in France: one each with Nos 1, 3 and 5 Sqns.[6] Despite the considerable expansion of the corps over the next two years,

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Sgt Ernest Albert Cook was typical of the handful of NCO pilots who flew on operations. When he joined No 45 Sqn in France on 1 April 1917 he had a total of 34 hrs and 55 min flying time in his log book of which only 65 minutes had been on the Sopwith 1 Strutters that he was to fly in combat. He had two dual rides with a Flight Commander followed by two solo trips, damaging his aircraft on both occasions. Thereafter he got the hang of it and went on to become a sound squadron pilot until he was shot down and killed on 5 June

although more NCOs were trained, they continued to represent only a tiny proportion of the total number of pilots available.[7]

In mid-1916 it was ruled that all holders of Second Class Certificates would have to qualify to First Class standard within six months or become uncertificated.[8] Several more concessions were soon granted. For example, a retrospective clause which had been a feature of the new regulation was removed so that pilots already holding Second Class Certificates needed to re-qualify only at that level, the obligation to upgrade being confined to newly qualified pilots. Similarly, the six-month limit was waived for any Second Class pilots already serving with an Expeditionary Force. Perhaps as an added incentive, however, at much the same time it was also announced that corporals and air mechanics qualifying as First Class pilots would be automatically promoted to sergeant.[9] Nevertheless, the thin end of a wedge could be discerned here and the evident reservations over the utility of the two-tier system would eventually lead to questions being asked about the real value of having *any* non-commissioned pilots. In this general context the Bailhache Committee[10] noted in November 1916 that: "Every pilot must now be an officer. There are a few exceptions".[11] What the writer had presumably been trying to convey via these two mutually contradictory statements is that despite the RFC's overwhelming preference for officers, a handful of NCO pilots was still being trained, in addition to the relatively small numbers that were already on strength.

The employment of sergeant pilots on operations peaked during 1917. There were for instance, a total of 27 of them on the strength of the squadrons serving with the BEF in March,[12] 24 in May[13] and 28 in August.[14] All of these NCOs were overborne against each unit's current establishment which by then provided for a total of 21 pilots per squadron, *all* of whom were to be commissioned: one Squadron Commander and two 'spare' Flying Officers with the headquarters, and a Flight Commander and five Flying Officers for each of three flights. By August 1917 there were 47 squadrons in France, reflecting an overall requirement for 987 officer pilots. There were actually 970 on strength, which, allowing for the 28 sergeants, represented a ratio of officers to NCOs of the order of 35:1.[15]

Since there was no official establishment for sergeant pilots, it would seem likely that the primary function of the handful serving in France may have been to provide a cushion to ensure that a squadron would remain fully operational if there were any delay in providing replacement officers. This is not to say that NCO pilots were used only as makeweights and those squadrons which had sergeants on strength certainly made full of use of them. It is worth noting, however, that very few NCO pilots were carried on the books of single-seat fighter squadrons until the summer of 1918. Of 32 NCOs at the front in the late summer of 1917, for instance, one was flying Pups and three Nieuports; all of the others were driving two-seaters.[16]

Long before this however, the RFC's practice of employing officer pilots — almost exclusively — had become policy. In June 1917 the War Office

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Having enlisted in the REs in 1910, James McCudden transferred to the RFC in 1913 to become an engine fitter. He went to France with No 3 Sqn on the outbreak of war and soon began to fly as an observer, being formally recognised as such on 1 January 1916. He returned to the UK soon afterwards to train as a pilot, gaining his wings at the end of May. The photograph dates from this period, at which time McCudden was a sergeant. Commissioned while flying DH 2s with No 29 Sqn, he later flew SE5as with Nos 56 and 60 Sqns. When he died, in a flying accident on 9 July 1918, he was Major J T B McCudden VC DSO MC MM CdeG and the accredited victor of 57 aerial combats. His brother, William, had also qualified as a pilot, only the fourth RFC NCO to do so, as early as August 1912. He too was killed in a flying accident, on 1 May 1915

announced with immediate effect: "the training of non-commissioned officers and air mechanics as pilots will be discontinued". Special cases, should there be any, would still be entertained but, in general, all successful applicants for flying training were now to be posted initially to a Cadet Wing for eventual commissioning. This regulation was not to be applied retrospectively, but any serving NCO pilot could apply to become an officer; if recommended, he was to be directly commissioned in the field without having to go through the cadet stage.[17]

It is not known to what extent it influenced the decision to cease training NCOs, but one of the problems associated with sergeant pilots was that some of the more Edwardian- (even Victorian-) minded among the officers will have found it difficult to work with them on anything like equal terms, which did little to foster the close working relationship that was so essential in the air. No 6 Sqn's Sgt G Eddington described it thus:[18]

"I knew what time I was going up but I didn't even know what job I was on until the observer came out — always an officer in my case. I said, 'Good morning, Sir' and we got on with our job. When we came down he got out and went to make his report. He did all the reporting — what he'd found, what he'd seen, what he'd photographed. I went to the sergeants mess and I had no further contact."

Sergeants never represented much more than 3% of the available pilots in France and, despite the continued expansion of the RFC, the universal commissioning policy meant that their numbers actually began to decline from the autumn of 1917. By January 1918, there were only fourteen of them, this figure contrasting markedly with that for non-commissioned back-seaters of whom there were no fewer than 231.[19]

For a time, it looked as if things were about to change again. Within a few weeks of the RFC's announcing that it did not intend to employ any more NCO pilots it had been obliged to reconsider this decision. There were two reasons. First, aviation was not the only field in which high grade manpower was required. The terrible casualty rate in the trenches meant that capable and competent young men with leadership qualities were urgently needed by other branches, particularly the infantry, and it was being argued in some of the corridors of the War Office, that the RFC's 100% officer pilot policy could be sustained only at the expense of the rest of the Army.

The second reason was the July 1917 decision to double the size of the RFC. While it might have

Sgt William Robinson Clarke was the first (possibly the only) black West Indian to serve as a pilot in the RFC. Born in 1895 he came to the UK from Jamaica to enlist in the RFC as an air mechanic. After service in France as a driver with a kite balloon unit, he was accepted for pilot training and eventually flew RE8s with No 4 Sqn. On 28 July 1917 he was wounded, and rendered unconscious, in combat with five German fighters. His observer, 2/Lt F P Blencowe, managed to gain control of the aircraft and pull off a forced landing, in which he too was injured, on the right side of the lines

been realistic to expect to be able to find enough soldiers with the potential to permit the 'old' RFC to operate on an all-officer basis, it was doubtful whether this ideal could be realised with the newly projected 200-squadron force. The staffs foresaw a recruiting crisis and, although it would involve a reversal of policy, reinstating NCO pilots, this time in comparatively large numbers, would provide an obvious solution to the problem.

Before implementing such a sweeping change in policy it would clearly be necessary to ascertain whether it would be acceptable to front-line commanders and in August the War Office submitted an outline proposal to the CinC BEF and sought his opinion on it.[20] Initial calculations indicated that, considering only the 44 squadrons currently serving with the BEF, it might be possible to replace as many as 290 of the commissioned pilots with sergeants. Such a substitution would also save 143 batmen although this might have had to be partially offset by the provision of a number of cooks and waiters to cater for the increased numbers of NCOs.

Having first consulted with Trenchard, Field Marshal Haig eventually agreed to the introduction of significant numbers of NCO pilots with the proviso that the measure should be tried"purely as an experiment, subject to a further recommendation at some future date as to its permanent adoption". The CinC went on to indicate that he was prepared to accept one complete flight of NCO pilots in each of the recently enlarged 24-aircraft corps reconnaissance squadrons and up to 50% of all pilots in day bomber squadrons. He was less enthusiastic about NCOs flying fighters but, on a trial basis, he was prepared to have one flight of sergeants in one two-seater squadron and one flight in each of six single-seater squadrons. For night bombing duties, however, Haig considered that all pilots "must be officers". He imposed two other conditions. First, that the influx of NCOs was to be provided in a single group, not piecemeal, and, secondly, that separate messing facilities for sergeant pilots were to be provided on units associated with the trial.[21]

With hindsight, the second of Haig's conditions is curious — more for what it implied than for what it actually said. After all, every unit already had appropriate messing facilities for NCOs, although this did not necessarily always provide an appropriate environment. George Eddington again:[22]

"I couldn't make friends. I had nothing in common – I didn't have access to the officers mess; I didn't know what they thought. In the sergeants mess they were all fitters and riggers — I wasn't in their world any more than they were in mine."

Nevertheless, well over 200 non-commissioned back-seaters were already serving in France at the beginning of 1918 and no one had ever thought it necessary to make any special domestic arrangements for *them*. Yet the prospect of half-a-dozen sergeants turning up to fly Sopwith Camels prompted the immediate establishment of a mess for their exclusive use. Very odd.

If a man is of the right type and good enough to be a fighting pilot in a fighting unit, he should be commissioned

Sgt Ernest Elton originally enlisted as an air mechanic in 1915. Eventually accepted for pilot training, he joined No 22 Sqn early in 1918 and promptly proceeded to account for 10 enemy aircraft in 32 days while his various observers shot down another six. This performance made Elton the top-scoring NCO pilot in the RFC/RAF and earned him the DCM and MM but, a little surprisingly, he was not commissioned and was on his way back to France as a flight sergeant with No 39 Sqn when the war ended

London signalled its acceptance of the CinC's constraints in November, but in view of the critical importance of short range tactical reconnaissance and artillery spotting in the eyes of the army-oriented RFC, the option of using sergeants for corps work was not taken up.[23] In effect therefore, it had been agreed that the number of NCO day bomber pilots could be increased as required up to a maximum of 50% of establishment and that the use of a proportion of sergeants in selected fighter squadrons would be tried on an experimental basis. In practice, although a few sergeants did fly with bomber squadrons they never represented anything like half the overall strength and the aim of the trial began to focus increasingly on the single-seat fighter pilots.

Since there had been an embargo on the training of airmen pilots since the previous summer, this constraint had clearly had to be lifted, and although the programme must already have been under way by then, a formal announcement was made in February 1918 to the effect that training could be reinstated in batches of up to 10 per month, although, in view of the manpower situation 'no skilled mechanics' could be accepted.[24]

Early administrative difficulties were experienced in the training of NCO pilots and the plan soon began to slip. In January 1918 London notified GHQ BEF that the single-seat pilots were not now expected to become available until 15 March and that it would be the end of April before any two-seater pilots would be ready.[25]

By then, however, the trial had been more clearly defined and it had been decided to concentrate solely on the single-seaters. The project now embraced 24 pilots who had been trained on SE5a aircraft and 12 trained on Camels; they were all now due to reach France on 25 March. In anticipation of their arrival HQ RFC issued instructions that Nos 1, 24, 41, 43, 60 and 70 Sqns were to prepare the necessary accommodation (two Nissen huts per unit) and arrangements were made to provide the additional domestic staff (one cook and one steward per unit).[26] This directive was promptly short-circuited by receipt of a letter from the Directorate of Training announcing that "the training of NCOs on other than 2-seater machines has not proved to be an unqualified success and there is no doubt that they have proved slow in taking to Scouts".[27] The upshot was that the trial was postponed indefinitely. It had not been abandoned, however, and the training staffs persevered throughout the summer.

In the event it would be September before the trial commenced. By then it had evidently been decided not to concentrate on single-seaters and only two such units (Nos 84 and 203 Sqns) were nominated to participate in the experiment. The other units involved flew two-seaters in the fighter reconnaissance role (Nos 11 and 48 Sqns) and as day bombers (Nos 103 and 206 Sqns).

In preparation for the arrival of the pilots involved in the trial, the orders concerning the provision of

separate accommodation were reissued and, since two-seater units were now included, the instructions noted that any NCO observers on strength were also to be accommodated in the messes being provided for sergeant pilots. No mention was made of the NCO observers flying with other squadrons.[28]

The new arrivals were initially to be held supernumerary to the nominal strength of each unit, being progressively absorbed against the establishment as replacements for officers who were lost or posted. As intended, most of the initial influx of sergeants did arrive in groups but these were supplemented by a gentle trickle of additional pilots to offset wastage. As a result, most units were exposed to more NCOs than the nominal six required by the trial. Apart from stipulating that these men were not to be transferred to other squadrons, HQ RAF deliberately did not lay down any policy as to how they should be employed. It was specifically left to the discretion of Brigade Commanders to decide whether to integrate them into their existing squadron organisations, or to concentrate them within all-NCO flights commanded by an officer.[29]

Although details are incomplete, 32 of at least 44 pilots who participated in the trial have been identified and, of these, we know the dates of seven of their RAeC Certificates, the earliest of which was issued in May 1918.[30] While this does not exclude the possibility that some of the trainees who were reported to have been making slow progress back in February / March may still have been involved, it seems more likely that the eventual participants were a much later batch who would have had the advantage of being instructed in accordance with Smith-Barry's philosophy while passing through a far better structured sequence and in the process, and just as importantly, accumulating at least twice as many flying hours as their less fortunate predecessors.

Had the serious shortage of pilots anticipated in 1917 actually materialised there can be little doubt that the delays experienced in mounting the trial would not have been tolerated and that many sergeant pilots would have been sent to France, regardless of their capabilities. In practice, the manpower problem had been solved, largely by the Dominions. An initial trickle of mostly South African and Australian cadets, arriving in the UK to be trained as pilots during 1917, had become a flood by mid-1918 and by that time substantial numbers of pilots were also beginning to graduate from the flying schools that had been set up in Canada by the RFC. When the output of the considerably expanded facilities in Egypt was added to the total, it seems possible that the number of officer pilots being turned out by the RAF's global training organisation might even have begun to exceed its requirements by the summer of 1918, much as it was to do again in 1944.

Against this background, little real urgency appears to have been attached to the NCO trial. Now that the original dynamic underpinning it, had evaporated, the main reason for sustaining the enterprise was probably scientific curiosity. The suspense date for reports on the experience gained from the trial was 10 November 1918 and at least five of those submitted have survived.[31]

There was almost universal agreement that the separate messes had been a serious mistake. It was considered essential that all pilots should share the same domestic facilities, partly because that was where flying was constantly discussed, allowing newcomers to soak up the experience of the older hands and partly because it was where *ésprit de corps* was consolidated. In view of the 'class' problems, of course, this more or less implied that all pilots needed to have similar social status. Unsurprisingly, none of the reports advocated that they should all be sergeants.

Opinions as to the overall capabilities of the sergeants involved in the trial varied considerably. For instance, Lt-Col T A E Cairnes, OC 22nd Wg, had considered that all of No 84 Sqn's NCOs had been good pilots and Brig-Gen C A H Longcroft, GOC III Bde, seems to have been equally content with those flying with No 11 Sqn who had "proved themselves to be quite as good as the average officer pilot". Brig-Gen E R Ludlow-Hewitt, GOC X Bde, was rather less enthusiastic about the experience of No 103 Sqn whose NCOs had been "thoroughly satisfactory when working in formations led by experienced Officers" but lacking in "initiative and enterprise when flying alone on Reconnaissance or Photography".

On the other hand, although No 206 Sqn's style of operation will have been very similar to No 103 Sqn's, its CO, Maj C T Maclaren, had considerable reservations about the performance of his sergeants, even on bombing raids since "they do not keep good formation and when attacked are inclined to split up rather than packing together". While acknowledging that two of his sergeants had been satisfactory, in general he was of the opinion that "there is a marked difference between the NCO pilot and the Flying Officer, particularly with regard to reconnaissance and photographic work". Maclaren had tried his men with both commissioned and non-commissioned back-seaters and had concluded that the two-NCOs combination did not "possess the necessary intelligence and initiative for the carrying out of their work successfully" and he had no doubt that "the absence of the spirit of the officer in command of the machine is largely felt". While the provision of a commissioned observer did improve matters, such mixed crews still tended to perform indifferently, because "there is not the complete understanding of two Officers". This was clearly an oblique reference to the sort of problems that were almost bound to arise as a result of the 'class' distinctions that were embedded within contemporary British society and it confirmed the testimony offered by Sgt Eddington from the other side of the social divide.

The most damning report came from OC 48 Sqn, Maj K R Park, who had received a total of nine sergeant pilots. He had had four of them posted home for further training and had recommended that a fifth be consigned to the trenches! Of the remainder, he considered only three to have been satisfactory. Park's assessment led him to draw a very interesting conclusion. He was of the opinion that his three good NCOs had been the equal of officer pilots and he recommended that if a man is "of the right type and good enough to be a fighting pilot in a fighting unit, he should be commissioned". Much the same view had been reflected by both Cairnes and Maclaren. The latter, noting that his two satisfactory NCOs had both been educated at Public Schools, failed to "understand how they came out as NCOs as their flying is beyond reproach".

With little else to go on, the RFC's preference for commissioned pilots had always been based largely on instinct. The feedback from the formal attempt to assess the capabilities of NCO pilots had provided positive, if unscientific, evidence that the corps had been right to trust its judgement. While their assessments will have been almost entirely subjective, three very experienced unit commanders had independently drawn the same conclusion, that a good pilot needed to possess much the same personal qualities as those traditionally associated with a commission. This tended to confirm the long-standing assumption that the terms pilot and officer were, in many respects, synonymous. The same was actually true of contemporary back-seaters, apart, perhaps, from those whose duties were confined solely to gunnery in those day bomber squadrons that usually operated in formation.

Two further points should perhaps be made. First, while the trial had focused on a specific group of NCOs, others had still been reaching France via the usual channels, as they always had done, albeit in ever-decreasing numbers.[32] When the fighting stopped in November 1918 only 35s of the 1,879 pilots on the strength of front-line units stationed in France, and operating under the control of HQ RAF, were NCOs:[33] less than 2% of the total. If the sergeants flying with units associated with the NCO trial are discounted, however, there were only two, or about 0.1%.

Secondly, the Armistice had been signed just four days before the last report on the NCO trial had been rendered. Since further intakes into training ceased almost immediately and the staffs soon became preoccupied with the problems associated with demobilisation, it seems unlikely that the, now largely irrelevant, reports will have attracted much attention. Nevertheless, anyone who did read them (and who was also able to read *between* the lines) might have been able to predict that the close correlation between commissions and, at least some, aircrew trades that had been highlighted by the trial might well present a difficulty in the future. The problem was that if a peacetime air force were to commission almost anyone who flew, most of them would actually have no one to command. This would make their being officers a little pointless and thus undermine the whole ethos of the commission. On the other hand, if it did not offer commissions on a fairly generous scale, it might not

be able to attract sufficient volunteers of the necessary calibre. This peculiarly 'air force' problem was to crop up again and again over the rest of the century, and despite several attempts it could be argued that it has never really been satisfactorily solved.

Which takes me back to my original question.

Acknowledgements: The photograph of Elton is reproduced courtesy of Cross & Cockade International and those of Ridd and Clarke courtesy of the Royal Aero Club Collection.

Notes: Documents identified as AIR and WO are held by the National Archives (*née* the Public Record Office) at Kew.

1 AIR1/119/15/40/62. Memorandum on Naval and Military Aviation presented to both Houses of Parliament on 12 April 1912.

2 Brett, R Dallas, *History of British Aviation 1908-1914*, (Surbiton, 1988 – reprint of 1933 original) lists the recipients of all 863 RAeC Certificates awarded prior to the outbreak of war. Of these, 305 had been issued to military, and 101 to naval, officers. By comparison only 47 non-commissioned army personnel and 39 naval petty officers had qualified as pilots.

3 WO123/55. A pamphlet, entitled *Tests For First And Second Class Pilots Certificates For Officers And Men*, was published with Army Orders for September 1913.

4 AIR1/122/15/40/131. Minute by Sir David Henderson dated 5 August 1914. The seven men involved were sworn in at Farnborough on the 9th.

5 AIR1/2148/209/3/191. Nominal roll of officers and non-commissioned aircrew serving with the BEF as at 15 September 1915. The two NCOs listed were Sgts F Courtney (2891) and W Watts (1831).

6 AIR1/1290/204/11/70. Nominal roll of officers and non-commissioned aircrew serving with the RFC, dated February 1916. The three NCOs concerned were F/Sgt T Carlisle (351), Sgt T Bayetto (4808) and Sgt J Noakes (4469) respectively.

7 Comprehensive records of the numbers of officer and NCO pilots trained during WWI do not appear to have survived but sufficient documentary evidence exists to provide a reasonable impression of the balance between them. On qualifying for their flying badges the CFS issued all commissioned pilots with an RFC Graduation Certificate, NCO pilots receiving a very similar document called a Flying Certificate; each series was numbered independently. It is known, for instance, that Sgt E A Cook's Flying Certificate No 175 was dated 7 April 1917 while 2/Lt H D Arkell's Graduation Certificate No 5,321 was issued on 26 June. While the dates of these documents differ by several weeks, they are close enough to show that officer pilots outnumbered NCOs by more than 30 to one, this ratio remaining more or less constant throughout much of the war.

8 AIR2/9/87/7956. Directorate of Air Organisation (DAO) letter 87/7956(AO1a) dated 25 June 1916. Subsequent correspondence amending the rules as initially published is on the same file.

9 AIR1/405/15/231/46. DAO letter 87/RFC/12(AO1a) dated 3 August 1916.

10 In the summer of 1916 a Committee on the Administration and Command of the RFC was appointed, under the chairmanship of Mr Justice Bailhache, to investigate a variety of serious criticisms raised in the Press and the House of Commons by a group of activists with Mr Noel Pemberton-Billing MP acting as their chief spokesman. Taking evidence from May, the Committee's final report, which substantially exonerated the corps and its commanders, was dated 17 November.

11 AIR2/9/87/7661. From the unpublished Appendix A to the Final Report.

12 AIR1/1297/204/11/139. Nominal rolls of officers and non-commissioned aircrew serving with the RFC overseas, dated January-April 1917.

13 AIR1/1297/204/11/140. Nominal roll of officers and non-commissioned aircrew serving with the RFC overseas, dated June 1917.

14 AIR1/1301/204/11/158. Nominal roll of officers and non-commissioned aircrew serving with the RFC overseas, dated August 1917.

15 *Ibid.*

16 AIR1/1036/204/5/1455. An enclosure on this file indicates that there were 32 NCO pilots flying with squadrons and a further seven held in reserve at Nos 1 and 2 Air Depots; unfortunately, this list is undated but there is ample circumstantial evidence to indicate that it was compiled *circa* late August or early eptember 1917.

17 AIR1/391/15/231/32. DAO letter 87/RFC/564 (O.2) dated 7 June 1917.

18 Eddington's personal recollections are in the Sound Archives of the Imperial War Museum. The extract reproduced here is taken from Steel, Nigel and Hart, Peter, *Tumult in the Clouds*, (London, 1997).

19 AIR1/1214/204/5/2630. Nominal roll of officers and non-commissioned aircrew serving with the RFC overseas, dated January 1918.

20 AIR1/520/16/12/1. War Office letter 79/9962 dated 18 August 1917.

21 AIR1/1078/204/5/1678. GHQ letter OB/1826/E/1 dated 6 September 1917.

22 See Note 18.

23 AIR1/1078/204/5/1678. War Office telegram 45677 dated 14 November 1917.

24 AIR1/399/15/231/40. DAO letter 79/9962 (O.2) dated 15 February 1918.

25 AIR1/398/15/231/39. DAO letter 79/9962 (O2) dated 8 January 1918.

26 AIR1/1078/204/5/1678. HQ RFC letter CRFC 2022/1G dated 6 March 1918.

27 *Ibid.* Brig-Gen H D Briggs informed HQ RFC of the problems being experienced in training NCO pilots on single-seaters in Air Ministry letter 79/9962 dated 5 March 1918.

28 *Ibid.* HQ RAF letter 2567(A) dated 30 August 1918.

29 *Ibid.*

30 In 1910 the Royal Aero Club had been recognised as the British licensing authority for all pilots and the completion of the elementary phase of military flying training was marked by qualifying for one's 'ticket'. By August 1916 the demands of the, still very basic, RAeC test no longer reflected the level of skill required of a military aviator. The Club's certificate had therefore become virtually irrelevant and it was agreed that the RNAS and RFC would thenceforth endorse the abilities of their pilots on their own cognisance. Until then most (but not all) RFC pilots had

been registered with the RAeC, thereafter registration became merely an option that was not always taken up. This would explain why only seven of the 32 pilots known to have flown in the NCO trial appear to have been recognised by (i.e. taken the trouble to register with) the RAeC.

31 AIR1/1036/204/5/1455. Reports to HQ RAF, submitted either directly or via Brigade HQs, representing the views of Nos 11, 48, 84, 103 and 206 Sqns are on file.

32 For example: Sgt J Matthews and FSgt J Helingoe had arrived in France with No 148 Sqn in April 1918 as had Sgt H N Lee of No 88 Sqn; Sgt H H Wilson joined No 99 Sqn in June and at the end of August, Sgts H W Tozer and A Haigh reached France with No 110 Sqn; Sgt A O Hall was posted to No 70 Sqn on 5 September 1918 and, just as hostilities were ceasing, the redoubtable FSgt Ernest Elton was on his way back to France with No 39 Sqn. This list is not presented as being exclusive; there will probably have been (a few) others.

33 AIR1/1163/204/5/2532. HQ RAF return of numbers of aircrew by unit. Although undated, the assignment of squadrons to wings and brigades fixes the date as being no earlier than 1 November and no later than the 9th.