The Development of British Air Power on the Western Front to the end of 1915

An analysis of the technological, procedural and tactical developments of the Royal Flying Corps

Part 2

by David Spruce

Fighting in the Air

A little fighting in the air will […] *have a far-reaching deterrent effect on the moral of the aerial forces of the losing side* […] *The aircraft of one side will be imbued with greater staying powers, greater determination to fight. That side must be ours. It is this spirit which, creating moral ascendency, always wins* […] *The side which loses command of the air will labour under all the disadvantages of defensive action.*[1]

Sykes's speech, given at the Aeronautical Society meeting in February 1913 shows that consideration of aerial fighting and the policy of aerial supremacy predate the war. In fact, the need to fight for information had been recognised as soon as aircraft were first conceived as a reconnaissance tool. No enemy could afford to sit by passively and allow their opponent freedom of the skies. As early as 1907, Henderson wrote of the need for aerial combat even though at this time he thought the chances of pilots hitting each other were small.[2] Such methods included creating a wash to unbalance the other flyer, dropping objects on him or even in the last resort to ensure his destruction at the price of self-immolation by ramming in mid-air.[3] His ideas for bringing down opposing pilots may have been naïve, but they still demonstrate intent.

In May 1912, a year earlier than Sykes's speech, Henderson, also speaking at the Aeronautical Society, shows that the idea of aerial fighting was already conceived and expected:

The fighting aeroplane will be required to overcome the air forces of the enemy, if possible to drive to the ground; at any rate to inflict damage upon them […] *Also it will be required to block the enemy's endeavours to gain information by bringing to action any aeroplane which may approach our lines. To fulfil these purposes the fighting aeroplane must be of such design that weapons can be used effectively by the passengers or pilot.*[4]

Though the secondary source historiography has often focussed on alleged Army intransigence to aircraft development, mostly remarks attributed to General Sir William Nicholson or spuriously later to Sir Douglas Haig, most senior Army figures echoed the positive remarks of the aviators.[5] In December 1912, General Sir James Grierson said, *It is impossible to carry on warfare unless we have mastery of the air.*[6] Sykes was more cautious. While he welcomed Grierson's supportive comments on flight, he doubted whether such mastery was achievable in the short-term, *the third dimension' he said, 'is a severe stumbling block.*[7] This was not simple caution from Sykes; he recognised the technological reality of the day. Aircraft would need to carry weapons to fight in the air. Effective weapons such as machine guns would add significant weight and thus severely degrade climbing ability. In turn, this would make the pursuit of unarmed aircraft difficult, if not impossible, regardless of the aggressive attitude of the pilot.

Britain carried out a great deal of experimentation in aerial gunnery before the war. In 1912, the RFC tested several different machine guns, including a Maxim and a Rexer, and a year later a Vickers, a Light Hotchkiss and a Lewis to determine the effect that such weapons would have on the aircraft.[8] They were pleased and encouraged by the tests, reassured that *the slight recoil due to the discharge is entirely absorbed in the fuselage.*[9] These experiments helped the RFC learn valuable lessons and provided ideas for the future. They showed the great potential of the Lewis gun and that both gun mountings and aperture sights were a necessity to assist accurate shooting.[10]

Brancker claimed in a lecture to the Military Education Committee in June 1914 that pre-war experiments had proved that it was *possible in this country to fire a rifle, a machine gun, and even a 1-pounder gun from an aeroplane with fair accuracy.* Such claims were nonsense, but at least on strategy he soundly echoed his fellow senior officers. It was logical he said, *that these aircraft must fight in order to maintain for themselves the advantage of being able to reconnoitre. The aeroplane of the immediate future will be armed.*[11] Reiterating Sykes's comments on air superiority he believed that *Fighting in the air will probably demand a higher standard of morale* […] *than any other feature in war; an aerial service which is lacking in this respect will speedily vanish from the air.*[12] Writing at a similar time, Henderson concurred, it was only *by the display of superior resolution*, [that] *the enemy's courage may be worn down, and something like the mastery of the air secured.*[13]

Thus, all three leading RFC figures at this time, Henderson, Sykes and Brancker were aligned in the expectation that aerial fighting would be required and for a strategy of aerial superiority. The 'RFC Training Manual' issued in June 1914 reflected this philosophy stating, *After a series of victories in the air, any of the opposing aircraft that leave the ground must be relentlessly pursued and destroyed until complete command of the air is obtained, while after defeat all aircraft capable of flying should continue to reconnoitre at all costs.*[14] Thus, when war broke out, the RFC fully recognised fighting in the air would become a reality. Further, it had a clear and coherent vision that success would depend upon decisiveness of action and moral superiority. As Pugh writes, *at the core of RFC policy, doctrine and practice remained the value, ethos and ideas of pre-1914 theory and policy.*[15] However, it was unclear in August 1914, precisely *how* such superiority could be accomplished. War arrived too soon for Britain to be in a technological position to make such a policy a reality. There were a wide variety of different aircraft types in use and a near-total shortage of machine guns. It would be left to the RFC pilots and observers themselves to work tactics out with what material they had available.

Without the tools to conduct aerial combat, effectively dogfights in the early stages of the war, were as Joubert observed, *more demonstrative than effective.*[16] Fixings for the few Lewis guns possessed by the RFC were improvised, one *tried out on mountings arranged so that they could fire over the pilot's heads* for example.[17] Lt Strange observing for Lt Penn-Gaskell fitted a Lewis gun to his aircraft on reconnaissance missions. He would become very irritated by instructions from his Commanding Officer to remove it to save weight, his frustration having more to do with his aircraft's weak performance than the order, as *the poor old B.E's were easily outclimbed.*[18] In October 1914 the first Sopwith Scouts arrived