Dover's Forgotten Aviation History

Part II

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The story of early aviation is full of characters whose exploits, and often sad fates, are inspirational even a century later. One such was Lt. Hubert Harvey-Kelly of 2 Squadron RFC who flew his BE2a down from Montrose to Swingate before departure for France. A photograph exists of Harvey-Kelly resting en route to Swingate, lying against a haystack in a field, nonchalantly smoking a cigarette. Beside him is his parked, fuelled up aeroplane and a small crowd of enthralled country folk. 2 Squadron was ordered to France on 14th August. Harvey-Kelly, determined to be first to arrive, ignored the flight plan and flew by the most direct route to achieve his ambition. His war gear consisted mainly of sandwiches, soap and a pistol. On 26th August he became the first British pilot to bring down a German plane when he flew his unarmed BE2 so aggressively behind a German Taube that the German landed his plane and fled. For a while, Harvey-Kelly's tactics became a recommended model for other British pilots! In "Bloody April" 1917 at the height of the Battle of Arras, when RFC losses in the air were truly alarming, partly due to the depredations of Von Richtofen's Jasta 11, Harvey-Kelly was station commander at Vert Galand on the Western Front. On 29th April, hearing that the Red Baron was aloft, Harvey-Kelly led his squadron to the attack without waiting for reinforcements. He was shot down by the German pilot Kurt Wolff and died 3 days later in a German hospital. He was 26 years old. The Germans returned his personal possessions to the British lines. Kurt Wolff, who was 22, was killed by the RFC in September the same year.

Lt. Hubert Harvey-Kelly attacks a German Taube, August 1914. Reproduced by kind permission of James Field, artist.

After 1914, Swingate continued to develop, primarily as a training depot, ultimately becoming in 1918 the specialist station for training in convoy and antisubmarine work following the merger of the RNAS and RFC to form the RAF. In 1916, in an effort to improve defences against Zeppelin attacks on London and the South East, No. 50 Home Defence Squadron, which included a night fighter wing of BE2c aircraft, was established at Swingate. It subsequently moved to Bekesbourne and had flights at Throwley and Detling as well as Harrietsham at various times. During the Gotha bombing campaign between May 1917 and April 1918 it usually operated on a

patrol line that stretched from Throwley through Bekesbourne to Dover. Many hundreds of airmen passed through Swingate air station which, by the end of the war, covered 219 acres. Its contribution to the successful prosecution of the War is recognised in the memorial to 2, 3, 4 and 5 squadrons which is all that stands on the site today to remind passers by of its history.

The Dover Patrol and the battle for control of the Channel is of course a major story in its own right. Suffice it to say that the war for the Dover Straits was waged on both sides of the Channel and the RNAS, whose principal base was Dunkirk, led the way in the air over the Channel for most of the war. In August 1914, the RNAS (until May 1915 the Naval Wing Royal Flying Corps) had 93 aircraft, six airships, two balloons and 727 personnel, more than the army element of the RFC.

The scale of the defence challenge can be gauged from the fact that in a single 6 week period in 1916 21,000 ships were passed through the patrol. 1¼ million wounded came through Dover during the war; 11,936 cross channel journeys were made to and from Dover; 10,636 troop ship crossings were made from Folkestone and 10,000 barges were despatched from Richborough. Just 63 ships were lost in the Channel during the war from more than 125,000 ship movements.

The Royal Navy planned for the protection of Dover Harbour from the air well before the war started. From June 1913 some 55 acres at Guston between Fort Burgoyne and the Duke of York's Military School were earmarked for an airfield. Progress was slow but in January 1915 No.1 Squadron RNAS arrived to complete training and assume responsibility for the defence of Dover Harbour. The first seaplane attacks on the harbour occurred in daylight on 9th January 1916; this was followed by a night attack in which 9 bombs fell. The RNAS planes at Guston became the 'Dover Defence Flight' and, until the end of the war, training and day and night defence patrols were flown. There was a good deal of interchange and operational collaboration with the RNAS base at Dunkirk – Guston was part of the single command subordinated to the Officer Commanding, Dover Patrol. In 1915 planes from Guston Road joined large scale attacks on German installations at Zeebrugge and Oostende and in 1916 on the Tirpitz Battery. In August 1916 the airfield was bombed but not seriously damaged. Guston Road was also used as a testing station for new types. One of the more unusual "pusher scout" designs tested there was the Pemberton-Billing PB25 "Zeppelin Destroyer". According to contemporary sources it, "...climbed like a rocket," which was, after all, the requirement, Zeppelins having been difficult to reach because of their height and the slow rate of climb of most attacking aircraft. In the event, the PB25's poor landing and take off characteristics outweighed the value of its fast rate of climb. Much of the site of the airfield is now built upon but traces of the foundations of administrative buildings can still be seen in the grass where no modern buildings have yet appeared. There is no memorial to the many who served there.

The Navy had been quick to recognise the potential value of seaplanes for operations in coastal waters. In 1913, Guilford battery and its site around Moat's Bulwark was requisitioned for the 'RN Seaplane Patrol'. No progress was made, however, until November 1914 when U12 sank a gun-boat off Deal Pier. Two Wright navy planes were rapidly ordered to Dover from Eastchurch

with orders to set up a seaplane base. The skating rink on Marine Parade was requisitioned for the planes and a slipway was built to enable them to be hauled up the beach and across the road! By May 1915 the first planes had been replaced by the Short model 184 and some 15 planes were on station. In August that year much of the operational flying was transferred to Dunkirk. In addition to some residual operational flights, Dover assumed a major training and repair role for which two large hangars were built adjacent to the skating rink. Every pilot posted to Dunkirk had to spend a month at Dover first, learning the ropes. The busy harbour was unsuitable for take off, so planes had to weather the harbour entrance to take off beyond the mole. The base produced modifications to the floats and wings of the Shorts to enable them to cope better with the conditions. These planes became officially known as the "Dover Type" 184's and were powered by an uprated Sunbeam engine. Sopwith Baby fighter seaplanes later flew with the Short patrol 184's to defend them against German fighters. The only damage suffered by the seaplane base was during a 5 hour Gotha bomber raid on Dover on the night of 31st October 1917 when 22 Gothas attacked various Kent targets and destroyed a gasometer in Ramsgate. With the formation of the RAF in April 1918 the Dover seaplanes became part of 5 Group which supported the Zeebrugge raid in April and then concentrated on closing the Channel to German submarines. Heavy patrolling in support of the submarine barrage and other elements of the Dover Patrol ensured that no U-boats successfully passed down the Channel after May 1918. No trace now remains of the Marine Parade seaplane base.

During the war the Royal Navy maintained twelve airship stations around the coast of Britain. The strength of the airship was, above all, its ability to remain on station for long periods. Its weakness was that in bad weather it could be unmanageable and it always required large numbers of people to handle it on landing and take off. Nevertheless, the RNAS made great use of airships throughout the war, particularly in countering the submarine menace. Their importance cannot be overestimated – during the entire war there was only one instance of a ship being sunk whilst being escorted by an airship. The importance of the Straits and the inevitability of the transports, merchantmen and Dover based warships becoming targets for submarines was fully appreciated. At first patrols were mounted by airships from Kingsnorth but the German's declaration of unrestricted submarine warfare in February 1915, "All the waters surrounding Great Britain and Ireland, are hereby declared to be a war zone. From February 18 onwards every enemy merchant vessel found within this war zone will be destroyed", galvanised the Admiralty and work on a new airship station at Capel started in April that year. The site is now largely occupied by mobile homes. There were three hangars and a workshop on about 240 acres. The first airships at Capel were ex-Army but they were soon replaced by the new SS (Sea Scout) airships. Simple and cheap to build, 158 were produced during the war. They were powered by a BE2 aircraft fuselage. Incredibly, the first Sea Scout to be delivered (often called the Silver Queen) was entrusted to Sub Lt. Ralph Booth who had just passed his test and had never flown cross-country before. He brought SS1 from Kingsnorth to Capel and mistook the wind direction arrows laid out by the helpful ground crew for landing directions. The result was that he approached down wind, overshot the landing and piled into the roadside telegraph wires. The balloon caught fire and the crew had to leap to safety on the edge of the cliffs.

Nevertheless, Booth recovered from the disgrace and, as Commander Booth, took R100 on its return crossing of the Atlantic in 1930. The engineering section at Capel went on to build a very successful variant of the SS airship: the SSZ. The SSZ had an improved car and was fitted with a (pusher) 75hp Rolls-Royce Hawk aero-engine, giving a speed of 50+ mph; it was test flown in August 1916. It could carry 350lbs of bombs. The Admiralty, on discovering the modifications censured the air station for carrying out unauthorised work, but then ordered the type into production!

Convoy escort was a major role for the Capel airships as well as escorting Folkestone – Boulogne cross Channel transports. It all looks rather primitive to us but it is worth repeating that during the whole war only one ship was sunk by a submarine whilst being escorted by an airship. By 1918 there were 9 airships on station at Capel and there were satellite moorings at Godmersham Park and Wittersham.

The Downs anchorage has been used by merchant ships for centuries. In early 1917 a ship was torpedoed at anchor in The Downs and the Admiralty rapidly ordered the establishment of an airfield to give additional protection to the area. The site chosen at Hawkshill Walmer was ideal; it directly overlooks the stretch of sea towards the Goodwin Sands that is the Downs. The aerodrome occupied 57 acres between Walmer Castle and Kingsdown; it is now farmland and a nature reserve popular with walkers. The aircraft were housed in Bessoneau hangers and the men in tents and, later, wooden huts alongside the hangars. Officers were billeted offsite. In order to start up operations, six of the best pilots who had been serving in France for many months were posted to Hawkshill. The transfer to Walmer ostensibly met a need both to protect the shipping and to provide airmen with a rest from the very stressful conditions in France. The "rest" was relative; the "Walmer Defence Flight" established primarily for protection of shipping took a very active part in Home Defence duties. Patrols were flown constantly and aircraft from the Flight played a creditable part in the Gotha battles of 1917/18. Remarkably, one of the Sopwith Pups based at Walmer has survived and can be found in the RAF Museum. N5182 is one of a total of 64 Pups built in 1916. The plane had a very active operational life in France before transferring to the Walmer Defence Flight in May 1917. Thereafter it is recorded as having flown anti-Zeppelin and anti-Gotha bomber patrols. In both July and August 1917 it was noted as being badly damaged, but it was evidently repaired and in October transferred to the War Flight School at Manston. Although the Hawkshill site was abandoned after the war, the memory of the airmen who served there has not been lost. In 1920 Lady Beauchamp donated a memorial that still stands.

October 1918 was exactly 10 years after Samuel Cody had managed to fly a mere 1400 feet. In 1914 the RFC mustered 60 planes to fly from Dover in support of the BEF. On formation in 1918, the RAF came into possession of more than 20,000 machines. Between 1910 and 1918 the skies around Dover were full of aircraft – first in pursuit of better aeroplanes to fly longer distances to and from Europe and, later, as a truly vital component of the war machine that defeated the Kaiser. Thousands of civilian and military aviators and engineering and ground crews passed through the Dover air stations, a remarkable story that is now all but forgotten.