

RNAS No.8 Kite Balloon Section 1915

Or 'Up, up and away!'

F. Russell Sadd with No.8 Kite Balloon Section in France 1915.

Aeroplane Monthly of June 1976 carried the following article, under the headline Eyes for the artillery. I have reproduced it here in full, for anyone who has not seen the original, as it is a fascinating insight into a little-described arm of the aviation services.

'The days of manned balloons for observation work have now passed, but very little has been recorded about the Balloon service of the 1914-18 War. F. Russell Sadd served on observation balloons with the Royal Naval Air Service, spending a year with No. 8 Section in France and following this with a further 2 ½ years with the Grand Fleet at Scapa Flow and Rosyth, in command of No. 3 Section aboard HMS *Canning*. The author here describes his early Balloon Service training and his operational experience in France.'

'It was not until I reported for training at RNAS Roehampton in March 1915 that I realised I had been attached to the lighter-than-air side of the service. This training was condensed into weeks, to cover each phase of balloon work as much as possible. It was essential that all officers under training should not only be observers but should also be able to handle a kite balloon in case it should break adrift. We were given balloon training trips in thermal balloons under supervision of pre-war experts, and after six flights each officer had to make a solo flight in a small spherical balloon. The course consisted of map reading, elementary navigation, weather instruction, and rope work. The technical side of the use and manufacture of hydrogen, including safety precautions, were stressed. We had to familiarise ourselves with the component parts of the kite balloon including the rigging, towing lines, towing bridles and rigging suspension. It was also important to learn how to handle the balloon on the ground, and we were instructed in the drill required by the crew for such handling.

Our training at Roehampton was carried out on the Drachen type kite balloon. These were made with one air-filled balloonet below the main bag, two stabilising sails, and a tail with several small parachute kites at the rear end. All these devices caused a great deal of vibration in high winds, and the type could not be successfully used in winds exceeding 30 m.p.h., the vibration making the use of binoculars for observation work impossible.

The next stage in our training took us on to free balloons. These operated from Hurlingham, where there were facilities for filling the balloons with coal gas, and at Wormwood Scrubs Air Station where crews were trained for airship work. My first flight in a large balloon proved eventful and I shall never forget my introduction to this form of travel.

Seven of us left Hurlingham about noon one day under the charge of our instructor, John Dunville, Sub Lt Carr was doing his pass out, which meant that he had to maintain the balloon's height under Dunville's observation. The day was cloudy, with a light wind from the south-west taking us over London in a north-easterly direction. Regulations dictated that the balloons had to maintain a height of 1,000 ft whilst flying over the capital, and as we drifted along the weather became more cloudy and cooler and there was a distant roll of thunder. Dunville, who had been chatting away with some

of us, suddenly became alert and asked Carr our altitude and how many of the 28 bags of ballast remained, Carr had dumped most of the bags over London and only two were left. Dunville ordered us to let out the trail rope and to untie our shoe laces, in case we had to throw out our shoes to lighten the balloon. We began rising in an updraft ahead of the storm and eventually the aneroid showed a height of 7,000ft. Then it started to rain and in dense cloud we started to fall rapidly. As we broke cloud and neared the ground we could see that we were approaching Romford, in Essex, and travelling in a direction that would take us over the Great Eastern main line railway. Our trail rope ripped out a chimney pot on a school and then passed over some telephone wires like a violin bow, ripping them out of their posts and completely disrupting the railway signals.

Uncontrolled descent

Ahead of us was a playground and some cricketers sheltering from the rain. They ran out and tried to catch hold of our trail rope but we were travelling too fast and were blown towards a block of houses. Dunville had already pulled out the rip panel and the entire gas bag was like a huge sail. We hit the end wall of the houses and bounced up again and then crashed into a nearby garden, demolished a greenhouse and landed in a tree. The top of the balloon was spread over the roof of a house with its extreme top section in the street in front of the house.

Dunville's first question was to ask who had left the basket. The drill in such a case was to bend the knees and grab hold of the safety lines fitted on the floor of the basket. One man thought it best to hold on to the basket rigging, and on our first contact with the ground he had been thrown out. The loss of his weight had caused the basket to rise and we had been blown up and on to the other house. There were a few minor injuries, Dunville had sprained his ankle and one man was so shocked he could scarcely speak. Under normal circumstances a balloon crew was expected to pack their balloons up by themselves, but on this occasion a crew was sent out from Wormwood Scrubs to remove our balloon from the house.

On that day there were several balloons wrecked with minor casualties, and as a result the authorities issued stricter instructions to prevent similar losses. One of these was that weather forecasts should be more closely observed.

We were each required to make six free balloon training flights, followed by a solo flight. I did my first solo in a small goldbeater-skinned spherical balloon sent up from Roehampton and filled with hydrogen. The weather was favourable and I had an uneventful flight drifting in a south-easterly direction over Kent. As I neared the end of my flight I let out the gas and put out the grapnel which dug into the ground and brought me to rest. When I landed there was no one about, but within minutes some soldiers and a crowd of children crowded around. I gave some of them a ride up to the extent of the trail rope and then, making sure no-one was smoking, I deflated the balloon and many volunteers helped me take the balloon to the nearest railway station in a small dog cart. So ended a very pleasant trip. Soon after this I was appointed to No. 8 Kite Balloon Section for service in France.

Number 8 K.B. Section was formed in July 1915 and was sent to France in the first week in August. This was the fourth section to be lent to the Army for duty in France, and it consisted of six officers and 80 men. These men were made up largely from the Metropolitan Police by special arrangement with the Air Department of the Admiralty and the Police Department. Our commercial telephone ratings were from the General Post Office and were very competent. The entire section was mobile and consisted of camp equipment, stores, hydrogen bottles, truck-mounted winch, several seven-ton lorries, a workshop mounted on a truck, two light tenders two motor cycles and the C.O.'s car.

Over to France

We left Roehampton in convoy to Southampton, boarded our ship and crossed to Boulogne, where we spent our first night under canvas. The next day we moved up to St. Omer, camped the night, and then moved on to Bethune and made camp a few miles to the east of the town. We were now attached to 1st Brigade, 1st Division, 1st Army for operations and supply. Our balloon was bagged down behind a railway embankment where it was well hidden from the enemy, and we camped here under canvas. On September 7, 1915, I was gazetted as a Probationary Flt Sub Lt, RNAS.

Our job was to carry out counter-battery work with the long range gun batteries, which were equipped with 60-pounder guns, and some Naval batteries equipped with 6-inch guns. We were using Drachen type balloons, and under normal conditions we could reach 2,800ft with two observers aboard. We were tethered by a cable made of 6/18 plough steel with a diameter of 9mm. the telephone wire was run to the basket from a separate drum and these were always giving trouble with noise and breakage. Our mess was in Bethune, and the Germans were constantly shelling the railway with high explosive armour-piercing shells. I remember one shell falling into the yard of a nearby house, making a huge hole without exploding. Our Supply Petty Officer found the base of the shell in the road minus the fuse, and, stopping to pick it up, burnt his hand. The intelligence branch wanted to see the piece of shell and it was sent to them, but the PO eventually took it home to England as a souvenir.

Later on, during the Battle of Loos, we were moved to a position further forward towards the lines in order to obtain a better view of the enemy battery positions. Our reports of enemy gun flashes in conjunction with other reports from observers in forward observation posts gave commanders a cross-bearing of falls of shot which was most valuable.

Winch technique

It was of utmost importance to be able to winch in a balloon as quickly as possible, particularly when under attack, and we had one of the first petrol-engined winches, designed after a French type. We were able to move even quicker because our winch was mounted on a truck, a distinct advantage when the enemy had located us and decided to shell us. On one occasion, when hauling the balloon down to change observers, the enemy fired three shells which landed within a few feet of where the basket had been only moments before. Everything was immediately made ready for a quick move with the lorry engine running. As our balloon reached the ground two shells burst very close by. The balloon was unshackled and our ground crew took over and towed the balloon to one side on open ground, veering in *zig-zag* fashion as they drew away out of range.

Near misses

The shelling increased as the range was kept up, but fortunately there were no casualties. As we arrived at the camp the last few shells fell very close, and one put our telephone hut out of action. Eventually our petrol winch gave us continual trouble and became too worn for further use. An old steam-driven one was supplied in its place. This was mounted on a trolley, but unfortunately, in order to fire the boiler, one wheel had to be taken off, thus making the machine immobile.

In May 1916 we were ordered to move a section nearer Mazinarbe using a site once used by the French. We ascended from here for two days and then, on the third day, I went up alone to get as high as possible, since our targets were behind rising ground. Eventually I was able to observe over this newer ground and spot several batteries. Our own 60-pounder and the six-inch naval batteries were able to make good use of the information that I was able to give them.

I think the enemy had been watching us using the new position, and had probably shelled it into the past when the French occupied the site, for after an hour a salvo of six or more shrapnel shells burst all around me. The balloon was bracketed completely. The battery commanders telephoned me immediately to ask from where the shells were coming. The only thing I could do was to take reciprocal angles of the spread of the bursts, as I had not seen the gun flashes. I phoned down to the winch and told them to let out as much cable as possible. At the same time I dumped ballast in order to gain more height and avoid shelling. My CO telephoned to ask if I was all right, and suggested I should take to my parachute as the salvos were coming over every few minutes and following me as I gained height.

I was most anxious to give our batteries the information they required, as they were all ready to fire as soon as they were given the enemy's location. For this reason I decided to stay where I was. The prospect of using the parachute didn't appeal to me, because at that time they had no harness, and if I had jumped I would have had to hang on to a trapeze bar like an acrobat in a circus.

Soon holes began to appear in the balloon after each salvo, and as the shelling continued the balloon started to lose height. As the cable became slack it was taken in by the winch, and as the old steam winch was immobile, the winch tenders down below had to withstand the barrage of pieces falling around them. Finally, just as I was too low to see over the enemy high ground, a signal came in from Capt. James of No 2 Squadron, RFC, giving us the map position of the battery shelling us. All too late for me to have the satisfaction of helping in the counter-battery firing which followed from our own 60-pounders.

We manhandled the balloon away out of range and returned to our old position, moving over fields and roads. Later the balloon was found to have over two hundred holes in it, and several shrapnel bullets were recovered from inside the bag. The balloon was replaced, but in July 1916 the RFC commenced taking over work and were joined by them and offered good positions if we joined the Corps. Some of our officers did avail themselves of this offer, but most of us elected to stay with the Naval service. I was thankful of this as some of the most experienced ratings returned to Roehampton and I was able to get them redrafted to the section that I was appointed to later.

As far as I know the RFC took over our equipment *in situ* and they carried on our work. The fortunes of the balloon sections became more and more hazardous in the later stages of the war because of the increasing danger from attack by aeroplanes.'

F. Russell Sadd – as published in *Aeroplane* monthly, June 1976.

