

TOO CLOSE FOR COMFORT: ZEPPELINS OVER THE CITY OF LONDON

Read by The Revd Dr Martin Dudley

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Three weeks after the First World War began in August 1914, the German airship LZ 25 bombed Antwerp, killing and wounding 26 people, and made the British realise that they also could be attacked from the air. The Zeps might come and the threat was taken seriously. There were two ways to deal with the threat, offensive and defensive. An offensive against Zeppelin sheds at Cologne and Dusseldorf was launched in September, by the Royal Naval Air Service, on the instruction of the First Lord of the Admiralty, Winston Churchill. The first largely unsuccessful raid was on 21 September. During the second raid, on 7–8 October, the shed at Cologne was hit by a high explosive bomb, and the brand new L9 was damaged. There had not yet been a single bomb dropped on British soil, and some historians have argued that the collateral damage caused in these raids, including the bombing of the Cologne Hauptbahnhof gave rise to retaliatory attacks. Others believe that it was always the German intention to bomb Britain.

On 11 September 1914 the Metropolitan Police Commissioner issued the first restriction on lighting as a safeguard against attack. Street lights were reduced in number and shaded. Trams and buses were darkened to the point of semi-obscurity. Blinds had to be drawn on private dwellings. Eclipsed by the later memories of the Blitz, most people are unaware of the tension felt in England, especially by Londoners, during the Great War—the overworked nerves, the horror, the pathos, the heroism, and the compelling changes in lives that air raids and the threat of air raids brought about. With the streets darkened, Londoners could see again the starry sky. For two years they looked at it with a sort of Zeppelin psychosis. On a clear night they would say “not a Zeppy night tonight, thank God”. The Zeppelins did not come on moonlit nights. As you will know, if you ever circled over London waiting to land, it is comparatively easy to work out the geography. The parks especially have distinctive shapes. To prevent raiders hitting Buckingham Palace, St James’s Park lake was drained. Other parks were given dummy lights so as to be less recognisable. But the Thames remained a huge problem. Even with lights on bridges reduced or removed, the river reflected the light, and like a luminous road it could draw the raiders from the estuary to the city. In consequence, further preparations were made to deal with the raids. The roofs of important buildings in Whitehall were sandbagged. The statue of Charles I in Trafalgar Square and the royal tombs in Westminster Abbey were heavily sandbagged. The face of Big Ben

was dark, as were the faces of all other public clocks. Clocks did not strike the time and church bells did not ring. Life had changed and it came as a shock.

In this paper I shall deal with one small part of the war in the air, which began with the dropping of the first bomb on British soil, by an aeroplane, on Christmas Eve 1914, near Dover Castle, and ended with the last bombing raid of all on the night of 5–6 August 1918. Though I will set my story into its context, I am concerned with the bombing of London, and specifically the City. There were in total 103 raids on Britain by airship and aeroplane. About 270 tons of bombs were dropped; some 8,500 bombs in total, ranging from light-weight incendiaries to high-explosives a ton in weight. There were 1,414 people killed, and 3,416 injured, with considerable damage to property. It was, of course, as nothing compared to the loss of life on the various fronts, but it brought a war to Britain for the first time and left people feeling vulnerable. It was all too close for comfort.

Airships had a somewhat chequered history since Count Ferdinand von Zeppelin of the German army began, from 1897, the construction of an immense balloon “of most careful and most intelligent design” able to carry five men. He used an aluminium framework containing sixteen gas bags; it had two cars or gondolas beneath it, and when first tested in June 1900, it attained a speed of 18 mph and travelled for three and a half miles before having a problem with its steering gear. The next one, launched in 1905, was smaller but more powerful. It was wrecked in a violent gale, but its successor travelled round Lake Constance in October 1906 and demonstrated great manoeuvrability. With further revisions, it achieved a speed of 36 mph, and carried nine or eleven passengers. Zeppelin IV, in 1908, travelled 250 miles in 11 hours but was wrecked and burnt out. Nonetheless, Count von Zeppelin’s airline DELAG (Deutsche Luftschiffahrts-Aktiongesellschaft), founded in 1909, had flown 1,588 flights carrying 10,197 fare-paying passengers before war broke out. Though the Zeppelins never came to London in peace time, the “Nulli Secundus”, an airship constructed for the War Office, sailed from Farnborough round St Paul’s Cathedral and out to the Crystal Palace, in October 1907, a distance of fifty miles, in 3 hours 35 minutes. So an airship had been clearly seen over the City.

The German army and navy both bought airships and they were operated quite separately. They all tend to be called Zeppelins these days, but the army version was actually the Schütte-Lanz type, with a wooden framework. The Navy primarily used its Zeppelins for reconnaissance. Bombing missions achieved little in strategic terms but they captured the imagination of the German public. There were 1,000 reconnaissance missions over the North Sea alone, compared to some 50 bombing raids.

The first serious airship raids over England began in January 1915, with attacks on Yarmouth, Cromer and King’s Lynn. In April that year a new improved

naval airship, the L9, made a considerable tour over the north of England. It was commanded by 22-year old Kapitänleutnant Heinrich Mathy, the “boldest and ablest of all German air commanders”. An exceptional naval officer, he first flew Zeppelins in the summers of 1913 and 1914, when on the staff course at the Marine Akademie. Early in 1915 Führer der Luftschiffer Peter Strasser insisted that he be transferred to his operations.

The earliest military Zeppelin, the L4, 518 feet long, 49 feet in diameter, had a maximum speed of 45 knots, a cruising speed of 32 knots, and could manage about 39 hours in the air. The L10, like Mathy’s L9, completed in 1915, was longer, wider, faster and could endure for 77 hours. Each version was improved until the last one built, the L72, which was 743 feet long, 79 feet in diameter, with six engines, and a maximum speed of 66.4 knots. It could stay in the air for 182 hours at cruising speed of 49.1 knots, but if it went a bit slower, say 40 knots, it could endure for 330 hours, or nearly a fortnight!

Zeppelins were kept in rotating sheds, to enable them to cope with wind when taking off. Refuelled with hydrogen, they were then brought out into the air. The crew would board, they would give the signal to cast off, and the Zeppelin would rise vertically and head out probably towards Heligoland to meet other airships. The crew observed radio silence. They steered using the vertical beams of the Flanders lighthouses, at Ostend and Steenbrugge. The point of convergence directed them towards East Anglia. Airships were subject to the vagaries of weather; and rain, fog and thick cloud, as well as ice, could weigh them down and storms could knock them off course. Navigational difficulties were such that over and over again they bombed places by mistake.

The Zeppelin had two gondolas, forward and aft, both with engines. These were Maybach engines, developed at the same time as the airships and intended for them rather than for aeroplanes. Amidships, there was a gondola on each side, also with engines. On the outer envelope at the summit there was a machine gunner and look out. Under the belly there was an amazing observation car that could be lowered beneath the clouds as the airship rode above. This gondola was quite comfortable, with seating, a chart table, a compass, a shaded light and a telephone. It could hang 3,000 feet below the Zeppelin. The later Zeppelins had a ceiling height of 20,000 feet, though they rarely went above 14,500 feet—two and a half miles up. The crew was around twenty-three, varying with the size of the ship. A commander, an observation officer and bomb aimer, a chief engineer, the steersman, four controllers, two wireless operators, a sailmaker who could repair the fabric, and twelve mechanics, all capable of operating the machine guns. Like submariners, the air crews were a breed apart. They had to be very fit and capable of enduring cold and isolation. There were some comforts. There were, for example, cooking facilities in the gondolas, that used the heat from the engine exhausts.

The airship approach was furtive, like a night animal. It could be noisy or silent at will, motionless or swiftly moving. As one eye-witness wrote: "Once seen, or vividly described, their monster bulk, ominously shaped and evil looking, could obsess the mind and endow them with a fabulous power of destruction." (Air Commodore Leo Charlton, *War over England*, Longmans, 1936, p. 33)

After the northern raids, L9 attacked Suffolk, bombing Bury St Edmunds in moonlight from a height of 3,000 feet, and escaping in fog, and then attacking Southend, though only three people were killed. Mathy was not the first to attack the Metropolis. Captain Linnarz in a military airship saw the lights of London when over Ramsgate on 17 May 1915 but had orders not to venture inland. Just two weeks later, on the night of 31 May, Linnarz came over London in the LZ 38 alone on a twenty minute trip from Stoke Newington to Leytonstone. 3,000 pounds of bombs were dropped, 41 people were killed and injured, more than £18,000 of damage was done, with some buildings gutted by fire and one bomb apparently fell into a tank at the Johnnie Walker whisky distillery in Whitechapel. Fortunately it only contained water! There were other raids in the north, causing considerable damage in Hull, but one airship, the LZ37, was brought down in flames. A raid on the Yarrow shipyards gave rise to 18 deaths and many casualties. Commenting on the 31 May raid, the Press reached the conclusion that it was a trial run. The short summer nights put an end to airship raids; they were just too vulnerable, but raids were attempted unsuccessfully in August, and by September it was clear that London was the prime target.

The air defence system was initially inadequate. All one could do was to seek a place of safety. A system of sirens was created and constables blowing whistles, sounding klaxons or ringing bells, went around by car or bike announcing that people should TAKE COVER. Shelters were established in the basements of buildings. Leyton and Leytonstone were much affected, with airships coming in over Epping Forest, and there the clergy organised shelters, often in crypts, newly painted and equipped with electric light and harmoniums. 1,900 people could be got into one crypt in less than 19 minutes. The old ladies of the East End were, however, the hardest to bring into line. One eighty-four year old refused to leave her home even after the terrifying experience "of seeing me front door go right past me up the staircase and me standing in the passage". Another said she would celebrate peace by taking her stockings off—"they haven't been off for two years!" Tube stations were used as shelters, especially during the later aircraft raids.

Beyond the Guildhall on Aldermanbury is the footprint of the church of St Mary, gutted by fire in 1666 and rebuilt by Christopher Wren. It was this building that was again gutted in 1940, leaving only the walls, but it was transported to Fulton, Missouri, and re-erected there. One significant aspect of its history has,

however, been forgotten. Wren gave it his usual scheme of window lighting—plain glass in all the windows, except for the eastern window, which contained stained glass. All the windows were shattered on the night of 8 September 1915 in the first Zeppelin raid over the City of London. That night Mathy was in command of L13. He had travelled with three other airships. One targeted the benzolplant at Skinningrove. Two others were forced to turn back; L11 turned back early with engine trouble and L14 had the same problem over Norfolk. Mathy reached London, approaching over Golders Green. He told an American correspondent that London was even then sufficiently lighted to be seen 25 miles away.

The Camden Local Studies and Archive Centre houses a wonderfully dramatic picture by Ernest Stamp, an artist who painted many views of Hampstead. This one, with searchlights seeking out a Zeppelin above the clouds, is entitled “Searchlights from Parliament Hill” and depicts an aspect of Mathy’s raid. A picture by John Fraser, in the collection of the Defence Academy of the United Kingdom at Shrivenham, also depicts the raid. Searchlights had been installed early in 1915 and a number of guns were in place, some fixed, some mobile. The searchlights found the airships and the guns opened fire, but they were not well adapted to their purpose and the raiders escaped.

D.H. Lawrence wrote about the raid, in chapter 12 of his novel *Kangaroo*, a chapter entitled *The Nightmare*.

“In 1915, autumn, Hampstead Heath, leaves burning in heaps, in the blue air, London still almost pre-war London: but by the pond on Spaniards Road, blue soldiers, wounded soldiers in their bright hospital blue and red, always there: and earth coloured-recruits with pale faces drilling near Parliament Hill. The pre-war world still lingering, and some vivid strangeness, glamour thrown in. At night all the great beams of the searchlights, in great straight bars, feeling across the London sky, feeling the clouds, feeling the body of the dark overhead. And then Zeppelin raids: the awful noise and excitement. Somers was never afraid then. One evening he and Harriet walked from Platts Lane to the Spaniards Road across the Heath: and there, in the sky, like some god vision, a Zeppelin, and the searchlights catching it, so that it gleamed like a manifestation in the heavens, then losing it, so that only the strange drumming came down out of the sky where the searchlights tangled their feelers. There it was again, high, high, high, tiny, pale, as one might imagine the Holy Ghost, far, far above. And the crashes of guns, and the awful hoarseness of shells bursting in the city. Then gradually, quiet. And from Parliament Hill, a great red glare below, near St. Paul’s. Something ablaze in the city.”

Much was indeed ablaze and a set of photographs at London Metropolitan Archives (LMA) shows the extent of the damage. George Williams, a hospital

worker, went to look at it and found a house still smouldering in Gresham Street. Mathy came from the north-west with Hampstead Heath on his left. He says that he could see clearly the outline of Regent's Park. He crossed over Great Ormond Street and Theobald's Road, dropping bombs; he veered northeast towards Mount Pleasant then south again crossing Clerkenwell Road, and bombing Farringdon Road, then he went over Smithfield Market, bombed Bartholomew Close, crossed Aldersgate Street, almost over Guildhall, and then east again, dropping his last bomb on Liverpool Street Station.

The British Library contains a collection of accounts of this raid written by boys at Princeton Street School, Holborn.

"On Wednesday I retired to bed about a quarter past ten. Suddenly I was awakened by the whirring of a propeller and a loud resounding crash mingled with the sound of falling glass. I looked out of my bedroom window to see what was the cause of the disturbance. In the sky I could see a long cigar shaped object, which I at once knew to be a Zeppelin."

The boy, John Hubert, tells of the Zeppelin turning, of a bomb dropped at the end of Lamb's Conduit Passage that set fire to the spirit cellar of the Dolphin pub. A gas main had also caught fire. The LCC housing in Leather Lane had been bombed. Buildings were burning and there was broken glass everywhere. John's brother helped rescue children caught under falling debris, three were dead, one uninjured. J. Sawyers heard the low rumbling noise of the engines, gunfire, and the shouts "All lights out" and "Down in the cellars." He tells of the fried fish shop in Lamb's Conduit Passage and the man killed there by a bomb. He had fetched supper and gone home; he was just going to eat when the child said "Where is my potatoes?" The man said "Alright I will get them." He got them and was leaving the shop when the bomb dropped and buried him. The fear was such that one mother fainted at the very word Zeppelin. Most of the boys comment on the Zeppelin itself, seemingly impervious to gun fire, turning in the air above them for perhaps two minutes, illuminated by the flames, and then quite suddenly ascending into the cloud. As soon as it was gone people went out into the street, an enormous seething crowd that hampered the efforts of the police and fire brigade.

"[Bombs] were dropped in Queen's Square, Leather Lane, Ormonde Yard, East Street and Devonshire Street and the City. The Homoeopathic Hospital in Queen's Square was damaged. The hole the bomb made in the square was six feet deep and ten feet wide."

One of the boys walked into the City and found many buildings on fire in Wood Street. A mass of stones fell from one, killing five people. In Bartholomew Close eight buildings were totally destroyed, there was a huge crater in the middle, all the windows of Butchers' Hall were blown out, and cloth warehouses were

on fire. The LMA photographic collection shows all this, including the wrecked office of the City of London Poor Law Union. The insurance claim for Butchers' Hall is also to be found there. As a consequence of this raid, Prior Rahere's tomb in St Bartholomew the Great was also sandbagged.

There was another serious raid on 13 October; it became known as the "Theatre Raid" as a number of West End theatres were hit that night. The boys of Princeton School again witnessed it. J. McHenry saw crowds of women and children being sent down into Holborn tube station and realised that an air raid was expected. He ran home to tell his mother, who took no notice, but half an hour later there was a terrible bang, bombs followed by gunfire. From the window parapet he could see gun flashes coming from the British Museum and from the Kingsway, and just caught a glimpse of the Zeppelin heading towards the City.

Heinrich Mathy's daredevil career ended on 1 October 1916 at Potters Bar. He had crossed the North Sea without difficulty in the newly launched super-Zeppelin L31, crossed the coast at Lowestoft and headed for London. At 8.00 p.m. the L31 was caught in the beams of searchlights. For whatever reason Mathy abandoned the raid, dropping thirty high explosive and twenty-six incendiary bombs on Cheshunt. There was only one casualty, but more than three hundred houses damaged. At 11.45 p.m. 2nd Lt Wulstan Tempest, flying a BE2c at 14,500 feet, saw the searchlights converge on the Zeppelin and flew towards it at top speed, though he had to contend with significant anti-aircraft fire. He fired his machine gun at the Zeppelin, using a mixture of tracer, incendiary and ordinary ammunition. He saw the envelope begin to glow "like a giant Chinese-lantern" and then flames spurted out. Tens of thousands of people were able to witness the death throes of the Zeppelin from the ground. One witness, Michael McDonagh, a reporter, was crossing Blackfriars Bridge when he was alerted to it. "Looking up the clear run of New Bridge Street and Farringdon Road I saw high in the sky a concentrated blaze of searchlights, and in its centre a ruddy glow which rapidly spread into the outline of a blazing airship. Then the searchlights were turned off and the Zeppelin drifted perpendicularly in the darkened sky, a gigantic pyramid of flames, red and orange, like a ruined star falling slowly to earth. Its glare lit up the streets and gave a ruddy tint even to the waters of the Thames."

As the airship fell, Mathy jumped from the gondola and fell a little way from where the airship crashed into Zeppelin Oak, being killed on impact, his shape outlined in the soft earth. The heat of the burning ship was enormous, and one of the huge propellers cartwheeled away, demolishing a hayrick. The next day sightseers were charged a shilling to view the wreckage. Mathy and his crew, first buried at Potters Bar, were moved in the 1960s to the large German War Cemetery at Cannock Chase. All the crew are buried together, nineteen in all. At

Potters Bar you will find Tempest Avenue and Wulstan Park, though probably no-one connects the names with Wulstan Tempest DSO and the L31.

The Zeppelins were thereafter deterred by London's air defences, but aeroplane raids began in November 1916 and the 3rd Bombing Squadron, based at Ghent, and equipped with new Gotha bombers, attacked frequently from the end of May 1917. On 13 June, Liverpool Street station was hit by 72 bombs, 159 people were killed, 424 injured. On 7 July, 22 bombers, in a diamond formation attacked London; 26 bombs fell on the City and caused a fire at the General Post Office in King Edward Street. As air defence improved, the Germans switched to night bombing. On 4 September the City, Paddington, Stratford, Hornsey, Holloway and Regent's Park all suffered, and a bomb narrowly missed Cleopatra's Needle. There were other raids, including one in which bombs fell in the Serpentine, killing all the fish. The last Zeppelin raid on London on the night of 19–20 October 1917 became known as the "silent raid". Eleven airships came over the Yorkshire coast to attack industrial centres in the Midlands. They flew very high, over 16,000 feet, at which height sickness and cold affect the crews' abilities. It was misty near the ground, with very little wind, but at airship height a gale was blowing from the north and it pushed the airships south. Their navigators had no idea where they were. One airship passed over London without recognising it but dropped a few heavy bombs. One fell in Piccadilly outside Swan and Edgar and caused casualties. Eight other airships passed almost silently over. The searchlights had not engaged them, nor the guns opened fire. By this curious combination of events, London was saved from disaster, and the airships never came again.