



## Beiträge zur Geschichte der Flieger- und Fliegerabwehrtruppen

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### **Der Fliegerangriff auf die Zeppelinwerft in Friedrichshafen vom 21. November 1914: eine Dokumentation**

Von Walter Dürig

#### **Vorbemerkung**

Der Angriff auf die Zeppelinwerft in Friedrichshafen vom 21. November 1914 durch den britischen Royal Naval Air Service war eine der ersten strategischen Luftoperationen der Kriegsgeschichte mit Flugzeugen. In der Schweiz löste dieser Husarenstreich einen diplomatischen Notenwechsel mit London, Paris und Berlin sowie eine Diskussion über das Wesen der Neutralität im Luftraum aus. Diese aus dem Internet stammende Dokumentation beschreibt die Hintergründe und den Ablauf der Operation.

#### **Bedeutung der deutschen Luftschiffahrt im Ersten Weltkrieg**

Insgesamt wurden während des Krieges 88 Zeppeline produziert. Die Luftschiffe warfen bei 51 Angriffsfahrten (meist im Geschwader) 197-t-Bomben ab, töteten dabei 557 Menschen und verletzten 1 358. Daneben wurden rund 1 200 Aufklärungsfahrten unternommen.

Die Lebensdauer der Kampfluftschiffe war meist sehr kurz. Etwa zwei Drittel aller Kriegsluftschiffe gingen verloren, etwa zur Hälfte durch Feindeinwirkung, der Rest durch Unfälle. Die Verluste an Menschenleben waren, verglichen mit anderen Tätigkeiten an den Fronten, eher gering; sie betragen beim Heer 79 Mann und bei der Marine 389 Mann.

Die Einsatzwirkung der Kriegsluftschiffe war insgesamt gesehen effektiv. Zwar richteten die Angriffe nur vergleichsweise geringen Schaden an, verbreiteten jedoch beim Gegner in Militär und Zivilbevölkerung überproportional Angst und Schrecken und banden grosse Mengen an kriegswichtigen Ressourcen. Die Entente Cordiale musste zur Bekämpfung der deutschen Militärluftschiffahrt mit ihren rund 15 000 Mann und durchschnittlich etwa 25 Luftschiffen Waffen, Material und Personen im Verhältnis von fast 1 zu 33 abstellen. Obwohl sich auch andere Waffengattungen, etwa die Seestreitkräfte, solche Bindungsstrategien zu eigen machten, blieb die Effizienz der Luftschiffe unerreicht, selbst von den deutschen U-Booten.

Noch bei Kriegsende waren die Kriegszeppeline in der Luftfahrt Spitzentechnologie. Insofern hat sie nicht der Fortschritt überholt. Vielmehr forderten die militärischen, taktischen wie auch strategischen Vorgaben und vor allem praktische Zwänge ihren Tribut.

Quelle: <http://de.wikipedia.org/wiki/Milit%C3%A4rluftschiff> (05.01.2012 21:26)

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#### **Stuttgart, 21. November 1914. (W. B.)**

##### **Bekanntmachung des Stellvertretenden Generalkommandos des 13. Armeekorps:**

Heute Mittag 12 Uhr 15 erfolgten durch zwei englische Flieger, die schon frühzeitig bemerkt und gemeldet worden waren, Angriffe auf die Luftschiffwerft in Friedrichshafen. Durch das in Bereitschaft stehende Abwehrkommando und die in Friedrichshafen stehende Infanterie wurde alsbald der eine der Flieger, ein englischer Marineleutnant, heruntergeschossen und schwer verletzt gefangen genommen, während der andere in der Richtung nach dem Schweizer Ufer entkam. Mehrere von den Fliegern herabgeworfene Bomben richteten an der Luftschiffwerft keinerlei Schaden an, dagegen wurden durch Sprengstücke von der Zivilbevölkerung ein Mann getötet und mehrere Personen verwundet. Das abgestürzte Flugzeug ist nur wenig beschädigt.

### **Friedrichshafen, 21. November 1914. (W. B.)**

Durch die Bombenwürfe des heruntergeschossenen Fliegers, der am Kopfe und an der Hand schwere Verletzungen erlitt, wurde ein 21 Jahre alter, aus der Schweiz gebürtiger Schneidergeselle namens Wiedmann auf der Stelle getötet. Zwei Frauen wurden schwer verletzt, eine am Kopf und an der Achsel, der anderen wurde der linke Unterarm weggerissen. Die Vermutung, dass der zweite Flieger im Bodensee ertrunken sei, bestätigt sich nicht. Er hat vielmehr in ziemlich niedriger Fahrt über Manzell eine Bombe geworfen, die ihre Wirkung aber verfehlte.

### **Basel, 21. November 1914. (Priv.-Tel.)**

Die französischen Flieger, die Friedrichshafen bombardierten, überflogen Schweizer Boden. Quelle: Frankfurter Zeitung (1914)

Quelle: [http://www.stahlgewitter.com/14\\_11\\_21.htm](http://www.stahlgewitter.com/14_11_21.htm) (07.08.2014 21:27)

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## **The Friedrichshafen Raid – 21 November 1914**

### **Background**

When WW1 started in August 1914 the German airship, (mainly the Zeppelin) was perceived as being a significant threat. It could fly higher, faster, further, had a greater rate of climb and carry a greater payload than any aircraft of the day. To the Royal Navy, it was potentially more effective than the cruiser for reconnaissance and there were great fears that it would be used for bombing, which in 1914, with no aircraft capable of interception, would be unstoppable, thus giving the Germans command of the air.

If they could not be destroyed in the air then they must be destroyed on the ground. The First Lord of the Admiralty, Winston Churchill, drew an analogy of getting rid of hornets by destroying their nest. Therefore, the best way to counter the Zeppelin was to destroy its bases, and to this end, the Royal Naval Air Service (RNAS) was charged with instigating the world's first strategic bombing campaign.

The Royal Naval Air Service Commander, Captain Murray Sueter, approved the first raids against the Zeppelin bases at Dusseldorf and Cologne, achieving mixed results. The next target selected was the main Zeppelin works at Friedrichshafen, on the north east coast of Lake Constance where the borders of Germany, Austria and Switzerland meet.

### **Why the Royal Naval Air Service?**

When the Royal Flying Corps was formed in April 1912, it amalgamated the Army and Naval aviation resources under one umbrella. However, from the start it was divided into a Military Wing, a Naval Wing and a Central Flying School. The two wings had incompatible needs, and did not fully understand the other's roles, even though it was envisaged that they would support each other when need be. The Military Wing needed slow stable aircraft for observation and reconnaissance, while the Naval Wing with their various roles, took a much wider view of aviation in general.

Within a couple of weeks of the Royal Flying Corps being formed, Captain Murray Sueter visited Germany and took a ride in a Zeppelin. He immediately recognized the military threat that it could present to Britain, and in a report, which outlined the Zeppelin's capabilities, concluded with «*In any future war with Germany ... it is difficult to exaggerate the value of this advantage to Germany*».

Churchill had become First Lord of the Admiralty in October 1911, and saw the potential of aircraft beyond the limited view of the Military Wing. In October 1913, he wrote a paper describing how Britain needed fighter aircraft for its defense, and bombers to attack the Zeppelins.

The Royal Naval Air Service was formed on 1 July 1914 from the Naval Wing of the Royal Flying Corps, with Murray Sueter as its first Director. It was given as its main role, fleet reconnaissance, attacking enemy coastal territory and defending Britain from enemy air raids. As the Zeppelin was the only means of performing an air raid, the Royal Naval Air Service was therefore responsible for countering it.

## **Planning**

With Austria and Germany being allies, and Switzerland neutral, Friedrichshafen could only be approached from France to the west. The nearest convenient base from which to launch the attack was an airship station at Belfort in eastern France. Belfort is 125 miles from Friedrichshafen, 50 miles west of the German border and 12 miles north of Switzerland. After protracted negotiations, the French eventually agreed to its use for the operation, but insisting the raid be mounted in complete secrecy and within one month.

Belfort, being an airship station, had no runway, so the aircraft would have to be crated and transported by train. This also preserved secrecy, as the arrival of four aircraft loaded with bombs would not have gone unnoticed.

The reconnaissance and planning of the operation was entrusted to an extraordinary character, Noel Pemberton-Billing who had been trying to sell his aircraft to the Naval Wing of the Royal Flying Corps for a long time. Sueter was not interested in his aircraft, but saw something in Pemberton-Billing that he thought made him suitable for the task, and so enrolled him in the Royal Naval Air Service with the rank of Temporary Acting Flight Lieutenant and gave him the job.

Pemberton-Billing left England by car on 21 October 1914 in the company of Lieutenant Frank Arthur Brock, arriving at Belfort three days later where he found the air staff most cooperative. He inspected the two airship sheds and obtained permission to use one of them to house the Royal Naval Air Service aircraft and personnel. He also travelled to Switzerland on a reconnaissance mission from where he could see Friedrichshafen across the lake. Pemberton-Billing returned to England on 28 October. He reported to Murray Sueter, who briefed Churchill who then gave his approval.

Now they needed aircraft. The Avro 504 biplane seemed to be the most suitable so, on 30 October, the Royal Naval Air Service ordered six from A.V.Roe at Newton Heath, of which the first three were for the raid. The Avro 504 had a top speed of 80 mph with four-hour endurance. It was a two seater but, for the operation, the second seat was used for an extra fuel tank. The bombs to be used were four 20 lb Hale bombs per aircraft, each containing 4.5 lbs of explosive, for which new bomb racks had to be designed and made. There were fears that the aircraft would not be ready in time.

Squadron Commander Briggs was given responsibility for modifying, packing and later erecting four of the airframes, for which a party of five riggers were selected to accompany the crated aircraft. The engines to be used were the rotary 80 hp Gnome, of which the Royal Naval Air Service had a stock. Flight Commander Babington selected six of these, along with an adequate supply of spares, crated them up and sent them to Southampton. Babington selected a ground crew of five to fit and maintain the engines.

An eleventh man was selected from the staff of A.V.Roe to accompany the aircraft and take responsibility for the newly designed bomb racks. This man was Roy Chadwick, later of Avro Lancaster bomber fame.

## **Travel and Arrival**

In command of the party travelling to Belfort was Squadron Commander Shepherd who, yet, had received no briefing or orders. They travelled down to Southampton on 10 November to board a steamer whose destination the captain of the vessel refused to disclose until he was at sea.

Just before the ship was due to sail, Pemberton-Billing arrived in a white car, gave Shepherd his sealed orders and a small bag containing £ 500 in French banknotes and gold sover-

eigns, and departed just as the vessel was casting off. Meanwhile, the crated airframes, engines and bombs had been loaded on board a different ship, also bound for Le Havre.

When they arrived at Le Havre they found Pemberton-Billing was already supervising the loading of the crates and his car on to the train, which was to transport them to Belfort. The train arrived at Belfort after dark on 13 November. The crates were off loaded and moved into one of the airship sheds, and the next day the ground crew started to assemble the aircraft.

To preserve secrecy, no one was allowed to set foot outside the airship shed, which meant that they ate, slept and worked there. Living in the airship shed and sleeping on a bare concrete floor in winter proved to be too much for Shepherd who soon fell ill.

### **Preparation**

The assembly of the aircraft was completed in two days and the engines were test run inside the shed. Being an airship station, Belfort had no runway, just rough ground, so a runway of sorts was made by clearing stones and removing fences. Shepherd, while conducting taxiing trials in his aircraft, damaged the undercarriage, propeller, tailskid and a wing tip on the rough ground necessitating rapid repairs.

Shepherd's taxiing accident had put paid to any thought of test flights, as the risk of damage and the limited spares could jeopardize the operation. This meant that the aircraft's maiden flight was to be the attack itself. To help the pilots in case the aircraft were not rigged correctly, Briggs provided bungee cords to attach to the control columns to hold them in place.

Shepherd's condition worsened, and so as not to jeopardize the entire operation, in case others also succumbed to illness, Pemberton-Billing took a risk, moved the Royal Naval Air Service personnel to a nearby hotel, and obtained a car to transport them daily. Briggs assumed command of the operation and Roland Cannon took Shepherd's place in his repaired aircraft.

As some of the pilots hadn't flown a 504 before, there was a great deal of apprehension about flying an unfamiliar and overloaded aircraft, and they must have wondered if they could even take off with a full load of fuel and bombs.

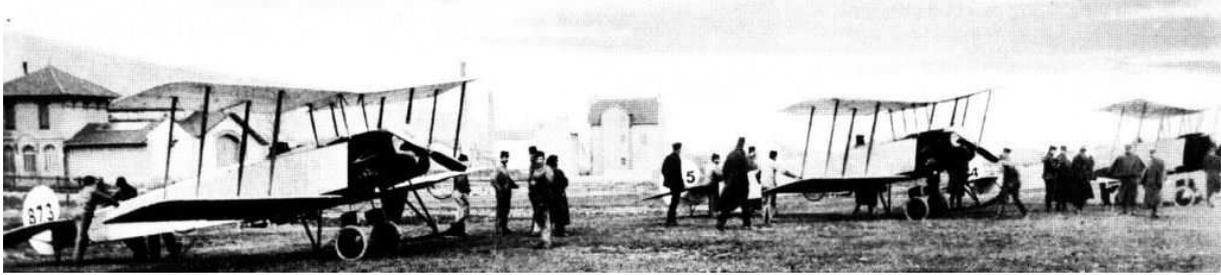
In addition, as none of the pilots had ever dropped a bomb before, Chadwick had to instruct them in how to operate the release mechanism. The bombs were held on their racks by split pins and the pilot had to pull four separate wooden toggles, attached by cable to the pins, to release them.

The French produced a last minute surprise by insisting that no maps should be carried that could reveal that they had flown from France, so the first part of the route had to be memorized.

### **Take Off**

After waiting days for suitable weather, finally on 21 November, the best weather for some days dawned, and the decision to go was made. They would have to go early to ensure the returning aircraft had enough light in which to land. At 09:30, all four aircraft were lined up awaiting last minute checks, and then took off at three-minute intervals. Because of the shortness of the makeshift runway, each aircraft was restrained by the ground crew until the engine was at full power, and then released for a quick getaway.

First away was Briggs in 873, then Babington in 875, followed by Sippe in 874. Last was Cannon in Shepherd's repaired 179, but he failed to get airborne, tried again, but damaged the aircraft on the rough ground and had to abort. Now there were only three.



From left to right: No. 873, flown by Squadron Commander Edward Featherstone Briggs; No. 875, flown by Flight Commander John Babington, and No. 874, flown by Flight Lieutenant Sydney Sippe.

The flight plan was to fly 10 degrees north of east for 85 miles at 4 000ft to clear the Black Forest Mountains, then eight degrees south of east for the next 40 miles to the target.

The rotary engines of the 504s only had two speeds, stop and full speed; the speed could not be adjusted. Consequently, flying in formation for a coordinated attack was impossible. Instead it was very much three individual attacks.

Although no one knew exactly what the target looked like, they were confident that large sheds beside a large lake should not be that hard to find. In the event, the weather was clear and sunny, and they all found the target

### **The Attack**

*Briggs* was the first to arrive at Friedrichshafen at about 11:50, and dropped his bombs, but anti-aircraft hit his aircraft in its fuel system and the engine lost power. Wounded in the head Briggs had no option but to land in front of the sheds he had just tried to bomb. Many accounts erroneously state that civilians beat him up. He was arrested and taken to hospital and then on to captivity, later escaping.

*Sippe* reached the western end of Lake Constance at 11:30 and descended to within ten feet of the surface of the water in the hope that he could approach Friedrichshafen undetected. Following the north shore of the lake until he was about five miles from the target, he then started to climb to around 1 200 feet. When half a mile from the target, he dived to 700 feet flying into anti-aircraft fire, dropped his first bomb in the hope of putting the gunners off their aim. His second and third bombs were released as he passed over the Friedrichshafen sheds and works. The fourth bomb failed to release and as he headed north out of the range of the anti-aircraft fire, he decided to make another run at the floating seaplane shed nearby. Again, the bomb failed to release and he was forced down to ground level to avoid anti-aircraft machine gun fire as he headed out over Lake Constance and home. He reached Belfort at 13:50.

*Babington* was the last to arrive at Friedrichshafen, having had trouble with his aircraft which was nose heavy, and with his engine not producing full power, limiting his ceiling to 4 000 ft. On arrival, he overflew the target, turned and lined up for his bombing run with the sun behind him. He believed that the Zeppelin shed was hit and Zeppelin inside damaged. He did not make it back to Belfort, because he was not allowed to carry maps. Carefully flying a reciprocal course he became disorientated as he flew over unfamiliar countryside, and running short of fuel, he decided to land to get directions. Fortunately, he had landed in France, 30 miles SW of Belfort and a local farmer took him to a telephone, where he contacted Belfort and arranged to be picked up.

The Royal Naval Air Service party left for England the next day. They arrived back in England to great acclaim, with awards to the pilots of both the Distinguished Service Order and the French Legion d'honneur.

## Damage Reports

Accounts of the time differ as to the extent of the actual damage caused by the raid. The British naturally emphasized the effectiveness of the raid for propaganda reasons, but actually, only one bomb hit a workshop causing minor damage, and no airships were damaged because the nearest bomb had exploded between two buildings 60 feet away, breaking a window.

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### British Report

Quote:

*Admiralty, 17th December, 1914*

*On 21st November 1914, Squadron Commander EF Briggs, Flight commander JT Babington, and Flight Lieutenant SV Sippe, royal Navy, carried out an aerial attack on the Zeppelin airship sheds and factory at Friedrichshafen on Lake Constance.*

*Leaving French territory shortly after 10 am, they arrived over their objective at about noon, and, although under a very heavy rifle, machine-gun and shrapnel fire from the moment they were sighted, they all three dived steeply to within a few hundred yards of the sheds, when they released their bombs – in all eleven.*

*Squadron Commander Briggs was wounded, brought down, and made a prisoner, but the other two officers regained their starting point after a flight of more than four hours across hostile country under very bad weather conditions.*

*It is believed that the damage caused by this attack includes the destruction of one airship and serious damage to the larger shed, and demolition of the hydrogen-producing plant, which had only lately been completed. Later reports stated that flames of considerable magnitude were seen issuing from the factory immediately after the raid.*

### German Report

Quote:

*22 November 1914*

*From: Oberleutnant-zur-See Werner Peterson (commander designate Zeppelin L7)*

*To: Konteradmiral Phillip (Wilhelmshafen)*

*SECRET*

*Report concerning the English air attack on the Zeppelin works on November 21, 1914, at noon:*

*The attack was carried out on the 21st undoubtedly due to information from spies or agents that the ship had completed inflation on the 20th.*

*Towards noon telephone information was received here from Lorrach-Oberheim (Baden) that three enemy aircraft had been sighted, flying in the direction of Konstanz. The same information was received from Konstanz at 12:15 pm. The troops and guns were therefore altered. I received the report by telephone in the Kurgarten Hotel and immediately went to the Zeppelin works. The weather was clear, sunny, wind northeast, moderate to strong.*

*I found myself close by the gatehouse of the works as the guns and machine guns opened fire. At the same time I observed the first aircraft (biplane) heading for the Zeppelin buildings from the lake at an altitude of several hundred meters. The shell-bursts from the anti-aircraft guns lay very close to him. Meanwhile the plane flew over me and dropped the first bomb, which was easily visible while falling. It hit a house, exploded (about 60 meters from me), and partly destroyed the upper storey (1 dead, 2 injured). Then it flew over the sheds and, descending to 150 meters, very skillfully dropped a bomb which, however, merely landed on the field, then another which was accurately aimed and hit between the two sheds (minor damage to the shed doors of the new hangar).*

*Meanwhile a shell splinter had hit him and the plane glided down in a turn, making an emergency landing in front of the sheds. The plane was almost undamaged. The pilot, an English naval officer, Lieutenant Brigg of the Royal Naval Flying Corps, in uniform with leather outer clothing, was pulled out of the plane by militia and our petty officers, after trying to fire a few shots from his pistol. He was rather severely wounded in the head, but not so that his life was endangered, and was taken to the hospital. His undamaged plane, a new, light "Avro" machine, had suffered a decisive hit by a shell splinter and had been hit by about 10 bullets (one of them in the fuel tank).*

*While this plane was descending, the second plane appeared at about 200 meters above the gas works, dived low in the heavy fire, and above the shot-down machine released 2 bombs, which exploded in the field. Then he flew very fast above the sheds and dropped a bomb which hit the workshops and caused damage and which damaged a window of the shed in which "L.7" lay: 20 meters farther and the inflated ship would have been destroyed. Then he disappeared over the lake in the direction of Manzell, where he dropped a bomb close to the airplane hangar. Today he was reported from Konstanz as having come down. The third plane, which I did not see, turned back prematurely.*

## **Awards**

*Admiralty, 1st January 1915*

The King has been graciously pleased to give orders for the following appointments to the Distinguished Service Order in respect of the under mentioned Officers:

*To be Companions of the Distinguished Service Order.*

Squadron Commander Edward Featherstone Briggs, Royal Naval Air Service.

Flight Commander John Tremayne Babington, Royal Naval Air Service.

Flight Lieutenant Sidney Vincent Sippe, Royal Naval Air Service.

*Whitehall, May 18 1916*

The King has been pleased to give and grant unto the under mentioned Officers His Majesty's Royal license and authority to wear Decorations (as stated against their respective names), which have been conferred upon them by the President of the French Republic in recognition of valuable services rendered by them:

*Insignia of Chevalier of the Legion of Honor.*

Engineer Lieutenant-Commander Edward Featherstone Briggs, D.S.O., R.N. (Squadron Commander, R.N.A.S.).

Lieutenant John Tremayne Babington, D.S.O., R.N. (Squadron Commander, R.N.A.S.).

Flight Commander Sidney Vincent Sippe, D.S.O., R.N.A.S.

*Air Ministry, 16th December 1919*

His Majesty the King has been pleased to approve of recognition being accorded, as indicated below, to Officers and other ranks of the Royal Air Force, for gallantry whilst Prisoners of War in escaping, or attempting to escape, from captivity, or for valuable services rendered in the Prison Camps of the Enemy:"

*Awarded a Bar to the Distinguished Service Order.*

Wing Commander Edward Featherstone Briggs, D.S.O., O.B.E.

## **Epilogue**

After the raid, the Germans increased both security and anti-aircraft defenses at Friedrichshafen. They were also concerned about the vulnerability of their airship production facilities, so built a second Zeppelin factory at Potsdam, which was beyond the range of any enemy aircraft.

Looking at the raid with modern eyes, it seems a very amateurish affair, but with the Royal Naval Air Service formed only five months, and World War 1 only three months old, everyone was still finding their way, learning as they went along. It epitomizes the enterprise and pioneering spirit of the Royal Naval Air Service in those days and the character and caliber of the officers who operated it.

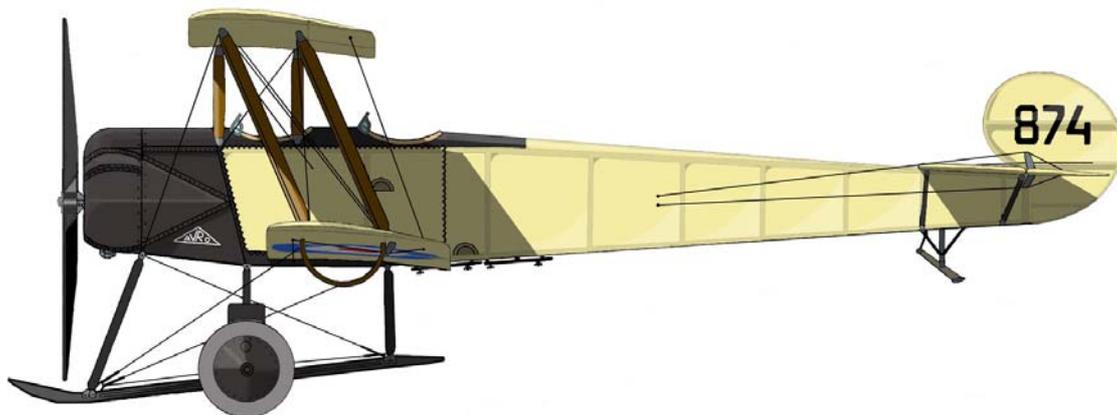
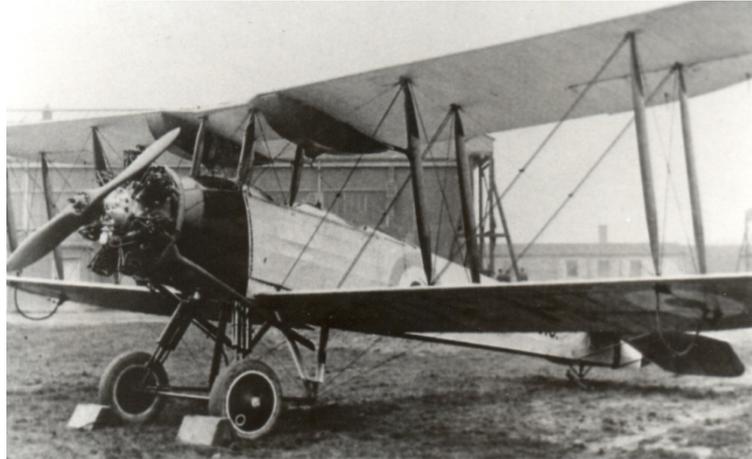
In summary, the attack was launched from an airport with no runway, by aircraft, which had not flown before, piloted by some who had not flown this type before, navigating solo across unfamiliar country without maps, to drop bombs from untested bomb racks on a vaguely defined target by those who had never before dropped a bomb.

In spite of these daunting difficulties, it did not stop them, and they succeeded!

Quelle: <http://www.worldnavalships.com/forums/showthread.php?t=9619> (07.08.2014 21:27)

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## Das Flugzeug Avro 504



Das erste Exemplar der 504 startete, angetrieben von einem Gnôme-Lambda-Umlaufmotor mit 59 kW (80 PS), im Juli 1913 in Brooklands zu seinem Erstflug. Mit einem Passagier an Bord erreichte die Maschine eine Flughöhe von 5 000m, ein Rekord zu damaliger Zeit.

1914 erhielt Avro vom War Office einen Auftrag über zwölf Maschinen des Typs 504 für das Royal Flying Corps. Der Royal Naval Air Service bestellte ein Flugzeug. Auch Privatleute zeigten Interesse an diesem Flugzeugmuster, und es wurden weitere Maschinen, teilweise mit Schwimmern und anderen Veränderungen des Grundmodells, bestellt.

Die ersten vier an die britischen Marineflieger gelieferten Avro 504 wurden nach Belfort überführt, wo sie für einen unter Geheimhaltung vorbereiteten Angriff auf die Produktionshallen des Zeppelinwerkes in Friedrichshafen eingesetzt wurden.

Quelle: <http://wp.scn.ru/en/ww1/o/93/9/0> (07.08.2014 21:27)