

BALLOONS AND AIRSHIPS

A talk by

Mr. R. A. Rostron

Prepared for printing by Mr John Cardona

(Given to the members of the Malta Philatelic Society on 1st December, 2010)

This is a follow-up to my earlier talk titled “Early Powered Flight” given to the members of the Malta Philatelic Society on 3rd November, 2010.

My interest in the subject of “flight” came from making model aeroplanes as a schoolboy. To embrace the subject comprehensively, it is necessary to include balloons and airships, and there is an overlap with “powered flight”, particularly with regard to Airships.

General factors that restricted development and progress were:-

- the difficulty in steering,
- the sheer size of the airbags,
- the nature of the “lighter than air” gases required;
- the limitations of engine designs, and
- the major influence / uncertainty of winds and the mooring problems.

Much has been written on the subject but perhaps not so often with interpretations of a philatelic nature.

BALLOONS

I intend to ignore the Chinese developments and concentrate on European progress. Once more, as in Powered Flight, the French were in the forefront, with people like Montgolfier.

The first couple of pictures are taken from literature to “set the scene”. They include an explanation of how hydrogen was made (Fig 1) and the Montgolfier balloon (Fig 2).

Fig 1 – How hydrogen was made.

Hydrogen was far lighter and, though inherently volatile, relatively safer than hot air, which required an open fire. Nevertheless it had two drawbacks as a lifting agent for early balloons. It was expensive to produce and the process was tediously time consuming.

Originally, hydrogen was produced by the reaction of dilute sulphuric acid and such metals as iron and zinc. In arrangements like the one shown in Fig 1, sealed casks filled with dilute sulphuric acid and iron fillings were interconnected with pipes made of tin. As the acid-iron mixture bubbled away, the hydrogen thus produced was forced through the pipes into a main feeder line to the balloon.

To stabilize the balloon and make it easier for the hydrogen to enter it, the envelope was strung between two masts by a cable that ran through a ring at its top. Once the envelope was filled, a process that might take several hours or even days, the cable helped to restrain the balloon until lift-off.

By the 1790's a less expensive method, isolating the hydrogen content of water by passing steam continuously over hot iron in a tube, was in use as a way of generating the large amounts of hydrogen needed by a balloon. And in 1821 coal gas, often available at city mains, was introduced as a cheaper and less expensive alternative to hydrogen.

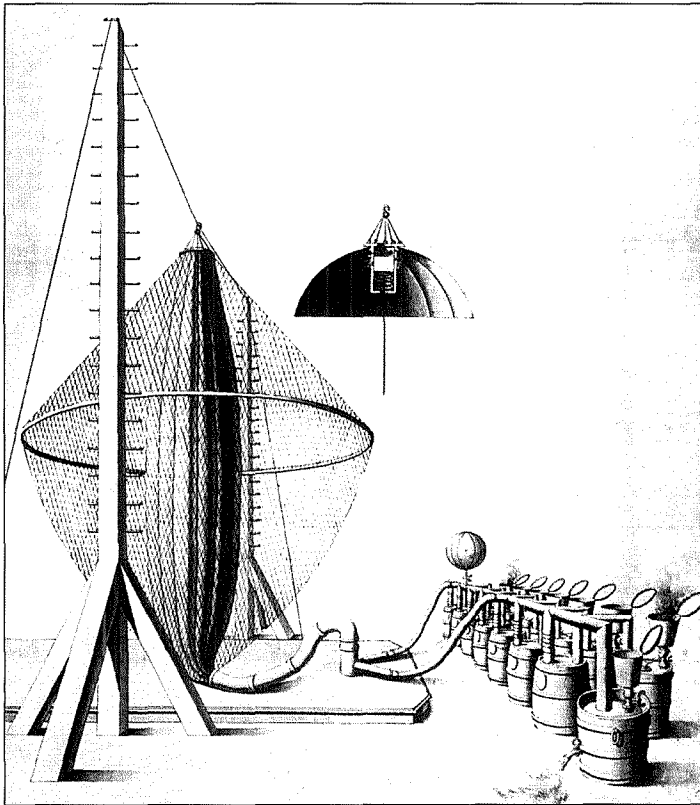


Fig.1

An elaborate apparatus used for producing hydrogen is shown in the 1790 drawing.

Fig 2 – Montgolfier Balloon.

Etienne Montgolfier’s balloon is featured tugging on its mooring lines just moments before being released from the Bois de Boulogne, near Paris, on November 21, 1783. The world’s first aeronauts, d’Arlandes and Pilatre de Rozier, are saluting the crowd from opposites sides of the balloon’s circular gallery.

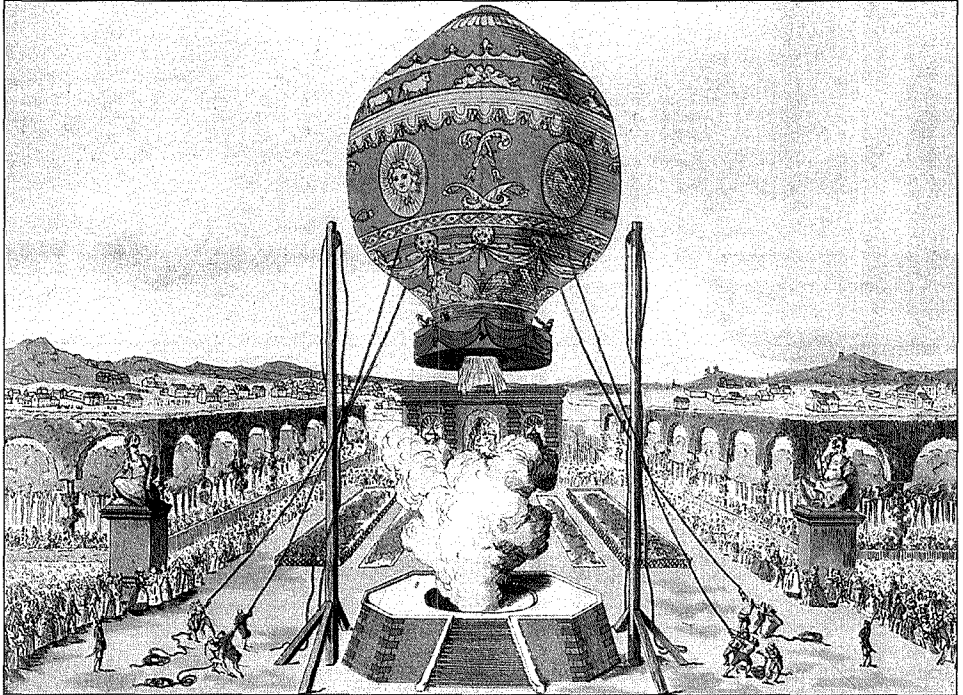
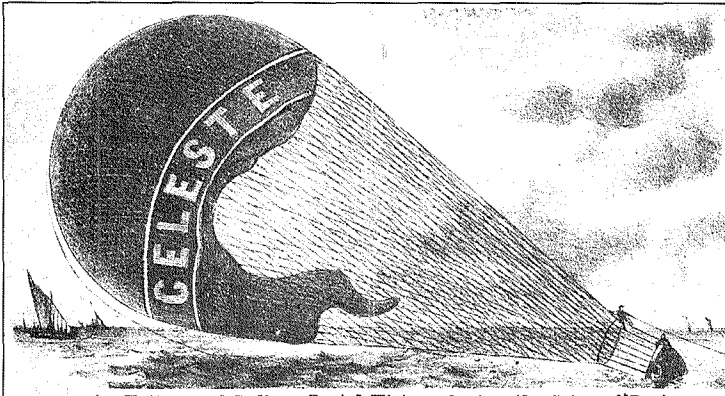


Fig.2

Often a crisis is needed to stimulate development to an idea. Balloons came into their own at the time of the Siege of Paris, 1870. Fifty-four flights carried 2½ million letters, but not many now survive. A “*ballon monte*” took passengers and letters, whereas a “*ballon libre*” letters only.

This article (Fig 3) by Letts gives an account of some of the named balloons and flights.

There is also a Goddard label (Fig 4) which is now very scarce. The well known aeronauts Goddard and Nadar superintended the manufacture of these balloons.



An Epitome of Balloon Postal History during the Siege of Paris.

On Sept. 19th, 1870, the last letter from the correspondent of the "DAILY NEWS" left Paris in the usual way, and on the 22nd this paper recorded the entire suspension of communication with their regular correspondent. Immediately on the completion of the siege arrangements, Messrs. Goddard & Nadar, the well-known aeronauts, were employed at the terminus of the Orleans Railway, in Paris, superintending a large number of men and women in cutting and sewing the silk, impregnating it with an impermeable solution, and preparing the surrounding network for balloons, as a commercial necessity. Numbers of sailors and *douaniers* were also placed there by the Government, as pupils in the art of aërostation.

A "balloon monté" took passengers and letters; a "ballon libre," letters only.

On Sept. 23rd, M. Jules Dumot left Paris at 8.0 a.m., in the first "balloon monté" the "Nep-tune," and was shot at with cannon by the Germans, who aimed so closely that the displacement of the air made the balloon vibrate. In three-quarters of an hour Mons. D. descended near Evreux, with three mail bags, weighing 250 lbs. He had strict orders from the Postmaster to give his letters only to a prefect or general, or destroy them.

Sept. 24.—The balloon mail brought copies of the "JOURNAL OFFICIEL," of 20th, 21st and 22nd, from Paris to Tours.

Sept. 26th.—On this day a service of post balloons was appointed to carry letters from Paris. Frenchmen picking them up were requested to carry the letter packet to the Post Office of the nearest unoccupied town.

At this date, also, appeared the first letter from the "besieged resident," attached to the paper already named, with news dated Sept. 20th.

Sept. 30th.—The letter we have fac-similed was sent per the "Celeste."

Oct. 7th.—The "Armand Barbès" took M. Gambetta out of Paris, and the first carrier pigeons.

Oct. 14.—The "Godefroy Cavaignac" took out M. de Kératry.

Oct. 27th.—The "Vauban" fell near Verdun, in the German lines.

Nov. 4th.—The "Galilée" was captured by the Germans.

Nov. 12th.—The "Daguerre" was also captured.

Nov. 21st.—The "Archimède" fell in Holland.

Nov. 24th.—The "Ville d'Orléans," (balloon monté), fell in Norway, after a most extraordinary voyage, both for speed and adventure.

Nov. 30th.—The "Jules Favre" lost at sea.

Dec. 15th.—The "Ville de Paris" fell in Nassau.

Jan. 28th, 1871.—The "Général Cambronne" was the last officially despatched balloon.

In all, 54 official balloons (conveying 2,500,000 letters), were sent out during the siege; besides many private ones, of which there is no record.

The above epitome has been prepared to accompany a fac-simile of a REAL BALLOON LETTER, as sent from Paris by the "Celeste" on Sept. 30, wherein the handwriting, Republican stamps, post-marks, and even the size and weight of the paper are identical with the original, the names only being fictitious. As a lasting memento of the great war just closed, and the gigantic and novel enterprises connected with it, this letter will fairly claim a place in every one's album or scrap book.

Price 6d.]

LETTS, SON AND CO. (LIMITED), LONDON.

[Price 6d.]

Fig.3

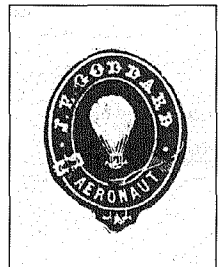


Fig.4

The item in (Fig 5) shows a genuine example of a “Par Ballon monte” letter-sheet. Very lightweight, it measured only 4" x 2.75" folded.

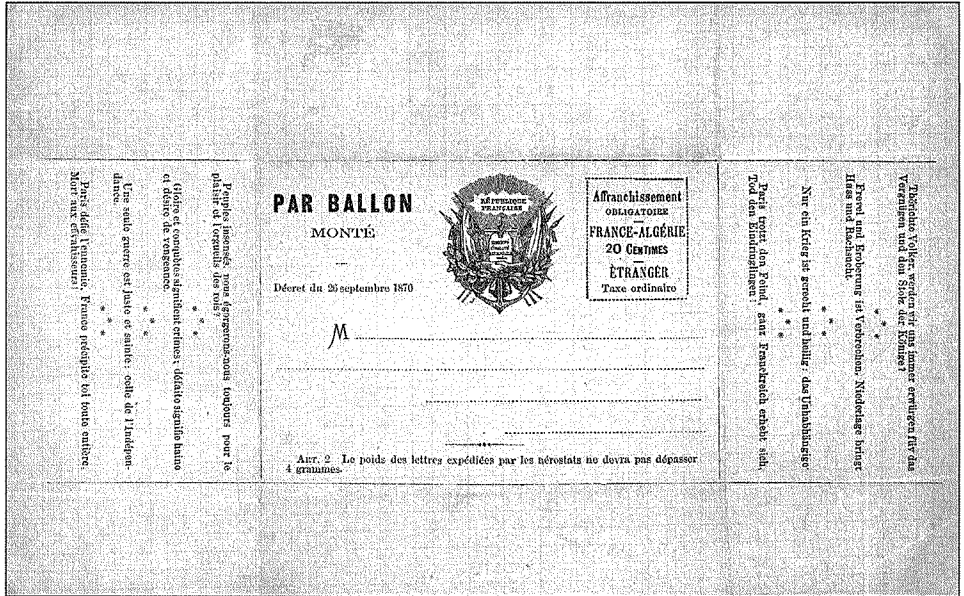


Fig.5

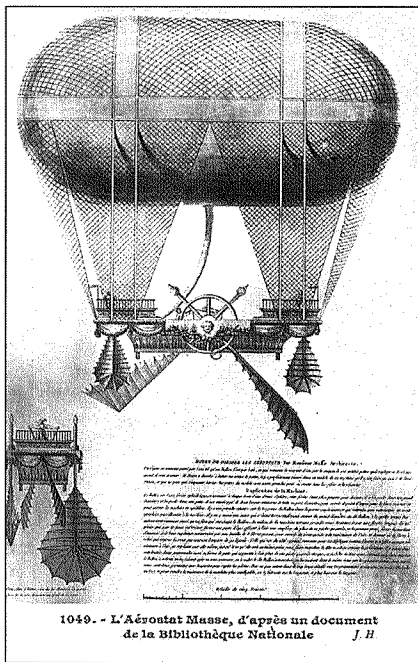


Fig 6 shows an unused postcard as held in the National French library, depicting a design of a balloon with much detail about a steering system. Below it (Fig 7) is an amusing modern British Airletter showing Father Christmas eliminating the need for a reindeer by using a steerable Balloon.

Fig.6

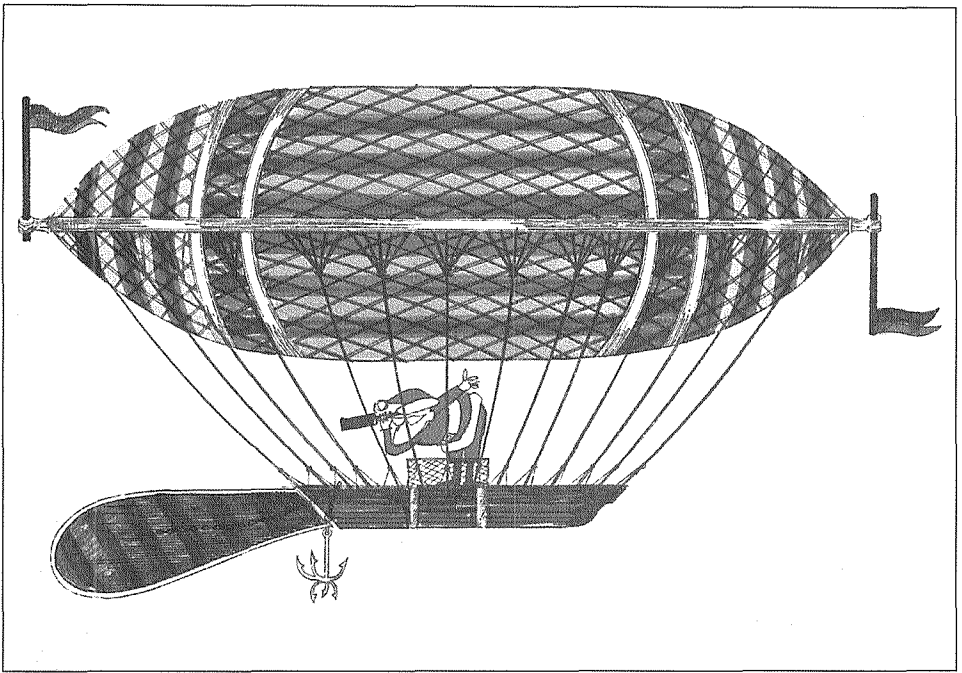


Fig.7

The postcard in Fig 8 shows the use of a balloon before WW I whereas Fig 9 shows a powered steerable version at the end of WW II.

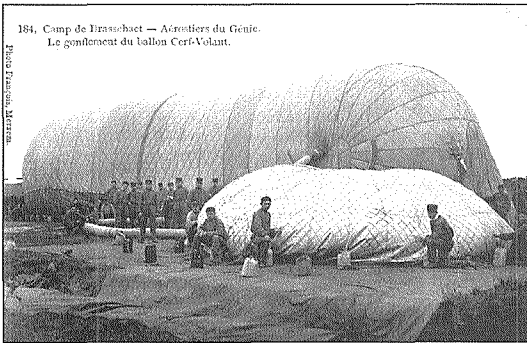


Fig.8



Fig.9

Comparisons of design over 200 years and a first flight commemorative card is shown in Fig 10.

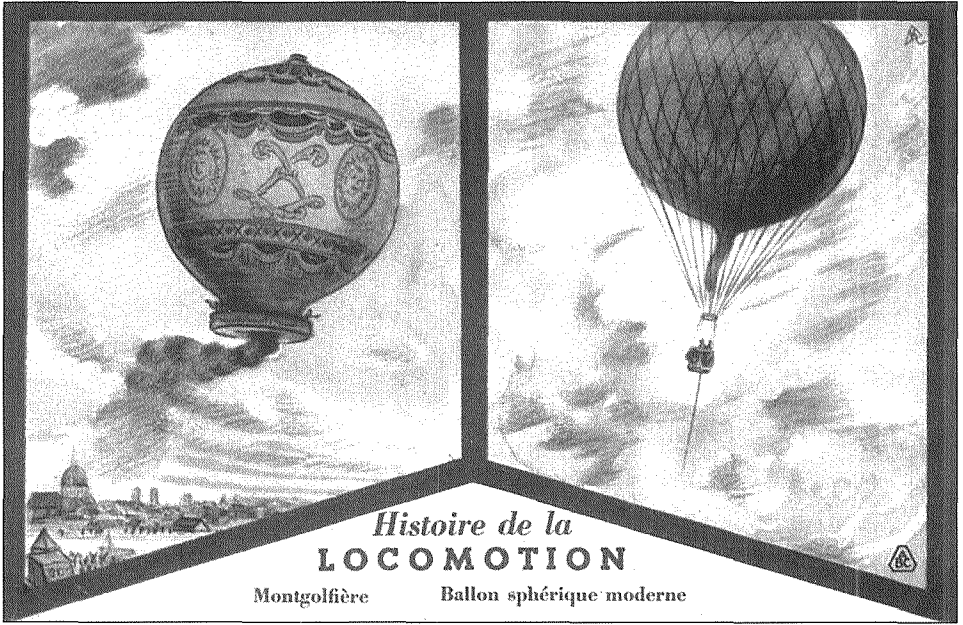


Fig.10

Greetings card manufacturers soon took advantage of public interest in the subject. Early examples are shown in Figs 11 and 12.

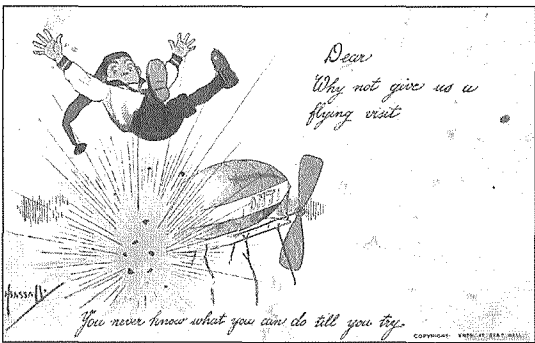


Fig.11

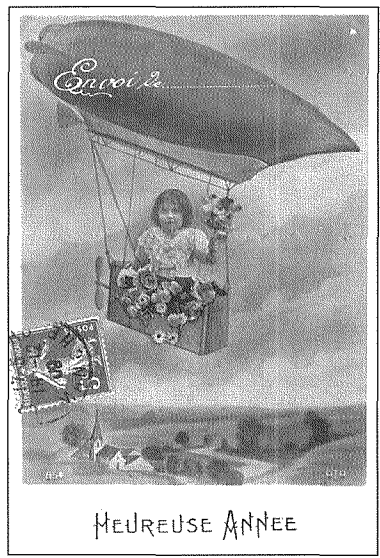


Fig.12

Early Punch Magazine humorous sketches illustrate how travel by balloons and Airships was exercising the minds of artists and the public. One is shown in Fig 13. Along similar, but more realistic lines, a coloured postcard (Fig 14) envisages the forthcoming Tercentenary Celebrations of the discovery of the Hudson River in 1609.

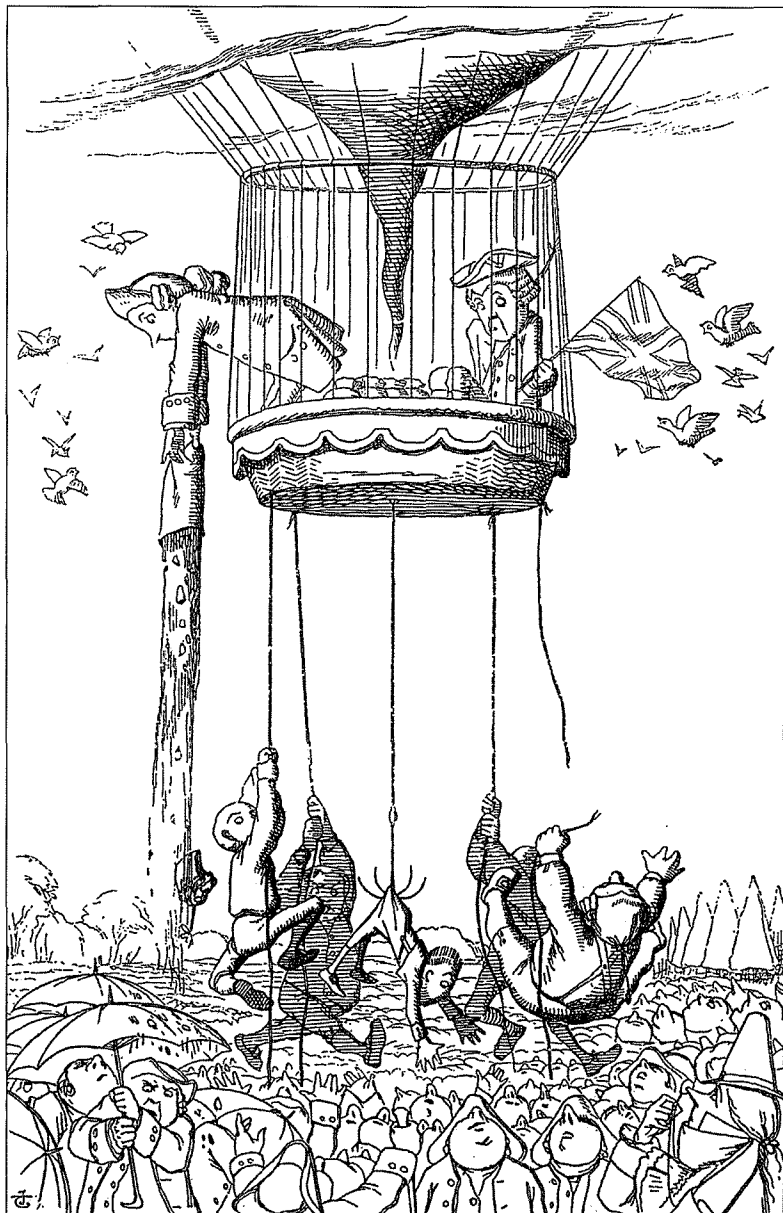
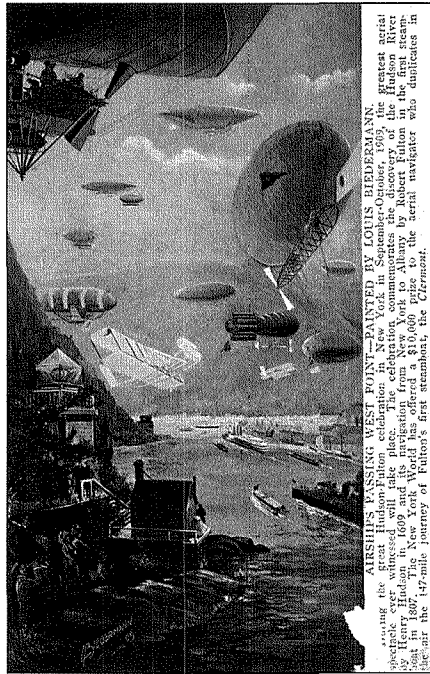


Fig.13



AIRSHIPS PASSING WEST POINT—PAINTED BY LOUIS BIEDERMANN. The artist's greatest achievement is the airship. The celebration commemorates the discovery of the Hudson River by Henry Hudson in 1609, and its navigation from New York to Albany by Robert Fulton in the first steamship in 1807. The artist also depicts the aerial navigation of the first steamship, the Clermont, in 1807.

Fig.14

AIRSHIPS

From here on Airships are concentrated upon.

The two postcards that follow show a British airship flying over St. Paul's Cathedral (Fig 15) in October 1907; and a French one, the "Republique", flying over the Seine, Paris (Fig 16). This card was used in England, February 1914. The following postcards show the "Republic" (Fig 17), "Patrie" (Fig 18) and "Ville de Paris" (Fig 19).

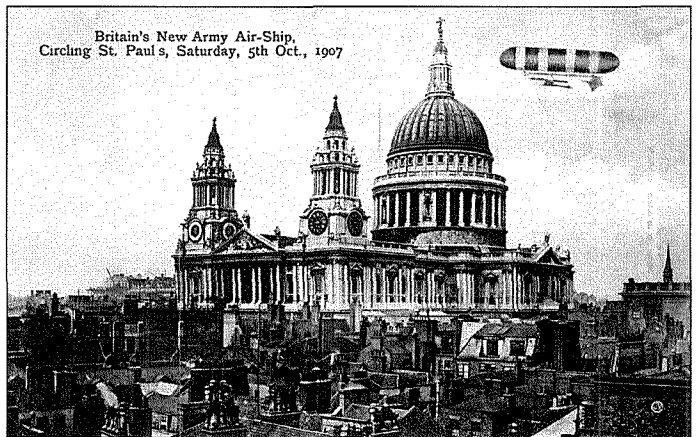


Fig.15

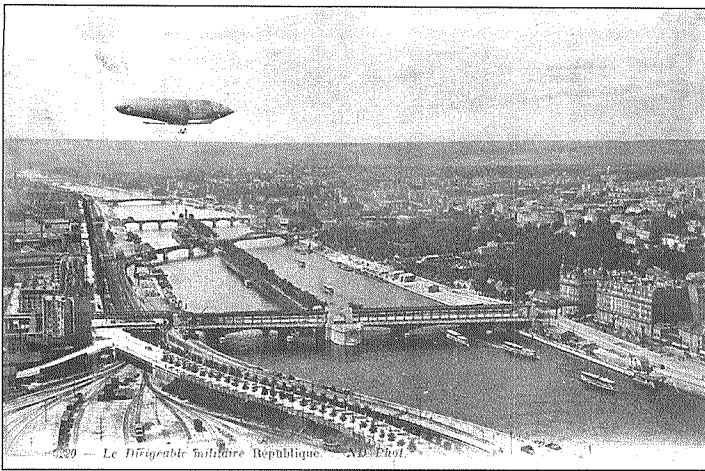


Fig.16

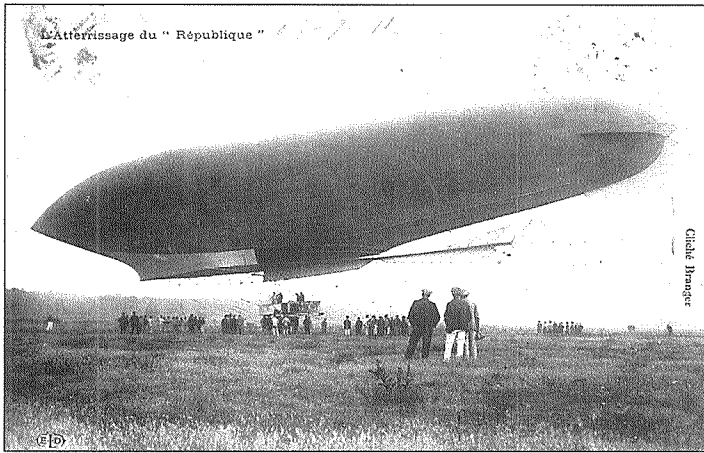


Fig.17

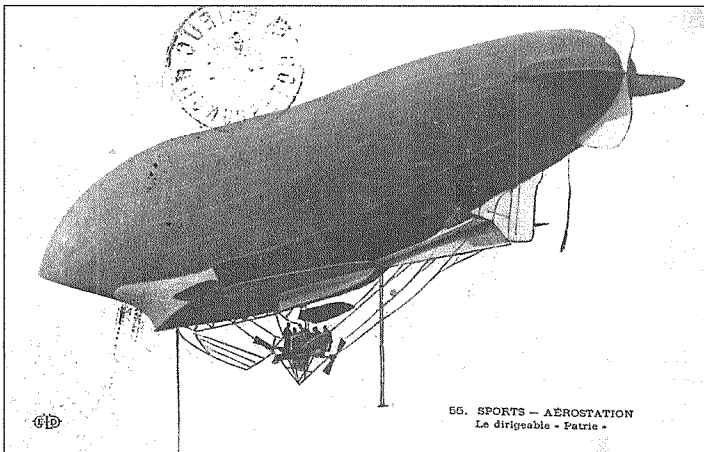


Fig.18

956. - Le Dirigeable "Ville de Paris", appartenant à M. Henri Deutsch, construit par M. Surcouff avec la collaboration de M. H. Kapferer. - Le Lâchez tout
 Longueur 62^m, diamètre au maître couple 10.50. - Volume 3.000 mètres cubes - Moteur de 70 Chevaux

J. H

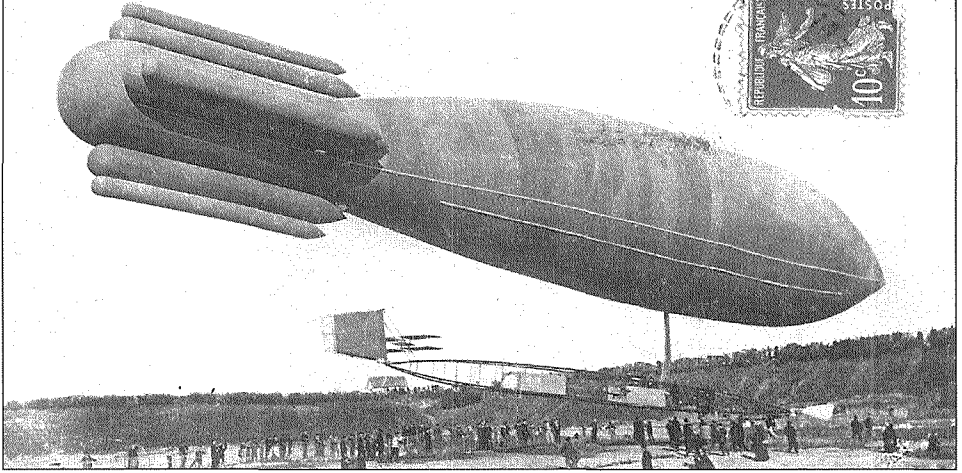


Fig.19

Two unused postcards show (Fig 20) a biplane and a powered airship flying over Stonehenge and (Fig 21) an airship, probably a Zeppelin flying over an English Pier, the location is uncertain. Clues lie in the Hancock's advert and the "Hawneys Lighthouse Helter Skelter".



Fig.20



Fig.21

Fig 22 shows an unused American postcard which appears to be an artist's impression of an airship flying over New York.

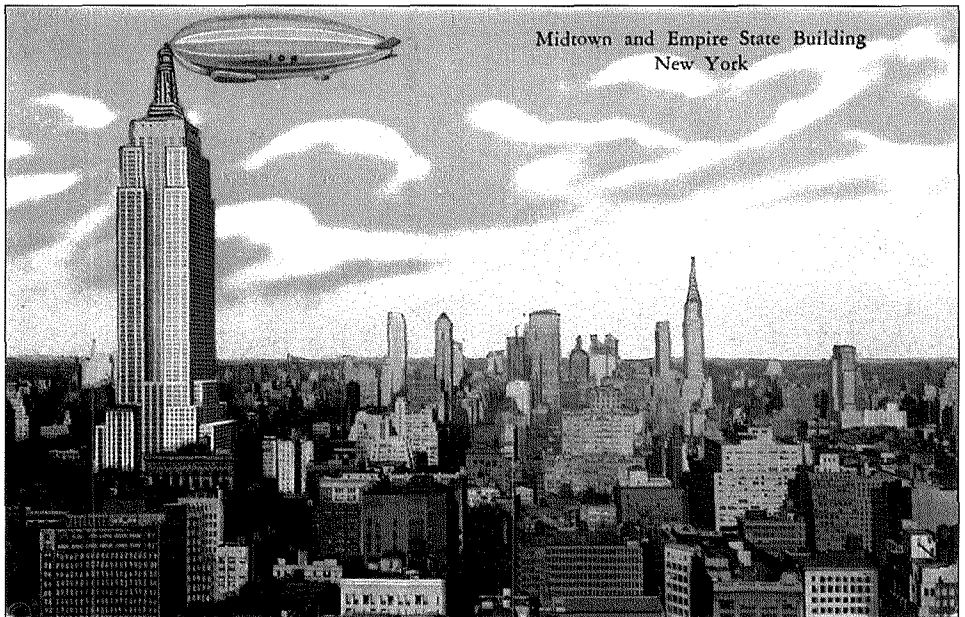


Fig.22

The “Baby” (Fig 23) was noted as being Britain’s fastest airship at the time. In the background can be observed another similar airship, the ‘Beta’.

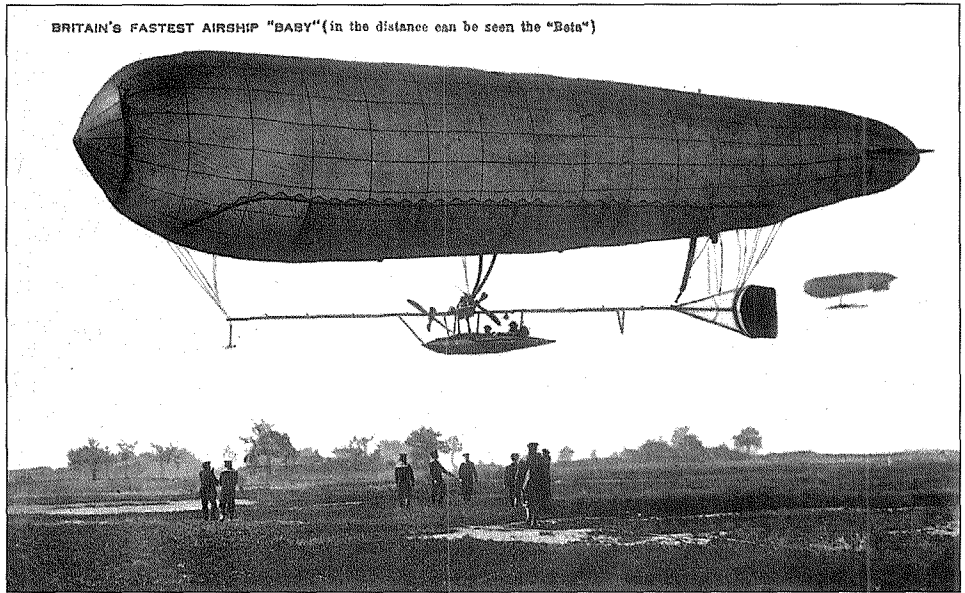


Fig.23

The British Airship R 101 (Fig 24) is shown at its mast. This American used postcard provides considerable detail about the R 101. It was apparently designed to carry 100 passengers and 48 crew. Launched in 1929, it crashed in France in 1930 with the loss of 48 lives. This accident started the demise of the British Rigid Airship programme.

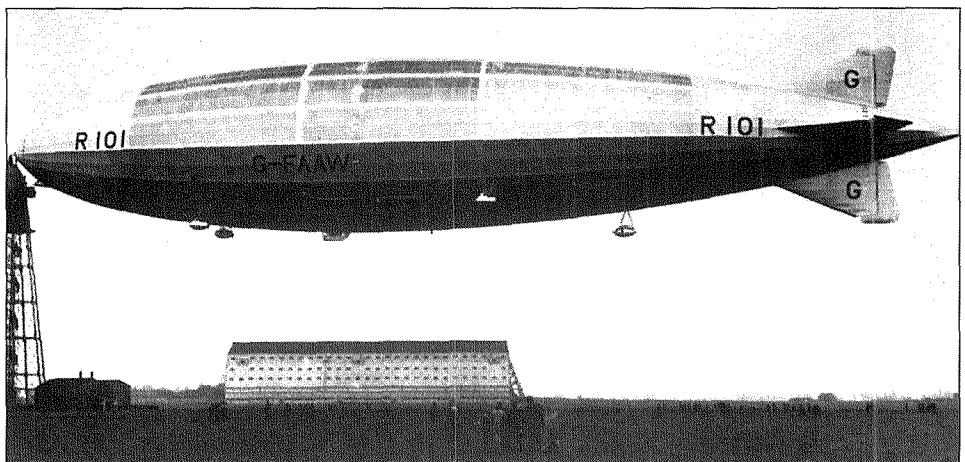


Fig.24

The next five postcards (Fig 25 to 29) feature photo reproductions of British Airships R33, R34 and R36 and their huge hangers at the Norfolk Base of Pulham.

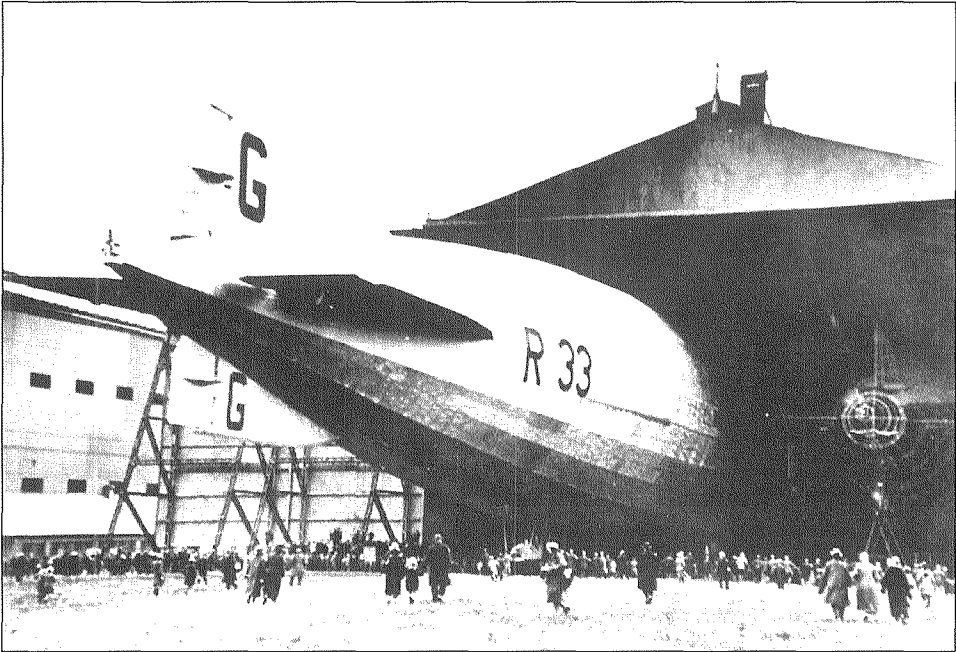


Fig.25

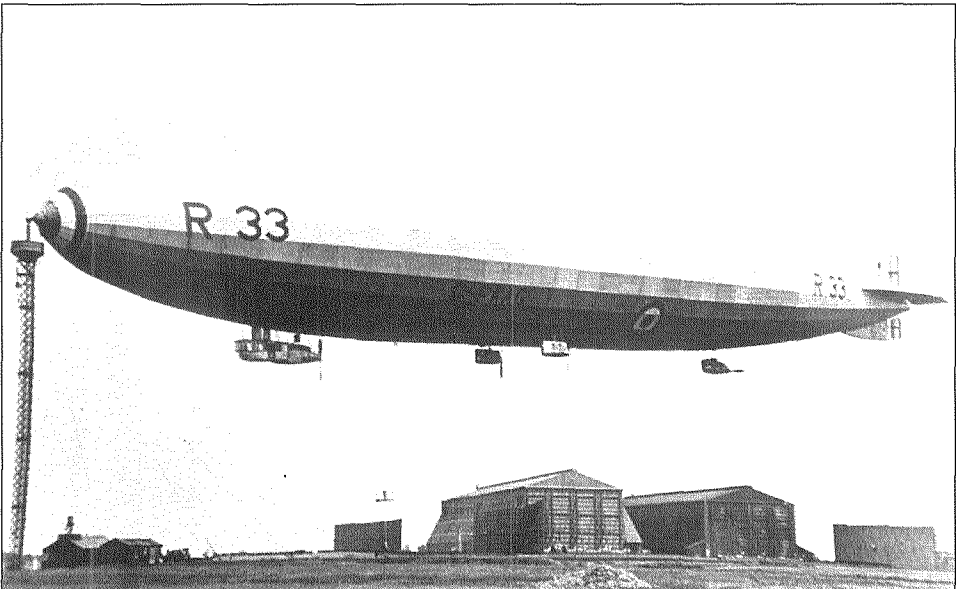
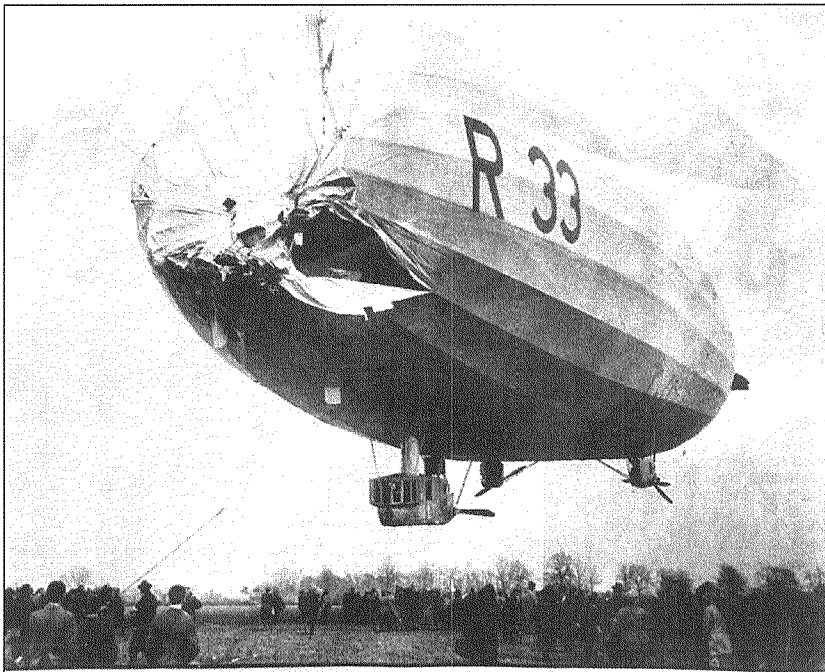
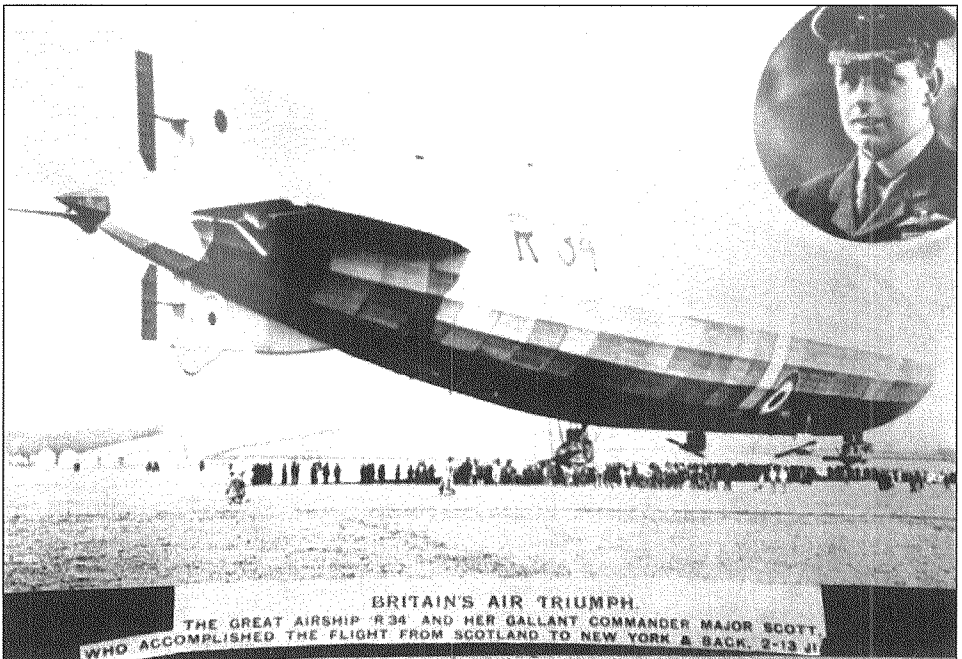


Fig.26



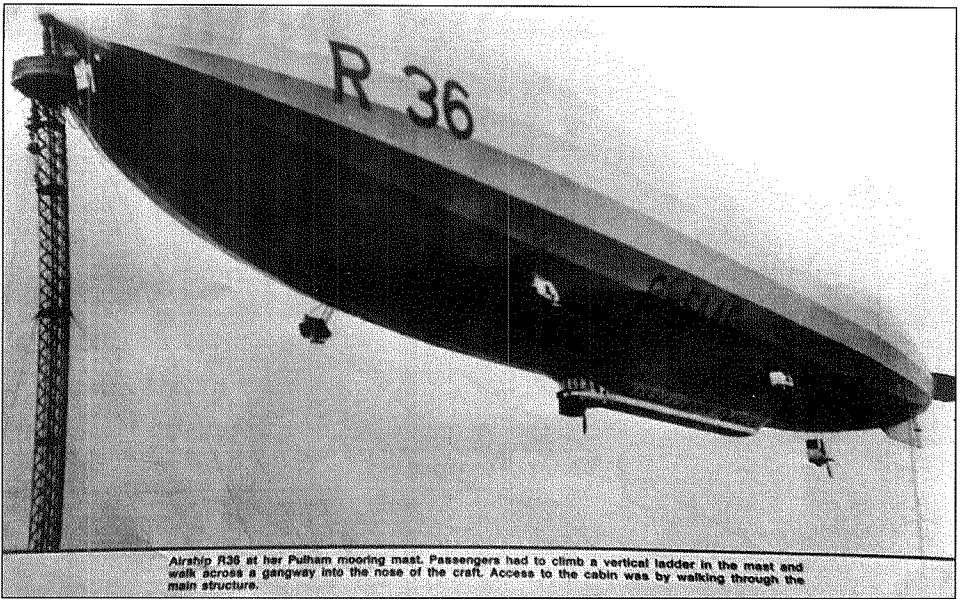
★ The R33 on her return to Pulham after being blown over the North Sea with her nose badly damaged.

Fig.27



BRITAIN'S AIR TRIUMPH.
THE GREAT AIRSHIP 'R 34' AND HER GALLANT COMMANDER MAJOR SCOTT,
WHO ACCOMPLISHED THE FLIGHT FROM SCOTLAND TO NEW YORK & BACK, 2-13 JI.

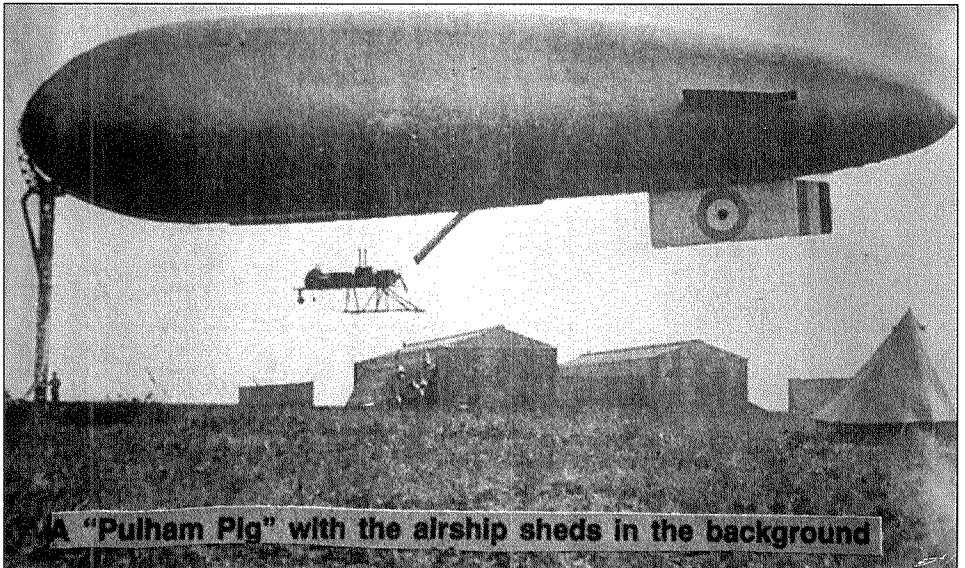
Fig.28



Airship R36 at her Pulham mooring mast. Passengers had to climb a vertical ladder in the mast and walk across a gangway into the nose of the craft. Access to the cabin was by walking through the main structure.

Fig.29

Further photo reproductions show the “Pulham Pig” (Fig 30) as it fondly became known, at its mooring mast and the “Norge” (Fig 31), used by Captain Amundsen but piloted by Major Scott. They landed at Pulham en-route from Italy in an attempt to fly to the North Pole.



A “Pulham Pig” with the airship sheds in the background

Fig.30



Fig.31

The next (Fig 32) is of a nice coloured postcard showing a Zeppelin possibly racing a train. The card was sent from Switzerland on 1st October 1908 to Malta with two receiving datestamps for 5th October 1908.

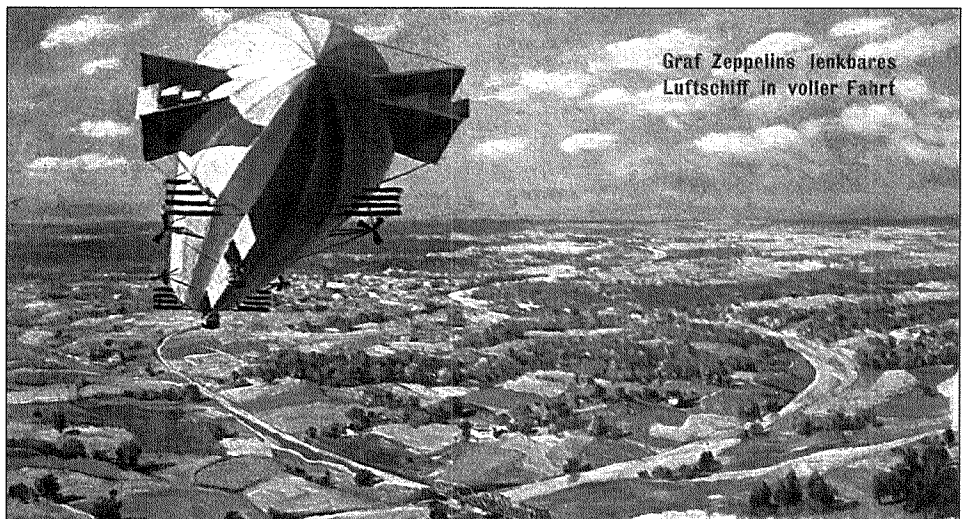


Fig.32

The Zeppelin 1936 cover (Fig 33) bears the red Airship LZ 129 cachet. The stamp is the 2 Marks Blue Zeppelin "over the world" SG 444. It is postmarked Friedrichshafen (Bodensee) 23rd March 1936. For space reasons, several zeppelin reproductions and 1st Flight Covers have been omitted.



Fig.33

Fig 34 is a card of the Graf Zeppelin near its base in Friedrichshafen, its hanger can be seen in the distance. The card has a red Zeppelin cachet on reverse. It was sent from Germany to England on 9th August 1933. Below is the 3 Marks stamp (Fig 35) of the Airship's Designer, Count von Zeppelin.

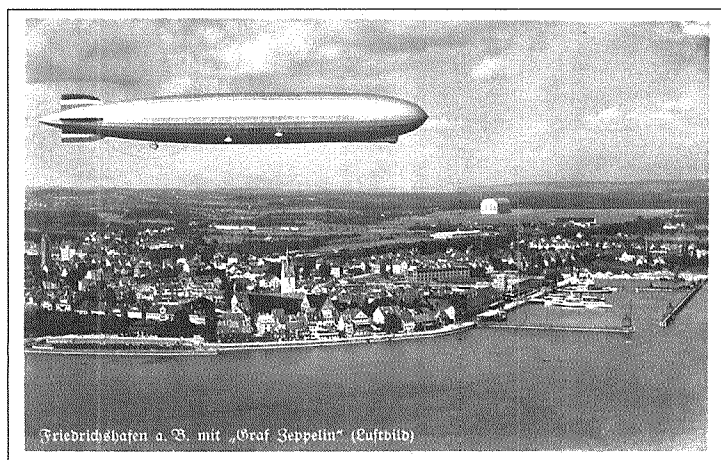


Fig.35

Fig.34

The 2 Marks and 4 Marks (Figs 36 and 37 respectively) “Zeppelin over the world” stamps were issued in 1928 and the 1 Mark was overprinted for the ‘Polar Flight 1931’.

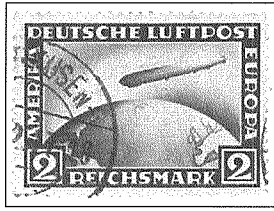


Fig.36

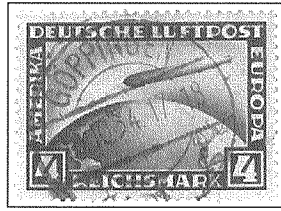


Fig.37

The Figs in 38 to 46 are mainly of real photo postcards of Zeppelins over England in WW I, caught by searchlights, shot down in flames, wreckage pictures etc.



Fig.38



Fig.39



Fig.40

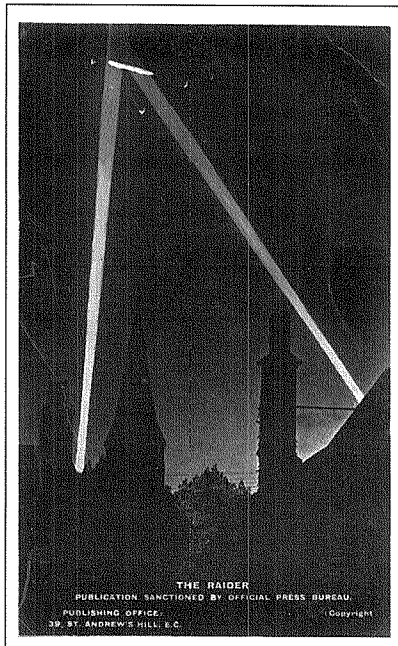


Fig.41

The postcard (Fig 42) shown below features the Zeppelin Z48 shot down on 17th June, 1917, and four pictures of its wreckage. The moment of its coming down in flames is recorded as 3.21 a.m. and is shown in the central insert.

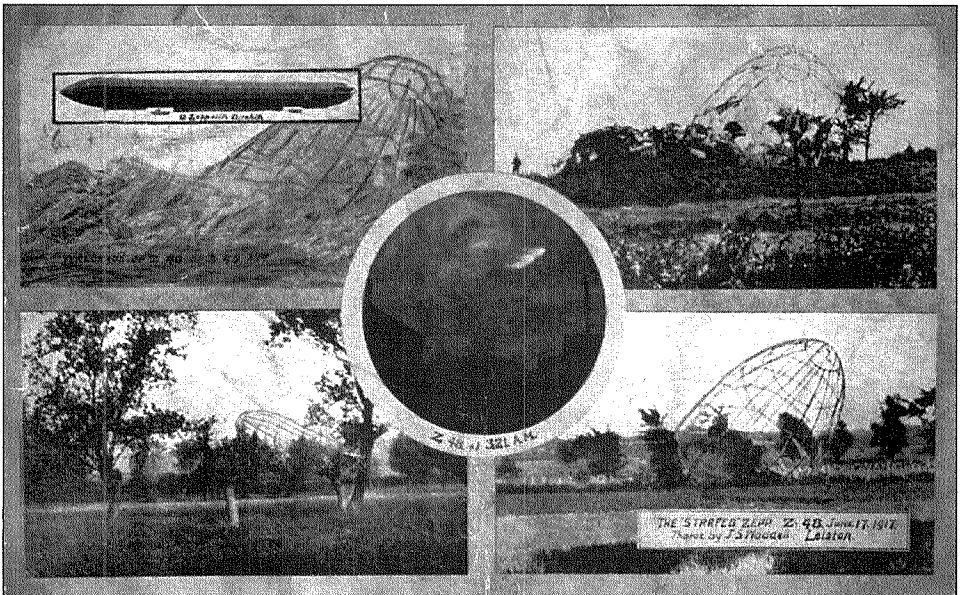
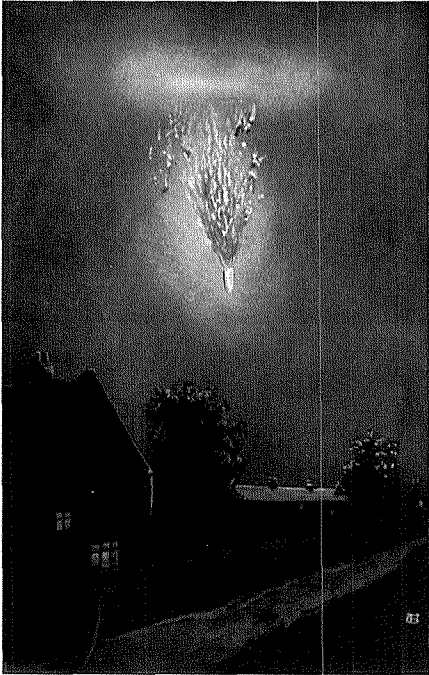


Fig.42



"THE FOURTH"!!!!

Super-Zeppelin brought down in Flames at Potters Bar, Oct. 1st, 1916
 Reproduced by permission of "THE DAILY SKETCH."

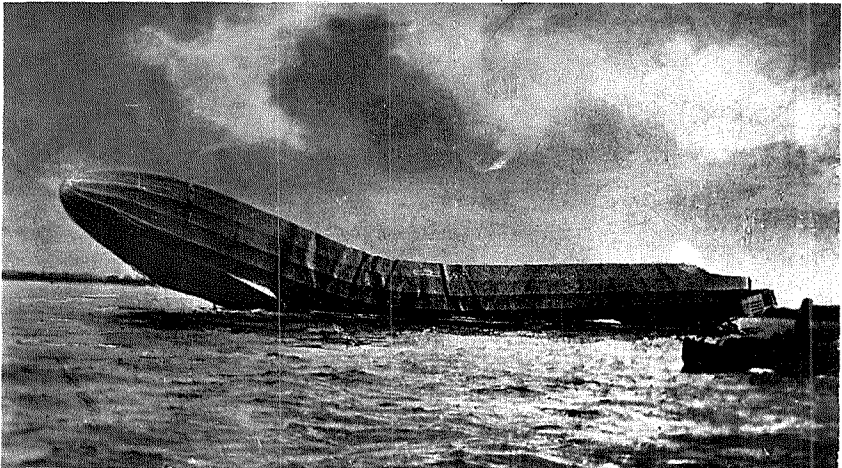
Fig.43

The Zeppelin's Fight, Fright & Flight.

Twas on a Wednesday evening,
 The crescent moon shone bright,
 When Commander of . . . L (number guess)
 To England came to fight?
 He took the old familiar track
 To the town he so well knew,
 Where he'd slain the aged, the women folk,
 And suckling babies too.
 He sailed quietly to the outskirts,
 About to make a dash;
 But terror seized on his black heart,
 As he met the search lights flash.
 Just then the guns began to bark,
 And he fairly lost his head—
 "O, Kaiser, dear! what shall I do?"
 In agony, he said.
 "Two times, before, I bravely came,
 In the witching hour of night,
 Killed some women and children,
 And put the rest to flight,
 It cannot be the babies
 Or the women man that gun;
 They must have got some soldiers here;
 It's time for me to run.
 I thought all the men were soldiers,
 And the soldiers were away;
 And that with the women and the babes
 I could the devil play.
 They're cowardly, inhuman,
 For they want to take my life—
 These wicked, cruel Englishmen
 Are always starting strife.
 Mine Gott! who ruleth over hell,
 How can I get away?
 If I get safely home again,
 I'll do my best to stay.

Copyright,

Fig.44



THE LOW DOWN ONE NEXT MORNING.
 SANCTIONED BY THE OFFICIAL PRESS BUREAU.

Copyright.

39. St. Andrew's Mill, E.C.

Fig.45

The following unused real photocard (Fig 46) shows Zeppelin LZ85 shot down on 5th May between 2 and 3 p.m. as stated on reverse, but no year; it was probably 1917.



Fig.46

A 1921 postcard (Fig 47) shows the British Airship 38 wrecked by explosion over Hull 24th August, 1921. It looks like an artist's impression. It should be noted that parachutes were carried and used.

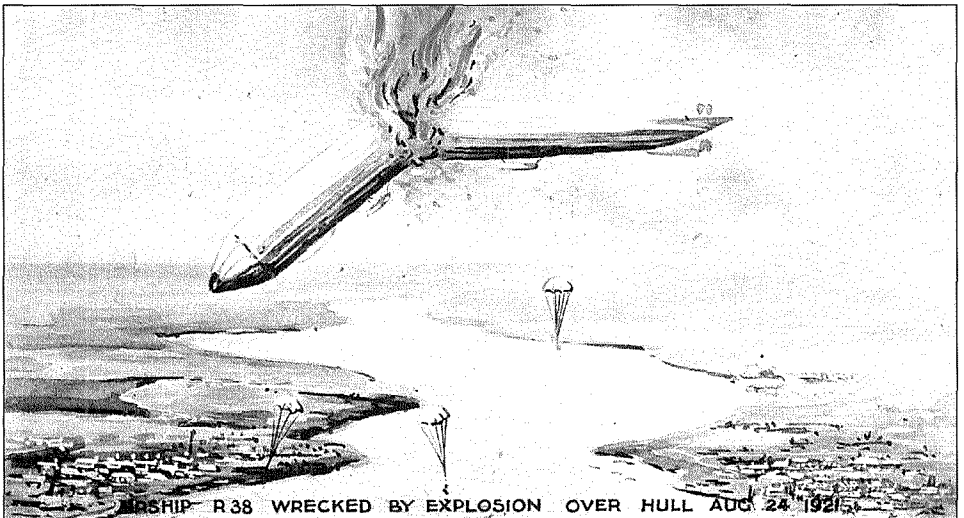


Fig.47

A real photo taken of Zeppelin LZ 1 at Ueckingen, Germany dated 21st July, 1909 is shown in Fig 48. It is accompanied by an 80th Anniversary Cover (Fig 49) of the 1st flight Zeppelin LZ 1 on 2nd July, 1900.

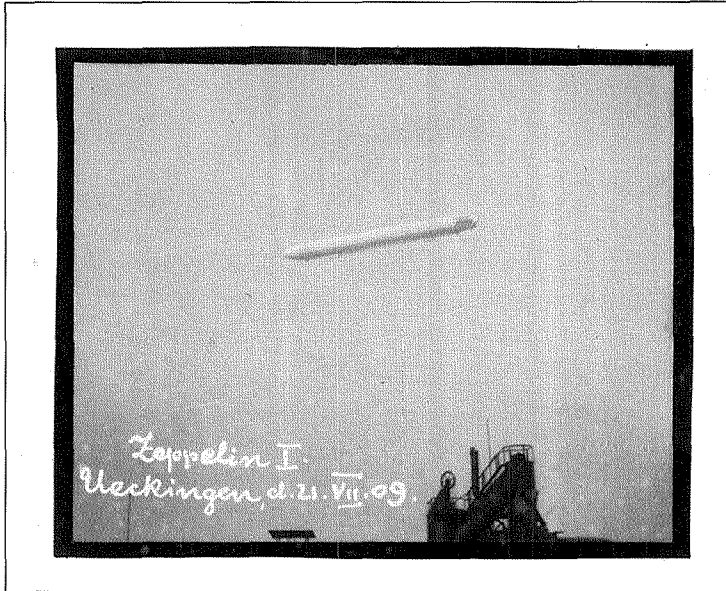
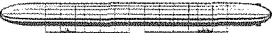


Fig.48


RAF FF18

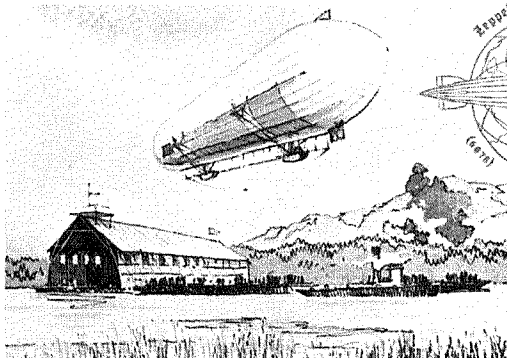
**80th ANNIVERSARY of the
FIRST FLIGHT of the ZEPPELIN
2 JULY 1900**

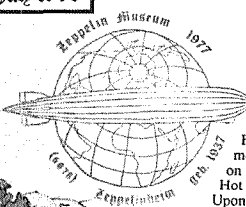
Count Ferdinand von Zeppelin 1838-1917



Luftschiff Zeppelin 1 (LZ1) Lake Constance 2 July 1900








Flown from Ashton Court Bristol on the morning of Monday, 8th December 1980 on a local test flight in Cameron D96 Hot Air Airship 'Cimarron' c/n 675. Upon completion of the tests 'Cimarron' will be registered and based in Spain. Time up 9.27, time down 9.37.

Pilot 1, Don Cameron. Pilot 2, Vincente Marzal Company. Crew, Maggie Tobin, Nick Purvis, David Boxall, Pat Edwards.



**Royal Air Force
Museum
Aerodrome Road
Hendon
NW9 5LL**

Fig.49

A Greek set of stamps (Fig 50) depicts a Zeppelin over the Acropolis 29th May, 1933.



Fig.50a



Fig.50b



Fig.50c

Fig 51 shows the front view of the Zeppelin LZ 129, known as the “Hindenberg”. On reverse is a 75pf green, part of the Hindenberg set, issued for the planned North American flight. The card which was sent to England is postmarked Frankfurt Main 17th September 1936.

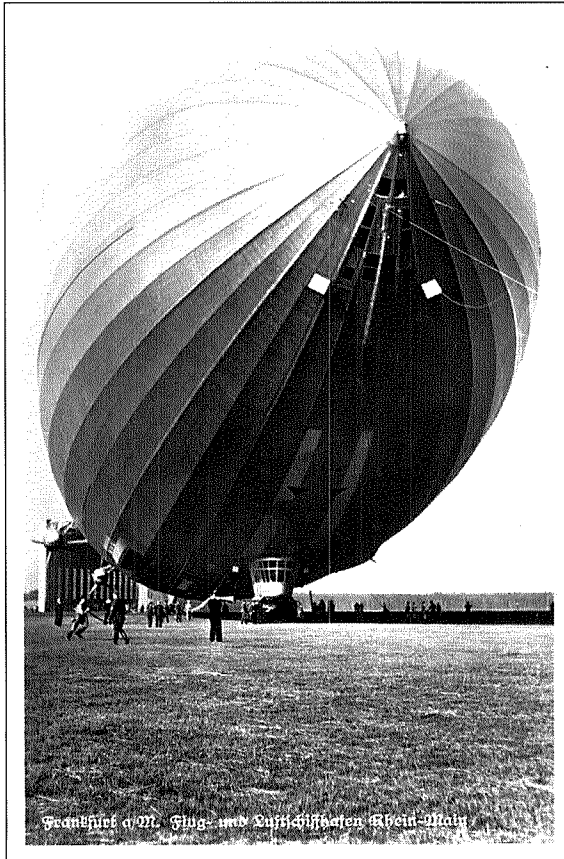
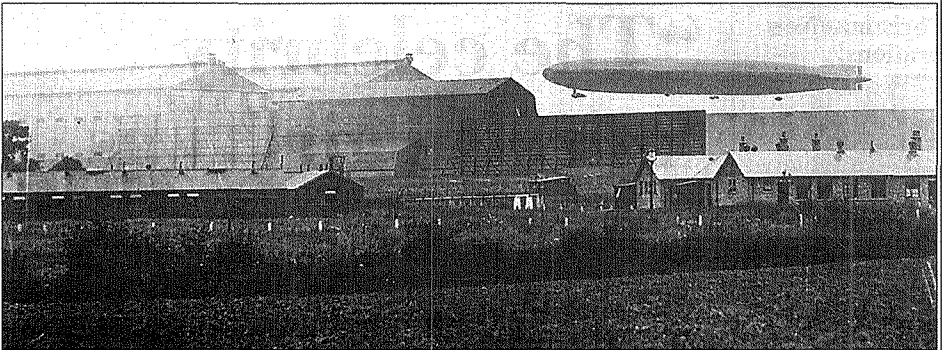


Fig.51

Some while after WW I hostilities ended a Zeppelin turned up at a Pulham, in East Anglia. The 1996 Eastern Daily Press cutting of an article which, first appeared in the daily paper in July 1920, is shown in Fig 52. The LZ 71 was originally built in August 1918 for planned bombing attacks on New York. The war having finished did not stop the Zeppelin's technical secrets being of great interest to British Engineers at Pulham.

Eastern Daily Press, Friday, October 4, 1996

OPINION



Zeppelin's arrival took everyone by surprise

It was a picture that the authorities hoped the public would never see. In July 1920, the German Zeppelin LZ 71 descended on Pulham air station to provide a bizarre echo of the recently ended conflict.

No warning had been given of the aerial leviathan's arrival as part of the terms of the Treaty of Versailles to avoid Press coverage and the risk of anti-German sentiment spilling over.

The only problem was that no one even at Pulham was informed.

The first the station commander knew of the airship's imminent landing was when it roared overhead at 6.45am - shaking him out of his slumbers!

Apparently, he rushed out in his pyjamas to be greeted by a loaf of bread, dropped from

▼ DOWN MEMORY LANE

one of the airship's gondolas, with a message attached asking for a landing crew.

Any hope of keeping news of the airship - more than twice as long as Norwich Cathedral's 313ft spire is tall - a secret vanished as the Zeppelin crew were compelled to spend six hours cruising over the county while a force of soldiers was hastily assembled to help haul her down. Inevitably word spread with the result that the EDP, not for the first time nor the last time in its history, was able to pull off a newspaper scoop by publishing the first shot of the LZ 71 as it passed low over the massive airship sheds where she was to be

housed while British engineers dissected the Zeppelin's technological secrets. Built in August 1918, only three months before the end of the war, the huge airship had been designed to carry out bombing attacks against New York.

In the event, she played little or no part in the conflict - her greatest contribution to aviation history being the assistance she gave to her former rivals.

As for the concern about things turning nasty when local people realised that a German "Zepp" crew was in their midst, it proved to be wholly unfounded.

No such incidents took place, and the report of the surrender stated that the airmen were met with "that camaraderie characteristic of the air services".

Fig.52

The Daily Mirror Newspaper dated 20th June 1919 shows the R 33 Airship (Fig 53) setting off to monitor the implementation of peace terms. It was the sister 'ship' to the R 34 which was also taking part. The caption above 'The Daily Mirror' is misleading as it refers to R 34 although the picture is of the R 33.

THE DAILY MIRROR, Friday, June 20, 1919.

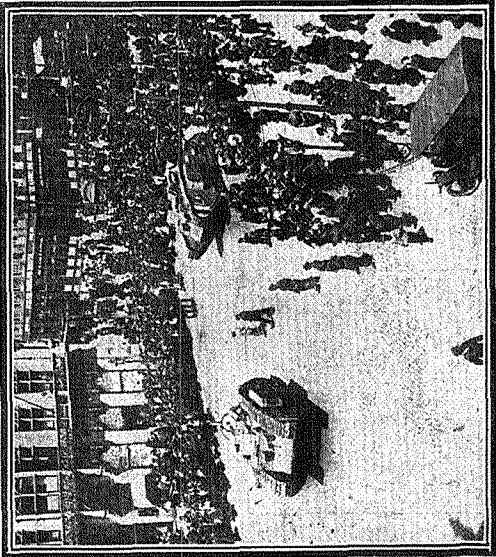
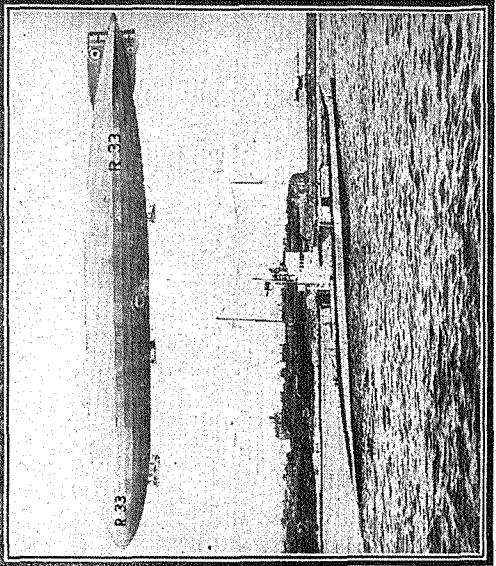
BIG AIRSHIP R 34 OVER COPENHAGEN ROADS

The Daily Mirror

CERTIFIED CIRCULATION LARGER THAN THAT OF ANY OTHER DAILY PICTURE PAPER

No. 4,882. Registered at the G.P.O. as a Newspaper. **FRIDAY, JUNE 20, 1919** One Penny.

EVERYTHING READY FOR THE ALLIES' MARCH TO BERLIN

Two British tanks on the move through the streets of Cologne.

The R 34, provisioned for several days, starting off for Heligoland and Kiel Canal.

Fig.53

Finally in Fig 54 are two examples of various stamps, which were shown on stockcards. They were issued around the world to commemorate Count von Zeppelin and his Airship achievements. He was by far and away the most successful designer of them all.



Fig.54a

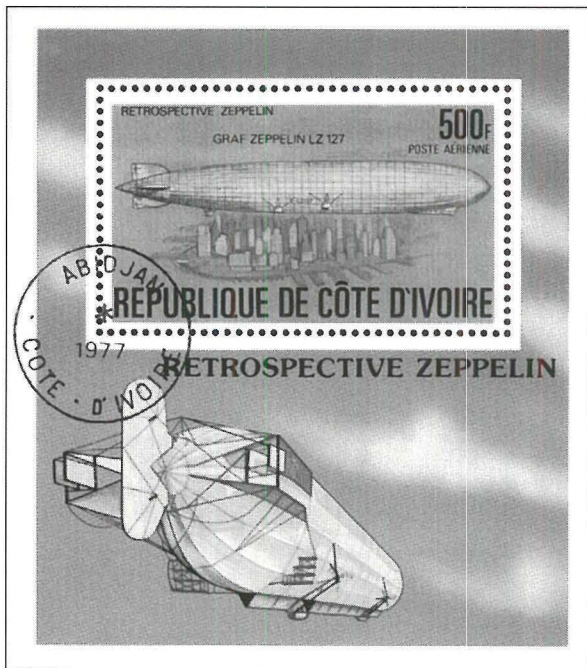


Fig.54b

Once again it was a pleasure to present my material and talk to an appreciative Malta Philatelic Society audience.