

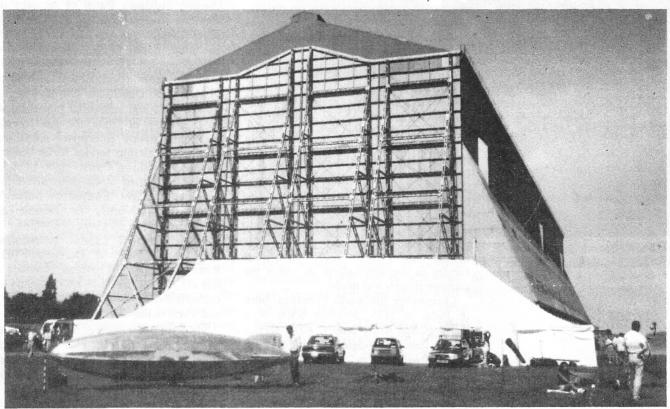
# DIRIGIBLE

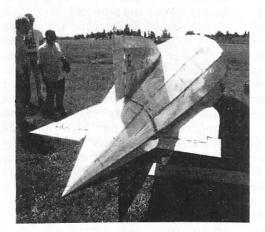
#### THE JOURNAL OF THE AIRSHIP MUSEUM

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## CARDINGTON AIR DAY SUCCESS





FOCAS held a highly successful exhibition at the Cardington Air Day held on July 14. Appropriately situated in a marquee outside Shed No. 1 our exhibition generated a great deal of interest amongst those who attended the open day with many hundreds of visitors passing through and resulting in a healthy number of new members.

Some of the many items on show included a piston from R 101, girder sections from SR 1 and U.S.S. Akron and coming right up to date with a Skyship helium valve. The history of lighter-than-air flight was told using photographs, diagrams and period newspapers. Member Roy Boyle displayed his collection of rare airship china, while outside, members Nigel Wells and Martin Avery flew two model airships, one of which was a large replica of R 100.

A highly successful day, enjoyed by all, which saw FOCAS fulfil it's primary role of informing the public about lighter-than-air flight.

#### **K 88 RESTORATION**

The No. 4 School of Technical Training at R.A.F. St Athen, South Wales have agreed to undertake the restoration of the K 88 gondola on behalf of FOCAS. Work is already underway and a detailed report on progress will be included in an upcoming issue.

#### MODELS DONATED

Member George Ambridge has donated five superb models to the museum collection and is currently working on a sixth. The models, some of which are set in intricate dioramas, are all of British airships and range from C 25 to R 101. The models will be featured in a future issue.

"I did not know Lord Thomson as I knew others I have written of. I only saw him twice, at the foot of the Mast, a tall, slim, slightly stooping figure sombrely dressed that hovers like an Angel of Death in the corners of memory".

# Lord Thomson of Cardington

by E. A. JOHNSTON

Ramsay Macdonald wrote of Lord Thomson of Cardington that he was an ardent connoisseur of books, good food and good wine, with a passion for fine pictures and fine music; a master in conversation; a man of unbounding generosity, gentlemanly honour and rectitude; a magnetic personality, justifiably ambitious; a man of hot temper who did not suffer fools gladly, sometimes a litte cruel in pricking other men's vanity; "he did his work with the devotion of one who withheld nothing from the public service." Lloyd George touched on a capacity for ruthlessness.

Sir John Simon in his "Report of the R 101 Inquiry" found that "R 101 would not have started for India on the evening of October 4th if it had not been that reasons of public policy were considered as making it highly desirable for her to do so if she could." And "the personality of the Secretary of State" and his "enthusiastic backing of this part of British Air Policy" were significant factors in the atmosphere in which the decision to start was made.

Christopher Birdwood Thomson, born in India in 1875, was the scion of a distinguished Army family. After service in the field in Bridging Sections of the Royal Engineers in South Africa and sundry minor outposts of Empire he had become by the age of 35 a professional Staff Officer. Early in 1915 he was sent to Bucarest for a couple of years. Moving in Court and high Government circles, he fell deeply in love with the young, beautiful but unfortunately married Princess Marthe Bibesco, a woman of great charm, culture and sophistication. Their relationship was central to his life to the end; he wrote to her "There are few actions in my life of any importance which are performed without some thought of you."

In 1917 he was "banished" briefly to Palestine as Chief Engineer of a Division where he won his DSO. Then, early in 1918, he was appointed to the Staff of the Supreme War Council at Versailles as a temporary Brigadier General. There he was in his element and was awarded his C.B.E. for his services. In the middle of 1919 he resigned his commission, joined the Fabian Society and nursed a Parliamentary constituency. His Princess Bibesco approved. "She hoped at one time that I would be a successful General, one of the heroes of the war," he wrote. "It must have required an effort on her part to remain loyal to a failure." To be worthy of her loyalty became a major element of his ambition. He lost, honourably, two elections; what he did win, however, was the warm friendship of the Labour Party's Leader, Ramsay MacDonald.

Thomson was invited to sit on an Air Ministry Advisory Panel of Airships in May and June of 1923. He knew nothing about airships but was brought in as an articulate, strong-minded personality to counterbalance the other independant Member, the formidable Lieutenant Commander Denistoun Burney M.P., who in 1922 had submitted proposals to the Secretary of State for Air for an ambitious private enterprise, subsidised commercial airship service to be run by Vickers. Thomson's first sight of R33 slung in the shed at Cardington set his imagination alight. Swayed by Burney's enthusiastic advocacy he became an ardent convert to the cause of airships.

When the first Labour government came into power in December 1923 Ramsay MacDonald offered Thomson a Barony to sit in the Lords, and he enthusiastically accepted the Air Ministry and a seat in the Cabinet.

He discussed a number of possible titles with Princess Bibesco over lunch and, deferring to her preference, decided there and then to call himself "Lord Thomson of Cardington".

Within two months of taking Office, Thomson scrapped the previous Government's plans for a modified Burney scheme and proposed that the Air Ministry would design, build and operate a five million cubic foot airship together with bases in Egypt and India to gain experience for further airships to be built in 1927. The Admiralty, however, forced him to compromise substantially, with the result that in May 1924 Parliament approved the now historic 1924 programme for Vickers' R100 and the Government's R101. If it was a politically necessary compromise, its wisdom in technical terms was questionable, for it spread out thinly the few airship experts left after the R38 disaster. Burney's obsessiveness was restrained by a Government contract, but in the end none could restrain Thomson's.

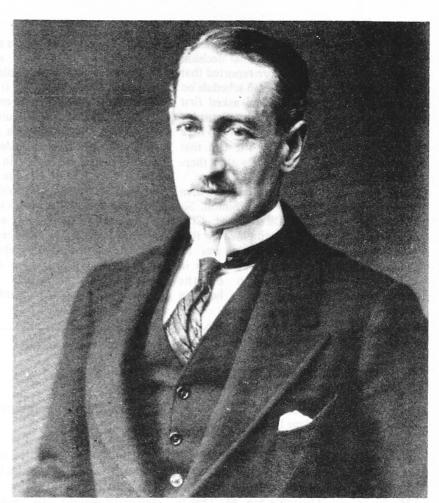
The first Labour Government fell at the end of 1924, but when MacDonald formed his second government in June 1929, Thomson returned to the Air Ministry. Ten days after taking office he was at Cardington. The programme was now nearly three years behind his original

schedule and he was determined to accelerate it. During the next 14 months he visited Cardington eight times. He flew on the second flight of R101 on October 18th and on landing announced to the Press that he "hoped to fly to India in the Christmas recess"; but since R101 was quite incapable of flying to India without much more "lift" it cannot be argued that Thomson had any penetrating understanding of aerostatics. Wing Commander Ralph Booth, formerly the Captain of R100, wrote to me "Thomson did not really come into the picture (at Cardington) until the ships started to fly, when he undoubtedly harrassed RAW." Wing Commander Cave-Brown-Cave, who was in charge of the installation of R101's machinery wrote; "When Lord Thomson became Secretary of State and announced his intention of making the India flight himself under conditions which were to demonstrate the luxury of passenger travel, as well as the practicability of making the journey, the urgency and the difficulties became still more acute."

A few weeks later Thomson settled on the end of September 1930 as his new target date for the first flight to India, although on operational grounds Cardington preferred a departure late in November. The date of the Imperial Conference was beginning to become significant. Three times between the end of June and of August 1930 his senior professional adviser at Air Ministry, Sir John Higgins, warned him that the programme for enlarging and modifying R101 left no margins for unforeseen circumstances assumed a satisfactory trial flight of not less than 24 hours. "Nothing," Thomson replied, "must delay the preparation of R101 for India." Nevertheless at the end of August he was forced to concede a postponement to 4th October.

When it was suggested to him that R101 might be substituted for R100 to avoid further embarrassing postponements of the Canadian flight, his reply was terse: "I must insist on the programme for the Indian flight being adhered to as I have made my plans accordingly". Sir John Higgins told the Court of Inquiry "I was somewhat surprised that Lord Thomson insisted so strongly on doing nothing which might cause any delay in getting R101 ready to fly to India." And well he might be; for, whilst Imperial Airways had already inaugurated a weekly air mail service between London and Karachi more than a year before, the Atlantic was to remain beyond the capacity of commercial aeroplanes for most of a decade yet.

At the end of August, in response to Thomson, Cardington submitted proposals for the design and construction of two further much larger airships, and an ambitious five-year development and



Christopher Birdwood Thomson— The Lord Thomson of Cardington

operating programme. He approved the plans; materials should be ordered in midsummer 1931; and he undertook to seek Treasury agreement before R101 left for India. His most senior civil servant, however, felt that Thomson was "making a radical departure from the wisely cautious policy he has hitherto pursued" and that it was premature to embark on such ambitious new plans before the practicability of regular operations on the Imperial routes had been demonstrated by R100 and R101. Nevertheless the Treasury was persuaded later in September to indicate that the money would be made available if the Imperial Conference endorsed his programme after his return from India in R101. How Cardington interpreted the Treasury ruling was expressed later by Wing Commander Cave-Brown-Cave.

"I discussed with Colmore, the Director of Airship Development, the risk of leaving without a full speed test... He said, however, that he had been told quite definitely that 'if the ship did not succeed in getting the Sof'S to India in time for him to arrive home for the Imperial Conference, no further money would be available for airship development and none would be asked for

The enlarged and modified R101 was brought out of her shed on Wednesday October 1st. That afternoon she set out on an overnight trial flight of just under 17 hours, curtailed in order to get her ready to leave for India on the 4th. A minor fault precluded the required full

speed trial. On Thursday evening Thomson held a conference to make a final decision about the departure. Colmore reported that the ship should be fit to leave on schedule on Saturday evening yet Thomson asked first for a Friday evening and then a Saturday morning departure, forcing Colmore to stick to his guns. It was only at the end that Thomson conceded handsomely that there need be "no rush on my account."

On Friday afternoon, according to written evidence submitted to Sir John Simon, Sir Sefton Brancker, the Director of Civil Aviation, repeated to Thomson his view that "the whole policy of this trip was all nonsense... the airship should stay in England for the duration of the Conference." Brancker said that he "got

rapped over the knuckles" as a consequence.

So on the following evening Lord Thomson set out in "his" airship to realise his dream and return in triumph to the Imperial Conference, at the end of which the Prime Minister was to announce his name as the next Viceroy of India: a consummation worthy of his Princess. Alas, he and his colleagues and crew died in the flames at Allonne. As R.D.S. Higham wrote in 'The British Rigid Airship": "Lord Thomson . . . added dangerously to his lack of knowledge of aeronautical matters an unbounded enthusiasm for the new technology. His complete failure to comprehend the nature of experimental work led directly to his death . . .

In Sir Samual Hoare's words, his was "the sin of impatience."

### Correspondence

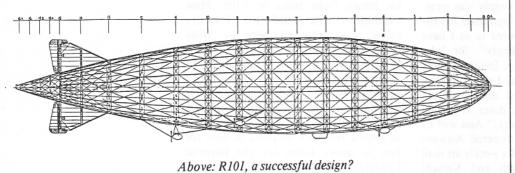
From Mr. Norman B. Peake, Norwich, Norfolk.

Editors note: I have had Mr. Peake's letter on file for some time but pressures on space have previously prevented me from publishing.

Don Woodward is correct in saying that R 100's STRUCTURE weight was less than R 101's but only by half the 17% he claims (Dirigible No. 6). This is because R 101's "reefing girders" formed no part of her hull strength, yet weighed 5,734 kilos. Designed to tauten her cover without the need for pull-in tapes, these were partly cosmetic, and hopefully reduced drag. Deducting these, R 100 becomes scarcely 10% lighter!

It is also possible that, in discounting the weight of the fins (along with the rudders and elevators) Don took only their EXTERNALS—though they were part of a cruciform built into the hull, to the strength of which they did not contribute. The absence of such in the "Macon" was her achilles heel.

But I feel that using the ratio of structure-weight to gas volume is misleading from an engineering standpoint, since the later passenger ships had their gas volumes reduced by lavish passenger their accommodation—very spartan in military ships and largely external in LZ 126 and LZ 127. Using total hull volume (equivalent to displacement tonnage/ strength ratio in cargo ships) would have been more meaningful. The disparity between R 100 and R 101, which was exacerbated by the latters use of deep unbraced transverse frames, would then further diminish.



Above. Kioi, a successjan

DIRIGIBLE is the journal of the Airship Museum and is published by Friends of Cardington Airship Station. It is published quarterly and distributed free to all members and associate members of FOCAS and, through our close associations, to the Friends of the British Balloon Museum and Library.

The objects of FOCAS are to foster and promote the study of the history of airships in every aspect, and to present the results of such study to the public, and to stimulate public interest in the role of Cardington as an airship base and in the conservation of the principal buildings thereof, and in particular to promote and assist in the formation and operation of a museum and study centre devoted to the airship.

Full Membership of FOCAS is limited to persons who, having a particular interest in or knowledge of airships, are approved by the Governing Council, the Trustees, who are elected by members from among their number. There is also provision for Associate Membership, which is open to the public generally. Further information and application forms can be obtained from:

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#### EDITORIAL A future for Shed No. 1?

In his editorial for the summer '91 issue of 'Aerostation' Donald Woodward calls for the purchase of Shed No. 1 by the U.S. Navy to act

as a 'down wind' base for the upcoming YEZ 2A. Such a farsighted move would secure the future for at least one of the sheds—perhaps in greater danger now than for many years—and return the base to it's intended role of an

airship station.

All will depend on the success of the YEZ 2A program, the genesis of which lies at Cardington. This bold proposal should be actively supported so that we may again see large airships return to Cardington.