

# BULLETINS

OF THE

## Aerial Experiment Association

Bulletin No. XXXIX Issued MONDAY APRIL 12 1909

WITH APPENDIX A.

MR. McCURDY'S COPY

BEINN BHREAGH, NEAR BADDECK, NOVA SCOTIA

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Bulletins of the Aerial Experiment Association.

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BULLETIN NO. XXXIX    ISSUED MONDAY    April 12, 1909

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WITH APPENDIX A.

Beinn Bhreagh, Near Baddeck, Nova Scotia.

TABLE OF CONTENTS.

1. Editorial Notes and Comments:-.....1-9

    Dissolution of the A.E.A.....1-1  
    The Trustee of the A.E.A.....1-6  
    The Proposed Joint Stock Company.....6-8  
    The Final Bulletin.....8-8  
    Conclusion.....8-9

2. Work of the A.E.A:-

    Experiments reported by the Secretary.....10-11  
        March 27, Experiments with the Silver-  
            Dart.....10-10

        March 29, Silver-Dart experiments  
            continued.....11-11

3. Miscellaneous Communications:-

    Dr. A. Graham Bell's Address before the Canadian  
    Club of Ottawa March 27, together with the re-  
    marks of His Excellency, the Governor General  
    of Canada, and the remarks of the Finance Mini-  
    ster of Canada:- From the Ottawa "Citizen"  
    March 29, 1909.....12-30

        Reporter's Introduction.....12-13  
        The Telephone invented in Canada.....13-14  
        The Airship.....15-15  
        First Balloons.....16-17  
        Aerial Navigation.....17-18  
        The Dirigible Balloon.....18-19  
        Important to Empire.....19-19  
        The Aerodrome.....20-21  
        Langley's Experiments.....21-22  
        The Experiments at Baddeck.....23-26  
        Canada's Opportunity.....26-27  
        The Governor General's Address.....28-29  
        Address of the Finance Minister.....29-30

4. The Outlook on Aviation:-

(see next page).

APPENDICES.

Appendix A. The Secretary's minutes of formal meetings of the Aerial Experiment Association from the date of its organization Oct. 1, 1907, to the date of its dissolution March 31, 1909 (36 pages). This Appendix will be found at the end of this Bulletin after page 30.

Appendix B. Souvenir Volume of enlarged photographs illustrating the work of the Aerial Experiment Association (31 pages). This appears as a separate volume accompanying this Bulletin.

Appendix C. Portfolio of blue prints consisting of Engineer's working plans showing the construction of

The Kite Cygnet I  
Drone No. 1, Selfridge's Red Wing.  
Drone No. 2, Baldwin's White Wing.  
Drone No. 3, Curtiss' June Bug or Loon.  
Drone No. 4, McCurdy's Silver-Dart.  
Drone No. 5, Bell's Cygnet II.

This portfolio does not accompany the present Bulletin but will be forwarded by express.

EDITORIAL NOTES AND COMMENTS.Dissolution of the A.E.A.

April 5, 1909:- The Aerial Experiment Association came to an end by time limitation at midnight on the 31st of March 1909.

It was quite a pathetic little group that gathered round the great fireplace in the Hall at Beinn Bhreagh, and watched the clock go round. Only three members were present, Messrs. Bell, McCurdy and Baldwin; with Mrs. Baldwin, Miss Mabel B. McCurdy, and Mr. Charles R. Cox present by invitation.

The vote to adjourn sine die was hardly put when the first stroke of midnight was heard, and.....*exeunt omnes!*

And yet not all - the Trustee remains.

The Trustee of the A.E.A.

Mr. Charles J. Bell, Trustee of the A.E.A., is now the sole representative of the Association, the one remaining link to connect its past with whatever future may be in store for it.

Everything belonging to the Association now passes into his hands as its representative:-

1. There are the tools, and apparatus belonging to the Association.
2. The sum of \$4000.00, being the last contribution from Mrs. Bell for the support of the Association; and

3. A small balance in the bank of \$151.99 which has been turned over to the Trustee by the Treasurer.

Against these assets there are debts and liabilities to the amount of about \$7000.00, not including the expenses incurred in issuing the Bulletins (about \$1500.00) which have been met by me personally, and will not be charged to the Association.

The funds in the hands of the Trustee are not sufficient to meet these liabilities; and the Association has therefore authorized the sale of its tools and apparatus to me for whatever amount may be necessary to complete the payment (between two and three thousand dollars).

This plan provides for the extinction of the debts of the Association, and leaves me in possession of the tools and apparatus.

Any tools and apparatus at Hammondsport, N.Y., including the aerodrome "June Bug", or "Leon", will be presented by me to Mr. Curtiss.

The tools and apparatus at Beinn Bhreagh, including the aerodrome "Silver-Dart", the aerodrome "Cygnet II" and the hydroplane boat "Query" will belong to me; and the "Silver-Dart" will be placed at the disposal of Messrs. McCurdy and Baldwin for practice purposes.

After the payment of the debts of the Association nothing will remain in the hands of the Trustee excepting:-

4. The inventions made by the members of the Association between Oct. 1, 1907, and March 31, 1909.

These may, or may not, turn out to be of value. In order to test the matter two applications for U.S. Patents have been prepared upon the Hammondsport work of the Association.

One of these, an application in the name of Mr. F. W. Baldwin, has been filed in the Patent Office, and bears the serial number 485,281.

The other is a joint application in the names of Alexander Graham Bell, J.A. Douglas McCurdy, F.W. Baldwin, G.H. Curtiss, and Thomas E. Selfridge. It has been signed by Messrs. Bell, McCurdy, Baldwin, and Curtiss; and will be filed in the Patent Office as soon as the signature of the Administrator of the estate of the late Thomas E. Selfridge can be obtained.

The Aerial Experiment Association had no funds that could be applied to the taking out of patents. The expense of such applications should of course be borne by any company or commercial organization formed to exploit them. No such organization at present exists; and I have therefore assumed personally the burden of expense of applying for these two patents, on the understanding that the commercial organization taking over the patents will return the costs.

These two patents, if allowed by the Patent Office, will be issued assigned to Mr. Charles J. Bell, as Trustee of the Aerial Experiment Association; and will be by him assigned to some commercial organization for stock or cash, and the proceeds divided in accordance with the agreement of organization of the A.E.A., and resolutions of the



Association relating to the disposition of the proceeds.

When a commercial organization acquires from the Trustee the rights to the inventions of the Association, it will then be the duty of this commercial organization to examine into the nature of the inventions, and decide which of them should be patented, and where.

Such a company would bear the cost of obtaining patents in the United States and other countries, and of defending them; and it would be the duty of the members of the Aerial Experiment Association to aid the company in obtaining patents by signing the requisite legal papers.

The Trustee should make arrangements with this company whereby a limit of time should be set for the preparation of patents. The Association expired on March 31, 1909; and I would suggest that all the inventions of the Association, or of its members, for which the company has not seen fit to apply for patents before March 31, 1911 should then revert to the individual inventors, and not be subject to claim by the company. This gives a period of two years within which to apply for patents.

At the present moment no patents exist to represent the work of the Association. There is nothing therefore to prevent anyone from manufacturing the inventions of the Association. It will not be until patents are obtained that the rights of the Association can be legally enforced; and a patent cannot legally be obtained for an invention which has been in commercial use for more than two years.

Should therefore persons not members of the Association manufacture aerodromes embodying the inventions of the Association we would have no remedy until our patents come out; and such persons would be under no obligation to recognize the rights of the Association until controlling patents had been obtained.

If however, individual members of the Association should enter into the work of manufacturing and selling aerodromes embodying the inventions of the Association before the issuance of letters patent upon them, they would be under a moral obligation to recognize the rights of the Association until a sufficient length of time has elapsed to enable a commercial organization to obtain patents upon the work of the Association. I would suggest, as a reasonable time, a period of two years from the 31st of March, 1909.

That is:- Should individual members of the Association go into the practical work of manufacturing and selling aerodromes embodying the inventions of the Association, and especially embodying those features claimed in our two pending applications for U.S. Patents, they should make some arrangement with Mr. Charles J. Bell, Trustee of the Aerial Experiment Association, or with the commercial organization acquiring from him the rights to the inventions of the Association, whereby they should recognize the equitable rights of the Association in the premises, by paying to him, or to the commercial organization succeeding him as owner of the inventions, an agreed upon royalty for each aerodrome sold. I would suggest that this arrangement should last until March 31, 1911; after which any

patents that may have been granted upon our work will protect the rights of the Association in the matter.

Of course such an arrangement would have to be made by the voluntary action of those members of the Association who enter into the commercial field, through a feeling of moral obligation to the Association of which they had been members.

#### The Proposed Joint Stock Company.

The Trustee of the Aerial Experiment Association has the power and authority to dispose of the inventions of the Association as he thinks best in the interests of the members; but various plans have been discussed in the Bulletins of the A.E.A. regarding what should be done upon entering the commercial field (see Bulletins XXXIV pp 3-13, XXXVI pp. 44-46).

The simplest mode of procedure seems to be to organize a special joint stock company to replace the Association; and I have suggested that it should be known as "The American Aerodrome Company".

Let then a company be organized to take over the inventions of the Aerial Experiment Association with a nominal capital of one hundred thousand dollars; and let the Trustee sell the inventions of the Association to this company for the sum of one hundred thousand dollars in fully paid up shares of the company.

The Trustee would then divide the shares as provided for in the resolutions of the Association and in its agree-

ment of organization as follows:- To Mrs. Bell 35 per cent (for the \$35,000.00 she has contributed to the support of the Association), and to Messrs. Bell, McCurdy, Baldwin, Curtiss, and Selfridge, 13 per cent each.

This would result in the following distribution of the shares:-

Mrs. Bell.....	\$35,000.00
Mr. Bell.....	13,000.00
Mr. McCurdy.....	13,000.00
Mr. Baldwin.....	13,000.00
Mr. Curtiss.....	13,000.00
Mr. Selfridge.....	13,000.00
	<u>\$100,000.00</u>

The above persons would constitute the first shareholders. Then, upon the first meeting of the shareholders I would propose that sixty-five thousand dollars of these shares should be turned into the Treasury of the company to be sold from time to time for cash as might be required. Of this amount, 35 per cent would be contributed by Mrs. Bell and 13 per cent by each of the other shareholders.

When Treasury stock is sold for cash it should be offered first to the actual shareholders in the proportion of their several holdings.

I would further suggest that the principal objects of the company should be:-

1. To obtain patents for the inventions of the Aerial Experiment Association in the United States and other countries.
2. To defend them.
3. To license individuals or commercial organizations to manufacture aerodromes under the patents owned by company.

These are of course mere suggestions for the consideration of the Trustee, and the members of the defunct Association. The Trustee has full power to act as he thinks best in the interests of the members; and he knows more about business matters, and the organization of companies than I do. We are safe to leave our interests in his hands.

#### The Final Bulletin.

In issuing this, the last Bulletin of the A.E.A., I have thought it well to present to the members a copy of the Secretary's minutes of the formal meetings of the Association from Oct. 1, 1907, the date of its organization, to March 31, 1909, the date of its dissolution. This forms an appendix to this Bulletin.

I also present as<sup>a</sup> separate appendix a Souvenir Volume of enlarged photographs illustrating the work of the Association; with a frontispiece photograph of Mrs. Bell - "The Little Mother of us All" as Baldwin expresses it.

Another appendix will be forwarded to the members later on consisting of a large portfolio containing blue prints of Engineer's working drawings illustrating the construction of the kite "Cygnet I", and of Dromes 1, 2, 3, 4 and 5.

#### Conclusion.

The Aerial Experiment Association is now a thing of the past.

It has made its mark upon the history of Aviation

and its work will live.

Every success to the commercial organization that will succeed it, and to the individual members of the Association in their future careers, is the earnest wish of

Your Editor,

Alexander Graham Bell.

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EXPERIMENTS REPORTED BY THE SECRETARY.Experiments with the Silver-Dart.

March 27, 1909 (Saturday):- The ice being in better shape than on the previous trial day the Dart, fitted with two runners in place of the back wheels, was taken out on the ice.

We were very anxious to see how the runners compared with the wheels from the standpoint of efficiency. Another change was made which I forget to mention in the account of experiments for last day. This was in reference to the angle of incidence of the surfaces. In repairing the Silver-Dart, after Casey's accident, advantage was taken of the occasion to change the angle of attack from 6 to 4°.

To-day, as the Silver-Dart started, mist was falling quite heavily and in addition to this there was about two inches of water all over the ice. The Dart, however, responded to her front control after having traveled an astonishingly short distance, about 100 feet I should judge. The usual turn to port was easily made and a second one attempted during the same flight; the machine however, touched the ice after almost completing the second circle. The trouble was with the motor again although investigation failed to show anything which would give rise to this reduction of power.

A series of three such flights was made at the conclusion of which the machine was taken to the shed.

J.A.D. McC.

March 29, 1909, (Monday):- This afternoon, although the ice was in a much worse condition than on Saturday, the Dart was given its usual series of trials.

We had with us on this occasion a gentlemen from Halifax of German birth, Mr. Hermann Drechsel, who is much interested in the subject of aviation generally.

Three flights resulted. In the last one of which the complete circle was made without mishap.

During this flight, which was about 3 1/2 miles in length the Silver-Dart rose to a higher altitude than ever before attained with this machine. I should say the maximum height attained was about 50 feet.

J.A.D. McC.

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DR. A. GRAHAM BELL'S ADDRESS BEFORE THE CANADIAN CLUB OF  
OF OTTAWA, MARCH 27, 1909.

(Copied From "The Citizen" Ottawa, Canada,  
Monday, March 29, 1909).

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CANADA MAY ENTER FIELD OF AERIAL EXPERIMENT. SUCCESSFUL YOUNG AERODROME EXPERTS GIVE DOMINION FIRST CALL ON THEIR SERVICES. PROF. A.G. BELL ADDRESSES CANADIAN CLUB. DISTINGUISHED AUDIENCE PRESENT.

SKETCHES HISTORY OF AERONAUTICS. WHAT BADDECK TRIALS HAVE DONE FOR CANADA. ZEPPELIN DIRIGIBLE MAY REVOLUTIONIZE WARFARE.

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An address that was practical, intensely interesting and entertaining was given before the Canadian Club on Saturday by Professor Alexander Graham Bell, the guest of the day. The luncheon as usual was held in the Grand Union and the fame of the distinguished visitor resulted in the event being one of the most successful in the Club's history. The large dining room was filled to capacity and the smaller room had to be used. The President, Mr. Gordon C. Edwards, was in the chair and the guests included His Excellency Earl Grey, Hon. W.S. Fielding, Hon. William Paterson, Hon. George E. Foster, Sir Frederick Borden, Hon. Sidney Fisher, Hon. John G. Foster, Mr. R.L. Borden, Dr. James Mills, Judge Idington, Sir Sanford Fleming, Sir James Grant, Capt. F.C.T. O'Hara, and many others prominent in the political, scientific and business world. The address by Prof. Bell was an admirable one. It was not technical and, while it contained a wealth of practical and new information, it

was not too heavy for the layman and was worded in a way which appealed to all.

Prof. Graham Bell is a man of striking appearance, learned but not austere, and he tells a story in the most pleasant way. His address dealt first with the telephone and then with airships. He traced the course of the inventions and pointed out that the control of the air, as far as a nation was concerned, was as important for to-morrow as the control of the sea is to-day. Incidentally he strongly urged that the Canadian Government should take some steps to secure for the nation the services of the two brilliant young Canadians who have been working with him for the last two years and who are now branching out for themselves with their inventions for aviation.

Prof. Bell was given a most enthusiastic ovation when he was introduced by Mr. Edwards. In responding Prof. Bell said:

"I thank you most sincerely for the cordial welcome you have given me. I do not know but that I have a little Canadian feeling in me too. I am a good American Citizen and have been for thirty-five years, but my heart has still a warm spot for Scotland, my native land, and for Canada, the home of my early manhood.

Invented in Canada.

It is a rather curious thing to me to see the dispute about where the telephone was invented. I have not any doubt about it. It was I who invented the telephone, and it was invented wherever I happened to be at the time. It so

-3-

happened that I resided in Salem, Mass., and carried on work in Boston, and then I would come up to my father's home in Canada to spend a large portion of my time. I carried my instruments with me, but of this you may be sure, the telephone was invented in Canada. (Loud Applause). It was made in the United States. (Laughter and Applause). The first transmission of a human voice over a telegraph wire, where the speaker and listener were miles apart was in Canada. (Applause). But the transmission was only one way - you could not talk back; you had to telegraph back. The first transmission by wire in which conversation was carried on reciprocally over the same line was in the United States, but I was there all the time, and it certainly is the case that the telephone was invented in Canada and the first actual use of telephone lines was in this country. (Applause). It is an interesting fact to me to look back upon these old days. It seems like a dream to me now; I can hardly realize that I had any connection with these events. But I can remember very well the way in which people used to look at me (the speaker tapped his forehead and sympathetically shook his head, causing great laughter and applause) just as they looked at me two or three years ago when I talked of a flying machine. The world has long since learned to know the reality of the telephone. And this great audience to-day shows that, thanks to the Wright Bros. and foreign inventors, and to your own Douglas McCurdy, you know that the flying machine has passed the experimental stage and is to-day in Canada.

-4-

The Airship.

I shall speak but little of the events of the past, except so far as they have to do with the Aerial Experiment Association which was organized in Halifax on 1st October, 1907, and has already produced four aerodromes or flying machines that have successfully flown, has a fifth completed, which is fluttering its wings but has not yet got into the air and a sixth partially done.

England was greatly in the front in the first scientific experiments relating to aeronautics. In 1670, there had been produced a very remarkable scheme that gave rise, by the bye, to our modern expression "Aerial Navigation". It was the theoretical conception of De Lana who had lived a hundred years before the introduction of the idea of the balloon. He proposed to make huge copper vessels, 24 feet in diameter, and exhaust the air in them, when he thought they would rise.

Long before this time, 1670, attempts were made to fly. The experimenters always had one object in view, it was not the balloon, people had not come to that; the idea was one to which we have come back again, that we should imitate the birds, that the bird should be our model. So, men put on wings and jumped from high places and glided two or three hundred feet, and often fell down and broke their limbs or lost their lives, any number of them; several hundred did that before balloons were invented.

### Aerial Navigation.

When Father De Lana came along with his proposition of these floating balls, the idea was really aerial navigation, that was the theoretical position. People supposed that the air had a surface like the sea, and, as a light body thrown upon the surface of the sea would float, the idea of the early experimenters was that if they could get a body lighter than air, such as a hollow sphere from which the air had been exhausted, it would rise and float on the surface. But, of course, if men got above the surface they could not breathe; they must be below the surface. So, they got the idea of a ship hung below the floating body. The idea was reached of masts rising above the floating body bearing sails so that the ship could be propelled by the ethereal winds. It was a pretty idea. Of course, we know that it was entirely impracticable. But you can see that that is what gave rise to the term "Aerial Navigation", which term has persisted to our day.

The idea was not realized for a hundred years afterwards when the Brothers Montgolfier, through a mistake invented a balloon. The Montgolfiers were papermakers. They were not scientific men, but they had the idea, common in that day, that the clouds were floating on the surface of the air. They thought that if they could manage to make a large paper bag and get a cloud in it, it would float. But the difficulty was to get the cloud into the paper bag. They observed the dense smoke coming from the chimney,

went a little way into the air and became a cloud. Could they fill a paper bag with dense smoke? They tried to find the mixture that would make the densest possible cloud of smoke. They decided upon a mixture of chopped straw and wool. It made a frightful smell. They got a great paper bag made and held it upside down over a bonfire of this material. To their great delight it floated to the top of the room. This proved that the principle was right. So they made a big one and tried it outdoors. But, instead of using paper they used cloth. It went up, and came down in a neighboring field.

#### First Balleons.

Then they made a much larger one and called the world to witness the first flight of a balloon. This was in 1783. It must have been an exciting day when the first living passengers were sent up. They were, I think, a sheep a cock and a duck, and, when they came down safely, the next question was to carry a man. Two men were sent up in a captive balloon and came down safely, and then they made the first real flight.

All this time, while the Montgolfiers were experimenting, scientific men knew that the new gas, discovered by Priestly, hydrogen, was lighter than air, and, by popular subscription the Brothers, Charles and Robert constructed the first hydrogen balloon. That was sent up without a man and flew well. The first hydrogen balloon was a great sight. It was found necessary to have soldiers

to protect it. It was brought through the streets of Paris at night, as a captive balloon, with troops in attendance. It was taken into the Champs de Mars where they could protect it from the crowd. It made a great ascent without a man aboard and disappeared in the clouds. It came down, perhaps twenty kilometers from Paris. Some country people who had never heard of such a thing, saw this great animal as they supposed it to be, come down from the sky. It was evidently alive - there was a little wind stirring, and the balloon moved from side to side. And it had a tremendous smell about it. Many villagers came with pitchforks and other weapons. They saw that this was a living creature, for it rolled from side to side as if in agony, and they did not dare to approach it. One man had a gun. Rather fortunately, he did not go too close when he fired. He hid behind a tree and shot the monster. Immediately there was a hissing sound and an awful smell. 'It is dying!'. 'You have wounded it!' they cried. When they attacked it with their weapons, they found that it was only skin. To make sure it was dead, they tied it to a horse and dragged it about a mile or two and then cut it up, and that was the end of the first hydrogen balloon. (Laughter and loud applause).

#### The Dirigible Balloon.

We all knew that, from that time and for many years, the hopes of mankind in relation to aerial locomotion were based on the balloon, and the earlier experiments of the

-8-

men who had tried to imitate the bird were neglected and many of them forgotten. We are to-day performing experiments that were made before the introduction of the balloon. For a hundred years the balloon led men away from what I believe to be the proper line of investigation. It is only within recent years that the balloon, which is necessarily lighter than air, and therefore necessarily at the mercy of the air, was made dirigible. We have dirigible balloons, they have their great function, carrying heavy weights into the air. The balloon of Zeppelin carried up something like twenty men the other day and could make a speed of over thirty miles an hour and go a mile high.

Important to Empire.

Dirigible balloons have features that should make us pause. It is a thought, it seems to me, for the British Nation, supreme upon the waters, to consider that a balloon such as that of Zeppelin could float over London and all the British fleet could not prevent it. Of course, we do not know what Great Britain is doing. But the success of such machines as that means more to Great Britain than to any other power, because when these machines are used for purposes of war sea power becomes secondary to air power. The Nation that controls the air will be the foremost nation of the world; so, the success of the dirigible balloon, even though to my belief, it is on a wrong basis, being lighter than air, is of the greatest importance to mankind. (Applause).



The Aerodrome.

Now, I wish to say a word with regard to the modern machines that we call aerodromes. People generally speak of these as aeroplanes. But they are not aeroplanes, for they have not a flat surface. Our aerodromes in Canada are curved in a particular way, and there is not an aeroplane in the whole machine. So, I hold the word "aeroplane" to be a misnomer as applied to these machines. I prefer the name suggested by Prof. Langley, the Secretary of the Smithsonian Institute, 'aerodrome'. It comes from a well known Greek word which can be found in any dictionary of that language, and which covers the idea of traversing the air. An aerodrome is a machine that traverses the air and is much better than an aeroplane. The first machine of this kind originated in England. It was invented by Henson in 1842. Although the British do not seem to be very much ahead at the present moment on this subject, it is very curious, if you look back, to see how ideas have originated in that country. The first British machine of this kind was to be driven by propellers, after the manner of the machine used by the Wright Brothers. If you look at pictures of the machine they then had, you will see that if they could have made an engine light enough for it the machine would have flown. This is undoubtedly the machine that has developed into the modern machine. The work of Maxim has developed great principles, though his machine never flew, from inherent instability. It showed how inventions should proceed. The machine was lifted from the

rails by its own motive power, in fact it tore the rails up. In America, Langley was one of the first to lift up the whole subject of aerodromics to the scientific plane. Before that time, and even later, when people spoke of machines heavier than air, they were liable to hear quoted the words about Darius Green and his flying machine, and it was quoted so often to Langley, whose machine was never tried, that he died of a broken heart over newspaper censure.

#### Langley's Experiments.

I must not keep you too long with these preliminaries but must tell you what you are interested in as Canadians, and that is the new organization which has come into the work, second only in importance to the improved aerodromes, and that is the new agency of <sup>a</sup> co-operative scientific association, not for gain but for the love of the art and doing what we can to help one another. As it sprung into being in my Laboratory, it may be well for me to say a few words about it. I was always interested in flying machines. I was one of the spectators of Langley's aerodrome with a fifteen foot spread of wings. This, I think, was in 1896, and the sight was presented to us then of a steam engine, flying in the air with wings like a bird. I saw it fly, photographed it in the air, and the photographs are the only record of that magnificent flight of a mile with no man aboard. Any one who saw it, as I saw it, must have felt that the age of the flying machine was at hand. At the expense of the American War Department, Prof.

Langley tried to build a machine of the same type, but of a size to carry a man. I think that the War Department contributed \$50,000.00.

The machine never got a fair test because of accidents in the launching ways, due to the ways and not the machine.

Of course, it was no mere a failure of flight than to have a ship caught in the ways in launching would be proof that she would not float. But the result was proof enough for the disgruntled newspaper men that she would not fly, and the result of this disagreement with the newspaper men was that Langley could not get more money to repair the machine. And it broke his heart. Not long afterwards he had a stroke of paralysis which his friends knew little about, and the second stroke carried him off. He was a man of very sensitive feelings, and I believe that the unjust criticisms of the newspapers contributed to his death. Before he died, by the aid of private funds he had the machine put into condition, and it now hangs, in its original form, in the National Museum. I speak of Langley because he was our modern pioneer, and he was the scientific man who lifted the art to the plane of scientific investigation. I was closely associated with him. He was Secretary of the Smithsonian Institution, and I was a Regent, so we knew one another intimately. I knew of his work and he of mine. After his death, I pushed my work in the same line more prominently forward. Up to that time I had only played with the subject.

The Experiments at Baddeck.

I had been interested in kite-flying, not the kites that little boys fly with strings, but big structures that would lift a man into the air. I was interested in this because of its bearing on the subject of aeronautics. I wished to carry up a man in the air, then add a propeller and see what it would do. My kite differed from other kites in one important respect. Other kites, in a gust of wind, will dance about, but my kites for some reason are perfectly stable in the air, even under circumstances of gusty wind. In aerial machines what we want above all things is automatic stability, and this quality is possessed by these tetrahedral kites. I wanted to see what could be done with an engine to propel one of these with a man aboard. The first thing was to put up a man. I found I had not the necessary technical knowledge. I did not feel confidence in putting up a man in one of these structures without an opinion from some competent engineer. So, I associated myself with two young Canadian engineers, just graduated from Toronto University, to give me the necessary technical knowledge. One of these young men, Douglas McCurdy of Baddeck, is a son of A.W. McCurdy now of British Columbia, and a grandson of Hon. David McCurdy, formerly a legislative Councillor of Nova Scotia. He is a young engineer, full of enthusiasm, brave and fearless. He is the one who has been making the recent flights. He came to me as Assistant Engineer to help me to design the engineering

structure. The other is a young man of pre-eminent ability, Mr. F.W. Baldwin. His father is not living, but he is a grandson of Hon. Robert Baldwin, one of the founders of your country. (Applause). And, if Robert Baldwin were living to-day, I do not think he would be at all ashamed of his descendant. F.W. Baldwin is a young man of 29, one who will be a great acquisition wherever he goes. These men afforded the necessary engineering ability to decide whether my structures were built on sound engineering lines. But there was another thing to be done. We did not know about motors, so we tried to find the best man to help us in that respect. So, I brought to Baddeck a man who, though only 28 years of age, had made a name for himself, Mr. Glen H. Curtiss, of Hammondsport, New York. He had opened a little motor shop in Hammondsport, and had built up a business for himself which was perfectly astonishing. He is now recognized all over America as our foremost motor expert. He came to Baddeck to help in putting in our engine, and we got another helper whose coming pleased me very greatly. This was a young Officer of the United States Army. I must confess, with all my kindly feelings for Canada, I was a little concerned at the point that all the people associated with me in Baddeck and the workmen in my Laboratory, except Mr. Curtiss, were Canadians. Here was one who belonged to my adopted country, the United States. Therefore I welcomed him all the more. This was the late Lieut. Thomas Selfridge, of the United States War Department. He had made a specialty of flying machines. He was bright

enough to know that the time was coming when the United States Army would need such things, and he knew that, when that time came, he a young Officer that knew about them would be of great benefit to his country. So he began to make himself an expert, and wanted to see what we were doing at Baddeck, in the interest of the United States War Department. I said, 'Come along, we want the War Department of the United States to know what we are doing, so that, if there is any benefit, the United States may share in it as well as Canada'. So Lieut. Selfridge was sent by the War Department of the United States to come up and observe our experiments. So, here we were, living in my house myself, an elderly man, surrounded by brilliant young men each an expert in his own line. We became very friendly. My wife became very much attached to them all. Besides the property my wife has coming from my invention, she had a property that I have nothing to do with, a little corner lot that has been going up in value, she said: 'Why don't you make an Association. I will put up this lot of land that my husband has nothing to do with as the fund to support the Association. So, this Aerial Experiment Association came into existence with these members, myself, Mr. McCurdy, Mr. Baldwin, Mr. Curtiss, and Lieut. Selfridge, and with the working capital contributed simply for the love of it, without any intention of making anything out of it, which working capital amounted to \$35,000.00. With the providing of that I had nothing to do, I come in as one of these young men on equal terms. We had similar ideas; they

wanted to help me and I wanted to help them. I wanted to give them a start in life and develop their individuality. So, we agreed that we would work together purely in the interest of the art. As Lieut. Selfridge said: 'All we want is to get into the air'. All our machines are joint productions, but each one has a machine built on plans approved by him. As I have said we have five finished. We call them 'dromes', we have got past calling them 'aerodromes'. In fact, we speak of 'droming' from place to place. I do not know whether the word will take or not.

#### Canada's Opportunity.

Now I do not know how long one is expected to speak before the Canadian Club (Cries of "Go on, go on") I will hand around some photographs I have of the aerial experiment navigation. Now, our funds are out and this Association dissolves by time limitation on the 31st of this month. We have gone a little beyond the experimental stage having built four dromes that have flown and a fifth that is fluttering its wings, while we have a sixth that is not completed. Some <sup>of our</sup> fledglings having proved their ability to and look out for themselves. Personally fly, we are going to let them fly. I do not care about commercial matters. I will go on with my experiments in tetrahedral structures. Mr. Curtiss intends to carry on the manufacture of aerodromes in Hammondsport, N.Y. Mr. McCurdy and Mr. Baldwin are a little different. They say they are Canadians, and they want to go into the practical manufacture of these machines. But they say: 'Cannot

we do anything for the Canadian Government? I told them I did not know, but I would be glad to help. I said: 'I am going up to Ottawa to talk to the Canadian Club, and I believe it probable that I shall have a seat at the same table with His Excellency and Mr. Fielding and other members of the Cabinet; perhaps something will turn up, we can't tell' (Laughter and applause). I said to these young men: 'I don't care to go into this thing, but what do you want? There answer was, 'We are Canadians; if we can do anything for the Canadian Government we want to do it; if not, we want to do it for the British Government; or if not that, then we want to go in for ourselves and treat with any other Government, because Governments must afford the market for these machines'. And now I have come here. I have talked to Mr. Fielding, and have put a few ideas into His Excellency's mind; and something may come of it. Though I cannot claim to be a Canadian, except that I do have a warm spot in my heart for Canada, I do want Canada to have the benefit of these Canadian boys. (Applause). I want to have the British Government have the benefit of them; and I would like to see some plan develop to that end. I do not know what that plan shall be; it is in the air. When our Association dissolves on March 31st, I want to say to these young men, 'Go ahead on this work for Canada' or else, go ahead for yourselves'.

Now, I have exceeded my reasonable time, so I will sit down leaving these photographs to be handed around showing the machines that we have constructed'. (Loud and prolonged applause).



The Governor General.

His Excellency Earl Grey was called on by President Edwards. "In my capacity as representative of the crown," said His Excellency, "I desire to welcome Dr. Graham Bell among us this afternoon. I may tell Dr. Graham Bell that, thanks to the efforts of the newspaper men, who are determined from the standpoint of Canada to compensate for the injury done in the case of Mr. Langley, every part of the British Empire is watching with interest and hope the experiments in Baddeck Bay. We are all growing conscious of the fact that that Nation which has the best airships, the best 'drones' will obtain that supremacy in the air which the British Empire to-day possesses, and, will I hope for all time, possess upon the seas. (Applause). The question is, who is to have the credit, the honor and the glory to give to the British Empire that machine? Listening to the speech of Dr. Graham Bell this afternoon, I think there is but one hope that animates us in this matter, and that is that Canada will be that country. (Renewed and long continued applause). We have heard that Canada can boast of the honor of having invented the principle of the telephone. Canada can boast of the honor of having been the first country to apply that principle. We also know that it is owing to the liberality of the Canadian Government that Mr. Marconi was enabled to continue the experiments as a result of which he has given to the world the advantage of the wireless system of telegraphy. I believe that every single person

whose life was saved upon that sinking ship a few days ago owes the enjoyment of his life to the liberality of the Canadian Government. It only remains for Canada, which gave to the world the telephone and wireless telegraphy, to complete her services to the British Empire, and to civilization by giving to the world the best aerodrome, the possession of which will make the nation that is fortunate enough to own it, to quote Dr. Graham Bell, "the foremost Nation of the world". (Loud and prolonged applause).

Minister of Finance .

Hon. W.S. Fielding, Minister of Finance, referred to his personal acquaintance with Prof. Bell, who has a summer home in Nova Scotia.

"The gentleman of whom he spoke to us, Mr. Douglas McCurdy" said Mr. Fielding, "is a grandson of a man with whom I was associated for many years in the public life of my province and three generations of whose family I have known intimately. I am glad to know that this young man is going to make his mark in the world of science. What we can do for these young men is the question. I had the pleasure of calling the attention of His Excellency to the achievements of Mr. McCurdy and Mr. Baldwin, and he took a kind interest in the matter and reported to the Imperial authorities their experiments with airships with a view to call in the attention of the Imperial War Department to them. Our War Department though some say is very costly, has not yet indulged in the luxury of an airship. I do not know what

may happen. Of course we have made our pious resolves against expenditure, but after the address that we have heard to-day I fear that Sir Frederick Borden will have dangerous intentions upon the Finance Department. Other Ministers can sometimes speak rashly with regard to expenditures, the Minister of Finance always speaks under reserve. But I think that the presence of this great gathering, and I wish to say to Dr. Graham Bell that this is one of the greatest gatherings held by the Canadian Club of Ottawa, and in that respect he is honored as he deserves to be, is an indication that there will be new and increasing interest in this work. And if it is found possible for the Government of Canada to do something to help on this movement something to recognize the work of these two devoted young Canadians and keep their names and fame and services for the Empire no one will be more pleased than myself."

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APPENDIX A.

Secretary's Minutes of the Formal Meetings of the Aerial Experiment Association held from the date of its organization Oct. 1, 1907, to the date of its dissolution March 31, 1909.....1-36

1st Meeting	Oct 1	1907	at Halifax, N.S.....	1-5
2nd Meeting	Oct 2	1907	at Beinn Bhreagh C.B....	5-7
3rd Meeting	Oct 3	1907	at Beinn Bhreagh C.B....	8-11
4th Meeting	Oct 13	1907	at Beinn Bhreagh C.B....	11-11
5th Meeting	Nov 1	1907	at Beinn Bhreagh C.B....	11-12
6th Meeting	Nov 15	1907	at Beinn Bhreagh C.B....	12-12
7th Meeting	Dec 7	1907	at Beinn Bhreagh C.B....	13-13
8th Meeting	Dec 23	1907	at Hammondsport, N.Y....	13-14
9th Meeting	Mar 26	1908	at Hammondsport, N.Y....	14-16
10th Meeting	Apr 7	1908	at Hammondsport, N.Y....	16-17
11th Meeting	May 4	1908	at Hammondsport, N.Y....	18-19
12th Meeting	May 8	1908	at Hammondsport, N.Y....	19-20
13th Meeting	May 17	1908	at Hammondsport, N.Y....	20-21
14th Meeting	May 20	1908	at Hammondsport, N.Y....	21-22
15th Meeting	Jul 6	1908	at Hammondsport, N.Y....	22-23
16th Meeting	Jul 10	1908	at Hammondsport, N.Y....	23-24
17th Meeting	Sep 21	1908	at Washington, D.C.....	24-25
18th Meeting	Sep 26	1908	at Washington, D.C.....	26-29
19th Meeting	Jan 29	1909	at Beinn Bhreagh C.B....	29-29
20th Meeting	Feb 17	1909	at Beinn Bhreagh C.B....	29-32
21st Meeting	Mar 31	1909	at Beinn Bhreagh C.B....	32-36

MINUTES OF THE MEETINGS OF THE AERIAL EXPERIMENT ASSOCIATION.

1907, October 1, Tuesday:- Messrs. Alexander Graham Bell, G. H. Curtiss, F.W. Baldwin, J.A.D. McCurdy, and T. Selfridge, 1st Lieut. U.S.F.A., met together in the Halifax Hotel, Halifax, N.S. at 11.00 A.M. Tuesday, Oct. 1, 1907. They were presented with the following article of agreement, which they had signed the previous day before a Notary Public whose signature was duly authenticated by the American Consul General at Halifax, by Dr. Bell.

Agreement to Organize the Aerial Experiment Association.

WHEREAS, the undersigned Alexander Graham Bell of Washington, D.C., U.S.A., has for many years past been carrying on experiments relating to aerial locomotion at his summer laboratory at Beinn Bhreagh, near Baddeck, N.S., Canada, and has reached the stage where he believes that a practical aerodrome can be built on the tetrahedral principle driven by an engine and carrying a man, and has felt the advisability of securing expert assistance in pursuing the experiments to their logical conclusions, and has called to his aid Mr. G.H. Curtiss of Hammondsport, New York, an expert in motor construction, Mr. F.W. Baldwin, and Mr. J.A.D. McCurdy, of Toronto, Engineers, and Lieut. T. Selfridge, 5th Field Artillery, U.S.A., military expert in aerodromics, and

WHEREAS, the above named gentlemen have all of them given considerable attention to the subject of aerial locomotion, and have independent ideas of their own which they

desire to develop experimentally, and

WHEREAS, it has been thought advisable that the undersigned should work together as an Association in which all shall have equal interest, the above named gentlemen giving the benefit of their assistance in carrying out the ideas of the said Alexander Graham Bell, the said Alexander Graham Bell giving his assistance to these gentlemen in carrying out their own independent ideas relating to aerial locomotion, and all working together individually and conjointly in pursuance of their common aim "to get into the air" by the construction of a practical aerodrome driven by its own motive power and carrying a man;

NOW THEREFORE, we, the undersigned Alexander Graham Bell, G.H. Curtiss, F.W. Baldwin, J.A.D. McCurdy, and T. Selfridge do hereby agree to associate ourselves together under the name of the "Aerial Experiment Association", for the purpose of carrying on experiments relating to aerial locomotion with the special object of constructing a successful aerodrome.

We agree that the "Aerial Experiment Association" shall be organized on the first day of October, 1907, and shall exist for the term of one year from that date of organization unless otherwise determined by the unanimous vote of the members.

We agree that the inventions relating to aerial locomotion made by the members of the Association during the lifetime of the Association shall belong to the Association; and that any applications for letters patent for such invent-

ions shall be made in the names of all the members as joint inventors.

We agree that inventions relating to aerial locomotion made by the members of the Association before the organization of the Association shall belong to the inventors and not to the Association unless specially assigned; and that only such prior inventions shall be claimed by individual members as shall be substantiated by the production of written memoranda, drawings, photographs, or models existent before the date of the organization, so that the proofs of prior invention shall not rest on recollection alone, or upon verbal statements unsupported by documentary or tangible evidence of earlier date than the organization of the Association.

The said Alexander Graham Bell agrees to place his Laboratory at Beinn Bhreagh, near Baddeck, Nova Scotia, at the disposal of the Association for the purpose of carrying on experiments relating to aerial locomotion, together with all the buildings, tools, materials and appurtenances belonging to the Laboratory, without charge, so long as the Association desires to carry on experiments at Beinn Bhreagh, provided that the running expenses of the Laboratory, including the salaries of the Superintendent and men employed shall be paid by the Association during their use of said Laboratory, the number of men employed other than the Superintendent to be at the discretion of the Association, and that any new material or apparatus not in the Laboratory at the date of the organization which may be desired for the

use of the Association shall be acquired at the expense of the Association.

We, the undersigned agree to appoint one of our number as Director of Experiments to be our medium of communication with the Laboratory.

We agree that the Laboratory workmen shall receive their instructions from the Superintendent of the Laboratory alone, that the Superintendent of the Laboratory shall receive his instructions from the Director of Experiments alone, and that the Director of Experiments shall receive his instructions by vote of the Association of which he is a member.

We agree that the Headquarters of the "Aerial Experiment Association" shall be at Beinn Bhreagh, near Baddeck, Nova Scotia, and that, on or before the first of Jan. 1908, the Headquarters of the Association shall be removed to some place yet to be determined within the limits of the United States.

This agreement can only be modified by unanimous vote of the undersigned.

Witness our hands and seals at Halifax, N.S. this thirtieth day of September, A.D., 1907.

(Signed)  
Wm. L. Payzant  
Notary Public  
Nova Scotia

(Signed) Alexander Graham Bell

(Signed) G.H. Curtiss

(Signed) F.W. Baldwin.

(Signed) J.A. Douglas McCurdy

(Signed) T. Selfridge, 1st U.S.P.A.

Authenticated by David F. Wilder, Consul General of the United States, Sept. 30, 1907.



Dr. Bell proposed that the above agreement be accepted and that they proceed with the organization. This was unanimously agreed to.

The election of Officers was then in order. It was moved and seconded that Alexander Graham Bell be elected Chairman of the Association. Motion carried unanimously.

In like manner T. Selfridge was elected Secretary and J.A.D. McCurdy Treasurer.

The Association then appointed G.H. Curtiss, Chief Executive and Director of Experiments, and F.W. Baldwin, Chief Engineer.

The duties of the Secretary were further extended to include those of Recorder of Experiments and Librarian; and those of the Treasurer to Photographic Recorder of Experiments, and Asst. Engineer.

The Association adjourned to meet at the call of the Chairman at Beinn Bhreagh, N.S. (Signed) T. Selfridge, Secretary.

1907, October 2, Wednesday:- The Association met in accordance with the previous adjournment at 8.30 P.M., Wednesday, Oct. 2, 1907.

Present:- All the members.

The minutes of the previous meeting were read by the Secretary. It was moved and seconded that the minutes be accepted. Motion adopted.

The Association then proceeded to the discussion of ways and means. The Secretary read the following note from Mrs. A. Graham Bell.

Beinn Bhreagh, near Baddeck,  
Oct. 2, 1907.

To the Members of the  
Aerial Experiment Association.

Gentlemen:- I am very happy to hear of the organization of  
the Association upon the success of which my heart is set.

I shall be glad to advance it funds from time to time  
as may be requested by the proper officers for the purpose  
of enabling the Association to carry on experiments relating  
to aerial locomotion, providing the total amount advanced  
does not exceed, in the aggregate the sum of twenty-thousand  
dollars (\$20,000.00)

Yours sincerely,

(Signed) Mabel G. Bell.

It was moved and seconded that Mrs. Bell's offer  
as embodied in the above note be accepted. Motion unani-  
mously carried.

Moved and seconded that the Secretary be instructed  
to thank Mrs. Bell for her offer. Motion unanimously carried.

Moved and seconded that Mrs. Bell be given a 1% in-  
terest (one per cent) in all proceeds resulting from the  
work of the Association for every \$1000 she contributes.  
Motion unanimously adopted.

Moved and seconded that no further contributions be  
accepted, or funds raised, without first applying to Mrs.  
Bell or members of the Association. Motion unanimously adopted.

Moved and seconded that Dr. Bell's offer of the use  
of his Laboratory set forth in the agreement appearing in  
the minutes of the previous meeting be accepted. Motion  
unanimously adopted.

Moved and seconded that the Secretary be instructed to thank Dr. Bell for his offer. Motion unanimously adopted.

Moved and seconded, that, as funds are desired, the Secretary be instructed by note to notify Mrs. Bell, and request her to send cheque of amount to Treasurer. Motion unanimously adopted.

Moved and seconded that all funds of the Association be deposited to its credit by the Treasurer in such bank as the Association may elect. Motion unanimously adopted.

Moved and seconded that all expenses of Association be met by cheque by the Treasurer. Motion unanimously adopted.

Moved and seconded that the Association shall select some person, not a member of the Association, to periodically audit the Treasurer's accounts. Motion unanimously adopted.

Moved and seconded that the Treasurer shall be required to give a bond. Motion unanimously adopted.

Moved and seconded that all the Treasurer's cheques on the Beinn Bhreagh Laboratory account shall bear the endorsement of the Director of Experiments. Motion unanimously adopted.

Moved and seconded that Association adjourn to meet at the call of the Chairman. Adopted. Association adjourned at 11.45 P.M. (Signed) T. Selfridge Secretary.

1907, October 3, Friday:- The Association met in accordance with the previous adjournment at 10.00 P.M.

Present: All the members.

The minutes of the previous meeting read by the Secretary. Moved and seconded that the minutes of the previous meeting be adopted. Motion carried.

The following suggestions as to salaries were read by the Chairman.

That Mr. Curtiss, as Chief Executive, and Director of Experiments in special charge of motive power, receive \$5000.00 per annum.

That Mr. Baldwin as Engineer in Chief in special charge of construction receive \$1000.00 per annum.

That Mr. McCurdy as Treasurer and Asst. Engineer in special charge of Photographic Records receive \$1000.00 per annum.

That Mr. Selfridge, in accordance with his own suggestion, as he has been detailed here as an observer by the United States Government, on full pay, receive no salary.

That Dr. Bell should also serve without compensation, as he does not wish to measure the value of his services by receiving a salary.

Mr. Curtiss then submitted the following statement to be read by the Secretary, embodying his views on the matter.

**\*To the Aerial Experiment Association\*:-**

Having been honored by the appointment of Director of Experiments, I wish to make the following statement.

In the first place I must say that I am thoroughly in

accord with the plan, and feel honored to have an opportunity to associate myself with Dr. Bell, and the men who constitute the Association; and also express my admiration for Mrs. Bell, who conceived the idea and made the Association possible. I am sure it will be a success and trust its achievements will fully repay Mrs. Bell for her efforts.

When Mrs. Bell first made known her proposition I was not in a position to devote much time to the scheme, owing to my rather rapidly growing business, which I felt would not be made to pay without my personal and constant attention. In talking over my plans with Messrs. Bell, Baldwin, McCurdy and Selfridge, I stated that I believed arrangements could be made whereby I could give a large part of my time to the undertaking. A plan was formed in which I could give an active part and receive a salary of \$5000.00 per year. With this in view I carried on negotiations to transfer my business to a new company which, however, necessitated my giving up a large part of my interest in business, but, enabled me to absent myself much of the time by turning over the brunt of my work to others.

As to the Association, my plan is to devote my self entirely to its interest, with the exception of the time required to handle important matters of my company. I shall be at the "scene of action" as much as possible, but when not, I shall be constantly working to further the interests of the organization.

Aside from the actual necessity of my continued identity with the Curtiss Company, I think it quite desirable

that the "Aerial Experiment Association" be in touch with such a company backed by prominent men with plenty of capital which could take hold of the commercial end of the Association's achievements.

However, if thought advisable as a further incentive for me to give a large part of my time entirely to the Association, I would propose that instead of being paid a fixed salary of \$5000.00 a year, I receive only half pay while not actually at the scene of operations or headquarters of the Association.

Mr. Baldwin then stated that he was willing to devote his whole time to the interests of the Association, and that \$1000.00 per annum was satisfactory to him.

Mr. McCurdy was also willing to give all his energies to the Association, the sum of \$1000.00 therefore being agreeable to him.

Mr. Selfridge then moved that the following salaries be paid by the Association to its members: Mr. Curtiss \$5000.00 per annum, receiving half pay when not actually at the scene of operations or headquarters of the Association.

Mr. Baldwin \$1000.00 per annum, and Mr. McCurdy \$1000.00 per annum. The motion was seconded and adopted.

Moved and seconded that during the absence of any of its members, the Association may appoint a temporary substitute. Motion carried.

Moved and seconded that the Association adjourn to meet at the call of the Chairman. Carried. Association

adjourned at 11.05 P.M. (Signed) T. Selfridge, Secretary.

1907, October 13, Monday:- The Association met in accordance with the previous adjournment at 10.00 P.M.

Present:- A.G. Bell, McCurdy, Baldwin, Selfridge.

Absent:- G.H. Curtiss.

The Secretary read the minutes of the previous meeting. Moved and seconded the minutes of the previous meeting be accepted. Carried.

Moved and seconded that Mrs. Bell be notified of manner in which she was to be reimbursed for her contributions. Carried.

Moved and seconded that Mr. Baldwin act as Director of Experiments during the absence of Curtiss. Carried.

Moved and seconded that Mrs. Bell be requested to advance \$2000.00 to the Association. Carried.

Moved and seconded that the Treasurer open an account in the Baddeck Branch of the Union Bank of Halifax in the name of the Aerial Experiment Association. Carried.

Moved and seconded that the members of the Association come together each day at the headquarters of the Association for the purpose of discussion. Carried.

Moved and seconded that the Association adjourn to meet at the call of the Chairman. Carried.

The Association adjourned at 12.00 midnight. (Signed) T. Selfridge, Secretary.

1907, November 1st, Friday:- The Association met in accordance with the previous adjournment at 10.00 P.M.

Present:- A.G. Bell, F.W. Baldwin, J.A.D. McCurdy,  
and T. Selfridge.

Absent:- G.H. Curtiss.

The minutes of the previous meeting were read by  
the Secretary. Moved and seconded that the minutes of the  
previous meeting be adopted. Carried.

The Treasurer stated that he had deposited the  
\$2000.00 contributed by Mrs. Bell in the Baddeck Branch of  
the Union Bank of Halifax to the account of the Aerial Ex-  
periment Association.

There was a general discussion of the future plans  
of the Association.

Moved and seconded that the meeting adjourn to meet  
at the call of the Chairman. Adopted. The Association ad-  
journed at 11.20 P.M. (Signed) T. Selfridge, Secretary.

1907, November 15, Friday:- The Association met in accord-  
ance with the preceding adjournment at 4.00 P.M.

Present:- A.G. Bell, J.A.D. McCurdy, T. Selfridge.

Absent:- G.H. Curtiss and F.W. Baldwin.

The reading of previous minutes omitted.

Moved and seconded that the Treasurer in his capacity  
as Photographic Recorder of experiments be allowed a suf-  
ficient sum to permit his hiring an asst. Carried.

The Secretary was directed to draw up a motion to  
the effect that a gliding machine be constructed; this matter  
having been discussed at the meeting. The Association ad-  
journed to meet at the call of the Chairman at 5.30 P.M.  
(Signed) T. Selfridge, Secretary.



1907, December 7, at House:— The Association met in accordance with the preceding adjournment at 3.00 P.M.

Present:— A.G. Bell, J.A.D. McCurdy, F.W. Baldwin, T. Selfridge.

Absent:— G.H. Curtiss.

Moved and seconded that the minutes of previous meeting as read by Secretary be accepted. Carried.

The following resolution was presented and adopted.

Whereas, for the purpose of training the members of the Association as aviators, that they may be in position to successfully handle the flying machine the Association is to construct, Lieut. Selfridge is anxious to make experiments with a gliding machine modelled after the machines that have been successfully used in America and France, both as gliding machines and flying machines propelled by their own power.

Resolved, that the Association aid him in constructing and making such a machine in accordance with his plans.

Moved and seconded that the gliding machine mentioned in the preceding resolution be constructed at Hammondsport under the direction of Mr. Curtiss. Adopted.

Moved and seconded that the meeting adjourn. Adopted.

The meeting adjourned to meet at the call of the Chairman at 4.00 P.M. (Signed) T. Selfridge, Secretary.

1907, December 23, Monday:— The Association met in accordance with the preceding adjournment at 4.00 P.M.

Present: All the members.

Moved and seconded that the minutes of the previous  
\* Probably Dec. 24, Tuesday. J.A.D. McC. Sec.

meeting, as read by the Secretary be adopted. Carried.

Moved and seconded that the headquarters of the Association be transferred for the present to Hammondsport, New York. Adopted.

General discussion as to plans followed.

Moved and seconded that the meeting adjourn to meet at the call of the President. Adjourned 4.45 P.M. (Signed) T. Selfridge, Secretary.

1908, March 26, Thursday:- The Association in accordance with the previous adjournment met at 9.45 P.M.

Present:- Curtiss, Baldwin, McCurdy, and Selfridge.

Absent: A.G. Bell.

Mr. Curtiss acted as Chairman. The Secretary read the minutes of the previous meeting.

Moved and seconded that the minutes be accepted. Carried.

Moved and seconded that the Secretary put in a requisition to Mrs. Bell, to be paid as soon after April 15th as convenient, for \$3000.00 to consist of the following items.

Mr. Curtiss' Salary.....	\$1500.00
Expenses incurred in shop...	400.00
" " by Secretary.....	300.00
Current expenses.....	800.00
	<u>\$3000.00</u>

Carried.

Moved and seconded inasmuch as Aerodrome No.1 called the "Red Wing" had been so badly damaged during a trial on March 17th as to be beyond repair and as it had given promise of being able to accomplish far more than has yet been obtained from this type, that another aerodrome, to be known as

aerodrome No. 2, be constructed under Mr. Baldwin's supervision, with the aid of the other members of the Association along much the same lines as aerodrome No. 1, with certain departures suggested by the trials with aerodrome No. 1. Carried.

The Secretary then read the following letter and submitted the matter to the Association for instructions.

Glen Ridge, N.J.  
March 21, 1908.

Lieut. Selfridge, U.S.A.,  
Hammondsport, N.Y.

Dear Sir:- My cousin Lieut. Lahm has already spoken to you of my desire to be of assistance to you this summer. I thought I would write to you also to make sure of my being remembered. I am very much interested in the kind of work you are doing and should be pleased to be connected with it in any way. I shall finish the Sophomore year at Stevens about the tenth of June when I shall be free till the latter part of September.

Hoping you will consider the matter favorably, I  
and truly yours,  
(Signed) Ralph H. Upson.

Moved and seconded, that inasmuch as the Association was made up of men capable of handling the different phases of the problems it expected to <sup>have to</sup> solve, it was not deemed essential or advisable to enlist the services of outside talent. Mr. Upson be notified to that effect by the Secretary, but also that the Association would have no objection to his following their experiments during the next summer.

should be care to do so. Carried.

Moved and seconded that the meeting adjourn to meet at the call of the Chairman. Carried.

Adjourned at 10.30 P.M. (Signed) T. Selfridge, Secretary.

1908, April 7, Tuesday:- The Association met in accordance with the previous adjournment at 3.07 P.M.

Present: All the members.

The Secretary read the minutes of the previous meeting.

Moved and seconded that the minutes of the previous meeting be adopted. Carried.

Moved and seconded that the Association build a catamaran to continue experiments with at Baddeck. Carried.

Moved and seconded that the Engineer draw plans of a catamaran and set work going on matter. Carried.

Mr. Williams and Mr. Bedwin were called in and consulted as to best form of hull to be used.

The Treasurer read the following statement:-

Total receipts to Mar. 31.....	\$5000.00
Total expenditures.....	4955.54
Bills payable.....	<u>3374.51</u>
Total.....	\$8330.05
Deficit.....	\$3330.05

The reports of the Treasurer submitted on Jan. 17th and April 7th are appended hereto for reference.

Moved and seconded that Mr. L.D. Masson audit the reports of the Treasurer up to Mar. 31, 1908.

Whereas it has been found advisable to change the motion for a requisition for \$3000.00 in view of the above statement

submitted by the Treasurer as made at the meeting of March 26, to \$5000.00.

Resolved, that the Secretary make a requisition on Mrs. Bell for \$5000.00 in order that the Association may continue its experiments.

Moved and seconded that the above resolution be adopted. Carried.

Whereas Lieut. Selfridge has given his time and services freely to the Association without salary, and has incurred expenses personally incident to his position as Secretary therefore,

Resolved that the Treasurer be authorized to pay Lieut. Selfridge the sum of \$500.00 to cover the expenses of the Secretary's office for the six months ending Mar. 31, 1908.

Moved and seconded that the above resolution be adopted. Carried.

The Secretary requested that he be instructed as to the manner of answering letters requesting help by outsiders also those containing suggestions regarding the construction of an aeroplane or other flying machine.

Moved and seconded that the Secretary inform persons who are kind enough to offer information that the Association will be very glad to receive information so long as it is not of a confidential character. Carried.

Moved and seconded that the Association adjourn to meet at the call of the Chairman. Carried. Meeting adjourned at 4.00 P.M. (Signed) T. Selfridge Secretary.

1908, May 4, Monday:- The Association met in accordance with the previous adjournment at 3.30 P.M.

Present:- All the members.

The Secretary read the minutes of the previous meeting.

Moved and seconded that the minutes of the previous meeting be adopted. Carried.

The Treasurer reported that \$5000.00 had been received in response to a requisition for same upon Mrs. Bell.

The following report was submitted by the Treasurer:

Balance in Bank.....	\$ 13.88
Receipts.....	5000.00
Expenditures.....	<u>4065.19</u>
Balance on hand.....	\$ 948.68

Detailed report appended.

The Engineer stated that Aerodrome No.2 was practically completed. The running gear only remaining to be installed.

The Engineer was directed to submit a report on the progress in regard to a catamaran at the following meeting.

Moved and seconded that members submit papers on the following subjects:-

Baldwin on differences between Aerodrome No.1 and Aerodrome No.2. Curtiss on motors. Selfridge on the subject of Aviation. Carried.

Mr. Post, Secretary of the Aero Club of America was present at the meeting. Mr. Post suggested that the Association give an exhibition with aerodrome No.2 in New York or vicinity after the completion of successful trials at Hammondsport. Also requested correspondence with Aero Club

on subject of experiments.

The suggestion was favorably received.

Moved and seconded that the Association adjourn to meet at the call of the Chairman. Carried.

The Association adjourned at 4.30 P.M. (Signed) T. Selfridge, Secretary.

1908, May 8, Friday:- The Association met in accordance with the previous adjournment at 8.10 P.M.

Present: All the members. Also Messrs. Post, Bedwin and Williams.

The Secretary read the minutes of previous meeting.

Moved and seconded that the minutes of previous meeting be adopted. Carried.

The Engineer stated that he considered it advisable to order the parts of the boats for the catamaran from Brookes and Co., Michigan, to be shipped to Baddeck and assembled at Laboratory.

Moved and seconded that the Engineer order the necessary parts of catamaran from Brookes & Co. Michigan, as early as convenient. Carried.

Mr. Baldwin submitted a paper on the "Red and White Wing" accompanied with blue prints of same.

Mr. Curtiss read a paper on motors and the probable lines of future development of his motor.

Mr. Selfridge read a paper on the early history of Aviation.

It was moved and seconded that the above papers be turned over to the Secretary and that he retain them in

order as submitted, the collection to be known as "The Proceedings of the A.E.A". Carried.

Moved and seconded that the following papers be submitted at the next meetings.

Mr. Baldwin to finish the treatment of his subject by the description of the machines in detail, the paper to be accompanied by drawings to be executed by both Baldwin and McCurdy.

That Mr. Curtiss contribute further on his subject of motors.

Selfridge to continue his article and bring it up to date, and Mr. Bell also contribute a paper on a subject to be later determined upon. Carried.

Moved and seconded that the Director of Experiments design and construct an arrangement for accurately measuring the brake horse-power of an engine. Carried.

Moved and seconded that the meeting adjourn to meet at the call of the Chairman. The Association adjourned at 10.00 P.M. (Signed) T. Selfridge, Secretary.

1908, May 17, Sunday:- The Association met in accordance with the preceding adjournment at 9.30 P.M.

Present:- All the members. Also Mr. E.A. Selfridge, Mr. Augustus Post, W.F. Bedwin, J.W. Williams, and Karl Adams.

The Secretary read the minutes of the previous meeting. Moved and seconded that the minutes be adopted. Carried.

The Engineer in Chief, Mr. Baldwin reported that an order had been made on Brookes & Co. Michigan, for the



necessary material to build a catamaran.

The following papers were submitted and read before the meeting:-

Mr. Curtiss on future of motor construction. Mr. Baldwin on construction of "Red and White Wing"

Mr. Selfridge on "Aviation". Mr. McCurdy on tendency of aeroplane to overturn due to torque of propellers. Mr. Bell, atmospheric Pressure, and thoughts concerning light engines.

General discussion, Mr. Selfridge directed to submit a discussion of McCurdy's paper for the next meeting.

Moved and seconded that meeting adjourn to meet at the call of the Chairman. Carried.

Adjourned at 12.00 midnight. (Signed) T. Selfridge, Secretary.

1908, May 20, Wednesday:- The Association met in accordance with the preceding adjournment at 7.00 P.M.

Present:- All the members. Also Mr. Augustus Post, Secretary of Aero Club of America. The Secretary read the minutes of the previous meeting. Moved and seconded the minutes stand adopted. Carried.

Resolved that upon the conclusion of experiments with aerodrome No.2, Baldwin's "White Wing", or not later than July 1, 1908 the headquarters of the Association be removed to Beinn Bhreagh, near Baddeck, N.S. The above resolution was adopted.

Resolved that, whereas we have had with us during experiments with aerodrome No.2, "Baldwin's White Wing"

Mr. Augustus Post of the Aero Club of America the Association tenders him its appreciation for the interest he has shown, and for the stimulus given by his presence here.

Adopted.

Moved and seconded that the meeting adjourn to meet at the call of the Chairman. Carried. Adjourned at 10.30 P.M.

(Signed) T. Selfridge, Secretary.

On June 21st requisition was made and filed for \$1000.00.

1908, July 6, Monday:- The Association met in accordance with the preceding adjournment at 5.07 P.M.

Present:- Curtiss, Baldwin, McCurdy, Selfridge.

Absent:- A.G. Bell.

Mr. Curtiss was temporary Chairman. The reading of the previous minutes omitted. The following telegram was read to the meeting.

Pictou, N.S.  
July 6, 1908.

To the Aerial Experiment  
Association, Hammondsport, N.Y.

If McCurdy wishes to follow on line of "June Bug" I recommend that McCurdy machine be now built at Hammondsport and headquarters be retained there for the present. In meantime don't run any risk of injuring "June Bug" until an application for a patent has been prepared. Would like Baldwin to help me in Baddeck soon as possible and when we are ready for motor would like all to come to Baddeck. If these plans are acceptable would simply let it be known that at my request further trials of "June Bug" will be postponed until another aerodrome has been completed, so that in case of

accident to one machine another will be available for experiments. Would say nothing about patents outside as that would stir up inventors to forestall us in the patent office. Telegraph reply to Baddeck. (Signed) Graham Bell.

McCurdy stated that he wished to start work on his machine at once, and the following resolution was adopted. Resolved that, whereas Mr. Bell has notified the Association that it would be premature for all the members to proceed at once to Baddeck as certain preliminary work must be completed there before they can begin their experiments, the Association retains its headquarters at Hammondsport till such time as it may be notified by Mr. Bell that the work at Beinn Bhreagh is at such a stage as to warrant the discontinuance of experiments here, and that the Association proceed at once with the construction of aerodrome No. 4, which will be used jointly in the experiments with aerodrome No. 3. The Secretary stated that the Association had won the right to have its name the first inscribed on the Scientific American Trophy by the flight made by Mr. Curtiss on July 4th of 5090 feet (Total 1697 yards) in 102 1/2 seconds before the Contest Committee of the Aero Club of America in aerodrome No. 3, Curtiss' "June Bug".

Moved and seconded that the meeting adjourn to meet at the call of the Chairman. Adjourned at 6.15 P.M.

(Signed) T. Selfridge, Secretary.

1908, July 10, Friday:- The Association met at the call of the Chairman pro temp.

Present:- Curtiss, Baldwin, McCurdy, Selfridge.

Absent:- A.G. Bell.

Reading of minutes of previous meeting omitted. The Treasurer notified the Association that he would shortly be in need of funds to the amount of \$4000.00.

Moved and seconded that the Secretary be directed to make a requisition on Mrs. Bell for \$4000.00 for the purpose of carrying on the Aerial Experiments. Carried.

Moved and seconded that the Association adjourn to meet at the call of the Chairman. Carried. Adjourned at 10.30 P.M. (Signed) T. Selfridge, Secretary.

1908, Sept. 21: A meeting was held on Sept. 21, 1908 by order of the Chairman, at 1331 Connecticut Avenue, Washington, D.C. at 10.00 A.M.

Present:- A.G. Bell, G.H. Curtiss, F.W. Baldwin, and J.A.D. McCurdy.

Owing to the death of Lieut. Thomas E. Selfridge, J.A.D. McCurdy was elected Secretary as his successor.

Special business before the meeting was the framing of two resolutions in reference to the unfortunate accident at Fort Meyer which caused the death of our late Secretary. The following resolution was decided upon to convey to the parents of Lieut. Selfridge our sympathy in their great loss:-

Resolved that the Aerial Experiment Association place on record our high appreciation of our late Secretary, Lieut. Thomas E. Selfridge, who met death in his efforts to advance the art of aviation. The Association laments the loss of a

dear friend and valued associate; the United States Army loses a valuable and prominent Army Officer, and the world an ardent student of Aviation, who made himself familiar with the whole progress of the art in the interest of his native country.

Resolved, that a Committee be appointed by the Chairman to prepare a biography of our friend, the late Thomas E. Selfridge for incorporation into the records of the Association.

Resolved, that a copy of these resolutions be transmitted to the parents of Lieut. Thomas Selfridge.

Resolution No. 2 which follows conveys to Mr. Orville Wright the idea that the members of the Association sympathize with him in his grief over the death of Lieut. Selfridge and hope for a speedy recovery from the injuries sustained by his fall.

Resolved, that the members of the A.E.A. herewith extend to Mr. Orville Wright their deepest sympathy for his grief at the death of their associate Lieut. Selfridge. We realize that in this pioneering of the air the unforeseen must occasionally be disastrous. We hope sincerely that Mr. Wright will soon recover from the serious injuries he has sustained and continue in conjunction with his brother Wilbur Wright the splendid demonstration to the world of the great possibilities of aerial flight.

The meeting adjourned at 12 A.M. subject to the call of the Chairman. (Signed) J.A.D. McCurdy, Secretary.

1908, September 26:- A meeting of the Association was held by order of the Chairman at 1331 Connecticut Avenue, Washington, D.C.

Members Present:- A. Graham Bell, G.H. Curtiss, F. W. Baldwin, and J.A.D. McCurdy.

Non-Members Present:- Mr. Edward A. Selfridge, J. S. Selfridge, S.W. Selfridge, Octave Chanute, G.H. Bell, and G.H. Grosvenor.

The Secretary read the minutes of the previous meeting which were approved.

The Chairman reviewed the condition which led to the formation of the Association, its work during the past year, and the probable plans for the Association in the future.

The Chairman also read an extract from a letter to him from Mrs. Bell in which she expressed so beautifully the place our late Secretary held in her heart.

Mr. Bell requested that a copy of this extract be prepared by the Secretary and transmitted to Mrs. Selfridge.

The Chairman went on to say that the Association would come to an end on Sept. 30, 1908 unless as stipulated by our constitution a unanimous vote of the members was obtained which would decide otherwise. He also pointed out that we might have inventions relating to our experiments which of a patentable nature would have some commercial value and if so the interests of the late Lieut. Selfridge would have to be considered in a legal fashion.

Mr. Bell also stated that he had been authorized by Mrs. Bell to say that she would be willing to donate money as wanted by the Association to the limit of \$10,000.00 more to allow the experiments to be carried on for another period of six months. The following resolution was put and unanimously carried.

Resolved, that the legal representative of the heirs of our deceased member Lieut. Thomas E. Selfridge shall have the right to attend any of the meetings of the Association and vote at such meetings in the name and stead of the late Lieut. Thomas E. Selfridge; and that in all matters requiring the unanimous consent of the members that the consent of the said representative of the late Thomas E. Selfridge shall be required.

Resolved, that the Association recognize Mr. Edward A. Selfridge of No. 2615 California Street, San Francisco, California, as the legal representative of the late Thomas E. Selfridge.

In voting upon the resolution which follows an individual vote was taken Mr. Selfridge voting for the late Thomas E. Selfridge.

Resolved, that the Aerial Experiment Association be continued under its present organization for another period of six months ending March 31, 1909. The vote was unanimous.

The Chairman next brought up the matter of the appointment of a Trustee. There was considerable discussion

on this point and finally it was moved by Mr. McCurdy and seconded by Mr. Curtiss that the following resolution be put:-

Resolved, that Mr. Charles J. Bell, President of the American Security and Trust Company be appointed Trustee of the Aerial Experiment Association to receive and distribute the proceeds of the work of the Association in accordance with the article of agreement of organization and of resolutions of the Association.

An individual vote was taken, Mr. E.A. Selfridge voting in the name and stead of Lieut. Thomas E. Selfridge and the resolution was unanimously carried.

The Chairman next referred to an article prepared and written by Lieut. Thomas E. Selfridge for publication in one of the Bulletins of the Association and thought that it would be a good idea to have it published in book form for the information of the general public. Mr. Selfridge agreed to this providing that he could reasonably be assured that the statements made by Lieut. Selfridge in his article were correct, so that there would be no room for criticism which would be unpleasant.

The Secretary suggested that Mr. Chanute be asked to look it over with a view of correcting any statements as to facts, which were perhaps a little wrong. Mr. Chanute kindly consented to do this. It was moved by Mr. Curtiss and seconded by Mr. Baldwin that the headquarters of the Association be returned to Beinn Bhreagh, Nova Scotia, on October 1, 1908. Carried. A motion to adjourn subject to



the call of the Chairman was put and unanimously carried.  
Adjourned at 12.30 P.M. (Signed) J.A.D. McCurdy, Secretary.

1909, January 29, Friday:- A meeting of the Association was held at Beinn Bhreagh by order of the Chairman.

Present:- A.G. Bell, G.H. Curtiss, F.W. Baldwin and J.A.D. McCurdy, members. Non-members Gardiner H. Bell.

The Secretary read the minutes of the previous meeting which were approved. It was moved by Mr. Baldwin and seconded by Mr. Curtiss that Mr. K.J. McKay of Baddeck be asked to act as auditor of the Treasurer's accounts. The Treasurer was instructed to take steps in accordance with the above motion which upon being put to a vote was unanimously carried.

The Chairman then read a paper concerning patent matters from our patent firm, Mauro, Cameron, Lewis & Massie. To this the Chairman had written a reply with which he favored the meeting.

The patent application was carefully gone over with special attention given to the claims.

The meeting adjourned at 11.00 P.M. to meet again subject to the call of the Chairman. (Signed) J.A.D. McCurdy  
Secretary.

1909, February 17, Wednesday:- A meeting of the Association was held at Beinn Bhreagh by order of the Chairman.

Present:- A. Graham Bell, G.H. Curtiss, F.W. Baldwin, J.A.D. McCurdy, members. Non-members, Wm. F. Baldwin and G.H. Bell.

The Secretary read the minutes of the previous meeting

which were approved.

The Chairman read a letter before the meeting which he had forwarded to Mauro, Cameron, Lewis & Massie concerning patent matters. The following resolution was moved by Mr. Curtiss and seconded by Mr. McCurdy and unanimously passed.

Resolved that the letter of Dr. A. Graham Bell to Messrs. Mauro, Cameron, Lewis & Massie dated Feb. 2, 1909, a copy of which is appended be approved.

Copy of Approved Letter.

Beinn Bhreagh,  
Feb. 2, 1909.

Messrs. Mauro, Cameron, Lewis & Massie,  
620 F. Street, N.W., Washington, D.C.

Gentlemen:- Many thanks for your telegram of the 30th ult.

Messrs. McCurdy, Baldwin, and Curtiss are here, and have gone over very carefully with me your specification on the Harmondspert work of the Aerial Experiment Association; and, in accordance with the recommendation contained in your note of Jan. 19 we have taken up the claims seriatim to ascertain who had, and who had not, contributed the subject matter of each claim.

As the results of our investigation we have unanimously come to the following conclusion:-

(1) McCurdy, Baldwin, Curtiss, Selfridge and Bell have each contributed to the subject matter of some of the claims.

(2) Mr. F.W. Baldwin alone has contributed the subject

matter of claims 1,2,3,4,5,6,7,8,9,10,11,13,14 & 16. Under these circumstances we should be glad to have your opinion as to whether it would be better to make this a joint application in the names of all the members of the Aerial Experiment Association, including Lieut. Selfridge; or to make two applications one in the name of Mr. F.W. Baldwin alone and the other a joint application.

We should be much obliged if, in deciding this matter you would consult with Mr. Charles J. Bell, who will act as, Trustee of the Association, and to whom, as such Trustee the patent should be assigned.

Yours sincerely,  
(Signed) Alexander Graham Bell.

The following resolution was moved by Mr. Baldwin and seconded by Mr. Curtiss, and upon being put to a vote was unanimously carried.

Resolved, that the telegram of Dr. A. Graham Bell to Messrs. Mauro, Cameron, Lewis & Massie dated Feb.17, be approved.

COPY of APPROVED TELEGRAM

Beinn Bhreagh,  
Feb.17, 1909.

Messrs. Mauro, Cameron, Lewis & Massie,  
Washington, D.C.

Please go ahead with two applications as suggested.

(Signed) Graham Bell.

A third resolution was proposed by the Chairman seconded by the Secretary and upon being put to vote was unanimously carried.

Resolved that all patents granted to members of the Association or either of them be issued assigned to Mr. Charles J. Bell, Trustee of the Association.

Upon it being moved and seconded the meeting adjourned at 5.00 P.M. subject to the call of the Chair. (Signed) J.A. Douglas McCurdy, Secretary.

1909, March 31, Wednesday:- On March 31st 1909, Wednesday, a meeting of the Association was held at Beinn Bhreagh by order of the Chairman.

Present:- Members, A.W. Bell, F.W. Baldwin, J.A.D. McCurdy. Non-Members, Charles R. Cox, Mabel B. McCurdy, and Mrs. F.W. Baldwin.

The Secretary read the minutes of the previous meeting which were approved. Treasurer then read his financial report showing a credit balance to date of \$151.99. The report was approved by the meeting and accepted. As the amount represented by bills payable amounted to about \$6000.00 the Treasurer was instructed to make a requisition upon Mrs. Bell for the amount of \$4000.00, this cheque to be made payable to Mr. Charles J. Bell, Trustee. This would bring her total contribution up to \$35000.00 Discussion followed concerning the disposition of the tools and apparatus now belonging to the Association. It was finally moved and seconded:-

Resolved that the Association transfer all tools and apparatus now in their possession to Dr. A. Graham Bell, he agreeing to assume the liabilities of the Association for any sum over and above \$35000.00. Adopted,

Considerable time was then spent in drawing up a letter of instructions to our Trustee Mr. Charles Bell. This letter follows:-

Beinn Bhreagh,  
March 31, 1909.

Mr. Charles J. Bell,  
Trustee of Aerial Experiment Association,  
Washington, D.C.

Dear Sir: The Aerial Experiment Association of which you are Trustee expires to-night by time limitation, and all the property inventions and rights belonging to the Association now pass into your hands as Trustee to be disposed of as you think best in the interests of the members of the Association subject to the following conditions which contain the substance of the resolutions and agreement of the Association relating to the matter.

The property of the Association coming into your hands as Trustee to be sold by you as you think best in the interests of the members of the Association and the proceeds to be divided by you equally between Alexander Graham Bell, J.A. Douglas McCurdy, F.W. Baldwin, G.H. Curtiss and the heirs of the late Thomas E. Selfridge after paying over to Mabel G. Bell  $1\%$  of the proceeds for every thousand dollars she has contributed to the funds of the Association. This means that upon disposing of the property of the Association you pay over the proceeds as follows:

35% to Mabel G. Bell  
13% to Alexander Graham Bell  
13% to J.A. Douglas McCurdy  
13% to F.W. Baldwin  
13% to G.H. Curtiss  
13% to Thomas E. Selfridge.

Two applications for United States patents have been prepared upon the Hammondsport work of the Association. One of these which has already been filed in the Patent Office is an application numbered 485,281 in the name of Mr. F.W. Baldwin as inventor which will be issued assigned to you as Trustee of the Aerial Experiment Association. The other which has not yet been filed in the Patent Office as it requires the signature of Mr. E.A. Selfridge administrator of the estate of the late Thomas E. Selfridge is a joint application in the name of Alexander Graham Bell, J.A. Douglas McCurdy, F.W. Baldwin, G.H. Curtiss and Thomas E. Selfridge. This application also if granted will be issued assigned to you as Trustee of the Aerial Experiment Association. The expenses of obtaining these patents have been assumed by me personally until such time as you can dispose of them in the interests of the Association, it being understood that you will transfer these patents to the purchaser of the inventions of the Association upon their refunding to me the amount expended in obtaining the patents. The members of the Association assume that you will dispose of their inventions to some company for stock or cash which will be distributed in the proportion shown above. It has occurred to us that your work as Trustee could be greatly simplified if the members of the Association including the legal representative of the Late Thomas Selfridge should be organized in the form of a joint stock company. Then you could simply transfer all the property of the Association to this company distributing the shares in

the proportion named.

Yours sincerely,  
(Signed) Alexander Graham Bell,  
Chairman of the A.E.A.

P.S. March 31, 1909: The above letter has been formally approved by the Association through the vote of the members here present, namely Mr. Douglas McCurdy, Mr. F.W. Baldwin, and myself.

I will send copies to Mr. Curtiss and Mr. Selfridge so that you may have the formal approval of all the interests involved. I will also communicate with you later submitting suggestions concerning the future of the A.E.A. work which has received the approval of the members here. A.G.B.

As has been stated in the P.S. this letter was unanimously approved by Mr. Bell, Mr. Baldwin and the Secretary.

Mr. Baldwin and Mr. McCurdy submitted the following resolutions which after being put to a vote were carried unanimously.

Whereas, our Chairman Dr. A. Graham Bell realizing the importance of preserving systematic and accurate records of all experiments ideas etc. relating to the work of the A.E.A.,

Resolved that the younger members of the Association express their high appreciation of the results of the labors of Dr. Bell in that an interesting and valuable permanent record is in our possession under the name of the Bulletins of the A.E.A. of which we will always be proud.

Resolved further that the Association as a whole express to Mr. Charles R. Cox, and Miss Mabel Bell McCurdy

its gratitude and thanks for the untiring interest and help they have devoted in the preparation of the Weekly Bulletins.

The Secretary then moved the following resolution which received the ayes of all present,

Whereas the members of the A.E.A. individually and collectively feel that Mrs. A. Graham Bell has by her great personality, loyal support and inspiring ideas contributed very materially to any success the Association may have attained,

Resolved that we place on record our high appreciation of her loving and sympathetic devotion without which the work of the Association would have come to nought,

It was reluctantly moved by Mr. Baldwin and regretfully seconded by the Secretary that we dissolve, so by the stroke of 12.00 (midnight) the A.E.A. as an Association was no more. (Signed) J.A. Douglas McCurdy, Secretary.

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