BULLETINS

Aerial Experiment Association

Bulletin No. XXXV Issued MONDAY, MAR. 8, 19089

MR. MeCURDY'S COPY.

BEINN BHREAGH, NEAR BADDECK, NOVA SCOTIA

BULLETIN STAFF.

ALEXANDER GRAHAM BELL	Editor
GARDINER H. BELL	Assistant Editor
CHARLES R. COX	
MABEL B. McCurdy	

Bulletins of the Aerial Experiment Association.

BULL TIN NO.XXXV ISSUED NONDAY HARCH &, 1909.

Being Bhreagh, Near Baddock, Neva Scotia.

TABLE OF CONTENTS.

- 1. Editorial Notes and Comments:-
- E. Work of the A.E.At-
- . Miscellaneous Co sumications:-

To legrana	from Members and Others
Fob.22,	Bell to Associated Press1-2
Feb.22.	Boll to Halifax Horald1-2
Peb.22	Boll to Baldwin 2-2
Fob.22.	Ball to Fairchild2-2
Feb. 22	Ball to Grosvoner 2-2
Fcb.22.	Fairchild to Bell2-2
Fab. 22	Hallfax Herald to Bell2-2
	Sydney Post to Bell3-3
Fab.23.	Bell to Sydney Post
	London Firms to Bell
Feb.23	Bell to London Times4-4
Fab.23.	Bell to Associated Press5-5
Fab.23.	Bell to Halifax Herald
Feb.23	Roll to Roldwin
Feb.23.	
Fub.23.	Bell to Fairchild6-6
Fob.24.	Bell to Associated Press6-7
Feb. 24.	Bell to London Times6-7
Feb. 24	Bell to Sydney Post
Feb.24.	Cox to Halifax Herald7-7
Fab. 24.	Associated Press to Ball
Feb. 24.	Arthur W. McCurdy to Boll8-8
Feb.24	Bell to Arthur W. McCurdy 0-6
Feb.24.	Bell to Fairchild
Fob.24.	Boll to Greswener
Feb.24.	Bell to Baldwin
Fob.24	Sydney Post to Boll
Fob.24.	Bell to Sydney Post9-9
Feb.24.	Boll to Associated Press
Feb.23,	Mr. and Mrs. Gresvener to Bell10-10
Fab.24,	Baldwin to Bell
Feb.25.	Halifax Chronicle to Bellll-11
Feb.26,	Canadian Club of Victoria to McC11-11
Fob.28,	Baldwin to Bell
Har. 1.	Boll to Baldwin
Mar. 1,	Halifax Chronicle to McCardy12-12
Har. 2,	Baldwin to Ball
Mar. 2,	Gooderham to McCurdy
Mar. 3,	Curtiss to McCurdy
mar. 3,	McCurdy to Curtiss12-12
Mar. 3,	Boll to Sydney Post
Har. 4,	Curtiss to McCurdy13-13
mar. 4,	McCurdy to Curtiss

TABLE OF CONTENTS (CONTINUED).

Baddock offers congratulations
Witnesses of McCurdy's First Flight in the Silver- Dart on Baddeck Bay, Fob. 23, 1909, Compiled by Er. Alec. McDonald
Special Despatch to Washington Star: By Charles E. Cox
Scotal Despatch to a Canadian Newspaper: By J.G. Davidson
Blanchard to McCurdy (Peb.25) about suggestions regarding Cygnet II
Lahm to Curtiss (Feb.23) about the Selfridge Memorial
Correspondence about the word Aerodrome
4. The Outlook on Aviation: - By J.A.D. McCurdy37-40

Boll to Chas. S. Thompson (Associated Press. N.Y.).

Baddeck. N.S.. Peb. 22. 1909: Beperiments were made on the ice here to-day with the new aerodrome built by the Aerial Experiment Association. This is officially known as "Drome No.5, Ball's Cygnet the second". The machine was operated by Mr. J.A.D. McCurdy of Baddeck.

Cygnet II resembles very much in appearance Dr.

Bell's tetrahedral kite, Cygnet the first, which in December 1907 successfully carried up into the air the late Lieut.

Selfridge then Secretary of the Aerial Experiment Association, who was afterwards killed in the accident to Orville Wright's acrodrome at Fort Meyer.

Power to a tetrahedral structure. The machine had been previded with sledge-runners and an aerial propeller 10 feet in dismeter driven by a 50 H.P. 8 cylinder water-cooled motor especially designed by Mr. Glenn H. Curtiss and built by the G. H. Curtiss Mfg. Co. of Hammondsport, Hew York. It contains 3690 tetrahedral winged cells and weighed 950 lbs.

Before the machine had gathered sufficient speed over the ice to get into the air the propeller shaft sheared, and the propeller was thrown violently upon the ice and broken. It will take a few days to make another propeller and in the meantime experiments will be made with Brome No.4, No. Curdy's Silver-Dart. This machine has already made several

flying machine to appear in Canada.

If weather conditions are favorable it is hoped that a flight may be made to-morrow.

(Signed) Graham Bell.

(Above telegram was also sent to W.R. McCurdy of the Halifax Herald).

Bell to Fairchild, Grosvener and Baldwin.

Baddeck, H.S., Feb. 22, 1909: BeCurdy tried tetrahedral acredreme Cygnet the second to-day. Propeller shaft sheared throwing propeller wielently to the ice and breaking it.

Will take few days to make a new propeller. Ecantime will try McCurdy's Silver-Dart. First flight in Canada probably to-morrow.

(Signed) Graham Bell.

Fairchild to Bell.

Washington, D.C., Peb. 22, 1909:- Confound the propeller.
Wish you better luck next time. All well here.
(Signed) David.

McCurdy (Halifax Herald) to Ball.

Hallfar, E.S., Peb. 22, 1909: Thanks for aerodrome dispatch. Glad to hear from you at any time.

(Signed) W.H. McCurdy.

Milton Brown (Sydney Post) to Bell.

Sydney, E.S., Feb. 23, 1909: Have an old interview on air-ships you were kind enough to give me in 1906. New York papers asking for something. Eay I use it again.

(Signed) J. Milton Brown.

City Editor of Daily Post.

Bell to Milton Brown (Sydney Post).

Baddock, Feb. 23, 1909: Old interview quite out of date.

Newer things here now. Douglas McCurdy of Baddock made a

beautiful flight to-day in his aerodrome Silver-Dart, the

4th aerodrome built by the Aerial Experiment Association.

This is the first flight of a flying-machine in Canada.

A 50 H.P. engine was employed designed specially for the

Association by Mr. G. H. Curtiss and built by the Curtiss

Mfg. Co. of Hammondsport, H.Y. Half the town of Baddock

were on the ice to witness the event.

(Signed) Graham Boll.

Fred Cook (London Times Correspondent) to Bell.

Ottawa, Feb. 23. 1909: Shall be glad to be advised of the success of your acrodreme experiments. Wire at my expense.

(Signed) Fred Cooks

London Times Correspondent.

Bell to Cooke (Correspondent London Times)

Baddeck, N.S., Feb. 23, 1909: The first flight of a flying machine in Canada occurred here to-day when Mr. Douglas
McCurdy, a native of Baddeck, Hova Scotia, flew a distance
of about one half mile, at an elevation of about 30 feet above
the ice on Baddeck Bay in an acrodrome of his own design
named the "Silver-Dart". This is the fourth acrodrome built
by the Acrial Experiment Association of which he is a member. The Association was organized in Halifax in October
1907 and has built five acrodromes.

Drome No.1, Selfridge's Red Wing; Drome No.2, Baldwin's White Wing; Drome No.3, Curtiss' June Bug; Drome No.4, McCurdy's Silver-Dart and Drome No.5, Ball's Cygnet the second.

No.5 is atetrahedral aerodrome designed by Dr. Alexander Graham Bell, the Chairman of the Association. It was tried for the first time yesterday but the ten-foot propeller used overloaded the engine, the propeller shaft sheared and the propeller was thrown off against the ice and broken. Some days will clapse before another propeller can be made and in the meantime the Association will carry on experiments with McCurdy's No.4, the Silver-Dart, at Baddock.

(Signed) Graham Bell.

Ball to Chas. S. Thompson (Associated Press. N.Y.).

Buddeck. H.S. Feb. 23. 1909: A successful flight of one half mile was made to-day at an elevation of from 20-30 feet over the ice at Baddeck, Bova Scotia, by Er. Douglas McCurdy in his acrodrome the "Silver-part", the fourth acrodrome built by the Asrial Experiment Association.

It is worthy of notice that this seems to have been the first flight of a flying-machine in Canada. Half the town of Baddeck were on the ice to witness the event.

Kindly telegraph if you wish me to notify you of further developments.

(Signed) Grahem Bell.

Boll to McCurdy (Halifax Horald) .

Baddack, N.S., Feb. 25, 1909: The people of Baddock, Hova Scotia, witnessed to-day the first flight of a flying-mach-ine in Canada when Mr. Douglas McCurdy, himself a mative of Baddock, flew a distance of one-half mile over the ice in Baddock Bay at an elevation of about 30 feet in an acrodrome of his own design named the "Silver-Dart". This is the fourth acrodrome built by the Acrial Experiment Association which was organized in Halifax in October 1907. Mr. McCurdy had previously made 14 flights in this acrodrome at Hammondsport, New York.

It was obvious from to-day's experiments that Mr. McCurdy could have flown to an indefinite distance so long as his engine power held out. He came down very gently on the ice after a short flight because he was getting rather

close to the shore and feared running into the land. Two little girls upon the ice had a narrow escape from being run over by the machine when it came down but Mr. McCurdy was equal to the occasion and steered the machine gracefully to one side.

I have the names of over one hundred witnesses if you want them. Have sent a different telegram to Associated Press. Do you wish me to notify you of further developments here?

(Signed) Graham Bell.

Bell to Arthur McCurdy, Baldwin, Grosvenor & Fairchild.

Baddeck, M.S. Feb. 23, 1909:-Bouglas flew one-half mile in
the Silver-Dart to-day in great style. Half the town of Baddeck present.

(Signed) Graham Boll.

Bell to Chas R. Thompson (Associated Press, E.Y).

Baddeck, H.S., Feb. 24, 1909: The Aerial Experiment Association continued experiments this morning with Dress
No.4, McCurdy's Silver-Dart.

Mr. McCurdy made a magnificent flight of 4 1/2 miles at the rate of 40 miles an hour, circumnavigating, or rather circumdroming Baddeck Bay at an elevation of between 40 and 50 feet in the air. At one point he crossed a tongue of land going over a tree in his way. At the lower end of the Bay, finding himself too close to shore for a safe turn he shut off power and came down on the ice. One of the wings was broken during the landing and a wheel was injured by

skidding. It will take a day or two to repair dama cos. (Signed) Graham Boll.

(The above telegram was also sent to Fred Cooke, Ottawa correspondent of the London Times and to Milton Brown, City Editor of the Sydney Daily Post).

Cox to McCurdy (Halifax Herald).

Baddeck, H.S., Feb. 24, 1969: The Aerial Experiment Association continued their experiments on the ice in Baddeck Bay this morning. Ideal weather conditions provailed and Er. Douglas Eccurdy, Secretary of the Association celipsed all records of the Association by flying four and a half miles at an elevation of between forty and fifty fee: in the air, and turning a complete circle.

Mr. F.W. Baldwin, Chief Engineer of the Association, made the first public flight in America in Drome No.I, Self-ridge's Red Wing.

Mr. G. H. Curtiss, the Association's Director of Experiments won the Scientific American Trophy on July 4 by flying over a measured kilometer in Drome No.5, Curtiss' June Bug.

Mr. McCurdy in his magnificent flight to-day had full control of the machine at all times, but in endeavoring to circle for the second time at the lower end of the Bay found himself pinched for room and therefore shut off power to avoid running into trees and landed. In doing so the machine skideded on the ice and broke some chords and struts in the stare board wing. A day will repair all damages.

Dr. Bell approves this telegram.

(Signed) Charles R. Cox, Private Secretary.

Thompson (Associated Preps) to Boll.

New York, Feb. 24, 1909: Thanks for message. Please continue sending developments.

(Signed) Charles S. Thompson.

Arthur W. McCurdy to Bell.

Victoria, B.E., Feb. 54, 1909: - Many thanks for telegram.
Hope Douglas will bring the world's record trophy to Canada.
Our papers here full of it.

(Signed) A.W. McCurdy.

Boll to A.W. McCurdy. Pairchild. Grosvener & Buldwin.

Baddeck. Feb. 24. 1909: Douglas sclipsed all records of the Association this merning by circumnavigating, or rather circumdroming Baddeck Bay at a height of 40 or 50 feet. He went between four and five miles at ferty miles an hour.

A magnificent performance.

(Signed) Graham Bell.

Milton Brown (Sydney Post) to Bell.

Sydney. Feb. 24, 1909:- What is world's record flight, and time heavier-them-air machine? When made by whom?

(Signed) Hilton Brown, City Editor Sydney Post.

Bell to Milton Brown (Sydney Post).

Baddeck. Feb. 24. 1909: World's official record made by Wilbur Wright at Le Mans Dec. 31, 1908. Distance 77 1/2 miles; time 2 hours, twenty minutes, twenty-three and one fifth seconds.

(Signed) Graham Boll.

Ball to Thompson (Associated Press).

Baddack. Feb. 24. 1909:- The fellowing is a copy of minutes of meeting held in Baddeck this merning:-

Baddeck Center. Feb. 24th, 1909:- At a meeting of the BOARD OF COMMISSIONERS FOR BADDECK CHRIM, namely John E. Campbell, Kenneth J. McKay, and H. Percy Blanchard, convened this morning for the purpose, the following resolution was unanimously passed and ordered to be engressed upon the minutes:-

WHEREAS the first flight of an airship within Canada was made successfully at Baddeck yesterday the twenty-third day of February in the year one thousand nine hundred and nine, an event of historic importance coupling as it will with the fact, the name of our worthy and honored citizen Br. Graham Bell under whose auspices the flight was made, the name of the bold aeronaut Douglas McCurdy a Baddeck bey born and brod, and the name of our home Baddeck where this notable event took place:-

RESOLVED that these facts are well worthy of being recorded on our public records, and further resolved that

copies of this resolution be sent to Dr. Graham Bell and Mr. Douglas McCurdy with the congratulations of the village of Baddeck Center on their well merited success.

(Signed) Graham Bell.

The following telegrams received here are a little out of order:-

Mr. and Mrs. Grosvenor to Bell.

St. Augustine Fla. Feb. 23. 1909: Congratulations on splendid flight. We wish tetrahedral Cygnet equal success. (Signed) Elbert.

Baldwin to Ball.

New York. Feb. 24, 1909: Thanks telegram congratulations.

Saw interesting aerially propelled hydroplane feature.

(Signed) Casey.

Halifax Chronicle to Bell.

Halifax. N.S.. Feb. 25. 1909: Owing to wide spread interest in your experiments the Herning Chronicle sould be
ed
obliged if you would have telegraph at our expense daily
reports of flights of Acrodress.

(Signed) Morning Chronicle.

Canadian Club of Victoria to McCurdy.

Victoria, B.C. Feb. 26, 1909: Hearty congratulations of Canadian Club of Victoria on your splendid achievement in acrial navigation.

(Signed)Frank J. Clarke Secretary.

Baldwin to Bell.

Montreal. Feb. 26, 1909: Secture delivered successfully.

Misven Hundred students. Prestrated faculty completely collapsed. Attack Canadian Club to-morrow night.

(Signod) Casey.

Bell to Baldwin.

Baddeck, M.S., March 1, 1909:- Having survived lecture you must now be in fine shape to tackle Canadian Club. Good luck to you. McCurdy's flight twenty-fourth was magnificent. Only sorry you and Kathleen not here.

(Signed) Graham Bell.

Hickey (Halifax Chronicle) to McCurdy.

Halifax, N.S., March 1. 1909: New York Times requests me to ask you to kindly forward through me reports covering all aerial experiments.

(Signed) James Hickey Chronicle.

Baldwin to Bell.

Wentreal, March 2, 1909: Record meeting Canadian Club.

Very enthusiastic over first Canadian flight. Leaving Montreal twelve this morning.

(Signed) Casey.

Gooderham to McCurdy.

Toronto, March 2, 1909: Congratulations from Donneroft.

Don't fly to high.

(Signed) A. E. Gooderham.

Curties to McCurdy.

Hammakork, March 5, 1909:- If square radiator don't cool put fan en engine fly wheel etc.

(Signed) G.H. Curtiss.

McCurdy to Curtiss.

Baddeck, N.S., March 3, 1909:- Square radiator cools 0.K. Tried on ice-boat reservay .

(Signed) J.A.D. McCurdy.

Boll to Milton Brown (Sydney Post).

Baddock, H.S., March 3, 1909: Must apologize for delay in answering your telegram. You are mistaken about Curtiss, and none of us have any intention of competing for the British Channel Race you refer to. The Association, as its name implies, is only for experimental purposes.

(Signed) Graham Bell.

Curtiss to McCurdy.

How York, H.Y., March 4, 1909. Bishop agrees for Cup Trial.

Has written. Made Herring proposition which he verbally accepted. Took order for acroplane from Aviation Society.

(Signed) G. H. Curtiss.

McCurdy to Curtiss.

Baddeck, H.S., March 4, 1909: Telegram received. Arrange with efficials for trial of Trophy as soon as possible. Telegraph reply.

(Signed) J.A.D. McCurdy.

BADDECK OFFERS CONGRATULATIONS.

Blanchard to Bell.

Baddock. N.S.. Feb. 24, 1909: A meeting of the Board of Commissioners for Baddock Center was convened this morning pro re mata to take note of a remarkable event that happened in Baddock yesterday to wit successful flight in Canada. This means a great deal for Baddock. We cannot help but share in the fame of this event. We can at least express our appreciation and congratulations, as well as our admiration of the courage and nerve displayed by Mr. Douglas McCardy.

Kindly permit us the liberty of enclosing you a copy of the resolution passed at the aforesaid meeting.

(Signed) H. Percy Blanchard Sec. Board of Com.

Blanchard to McCurdy.

Baddeck, H.S., Feb. 24, 1909:- A meeting of the Board of Commissioners for Baddeck Center was convened this morning pro re nata to take note of a remarkable event that happened in Baddeck yesterday to wit successful flight in Canada.

Please accept a copy of the enclosed resolution with best wishes and congratulations.

(Signed) H. Percy Blanchard, Sec. Board of Com.

Resolution of Board of Commissioners enclosed by Mr. Blanchard.

Baddeck Center, Feb. 24, 1909:— At a Meeting of the BOARD OF COMMISSIONMES FOR BARDECK CENTER, namely, John E. Campbell, Kenneth J. McKay, and H. Percy Blanchard, convened this morning for the purpose, the following resolution was unanimously passed and ordered to be engressed upon the Minutes:-

WHEREAS the first flight of an airship within Canada was made successfully at Baddeck yesterday the twenty-third day of Pebruary, in the year one thousand nine hundred and nine, an event of historic importance coupling as it will with the fact, the name of our worthy and honored citisen Dr. Graham Bell, under whoseauspices the flight was made, the name of the bold aeronaut Douglas McCurdy a Baddeck boy born and bred, and the name of our home Baddeck where this notable event took place,

recorded on our public records, and further resolved that copies of this resolution be sent to Dr. Graham Bell, and Mr. Douglas McCurdy with the congratulations of the Village of Baddeck Center on their well merited success.

Cortified copy of minutes,

(Signed) H. Percy Blanchard, Sec. of Board.

McCurdy to Blanchard.

Boinn Bhreach. Feb. 26. 1909:- It is indeed a great pleasure to me to realize that Baddeck, by a formal secting of its Board of Trade, has expressed the feeling that its citizens appreciate the fact that the first flight of a flying-machine in Canada occurred at Baddeck.

Dart is due to the great kindness of Dr. Alexander Graham Bell whose untiring efforts to advance the science of the art of Aviation will, I feel sure, bring great credit and honor to our Canadian Dominion.

(Signed) J.A. Douglas McCurdy.

Boll to Blanchard.

Boinn Bhreach March 3. 1909:- I must apologise for my dolay in acknowledging receipt of your kind note of Feb. 24. enclosing resolution of the Board of Co missioners of Baddock Center relating to Mr. Douglas McCordy's successful flight in the Silver-Dart on the 23rd of Feb.

It is very gratifying to me, and to all those assectated with me, that the citizens of Baddeck should have recognized the historical importance of that experiment. It
is also gratifying to me that the machine which made this
flight was constructed after the plane of a Baddeck man, and
tried by a Baddeck man, at Baddeck itself.

This may seem to be a small matter at the present moment; but when flying-machines have become common, and

Acrial Locomotion a well recognized and established mode of transit, the origin of the art in Canada will become a matter of great historical interest, and people will look back to the flight made Feb. 23, 1909, as the first flight of a flying machine in the Dominion of Canada.

It is as gratifying to me, as to the citizens of your little town, that the name of Baddeck will be indissolubly connected with that event.

(Signed) Alexander Graham Bell.

WITHERSES OF MCCURDY'S FIRST FLIGHT IN THE SILVED-DART ON BADDRCK BAY, FEB. 23, 1909.

(Compiled by Mr. Alec. MacDonald).

	Anderson	Miss	Annie	Hart	Mr	Joseph
	Anderson	Mina	Moline	Hutchinson	Mr	Dan
	Archibald	Mr	John			
	Arsenault		41 4 4 4 4 4	Ingrahan	Mr	K
	Arsenault		John	Ingraham	Mrs	K
	CONTROL CONTROL OF		-	Inaddor	Mr	George
	Bedwin	Hr	Wn F	Irving	182	JA
	Bell	Dr	A Graham	wa A mest?	avesas .	• 4
	Bell	Mrs	A Graham	Kidston	Miss	Jennia
	Boll	lir	Gardiner H		Hr	John
	_		H H	Keily	Mi ss	Sarah
	Benner	Sign Sign		Koily	21.7 20.0	Chief ARI
	Be thune	Hra	John L	Mar Ambrel 3.3	Titree	22.09
	Be thune	BER	Gordon	MoAskill	No.	EG
	Bo thumo	362	Norman	Me Askill	Mrs	3 G
	Bingay	lor.	A	MeAskill	Miss	Marguerite
	Blanchard		H P	MeAulay	H2	DW
	Bowers	Mar	Willie	Meaulay	MT.	Bendapen.
	Burke	Mr	Sanford	Maulay	302	Ian
	Syrnes	Mr	Charles	lic Aulay	Mr	Merdock
	Byrnes	Mro	Charles	McAulay	Me	Pe ter
	Byrnes	352	Tom	MeCuray	Mr	JAD
				MeCurdy	Miss	Mabel B
,	Cadell	Mine	Incs	MeDermid	F	John
	Campbell	He	Bort	McDermid	Mr	No11
	Campbell	Fr	Dusa	MeDonald	ET	Angua J
	Campbell	Mar	John	Mellonald	Mrs	Angus J
	Campbell .	Har	John B	McDonald	Mi es	Annie
	Campbell	Hice	Lena	MeDonald	ME	AS
	Cambell	Miss	Maggie	McDonald	Her	Dan
	Campbell	Mar	S C	McDonald	No.	DM
	Campbell	Miss		McDonald	Mr	Donald
++	Cox	Mr	Chas R	McDonald	Mr	Dougald
	Crocker	Miss		McDonald	Mar	Ion
	Crocker		Nellie	McDonald	122	John
	Croudia	Mina		HoDonald	Mr	Murdock
	Crowdia	Minn	The state of the s	McDonald	HE	RS
	Crowdia	Mrs	盆	HeDonald	M ss	Rath
	Curting	3520	GH	McDonald	Mr	5
	Curties	Mra	G H	McDonald	Mi ss	Sarah
				MeDonald	MX	Stanley
	Davidson	Hr	John 9	McFarlan	182	John
	Dunlop	Mr	Grahem	McParlan	EST.	M
	Dunlep	Mar	3 G	McParlan	362	PL
	Danlop	Mrs	3 G	McIntoch	Rav	CC
				MeIntonh	Mr 46	€ €
	Perguson	352	Angus	Molver	Der	
	Fergusen	Mar	Angua Jr	Molyer	Hr	John
	Forguson	152	Murdock	Melyor	Mrs	H A
	Franks	Mr	Richard	Melver	KF	Philip
	Frager	Mr	Janes	Makay		tward
	Frager	Mrs	Innes	Hokay	Mrs	dward
	Praper	Mr	Douglas	Hokay	Miss	Fanny
	Fraser	Mr	Harry	MoKay	NO.	Floyd
		-	The state of the s			

McKay	Mr	John
McKay	Mrs	K J
McKay	Mar	Wilson
McKenzie	Mr	Charles
McKenzie	Mr	John
McKillop	Mr	A M
McLean	Hr	J
McLean	Mr	John
McLean	Mrs	John
McLean	Mr	M C
McLean	Mr	Michael
McLean	Mr	R J
McLean	Mr	Stephen
McL ean	Miss	
McLennan	Mr	Fred
McLood	Mies	
McLe od	Mr	Daniel
McLeod	Mr	James
McLe od	Mr	John
McLeod	Mrs	M
McLeod	Mx	M G
McLeod	Mr	Philip
McLood	Mx	William
McNe 11	Mr	Alec
McHeil	Mr	Daniel
McMeil	Mr	Hector P
McNe il	Mr	John D
McNeil	Mr	PB
McPherson		Rebert
McRae	Mr	Ale e
McRae	Rev	D
McRae	Mrs	Ð
McRae	Mr	Kenzie
Manuel	Mr	James
Manuel	Mr	Rod
Morrison	Mr	Dan
Morrison	Mr	Dan J

Oram	Mr	Charles
Ross Rudderham		M E
Smith Stewart Sutherland		Duncan W A H
Taylor Thompson	Mr Mr	Alec B A
	Mr Miss Mr	Bobby Mary R

THE ARIAL EXPERIMENT ASSOCIATION AT BADDECK, HOVA SCOTIA. By Chas. E. Com. (Special despatch to the Washington Star).

Trial of Alexander Grahem Bell's Cygnet II, and Mr. J.A.D. McCurdy's Silver-Dart; both machines installed with the G.H. Curtiss new 50 Horse-Power, 8 cylinder water-cooled motor. Large crowd witnesses the experiments.

The Asrial Experiment Association which was organised October, 1, 1907 at Halifax, Nova Scotia, and who have
been experimenting for the last eight months at Harmondsport,
New York, have finally taken up their headquarters at Beinn
Ehreagh, Hear Baddeck, Nova Scotia, to continue their experiments with their heaver-than-air machines on the ice
in Baddeck Bay.

The Association at the present time is composed of Dr. Alexander Graham Bell of Washington, D.C., Chairman, Mr. G.H. Curtiss of Harmondsport, How York, Director of Experiments, and Mr. F.W. Baldwin and Mr. J.A.D. McCurdy of Baddock, Engineers. The fifth member was the late Lieut. Thomas E. Balfridge, of the U.S. Army, who was killed at Port Meyer in the accident to Orville Wright's machine.

On Monday, Yeb. 22, word was passed around the town of Baddeck that the Association was going to try for the first time their aerodrems No.5, Bell's Cygnet II, and be-fore three e*clock in the afternoon, which was the time set for the trial crowds had gathered on the ice from all places in and around the county.

Ideal weather conditions prevailed and about 2.45 the magnificent bird-like structure (Bell's Cygnet II) was taken

100

from its large acrodrome shed and pushed on its sledge-runners on the ice out in Baddeck Bay. The minute she made her appearance on the lower Bay it seemed as if everyone had a camera, and for a few minutes everyone was taking pictures. A few preliminary touches had to be made on the machine when finally she was placed facing the wind and the engine started. Quickly did this large man-carrying structure speed along the ice, but it was evident that she was not making the necessary speed required to lift her from the ice, and the aviator, Mr. J.A.D. McCurdy, Secretary of the Association, shut off power. Something was wrong with the engine, and upon examination it was found that one of the pipes leading from the gasoline tank was broken. This was easily repaired in about five minutes, and again the machine was started once more into the wind. Just when she was making a good speed and everyone was looking for her to rise into the air a great crash was heard something like an explosion and the propeller was hurled violently to the ice meashing in three picces. At this very moment to the onlooker it was hard to realize what was the matter until finally hundreds of people were seen scrambling for souvenirs from the broken propeller which was some twenty feet away from where the machine had stopped.

It was here evident to the members of the Association that the ten-foot propellor used was too such for the engine and the explosion that was heard was not from any defect in the engine, but from the sudden snapping off of the propeller

shaft.

It was decided to take the machine to the aerodrome shed to repair the shaft and to make a new propellor of smaller diameter. Everyone seemed to be well satisfied with the first attempt at a flight of a heavier-than-air machine in Canada, and it was announced that weather conditions being favorable a flight would be made the next afternoon with Drome No.4, McCurdy's Silver-Dart.

MCCUMDY'S FLIGHT IN THE SILVER-DART.

On Tuesday, Feb. 23, the Asrial Experiment Association continued their experiments. About one etclock hardly any wind was noticed, and like the previous day the weather was fine and even a greater crowd than the day before had assembled on the ice to witness the experiments. About three O'clock the Silver-Dart was wheeled from her shed to the outer Bay and placed in a position about a mile from the Beinn Bhreagh Shore facing the wind. Mr. McCurdy took the aviator's seat. Crowds at this time begon to congregate in front of the machine and along the line of advance of the machine until it became obvious that it would be necessary to appoint police in order to keep the ice clear thereby avoiding accident. Just as the machine was about to be started the wind shifted from the south-east to the north-east, and it was decided to take the machine further up the Bay and start flying towards the Beinm Bhreagh Shore. As most of the Laboratory Staff were on skates this was done very quickly and before some of the people could realize what was taking place the buse of the engine could be heard in the distance and the

machine was seen rapidly advancing along the ice. She had gone about 90 fort along the ice when all of a sudden she rose gracefully into the air to an elevation of about 20 to 30 feet, and was traveling at about the rate of 40 miles an hour. Everyone seemed dumb-founded and before they could realise that they had actually witnessed the first flight of a heavier-than-air machine in Canada, Mr. McCurdy was compolled to shut off his power and glide to the ground owing to the long stretch of land and trees is front of him. Just as he was about 10 feet from the ground he noticed two little girls agating in front of the machine, and if it wasn't for his presence of mind, and his complete control of the machine a serious accident might have occurred. Gracofully did he steer to one side of them making a beautiful landing on the ice. It was evident to the observers of this experiment that Hr. HeCurdy could have flown for an indefinite time as the engine and machine were working beautifully, and it was only a question of how much fuel he had as to how long he would remain in the air.

and he promised them that he would even do better the next day if the weather conditions were good.

MCCURDY'S SECOND FLIGHT IN THE SILVED-DART.

Wednesday, Feb. 24, was another ideal day for flying, and the members of the Aerial Association thought they would make two flights to-day instead of one, and therefore set the hour for twelve o'clock for the first flight. It now become obvious that the whole country had become flying-

450

machine crazy, and it seemed no matter what time a flight would be started the people would be on hand to witness it.

About 12.30 the machine was wheeled on to the ice about in the same position she was placed for her first trial the day before (the wind being south-west). The Laboratory Staff all held on to the machine while Mr. G. H. Curtiss have her one test before the ascension. Finally the power was shut off and every preparation was made for a fairly long flight, or at least until a complete circle was made which would mean about 2 1/2 miles in diameter.

The engine was started and away went the Silver-Dart over the ice for about 90 feet when she rose gracefully into the air as the day before. But this time Mr. McCurdy had a clear space in front of him for at least two miles and well did he take advantage of it. He flew for about a mile in a straight course, then taking a wide circle of about 1/5 of a mile and come along the other shore at an elevation of about 50 feet in the air at the rate of about 40 miles an hour. When he was making the turn the people on the opposite shore in their teams did not know what to do when they saw this "wizard" coming their way as some of them exclaimed. One man completely lost his head and drove directly under the machine which went over him like a shot; other people were running for the beach; but away sped the Silver-Dart over teams, over people's heads, over trees, and over a large tengue of land, and was making for the lower end of the Bay for its second turn when Mr. McCurdy saw at a glance that the place was too marrow at this end of the Hay and that he had better shut off power

and glide to the ice. This he did, and landed covering a distance of 4 1/2 miles. In landing one of the wings skidded on the ice and was damaged slightly, and one of the front wheels was bent. Mr. McCurdy had flown so far in such a short time that it was about five minutes before the fastest herse on the ice could get to where he had landed, and it was about an hour before all the people could get to him to congratulate him upon his magnificent flight, the longest ever made by any member of the Asrial Experiment Association, and one of the prettiest that has ever been made by any aviator in the world.

Weather conditions were unsatisfactory for a flight to-day and the Laboratory Staff will take the opportunity of adjusting a few miner details on the Silver-Dart in order that they might have her ready for daily experiments.

C.R.C.

DR. ALEXANDER GRAHAM BELL ADDS ANOTHER LAUREL TO CANADA: By J.G. Davidson, a special despatch to Canadian Newspaper.

Baddock. C.B:— And again the eyes of the world will be directed towards Baddeck, and no doubt but to some the map of
Canada will be scanned to locate that already far famed summer resort situated as it is "Romantic", on the shores of the
Bras d'Or Lakes; and near by on a prominent peninsula and
high mountain, already conspicuous by a Tower on top built
of totrahedral constructuion, is the estate and summer home of
the world famed Scientist and Inventor, Dr. Alexander Graham
Bell.

To-day the foremost thing with the powers of the world is navigation of the air, either by balloon or heavier-than-air machine. And to this end the veteran scientist, although now ever three score years, is as enthusiastic towards solving the problem as the younger-race of to-day. A little over a year age Dr. Bell, having some young talent in connection with his Laboratory seemingly interested with him in Aviation, formed an Association now known as the "Acrial Experiment Association" of which Dr. Bell is Chairman.

The first success of the Association was on December 6, 1907, when Dr. Bell's Cygnet of tetrahedral construction carried one of the members, the late Lieut. Selfridge, grace-fully in the air to a height of 165 feet and descended as gracefully as it ascended. The Association then moved its headquarters to Hammondsport, F.Y., for the winter to carry on further experiments at or near the works of the already femed Curtiss Notor Cycle Factory. The members, then combining

their ideas, each in succession built a heavier-than-air machine namely, Selfridge's "Red Wing", Baldwin's "White Wing", Curtiss* "June Bug", and McCurdy*s "Silver-Bart" all of which made successful flights, and on July 4, 1908, Curtiss with his "June Bug" captured the Scientific American Trophy for the first heavier-than-air machine to fly one kilometer. This was another victory for Dr. Bell as it was the first public flight made in America. Then Mr. McCurdy built his "Silver-Dart and made several flights at Hammondsport. It was then shipped to Baddeck, when we come to the present day. On Feb. 23, Mr. McCurdy made the first flight that has been made in Canada over the ice on the Bras d'Or Lakes and, although Dr. Bell made no public announcement that they were to make a flight, word reached Baddeck and surrounding districts, and the ice being in perfect condition about the whole townspeople of Baddeck, old and young, were swarming to the scene on skates and sleighs, and from all other directions was a moving mass of people and horses. Some men up in the seventies whom the writer talked with and who had not had skates on for years could not resist putting them on as the fastest means of getting to the scene after they had heard the news.

People were are stricken and looked on even with their mouths open when the machine seared through the air and in much better central than were the eye witnesses and descended as gracefully as a bird.

Peb. 24, Mr. McCurdy made another flight making a complete circle of fully four and a half miles and it will be a memorable day to old and young who witnessed the event.

Here comes honor to whom honor is due. Dr. Bell is a Scotchman by birth, America claims him by adoption although he spends the greater part of the year in Canada. Canada to-day ought to be proud and is proud of Dr. Alexander Graham Bell.

Canada to-day claims the inventor of the world's demestic telephone; Canada to-day claims the first flight with heavier-then-air machine through Dr. Bell. Canada is not slow. She has already demonstrated to the world the recognition of her telephone inventor by purchasing for a public park the old Bell Homestead in Brantford and to creet a monument while the inventor is still alive and can appreciate the tribute paid him by the people of Canada. And Baddeck claims by birth the first aerial navigator in Canada in J.A. D. McCurdy, a young man little over a year from Toronto University where he finished his course in Ingineering and today has made more public flights, barring the Wright Brothers than any man in America. A nice genial, cool-headed, free and easy young man and a man who no doubt at no distant date will attract the eyes of the world further. Baddeck no doubt is proud of one of its some who, when a boy after school hours, spent considerable time yachting on the Bras d'Or Lakes; and few could handle a yacht better than Douglas Mc-Curdy and to-day it looks as is it were less trouble for him to navigate the air then the sails. It is the sincere wish of all his friends that he may have a long and useful career J.G.D. shead of him in Aviation.

Blanchard to McCurdy.

Baddeck. H.S., Feb. 25, 1909:- Will you be offended if I make a few suggestions regarding the big Cygnet?

The first is, polish the runners to a shine. If my experience with coasting sleds and double runners is at all in point. I would say there would be a difference of 25% in favor of a polished runner, and the difference is fully as marked on ice as on snow. Now of course I don't have to tell you that if it requires a speed of say 25 miles in still air to get sustaining power for the Cygnet, that if the angle of elevation is the same while the machine is resting on the ice as it is to take when pursuing a horizontal course through the air that it will take not only the power sufficient to fly the "drome" to propel it up to this speed but also enough to evercome the friction on the ice. Say this latter friction requires 15 H.P. and to overcome the air friction on the cells 40 H.P. that means 55 H.P. But suppose you only have 50 H.P. you cannot get up the initial velocity, and so cannot fly. If now, you could reduce your head friction until you had then this initial velocity, then by throwing up your wings to the proper angle and your rudder accordingly as you well know how, you rise, and have 10 H.P. to the good once you are in the air.

My emggestion would be, for ICE use a such better skate like the ice-best and have a front steering skate moving in unison with your perpendicular rudder.

As to the hind skates have them at the end of arms or levers and then at the proper moment release a grip and let the rear of the proper fall down. Of course to heist the front would be preferable but that calls for too much strength.

The theory is that with an almost herizontal position of the aeroplanes while getting your speed on the ice only akin atmospheric friction is developed plus skate friction.

You will notice that in the sketch, the skate is part of the hind leg. As the adage reads on the back of the sheet music, "Try this over on your plane".

You won't mind these few suggestions. If they don't commend themselves to you, just put them down to an old man's foolishness.

(Signed) H. Perey Blanchard.

THE SELFRINGE HUMORIAL.

Lahm to Curting.

Wahington, D.C., Feb. 23, 1909:— I received your letter of Feb. 11 with Mrs. Bell's paper with suggestions for the Memorial. After taking the matter into consideration, I have decided that she has hit the nail on the head and we are indebted to her for an expellent idea.

Cullon Memorial Hall, built for the purpose of commemorating officers, wars, battles, regiments etc. In it are many tablets set in the walls of the different forms, each one to the memory of an officer who has been killed since minety-eight. One to Selfridge would be most appropriate among them. I have written to West Point on the subject, and will let you know as seen as I find out more about it.

As a matter of fact, I believe we can well do more than this. Possibly we can also set up a larger memorial in the shape of a tablet raised semewhat above the ground at Fort Meyer as Mrs. Bell suggests. I could be semething not too clabe orate but at the same time a fitting reminder near the place where the trials took place, but not on the drill ground.

I have talked with a monument man here relative to the last scheme, and find it can be done very easily for a reasonable amount.

(Signed) Frank P Lahm.

CORRESPONDENCE ABOUT THE DEFINITION OF THE WORD "ASSODROMS".

Jones to Boll.

Now York. Feb. 20. 1909:- Enclosed please find definitions of the words "aerodrome" and "aerodromics", and I have written Funk & Wagnalls as per the enlosed copy.

(Signed) N.K. Jones

Funk & Wasmalls to Jones.

Hew York. Feb. 17. 1909:- Replying to your enquiry I take pleasure in giving you the definitions of the terms "Acro-drome" and "Acrodromics" as printed in the Standard Dictionary.

"Aerodrome, n. A machine for gliding on the air, consisting of supporting surfaces, means for propulsion and other adjuncts".

I give also the etymology of aerodrome for your guidance if needed. Gr. LEPO, combining form of Lip, LEPA air, the atmosphere, + Apwnos a running, from Apanelivrum.

"Acrogromics, n. The art of gliding on the air by means of an acrodrome".

Trusting that this information may prove useful to you, we remain,

Very truly yours.
(Signed) Funk & Wagnalls Co.
Per Frank (something)
Lexicographer.

Iones to Punk & Vacualle.

Now York, Peb. 20, 1909; Please accept thanks for your letter of Peb. 17. The definitions you enclose exactly coincide with

Bulletin Ho.XXXV

the opinion held, until lately, by Mr. A. Graham Bell.

While at Hammondsport one evening, we were talking over the etymology of seronautical terms and subsequently Dr. Bell studied up the greek words and decided that "Aero-dromies" might properly be defined as "travel" through the air" and the word "Aerodrome" to apply to a course ever which flying machines and airships might race.

The word "Aerodrome" is popularly used now to designate grounds where flying machines and airships are tried out or raced. For instance, the Morris Park Race Track in New York City leased by the Aeronautic Society. This definition has come into use by comparison with the word "hippodrome" which means a place where horses are exercised and raced. The two words seem to be analogous.

Another, but incorrect use of the word "Acrodrome" is a shed or building housing flying machines or airships. This is in use particularly in France.

The word "Aerodrome", meaning the machine, defined as per your letter, was put into practice by Langley who called his steam model an "Aerodrome", and the word "Aero-dromies" was the name he gave to the art of flying by his machine.

Inasemen as the International Aeronautical Federation adopted, last year, a set of words covering the Art, I hope that the next edition of the dictionary will give correct definitions of all the terms to this new Art.

In this magazine, we are using the word "Acrodromica" as meaning "Travel through the air" and motor acrodromics" as

200

50.0

B.B.I.

"travel through the air with a self contained power plant".

I forward your very kind letter to Dr. Bell for his information.

(Signed) L.L. Jones.

Bell to Funk & Wagnalls.

Haddeck, H.S., March 2, 1909:- I am glad to note from your letter to Mr. Ernest La Rue Jones, dated Feb. 17, 1909, that the Standard Dictionary defines the word "Aerodrome" as follows:-

"Acrodrome, n. A mechanism for gliding on the air, consisting of supporting surfaces, means for propulsizon, and other adjuncts".

This is exactly the sonse in which I have always used the term; and was also, I believe, the meaning assigned to it by the late Prof. Langley.

I have been publicly criticized for applying the term to the flying machine itself, instead of to the shed or building in which it is housed, a meaning that has lately been introduced into this country from France, and which appears to me to be incorrect. This meaning has been defended on the ground of analogy to "hippodr@me"; but the analogy is not correct, for a hippodrome is not a place where horses are simply housed or kept (a stable) but a place where they are run.

It has recently been proposed to use the term "acrodrome" to designate the grounds where flying machines and
dirigible ballooms are run or raced. This meaning, although
less objectionable than the application to the building where
the machines are stored, seems to me inappropriate for the

Bullotin No.XXXV

"race track" of the flying machine is the air itself and not the ground.

I shall continue to use the word "aerodrome" for the flying machine itself until such time as some other meaning has been authoritatively defined. At present I believe that the word is not to be found in any dictionary excepting in this sense.

In order to avoid the awkwardness of using the word in three distinct meanings I shall speak of "Aerodrome-track" (or "Aerodrome-park) for the place where aerodromes are exhibited and raced; and "Aerodrome-shed" (analogous to balloon-shed) for the building in which they are housed. It would be unfortunate, I think to use in this connection the word "Aerodrome" alone, as it has already an established meaning in the sense of the machine.

The members of the Aerial Experiment Association, of which I am Chairman, have become so accustomed to this meaning of the word "Aerodrome", that we habitually abbreviate it to "Drome"; and speak of our flying machines as Brome No.I, Drome No.2 etc. We are even beginning to use the contraction as a verb (to drome, droming etc); and I notice that the newspapers the other day, in referring to Mr. Memourdy's recent flight in the serodroms "Silver-Dart", spoke of him asteircumnavigating or rather circumdroming Baddeck Bay".

I enclose for your information a communication I made to the members of the Aerial Experiment Association, Dec. 29, 1908, entitle "An Important Conference at Harmondsport" which

shows the origin of the discussion now going on in regard to the meaning to be assigned to the word "Acrodrome".

(Signed) Alexander Graham Bell.

The paper referred to "An Important Conference at Hammondsport has already been given in Bulletin XXVI pp 9-11. THE OUTLOOK ON AVIATION: By the Secretary.

In going over the newspaper clippings one cannot help being struck by the fact that a great mjaority of them deals with reports concerning the deings of the Wright Brothers. The French as a nation have decided to recognize the Wright Brothers by conferring on them the order of the Legion of Honor, the highest honor that the French Republic can confer. This action of the French Government was decided on some considerable time ago but when Wilbur was approached on the subject he is reported to have said, "wait for Orville we have done our work together, and I cannot take an honor apart from him".

An invitation has also been extended to the Wright Brothers to come to London at the end of March when they will be given the gold medal of the Aeronautical Association. This invitation has been accepted by the Wright Brothers. That England is alive to the fact that the Wrights are perhaps the most expert of a wasters is shown by the report that on the floor of the House of Commons on Feb. 23, the Secretary of War Haldane announced that the Government was considering the advisability of trying to secure the services of the Wright Brothers, the American aeroplanists of Dayton, Ohio, and their aeroplanes.

On Feb. 15 Miss Matherine Wright made her first ascension and flight in her brothers' acreplane with Wilbur acting as operator.

38

Although Mr. Wilbur Wright is reported to have admitted that he fears it will be always necessary to carry about the apparatus by which the aereplane is enabled to get started on his flight still a note in L*Aerophile which we will quote, points out that such may not be the case.

"A new way of Departure: Until now, at Pau as at Mans, Wilbur Wright has used, for starting, the weights falling from the staging and the rail for launching. Next week he is going to try to start from wheels attached to the frame of the aeroplane."

A new motor manufactured in France has been installed in the Wright meroplane from which great results as to speed, efficiency ste. are expected.

America to induce Wilbur Tright to represent the United States in the first International Aviation race this year in Paris for the Silver C up by James Gordon-Bennet. The winner will also receive a cash prize of \$5000 and additional trophics are to be offered. Wilbur Wright has thus far declined to allow his name to be used as a probable competitor but an earnest request was sent to him last week by the Directors of the Acro Club of America to reconsider his decision. The United States will do everything they can to have a representative in the first International Aviation Contest.

A race which is attracting much interest is the contest to be held at Monaco and which is open until March 24. Contestants are required to start from the Quay at Monte Carlo fly over the sea to Cape Martin, turn around the red and white flag and return to the starting point. The length of this flight is little more than six miles. The added time made by the contestants during his three best trips will constitute his official time. Many eminent aviators have entered as contestants in this race including Farman, Delagrange and others.

Major Baden-Powell the British authority for Acronautics, believes that the time for legislation governing the use of airships is ripe. In a letter to the London Times he says:-

> ****We are now confronted with the most intricate and difficult question of International politics one which, in the future, is bound to lead to complications and controversies. *** The first and one of the most important questions calling for solution is that regarding international frontiers seeing that neither walls nor fences. mountains nor rivers, not even seas offer insurmountable barriers. Secondly. there is the very serious question of private boundaries. *** If definite laws are adopted controlling such matters we then got to the still more perplexing problem of how to police these realms of blue. It is all very well to dictate regulations for acrial trayel but how is the law to be maintained. Who can deny that such problems will demand our most earnest attention in the near future and they must be considered while there is yet time". ***

A report is current in the American papers which states that Mr. A.M. Herring of New York has received an effect from three syndicates representing Germany, France and Belgium respectively effering him \$100,000 to leave the United States and give them exclusive rights in their country

Bulletin No. XXXV

to manufacture his flying machine. Mr. Herring says he has almost decided to accept one of these offers in which case he would return here in June to fulfil his contract with this Government.

Mr. F.W. Baldwin of the Aerial Experiment Association delivered on Feb. 27 before the University of Terente a lecture on Aviation. The popularity of the subject chesen and of the lecturer himself was clearly shown by the fact that immediately an imvitation was extended to Mr. Baldwin by the Canadian Club of Toronto to lecture before that body on the fellowing Monday, March 1.

The Aorial Experiment Association's Drome No. 5, Bell's Cygnet II was given its initial trial over the ice on Baddeck Bay on February 22. The shearing of her propeller shaft brought this experiment to an end.

Feb. 23 marks the date of the first flight of a flying machine in Canada. Drome No. 4, McCurdy's Silver-Dart flow a distance of one-half mile at an elevation of 20-30 ft. at Baddeck. On the 24th the Silver-Dart flow a distance of 4 1/2 miles circumdreming Baddeck Bay. In the afternoon of the same day Cygnet II was again tried and the results obtained were encouraging. J.A.D. NoC.