

## AIRSHIP AHOY!

### MANUFACTURED AT INVERCARGILL

#### SKILL OF LOCAL ENGINEER

#### MR PITHER'S INTENTIONS

The mere mention of "airship" in Invercargill is sufficient to raise a most spirited discussion on the "mysterious visitor" generally supposed to have called on various centres in New Zealand, including an extended tour of Southland, last August. Was it biplane, monoplane, airship or merely an uninteresting old gas bag?

That is curiously enough just as unknown today as it was during that terrible period of anxiety when everyone dreamt of rattling anchor chains or heard mysterious foreigners gabbling away in heathenish and unintelligible tongues.

Was it German, was it from Mars, or had Southland produced an aerial machine which carried a blazing headlight at an amazing speed, scorched across the sky at unearthly hours and astonished what natives happened to be awake and about when they should have been in bed? No one knows.

Has the same insane individual visiting England, Canada and Fiji since, or has it simply been a freak of imagination on the part of hundreds of worthy individuals who claimed to have seen a wonderful invention that thousands and thousands had not?

It is a question that the future alone can answer, a skein to be unravelled in some day to come, if ever at all.

But it will no doubt surprise Invercargillites to learn that there is in the city today, a full-rigged monoplane on most up-to-date lines, with several improvements, that promises to outclass the 'mystery' of last August in reality at least if not in supernaturalness.

The gentleman responsible for this event in the history of the town is Mr H J Pither, engineer, at one time world's champion cyclist and for some time past resident in Invercargill.

Mr Pither has always had a hobby of anything mechanical and has made a reputation for himself in the construction of motor launch engines, which were twice placed at Bluff regatta this year.

Consequently, when it is announced Mr Pither has put together an apparently high class aeroplane to his own design and embodying several ideas he has had on the subject of aerial navigation, the announcement will at once be taken seriously, and unanimous interest be displayed in the mechanic's handiwork.

It is his intention, Mr Pither informed a NEWS reporter who was given the opportunity of inspecting the machine, to hold several private trials and subsequently, if all goes with anticipated smoothness, a public demonstration.

#### The Machine –

It was about October last year [1909] that Mr Pither first moved in the matter of putting his ideas into execution, and during his spare time in the ensuing months, put together a framework of light though strong steel tubing, the chassis being on the box girder principle and proceeded to put together the skeleton for the wings and rudders.

The engine and control devices were of course, the main difficulty and months had to be devoted to their careful construction, such light metals as aluminium being used wherever it was possible without affecting (in the slightest degree) the stability of the structure or the efficiency of the motor.

The engine, of Mr Pither's own design, is regarded an unusually fine one with a strength equivalent to over 40 horsepower, being what is known in principle as a four-cylinder V motor engine. It has a weight of only 1601bs and drives a two-bladed propeller of 6½ ft diameter at a speed of about 1000 revolutions, developing a pull of 2501bs on a spring balance.

The engines have already been fully tested and ran without hitch.

The total lifting surface of the wings, which are of stout canvas securely fastened upon a skeleton built of steel, is 160sq.ft (14.9sqm). Direction is maintained by rudders at the rear, and lateral stability by warping the rear edges of the planes, and that is easily carried out by the driver.

An ordinary motor car steering wheel controls the rudder effectively, while the motor is manipulated by throttle.

It is a one-man machine, with an overall measurement of 28ft spread and 26ft in length, while the total weight (without aeroplane) is 5001bs.

As before mentioned, the principle material used in the construction was steel tubing. Springs have been fitted to the wheels to take landing shocks without jarring the machine, the wheels being used alike to facilitate starting and to enable landings to be taken with a gliding motion instead of a sudden stoppage. In lightness of construction, and in several other departments, Mr Pither's structure appears to have the advantage of several of the great continental and other aeroplanes and the following figures should prove interesting from comparative point of view.

	Weight (LBS)	Length (ft)	Cylinders	RPM	Prop. Diameter (ft)
Wright	1000	41.0	4	450	9.3
Farman	1200	34.6	4	1200	8.6
Voisin	1310	32.11	4	1000	7.6
Curtis	700	28.6	4	1300	6.0
Cody	2200	52.0	8	--	6.6
Bleriot 1		28.0	3	1400	6.10
Bleriot 11	1200	--	3	500	9.10
R.E.P.	1000	31.0	7	1400	6.7
Santos Dumont	392	18.0	2		6.6
Antoinette	1100	46.0	8	1100	7.3
Pither	500	26.0	4	1000	6.

### Prospective:

Although Mr Pither is familiar theoretically and practically with every part of the machine, wholly and individually while it is stationary, he naturally expects that it will take some time to accustom himself to manipulating it in actual flight.

That is, needless to say, the experience of every aeroplaneist, although Mr Pither has the advantage of being a practical man who built every portion of his machine himself.

It is safe to assess that if the machine will go all right, and there is no reason to suppose it will not, its manufacturer will manipulate it successfully.

“What about having a shot at the Federal Government’s £10,000 prize?” suggested the reporter.

Mr Pither said that he had no intention of entering for such a competition, the conditions of which would be much too severe for such a light machine as his.

These conditions stipulated for a machine to carry three men with a Maxim gun and ammunition.

No machine in the world, other than an airship, could comply with those conditions at the present time.

“What about the Sydney-Melbourne Race?” the reporter hazarded.

If all went well, Mr Pither replied unwillingly, he might have a “go” at that.

He knew the country pretty well between the two centres, having cycled through several times in his cycling days, and he could say that it would be a much longer and more severe route than the much boomed London to Manchester, which was only 183 miles, as against 600 between Sydney and Melbourne.

Furthermore the large quantity of bush and mountain areas between the cities would make landing very difficult.

He was hoping, he might add, that the contest would be made shorter and less arduous, because it was very doubtful whether anybody could get through, no one having attempted previously anything like so big a journey.

“Trials will be made privately, Mr Pither said, but he intends issuing invitations to the leading citizens in

order to give them an opportunity to inspect the machine.

It may be added that Mr Pither has, at present, an order from Mr Simon McDonald, draper, to construct the framework of an aeroplane on the ‘paper dart’ principle, and a specially manufactured engine is understood to be on the way out from America.

It only remains to add that the general wish of the New Zealand public will be that Mr Pither should uphold his new departure of aviation as he did cycling a decade ago, when he beat the world’s champion A A Zimmerman, and such great cracks as W Martin (America), A W Harris (England) Lesna (France), and Porter (Italy), who visited Australia and New Zealand in the days when professional cycling was in its heyday and when the Melbourne Exhibition track was world famous.

A version of this article appeared in the *Lyttelton Times* of 30 May 1910

Monday, 11 July 1910

## INVERCARGILL'S AEROPLANE

Mr Pither's successful flight covers a mile

### SECRET TRIALS AT RIVERTON BEACH

[commences with a summary of the previous article published – not transcribed]

#### Secret Trials

In order that his trials might be absolutely private and uninterrupted Mr Pither secretly removed his monoplane from his Kelvin Street garage and just as secretly established his camp upon lonely and desolate Riverton Beach.

The machine, which, like all other structures of the kind, possesses motor cycle wheels, for the purpose of assisting the starting and of taking landings with a quiet gliding motion, was, in the midnight hours, quietly trailed out behind a hired express along the North Road, Bay Road and over the sandhills to a secluded spot on Riverton Beach and no one was up and about to see the unusual sight.

Furthermore, as Mr Pither himself acted as driver, curiosity or the leakage of information was reduced to a minimum.

That was Thursday, the 30<sup>th</sup> ult [i.e. 30 June], but weather, tide and other difficulties prevented tests before Monday [i.e. 4 July 1910] when Mr Pither contented himself with stationary trials of the engine at first and then with its driving power along the beach. He accustomed himself to manipulation of every part of the machine and soon had sufficient confidence in himself to essay a flight on the first suitable day.

#### A Splendid Flight

Tuesday [i.e. 5 July] proved to be ideal for the purpose and in the afternoon he ran his machine down to the level sand and soon had the engine whirring and the propeller whirling him along the beach.

Having attained what he considered sufficient momentum he applied the 'elevator' and before he knew where he was he found himself gracefully rising at a greatly accelerated speed. It is a well-known fact that the aeroplane moves much faster in the air than when gliding along the ground and it took Mr Pither a few seconds to accustom himself to the novel experience of actually flying through the air.

The engine was going perfectly and the planes, or wings, were accomplishing their task of supporting the structure famously.

The height was between 25ft and 30ft and Mr Pither felt that he could keep going all day. After a flight of nearly a mile however, the unfortunate contour of the vicinity brought about his undoing.

On his left was the surf and breakers of the sea and on his right were innumerable sand hillocks, and lagoons, while the stretch of beach had a width of only about 150 yards.

It can readily be understood that a deviation either way would result in either troubles or disaster.

If he got away to the left he would be in the risky position of being alone above the sea fathoms deep where a stoppage of the engine would result in the finish of the monoplane and probably also of its driver, while if carried away to the right a stoppage over the uneven sandy waste would result in an awkward landing where it would be impossible to make another start without first having the monoplane dragged back to the beach - a matter, perhaps, of the delay of a day. Consequently, when Mr Pither found himself being gradually driven by a headwind towards those sand hills, he first endeavoured, unsuccessfully, to keep to his 150 yards width of track, and then, when he found himself almost on a tangent with the sand hills, he shut off his engine and gracefully alighted.

Altogether Mr Pither covered nearly a mile, and it was sheer hard luck that prevented his covering a much longer stretch of country, but Mr Pither has had the supreme satisfaction of knowing that he was the first aeroplaneist in New Zealand to make an actual and successful flight.

As he had never had a flight before, his feelings during alighting were somewhat 'mixed'.

The momentum of the affair and the parachute-like action of the wings enabled the 'landing' to be taken gracefully and glidingly.

Nevertheless, the actual contact produced a bit of a shock, which, although probably thought nothing of by experts, was rather new to Mr Pither.

In fact, it made him glad of the fact that he had deemed it fit, after arriving at camp, to substitute motorcycle wheels for the ordinary bicycle wheels which he had originally on the machine.

Otherwise he considered, they would have undoubtedly have buckled.

Mr Pither returned to 'camp' along Mother Earth unwilling to risk being driven out to sea, but delighted, withal, at the success which had attended his invention.

Thoroughly satisfied with the ability of the machine to fly Mr Pither devoted the remainder of the week to stationary work and the improvement of one or two of the adjustments.

#### A Reporter's Visit

When a News reporter fossicked out Mr Pither's little camp on Friday afternoon he found him busily engaged on readjusting his rear wheel, which had taken upon itself to 'wobble' a little.

A couple of side attachments remedied the evil, and Mr Pither pronounced his monoplane once more ready for action, if it were called upon.

The 'camp' consisted of an express van with a tarpaulin over all. That made it very cosy inside, and its owner spent a few nights very cosily there, despite Demon Frost, or the rain and snow outside.

Seeing that the pressman was intent on worrying him, Mr Pither produced much provender and invited his inquisitive visitor to lunch.

"What about having another fly?" suggested the NEWS representative after lunch.

"Not keen on it," replied Mr Pither and proceeded to point out the difficulties to be contended with on account of the sea and the sand hills, which bordered the 'track' on either side.

"I never had such alternatives in my cycling-days," he said, as he smilingly shook his head. "I don't mind having a ground run, though, if you want to see that it goes all right," and he commenced to put on the planes, rudder, elevator and other attachments, without which the structure would be a very unsuccessful affair indeed.

"Hold her while I set her going, and when I give the word shove in that thing there," as he pointed to the 'shut off' switch.

The reporter nervously did as he was directed, and Mr Pither set the propeller whirling merrily, and in two strides he was up into his seat and manipulating the steering wheel and different switches.

'Easy does it' he said as the monoplane started off along the beach like a motor car at ten miles an hour. "I'll risk it," he added, as he pushed the elevator crank preparatory to attempting to rise. The propeller gradually slowed down, however, and an inspection resulted in the discovery that the accumulator [?battery] had run down.

It was hard luck, and the machine had to be run back to its quarters.

Mr Pither said he was sorry but accumulators must run down sometime, and that the NEWS man had just struck it.

### **An Amateurs Attempt**

On Sunday afternoon the reporter again wended his way to the 'camp' and happened to catch Mr Pither on his way out.

Sunday afternoon have been splendid for a trial but for the fact that a high tide took up almost the whole of the hard beach and made a flight impossible.

There was room enough however for a ground run, and the recharged accumulator had things going well.

'It is as easy as A.B.C. to run along the ground,' explained Mr Pither; "Care to have a go?"

"Eh, what?"

"Care to have a try?"

"Rather, but hold it down if it wants to fly."

Steering on terra firma is accomplished without difficulty with a pedal attachment and the speed is easily regulated with a small switch.

A mile was covered a rate of about twelve miles an hour - it requires about twenty miles an hour to rise

from the ground - and the pressman was scared of the possibilities, even at that speed.

Mr Pither said that it was well-controlled, and promised him a real fly "some day."

Such was an amateur's performance, and he was keen.

### **Mr Pither's Intentions**

In answer to a number of questions Mr Pither said that he intended to bring the machine back to town, probably on 26 July.

He had carried out all the trials necessary and was thoroughly pleased with his machine.

He first of all intends to put it on view in for a few days, probably at his own workshop in Kelvin Street.

Would he give a public trial?

Yes, he intended doing so if he could get a suitable area.

Neither Queen's Park nor Rugby Park was big enough, and he would be running into the fence before he knew where he was.

The racecourse might do, however, even though it was rather far out of town.

It was very hard to get a suitable trial ground and the beach was the best he could think of. It was possible that he might go to Victoria, Australia, where there were plenty of magnificent level clay stretches that would be perfect for aeroplaning.

Yes, he understood that he was the first in New Zealand to make an actual flight. He had not formulated any plans yet regarding any of the Commonwealth Government prizes.

In any case the conditions would be too severe, he thought, for a light machine as his, and one of the conditions was that the competitors had to carry three men, a Maxim gun and ammunition. Only an airship could comply with those conditions.

Although he lived in Australia for many years during his cycling days, he was really a Canterbury man, and so was a New Zealander.

Beyond what he had said, he could add nothing more.

It only remains therefore to congratulate Mr Pither upon the consummation of his hopes and efforts, and to express the wish that he will reach the same fame in the aeroplane world as he did on the cycle track when he lowered the colours of Zimmerman, Martin, Harris, Lesna, Perta and Co. in championship events.

Friday, 29 July 1910

## **INVERCARGILL'S AEROPLANE INVENTOR'S EVENTFUL CAREER A STRANGE PARALLEL**

*[The account deals with a comparison between Henri Farman, the French aviation pioneer and Mr Pither, and also gives some details of the latter's career both in sport and business.]*

Mr H J Pither, inventor and builder of the first aeroplane in the Dominion to make a successful flight, is one of the most discussed men of today, and Invercargill has awakened to the fact that genius has been in her midst for quite a long time without her having the faintest idea that such was the case.

Mr Pither in the construction of his great machine went quietly about his work, informing no one and encouraging no one to pry into his labours.

For nine months Mr Pither devoted the whole of his spare time to his new hobby with no one to advise and only theoretical knowledge to guide him.

But he was a practical engineer and no detail was omitted, and his successful "fly" of a fortnight ago marked the culmination of months of labour and the dawn in New Zealand of a new locomotion.

Particulars of the structure and details of the trials are already in the public mind and would be needless repetition here.

There is one feature that has not been touched upon previously and that is the fact that the framework of the machine was constructed of braised steel tubing. In a recent article Mr Henry Farman the famous aeronaut, expressed the opinion that the day was not far distant when steel tubing would be used for frameworks in place of ash timber.

Mr Pither would seem therefore to have taken time by the forelock and to have gone a step further than the Continental manufacturers.

Mr. Pither has intentions of taking his monoplane to Australia and to compete for several of the prizes shortly to be given there for such events.

He will, however, visit the principal centres of the Dominion first giving practical demonstration wherever possible.

### **A REMARKABLE COINCIDENCE**

Perhaps one of the features of Mr Pither's success is the remarkable similarity of his career prior to taking up aeroplaning, with that of the famous Henry Farman who recently won the Grand Prix for the longest continuous flight at Rheims by covering 112 miles on 184 minutes.

Mr. Farman has made racing his hobby all his life. At the age of eight years he won a foot race at Boulogne. When a little older he took up cycling, eventually winning the championship of France in 1892. After the cycle came the motor car but Mr. Farman then turned his attention seriously to aeroplanes. Less advertised than many of his fellow aeroplanists he

worked quietly and steadily to perfect himself in the theory and practice of flight.

Strangely enough Mr Pither also distinguished himself as a runner when a boy, and won several footraces from twelve years upwards. In 1892 he turned his attention to cycling and his first race was over a fifty miles course from Christchurch to Leeston and back. It being his first race he was not known to fame and although he had the limit of 45 minutes he had very few supporters. But win it he did and to the general surprise also broke the then existing record, knocking off some five minutes. That same year he won the provincial championship and the parallel appears all the more extraordinary. In 1893 he was chosen as one of the four to represent New Zealand at the Sydney championships, and won several prizes, also succeeding in making an Australasian ten-mile record. In 1894 Mr Pither annexed two Otago championships in Dunedin; and also others at Timaru and Christchurch. The following year he made a great name for himself at the New Zealand championship meeting at Napier where he succeeded in capturing no less than five out of the six championship events and taking second place in the sixth. His fame as a cyclist was quickly bruited abroad and he was offered an engagement by the Humber Co. in Melbourne to ride their machine. This offer he accepted and he left New Zealand to become a professional. Throughout 1895 Mr Pither competed successfully throughout Australia in various track and at the tail end of the year reached the height of his career on the Melbourne Exhibition Track. The event was the International championship mile (from scratch, and Mr Pither succeeded in outclassing the then world's champion (A.A. Zimmerman) and such great cracks as W. Martin (America) A.W. Harris (England), Lesna (France), and Porta (Italy); who took part.

In 1896 Mr Pither toured New Zealand with Martin and Harris but although they won many races the trip was not a financial success the gate receipts being so small compared with those in Australia. On returning to Australia Mr Pither severed his connection with the firm and went into business at his trade of engineering.

On returning to New Zealand subsequently, he was induced to make a final reappearance several years after his retirement, and at Christchurch gave a glimpse of his old time ability by beating both the Arnsts in a mile just before they set out for Sydney to have a shot

at the Sydney Thousand, which Dick Arnst succeeded in winning.

Since then Mr Pither has been ensconced safely in his shell of retirement and for several years has followed his vocation in Invercargill.

Always interested in anything weird or unusual Mr Pither began to interest himself in flying machines, and by October last year his ideas began to take shape and after months of quiet uninterrupted work during spare hours his machine of today has been the outcome.

While in business as a bicycle manufacturer in Christchurch he built in 1902 a two-seater single cylinder motor car the tyres of which were made of several layers of canvas sewn together. At that time there were only about six imported cars in Christchurch.

The similarity between the careers of the Anglo-Frenchman and the Maorilander seem even more than a coincidence, and it only remains to express the wish that Mr Pither will be as successful in his flights to come as was Mr Henry Farman.

#### CONTEMPORARY OPINION

It is gratifying to learn that an aeroplane flight has at last taken place in New Zealand", states the Lyttleton Times editorial.

The overseas States of the Empire have been slow to venture into the new field of human achievement. In Great Britain, France, Germany and America men have been flying almost daily during the last twelve months, and a journey of fifty or one hundred miles in the air is no longer a feat to make the nations wonder. Scores of adventurous spirits have proved their possession of "the courage 'that braves heaven", and though death has taken heavy toll among the pioneers, the small group of airmen is growing into a regiment and will soon become an army. Young colonials generally are not lacking in self-confidence and enterprise, but they are far from the centres of scientific effort. They are not often brought into direct contact with the wondrous works of the world's great inventors and engineers and as a rule they do not have the inclination or indeed the leisure to study mechanical problems as presented in technical publications. But while it may be easy to explain New Zealand's backwardness in this respect, the whole country will be ready to congratulate the Invercargill engineer who has succeeded in travelling nearly a mile in the air in a monoplane of his own construction.

Mr. H.J. Pither probably has had no advantages not commanded by a man ambitious for a new sensation and able to spend a little money on the necessary equipment. There are no secrets about many of the most successful flying machines. Monoplanes and biplanes of half a dozen patterns may be bought ready for use in Europe and America and the most detailed plans and-descriptions have been published for the instruction of builders.

The task that lies before the airman is not that of inventing new machines, but rather that of learning how best to use the appliances already designed.

The world wants more highly-trained men like Paulhan and Latham in order that the remaining problems may be solved, and every individual who undertakes experiments with a desire to make himself a master of the air is doing a great public service.

We hope that Mr Pither's example will stimulate other men in the Dominion to a practical study of the art of flying. The younger countries should not lag behind in an exercise that demands courage, coolness and skill in a pre-eminent degree.