

26th August, 1937.

Wing-Commander L. J. Wackett,
Passenger - s.s. "Mariposa",
AUCKLAND .. N.Z.

Dear Sir:

I have to confirm my letter of 21st June, and have since received yours of 18th July. As customary, the letter was circulated to the members of the Board, and your remarks were noted with interest.

FACTORY BUILDINGS:- Reports Nos. 12 to 16 are enclosed herewith, and generally they will give you a picture of the progress towards completion of the buildings. I anticipate that we will move down to Fishermen's Bend just before your arrival.

As you can imagine, we have had our little troubles at this end. The comparatively isolated site, which has necessitated all essential services being laid anew, has compelled us to "court" the various Departments concerned, namely the local Municipal Council; the Harbor Trust; Melbourne & Metropolitan Board of Works; Electricity Commission, and the Gas Co. On the whole, we have got on splendidly with these people, but the main essential - the sewer - has required constant urging on our part, and only today have we been able to conclude arrangements for a temporary expedient which will suffice for a few weeks before the final installation is ready.

The Engine factory is well forward, but the Aeroplane factory is not so far advanced. The next week or two is expected to show decided improvement in this direction.

Work on the landing and testing ground is proceeding apace, and the Government are really doing a good deal more than they officially indicated to us. The work of grassing that portion of the ground which has been completed is going on, and I notice that they have put in some new posts round one section of the boundary, which leads me to think they are going to fence the area.

One other material point of progress since I last wrote you has been the receipt of a written communication from the Port Melbourne Council agreeing to put down a road from General Motors-Holden's Ltd. to our gateway, and this work is now well under way. It will be a 6-inch concrete pavement, and the cost - about some £15,000 - is being borne by the local Council with a contribution from the Harbor Trust: we do not contribute in any way.

The position regarding electric wires remains unchanged. Mr. Hartnett is to take the first opportunity of conducting the Premier over the factory, and it is hoped that the broadened knowledge resulting from the Premier's visit abroad, as well as the fact that he has more money available, will move him to do something with these wires.

TUGAN:- The restricted programme to build up to No. 8 machine is now nearing completion, and the position arises where we have to immediately consider putting off men who will not be required at the Melbourne factory, or alternatively, will not - even if we do require them - come to Melbourne.

By direction of the Board, Mr. Harrison is proceeding to Sydney tonight to survey the position generally on the above lines.

There does not seem to be the response for nucleus of personnel available for transfer to Melbourne which we anticipated, and this is explained perhaps a little more fully in Mr. Jarman's letter dated 19th inst., copy attached.

As regards sales of Gannets, although numerous inquiries have been explored, no actual sales have resulted. Since last writing you, the sale to Guinea Airways has fallen through. Another prospect was from Southern Airlines & Freighters Ltd. - this Company was originally formed after a good deal of publicity, to exploit the use of Junkers machines. One of the latter was specially flown from Germany to Australia, but suffered engine trouble at Darwin, where she was delayed as a consequence for some time. Later on, when the machine came to Melbourne, further publicity was indulged in, and actually the machine was loaned to the Sydney/Brisbane route when the Stinson liner crashed with such fatal results. However, they seem to have had no luck, and it had a forced landing. The upshot of it all is that the machine was shipped back to Germany yesterday.

Southern Airlines have now acquired Intercity Airways Pty. Ltd. and approached us for the purchase of

several Gannets. They made a good talking point of their proposed extensions etc., but it did seem to us that what they really wanted was to hook the Corporation up with them in some sort of association, so that this could be used as an advertising medium in the proposal which they had on foot to immediately increase their capital.

Incidentally, while they mentioned their authorised capital as £500,000, they really only have £42,000, and this is represented by second-hand assets such as two aeroplanes (one of which, it is since reported, has been damaged). Indeed, they suggested trading in their damaged machine to us as a deposit. Meantime they had ordered a Dragonfly. In the light of the above, we did not judge their efforts very seriously, and no business has resulted.

I am sending you herewith a copy of letter dated 19th August from Mr. Jarman, which reports breakage in the spar of the Gannet, and the indicated requirements of the Civil Aviation Board. Steps, of course, will have to be taken to put these matters right.

NEW TYPE:- Air Vice-Marshal Williams advises that the Air Board are securing one Miles Magister through the British Air Ministry, and this is expected to arrive in Australia some time about November/December next.

NA-16:- The first prototype machine duly arrived, and delivery was taken by the Air Board at the ship's side, and the machine was immediately transported to Laverton. Upon arrival of Air and Smith, assembly was proceeded with, and this has now been finished. I am expecting to hear today as to the definition of liability between the Company and the Air Force. We are prepared to accept responsibility for the pilot and the machine during test trials, and I understand the Air Board are going to make this suggestion to us on these lines.

The machine carried very well aboard ship, and subject to successful flights in the next few days, some of the Directors will take the opportunity of viewing it at Laverton next week.

In regard to the suggestion for a demonstration pilot, the Chief of the Air Staff was unfavourably impressed with the idea that we should await the arrival of Chaseling, and in the light of his opinion the Board agreed to permit the Air Force to fly the machine.

In connection with the second and improved model, as you were already committed to the engagement of Chaseling, nothing further could be done.

CUSTOMS DUTY:- You will be pleased to learn that, as a result of negotiations with the Customs Department, the Government has given us a comprehensive exemption from duty on machines and machine tools which, in effect, frees us from payment of Customs duty in toto - although we are still charged primage, but this can be dealt with later.

As regards materials, the position has not been cleared up, up to the present. In the lists sent forward by Air, the word "order" was used as a misnomer, and from his personal explanation on arrival, he intended to convey that some of the items which he had mentioned as "ordered through L. J. Wackett" had been intended to mean that these items had been remitted to you in England, as representing the balance of the materials not ordered, but which were left to you to order in England or Australia as you considered best. However, his personal explanation came at a very opportune moment in our negotiations, and I am endeavouring to hold the matter over until you return, when the complete list of what has been ordered, with your reasons, can be personally explained and delivered to the Department.

I might mention that the Defence Department were asked to report on the question of materials ordered, and they raised several pointed queries, as, for instance, the necessity for ordering forty propellers in America, and the ordering of complete cylinder heads for engines, etc. However, they have recommended to the Customs Department that the duty be at least suspended in the meantime, pending further investigation. This latter recommendation has not yet been given effect to, but we hope it will come through in the course of a few days.

Throughout the discussions with the Defence Department officials, it was generally accepted that our price for the machines for the initial order was subject to revision in the light of any duties or imposts which had not been taken into account by us, and this is a point to be borne well in mind in future.

GANNET BROCHURES:- I send you herewith a number of pamphlets relating to the flight of the Gannet machine to Rebaul, which I am sure you will be pleased and interested in perusing.

Under separate cover I have sent you the daily papers and weekly papers, perusal of which will acquaint you with Australian conditions at the present time.

Personally, I am looking forward to your return, and I know the Directors are also, so that things can be got under way.

Yours faithfully,

AGB/F.

Enc: Copies of letters(2)
Buildings Sub-Com. reports
Gannet brochures.

Secretary.

Engine Factory:

The external finish to the front facade is now completed. Work is in progress on finishing the internal walls. Some glazing remains to be done on south and west walls, and a small amount of work on the roof. The main doors have been erected.

Finishing work outstanding consists of:-

Completion of plumbing work and lavatory
Installation of ventilator fans
Erection of internal partitioning
Finish painting inside
Electrical installation.

The cables for the electrical installation are delivered on the site, and the switchboard is erected at the contractor's works ready for installation at the factory. A C.A.C. electrician has been engaged to carry out the installation.

Detail arrangement of the machine tools for the tool room is being gone into. Many of these tools are in Melbourne awaiting delivery, and it is expected to have them delivered to the factory within the next fortnight.

Administration Building:

The flat roof is almost completed. External walls have yet to be rendered and coloured. The finishing work internally is well under way. Plastering and ceiling work is in progress. All joinery and door furniture has been ordered, and will be available when required. Electrical installations (light and heating) are almost complete.

Canteen:

This building is generally in the same stage of advancement as the Administration Building, but being less complex it is nearer to completion.

Power House Substation:

The floors and cable ducts have been completed. Roof trusses have not been delivered from Johns & Waygood Ltd., and this has delayed completion. The 500 Kva transformer has been delivered to the site. Switchgear is well advanced at the contractor's works.

Aeroplane Factory:

The steel work on this building is well advanced. Roofing and wall covering is going on. The mezzanine floor area is in course of construction. The columns for the front facade are about 60% complete.

Outside Work:

Fire Hydrant and water mains are being installed.

Sewer connections have been made in the main roadway. It is hoped to have the roadway cleared next week, ready for the road contractor.

The Board of Works sewer outside our boundary is progressing well. The sewer pipe has been laid and cemented up to a point opposite the Administration Building. The Board of Works have been approached to hasten the work to enable us to occupy the factory. They now anticipate making final connection to the sewer outfall near the Williamstown Ferry by the end of August, although their contract time for completion was five months.

(Sgd.) H.C. HARRISON

MELBOURNE:
23rd June, 1937.

Engine Factory:

The ventilator fans have now been installed in the tower rooms and the ducts connected up. Work is in hand erecting the filter units adjacent to the ventilator fans.

Painting of walls and roof trusses is almost complete.

Plumbing work is almost complete.

A check of the stresses in the roof members supporting the overhead lavatories has been made. It has been found that the safety factors are adequate and deflections insignificant.

Internal partitioning is well in hand, and erection should commence this week. The erection of the partitioning cannot be completed, pending the installation of the Jig Boring Machine now on the water.

Work is in hand installing the overhead busbar system of electric distribution. The various runs of cable serving the individual busbar units have been run from the spools into the roof. It has been considered that, as the first example of this system of distribution in Australia, special pains should be taken to perfect the installation. Consequently light channel section members have been run throughout the roof to support the cables and eliminate any appearance of unsightly "festooning".

Detailed consideration has been given to the arrangement of the tool room machines, so that these may be placed in position straight from their cases. Full scale templates have been made for laying out in the shop, according to plans schemed on the drawing board.

Administration Building:

Finishing work is progressing, and joinery delivered to the job can now be installed.

Some re-glazing has been found desirable owing to the dulling effect of Coldite glazing, but the glass to be removed can be employed elsewhere.

Canteen:

The floor of this building has been commenced, and, with the exception of finish painting, this will complete the work.

Power House Substation:

The roof is now completed, and work on the installation of switchgear by the contractors, Messrs. Gladwell & Barlow, is in hand.

Aeroplane Factory:

The steel structure is almost complete, and roofing is well advanced. A start has been made with the laying of the

floor slab. The mezzanine floor is about half completed.

Outside Work:

Underground services are installed except for minor connections. (The dummy conduits under the administration buildings are being carried under the road to the outer walls of the factory buildings).

This does not apply to the gas service, which the Metropolitan Gas Co. have undertaken to bring to the site free of cost to ourselves, we to bear cost of distribution inside the site. This distribution can be arranged without disturbing made roads and paths.

Consideration has been given to placing contracts for road making as the work of next importance.

It is considered that a concrete construction best meets the conditions found at the factory site, by reason of the following -

- (a) Any form of macadamised road would require a very solid foundation on the sandy soil on which we have to construct the road. This foundation would require to be exceptionally well consolidated by heavy roller, with consequent risk of damage to service pipes.

The foundation material may be difficult to obtain with consequent delay in completion.

- (b) A concrete slab road can be laid direct on the sand, which packs well with a minimum of consolidation. A start can be made as soon as the area becomes available and delays are not likely to arise. The heavy loading arising from the machinery can be carried with confidence on this type of road.

road.

Tenders are being called for a suitable concrete

(Sgd.) H.C.HARRISON.

9th July, 1937.

MEMORANDUM SUBMITTED BY BUILDINGS SUB-COMMITTEE:

Colour Scheme for Factory Finish

The interior finish to the factory buildings has been determined largely on utilitarian grounds - the aluminium finish to roof members and upper works being non-absorbent of light and the battleship grey of dados and lower works as being a good serviceable colour of pleasing appearance.

Some guidance is desired as to the exterior finish. It is mentioned that the concrete work at present is finished in a light buff colour, which is obtained by the use of a coloured cement mixed in with the cement rendering. This colour can be altered by applying an outdoor cement Calomine at an added cost, but such a colour is not so fast as the present coloured cement.

If it is decided to allow the cement work to remain in its present colour, the selection of a colour is required in which to finish the window frames and doors. (The biggest splash of colour will come from the aeroplane factory hangar doors).

A fairly bright russet colour is suggested.

(Sgd.) H.C. HARRISON.

HCH/TK.

Engine Factory:

The structure is now complete and a small amount of finishing work only remains to be done. Internal partitioning is in course of erection.

Work is in progress on the electrical installation. The main cables have now been installed ready for connecting to the busbar system when the first unit of this arrives from overseas.

The work of laying out the machines for the tool room section is in hand, and various alternative arrangements are being investigated by means of full sized templates arranged on the floor.

The re-glazing which was necessary on account of the poor quality putty first used is now almost completed.

Administration Building:

Walls and ceilings are now being finished and joinery installed.

The special floor has been laid throughout the building in readiness for the linoleum. It is anticipated that all work will be completed in two weeks.

Canteen:

This building is likewise in the finishing stages and almost completed.

Power House Substation:

Work is in progress on the erection of the main distribution board. The switch rooms are ready for the installation of the Corporation's main switch and the Metropolitan Electricity Supply's main switch when these are available.

Aeroplane Factory:

Front facade is about 80% complete and roof about 80% complete. Good progress has been made with the floor slab.

A commencement has been made with the electrical installation.

Outside Work:

All underground services are now installed.

The Board of Works main water-pipe on Lorimer Street has been installed up to the Corporation's fence. The water supply should be available before the buildings are completed.

Roads:

Tenders have been received for road construction. Tenderers were invited to tender for concrete slab road, and were permitted to suggest alternatives. The best price has

an alternative
been submitted by R.G. Wales for a cement penetration road
similar to roads constructed for Imperial Chemical Industries
at Deer Park except that our road is to be 6" thick instead
of 5".

I have viewed this road, and consider that it would
satisfactorily meet out requirements, and that on our sand
foundation we should avoid certain minor troubles which have
been experienced on the clay foundation at Deer Park. The
tender has a minor advantage that the contractor would take
over the site as at present existing, and carry out all
excavations and provide brickbat foundation.

It is recommended that this type of road be adopted.

(Sgd.) H.C. HARRISON

MELBOURNE:
26th July, 1937.

Engine Factory:

The remaining finishing details to be completed are:-

Partitions: The heavier partitions near the main entrance are all fabricated and mostly erected. Erection cannot be completed until the arrival of the Genevoise Jig Boring Machine on August 16th. This machine is "built in" after setting on its foundation block, which is now ready for its reception.

Chain wire mesh partitioning for Stores and Inspection Bays are erected. Wire doors have yet to be fitted. The work is 90% completed.

Lavatories: A small detail of erection of W.C. dividing partitions remains to be done. All plumbing work and other finishing is completed.

Electrical Installation: Progress has been made with the electrical installation. The Engine Factory Sub-switchboard is erected, and the cable runs from the switchboard to the six runs of overhead bus-bar have been erected. In keeping with the clean arrangement which the overhead bus-bar system provides, these cables have been run in steel channel section members giving a pleasing and efficient distribution system.

The work of installing 230-volt power points on the main stanchions for hand-operated tools is proceeding.

Delivery has been made of such Engine Factory machine tools as are available in Melbourne. The set up of these tools has been arranged on paper. It is proposed to contract for their unpacking under an arrangement whereby we are relieved of the empty cases and paid at the rate of 5/- per 100 super ft. of timber in them. It is proposed to defer commencement of this work until the arrival next week of the Jig Borer, when the job can be undertaken as a whole.

Designs have been prepared for uniform draughting tables, fitters' benches and storage racks. Tenders have been called for samples of each and for quantity supply. Samples will be checked as satisfactorily meeting the requirements before placing a quantity order.

Administration Building:

Lignoleum flooring has been completed ready for the linoleum covering.

Finishing work in progress consists of:-

- Fitting skirtings
- Finishing lavatory partitions
- Laying stair treads
- Colouring walls
- Installing telephones
- Hanging office doors
- Mounting wall clocks.

Canteen:

This building is completed except for the laying of the floor and installing the kitchen servery counter. It is proposed to keep the kitchen arrangements on a moderate scale, until such time as an estimate can be made as to what extent facilities which may be provided will be used by the personnel.

Aeroplane Factory:

It is felt that better progress could have been made on this building, and the Contractor is being urged to hasten the work. All sub-contracts have been arranged from this office, and delays appear to be due to insufficient man power on the job.

The floor has been about 95% completed. Rails for the aerodrome main doors are laid, and those for the river front (North) main doors are in hand. The apron leading from the main doors to the aerodrome has been consolidated with brickbats ready for concreting.

Ventilation system is 80% complete.

The mezzanine floor rafters are in place ready for flooring and ceiling.

Work is in progress on the completion of the front facade towers and the east concrete wall.

Outside Work:

Work on the roads commenced immediately on placing the contract. Gutters are poured on that section leading from the main gate on Lorimer Street to the buildings. Excavation on the east road is complete, and gutter forms are placed.

Fences: Work will commence this week on the front (aerodrome) ornamental fence.

Gas: A contract has been accepted from the Metropolitan Gas Co. to instal mains to service the factory buildings. The work will be arranged so as not to interfere with work on the roads.

Cycle Shed:

Authority is sought to erect a cycle shed lean-to (in fibrolite, in keeping with the factory) on the west wall of the Aeroplane Factory. It is considered that the selected position will provide good access and at the same time be non-obtrusive.

(Sgd.) H.C. HARRISON

MELBOURNE:

9th August, 1937.

19th August, 1937.

The Secretary,
Commonwealth Aircraft Corporation Pty. Ltd.,
422 Little Collins Street,
MELBOURNE. C.1.

Dear Sir,

I wish to acknowledge receipt on the 18th inst. of a confidential letter signed by Mr. Harrison indicating that he wished to discuss by telephone the subject of labour as it appeared that no more work will be forthcoming from the Air Board.

I wish also to confirm the subsequent telephone conversation with Mr. Harrison on this subject.

In this conversation Mr. Harrison asked for the number of men, taking the present amount of work at this Branch and the impending necessity to reduce staff into consideration, it was desired to bring down to Melbourne.

It was pointed out to Mr. Harrison that it was very difficult to state how many of the men at these works would be prepared to go down to Melbourne owing to the fact that they were not able to obtain advice as to the actual conditions that would prevail at Fishermen's Bend. It was stated that out of a number of about 12 key men only two were willing to state that they would definitely go. Of the remainder there was a greater proportion ready to go but unless it could be definitely shown that these men could be found the class of work to which they are specially suited, it could not be definitely stated that it was desirable to have them go.

Taking these facts and the present situation into consideration it was estimated that about ten men, some of whom could be key men would be available for employment in the Melbourne Factory.

It is desired to draw attention to the fact that Mr. Wackett before going overseas stated that he wished the existing staff to be increased to something near 100 men of suitable skill.

Circumstances have militated against this and only about half that number counting clerical and store staff is on the present pay roll.

Every endeavour is being made to retain all suitable men particularly as it is not known definitely who will go.

It will be realised that it is not possible to hide from the men the fact that dismissals are possible in the near future. The danger of causing a sudden scramble for jobs that are offering in Sydney has to be taken into account.

I feel that I am placed in a difficult position in

not being able to state the conditions at the new factory, or offer any inducements to counter the offers on this aerodrome made to our best skilled men.

We require some of our best men right up to the completion of the work we have in hand. Some of these men have been offered jobs at Mascot and in Sydney, and the chances are that if we are forced into reducing staff some of them will not stay in the fear of not getting anything better in Melbourne and missing the best that is going in Sydney.

Yours faithfully,

(Sgd.) J.D. JARMAN

Branch Manager.

JDJ/JM

Cook Street,
Mascot, N.S.W.

19th August, 1937.

The Secretary,
Commonwealth Aircraft Corporation Pty. Ltd.,
422 Little Collins Street,
MELBOURNE. Vic.

Dear Sir,

Tail Plane - Gannet
Broken Spar

In connection with the matter of the broken Tail Plane spar of the Gannet operated by Intercity Airways, Mr. H.A. Wills representing Civil Aviation Board has reported that under examination at M.S.B. Maribyrnong, it was found that the spar which C.A.B. forwarded there for examination has been proved to be cracked at every rib attachment.

Mr. Wills said that the opinion stated at M.S.B. is that the cracks are due to the alteration of the structure of the metal at, or near the welds and the consequent early fatigue due to the vibration or fluctuating loads upon this member.

He also stated that he thought that the trouble may be overcome by securing the ribs by clips, without welding.

As all spars that have been fitted have had the ribs welded to them the damage has already been done if welding is the cause. Therefore, it appears to be necessary to replace all spars in existing Gannet tailplanes.

It has been reported by Mr. Wills that the R.A.A.F. Gannet which is, or was operating in Central Australia also has been found to have broken spars. No information in regard to the other Gannet in the possession of the R.A.A.F. has come to hand.

The steel in these spars is made to the T45 Specification and therefore has a fairly high carbon content, approx. .3%. This appears to be a disadvantage in the member we refer to. It is thought that the substitution of a lower carbon steel, even if a slightly heavier gauge has to be employed should be investigated. This suggestion has been put to Mr. Wills who appears to regard it with favour.

The spars under consideration are of 2" D x 20G. This relatively large diam and light gauge may on investigation prove to be a disadvantage.

No action has yet been taken by this Branch, to modify any Gannet Tail Plane in consequence of these failures. The Tail Plane for Gannet No. 8 was just in the process of being covered when information was received that the R.A.A.F. machine was found to have the fault, and C.A.B. intimated that it would be necessary to alter the method of rib attachment.