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AIRTOURER ASSOCIATION



Dedicated to the preservation and continued airworthiness of VICTA and AESL Airtourer Series Aircraft



NEWSLETTER

<http://www.Airtourer.asn.au>

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Articles for inclusion in the Newsletter should be submitted direct to John O'Halloran at the contacts listed above.

The next Newsletter will be published in May 2016. Contributions and or advertisements are to be with JOH by 15 April 2016.

Advertisements are free for current members.

Editorial

It's easy to become engrossed in you own problems until life reminds you that it could be worse. Those attending the President's Fly-in may have noticed that Jan and I were driving. In fact I haven't flown as pilot in command since mid last year and in December my licence medical was "suspended for the foreseeable future". By the time you receive this Newsletter I'll be about to retire. Although it was not quite at my choice I, (and of course Jan), are nevertheless looking forward to the chance to attack the thousand jobs that get put off due to work. In particular there's a lot of work to be done with the Co-op and I'd like to give the website a revamp.

However, hearing that Lorraine Howson finally lost her long battle with cancer put my concerns into a very different perspective. Although we haven't seen her for a while Lorraine made quite a contribution to the Airtourer community in the past and will be missed.

My medical condition has little impact on day to day quality of life and is not life threatening. I'm hoping to convince CASA to renew my Class 2 so that I can at least fly the Airtourer.

The Convention and AGMs are approaching. This is your association and I'd echo President Mike's comments about considering nominating for the Committee or the Board.

Safe Airtouring,

John O'Halloran

Cover Photo: The line up at Mansfield on the Saturday afternoon of the End of Year Gathering.

Disclaimer

The views expressed are those of the contributors and not necessarily those of the Publishers, the Airtourer Association or the Airtourer Co-operative Ltd.

From The President

No. 11

In early December 2015, Gerry Pels, Neils Jensen and I flew up to Dubbo to do the ground work for the 2016 Convention. You may make the observation that Goulburn was noted as the site for the next Convention but circumstances have conspired to make us change the venue, at least for 2016. We have high hopes of doing Goulburn the year after.

With the benefit of three pilots, three iPads and a couple of GPS we were able to successfully locate Dubbo. The direct track KTN-DU took us over Yar-randale, which is identified on OzRun-ways and clearly visible from the air. This genuine white fella sacred site is rich in Airtourer history. Airtourer Association President Sonny Rankin's property Yar-randale complete with grass runway and Airtourer sized gate leading to the Hangar, read machinery shed, was the original site for the President's Fly-in but a much different event to what happens today.

Our track also took us abeam PKS, a site of equal significance to the history of the Association. Tony Mathews President's Fly-Ins were held at his home base of Parkes. For 10 years PKS in September was the destination to look forward to, promising flying, good company and entertainment for all.

Dubbo is a pleasant town with more than adequate accommodation, with remarkably, over 40 motels. If you are unable to fly your aircraft it is also well served by road, rail and air transport services from anywhere in Australia AND if you are flying your Airtourer from the



deep north the trip has just become a whole lot shorter.

Running around a strange town trying to assimilate a hundred facts and an equal number of variables into a good programme is the stuff of headaches. It can also be highly amusing. Both Gerry and Neil are ex-military men and this is most evident in the collective attitude to any problem of "just get on with it". I therefore took the back seat in our hire car and made useful suggestions, while trying to form a mental as well as written picture of what we were creating. This calm process was interrupted when Neil demonstrated how to manoeuvre a Panzer out of harm's way by doing a 90 degree turn, at speed and without hesitation, up a back lane way to avoid an offensive railway crossing. After lunch Gerry decided to take command of the driving and that was that.

Dubbo regards itself as a regional capital so the citizens of Dubbo enjoy excellent amenities, many of which we will enjoy also. Being a major stop over on the road route between Melbourne and Brisbane contributes to the need for many

motels, but so is the tourist potential of the area. Front and centre is the Taronga Western Plains Zoo which we will be a major destination for us.

Be aware that for this event we have made a deliberate choice of motels that are within easy reach of some meal locations and offering choice in prices and styles from basic reasonably priced to apartments. All our meetings will be held at the Cattlemen's Motel. Co-location of accommodation will greatly simplify all the transport requirements for the weekend, so please book early.

The AGM is also election time. No one on the Committee has a position for life or expects it to be so. Any entity, or individual for that matter, that refuses to

acknowledge and manage change, which is the only constant, will be doomed to a miserable existence crowned by failure. If any member has new ideas on how it should be done, here is your chance. Nominations for ALL Committee positions are open to ALL members for which the elections will decide the outcome.

And there is more!

The Events Committee has gathered once more to work feverishly on future programming, resulting in the 2016 calendar of events being fully available.

Keep watching the web site for updates.

Until then may all your landings be good.

Farewell Lorraine Howson

The Airtourer community was saddened to learn of the passing of Lorraine Howson on Monday 8th February. Lorraine had been fighting cancer for a number of years. She and Bill Pennell owned Airtourer T6 XVV and were regulars at our gatherings before having to sell the aeroplane due to deteriorating health. Her son Stewart observed that "Her time flying was the best of her life."



Over the period of 2003 to 2006 when Bill was President of the Association Lorraine was the administrative force behind our fly-ins. She was an assistant editor of the newsletter and will be missed. Our thoughts go out to her family.

End of Year Gathering

Fine weather in Victoria assisted the 2015 end of year gathering to get off to a good start with nine aircraft stopping at Warring airfield south of Shepparton for a BBQ lunch. The superb culinary skills of Andrew Clement ensured the crews' appetites were well and truly satisfied before the next short hop to Mansfield in central Victoria. No time was lost in securing the aircraft as there was a 6:15 PM showing of the latest James Bond film, Spectre, followed by a thorough and well informed critique of the movie at a local pub.

After an enjoyable evening in Mansfield the Airtourers were all set to head home. Unfortunately the Piper Arrow VH-DWT required a callout from the RACV to jump start. A first for an Airtourer Fly-in!

For Sale

AESL Airtourer Super 150, VH-CRK



Manufactured in 1969 this aircraft has been beautifully restored and equipped to previous IFR standard. Total Time Airframe: 4133 hours. Engine 2036 since overhaul, all compressions very good. Prop, constant speed, 59 hours since overhaul. 30L Aux fuel tank.

Hangared at YBSS.

Will be sold with fresh maintenance release.

\$53,000

Ph: 03 5367 5450

Lead Acid Batteries

Mike Fisher

Aircraft batteries should not be considered to be the same as car batteries, while the construction methods are similar there are differences.

- Component weight is critical
- Lead plates are much thinner
- Electrolyte is more concentrated
- Lower charging voltages apply
- Small production runs
- The high cost of regulatory compliance

Also aircraft batteries are relatively small compared to automotive batteries. My car has an 80Ah battery fitted and is large and heavy whereas most 12 volt batteries fitted to Airtourers would be in the range of 25Ah to 35Ah and reasonably compact. And being an aircraft part batteries are an expensive item to replace.

In a large complex aircraft with numerous power sources and high power demands spread over a cascading system of electrical bus a battery will be found somewhere in the system. Often it is the minimum level of power available.

For us the battery is a source of stored energy to start the engine but it also serves as a source of emergency power in the case of a generator or alternator failure.

Operation of Lead-acid Cells

The cells of a battery are connected in series. Each cell contains positive plates of lead peroxide, negative plates of spongy lead, and electrolyte (sulphuric acid and water). In discharging, the chemical energy stored in the battery is changed to electrical energy; in charging,

the electrical energy supplied to the battery is changed to chemical energy and stored. It is possible to charge a storage battery many times before it deteriorates permanently.

During discharge, lead sulphate is formed on both the positive and negative plates, the acid content of the electrolyte is decreased, and its water content is increased. As discharge continues, the amount of lead sulphate on the plates increases until the sulphate coatings become so thick that the weakened electrolyte cannot effectively reach the active materials (lead and lead peroxide). When this happens, chemical reaction is retarded and the output of the cell is reduced.

When a cell is being charged, lead sulphate is removed from both the positive and negative plates, and sulphuric acid is again formed. In the process, the water content of the electrolyte is decreased and the density of the electrolyte is increased.

Battery rating

Theoretically, a 35Ah battery will furnish 35 amperes for 1 hour, 17.5 amperes for 2 hours and so on. Actually, the ampere-hour output of a particular battery depends on the rate at which it is discharged. Heavy discharge current heats the battery and decreases its efficiency and total ampere-hour output. For aircraft batteries, a period of 5 hours has been established as the discharge time in rating battery capacity. However, this time of 5 hours is only a basis for rating and

does not necessarily mean the length of time during which the battery is expected to furnish current. Under actual service conditions, the battery can be completely discharged within a few minutes, or it may never be discharged if the generator provides sufficient charge.

Factors in battery health

Inactivity

Most aircraft spend long time parked in hangars. Inactivity is the ideal situation for early battery failure.

Self discharge

Once a charge is removed, so once you park the aircraft, the battery begins a process of slow self discharge. The capacity of the battery to crank the engine slowly dissipates.

Considering the modest capacity of the battery in the first place we are on a downward trend before we even get that aircraft out of the hangar.

Sulphation

As we have already seen discharge leads to reduced performance due to sulphation.

Leaving the master switch on

Small as this electrical load may be remember that the battery relay is switched through earth and uses Battery power to engage. This current draw will steadily discharge the battery, any other loads from equipment that is operating will hasten the process.

Parasitic loads

Equipment such as electric clocks require a constant power supply to operate. This is a continual drain on the battery and discharges it slowly over time.

Going for a fly will charge a flat battery

No, you won't fully recharge your battery by going for a fly, idling the engine, or even going for a short trip. In fact, 'surface' charging or continuous undercharging will lower the capacity of the battery over time and shorten its life.

Given these considerations would you not wish to try and achieve the best life from your battery?

Battery Maintenance

Battery maintenance would fall into two areas, firstly what would be considered aircraft maintenance. Making sure the battery is secure, electrical connections are clean and protected, the electrolyte levels are correct and so on.

The second aspect is maintenance charging of the battery to keep it in good condition ready to serve its primary role and return a long life. In other words reliability.

Precision voltage control is essential for long term maintenance charging of batteries.

Simple fixed voltage car chargers are not suitable over the long term as they are incapable of monitoring battery condition. Microprocessor controlled chargers are required for this task.

The standard automotive battery chargers are constant voltage chargers. What this means is as the battery is charging the voltage slowly rises, and as the voltage rises the current (amps) that the charger is putting into the battery starts to drop off, and keeps falling until the battery voltage is up around 14 volts, at which point the amps going in have dropped off to almost nothing and the battery is deemed to be 'charged' but they are NOT really fully charged. On the other hand these chargers when left connected to a

battery for the long term will overcharge and damage the battery and are capable of boiling off electrolyte.

Smart multi stage chargers operate over a range of stages monitoring battery condition. With a low condition battery the first stage is the 'boost' stage, when the charger puts in as much current as the charger is capable for as long as it can safely do so, as in a constant current charger, so it will put in a constant charge until the battery reaches a voltage set point, at this time the battery is about 75-85% charged.

The 'absorption' stage, the charger turns into a constant voltage charger, it holds the voltage at the set point, the only way it can do this is to back off the current, otherwise the voltage would just keep climbing higher and higher, so it must vary the current to hold the battery at the set point volts as the battery adsorbs the last of the required current that it needs to become fully charged.

After some time the amount of current flowing to keep the battery at the set point is so small that the chargers smart processor circuit identifies that the amps have dropped off to almost nothing, this battery has stopped accepting any real

current, so it must be fully charged!

Finally the 'float or maintenance' stage is reached, where it backs the current off even further so the battery voltage drops to around 13.5-13.8v and holds it there by varying the current again, the lower voltage is below the electrolytes gassing point and can be left on charge like this indefinitely, and if power is being drawn from the battery the charger just ramps up the current out-put to match the draw.

The real advantages of smart multi stage chargers are faster full charging, ultimately leading to longer battery life, more usable capacity from the batteries, less electrolyte loss in the case of wet batteries, and little chance of overcharging and damaging either sealed or wet batteries.

Keeping your battery connected to a smart charger will maintain your battery in good condition year round and extend its life.



Nomination for election as Director of the Airtourer Co-operative

The Airtourer Co-operative rules require that at the AGM two Directors stand down but are eligible for re-election without nomination. Additionally, other members may nominate for election if they are either active members in accordance with Rule 18, or are a person having special knowledge of the requirements to maintain the airworthiness of Airtourer series aircraft.

Any person wishing to nominate for election as a Director should do so in writing to the Chairman prior to the AGM.

Australian Built Aircraft and the Industry by Keith Meggs

Victa Aviation

Millicer and Pacific Air Tourer, Victa Airtourer

This is the third part of a series of articles written by Keith Meggs on the history of the Airtourer. Published here with the kind permission of the author. See Newsletters 155 & 156 for the first two parts and more about Keith's encyclopaedic, four-volume work on every aircraft type proposed, designed or manufactured in Australia from 1884 to the mid 1980s!

Proof loading to 9g was required on the wing structure and, after the preparation of a suitable rig; the test was carried out with ARL bags of lead shot, (a loading of 11,250 lbs) at Perfectus under DCA and ARL supervision. It was found that the design was adequate and, after unloading, all deflections disappeared, with no modifications required to the structure. The fuselage was then still at the uncovered frame stage.

Final assembly of -FMM was then scheduled for January, with initial flights late in that month, but the major components were not ready for final assembly until about March.

Preliminary assembly of the major components was carried out at Newport and, after systems checks and the rectification of minor faults, the wings were removed. The components were taken by truck to Moorabbin where it was re-assembled for DCA inspection in the RVAC private-owners hangar, under the supervi-

sion of EWA LAME Arthur Webb, sent down from Tamworth for the task.

Initial ground handling trials and some low hops were carried out by Laurie McPherson, CFI of the RVAC, on Easter Sunday and Monday, 29 and 30 March. He commented that it was a very promising aircraft which handled excellently on the ground, and in the low short hops which were all that were permissible before the Permit to Fly was issued.

The DCA pre-flight Type inspection Report (unsigned and undated) was annotated 'Spec Cat CofA. Not to be sold outside group. Not to be used for aero club training'.

Some of the 'snags' listed for attention or concession action before issuance of the Permit to Fly were:-

- Nosewheel tyre clearance.
- Clearance of elevator push-pull rods through bulkheads.
- No access to the fuselage or wing for interior inspection'
- Marking of controls, plus cockpit placards, required.
- Harness installation inconvenient.
- Seal required around fuel tank filler, and tank placards required.
- Fuel tank calibration check needed.
- Cracked spinner, stone damage on the propeller.

First flight, of 40 minutes duration, was then made on 10 April 1959

(reported as 12 April in at least two other publications (Aircraft and Flypast), by Flt Lt Randall Green, who had undertaken to carry out the test program to DCA certification, on an honorary basis. His reported opinion after the first flights was that he was most impressed with it, and that it was a delightful little aircraft to fly. Further flying showed that handling characteristics were as good as Millicer had claimed, but it soon became apparent that an increase in power would considerably enhance its performance. This was first voiced by Millicer to pilot Green during a take-off from Berwick airfield (Vic). The initial scheming for a change to an 85hp Continental C85-8 (without a generator) was already in hand. The test program, of 60 or 70 flights, continued through several months, with preliminary spinning trials on 12 June. DCA's first Performance Engineer, Jim Cleaver, did considerable flying with Green to record and assess the aircraft's characteristics and performance. As Green was based in Sydney, a DCA contribution was made towards his air fares between there and Melbourne.

All told, 61 modifications were made in the test period, mainly of a minor nature. They included the provision of more carburettor heat, the provision of inspection-access holes in the wing and fuselage, a change in instrument layout, the addition of placards and control markings, as well as the rectification of those faults listed previously.

Attempts to obviate propeller abrasion from the grass and mud surface at Moorabbin brought the fitment of a plywood mud protector over the nosewheel, but part of it broke off and disappeared on one flight, never to be found. Eventually

a nosewheel spat was fitted.

After instrument calibration at the ARL and GAF laboratories, position-error corrections were investigated on 24 June 1959, with ARL's Arthur Keeler as the observer to plot the readings obtained - DCA notes at the time designated it as the Millicer-Bennett Air Tourer.

Notes made by Cleaver from 15 July recorded a number of things to be watched, and included rough running between 1,400 and 1,500rpm with the Perfectus PA4812 propeller, which did not occur with the alternative Sensenich 72CK42, cracking of the spinner and exhaust ejector tubes, chipping of the propeller, and cracks in the outer corners of the instrument panel.

During assessment of its handling characteristics, it was found that the stall warning was of a very mild nature, rather than clear and distinctive as called for in the regulations. Nevertheless, it was conceded that- 'knowing the intended use for this aeroplane, the restrictions (operational) to be placed on its certification to keep it for "group" use, coupled with the gentle nature of the stall, its high nose attitude and small height loss, it is recommended that no additional warning be required for this one aeroplane' (As stated, qualifications placed on its use were that it was not to be used outside the group for training, nor to be sold outside it).

In tight turns, it was found that it was quite stable, with no tendency to tighten up further, using 2g for the semi-aerobatic category, and 4g for the aerobatic. However, it was found that at the higher speeds and g-loadings it was not possible to perform a sustained turn because of rapid speed loss or juddering

and stalling, demonstrated from 105 to 125mph. At the latter speed, 4.2g was achieved, and the aircraft stalled while decelerating through 115mph. Sustained turns left or right were possible at 2.2g at 80mph.

The new carburettor-heat system was evaluated for DCA by its Senior Examiner of Airmen, Cliff Tuttleby, on 30 June 1959. Cleaver, as observer, recorded masses of figures for later detailed reduction, plotting, analysis, and use in compilation of the Type Record and the Flight Manual.

The CofA was awarded on 31 July, after a demonstration at Moorabbin by Tuttleby and it was subsequently flown to Tamworth by Green, with Millicer, for demonstration and evaluation by EWA. EWA was planning to use it for a 30-hour training period with one trainee and one instructor throughout. After a small amount of general flying, the first training flight was made by the CFI of the Royal Newcastle Aero Club, Eric Greathead, on 25 August. Less than a fortnight after its arrival, a heavy landing followed a too-ambitious take-off attempt, foiled by a lack of power. Having his first flying lesson at the time was the airline's Chief Pilots son, Brian Smith, a Boeing 737 Check Captain with Australian Airlines in 1989.

The accident resulted in extensive damage to the undercarriage, wing structure, and fuselage, and the rebuilding task was carried out by East West, over approximately seven months, at a cost of £1,321, (through insurance) with the 65hp Continental refitted during the repair. It was test flown by EWA Captain Chuck Woods after its completion, and with Company Chief Pilot Archie Smith also

participating.

Because of differences of opinion, and a change of mind about the venture by many of the airline Directors it was terminated during the rebuilding period. Millicer then went ahead with the design of a metal wing spar, previously discussed with East West, and on DCA's recommendation or insistence, while attempting to find a manufacturer with sufficient capacity. At the time, he had orders for 14 aircraft, and there were two or three other firms in Victoria interested in building it. This included Des Kelly's nomination of the LVAC, although it had no facilities at the time, it had in fact discussed the possibility prior to the East West negotiations. LVAC later ordered two for its own use, after -FMM had visited on 20 June for an assessment by CFI Ron East and Committee members.

Following the EWA repair, the aircraft was apparently flown to Bankstown for a presentation by Millicer to DH, with the hope that the company would take it on as a production project, but there was no interest in anything other than a metal aircraft. It then continued back to Moorabbin, and flying training began for members of the Group, under the auspices of the RVAC, with part-time instructors A.McCracken and Harold Graeme Phillips (always known as Graeme) acting for the Group. Bruce Northeast, Peter Carr, Cyril Jeffrey, Richard Millicer (Henry's son) and Chester Jones, started training on 25 April 1960. Peter Carr reached a total of 11 hours 25 minutes and then first solo by 27 August, while Jeffrey renewed his flying activity after Catalina operations in the RAAF.

During the winter of 1960, Mil-

licer met Gary Richardson of Victa Consolidated Industries, while both were weather-bound at Mangalore aerodrome (Vic). From that encounter and discussion, Millicer went to Sydney to talk to company management. Victa decided to undertake Air Tourer production, but with the metal wing spar, to increase its utility and durability. The evaluation tour, with Graeme Phillips as pilot, had highlighted that there was quite a bit of prejudice against wooden aircraft construction. M-B Design Company had produced a Project Specification booklet in April 1960, in which the production aircraft Mk2 Air Tourer was described as having an all-metal wing, with a wooden fuselage and empennage, powered by a Continental C95 (sic) engine.

Nevertheless, Victa decided that it would be a 100hp Continental engine, and it was to be produced as a fully-aerobatic aircraft.

On 11 August 1960 it was announced that production of a minimum of 50 for the Royal Federation of Aero Clubs was planned. This was to be in parallel with production of the Pellarini designed Victa R2, the prototype of which was then at an advanced stage of construction). On 30 August, the LVAC sent a letter of intent to purchase two Air Tourers to Millicer, c/o Victa Consolidated Industries, and confirmed it on 6 October by telegram.

Following the Victa decision, the company took over -FMM in September/October for further development work and for demonstration. In exchange, it made Piper Tripacer -BMD available to the Air Tourer Group on a subsidised basis, so that the training of Group members on their own aircraft could continue.

On 26 September, Millicer had written to LVAC to advise that the whole aircraft was being redesigned in metal - such was in keeping with a firm DCA attitude towards such a move, and its increasing suspicion of wooden construction.

Millicer resigned from GAF during September, to enable him to join Victa in October as a third Designer, alongside Blackler (responsible for the Victa R101), and Pellarini, taking the position of Chief Designer. In Melbourne, he invited Peter Carr, ME, then employed as Chief Designer for Franklin Suspensions, to join him as Project Engineer, along with Bob Dengate and Roly Carr, both from GAF. The team then spent about a month working on drawings and data, preparing a Maintenance Manual, arranging component supplies, and resolving airworthiness matters with DCA. All this was done in a sleep out behind Millicer's home at 7 Ruskin Rd, Glen Iris, before moving up to Sydney in November.

Recruitment of qualified personnel by newspaper advertisements began in mid-October, and interviews of applicants were carried out in Sydney, Melbourne, and Adelaide by Gary Richardson, Governing Director of Victa, and by Millicer. As a result, Bob Dengate, Bruce Ralston, and Roly Carr also left the GAF design team in favour of Victa. Other employees of GAF, and also of CAC, left to take part in the Air Tourer program - the latter included Harry Gorjanicyn, and Frank Rogers, who moved up to Sydney some weeks after the first group.

On arrival in Sydney, it was found that Gary Richardson had engaged a company psychologist to further assess the candidates, surely a kinky new depar-

ture for aircraft builders, and something more necessary for the bureaucrats and politicians who administer industry in this country.

The Design Team consisted of Millicer, Dengate, and Gorjanicyn, with Peter Car as Project Engineer. The drawing office staff consisted of Roly Carr as Chief Draftsman, Frank Rogers, Pat Hackett, who'd previously been on the R2 with Luigi Pellarini. Bill Tyce, who had been an illustrator with British Motor Corporation in Sydney, was responsible for illustrating the parts catalogue. Bruce Ralston was appointed to the position of Production Manager, a similar position to that which he had held with GAF at Avalon, with the title of Area Manager. Nick O'Keefe as Systems Engineer, was responsible for instrumentation and radio installations, after similar experience at GAF, and while being part of the team on -FMM

After the redesign to metal, it was initially known as the Air Tourer Mk2, but following the aircraft's adoption by Victa, it was to be marketed as the Airtourer, although it became the 'Tin Tourer' to the Victa team. Apart from its upgrading from semi-aerobatic fully aerobatic category, a number of other changes were incorporated, including the fitment of a full electrical system, with a generator and a starter motor on the Continental C90-12F engine, hand swinging was necessary on -FMM. Hydraulic disc brakes replaced the cable-operated bands, with the addition of a parking brake system, soundproofing material was added, and tie-down points (which had been put in to -FMM), jacking points, and gust locks were also provided.

Instrument-panel layout was

changed, much of it to meet suggestions made during the tour of the flying schools and clubs, and internal aileron mass balances replaced the external ex-Lincoln ones. The composition of the team later led to an opinion that there were too many people from the military aircraft business, with nobody from such as Ford or GM-H to contribute some knowledge of high-volume production methods.

While the R2 engineering group had been housed in a small section of the north-west corner of the Victa Mower Division building, and the Rotorcraft Group was working from the original Victa premises in (it is thought) Campsie, the Airtourer group initially had a couple of offices in the main Victa Design Pty Ltd building. However, a new 60,000 square-foot factory, costing £1,500,000, was begun in November 1960 to house the Aviation Division, as an addition to the Victa Consolidated Industries complex in Horsley Rd, Milperra, and the Airtourer group moved in during March 1961.

Following the troubles being experienced with the R2, it was abandoned for the time being, so that all effort could be concentrated on the new aircraft, which was at a more concrete state of development, and obviously had considerable sales potential.

Early interest from New Zealand gave rise to a provisional order for six aircraft by the Auckland Aero Club soon after the Victa commitment, subject to satisfactory production. After having seen it and flown it on a visit to Australia, the Auckland Club Manager stated that the club planned to replace its Piper and Cessna aircraft progressively with Victa types, partly because of the assured

spares position when dealing with an Australian-based company, and because of the favourable impression given of the Airtourer's handling, aerobatic capability, and economy of operation. Within a week, the RVAC had placed a provisional order for 15 - Victa's price at that time was £3,750, and the schedule called for the first production one off the line at the end of March 1961, with deliveries starting in June, and six completed by the end of that month.

By October 1960, provisional orders for 23 Airtourers and four R-2's, worth £120,250 without spares, had been advised, and a number of other orders were then expected. In December, the RAC NSW notified an intention to buy three, and, from that time, orders continued to come in. Consideration was then being given to exhibiting at the Singapore, Hanover, Paris, and Farnborough Air Shows during 1961, but these thoughts proved to be over-ambitious.

Soon after the formation of the Aviation Division, a person named John David Vaughan had arrived from England and, after extolling his qualifications, was appointed to the position of its Commercial and Export Manager. He had presented himself as an Air Transport Consultant with extensive senior airline and management experience overseas, and was snapped up by Victa soon after his arrival in Australia, but reportedly was the only employee not screened by the psychologist. His task was to promote the aircraft range then under development, even though there was a considerable wait at that time before any hardware was to be available.

Expensive publicity presentations

followed, with a pretty hefty budget for promotion, until news eventually reached top management that the company had acquired a DC-4, which was in process of being overhauled and refurnished by TAA at Mascot. An investigation then uncovered the man's past history and forged credentials, leading to an immediate parting of the ways.

Unfortunately Graeme Phillips, who had become the Victa demonstration pilot, had championed the con-man's cause before the revelations, and was consequently dismissed. Graeme then returned to Moorabbin, where he continued to instruct local members of the Air Tourer Group in the Tripacer.

During the weighing process after the new engine installation in -FMM, on 7 December 1960, it was found that the repair work undertaken at Tamworth had seemingly added 185 pounds to the structure. Theoretically it had been meant to increase by 15 pounds only, and not the 200 shown on the scales. A proof loading was carried out on 11 December with 6,000 pounds of cement, and was repeated on the following day under DCA supervision. However, the idea that the original weighing in Melbourne was incorrect was offered by Ted Barden, then DCAs Major Project Engineer in NSW Region. In November 1990, he cited examples of discrepancies found when aircraft had been weighed in New South Wales after having been done in Victoria - one example was a Mustang (possibly G-ARKD, during its preparation for the Australia-England record).

First flight of the re-engined -FMM took place on 16 December 1960, with Randall Green. Three days later it was

scheduled to leave on an 18-day demonstration tour of the major flying schools and clubs in south-eastern Australia, from Brisbane to Mildura, Adelaide, Melbourne, and Morwell, for a programmed total of 70 flying hours.

Before it left, it was subject to DCA flight testing, which was done on 21 and 22 December, with NSW Regional Aeronautical Engineer John Thorpe as observer to Green, on loan from the RAAF. The four flights, included an independent assessment by DCA pilot Bob Jarvis. The series resulted in DCA Engineering Report No NSW61/1 Flight Trials on Millicer Air Tourer with Continental C90-8F engine. Some of the points made in the report were as follows:-

All-up weight (with an empty weight of 973 pounds) had been increased to 1,500 pounds normal and 1,400 pounds for the semi-aerobatic category. Aerobatics were the subject of a separate report by Green.

- No comprehensive spinning trials had been carried out, and the prohibition on intentional spinning remained.
- The pitot static head had been relocated at the starboard wing tip.
- Large Flettner strips had been fitted to the trailing edge of the elevators to improve stick force-per-G characteristics.
- In the rolling plane, a slight trim change occurred with the extension of flaps, but was thought to be a probable rigging problem.
- Stall warning was by a very slight buffet one to three knots above the stall, often hardly detectable. Before Type Approval, the adequacy of such warning should be further considered.

- High rudder-pedal loads on take-off, with excessive control amounts, needing a review during Type-Approval testing.

How the tour was re-arranged is not known, but the aircraft arrived at Morwell for the LVAC on 30 December, the day before it was expected. It was flown by Roxley (commonly known as Richard or 'Rocky') Overell, who had been engaged to replace Phillips as demonstrator pilot, with a tour of New Zealand also planned for January-February 1961.

The appellation of 'Foxtrot Mickey Mouse' was applied to it after the re-engineering, apparently by a Bankstown Air Traffic Controller, and stayed with it throughout its life, even to the present day. By at least 1981, the registration was in use again, on a Cessna 182.

A subsidiary company was formed in Auckland to provide sales and service facilities with joint New Zealand and Victoria shareholding, under the name of Victa Air (NZ) Ltd, and -FMM was shipped across as scheduled. After assembly at DH's Wellington workshop on 16 and 17 January, it began a tour of the Aero Clubs throughout the South Island, and was then flown back to do the same on the North Island. Overell then refused to fly it any longer, and returned to Sydney, while the tour was continued by the CFI of the Auckland Aero Club. Its aerobatic qualities were much admired and, although it received considerable adulation for its performance and handling, the general consensus of opinion was very much against its wooden construction and its general air of makeshift, prototype, fitment. It was felt that these factors did more harm than good during the tour. FMM arrived

back in Sydney on 18 February, and in that month the Auckland Club cancelled its order.

Tooling-up problems and a multitude of design changes set the production program back considerably, exacerbated by a Government-inspired credit squeeze in February/March. Treasurer Harold Holt increased sales tax on mowers affecting their sales to the degree that Victa subsequently dismissed about 85% of its total work force, with emphasis on the unmarried members, and closed down its

Housing and Structural Steel Divisions. From the Aviation Division, while Bob Dengate left just prior to the retrenchments, Peter Carr and Harry Gorjanicyn were among those to lose their jobs, returning to Geelong and Melbourne respectively. Gorjanicyn gained a reprieve and was retained until he'd finished a task on fuselage-frame design. At a later date, a third Carr was employed by the company, Brian, who came from CAC, it is thought - none of the three were related.

.....to be continued – part 4.

**Airtourer Association
Dubbo NSW 20th March 2016
Balance Sheet**

	31 Dec. 2015	31 Dec. 2014
Members Equity		
Surplus/Deficit this year	3,535.00	7,253.00
Retained Surplus (Deficit)	45,059.00	37,806.00
Total Members Equity	48,594.00	45,059.00
Represented by:		
Current Assets		
Bank - current account	5,594.00	6,464.00
Cash on deposit	43,000.00	38,595.00
Total Assets	48,594.00	45,059.00
Total Liabilities		
Net Assets	48,594.00	45,059.00
Gerry Pels - Treasurer	Ian Close - Reviewer	

Dubbo NSW 20th March 2016
Statement of receipts and expenditure
1 January 2015 to 31st December 2015

	Year ending 31 Dec 2015 \$	Year ending 31 Dec 2014 \$
REVENUE		
Membership Fees	5,693.00	8,117.00
AGM	5,980.00	6,420.00
Presidents 'Fly in'	1,400.00	3,930.00
Member RFDS contributions	379.00	116.00
Interest [term deposit]	1,159.00	1,260.00
Bank interest	25.00	
Total Revenue	14,636.00	19,843.00
EXPENSES		
Bank Fees	12.00	12.00
AGM	4,968.00	5,591.00
President's Fly in	1,750.00	3,268.00
Newsletter/stationery/postage	1,109.00	1,859.00
Public Liability insurance/Directors insurance	1,700.00	1,700.00
AOPA subs	160.00	160.00
RFDS donation	1,000.00	0.00
Registry of Associations	53.00	52.00
AAHOF membership	75.00	
Bereavement flowers	274.00	
Total Expenses	11,101.00	12,590.00
SURPLUS (DEFICIT)	3,535.00	7,253.00

The Great Western Plains Muster

2016 Airtourer Association Convention and 38th Annual General Meeting, Dubbo NSW

18-21 March 2016

Programme

If not flying yourself to Dubbo, the City is generously serviced by three regional airlines with connections to anywhere in Australia, rail services and bus services.

Friday 18th

Arrivals At Dubbo And Airport Facilities:

Please plan your arrival to be tied down and at the RFDS hangar by 1445 (either from landside or directly from airside).

Aircraft parking will be on the grass between taxiways E and C. Fuel is available from both Shell and BP (refer to ERSA).

If arriving a little early there is a café/bar and ATM in the terminal. Be aware that the café is through security. To access the terminal, walk across the taxiway towards it. Lookout for aircraft and exit via the security gate to the right of the building. Note the entry code to both exit and re-enter.

1500 RFDS Dubbo Base Visitor Education Centre:

As supporters of the Royal Flying Doctors it is appropriate for members to visit the Dubbo RFDS Base for a tour. Read the stories, learn the history, watch the film and browse the shop. We will also take the opportunity to hand over our annual donation to the Service at this time. \$4.00 entry.

From airside proceed to the Ambulance gate to gain access to the facility.

Registration Desk:

Gerry Pels is the registrar

Please make sure you complete registration with Gerry.

Bus To Accommodation Will Pick Up From RFDS:

- First 1630
- Second 1700

Accommodation:

Please note that these venues have been chosen as preferred options to provide a range of prices and are located for efficient transport. No transport plan exists to or from other accommodation locations.

- Cattleman's Country Motor Inn (All Committee and AGM meetings will be held at this venue in the Outback Room)
- Akuna Motor Inn and Apartments (Golden Chain Motels)
- Ibis budget Hotel Dubbo

Additional information see page 21.

1900 Welcome Dinner:

Club Dubbo Riverview Bistro 82 Whylanda St

The venue is within walking distance of all accommodation. For any special transport requirements please contact the Transport Vice-Captain.

Table reservations in have been made in the Alcove with access to the outside deck.

The Riverview Bistro offers delicious meals with stunning views of Dubbo and the Macquarie River. Order and pay for your meals from the bistro. Order and pay for drinks from the adjacent bar.

Return to accommodation at your leisure.

Saturday 19th

0900 Committee Meetings:

- Airtourer Association Committee meeting 0900
- Airtourer Co-operative Directors meeting 0930

1000 Cultural Tour:

- 1000 and 1015 Bus transport will be from Cattleman's Motel to:
- Craft Alive Market (\$10 entry). You can purchase tickets at the door and it is being held at the Dubbo Regional Theatre and Convention Centre (DRTCC). Doors open at 1000 and close at 1700.
- And:
- Western Plains Cultural Centre (WPCC) Gallery and Museum (free entry). 76 Wingewarra St.
- There is also time for a tea or coffee in the Café.
- You can do both events as both venues are centrally located and within walking distance through Victoria Park.
- 1230 Gather for lunch at the Outlook Café at the WPCC.
- A table has been booked. Order and pay for your meals as you go.

1430 Bus from WPCC and DRTCC to Dundullimal Homestead (pre-paid event)

- Discover Dubbo's pioneer history at this 1840's rural property as well as the gardens and art gallery. Following a guided tour of the property, afternoon tea is available in the cafe.
- Bus returns to accommodations at the conclusion of this segment.

Shuttle Bus To And From Accommodation To AGM Dinner:

RSL courtesy bus as required (book directly with the RSL 02 68824411)

1900 Convention Formal Dinner:

- Dubbo RSL Club Resort Cnr Wingewarra St and Brisbane St
- (Pre-paid event drinks pay as you go)
- By NSW law, all visitors are required to show identification and sign the guest register. Dinner will be a hot and cold buffet.
- Presentation of Best presented Airtourer Award.

Sunday 20th

Annual General Meetings:

Both held at Cattleman's Motel in the Outback Room.

- 0930 Airtourer Association Annual General Meeting.
- 1000 Co-operative Annual General Meeting
- 1030 Bus from Cattleman's to Airport for early departures after which the bus will collect and head for the Taronga Park Western Plains Zoo for a full day tour (pre-paid)
- 1230 gather at Bakhita's Café for lunch.
A table has been reserved. Order and pay for your order as you go.
- 1630 bus returns to accommodations via the airport if required.
- 1900 The Last Supper:
Westside Hotel Bar and Bistro 22-30 Whylandra St
The Hotel is located within easy walking distance of all accommodation.
A table has been reserved. Order and pay for your drinks and meals as you go.

Monday 21st

Maxi Taxi's will be booked to shuttle members to the airfield starting at 0830 and as required. Address enquiries to the Transport Vice-Captain.

Contacts :

Your Event Organizing Committee

- Mike Fisher 0429 869134
- John Day 0412 399329
- Niel Jensen 0447 758489 (Transport Captain)
- Gerry Pels 0418 335965 (Registrar)
- Andrew Clement 0438 262315 (Transport Vice-Captain)

DISCLAIMER

All flying activities are carried out at the discretion of the pilot in command or aircraft owner. The Airtourer Association is not responsible for flying operations. Safety of flight is the individual responsibility of the pilot in command or aircraft owner at all times. Familiarity and knowledge of standard operating procedures, published aerodrome regulations and operating procedures and government imposed rules, regulations or specific procedures are the responsibility of the pilot in command. Bus transport is provided as a courtesy to all members and is not intended to be a private taxi service. Please observe the published ground transport schedule. If your needs are outside this please make other arrangements.

Accommodation Options

Cattleman's Country Motor Inn

8 Whylandra Street 02 68845222.

All meetings will be held at this venue that is conveniently located. The Dubbo City Holiday Park is near by. A convenience store is on the other side of the road.

If you are looking for accommodation in Dubbo, the multi award winning Cattleman's Country Motor Inn offers a variety of very well appointed motel style rooms and apartments. Set on 3 acres and boasting 140 accommodation motel rooms and serviced apartments, an award winning restaurant, conference and function facilities and on site activities, including one indoor (heated) and 2 outdoor pools, it is little wonder that the Cattleman's Country Motor Inn is the first choice of many travelling to Dubbo, with its quality accommodation, excellent facilities and all at an affordable price.

Quoted room price from \$120 per night.

Akuna Motor Inn and Apartments (Golden Chain Motels)

109-111 Whylandra Street 02 6885 4422.

Just 3 minutes drive from the famous Western Plains Zoo, and 7 minutes drive from Dubbo Airport. Akuna Motor Inn and Apartments features an outdoor pool and BBQ facilities. A flat-screen TV with satellite channels is standard in all rooms. Free on site parking and 3 hours of free WiFi are provided.

The 16 air-conditioned rooms feature a minibar and tea and coffee making facilities. Each room has a desk and a bathroom with a hairdryer and free toiletries. Guests enjoy a free beer in their minibar. Room service is available for breakfast and dinner 7 days a week. There are also restaurants within a 10-minute walk.

Quoted Prices from \$120 per night

Ibis Budget Hotel Dubbo

14 Victoria Street 02 68829211.

Ibis Budget Dubbo offers 66 guest rooms, swimming pool, onsite parking and all-you-can-eat breakfast served daily. Located on the corner of the Newell and Mitchell highway and within walking distance of public transport, restaurants & shopping. Ibis Budget Dubbo is under 5 minutes drive to the popular Western Plains Zoo, Airport, and CBD.

Offering guests contemporary accommodation at an affordable price, Ibis Budget Dubbo offers a range of convenient services, which include reduced mobility guest rooms, paid WiFi access throughout the hotel, 24 hour hotel access and free onsite parking. Opening hours.

The hotel is open 24 hours a day. Reception is open from 7am to 10am and from midday to 10pm

Quoted prices \$89-99 per night.

Airtourer Association Inc., Notice of Annual General Meeting

The Annual General Meeting of the Airtourer Association will be held at the Cattleman's Motel, Dubbo, in the Outback Room, at 0930 on Sunday 20th March 2016.

Agenda:

- Presentation of Minutes of the previous Annual General Meeting. (Published in the May 2015 Newsletter, available for download from the Association website.)
- Business Arising from the Minutes.
- Presentation of Reports. (Financial statements are included on pages 16 & 17 of this Newsletter.)
- Election of Office Bearers
- Other Business

Proxies may be registered in accordance with the Rules of the Association. These Rules and the proxy form are available from the Association website under *Airtourer Association*>*Administration*.

Airtourer Co-operative Ltd Notice of Annual General Meeting

The Annual General Meeting of the Airtourer Co-operative will be held at the Cattleman's Motel, Dubbo, in the Outback Room, at 1000 on Sunday 20th March 2016.

Agenda:

- Presentation of Minutes of the previous Annual General Meeting. (Published in the May 2015 Airtourer Association Newsletter. Available for download from website.)
- Business Arising from the Minutes.
- Chairman's Report
- Presentation of Accounts. (Accounts will be available for viewing by active members on the website in the near future.)
- Determination of Annual Subscription
- Election for retiring Board Members
- Other Business

Note: Only active members may vote at an AGM.

Proxy forms are available from the Airtourer Association website under *Airtourer Cooperative*>*Administration*

Airtourer Association Convention Dubbo

18, 19 & 20 March 2016

Registration Form

(Easy Registration - Online via the website)

Accommodation has been reserved for a limited time, if you are planning to attend this event and to avoid disappointment it is recommended you secure your accommodation ASAP at the sites listed on the preceding pages.

Captain and Passenger name.....VH.....
Car/other.....

Accommodation details:.....

Arrival day..... Departure day.....

Total cost, if attending all pre paid activities, \$115 per person
The deposit for the weekend is \$60 per person

For catering and venue requirements, complete the following details indicating Yes or No.

- Will you be attending welcome dinner (Club Dubbo) Friday? Yes/No
(pay as you go)
- Will you be attending Craft Market/WPCC Saturday? Yes/No
- Saturday lunch at the Outlook Café (pay as you go) Yes/No
- Will you be attending Dundullimal Homestead Saturday? Yes/No
- Will you be attending the AGM dinner (Dubbo RSL)? Yes/No
- Will you be attending Taronga Park Western Plains Zoo (Sunday) Yes/No
- Lunch at the Zoo Café (pay as you go) Yes/No

(1) By the 4th March, if not using the website on-line form, send this completed Registration form by Post to or via email to:-

Gerry Pels,
84 Santa Rosa Boulevard
East Doncaster, 3109

Email: treasurer@airtourer.asn.au

(2) Pay deposit by Cheque or Electronic Funds Transfer
Bank account details: Airtourer Association, BSB No. 033-028, Account No. 460085.
Quote Name.

Airtourer Association Nomination for Election to the Committee

I nominate _____
for the position of: *(mark appropriate position)*

- President**
- Vice President**
- Secretary**
- Treasurer**
- Ordinary Members (three positions)**

Nominated by (Signature) _____

(Name) _____

Seconded by (Signature) _____

(Name) _____

I agree to being nominated for the above mentioned position.

Signature of candidate:

Date:

Note: this form will be available for download from the Association website under *Airtourer Association > Administration*

Calendar of Events

Mid Year Lunch

Sunday 19th June, Yarra Glen Grand Hotel

President's Fly-In

17th & 18th September, Coonamble, NSW

End of Year Fly-In

26th & 27th November in the Kyneton / Castlemaine area, Victoria.

Watch the website for latest details