MELBOURNE AVIATION GROUP

August 2005

Budget session – your Board at work!
Nary a convivial glass of Red nor a cleansing ale passed the lips of the Directors at our budget meeting on 4th August ! In addition to the usual lengthy discussion on the upward movement of MAC charges for MB access and parking, spiralling avgas price and rising maintenance costs, we had to consider the report of the Aircraft Replacement Committee, following their submission to the Board earlier last month. The minutes of this meeting, with a more thorough account of the committee's proposals will be included in the October newsletter, so that well before the next AGM members are made fully aware of the timetable for any proposed aircraft replacement, and the likely cost to shareholders. Please refer to the brief statement about suitable aircraft later in this newsletter.

From the Accounts Officer – it's …

User Pays – and Pays – and Pays – and Pays – and Pays – and Pays – and Pays!

In 1998, when Fuel Excise was replaced by Location Specific Charges, each Terminal Navigation, Enroute or Met Charge (TNC/ERS/MET) was entered line by line on to a pilot's monthly invoice – quite a time consuming and error prone administrative procedure. Then ASA offered MAG an annual contract, of such modest cost that we were able to cover it via a $4.00 charge in our dry cost structure – based on around 500 hours utilisation per year - easy-peasy.

That system has worked well over the years, particularly for pilots flying a short local – for half an hour you paid just $2.00 in your dry rates, rather than **$13.41 for BJZ** and **$11.03 for NBE** (last year) for each TNC at Moorabbin. And the IFR boys, say $5.00 for TNCs at EN and MB instead of $26.82/$22.06. Longer trips in effect 'subsidised' the local flights – a 25 hour outback trip may have actually incurred only a couple of ASA fees, but paid $100 in dry rate charges.(25 hours at $4.00/hour) A little unfair, but I guess that it averaged out in the lower TNCs paid for ops at MB.

Unfortunately, for the current 05/06 year, as we have exceeded an average of 200 TNC/ERS/MET charges per aircraft, the annual contract price has been increased by ASA to **$4824** for both aircraft. Because of this steep cost increase this year we will have to revert to individual user pays billing, **effective immediately**. ASA charges will now be entered in the 'ASA movement fees' box on your monthly invoice. Please refer to the Flying Costs spreadsheet for current hourly rates, and note the removal of the ASA contract cost line in calculation of the dry rates.

There is an "old saw" – "those who do not remember history are destined to repeat it". Prior to the offer of an annual fixed price contract, after billing a pilot for two TNCs during one booking, in the Feb '99 newsletter, I wrote …

> *"One point to remember when you are flying at MB: If you fly circuits you will only be charged one TNC for the lot, but if you then depart the zone for a short local, you will attract a **second fee** for the subsequent circuit re-entry. Better to have your **local first**, then **make one zone entry** with circuits at the end of your session".*

So there is nothing new in a **double TNC charge** if you do a few **circuits followed by a local flight** – but be aware that from now on your pocket will be hit immediately – rather than in recent years being hidden in the $4.00 per hour previously charged in our dry rates. Therefore it is even more important now that all entries on our flight log are legible and accurate – date – start/stop times – IFR if applicable – some flight details – ("L" is OK, but 'EN' or 'LTV', 'CWS' etc better) – and write your name clearly, otherwise you may be billed with another pilot's fees. And the number of circuits please – these are also shown on the ASA invoice – some of you guys can't count even on your fingers !

Please remember one other thing – you are still personally responsible for all access fees at privately operated airfields – a scan of these invoices will be emailed to you ASAP after receipt – you land there you pay 'em ! (JA)

Maintenance – NBE is due for a 100 hourly, and it may be that we will have to pull the Lycoming O-360 for overhaul – but we might get a 100 hours extension as oil consumption and pressures are good – so keep your fingers crossed .

BJZ Autopilot – Bob Hayter reports that BJZ "flew like a bird" during his recent trip to all points North, and that the autopilot performed faultlessly.

Annual General Meeting – our AGM will be held on **Friday 11th November**, 2005, starting 2000, venue at MB to be confirmed in the October newsletter, so please make an entry in your diary **now**. As usual we will be inviting shareholders who would like to stand for election to apply to join the Board, and given that we currently have only six directors out of our normal quota of seven, now is a good time to 'put your hand up'.

Shareholders interested in joining the Board are asked to write around half a page outlining their flying and personal profile, attach a photo and send it all off to **The Chairman, MAG P/L,** 21 Yuile Street VIC 3147 as soon as possible. For your convenience we include an application form for you to return to John Argall.

Nominations are required to be seconded by one financial member, signed and dated by both parties.

The timetable for this election process is:

- Announce the positions up for election and invite nominations in the August newsletter.
- Nominations to close **Friday 7th October 2005**.
- Publish nominations received and manifestos in the October Newsletter with conformation of the AGM date. Should nominations exceed vacancies ballot papers will also be issued.
- Invite all non-attending members to vote by proxy at the AGM.

Included with the October newsletter will be the Profit and Loss, Balance sheet and other financial documents for the 04/05 financial year, and a report on the recommendations of the Aircraft Replacement Committee, who will be making a presentation to shareholders at the AGM.

All Companies must renew themselves – so if MAG is to remain a viable flying group it is essential that we have new blood on our Board. Please make every effort to attend the forthcoming AGM, put your name tags on, (in many cases never used) and offer your opinion on the recommendations of the Aircraft Replacement committee. Whether an active or non-flying member we are all equal shareholders in MAG and its assets, so our AGM will be the time to have your views on the future of our joint investment considered. And give some thought to how you might assist in the running of our Group.

There are important decisions to be made about the future direction of our Company, about how we handle the changes to GA in this privatised world, and what we need to do to maintain our 'fleet' into the next decade. We must renew our aircraft at some stage, as has been the case since MAG was formed in 1964. As always, timing is a difficult matter, and dependant on many factors. Please make every effort to attend and express your opinions.

Board to consider New Aircraft

During 2004, a small Committee comprising Rodney Richards, David Giddy, Martin Skinner, Bob Barrow and Peter Cossins was set up to examine aircraft replacement options. As most of you will recall, a survey was conducted with the results presented at the 2004 AGM. The survey showed that if the current aircraft were to be replaced, then the needs of the members was best served by a fleet consisting of:

- A 2-seat performance aircraft that would offer a lower hourly rate but would still be suitable for touring.
- A 4-seat touring aircraft similar to, or with better performance than, the existing C182.

It was agreed at the AGM that the Committee would evaluate specific aircraft options for consideration by the Board. This work has now been completed and the Committee has recommended as follows:

- 2-Seat Aircraft
  Only a Liberty XL2 met the requirements. However, this aircraft is not yet available in Melbourne.

- 4-Seat Aircraft
  A Cessna 182s or T

The changeover cost is of course not insignificant - $5,500 per shareholder for a new C182T/S and $3,700 per shareholder for the Liberty XL2.

The Board has agreed that such costs cannot be promulgated without input from a sizeable portion of the shareholders. The issue will therefore be discussed, at the forthcoming 2005 AGM in November.

SO COME ALONG, LISTEN TO WHAT THE COMMITTEE AND BOARD HAVE TO SAY, AND MAKE YOUR VIEWS KNOWN.

Just to give some relief from the financial and administration problems above, John Riley continues his report of "life as a part time ferry pilot" – lucky guy!

Broome or Bust (again !)

I mentioned in closing my story on the trip to Broome last August that my client was thinking about acquiring a C210. Well I am happy to report that he did just that.

But it was not the C210 I thought it would be as the one he acquired was a C210-5, a fixed gear C210. Now that might sound like an error in the description of the aircraft, but a C205, as it is more commonly known is, in fact a C210 without the retractable undercarriage.

Early in the life of the C210 Cessna recognised there was a potential market for a six seat aircraft for use by short haul air taxi operators. The C210 of the time had a long enough cabin, but the wheel wells for the main gear intruded into the cabin so much so that the rear two seats in the C210 were really only suitable for small children. The solution was to build a C210 with fixed gear, do away with the wells for the main wheels, and thus provide sufficient room for two adults in the rear seats. To provide access to the rear seats Cessna also added a small passenger door on the port side aft of the main door

In all other respects the aircraft was a C210 – it was fitted with the same IO-470S engine delivering 260HP, the wing, the fuselage and the tail were all the same. Although the aircraft was sometimes referred to as a "Super Skylane", the only similarity with the C182 of the time was in the size and shape of the wing. The C205 fuselage has the same bed mounting arrangement for the engine as the retractable C210 as compared with the Dynafocal mount employed in the C182. The cabin of the C205 is also noticeably wider than the C182 of the time.

The C205 has a gross weight of 3300lbs and could genuinely carry 6 standard adults (170lbs per person at that time) plus enough fuel for 200-250 miles. Cruise speed was at 6500feet was around 132knots.

There are not many C205 aircraft on the register as it was only built in 1963 and 1964 with total production of just 755 units. It seems that the C205 was really just a part of the process of the development of the C206 which was introduced in 1965. The C206 employed essentially the same fuselage, but with a change in the door arrangements, more power and a bigger tailplane. The wing was reconfigured to increase the flap area so as to improve the short field performance.

The C205, which is the subject of my story is RLP and had previously been owned by Air Fraser Island and had been used for many years in ferrying tourists on and off the beach at Fraser Island. It has flown in excess of 12000 hours, most in this short haul role, and most often with 6 aboard. It had been well maintained and had no visible corrosion despite its regular use on a beach strip. The former owner advised that it was washed after every trip and the paint was carefully looked after. In fact, although it had been painted more than 3 years previously, it looked like it had just come from the paint shop. The owner also confided in me that the aircraft had earned them more that $1million.

The aircraft was equipped with large wheels and tyres as befitted its role and, somewhat surprisingly, it had wet wings. Now this latter feature was not shared by other C205's as it had been modified in Australia many years previously. So, instead of having a maximum fuel load of 319 litres, it actually carried 357 litres, and did not have the problems associated with the bladders normally fitted.

The aircraft is registered in the NVFR category, but its current avionics fit don't support this status. The aircraft had previously had a Cessna VOR and ADF fitted (the panel indicators were still in the panel), but now no longer. It does have a suitable GPS (a Garmin 250XL) for the NVFR category, but the database for that unit is not up to date. The Garmin 250XL provided Com 1 and there is also a second VHF com, plus a UHF transceiver fitted.

The purchase of the aircraft was concluded in the last week of May so I arranged to travel to Hervey Bay on Tuesday, May 31st. Virgin provided the service to Brisbane and Sunshine Express the second leg to Hervey Bay.
I arrived at Hervey Bay just before 1.00pm with the hope of perhaps getting way by 3.00pm and making it to Emerald as an overnight stop. I was familiar with Emerald, having been in there a few times whilst working with Orica, and the 277 nm trip was a good chance to see how well the aircraft flew.

I had previously indicated my preferences to the people at Air Fraser Island and they assured me that all would be ready for me. Further the chief pilot kindly offered to take me for a few circuits to ensure I knew how to land the aircraft correctly. Given that they extremely busy when I arrived (they had an aircraft stuck on the main runway an Maroochydore with a blown tyre at the time) I especially appreciated this opportunity to familiarise my self with the aircraft.

I approached the task of flying RLP for the first time with some caution, but I was soon encouraged to rotate early as it wanted to fly, fly a tight circuit so as not to waste time, and flare it positively and use power to control the descent and touch down. After 4 circuits I was pronounced as OK to go. This was an interesting experience, and I valued it greatly as it gave me both some knowledge of the aircraft and the confidence to fly it across the country.

Before departing for Emerald I took the trouble to 'phone ahead to see if I could arrange accommodation. I didn't want to arrive there close to last light without the assurance of a bed for the night. Technically the aircraft was in NVFR category but it was still new to me and the GPS data base was not current so continuing the flight to Winton in NVFR was not really an option.

It was a good thing I called ahead to sort out the accommodation as there was a country fair on at Emerald and the first 4 hotels I called were booked out and the 5th only had a vacancy because they had received a cancellation just before I called.

The flight out to Emerald was fairly straight forward, just 277nm out of the planned 1800 for the trip to Broome. I cleared the coastal region and its ever present clouds and climbed to 6500'. The aircraft settled into the cruise at 21/23 and a TAS of 133knts. The former owners had recommended about 16 (US) GPH as a suitable fuel flow. I adopted this even though, at first, it seemed a little high for cruise at 6500'. However when I reduced the flow to 14GPH the engine lost a little power so I figured 16GPH was a best power setting for the altitude and, as my task was simply to deliver the aircraft safely to Broome I figured the consumption of a little extra fuel was of no consequence, particularly as the aircraft had 357 litres of total fuel.

The aircraft trimmed out in the pitch and yaw axes very easily, but it had an annoying tendency to roll and turn to the left. There was no aileron trim or autopilot to deal with the matter so I resorted to running it off the left tank to compensate. As the fuel in the left tank was consumed the aircraft flew straighter.

Another, more important, issue was the fact that the DG was precessing at a high rate making it less useful for course keeping. I had to resort to the compass and the GPS, but with the late afternoon sunshine coming directly through the screen from behind the compass, even this became a challenge. The GPS was useful as a substitute DG, but late in the day the sun glare tended to make the GPS screen difficult to read. Oh how I longed for a working ADF as the redundant ADF indicator in the panel was still quite readable!

Emerald is easy to find as it is about 10nm NNE of Lake Marahoon and, with the setting sun shinning off the surface of the water, the lake was visible from quite a way out. However with the sun setting and the shadows lengthening, I had to actually overfly the aerodrome before I could see it clearly.

I spent a comfortable night at Emerald and departed there the next morning (Wednesday June 1st) at 8.35am. I planned via Winton (267nm) with the original thought that I could stop there for fuel if necessary. However Mother Nature was on my side and, with a ground speed of 133knts, I was able to give Winton a miss and proceed directly to Mt Isa.

I arrived at Mt Isa a little after midday and had managed to cover the 513nm in 3hrs 35 minutes for an average ground speed of in excess of 140knts. The refuelling took 236 litres for an average consumption of 65 litres per hour – a bit on the high side but I still had 120 litres in the tanks when I arrived. The oil level had remained unchanged from the 12+ qts level prior to departure from Hervey Bay.

I bought some lunch in the terminal, had a chat to a couple from Latrobe Valley who were touring Australia in an Arrow 2 and headed off for Tennant Creek at 1.20pm. The planned journey was 305nm with an ETI of 130 minutes. I climbed to 8500 over some quite dry country and the ride settled down quite nicely in the cooler air. With 19/24 set (19 inches was everything the engine could give at that height) the ground speed settled down to 143 knots, just shy of my

planned 145knts. Tennant Creek is like many of the outback icon towns, it just appears out of nowhere in country where the horizon is largely unbroken by any other signs of European settlement. I landed there around 3.30pm and, as the place was seemingly deserted I called the contact number at the refuelling bowser.
Whilst waiting for the refueller to arrive I looked at my options as to where to spend the night. At that stage the last light at Halls Creek was 09.23 UTC so that it was achievable with my planned ground speed of 140 knots. However I planned via Hooker Creek as a position fix over other featureless country and as an alternate for Halls Creek if time was running short to make there by last light. As I had been doing for the earlier legs I advised flight service by phone of my intentions and arranged a SAR Time for arrival at Halls Creek of 09.15UTC. I also arranged accommodation at the local hotel which is adjacent to the aerodrome

When the refueller arrived I took on 85 litres in just the left tank as I had used it mainly on the way to Tennant Creek and the right tank was still 80% full. On that basis I had 320 litres for the 385nm journey to Halls Creek. The ETI as per my plan was 166 minutes so based on an earlier fuel consumption check I would have had nearly 2 hours in reserve on arrival at Halls Creek.

Whilst standing waiting for the refueller I noticed the aircraft was dripping some oil out of the open cowl flaps so I had a good look around the engine but could not see any obvious leaks. The caps were secure and there was sign of oil over the top or round the back of the engine. Recalling that the engine oil had been filled to the 12+ qt limit at Hervey Bay I concluded that it was blowing out of the breather. The dipstick showed 10.5 qts and that did not appear abnormal after more than 7 hours of use. I added one litre and the level came up to just short of 11.5 qts. I also took an extra litre from the refueller as a reserve.

I departed Tennant Creek at around 4.20pm (Eastern Time as I find it easier not to reset my watch to local time when travelling across country) with an ETA at Halls Creek of 09.15UCT .

I climbed out to 6500, and settled into the cruise at around 140knots ground speed. The sun was now getting lower and was staring to cause some difficulties with seeing the compass as had happened the day before. The sun and the precessing DG kept me busy ensuring I remained on track over a sparsely populated part of the country.

On departure from Tennant Creek I kept a close watch on the oil temperature and pressure gauges. For the 100nm or so out of Tennant Creek they remained exactly in the same positions as they had for the journey to that point. But after that I noticed an ever so slight fall in the oil pressure needle. The oil temperature gauge remained unmoved and all other engine condition indications were normal. The pressure continued to fall very slowly but as 100nm from Tennant Creek was my PNR with the tailwind I was experiencing, I decided to proceed to Hooker Creek and check what was the issue was. As a precaution I reduced power (18/22) and ran the engine as cool as possible. The oil and cylinder head temperatures fell a little, but the oil pressure continued to trend down ever so slowly.

I arrived at Hooker Creek just before 6.00pm (EST) - finding the town and the aerodrome was difficult again because of the position of the sun and the precessing DG, but I picked it up by looking out of the side window. When I spotted the runway I gave a quick call on the CTAF joined a close down wind and flew tight circuit to land as quickly as was practical. After landing I taxied clear and shut down. The shut down was normal with the oil pressure warning light only coming on as the engine stopped rotating. On inspection it was clear that the engine had been loosing oil and a check of the dipstick confirmed this. However there was no clear reason why the oil loss was occurring. All of the caps were tight and there was no oil over the engine. There was just a dirty belly and a low reading on the dipstick.

I contacted the local refueller and he advised that there was no oil available so there was no option but to cancel my SAR time for Halls Creek, my accommodation at the hotel, and to call my client in Broome with the news. The refueller lent me his CDMA phone as my mobile was useless and there was no public phone.

Given the hour of the day, and the fact that I would have to overnight there I needed to arrange accommodation. Fortunately the Community office (this is a remote aboriginal community) was still open and they had one room at the “Long House” available. The Long House provides accommodation for Europeans who find themselves in Hooker Creek for the night, and can only be described as basic.

With no oil available at Hooker Creek there were two choices, have some oil bought in from Alice Springs on the next aircraft due in or have my client send an engineer out from Broome with the oil and his tool box in case anything needed fixing. Fortunately, as it turned out, the client opted

for the second alternative and an engineer was despatched next morning in one of the C182s he operates. The reason for the good fortune was the fact that the loss of oil was caused by a small crack in the sump which the engineer was able to find and rectify. The repair effort was greatly aided by the tremendous help provided by the refueller and one of his multi skilled employees. There was nothing that they were not prepared to do to help

As the problem was resolved by late in the afternoon there was no way we could get back to Broome before last light we opted to fly in company to Halls Creek and overnight there. After a comfortable night at the local hotel we departed mid morning (WA time) for Broome and arrived there about 12.15 after a flight of 2.3 hours.

As with the flight from Port Lincoln to Broome in the C182 last August, this was a great experience. Nearly 1800 nm in 13.8 hours of flight time. Flying across the country, single handed seems to be quite a challenge, but broken into pieces and flown as a series of short flights joined together it was not a problem. I covered just short of 1100 nm on day two and that did not seem like a long way to travel. It worked out to be about 8 hours flying for an average ground speed of 138 knots for that day. The average ground speed for the whole trip (with flying on 4 separate days) was 130knts.

In conclusion, Cessna 210-5, RLP, is a nice old bird to fly. It had its own characteristics but was honest and, save for the unusual oil loss problem was reliable (my client has been an engineer for 25 years and he has only seen a cracked sump on one previous occasion). It would have been nicer if the DG was not so determined to change its mind all the time about which way we were pointing, and if the left wing could have remained level. Also it would have been nice if it had been equipped with a working ADF – I have made the point before but, in my view, every aircraft flown in the remote areas of Australia should have a serviceable ADF. They are easier to read and can be used as a substitute DG if the real thing fails. Another advantage of the ADF system is that the NDB's are in fixed and known positions on the ground – a comforting fact for NVFR and IFR operations.

One final comment about the C210-5 was the lack, to some degree, of elevator power when operating with a forward C of G. All of the larger Cessna singles seem to be nose heavy when flown with just 1 or 2 in the front. This improves with a load in the rear but when operating with a forward C of G care needs to be taken to ensure that enough nose up trim is used to ensure an arrival on the main wheels first. Most of the larger singles seem to have enough trim to achieve a good flair and a touch down on the main wheels. From my experience the C205 is less satisfactory in this regard and greater care is needed. This relative lack of elevator power is probably best illustrated by the fact that my landings in RLP were accomplished with full or near full, nose up trim.

I closed my first story by mentioning that my client was looking at purchasing a C210. I can close this story by reporting that he is still looking for a retractable C210, probably from the USA and a C172 from the local market. A ferry flight across the Pacific is out of the question, but another cross country flight in a C172 sounds quite appealing.

(John Riley)

FLYING COSTS per Hour from 01/08/2005

Item	**BJZ (Airswitch)**		**NBE (Tacho)**	
	Basis	$	Basis	$
50 hourly oil change	300 / 100	3.00	300 / 100	3.00
100 hourly inspection	2600 / 100	26.00	2600 / 100	26.00
Engine major overhaul	28000 / 1600	17.50	26000 / 2000	13.00
Propeller overhaul	3500 / 1500	2.33	1600 / 1000	1.60
Propeller replacement	10000 / 4000	2.50	4000 / 4000	1.00
Other maintenance	2500 / 100	25.00	1500 / 100	15.00
GPS Database fee		2.00		0.00
Refurbishment Recovery		0.00		0.00
Oil		0.22		0.40
DRY RATE (excl. GST)		**78.55**		**60.00**
Fuel	$1.16 x 58	67.28	1.16 x 38	44.08
Contingency (& balancing)		0.35		0.47
WET RATE (excl. GST)		**146.18**		**104.55**
10% GST added				
DRY RATE (inc. GST)	per minute = 1.44	**86.40**	per .01 = 0.66	**66.00**
WET RATE (inc. GST)	per minute = 2.68	**160.80**	per .01 = 1.15	**115.00**

Mr John Argall
Chairman,
Melbourne Aviation Group Pty Ltd,
21 Yuile Street,
Ashburton VIC 3147

Dear John,

I wish to nominate _____ for the position of Director of the Melbourne Aviation Group Pty Ltd for election at the 2005 Annual General Meeting.

Proposer:_____Signed_____Date _____

Seconder:_____Signed_____Date _____

I hereby accept the nomination

_____Date_____

Yours sincerely,