



# DECEMBER 2011 NEWSLETTER

PO Box 1678 Woden ACT 2606  
INC 9880292 NSW

## Presidents Report 2010 – 2011

This year we have had a mixed year for the Australian Piper Society with a very successful fly away to the Gulf and Northern Territory and a fly in to Scone. But our Pilot Proficiency Programs have lacked numbers to make them a success. Barry McCabe has to be thanked for his hard work in organising the very successful Gulf / NT fly away which was very well attended even if the weather didn't go our way for the first few days. There were very few problems along the way and I would have to say this was due to Barry's attention to detail every step of the way. It was good to see the participation of Allan Ould from WA with his passenger join us in Katherine as he was hampered by bad weather causing many diversions and delays stopping him from joining us earlier.

I would like to thank the committee for their hard work and dedication to keep the APS running. Their support is much appreciated with Irene looking after membership, Faye with PPP's, David as Secretary, Duncan treasurer, Barry kept busy with fly aways and of course Graham who supplied me with many articles for the newsletter.

The last PPP to be held in Narromine was cancelled due to lack of numbers. This to me is of some concern as I believe we may not be marketing this program enough or members are not interested in becoming involved in what I consider a must for all Piper pilots.

Avalon was a success this year and did attract a lot of pilots through our display. I would like to thank Faye for organising the display and maintaining a presence every day. Also those that helped maintain a presence and promote the Society. Our display certainly looked a



lot better than many other groups.

We have had some good feedback on the newsletter which has been pleasing as sourcing material is quite a chore. We have been quite lucky to have a printer that will work with us to get what we consider a reasonable result. We would still like to see a more varied content like maintenance and avionics issues. The Web site does need to be updated as it is now just over twelve months since our major update. I have managed to keep the coming events etc up to date but other areas like the home page need to be revamped.

Our next challenge will to organise our future fly aways as we seem to have a high percentage of the committee and club members from Victoria making up the bulk of participants. This I believe needs to change and we need to find a way of attracting other members along.

Finally I would like to thank those that have supported us and given help over the past twelve months to make our efforts worthwhile, including those who have contributed articles for our newsletter. We look forward to seeing new and familiar faces at our future events.

Safe Flying.  
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President

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# Treasurer's Report

## Statement of Receipts and Payments

### Australian Piper Society Incorporated

ABN:

Report Period: 1/07/2010 - 30/06/2011

Account(s) in this report: Bendigo Bank Cheque Account, Bendigo Bank Flyaway Account, Sandhurst Cash Common Fund

Receipts	Tax Type	Code	Quantity	\$
Advertising	Non GST	302		300.00
Fly Aways	Non GST	969		40245.39
Fly Ins	Non GST	969		486.70
Interest Received	Non GST	199		596.43
Memberships	Non GST	195		8150.00
Prepaid Proficiency courses	Non GST	708		300.00
Proficiency Courses	Non GST	231		600.00
Retail Sales	Non GST	230		200.00
<b>Total Receipts</b>				<b>50878.52</b>
Payments	Tax Type	Code	Quantity	\$
Administration (Postage, printing, phone Etc)	Non GST	414		990.40
Fly Away Expenses	Non GST	388		7537.86
Fly Away Refunds	Non GST	400		2979.53
Fly In Expenses	Non GST	387		486.70
Insurance	Non GST	381		1025.00
Name Badges	Non GST	390		108.00
Newsletters	Non GST	396		4850.00
Proficiency Course Expenses	Non GST	411		605.00
Proficiency Course Refunds	Non GST	412		1250.00
Purchases for Resale	Non GST	270		367.95
Subscriptions	Non GST	454		472.00
Web Hosting	Non GST	352		272.00
<b>Total Payments</b>				<b>20944.44</b>
<b>Net Receipts(Payments)</b>				<b>29934.08</b>

## Statement of Affairs as at 30<sup>th</sup> June 2011

### Assets

Cash at Bank – Bendigo Bank Flyaway Account	29153.00
Sandhurst Cash Common Fund	28060.00
David Seaton's Trust Account (SA Flyaway)	675.00
Prepaid Flyaway Deposits	3080.00

**Total Assets** **\$60968.00**

### Liabilities

Prepaid Proficiency Courses	300.00
Bank O/D – Bendigo Bank Cheque Account	762.69
Prepaid Flyaway Deposits	32233.00

**Total Liabilities** **\$33295.69**

**Members Funds** **\$27672.31**



## Treasurer's Report cont.

The Members  
Australian Piper Society

### Notes regarding the 2011 Treasurer's report.

1. You can see that the attached "Statement of Receipts and Payments" shows a surplus of \$29,934.08. However, it is not quite as good as it first seems. Let me explain....
2. During this financial year in relation to "Flyaway's":
  - We collected \$40,245.39 from Participants
  - We expended only \$7,537.86.
  - We paid out refunds of \$2,979.53.

These figures include transactions related to both the final "wash up" of the 2010 South Australian trip and the beginning of the 2011 Top End trip.

3. You will also notice that as at the 30<sup>th</sup> June 2011 we were holding deposits of \$32,233.00 for members in relation to the Top End flyaway and we had prepaid \$3,080.00 in expenses related to that flyaway.
4. You can also see from the accounts that we refunded \$1,250.00 to members for prepaid PPP's. Most of these had been paid for in previous financial years.
5. These issues all cause "carry over effects" between financial years.
6. In all other respects the transactions for the year were straight forward and the society had another financially successful year.

The attached reports have been reviewed by Irene Lawson. Please do not hesitate to raise any queries you may have in relation to the matters raised or indeed anything else contained in these reports. I will endeavour to answer any such queries to the best of my ability.

*Duncan Morris*

Duncan Morris  
Treasurer  
10<sup>th</sup> October 2011



# Echuca Minutes

AGM 30th October 2011  
Minutes of Meeting

Meeting conducted at Quality Inn Port of Echuca - Echuca Vic 3564 on the 30th October 2011

Meeting commenced at 9.10 am

Chaired by President David Law

Attendees:

David & Lorraine Law, Geoff & Kerrie Derrin, Lauris Bryant, Allan Dalrymple, Tom Courtney, David & Vickie Ind, Robert & Margaret Horne, Ian Thomson, Graham Mansey, Leighton Wraith, Irene Lawson, Duncan Morris

Apologies:

Barry & Jan Milsom, Phillip Reiss, Faye Warren, Mike Barnier, Allan Gordon, Graham Bell, Barry McCabe, David Seaton

Minutes of previous meeting

Minutes of the previous Annual General Meeting held in Dubbo 24th October 2010 were reconstructed by executive members prior to the commencement of the AGM in the absence of both the secretary and any written minutes. This reconstruction was read at the meeting and it was agreed unanimously that they were an accurate reflection of the attendees, and resolutions adopted.

Presidents Report

Attached is a copy of the report tabled and verbally presented to the meeting by President, David Law. Report adopted by acclamation

Treasurers Report

Treasurer Duncan Morris tabled his report and a copy was distributed to all those that attended. Treasurer's report is attached. After discussion and clarification as to the net value of assets, it was resolved that the Treasurers report be accepted

Moved Duncan Morris  
Seconded Allan Dalrymple

Membership Report

Report attached. Current fully paid up members tabled at 97 members. Discussion resulted in a resolution being moved and agreed upon that the new committee adopt a more pro active stance in attempting to attract new members.

Election of Office Bearers:

President David Law declared all positions open and invited Ian Thomson to take the chair for the election of office bearers for the ensuing 12 months. Ian thanked all the previous office bearers and committee for their dedicated work over the past year.

No written nominations were received prior to the meeting and in line with the Constitution positions were called for from the floor. Subsequently the following were received, accepted and elected.

President: David Law  
moved Duncan Morris  
seconded Geoff Derrin.  
No further nominations

Vice President : Barry McCabe  
moved Irene Lawson  
seconded Geoff Derrin  
No further nominations

Secretary: Leighton Wraith  
moved David Law  
seconded Tom Courtney  
No further nominations

Treasurer: Duncan Morris  
moved David Law  
seconded Irene Lawson  
No further nominations

Committee of Three: The following nominations were received Graham Bell, David Ind, Irene Lawson and Allan Gordon. As there was only three vacancies David Ind with the agreement of his nominator and seconder with drew his nomination. David Ind suggested suggested he would be happy to undertake special projects for the committee in lieu of a committee appointment. The remaining three persons nominated accepted the three committee positions and were duly elected to the committee

The chair was passed to the incoming President David Law.

Meeting Close

There being no further business, David Law declared the meeting closed at 9.50 am

Minutes submitted by:  
Leighton Wraith - Secretary

Approved by: David Law – President

General Discussion:

Following the AGM, President David Law invited general discussions included by the members

David Ind suggested closer liaison and interaction with other flying clubs. David also suggested that the AGM be conducted as part of a Fly-in. Another suggestion was if members were thinking of a flying safari that this information be circularized if the members would like to expand their party.

Ideas of venues were asked for the next AGM. Suggestions to be sought from all members. It was also suggested that weather factors be a consideration when considering venues to encourage greater participation. The idea of an open forum, with invited guest be a part of the format for the AGM's weekends activities. Lorraine Law kindly offered to assist in the organization of the next AGM.

No date was set for a meeting of the new committee

The above discussions took approx one hour followed by morning tea.

Leighton Wraith – Secretary APS.

## Echuca Journal

Annual General Meeting  
Echuca 28th – 30th  
October 2011

Friday morning in Echuca presented itself warm and cloudless but getting there from all directions was threatening. Sadly some Piper planes would not be making the trip. Not to be outdone and with determination a few attendees took to another mode of transport and drove in.

Echuca is set within an irrigated pastoral and agricultural district on the Murray River, and is one of the closest settlements on the river to Melbourne.

Echuca was surveyed in 1854 and quickly became one of Australia's busiest inland ports, with paddle steamers ferrying supplies throughout Australia's interior via the river network. Improving road and rail transport eventually took over, with cargo transport on the river through the Port of Echuca ceasing in the very early 1900s. Only a small section of the wharf remains today, preserved as part of the recreated Port Of Echuca tourist attraction, and serving as a great viewing deck of the Murray River and surrounding bush. As well as the wharf, this river port recreation of yesteryear features a museum, historic buildings, equipment displays, demonstrations and cruises on authentic paddle steamers. We were able to stroll through the buildings and ponder over what life would have been like in the early 1900s. Much of the architecture has been beautifully restored and plaques line the walls with brief explanations of what was and when!

As more people arrived we met up at the bar of the Quality Inn Port of Echuca. Dinner was casual and a fairly early night beckoned after a day of flying/driving in from the eastern states.

Saturday gave us a day of exploration which started from a breakfast being served at the many delightful eateries in town. A few more arrived and luckily the warm clear weather continued. We spread out where some enjoyed many of the interesting sites which included a cruise on the Murray River in an authentic Paddle Steamer, a step back in time at the Holden Car Museum, a local area museum or art gallery, or a stroll through the Port area. You name it this bustling town is set up wonderfully for the tourists. Did I mention the many places to stop and take a breather, a bite to eat and



some delicious coffee. For all that had travelled up from the south the added bonus was the warm sun as we left the cold and wet behind for a couple of days.

Saturday evening we were driven across the bridge into NSW, the town of Moama and the RSL on the Northern bank of the Murray River. This club and many like it in NSW came alive back in the days when there were no "pokie machines" in Victoria and buses would bring the hoards up from Melbourne with their pockets full of coins all eager to post it into the "one armed bandits" as they were fondly called. Great fun, but I still ask myself WHY!

Sense prevailed as some of us chattered away well into the night catching up with friends we had not seen for a few years. Time marches on but memories and friendship are a constant reminder of the good times.

Sunday was a little cooler when we all met up for the AGM and the election of new office bearers. Since its conception eight years ago the society has had four presidents and to have three present at the weekend was inspiring. Later after fond farewells we left leaving others to stay on for another day in Echuca.

Flying home to Tyabb was a little rough especially around central Victoria. We broke out under the cloud at Bacchus Marsh and landed late into the afternoon on a wet strip.

We would like to thank the organisers for making it possible to catch up with old friends and make a few new ones all in the historic town of Echuca. Whether we flew our Piper aircraft in or drove in to avoid bad weather it was a great weekend in the company of members, their families and friends all with the common interest of flying.



## PIPER PILOTS!

Put more family fun into your flying. The Australian Piper Society is active in social flying, fun family flying days, do you really know your aircraft information programs!., fly away days, and a variety of safaris. And a great regular newsletter. Have a chat to Irene about joining. And only \$100 per year.

Email

[ianirene@internode.on.net](mailto:ianirene@internode.on.net)

Mobile 0401 775 782

# Test Pilot

Written By Lloyd Sheppard

You're a/c has to meet minimum performance requirements (CAO 20.7.4) to be able to be certified in Australia. There aren't many, but the important thing is that if you choose to operate outside any of the performance parameters laid down in the POH, you become a test pilot! The Piper test pilot is experienced in extracting the peak performance from the a/c, is mentally prepared to do that testing, and is flying a nice new machine in peak condition. How would you compare in the heat of the moment?

Takeoff distance to 50' is established for level short dry grass. In Australia we normally add 15%, but this may not be the case with your POH. What allowance do you make for longer wet grass, slope more than 1%, wind, temperature etc. Is this info available?

The a/c must be able to climb at 6% at full power in the takeoff configuration at takeoff safety speed, nil wind. To get a feel for that, imagine lifting off at the beginning of a 900m runway. By the other end you will only be 180'.

Where the runway is legally just long enough, you could be 50' at the far end, climbing at 6%. The obstacle clearance path can be as high as 5% for an ALA, so you can be missing trees by 50' plus 1% of the distance travelled from where you reached 50', if you do everything perfectly, and the a/c is performing like new. Most likely you'll lose most of the 1%, so you're back to 50' clearance, not considering gusts, shear, turbulence, tailwind etc. Not much room for error there. Engine out operation in a twin is not even considered in this phase!

In the climb configuration, the a/c must be able to achieve 4.5% to 5000' (twins different).

In the landing configuration, the a/c must be able to climb at 3.2%, so you have the capability to accelerate over the runway, change configuration, and get a better climb gradient, before reaching the far end where the obstacles might be.

Landing is the distance from 50' to a full stop on level short dry grass, again normally factored by 15%, but again, maybe not. If you don't have that safety factor, you have to be as good as that test pilot again, and get that touchdown at the correct place at the correct speed, and handle the brakes correctly, all the while handling crosswinds/gusts/turbulence etc. Have you also considered the other parameters—weight, wind, slope, surface, temperature etc?

The more modern Pipers have performance to spare over the minimum requirements, but the place where all the possibilities start to 'stack up' is approach and landing, so it's not surprising that that is where most accidents occur.

Note that there is no requirement to be able to meet any accelerate/stop numbers on takeoff, and if you are in a twin, then all you have to be able to do is to maintain 5000' on one engine, but how you get up there is not revealed! IFR Charter and Airwork twins must be able to climb at 1% on one engine to 5000'. One of the better light twins (not turbine) can get about 2% on one engine at sea level—that means at least 40nm to get from sea level to 5000', and that's not even considering the loss of power during climb, so be patient!

There may be lots of other performance information in your POH, but the criteria to get that performance is very specific, and generally will be the best they can tweak out of the machine to make it look better to the customer. In real life—good luck!

For the majority of us, there aren't any definite design requirements for the strip we chose to use. We have to ensure that the strip is suitable for our use—I guess that means that if you have an incident on the chosen strip, it wasn't safe! There are airstrip guidelines available, but CASA specifically deny any responsibility for the safety of those guideline—Sir Humphrey lives!

What does all of the above mean? Read your POH, and be familiar with all the ifs, buts, and wherefores. Know what isn't covered, as much as what is.

Be a superlative pilot ie a superlative pilot uses his superlative judgement to avoid having to demonstrate superlative flying skills!



## \*\*Electronic flight bag rules are coming\*\*

An important step in the development of standards, rules and guidance material for electronic flight bags has been taken. CASA has set up an electronic flight bag project to co-ordinate work on this rapidly evolving area of aviation. Standards and rules for the approval of the use of electronic flight bags in air transport passenger carrying operations will be set out in Civil Aviation Order 82. Guidance material for the use of electronic flight bags in air transport and other operations will be published in a civil aviation advisory publication. In announcing the project CASA states the paperless cockpit is a reality with the latest technological developments in commercial off the shelf electronic tablets. Devices such as Apple's Ipad, and other similar devices, loaded with purpose designed software are now being offered to the aviation industry for use by pilots as portable electronic flight bags.

To ensure Australia's standards and rules for electronic flight bags are in line with international best practice, CASA is part of an International Civil Aviation Organization (ICAO) working group on the issue. This group is developing high-level standards and recommended practices, as well as guidance material, covering the basic requirements for issuing approvals for electronic flight bags. The group has identified six key issues that must be addressed in the new standards and practices. These are: keeping pace with evolving technology, data security and corruption risks, standardisation of applications, software assurance, the transition from paper to electronic databases and information overload. The ICAO working group is aiming to complete its work by the middle of 2012.

## \*\*Action to ensure instruments are accurate\*\*

Action is being taken to simplify and clarify the requirements for the ongoing maintenance of aircraft instruments and systems. A set of proposed rule changes would create a single calibration standard for aircraft altimetry to ensure all barometric altitude equipment is maintained to the same internationally recognised standard. To achieve this there would be changes to two Civil Aviation Orders and several airworthiness directives would be cancelled. At present there are conflicting standards for the maintenance of altimeters under the visual flight rules and instrument flight rules. In a notice of proposed rule making CASA proposes to adopt the US Federal Aviation Administration standard for the calibration of barometric altimeters.

This would ensure there is a tighter error tolerance than under existing standards.

In addition, some sectors of the aviation community have interpreted current regular altimeter testing requirements to mean other aircraft instruments and systems do not have to be checked for accuracy. This has meant that instruments such as fuel gauges may not have been tested. Under the proposals operators would be required to ensure there are appropriate instructions and data for the ongoing verification of instrument accuracy and the integrity of the associated instrument systems.

Read the notice of proposed rule making  
<[HTTP://casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC\\_100635](http://casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_100635)>  
and comment by 4 November 2011.

## \*\*Failed lifejacket battery warning\*\*

Aircraft owners and operators are being warned about the failure of survivor light batteries in Regent RSS-301 lifejackets. There have been a number of reports of batteries breaking open or deteriorating in Regent RSS-301 lifejackets manufactured in 2008. In some cases there is a strong sulphur/acidic smell when the lifejacket package is opened. The survivor light battery has been found to be swollen and the battery case separated. To date nine failed lifejacket batteries have been reported to CASA. The Regent RSS-310 lifejacket has a ten year maintenance overhaul period, however, the failed batteries were in lifejackets with less than three years time in service.

As the survivor light battery is packaged in the centre of the folded lifejacket, there is little external visible evidence of battery failure. CASA recommends all aircraft owners and operators with Regent RSS-301 lifejackets manufactured in 2008 visually inspect the lifejacket packages to determine if they are air tight and to see if there is any moisture in the package. Lifejacket packages that are not air tight or contain moisture should be considered suspect and they should be opened. CASA is asking that where any lifejackets are opened a service difficulty report is submitted, even if the battery has not failed.

Read the full details about the lifejacket problem  
<<http://casa.grapevine.com.au/lists/lt.php?id=Y0UCDQ0HCQMIHVFSBwRLAwwsIAA%3D%3D>>  
in an airworthiness bulletin.

## \*\*Pilots can get OnTrack at more locations\*\*

Pilots, are you making sure you stay 'on track' when flying in and around controlled airspace? To make sure you are operating correctly there is an easy to use and valuable on-line manual called OnTrack.

Launched last year, OnTrack initially covered the capital city general aviation aerodromes. Now OnTrack has expanded and offers information and support for flying at a number of other locations. Right now OnTrack covers Cairns, Archerfield, Bankstown, Camden, Moorabbin, Launceston, Cambridge, Parafield and Jandakot. OnTrack shows inbound and outbound tracks, hotspots for violations of controlled airspace, controlled airspace procedures and information about military operations where relevant. It uses video, pop-ups and animated flight threads to take pilots step-by-step in and out of each aerodrome.

Images of specific locations give a pilot's eye view of vital tracking and approach points. For pilots unfamiliar with operating at these nine aerodromes, OnTrack is a vital tool in preparing for a flight.

Naturally, OnTrack does not replace current charts and documents and pilots must still check ERSAs, NOTAMs and weather before flying.

Visit OnTrack

<<http://casa.grapevine.com.au/lists/lt.php?id=Y0UCDQ0HCQwAHVFSBwRLAwwsIAA%3D%3D>>  
and prepare for your next flight.



## \*\*Pilots to tell CASA about information needs\*\*

CASA is striving to find better ways to communicate safety information to Australian pilots. We want to make sure all pilots get the right information in the right ways. To do this market research has been commissioned by CASA's Safety Promotion branch to find out if and how pilots use new information technologies and how they like to get their information on-line. A range of qualitative and quantitative research methods will be used to gather this information, including on-line surveys and face-to-face feedback sessions. Questions and discussions will focus on how pilots use smart phones, other digital devices and computers. Pilots from across the nation will also be asked their preferences for the way in which they receive safety information. The findings will be used to review and develop current and future safety promotion products and explore new media avenues for the distribution of aviation safety information. The communications research will get underway before the end of 2011 and CASA hopes as many pilots as possible will take part. To maximise the effectiveness and accuracy of the research findings it will be very important for pilots across all sectors of aviation operations to participate. Vivid Research, a respected market research company, will conduct this research and information on how pilots can take part will be posted on the CASA web site soon.

# Psychological Hazards

There are several factors that may interfere with a pilot's ability to act promptly and properly when faced with an emergency.

Reluctance to accept the emergency situation.

A pilot who allows the mind to become paralysed at the thought that the aircraft will be on the ground, in a short time, regardless of the pilot's actions or hopes, is severely handicapped in the handling of the emergency. An unconscious desire to delay the dreaded moment may lead to such errors as: failure to lower the nose to maintain flying speed, delay in the selection of the most suitable landing area within reach, and indecision in general. Desperate attempts to correct whatever went wrong, at the expense of the aircraft control, fall into the same category.

Desire to save the aircraft.

The pilot, who has been conditioned during training to expect to find a relative safe landing area, whenever the flight instructor closed the throttle for a simulated forced landing, may ignore all the basic rules of airmanship to avoid a touchdown in terrain where aircraft damage is unavoidable. Typical consequences are: making a 180 degree turn back to the runway when available altitude is insufficient, stretching the glide without regard for minimum control speed in order to reach a more appealing field; accepting an approach and touchdown situation that leaves no margin for error. The desire to save the aircraft may be influenced by two other factors" the pilot's financial stake in the aircraft and the certainty that an undamaged aircraft implies no bodily harm. There are times, however when a pilot should be more interested in scarifying the aircraft so that the occupants can safely walk away from it.

Undue concern about getting hurt.

Fear is a vital part of the self-preservation mechanism. However, when fear leads to panic, we invite that which we want most to avoid. The survival records favour pilots who maintain their composure and know how to apply the general concepts and procedures that have been

developed through the years. The success of an emergency landing is as much a matter of the mind as of skills.

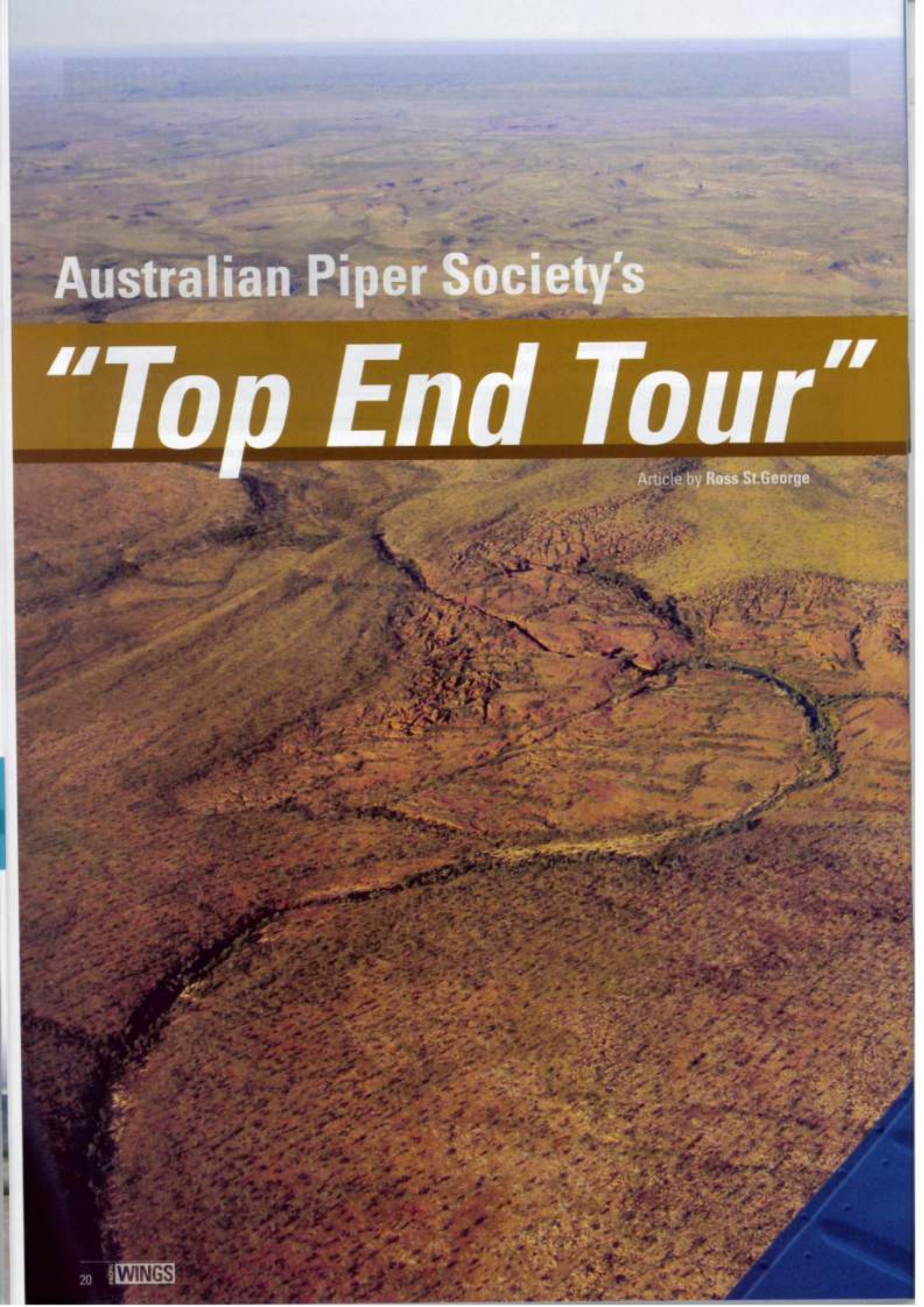
Basic Safety Concepts.

A pilot who is faced with an emergency landing in terrain that makes extensive aircraft damage inevitable should keep in mind that the avoidance of crash injuries is largely a matter of: (1) keeping vital structure (cockpit/cabin area) relatively intact by using dispensable structure (such as wings, landing gear, and fuselage bottom) to absorb the violence of the stopping process before it affects the occupants, (2) avoiding forceful bodily contact with the interior structure.

The advantage of sacrificing dispensable structure is demonstrated daily on our highways. A head-on car impact against a tree at 50 kph is less hazardous for a properly restrained driver than a similar impact against the driver's door. Accident experience show that the extent of a crushable structure between the occupants and the principal point of the impact on the aircraft has a direct bearing on the severity of the transmitted crash forces and therefore on survivability.

Avoiding forcible contact with the interior structure is a matter of seat and body security. Unless the occupant decelerates at the same rate as the surrounding structure, no benefit will be realised from its relative intactness. The occupant will be brought to a stop violently in the form of a secondary collision.

Dispensable aircraft structure is not the only available energy absorbing medium in an emergency situation. Vegetation, trees. And even man made structures may be used for this purpose. Cultivated fields with dense crops, such as mature corn and grain, are almost as effective in brining an aircraft to a stop with repairable damage as an emergency arresting device on a runway. Brush and small trees provide considerable cushioning and breaking effect without destroying the aircraft. When dealing with natural and manmade obstacles with greater strength than the dispensable aircraft structure, the pilot must plan the touchdown in such a manner that only non essential structure is " used up" in the principal slowing down process.



Australian Piper Society's

# ***"Top End Tour"***

Article by Ross St. George



This year, the Australian Piper Society's flying trip was a tour of the Top End—essentially, the Northern Territory of Australia. My wife Alison and I were fortunate enough to be able to join our friend Duncan Morris in VH-RQN a PA28-201R on this great adventure. It was my third and Ali's second trip with the Society. All have been wonderful experiences, mixing our passion for flying with great company and the impressive landscapes, fauna and flora of this vast island continent. In early August, we flew with Air New Zealand to Melbourne, drove to Cobden in rural Victoria, repacked for travelling as lightly as we could and prepared the aircraft.

Our starting point was Cobden, southwest of Melbourne. It is dairying country and shares winter rainfall akin to New Zealand. The trip began by having to literally tow the aircraft from its hangar with a ute to a concrete run-up pad near the runway. Not all of Australia is sun-drenched. Down in the southeast of Australia, winter weather can be as challenging as it is at home. It is once you are over the Great Dividing Range and inland that the weather pattern stabilises in winter with high pressure systems that settle in for extended periods, giving generally good flying conditions. The season is known as the 'Dry'. But it can still hold surprises.

Watching the weather, we left Cobden a day early to get over the hills near Stawell and planned for a night in Mildura. By New Zealand standards, the ranges to the north of Cobden are not high, but cloud, rain and clag can come out of the Southern Ocean and be pushed up against them for days. However, once at Mildura, we put that behind us with a day to spare to the start point of the trip. The plan originally called for all of us—11 aircraft and 24 people—to meet up in Longreach, Queensland. Unfortunately, the weather had other ideas. Dawn in Mildura showed pre-frontal cirrus, the television reflected the sky with a front and depression moving east out of South Australia. Maybe we would be ahead; maybe not. A possibly long day

of flying began heading basically north, tracking past Broken Hill and Tibooburra, with Thargomindah being the planned pit and fuel stop.

The distances are huge, even with nominally seven-hour long-range tanks in RQN. Of course, weight and balance dictated planning on five hours' flying plus the reserve, with wind (predicted and actual) and groundspeed to be factored in. Stretching the glide is never an option. RQN is well equipped with dual Garmin GPS/Comm units, a coupled autopilot and ADF; the Australian network of powerful NDBs is excellent.

At approximately 60 nm southeast of Thargomindah (we were in the real Outback now), the high overcast began to merge with the horizon, which, at 5,000 ft agl appeared to be about 20 nm away. Of course, out there, there is just one constant horizon ahead, left, right and behind. Cross-checking of heading, track, the flight director and the compass are regular tasks. Observation of a fixed point on the horizon in the far distance is difficult because, for long periods, there are no distinctive features suitable as reliable references. However, map track-crawl reference checks against the odd road, the occasional fence line, a station (usually with an airstrip and easy to discern), larger water bodies (natural or dammed—called "tanks" on the charts) and water courses—either with water visible or evident by the vegetation

Left: The heart of Outback Australia—here, somewhere between Birdsville and Mt Isa—is no place for an engine failure in a single-engine aircraft!

Top left: On the ground at Adels Grove. Top right: Piper line-up at Adels Grove Airport in Lawn Hill National Park.

Right: Modern Darwin.

Right, centre: Typical refuelling operations in the Outback, using drums and hand pumps.

Far right: Stunning scenery at Katherine Gorge.

Right, below: The author (foreground) and Duncan Morris at Birdsville.

patterns—helped to confirm location and progress. Noting time and cross-referencing to the GPS information all added to the picture, and our contentment that we were on track and had a good idea of position, time and distance to run, fuel available and the quantity in each tank.

The view ahead to our intended pit stop at Thargomindah was not improving. We contemplated sacrificing height to look for a way “under”, but the increasingly indistinct nature of the horizon ahead held other messages. Hmm.....Tibooburra lay to the southwest, but the forecasts had the system moving east. Further east—if we stayed ahead of the weather—was Cunnamulla, although it did not promise much in the way of facilities or reputation. Meanwhile, we listened out on the Common Area Traffic Frequency (CTAF) that covered the region and heard a commercial aircraft initiating an RNAV approach for Thargominda. We made contact and the pilot was happy to give us pilot reports during his approach. At something like 1,500 ft agl on his approach, he reported that he was down to about one mile visibility, which would be no place for us. Duncan is qualified IFR en route, but an approach is a different story. About one hour behind us and, importantly, not towards the weather, was White Cliffs. It was our Plan B, so we headed back for a night in an underground motel. As we were on final approach into White Cliffs, we could see other aircraft lined up at the pump...we were not alone.

The weather system had driven other groups of flying travellers from Warrnambool and Bathurst to also seek safety and shelter. But first, we had to fix the fuel pump! The local “in charge” had gone walkabout, leaving his wife running the pub. Among the collection of us “home handymen”, we adjusted the pump pulley and coaxed the electrics into life. Once the aircraft were all fuelled, we headed in search of “fuel” of a different kind.

In an underground motel, you are oblivious to the world outside. This was the Outback; tomorrow would be blue skies and sunshine. Wrong! Apparently, it had rained all night and we stepped out into cloud at ground level—fog. The day was pretty much spent exhausting all of the tourism possibilities of White Cliffs, discussing the weather with clusters of confined pilots...and digging red mud off one’s shoes. So, for us, it was another night at White Cliffs while most of the Piper group from out east had made it to Longreach and were having fun. Thankfully, the next dawned “fine enough” and we headed out, now bypassing Longreach for a long day of flying via Birdsville to catch up at Mt Isa. By the time we reached Birdsville for lunch and fuel, we were in those clear blue endless skies that these trips are all about.

That night at the Isa, there was much socialising with old friends from previous trips and new friends to make as well. Right; at last, the trip proper could begin.

The next morning we all set off for Adel’s Grove at the Lawn Hill National Park. This is slightly to the northeast of Mt Isa, tracking towards the bottom of the Gulf of Carpentaria. On the maps, it appears to be in the middle of nowhere...and it is. This national park was our first taste of the impressive water-filled gorges and mix of tropical forest and savannah grasslands. The three days here were spent



canoeing (fresh water crocodiles were said to be about), hiking and just soaking in the differences in this landscape. If we had had fishing gear, we might have caught barramundi, angel fish or spitting fish. We swam with them in crystal-clear water. By coincidence, a bunch of travellers on a coach trip around inland Queensland (on average, all slightly older than us) were also staying at Adel’s Grove and they were very much into Australian country music and bush poetry. They were an entertaining bunch over dinner for a couple of nights and we all enjoyed a good bush poem called “Turbulence” about a stockman’s first flight...check it out on the web; “It’s a cracker, mate.”

The next long leg was to Groote Eylandt—a Dutch name for a large Australian Aboriginal controlled island in the Gulf of Carpentaria. The island is simultaneously ecologically orientated and the site of major mining operations. We debated about our track after departure; the choice was between nearly 100 nm over water (with crocs, sharks and stingers below, and little prospect of rescue within 24 hours), or the longer coastal track over Borroloola, around to Numbulwar and then about 30 nm over water to Groote. It wasn’t really hard to choose. Our route took us over three and half hours of savannah, then almost empty coastal landscapes. There were the occasional



Aboriginal and mission communities, with strips that were noted just in case. Aircraft in the group chatted occasionally about progress, the winds down low (3,500 ft agl) and the winds aloft (7,500 to 9,500 ft agl), while the Arrows kept a good lookout for the Archers and Cherokees known to have got away a little earlier.

The Dugong Resort on Groote proved to be world class and the pool was delicious, while the air temperature was 28°C with little humidity at this time of the year. However, the supply barge had not been in for 10 days and it became “the resort with no beer” that evening—not entirely our fault, I might add.

West was the only way to go from Groote and we headed across Arnhem Land to the Kakadu National Park. The destination was Cooida, where we were to stay for a few nights at the Gagudju Lodge. En route, we stopped at Jabiru for lunch, fuel and, as it turned out, a very good briefing on how to fly and explore the huge escarpment. This geologically fascinating feature of the national park gives colour and form to the landscape and the elevation for the waterfalls.

From the Gagudju Lodge, a number of trips were available to us. High on the “to-do” list was Jim Jim falls. It was the culmination of a long day in the park and a mountain goat experience “rock climbing”

in the last half kilometre to the falls. The warning about a moderate level of fitness was possibly a little understated. Even the drive part way into to the falls was extreme 4WD territory. Still, it provided lots of laughs and a few bruises to admire over at a beer at the end of that day and the falls were ticked off the bucket list.

Of course, the experience was also about the wildlife—wallabies, buffalo, feral camels and birds in a rich variety. Oh, and, this being Australia, snakes as well.

I have already mentioned crocodiles. There are freshwater crocs (“freshies”) and salt water crocs (“salties”). We were not quite convinced that these crocs would always know where they should be. The story is that “freshies” like fish. So, if a croc swims up to you and then swims away, it is a “freshie”. If it doesn’t, it is too late.

A highlight of Kakadu is the Yellow Waters tributaries of the

...the ‘resort with no beer’ that evening—  
not entirely our fault...



Above: 1: Some of the "boys toys" in the "The Toy Box" at Emkaytee just south of Darwin.

2: Waiting in the shade for a bus at Groote Eylandt. 3: Melissa, who set an excellent example of professionalism in her flying.

4: The Daly Waters pub. 5: Yellow Waters on the South Alligator River. 6: The author (right) and Duncan, flight planning with Air Nav.

South Alligator River (an early explorer thought the crocodiles were alligators). The wetlands teemed with birdlife, water lilies and stunning views. For a wee while, it was like being caught up in a David Attenborough documentary. Nature impressed and although the area is vast and seemingly only minimally touched by human activity, it is no doubt fragile and worthy of care.

As far as the flying was concerned, we had left sealed runways behind and crushed red to sandy gravel was the norm. Finding an area with few stones for start and run ups was guesswork. Fuelling was a cooperative exercise, and we all helped to shift aircraft around to get to the pumps and back to the tie down spots. Every few days, bags had to be hauled about, aided by the generosity of the local accommodation providers who brought out utes or a mini-buses. I guess they are well used to this given the popularity of light aircraft touring in Australia.

Our fleet consisted of two PA28-140/160s (straight wings), two PA 28-180s, a PA28-181, one PA28-235 and five Arrows (various models). There were the expected performance variations due to configuration, power, weight (women's bags seem to be heavier) and fuel requirements. Duncan's PA28-201R had the benefit of long-range tanks, but at MAUW, we carried five hours' fuel plus the mandatory reserve. As mentioned, the aircraft was well-equipped and nice to fly. For Kiwis on such a trip, one needs a CASA-issued Certificate of Validation for a New Zealand licence and, of course, one must be a pilot named on the aircraft's insurance policy.

At breakfast of each flying day, we shared a briefing about weather, route and NOTAMs. Flight planning varied amongs the aircraft and involved mixtures of charts, rulers, protractors and EB-6, Air Nav (a nifty Australian computer product) and, for a couple, the new iPads with maps, terrain, NOTAM and weather availability all in one. With the iPad and its built-in GPS tracking display and other related applications, it is clear that the general aviation electronic flight bag is here. We all shared the information we gathered each morning that we flew and, as a result, we all took off well prepared. We maintained airborne contact on 123.45 and offered "advice" (bragging) about progress and tail winds.

From Cooina, we headed to Darwin for three days. Before the trip, it had been suggested that because it is a busy commercial and military airport, Darwin might not welcome all these country pilots with their country ways. Therefore, we planned to go to to Emkaytee, a private GA airfield with fuel about 20 kilometres south of Darwin. There, we were made welcome and our leader (more below on our fearless leader) had air-conditioned transport arranged. Emkaytee sported a lot of GA aircraft, both standard and microlight, a maintainer and a "Toy Store" with an Antanov An-2, a Yak-52 and, outside, a Piper (Smith) AeroStar. There also seemed to be no shortage of frogs...either squashed on the apron and roads, or live in the loos.

Two of our aircraft headed to Darwin, one with a noticeably unbalanced prop (which was found to be fitted one stud out), and one for the hell of it and to do an oil change while in town. The oil change

was for the effervescent Melissa (with Phil) in VH-KID. Melissa, who set off on this trip with just 114 hours total time, dressed in a smart white shirt and black trousers every flying day. Every aspect of her flying was strictly professional...and the "boys" took notice. Good on you, Melissa!

There was a little excitement at Emkaytee when one of our aircraft—an Arrow—went missing. Using a handheld radio, we made contact and established that the aircraft was not where we were, but was where his GPS said he should be. A quick check revealed the cause to be differences in coordinates given in different publications. The Airservices En Route Supplement—Australia (ERSA—like the VFG in New Zealand as it was once known) placed Emkaytee at S 12.36.6, E 131.03.170, while the 2010/11 AOPA (Aust) National Airfield Directory placed the strip at S 12.40 and E 131.05. This was certainly enough to make a difference—especially for anyone flying at a relatively low level, when red strips and red dirt roads can all start

to look the same when there are few other ground to map features to provide a geographical reference. Fortunately, the aircraft was "recovered", and the worry for us and the pilot subsided.

The last time I had visited Darwin was just a couple of years after Cyclone Tracy and I hardly recognised the Darwin of today, which is a modern, pleasant small city with an impressive waterfront development. In a balmy tropical evening breeze, the Mindil evening markets by the beach make for a vibrant event with arts and craft, food stalls and entertainment, and the city's museum and art gallery are worth half a day.

From Darwin, the group travelled by coach to the Litchfield National Park. The trip included time on the Adelaide River, where we viewed crocodiles jumping to snatch chunks of meat dangled above the water. These were "salties" and not to be messed with. Elsewhere, tree-lined red-rocked gorges and waterfalls provided "safe" swimming and relaxation.



Top left: On final approach to Cooiinda.

Top, centre: The author (left seat) and Duncan Morris.

Top right: Aussie IFR.

Above: Approaching Birdsville.

Refreshed from our stay in Darwin, the group then headed south. It began to feel as if we were heading home—and all too soon. The next couple of nights were at Katherine and the flight there was easy. However, the arrival at the joint RAAF Tindal/Katherine civil airport became interesting. Tindal is not controlled unless there are military operations; it operates as a CTAF. Because of a military exercise, the tower was NOTAMed to come on watch at 11:00 hrs (local), by which time we had planned to all be on the ground.



Under CTAF operations, probably three to four aircraft were arriving at Tindal at the same time as we did. Also joining from the east was a twin turbine regular passenger aircraft (RPT is the Aussie term). From our position in the right-hand downwind leg, we offered the RPT flight priority to join from the east while we extended. That aircraft declined, and then joined from the non-traffic side and started to overtake (run-down) the two downwind aircraft. As a result, the RPT aircraft had to reposition but its crew then commented it was "unsafe". Tindal ATC were obviously listening and watching in the tower, and came on watch early to reposition all the joining aircraft. By this time, we were already on the ground under uncontrolled CTAF procedures. In review, it was not clear why the crew of the RPT aircraft did not avail themselves of the more direct and simpler approach, because once behind slower aircraft, separation was going to be more of an issue. One complicating and confusing factor was an error made by one of the aircraft in our group; it had got itself into what appeared to be a left-hand downwind position for the active runway, which was clearly a mistake, as it was a right-hand circuit. Later, with my human factors interest hat on, I noted that in the ERSA, circuit information is **not** printed in close proximity to the depiction of the runways. Instead, it is located in Note 7 of the Local Traffic Regulations some three pages over. In the case of aerodromes with a lot of information, it means it can be displaced by some distance and embedded in a lot of other text. Perhaps one gets used to this, but I'd suggest that primary information about runways and circuit instructions should be co-located, as it is the central flight guidance material one refers to when planning how to join.

Our adventures continued with trips to Katherine Gorge and the Cutta Cutta caves. Katherine Gorge is deep and majestic with its red-rock formations and wildlife and, while the Cutta Cutta caves

lack the glow-worms of Waitomo, the limestone formations are nonetheless impressive. Katherine is a busy Outback servicing centre where, by the utes, the shops, the stock and station agents and the drought-resistant grins, you definitely know you are in the Outback.

Two days later, it was time for the group's last leg to Tennant Creek and the farewell party before dispersing. The flight from Tindal, with an uneventful CTAF departure for us all, was by way of Daly Waters for lunch and then on to Tennant Creek. Daly Waters has a rather iconic pub (nothing alcoholic if flying of course). You might say that the airstrip (ex-WWII) is iconic, too. Choosing which bits of scrub to land over or which might go underneath was interesting; so, too, was taxiing, as we wanted to avoid loose gravel "pinging" our props and we didn't want light scrub scraping the thin skins of our wings or damaging wingtips. The apron surface was much the same and the old hangar (with museum status) had seen better days—probably in about 1944! Fuel was available from drums at more than A\$4.00 a litre; thankfully, we had loaded five hours' fuel into our long-range tanks at Tindal.

Arrangements for lunch at Daly Waters were simple; the first aircraft to arrive "buzzed" the hotel and the publican sent out a car to shuttle everyone in. Once everyone had feasted, it took us back. Easy. We all lunched well, checked out downtown Daly Waters—a crossroads, the pub, the gas pumps and one craft shop with a distinct style; that was it.

Our "last supper" was at Tennant Creek. There, we enjoyed a gold mine tour, wine and dined, and said some of our farewells. Most importantly, we acknowledged the amazing planning and organisation of Barry and Sue McCabe of Roma (Queensland) who put the trip together. The responsibility for the hard yards many months ahead of time, and all the shepherding and briefings to

Opposite page, far left: Australia digs its way out of debt—a mine just north of Mt. Isa.

Opposite page, top right: Daly Waters “Shopping Centre”.

Opposite page, bottom right: The group together outside the Daly Waters pub.

Below, left to right: The author and his wife, Alison, canoeing with the crocs at Adels Grove; Not the local CASA representative, but a crocodile about to jump for bait at Litchfield Park south of Darwin; Sunset on the South Alligator River.



ensure that we and our aircraft were all safe and sound had rested with Barry and Sue. A great job—thanks.

The bad weather at the start of our trip had changed our plans. For some others, it had greater consequences. It was only on the very last day and night that two chaps made it from Perth, Western Australia, after having made a couple of attempts to get up the coast before reaching Broome, where they were stuck for six nights. They made it to Tennant Creek just in time to say “hi” before heading back across half of Australia the next day. Now that is determination and devotion to the Australian Piper Society!

Our trip home to Cobden should have been uneventful. The basic plan was for three Arrows to head south and slightly east, as we all were heading that way. We set out for Broken Hill via Birdsville where we stopped for lunch and fuel. As we tracked to Birdsville, others tracked to Alice Springs or Mt Isa and east. Last chats were on 123.45. Flying over the Simpson and Strzelecki Deserts, even at altitude, inevitably prompted occasional thoughts of a forced landing. One really would not want to go down there—even with PLBs and emergency supplies. Our overall flight time from Tennant Creek to Broken Hill via Birdsville was close to seven hours; that is a long time to hang in the sky in a general aviation aircraft in one day.

By early the next morning, the wind was up, the sky was grey and the weather forecast wasn't that promising, with a front lying just to the east of our intended route. With Duncan qualified for en route IFR, we planned our route across Mildura, Horsham and Stawell to Cobden (where it had to be VFR). The view from Broken Hill aerodrome wasn't that encouraging, with overcast and darker cloud down to the horizon to the southeast. About halfway to Mildura, we started to encounter drizzle; to the west, the visibility at 2,500 ft amsl was a little better with a horizon. After about 15 minutes, we

were past the worst and while it was overcast ahead, the base had lifted. It was going to be OK.

Oops—no it wasn't. The alternator annunciator light was on and the ammeter showed no output. How long had it been on? We were not sure; possibly as much as 20 minutes since the last check. What to do? We were VFR and below controlled airspace; obviously, we needed to shed electrical load and consider diversion options. The autopilot could come off, the transponder was nice but not essential and, initially, one GPS and radio could be switched off. The charts and our daily track maps were all well organised and Ali had her finger on things. We approached and overflew Mildura—making the required CTAF calls.

As we positioned to the south of Mildura, my museum piece Garmin 55 GPS came out of the flight bag. It took a few minutes to initialise. Technically, we could have flown home to Cobden, but as our battery was possibly weak and with no maintenance there, we made the decision to fly to Horsham, where VH-RQN's maintainer is based—even though it was Sunday. With our track confirmed by maps, the GPS and the Mark 1 eyeball, we shut down all the electrics and tracked to Horsham. At 10 nm from Horsham, we switched on the battery master to give us one radio and the comfort of “three-greens” as the landing gear was lowered and locked. All was well.

Duncan's engineer was at Oshkosh, but his Dad came out to the aerodrome and kindly loaned us a Toyota Camry for the three-hour drive to Cobden. We might not have arrived back in quite the style intended, but that's life. The wee challenge at the end took nothing away from the superb trip with its wonderful flying, the adventures in the “lucky country” and the great friendships forged.

Readers might like to view the Australia Piper Society website: [www.piper.org.au](http://www.piper.org.au) PW