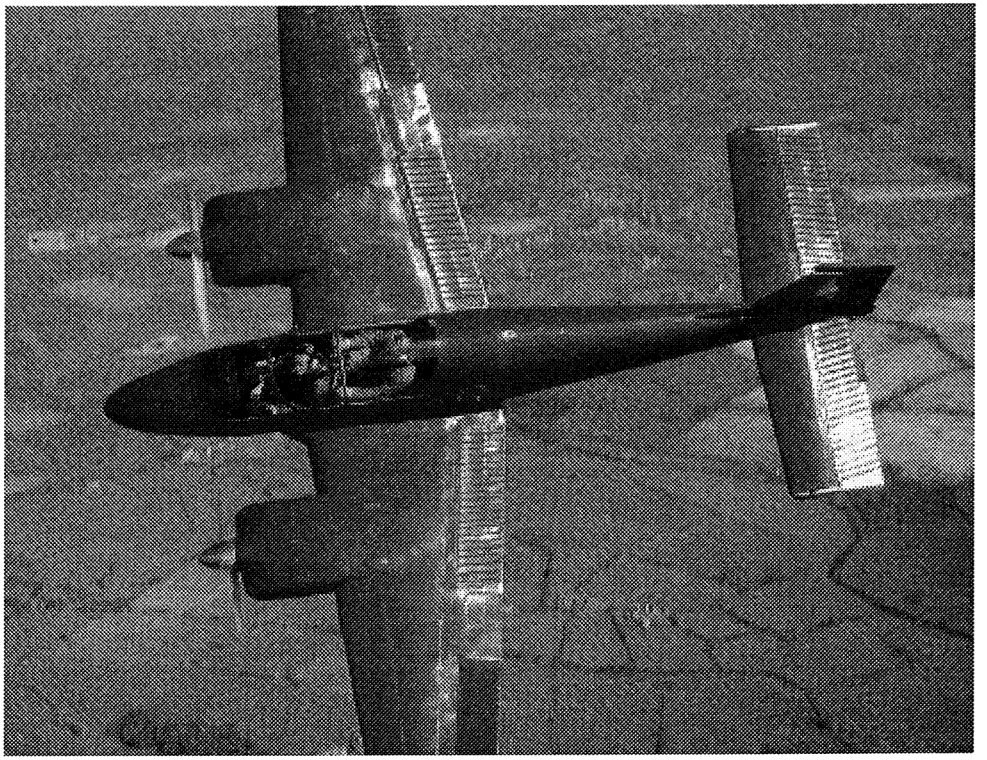
August 2002
Newsletter No. 103

AIRTOURER ASSOCIATION

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



NEWSLETTER

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Articles for inclusion in the Newsletter should be submitted direct to John O'Halloran at the contacts listed above. Please enclose payment for any advertisement. The next Newsletter will be published in November 2002. Contributions and or advertisements are to be with JOH by 15 October 2002.

Small advertisement (3 to 4 lines)	$10.00
Large advertisement	$20.00

Cheque to be made payable to the Airtourer Association. Post with copy direct to the publisher.

Editorial

This Newsletter is shorter than most after the last delayed issue. Additionally there has been a lot of activity for the Secretary's secretary (Jan) in collecting the membership renewals and updating our files. It's always interesting to read the additional news and comments some members include on the returned forms. The majority of renewals have been received however any not in by the time this Newsletter goes in the post will find a reminder notice with the Newsletter.

Planning is well under way for next year's AGM. An information sheet should be included with this Newsletter. It promises to be a good weekend so plan ahead and book leave etc.

Our next gathering will be the President's Fly-In at Parkes in September. Hugh has planned a "return to Parkes" with the emphasis on flying rather than sightseeing away from the airfield. Those of you who attended the many Yarrandale Fly-Ins will remember weekends of flying with members swapping rides in each others aircraft.

Cover Photo: It's obviously not an Airtourer but look closely and some parts may look familiar. See story on page 4.

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.

Letter to the Editor

Dear John,

Please pass a big "thank you" from me to all the Airtourers who have written, called in or phoned. They have helped us cope during these last months. You are all very special people.

Thank you,

Marjorie Roche

Editorial cont...

We have a number of members who don't own an Airtourer or their aircraft is not flying, yet they still make the effort to attend our Fly-Ins. Also there are many new pilots who don't know the joys of the Airtourer. Could you imagine the impact if everyone took one non-flyer or local flying club pilot for a quick trip in an Airtourer.

Safe Airtouring,

John O'Halloran

Happy 80th Birthday

Alan Wood

from President Hugh Knox and all members of the Association.

"ETOPS AIRTOURER"

Bill Pennell

This account was dredged from my failing memory during the consumption of the juice of a case of local "red" (in the company of persons who shall remain nameless) during "Warbirds at Wanaka" 2002. (See report elsewhere!)

Around the year 1993 I had gone to Europe in connection with my business as Service agent for Suizer Diesel in Australia.

Whilst there, I took the opportunity to visit with remaining family in London.

I noticed an intriguing article in English "PILOT" magazine, which described the air test of a prototype aerobatic light twin, called the "SPEEDTWIN", designed and built by one Peter Phillips.

The attached photos showed a taildragger, tandem seat aircraft, with Airtourer dimensions and with wings and tailfeathers bearing a distinct resemblance to our own!

Peter Phillips turned out to be a retired RAF pilot who had flown Meteors, Vampires and Sabres in the post war era. Peter's first love was aerobatics, and on leaving the service he flew air show display in Tigers, Stampes, and a Bob Hoover type routine in Britten-Norman Islanders.

He was demonstration pilot for the Beagle aircraft, and was at one stage Sales Manager for the VICTA aircraft distributor in U.K..(Glos Air I think).

Back to the story, I found Peter's home number and rang him at his farm in Trellech, a small village in Wales. After discussion I was invited to come and fly the machine, and duly set off with the family.

"Cae Gaw" farm turned out to be some fifty acres of rolling Welsh hills in Monmouth, with it's own airstrip of about *450* m in length rolling up one of the hills, covered in long, wet grass and daisies, and with a large oak tree marking each side of the uphill threshold! On arrival we were welcomed with open arms, and while Peter's wife entertained my family, we went off to prepare the aircraft for a sortie.

"G-PST" did indeed have some Airtourer components and was of similar dimensions. She had two "Continental" 0-200's, fixed pitch wooden props, and was finished in the most beautiful blue metallic paint with gold cheat lines.

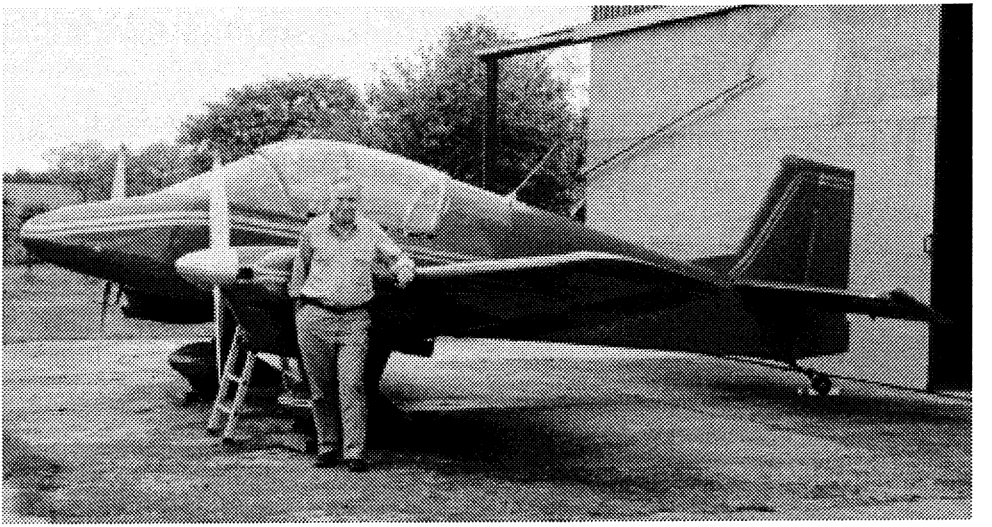
The finish and workmanship were outstanding and I couldn't wait to sample!

The cockpit was of narrow but comfortable dimensions, and the view was like sitting in a Vampire. The instructors seat was raised to give him a view over the blockhead in the front cockpit!

I was sent off with Peter's chief pilot, and the stiff breeze indicated an uphill take off. I expressed some concern, but was told "Don't worry, it will fly itself off the top of the hill, just make sure you go **between** the trees!"

I wound up the trusty 0-200's, released the brakes, and to my great surprise lifted off after a short run to gaze down on the top of the oak trees a couple of hundred feet below!

My logbook shows a landing at a grass strip called Oaksleigh, across the river Severn estuary back in England, followed by a cup of tea at the local flying club, and a return to the farm at Trellech.



It does nothing to describe the superb performance and incredible handling of the "Speedtwin"!

We climbed out at an indicated 1200 ft/min to 5000 MSL in around four minutes, whereupon I was urged to "chuck it around a bit".

Stalls were straight ahead, clean or dirty, at around 55 KIAS, with recovery in 100ft or less. With left engine at ground idle, only an asymmetric application of big toe and two fmgers was needed, followed by a 250 ft/min climb at the blueline speed of 78 KIAS. This at our all up weight of around 1850 lbs. including 80 litres of fuel, despite the drag of the fixed pitch prop. Try that in an "Apache"!

We quickly trued out at 140 KIAS on 70% power, and after throttling back to 2200 RPM were still showing 110 KIAS at 3000 ft, and consuming about 20 L/Hr both engines at this reduced and very quiet cruise.

With a three-G pull from an entry speed of 145 KIAS we did a near perfect loop (for me!) with feet off the rudders, showing 65 knots over the top.

The design incorporates something Peter calls RAP i.e. "Remote aerodynamic power", which was his improvement on aerobatic spades, consisting of a pair of small variable vanes mounted forward facing under the belly.

The torque generated by these vanes is applied through linkage to the ailerons, and the force applied can be varied to suit the individual pilot through adjustable length bell cranks. The result is aileron feel that remains the same regardless of aircraft attitude, coupled with stability that holds the aircraft at any angle "hands off".

All this, together with the view over the steeply sloped nose, and a sunny day (at altitude!) had me tempted to abscond with the aircraft!

A landing with no perceptible taildragger vices brought us back to the hangar/barn factory, where Peter employed five people building the production version, which he intended to sell in modular kit form in the near future.

I submitted an immediate request for my

name to go on the list for the early deliveries, however Peter Phillips was in a wheelchair on the day of our visit, and he sadly passed away from cancer in the following year.

I was totally amazed when after letting a total stranger from Australia fly his aeroplane, Peter and his wife insisted on giving us lunch, and positively refused to let me pay for the aircraft's fuel. The man and his machine are a great loss to aviation.

I recently wrote to the editor of "Pilot" magazine to try and find out what became of the project, but could discover only that it was thought to have been sold to American interests.

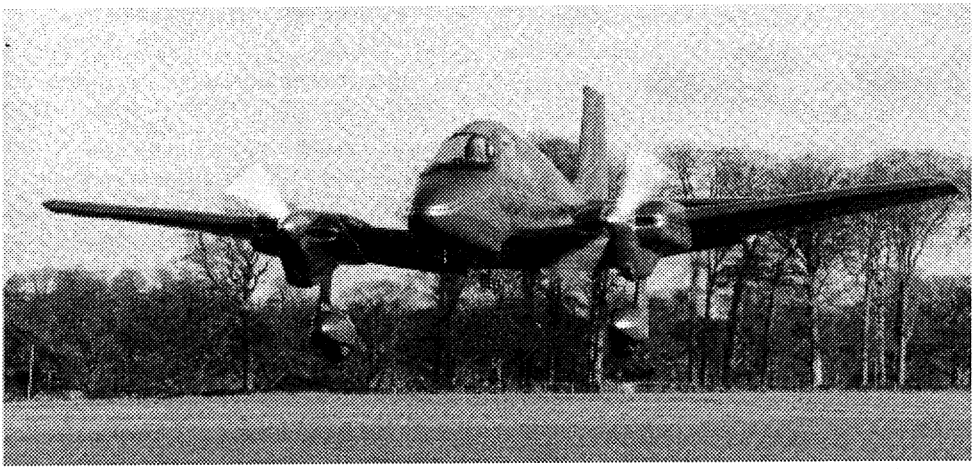
Peter told me that he had also designed a Mk II version with two "Lycoming" IO-320's and constant speed props, for later development.

I have copies of the original article on the "Speedtwin" if anyone is interested.

Should anyone be visiting the States in the near future I would be much obliged if they had time to make some enquiries on the ground.

What a great project to keep young and poor in old age!!

Any takers to join me?



Post Script.

Not long after receiving Bill's article I recieved an email from a David Mitchell from Carrollton , Georgia in the USA. He is interested in building the Speedtwin as a homebuilt and advises that the original aircraft is still somewhere in England where the present owner intends to market it as kits. David has been unable to obtain any drawings and is developing his own from the limited information available. We wish him good luck and will monitor his project with interest. Ed.

WANAKA SURVIVES AIRTOURER VISIT

Liz Matthews

New Zealand... Aotearoa...land of the long white cloud, the whitebait fritter, the one-lane bridge. Lend uf thu clupped vowel. "Pecker wanted chick-out sux" (in the super-market.) "Chicken time is eight o'clock" (at the airport.)

Capably organised by Lorraine Howson, a delegation of Airtourers representing the East coast of Australia converged on the picturesque lakeside town of Wanaka in the South Island to witness the spectacle of the Biennial Warbirds Over Wanaka airshow.

Wendy and Hector represented Victoria, Tony and I N.S.W., and Bill and Lorrraine the Sunshine State. Pat and Bob Peak were based in Queenstown. Wanaka headquarters was a delightful cottage perched on a hill, overlooking the village and lake, with snow-capped mountains near and far. Fantastic.

As a person who has been involved in theatre all my life, I was most impressed by the dramatic qualities of the Wanaka Airport "set".

Built on the floodplain of an ancient glacier-formed river, the strip is about 40 metres above the actual river valley. This enabled sneaky approaches, and very dramatic exits, especially during the dogfights. The stricken "enemy" aircraft just disappeared below the riverbank and quietly sneaked away unseen. Most theatrical.

Good Friday was rehearsal day for most, and we learned that axis A was the runway east-west, and axis B was over the Gold Pass stand, north-south. No problems about flying over the crowd!

We woke to snow-covered hills on Easter Saturday, and rugged up well. The traffic crawl to the airport was bearable, and we arrived well in time for the start of the show.

Showtime began with four flying fossils - the Polikarpovs, rescued from oblivion in a shed in Novosibirsk, Siberia, and now, restored, living happily at Wanaka. Shorter in length and wingspan than an Airtourer, they have a 1000 h.p. motor. That is not a typo. Eat your hearts out, Gerry and Lindsay. And they're retractable... as long as the clothesline bears up. Apparently the Russians had a ruthless squadron of female pilots who stooged about and lured German airmen into thinking they were slow and harmless ... until they came into range. The planes are so strongly built that pilots were told: "If you run out of ammunition, just ram them." One Polikarpov chewed the tail off a German fighter.

Wanaka airshow is continuous, in that aircraft are taking off and landing all the time, so there is always something to watch. The 18-strong helicopter ballet assembled in the background while the Harvards of the "Roaring Forties" took off with earsplitting effect.

Of course, the act we (and the Blemings especially) were waiting for was the performance by the Red Chequers, a formation of five CT4s which displayed excellent co-ordination,

and several times prompted Wendy to exclaim: "Hector, don't you even think about trying that."

The show went in roughly chronological order, from the 30s up to the 70s, with a special Hawker display of Hurricane, Sea Fury and Hunter. The most modern-looking aircraft (although it was designed in 1953) was the NATO Fouga Magister, a jet which makes Lears look clunky.

A couple of special performances were given by Steve Taylor in the Edge (he also piloted a Harvard and a Polikarpov) and by Fraser Briggs, with his 42% scale model which he made do things that no aeroplane should ever be able to. He's off to the World Championships in Poland next year, and will take a lot of beating.

Ryans, Kittyhawks, Mustangs, Yaks, Nanchangs, a Staggerwing (very elegant), a Klemm trainer, Grumman Wildcat, Hercules, Orion, Seasprite and Catalina as well as two Vampires filled the sky with noisy spectacle. What did Tony like best? No prize for guessing the Spitfire.

On Easter Sunday, the crowd was considerably smaller (perhaps the snow and sleet scuds of Saturday had scared people off) and Tony, Hector and Bill set off to investigate the Airtourer parked in the grounds of Wanaka Air Museum.

ZK-COW is a 115 which is listed for partial restoration. Half will be brought up to brilliant level, then it will be cut in half to show people how an Airtourer differs from other aircraft. (One wing is too far corroded for salvation.) However, Wanaka has a fully airworthy Airtourer locked away in a hangar because "The bloke who flew it died last year and no-one else knows how to fly it". Preposterous.

The wind on Sunday had lessened, so loops and other smoke-trail manoeuvres looked even better. The show was the same, but a special formation of Hurricane, Spitfire and DC3 was held in honour of the Queen Mother.

Facilities at the Gold Pass tent made it worthwhile (although I doubt they expected everyone to try to get in there all at the one time). The Blemings and the Matthews had made the trip a part of a longer South Island holiday, and so we were not pushed for time.

If you are considering going in 2004, do, but make a holiday of it and see some of the most beautiful country there is. Next time is later in April, so snow is almost guaranteed. For us, it was the icing sugar on the muffin.

Thanks to Lorraine for the organisation, Sir Tim for the impetus that keeps Wanaka going and the great Air Traffic controller in the Sky for giving us reasonably clear weather and lots of good company.

President's Fly-In

Have you booked your accommodation and sent the "mail in" slip to Tony Matthews. We need the information to help in the planning!!!

Some Tips On The Lycoming O-235 Engine

Lycoming Flyer. Reprinted with the permission of Textron Lycoming who advise that they represent Textron Lycoming policy.

Little things are sometimes forgotten. For that reason, a reminder is sometimes necessary. In the case of the Textron Lycoming O-235 engine, it is a little different from most other Lycoming models. Other models are equipped with hydraulic tappets which do not require frequent adjustment. Occasionally there is a report of an O-235 which is running rough or not producing normal power. Investigation often reveals that the solid tappets of the O-235 need adjustment. The Lycoming Operator's Manual states that valve rocker clearance should be checked, and reset if necessary, at each 100-hour inspection. It is important that the procedure outlined in Service Instruction 1068 for setting this clearance be followed exactly. We find that since this engine model is a little different, this inspection item is often overlooked. This reminder may help operators of the O-235 engine to keep it running smoothly.

A second problem sometimes reported with the O-235 engine also is the result of it being just a little different from other Lycoming models. Some O-235 engines which use a full flow oil filter have had very low oil pressure at idle after being overhauled. The oil pressure would then increase as power was increased and decrease as power was reduced. This inconsistency from the normal oil pressure indications was traced to improper installation of the oil filter adapter. Textron Lycoming Service Publication SSP-885-1 provides instructions for this installation.

These instructions specify that for the O-235 engine only, a plate — Lycoming Part Number LW-12999 — is to be installed between the accessory housing and the oil filter adapter. The plate is sandwiched between two gaskets —Lycoming Part Number LW-12795. The plate is designed with a hole that meters the amount of oil flow and prevents an excessive flow of oil to the idler gear. When this plate is not installed as required, it results in the oil pressure discrepancy discussed earlier. Anyone who has occasion to install the oil filter kit after overhaul - or at any other time, should follow the instructions carefully and should consider that the O-235 installation is slightly different from other Lycoming models.

The preceding paragraphs seem to picture the O-235 engine as an eccentric problem creator which it certainly is not. When the engine is maintained and operated in accordance with manufacturer instructions, it is so reliable that many models became eligible for an increase in TBO from 2000 to 2400 hours. Textron Lycoming Service Letter No. L213 gives the details that owners of O-235 engines built before mid-1986 may want to examine more closely. Starting in June of 1986, all new, remanufactured, and factory overhauled O-235 engines with compression ratios of 8.5:1 or

8.1:1 are built with new increased strength pistons, Part Number LW-18729. This part change, together with past service history, will allow Textron Lycoming to increase the recommended TBO from 2000 hours to 2400 hours.

For those individuals who own an O-235 with 8.5:1 or 8.1:1 compression ratio, a TBO Extension Kit is available. The kit includes four new pistons and all other parts necessary for the change. It should be noted that the TBO extension may only be applied to those engines that contain 100% GENUINE Lycoming parts.

Those O-235 models with a compression ratio of 6.75:1 were immediately eligible for the 2400-hour TBO if they contained 100% GENUINE Lycoming parts. For those owners who have maintained their engine reliability and durability by using only Lycoming parts, this notification of increased TBO was good news.

Efficient Use of English

The EEC - now the EU or European Union - has chosen English as the preferred language for use in the European Parliament and has commissioned a feasibility study into ways of improving efficiency in communications between Government Departments. European officials have pointed out that English spelling is unnecessarily difficult citing as examples: cough, plough, rough, through and thorough. Clearly, what is needed is a phased-in program of changes to iron out these anomalies. The program would, of course, be administered by a committee staffed at top level by all participating nations.

The program would be implemented in the first year by using "s" instead of the soft "c".

Sertainly, all sivil servants in all sities would reseive this news with joy. The hard "c" could be replaced with "k" sinse both letters are pronounced alike. Not only would this klear up konfusion in the minds of klerikal workers, typewriters would have one less key.

There would be growing enthusiasm when in the the sekond year it is announsed that the troublesome "ph" would henseforth be replased by "f". This would make words like "fotograf" 20% shorter in print.

By the third year, publik akseptanse of the new spelling kan be expekted to reash the stage where more komplikated shanges are possible.

Governments will enkourage the removal of double leters which have always ben a deterent to akurate speling.

We would al agre that the horible mes of the silent "e" in the languag is disgrasful. Therfur we could drop thes and kontinu to read and writ as though nothing hapend. By this tim it would be four years sinse the skem began and peopl would be reseptiv to steps sutsh as replacing "th" by "z". Perhaps zen ze funktion of "w" kould b takn on by "v", vish is, aftr al half a "w".

Shortly aftr zis, a unesesary "o" kould be dropd from words containing "ou". Similar arguments vud, of kors, b aplid to ozer kombinashuns of leters.

Kontinuing zis proses yer aftr yer, ve vud eventuli hav a reli sensibl riten stil. Aftr tventi yers zer vud b no mor difikultis and evrivun vud find it ezi tu unastan ech ozer.

Ze drems of ze Guvmnt vud hav cum tru!

Airtourer Co-Operative News

In the last Newsletter the Co-Op advised that the administrator of Millicer Aircraft Industries had cancelled the licence agreement whereby the Co-Op fulfilled the responsibilities of the Type Certificate holder. Under this agreement the Co-Op had drafted new Flight Manuals and were ready to forward them to the CAR 35 Engineer for review and submission to CASA. These drafts were available at Port Macquarie. As Airtourer owners are aware, Edge Aviation, as the new licencee, wrote to all owners advising them that Edge were now responsible for airworthiness including Flight Manuals. The Co-Op believed that the administrators cancellation of the licence agreement was invalid and hence the new licence agreement with Edge was questionable. Furthermore, MAI was experiencing financial difficulties and may not be able to satisfy the requirements of the original sale agreement for the Type Certificate and other property. The Co-Op made a number of reasonable but unsuccessful offers for return of the Type Certificate etc.

CASA advised that the 16 August deadline for the new Flight Manuals could not be changed so after considering legal advice and the August deadline the Co-Op decided not to challenge the licence agreement and advised all owners to contact Edge for a Flight Manual.

After further legal advice the Co-Op contacted MAI and questioned their ability to meet the requirements of the original sale agreement, in particular the requirement to produce an aircraft for sale by December this year. The administrator replied that MAI had produced an aircraft and satisfied the requirements of the sale agreement.

The Co-Op may be required to go to court to have the matter decided. This option would be very expensive and the Co-Op would prefer to avoid this expense if possible. To that end, if anyone has any information that may help the Co-Op could they please contact the Chairman, Hugh Knox.

The Co-Op and Association continues to receive enquiries regarding the new Flight Manuals. For Airtourers built in Australia then the owners must contact Edge Aviation who will sell them a new basic manual. For New Zealand built Airtourers, i.e. AESL rather than VICTA aircraft with Serial Numbers in 500 range, the situation is slightly different. There exist a New Zealand CAA approved Flight Manual that is acceptable to CASA. There was some confusion within CASA regarding these manuals however, Neville Probert, Head of Certification Standards CASA, stated that CASA has issued approval pages for NZ manuals and he sees no reason why CASA would not recognise these manuals. I have contacted the NZ CAA who confirmed that Edge Aviation has contacted them regarding writing new manuals however at present the existing NZ manuals remain valid. Therefore AESL Airtourer owners could apply to CASA for approval pages for the NZ manuals. This would cover them until Edge have the new manuals approved by the NZ CAA whereupon the new manuals would have to be purchased from Edge.

STOP PRESS

CASA Director, Capt. Mick Toller has advised of a moratorium on compliance action regarding the new flight manual system. The CAR that implements the new system will still become effective on 16 August however CASA staff will not enforce compliance for the duration of the moratorium. This is a great relief for many members who had not yet received approval pages for their manuals.

Calendar of Events

President's Fly-In
Parkes 21& 22 September 2002
Details last Newsletter or call the Secretary 07 5447 6604

Annual General Meeting and Fly-In 2003
22nd & 23rd March 2003
Details included with this Newsletter on
a separate sheet or see the Association's
Website.

Welcome

Scott Kennedy-Green of Woollahra who has VH-CGA, presently a 115 that should be converted to a 160 by late this year.

Aircraft Movements.

Paul and Helen O'Malley have purchased MOI from Marjorie Roche.

Heard at the Hangar Door.

Many of us have felt like telling Glen Sturges a.k.a. the 'Phantom Whistler' "...on ya bike son!" when assaulted by a blast from his whistle. Well Glen has recently taken that advice and just completed a cycling trip around Tasmania. 780Km and 9 kilos lighter Glen reports a great trip where he caught up with the Tilleys. We look forward to an article in the future Glen.