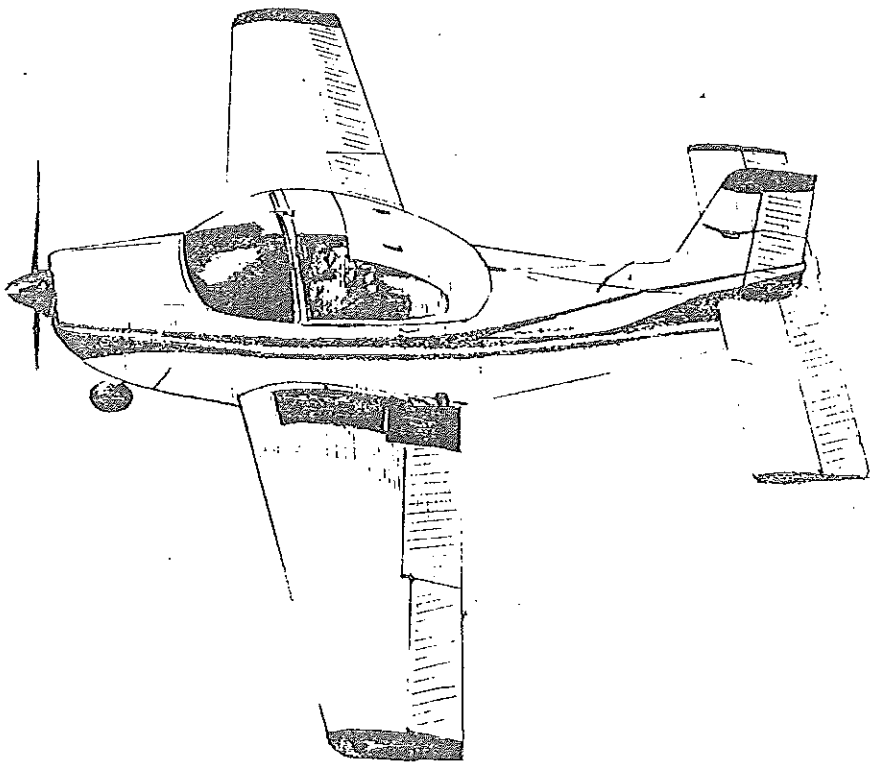
NOVEMBER 1982

AIRTOURER ASSOCIATION

PATRON:- *HENRY K. MILLICER* (AIRTOURER-DESIGNER)



NEWSLETTER

Registred Publication by Australia Post - No: VBH2662

AIRTOURER ASSOCIATION

PATRON : Mr. Henry K. Millicer (Airtourer Designer)

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****

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(07) 3965152 B

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NEW ZEALAND: TBA (Any volunteer's please ??)

EUROPE : DAVID HILL, Akacievej 25, 2791, Dragoer, DENMARK. (01) 536639

U.K. : JEFFREY WORTH, 12 Murren Avenue, Great Malvern WORCESTER. (0684)63748 H
(0242)21605 B

***** ***** ***** ***** ***** ***** ***** ***** ****

AIRTOURER CO-OPERATIVE LTD.

SECRETARY: G.H.(GUY) MAIN, 12 Turner Rd., NARELLAN. NSW. 2567. (046)461282.

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EDITORIAL

YEARLY MOAN !!

When I took this position on, I did so because (a) I was happy to do it and, (b) No one else stood up.

Unfortunately, a delay occured with the first Newsletter for the year which I could not overcome. This Newsletter was compiled, typed, printed and dispatched by myself (with only some help to post it).

Unfortunately (for me) the printing process left a little to be desired and lacked a little contrast on some pages. At the time of printing when this was discovered it was too late to do the N/L any other way and in an effort to get it out without further delay it was sent as is. At the time I thought it wasn't too bad.

Unfortunately (again for me!) I received some flak from various members re the lateness and quality of the Newsletter, although I felt this was explained therein. No matter, I say, no doubt these firers of flak will help with articles for the next N/L. - Wrong !! Only one member came forward with some ideas and an offer to help, and he would have the same problems I do.

Whilst I am quite happy to continue to produce the Newsletter, I ask for members understanding of the problems involved.

In the meantime I'd greatly appreciate some help with more letters from members and articles on your Airtourer adventures for future editions.

Meanwhile, I hope this newsletter is satisfactory to all our readers ...

DOUG STOTT
EDITOR (Writer, typist, Printer, stapler and runabout !!)

****

PRESIDENTS CORNER.

With Christmas 1982 just around the corner I would like to wish all our members and friends a very happy and enjoyable festive period.
I trust that 1983 will be kind to you all in every way. Betty joins me in saying Happy Christmas and a Prosperous 1983.

A few points which will interest all I feel :-

a) Our member, George Kinsher is still working on the cheaper insurance for Airtourer owners, and I do feel that 1983 will bring results.

b) 1982 has seen a wonderful improvement in the condition of most Airtourers. I can only say how proud I am of the result and effect due to two main reasons. Firstly to the birth of our Association and secondly to the availability of much needed parts, due to the birth of the Co-op. Thirdly and lastly due to the pride of ownership of an Airtourer. Why then should I not be justly proud of your achievements in these few short years since our FIRST CONVENTION & FLY-IN on the 6th January 1978.

c) Windscreens and canopies are now on the way. While in Sydney recently, I inspected the first windscreens off the line, "its the goods!", and better still they will not cost the earth.

To all members of our Association I join with your Committee and Board of Directors in expressing our thanks for your support during the year and trust that the coming year will allow you to continue many happy hours of Airtouring. Till we meet at the Quirindi Annual Convention 1983.

Happy and Safe Flying

SONNY RANKIN.
PRESIDENT.

SECRETARIES NOTES

Once again the year near's its end and it becomes a time when one may reflect on the year ending and/or think about what the new year has in store for us.

Our Association is still strong, however we have the usual problems of late renewals by members. We know it is easy to overlook, but it really makes our job difficult, so please, if you have let yours slip, send your renewal off today. At the end of this issue is a list of unfinancial members. If your name is there, please complete your renewal form and send it direct to John Treble.

Our two main gatherings for the year were quite successful and I am sure that everyone who attended LTV & YRD had a good time. Unfortunately, I was unable to make it to Yarrandale due to having just returned from overseas and having to travel back to Darwin on that weekend in time for work. Better luck next time !

Our summer airshow season is shaping up well with the usual events throughout the southeast staes. Details appear elsewhere on our next Convention and Fly-In which is to be held at Quirindi on the 5/6th March 1983.

If you plan to visit a local Airshow, I suggest you contact your state rep. for details of any Airtourer Association attendance.

During my recent visit to England, I once again obtained a list of owners there and we are in the process of writing to them all in an effort to increase our membership there.

I look forward to seeing you at Quirindi in March. In the meantime, Barb & I wish all our members a happy Christmas and a safe New Year.

Happy Airtouring,

DOUG STOTT.
HON. SECRETARY.

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MINI FLY-IN's

The Vic/Tas branch of the Association is holding a "fly-in-Get-together" at Flinders Island on the 11/12 December.
A full report will be in the next Newsletter. We hope they had a good time.

What about you other states ?? Its about time we had some mini-fly-in's in NSW, SA, WA & QLD. You chaps in Queensland could even get together with the members and owners in Northern NSW. What about it ??

If any member is willing to arrange a get-together of any sort and needs any information on members or owners in his area please contact Stan Wright or Doug Stott for details.

SCHOFIELDS 1983 Saturday 19th, Sunday 20th March 1983

A great weekend is assured - contact member Harry Couzin for details.
write: 53 Douglas St, Faulconbridge, 2776. phone: 047-512865 ah.

MANGARLORE 1983 Easter Weekend April 1,2,3,4. 1983.

The Sports Aircraft Association Annual Convention.
Unless you plan to camp, book your accomodation NOW - contact Stan Wright for details. The largest Fly-In to be held in Australia - BE THERE.

More details in the next Newsletter.

YARRANDALE 1982. from Sonny Rankin.

Friday 17 September, 1982, overcast and light rain only much to the local farmers disgust: Though to the Airtourer Association it seemed just usual. My mid afternoon only 25 points of rain but two Airtourers on the ground at Yarrandale, FHP Peter Sutton and Gerry Lawson, MOJ George Penfound and Bob Starkey. A great start these members came to assist with all that is needed to make this week-end a success.

Saturday 18th, bright and cloudless, work at a high pitch as we prepared for the days arrivals of members and aircraft, a total of 18 Airtourers and 2 CT4's plus one Iroquois and an additional four aircraft. Sad to relate our guest speaker Air Commodore Bill Monaghan was grounded because of the fuel strike in NSW. A big gap, no Bill, no guest speaker and no Macchi. Never mind the third time will be the crown and we will look forward to Bill at Yarrandale in 1983. During the afternoon, a meeting of members was held to discuss various Association matters.

The evening B-B-Q was crowded because of a special gesture to a flying group calling themselves the KANGAHOPS. My special thanks to all of our members and wives who did such a wonderful job with the influx of so many people !!! Alas our Stan (the BBQ man) was unable to be with us until later because of another event in the offering at West Wyalong and Stan is in everything as you all know. At my request Peter Patroni addressed the gathering and his address was most interesting and enlightening and touched on such subjects as the bi-annial checks and the cost recovery program (?) and ANC's.

Sunday morning bright with much local flying and the usual Airtourer aerobatics in most spots around the compass: Breakfast with the convincing information unwound by the boys of the RAAF Iroquois, that they had chased the woolshed all around Yarrandale for most of the night!!!!! Finally settling for a camp in the cottage with the crew of MOJ. Wagga FSU telexed weather info to our favoured Motel and departures started mid-morning and mid-day eats were in fair demand. Unfortunately for the board members who were tied to a Co-op meeting we were not able to witness all the departures but I am sure most of you would understand. STOP PRESS: Meeting of the Board was temporarily halted by a phone call from Bruce Rock - Enrolling one new member - a daughter for Judy and Greg Rutherford. Our congratulations and best wishes.

My personal thanks to all who came, especially the RAAF, Simon and Kai in the Iroquois, Rick Davies (Army) CT4 and crew, Geoff Sheppard (RAAF) CT4 and crew.

Our honoured guest Peter and Beverly Patroni (President AOPA) Our Thanks.

Hence Sunday was again a day with times of sadness as every member and friend departed Yarrandale after two wonderfully full days of Airtourer chatter and friendship.

To all those wonderful helpers who virtually restored and replaced everything in the hanger and cleared the area my gratefull thanks: You the members of our wonderful Association have made Yarrandale again the great success !! I hope it always will be for every member and owner. I am also proud to relate that we did have Alex Hood plus is C-170 FTC stay on for a couple of days.

Tuesday 21st was marked by a fly past at low level of a Hercules - I strongly suspect Kai Hansen was just making sure the woolshed had not again shifted as it did on Saturday night !!

Many thanks to all who attended Yarrandale 1982.
HAPPY AND SAFE AIRTOURING.

Sonny.

***** ***** ***** ***** ***** ***** ***** *****

YARRANDALE '82 (An Islander's view) by Stan Tilley.

Lots of Aeroplanes - lots of good company and lots of fun marked the fly-in to Yarrandale this year.

Once again Sonny & Betty ably assisted by daughters Helen and later Maryanne were wonderful hosts and it was great to renew acquaintances with many old friends and to meet quite a few new ones.

Missing was Henry - but we understand that the weekend co-incided with the completion of the mock-up "swift" - Henry's latest super efficient 180 hp, tandem seat design - so no further excuse was necessary.

Missing too was Stan Wright on the barbeque. We really did need his help.

Two CT4A's from Point Cook attended and gained the usual admirers and discussion groups.

But even perhaps more spectacular was the 'big chopper' from Canberra. I personally never fail to be impressed by these "beasts".

Our trip from Hobart and return was unusual in that we had to watch our Airtourer from the outside in - not the inside out !!
Jack & Molly Koerbin flew BQK - whilst we were content (?) with a USA type 'tin-can' (a 1982 C-172).

We flew in loose and sometimes very tight formation all the way and Airtourer 115 owners will be delighted to know that the Airtourer is in fact faster than the latest 160 hp C172 in most cruise situations.

Jack & Molly's son, Rex was part of the Air Force chopper contingent.

Sleeping quarters were at a bit of a premium - but Bonnie and I were happy to bed down on a few wool clippings in the shearing shed. Turned out later that we had peacefully slept on the "dags" and crutchings ! Just as well there are excellent showers in the nearby shearers quarters.

Just as well also that the "lost Airforce" could not find the shearing shed (big enough to house about six Airtourers) at about 0200 and apparently spent lots of time driving aimlessly around the paddock !!!!

Lots of aerobatics being performed all over the sky, next morning.

Harry Cousins wants the Association to appear and perform at Schofields next year - so perhaps we should get organised.

I would suggest we appoint a flying director at future fly-ins.

With information gained at registration he could then organise pilots with formation and aerobatic endorsements to perform - with the ultimate object of being able to offer a formation team and aerobatics of a professional standard.

So what about it you keen members ??

Brush up your manouvers and get yourselves the necessary endorsements and practice like mad.

See you at the next fly-in.....

Stan.

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ATTENDANCE AT YARRANDALE FLY-IN - 18/19 SEPTEMBER 1982.

D.O. (Sonny) Rankin		MVR	Yarrandale
John Treble		KHP	Laverton (Vic)
Tony Matthews		MTH	Parkes
Richard Sims) George Markey)		WHO	Sydney
Jack Koerbin		BQK	Hobart
Hugh Knox		MWR	Bankstown
Peter Sutton) Gerry Lawson)		FHP	Adelaide
George Penfound		MOJ	Canberra
Ian Donovan		MKL	Essendon
Bernie Kitchell		WAU	Echuca
Andrew Ronald		MRJ	Geelong
Des Anderssen		MTN	Bundaberg
Keith Nolan		MUV	Sunbury
Lindsay Marshall		MRF	Lockington
Ken Ball		RQH	Brisbane
Ray Abernethy		RQG	Brisbane
Ron Stiebel		BQW	Bankstown
Earl Johnson		EQA	Taree
Stan Tilley	C172	KSR	Hobart
Alan Wood	Beech		Hoxton Park
Guy Main	Datsun		Narellan
Harry Couzin	Beech		Sydney
Sqn Ldr Simon Ford	Iroquois	RAAF	Canberra
Kai Hansen	"		Canberra
Kerry & Stuart Hilsberg	Beech	CUP	Sunbury
Peter & Beverly Patroni	Piper	MLK	Moorabbin
Major Rick Davies (Army)	CT4A		Point Cook
Flt Lt Geoff Sheppard	CT4A		Point Cook

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LETTERS:

20th.September, 1982.

Dear Sonny,

Beverley and I would like to thank you, Betty and the Airtourer Association for your hospitality during the past week-end. We enjoyed meeting your members, many who had travelled from distant centres to be at "Yarrandale". It was also interesting to meet and 'debate' with your guests from the Services.

If A.O.P.A. can assist the Airtourer Association at any time, please do not hesitate to advise me.

I will note future events listed in the Airtourer Newsletter and forward this information to the Editor for inclusion in the A.O.P.A. magazine calendar.

Kindest regards,

(signed)

PETER PATRONI, President,
Aircraft Owners & Pilots Association.

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VIC/TAS BRANCH FLY-IN from John Treble.

On the weekend of 24th and 25th April 1982, the Victorian/Tas Branch of the Airtourer Association had a fly-in weekend at the Grampians Tourist Resort.

It was a weekend of heavy showers, however, we all eventually made it even if Jack & Jean Hopgood abandoned their aeroplane at Mt. Gambier and came by car.

Saturday afternoon was a coach tour (capably driven by Stuart Hilsberg) through the Scenic Grampians to eventually arrive at a winery where more than a reasonable amount of sampling took place. The wine kept flowing through to Saturday evening where after dinner presentations were made.

We thought to vary the presentations on this occasion to enable some of us to win a trophy which under normal circumstances couldn't be possible.

Bob & Bev Gilmore in MOG won the prize for the SHORTEST DISTANCE travelled and were duly presented with a tape measure.

Ian Donovan (MKL) easily won the WORST LANDING and proudly took home a cushion !

The prestigous award of the evening was for the LEAST PRESENTABLE AIRTOURER. After long and careful deliberation it was won by (and rightfully so) Keith Kolan (MUV). His prize consisted of a small tin of touch-up paint and a packet of Band-Aids, which I believe take pride and place on his mantlepiece !

Sunday morning saw flying activities between showers then lunch and onward home. Jack & Jean Hopgood with their friends enjoyed the place so much, they decided to stay on for another day.

Those in attendance were :

John & Doreen Treble	KHP	Laverton
Keith & Ellen Nolan	MUV	Keilor
Bob & Bev Gilmore	MOG	Donald
Ian Donovan	MKL	Essendon
Stuart & Kerry Hilsberg	Beech.	Essendon
Jack & Jean Hopgood	Peugeot	Mt. Gambier.

**Editors note: The above is an example of articles we would like to see in future editions of the Newsletter. Of course you have to have a fly-in or some activity first. So dont leave it to Vic/Tas you other states - GET AIRTOURING !!!

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AVAILABLE FOR SALE - SOON Airtourer WINDSCREEN's & CANOPY HALF's

At present being made to order by the Airtourer Co-operative in Sydney. The qulaity is good and the price reasonable.

For information or to place your order - Contact : Guy Main (046) 461282.

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STOP PRESS - A most successful weekend fly-in was held over the weekend of the 6th & 7th of November at DONALD (V) to help celebrate the opening of the new airport there. The following members aircraft attended :
MVI MVR COI KHP MRF MKL MOG MFP MFN MUV & CUP (a Beech type Airtourer!)

A full report of all the happenings at Donald will be in the next Newsletter.

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MEMBERSHIP RENEWALS 1982/83

The following members have not as yet forwarded the renewal for the year to the 30 June 1983. If your name is listed below, please complete a renewal form and send it together with your cheque for $14 to John Treble.

Abernethy R.	Hopgood J.	Paddison G.
Antel W.	Howells J.P.	Picker B
Aubort E.	Jones K.	Rawson G.L.
Bamford K.	Jones P.H.	Roberts R.
Bishop J.	Kenyon B.	Rogers F.
Burridge K.	Leech B&M	Rogers P.W.
Byers I.	Leech P.D.	Siede S.
Corrigan K.	Lipple N.	Sims R.
Coy P.	Lucas H.	Small N.
Davies C.	LeLay C.	Smith G.
Dietrich J.	Macris L.	Snowden C
Falch J.	Matthews A.	Stepanow L.
Furniss D.		Stewart R.
Garrett M.	Miller W.H.	Tilley S.
Gray H.D.	Monaghan W.	Walshe G.
Heffernan D.T.	McGregor C.& WG	Whittingham J.
Hill D.	McNamara J.	Wood A.
Hollins G.	Nathan M.	Woolcock G.

We appologize for listing overdue members in this way, however the alternative is either to write to each one or use the phone, both of which use funds we have better use for. We trust you will understand.

****

MEMBERSHIP RENEWAL (Please print)

NAME: .....
(First name/s) (Surname)

ADDRESS: .....
(Street or Box number)

.....
(Town) (State) (Postcode)

TELEPHONE: ( ) ..... ( ) .....
(STD) (Home) (STD) (Work)

Airtourer owner : YES/NO if Yes : REG: .....

Have there been any changes in the above information during the last year ?

.....

Are you a member of the Sports Aircraft Association of Australia ? YES/NO

Please renew my membership of the AIRTOURER ASSOCIATION for the year ending 30th June 1983.

Signed:..... Date: .....

FOR SALE : 'AIRTOURER ASSOCIATION' Badges & Transfers.
including Tie-bars.

Contact John Treble for supply.

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FOR SALE AIRTOURER 115 VH-FMA S/N : 24

Total Time 1990 hours, Engine aprox 700 hours to run.
Major Inspection just completed. Has had recent new fuel cell, strip and repaint. Fitted with VHF/VOR/ADF. Night VMC.
$11,000 Contact: Bob Miller,
(089) 851144 after hours.

***** ***** ***** ***** ***** ***** ***** *****

Reflections of Oshkosh Doug & Barb Stott

There is no way to discribe it !! The Annual EAA Convention to Oshkosh, Wisconsin is just great. For anyone even remotely interested in Aviation, it is just MANDATORY to go. Everything one reads about the event is true, only there is more and it is bigger every year. This year there were over 12000 airplanes on the field, 600 vintage/Warbirds and over 1200 homebuilts. There is an air display every arvo from 1600 to 1900 hours - every day for eight days - and you never get sick of it !!!! Its just slightly different every day and includes most of the worlds top pilots. Various events and forums occur all day, every day. You can buy almost anything that can be bolted or attached to an airplane in the giant flea-market. Lots of places to eat - and no booze on the drome. And its just so tidy, not a drop of rubbish anywhere. If you do plan to go - STAY THE WHOLE WEEK - some tours only stay for four or five days, so check - you might just miss the best bits. (as one certain Auzzie tour did this year). Should any of you be planning to go we would be pleased to answer any questions you may have. Once we get talking about it - its quite hard to stop to stop to stop to stop.....

**** **** **** **** **** **** **** **** **** ****

(cut along here)

To:

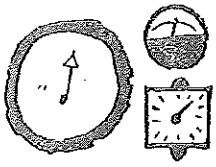
Mr. John A. Treble,
73 Aviation Road,
LAVERTON VIC. 3028.

MEMBERSHIP : $14.00 pa. within Australia
A$10.00 pa. Overseas - surface mail
A$15.00 pa. Overseas - Air Mail.

Payable to " Airtourer Association "

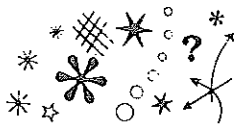
Editor's note: During our recent visit of the USA we obtained quite an amount of documentation issued by the FAA. We found their safety brouchers very good and have included copies of some with this Newsletter. We hope you find them of interest and of value.

BE PREPARED FOR WEATHER!



Pilots with instrument ratings have fewer accidents

LACK OF OXYGEN!

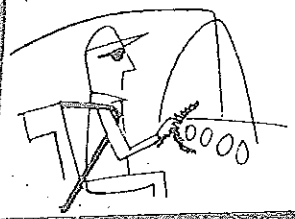


Can cause the same effect as a couple of Martinis

OVERCONFIDENCE...InCoOrDiNaTiOn

USE OXYGEN OVER 12,000 FEET

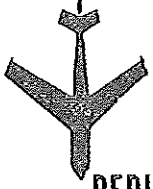
Wear a Shoulder Harness!



MOST FATALITIES OCCUR FROM HEAD INJURIES

[PREVENTABLE WITH SHOULDER HARNESS!]

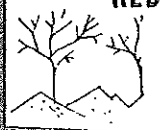
EVEN IN SMALL AMOUNTS- ALCOHOL



IMPAIRS JUDGMENT

DESTROYS COORDINATION

REDUCES PERFORMANCE



LOWERS ALTITUDE TOLERANCE

HAVE YOU PICKED UP ANY UNSAFE FLYING HABITS?

GET ANNUAL PROFICIENCY CHECK RIDE WITH YOUR INSTRUCTOR

FLIGHT SENSE

As pilots, it is our responsibility to broaden our aviation knowledge and set forth our individual safe operating criteria so we may enjoy the continuing pleasures of safe flight. The information presented in this publication emphasizes some of the important areas that require consideration by all pilots before every flight. Our lives and the lives of our passengers depend upon our correct judgment.

Preflight planning is one of the most often neglected acts of pilots contemplating flight. While the reasons remain obscure, the facts are well supported by aircraft accident statistics. In addition, a major portion of counseling activities by accident prevention specialists and counselors is devoted to counseling pilots who have failed to accomplish sufficient preflight preparation and planning.

KNOW YOUR AIRCRAFT:

Its Limitations—Performance—Systems —Switches—Emergency Procedures—Endurance—Loading

Lack of familiority with the aircraft is the cause of a large percentage of pilot error accidents. Pilot unfamiliarity with the aircraft's performance, capabilities, equipment, and systems is listed as a cause or contributing factor in many accidents. Fuel exhaustion, stall, spin, forgotten or retracted gear, undershoot, overshoot, hard landing, and improper use of emergency systems are high on the list of accident causes, yet all of these can result from pilot unfamiliarity with the aircraft and equipment.

Periodically reread your aircraft handbook, know the aircraft systems, how to operate them, and what to do in the event of a system malfunction or failure. Know how to conserve fuel. Know the procedure to follow for engine failure and, above all, know and remember how your aircraft handles during flight in high temperatures and when loaded to maximum allowable gross weight.

When an emergency occurs in flight, there is little time to decide the proper action to be taken. You need to have an established plan of action and a thorough knowledge of your aircraft before an actual incident occurs.

PRE-PLAN.

Weather—Fuel—Loading—Flight Plan —Min. En Route Alt.—Headwinds—Nav. Aids—Destination Runway Length

Many general aviation accidents are brought about because of the lack of preflight training. A surprising number of general aviation pilots arrive at the airport, get in the aircraft, and depart with complete disregard for flight preparation.

A few moments spent prior to each departure affords the pilot an excellent opportunity for a close, unhurried look at the weather along the intended route and at the destination airport. Check the present and forecast weather and winds aloft, consider the fuel capacity and consumption rate, endurance, and always allow sufficient reserve for the unexpected. Review routing, minimum altitudes along the flight path, nav. aids, notices to airmen, alternate airports in the area, destination airport runway lengths, and aircraft loading. If at all in doubt, ask the airport operator or an Accident Prevention Counselor for advice and assistance.

WEIGHTS:

Loaded within C.G. and Max. T.O. Weight?

Performance and flight characteristics of your aircraft are determined for a maximum weight. The maximum gross weight for your aircraft should never be exceeded. If this weight is exceeded, your aircraft will require longer distances to become airborne, may stall at a higher speed, may be uncontrollable or may not fly at all. Know your useful load, the difference between empty weight and maximum gross weight, and remember, useful load includes the weight of the fuel oil, baggage, and passengers. Also remember some aircraft will exceed their gross weight limits if a full fuel load is carried and all seats are occupied.

Fuel load plus passenger baggage weight plus the empty weight of your aircraft must not exceed maximum allowable gross weight of the aircraft. C. G. limits are becoming more critical with larger capacity aircraft. Know how to determine the C. G. location for various loads and configurations of the aircraft.

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RUNWAY LENGTHS:

Runway Length Adequate Including Safety Factor?

Required runway for landing and takeoff may vary considerably with changes in field elevation, outside air temperature, aircraft load, and runway surface.

To avoid running out of runway during the takeoff or landing; consult your aircraft owner's manual for the distances required to make a normal takeoff and normal landing; consider your aircraft weight; field elevation and temperature; then add your own safety factor of at least 25%. Consult a Koch chart if manual information is not available and consider the following thumb rules. Add 10% to the takeoff roll for each 1,000 feet of field elevation above sea level. Add another 10% for each 15°F (10°C) above standard temperature (Sea Level 59°F). Remember, a 10% increase in takeoff weight results in a 20% increase in takeoff roll, 20% weight increase—40% increase in runway needed. And above all, firm turf will require at least 7% more takeoff roll than a dry hard surface runway, short gross—10% or more, and a soft field or snow—25% to infinity. Ice, snow, or frost on the aircraft, especially on leading edges, wings, and empennage, may prevent a takeoff entirely.

FUEL RANGE:

Figure Flight Time With a Reserve to Avoid an Emergency—Don't Try To Stretch It—Switch Tanks Before Running Dry

Mixture, power, and RPM settings vary the fuel consumption considerably. Fuel gauges may be inaccurate. Because of these variables, a wise pilot determines his endurance at several different power settings by a measure of the actual fuel used versus flight time, allows for a minimum of 30 to 45 minutes reserve fuel, and never flies longer than this predetermined time limit.

Establish an endurance time for your aircraft at your normal cruise power setting and abide by it regardless of the distance covered. Always retain a reserve supply.

PREFLIGHT:

Fuel Oil O.K.—Caps On—Controls Free —Pitot Clear—Birds Nests Out—Wheel Brakes—Sumps—Dents Checked

Carelessly performed or disregarded preflight inspections have been the contributing cause of many accidents. Flights have been started, but often not completed, because fuel or oil tanks were not checked, fuel caps were left off or loose, pitot systems were covered or blocked, gust locks were left on, wheel skirts jammed with mud, engine coolers blocked by birds nests, wings, and other surfaces covered by frost, snow or ice, etc. Unfortunately, these items were not noticed or realized until after the accident.

Always thoroughly preflight your aircraft. Establish a set routine for inspection and initiate the inspection at the same starting point each time. Follow the recommendations in your handbook. Proceed slowly around your aircraft checking for the following—general condition of the airframe, gust locks off, flight control free movement, tie downs removed, visual check of fuel and oil, caps secure, all sumps drained, pitot static ports clear, condition of wheel brakes, tires, wheel wells and fairings, intakes for birds nests, blockage, stall warning device free.

KNOW THE NUMBERS:

Stall Speed—Approach Speed—Turbulence Speed—Runway Length—Glide Speed—Best Climb Speed—Useful Load

Most accidents caused by pilot error involve pilots who do not know their aircraft's operational numbers. Too fast, too slow, stall, spin, below engine out speed, exceeded structural limit speed, loss of control in turbulence, out of center of gravity limits, field too short for aircraft load, temperature and elevation, landed fast, and stall on approach are some of the causes listed and all because the pilot did not know or did not bother to learn the important numbers necessary for his aircraft's safe operation. Periodically review these numbers and adhere to them as they may make the difference between a safe flight and broken airplane.

SPEEDS:

Stall Speed—Approach Speed—Maneuver Speed

Speed control and using the correct speeds directly affect the longevity of you and your aircraft. High speeds in turbulence or rough air may damage or destroy the aircraft structure; on landing, will cause an overshoot. Too slow may cause a stall, spin, or undershoot on landing. Knowing your best engine-out glide speed and best climb speed may mean the difference between your making the airport or ending up in the trees.

Some of the more important speeds are stall speed, recommended approach speed, best rate and angle of climb, best glide, best rough air speed, maximum never exceed speed, and gear and flap extension speeds. Remember, stall speeds increase considerably with angle of bank and weight increases.

WAKE TURBULENCE:

Jet Blast—Prop Wash—Jet Vortex—Helicopter Downdraft

Accidents and incidents from these causes are increasing as the population of jet-powered high performance aircraft and rotorcraft grows. Be aware of the turbulent air coming from jet engines, propellers, and wing tips. Stay well clear during taxi and in-flight. While airborne, remember jet wake may extend far behind the aircraft. Plan to fly slightly above or to the side of the other aircraft. On takeoff or landing, the best procedure is to allow adequate separation or plan your approach to be slightly above the preceding aircraft's flight path and touch down slightly beyond its touch down point. On takeoff allow adequate separation, and when initiating climb stay above or to the side of the anticipated wake. The turbulent areas may remain for as long as three minutes depending on wind conditions.

WEATHER AWARENESS:

Ceilings—Visibility—Turbulence—Ice—Snow—Sleet—Present and Forecast Winds

Many of the fatal accidents in general aviation are attributed to weather and primarily because the pilot was inexperienced in instrument flight. Unfortunately, this type of accident is on the increase. The onset of deteriorating weather often results in disaster for the unsuspecting pilot unless he is properly trained and rated for instrument flight. If you are not trained for instrument flight, do not gamble on the weather improving. Alter your course, or land and wait for an improvement in the weather.

KNOW YOUR LIMITATIONS:

Always Adhere To Them

One of the most important keys to continued flying pleasure is to establish a set of safe standards or limitations that you can confidently adhere to. These limitations should never be broken or amended until more experience is gained. Establish your limitations for the following—weather and night flying, runway length, loading and range, and always adhere to them.

ALWAYS USE A CHECKLIST:

For Continued Happy Safe Flight

Countless accidents are attributed to negligence on the part of the pilot to rely on a written checklist. Even professionals have forgotten the gust locks, trim tabs, door lock, or landing gear. These foolish actions are not only embarrassing, but have caused many needless fatalities. Always carry and use the checklist in your aircraft and never rely on memory.

IT MAKES SENSE TO:

KNOW YOUR LIMITS
USE A CHECKLIST
PREPLAN YOUR FLIGHT
PREFLIGHT YOUR AIRCRAFT
KNOW YOUR AIRCRAFT SYSTEMS
KNOW YOUR AIRCRAFT PERFORMANCE LIMITS

REMEMBER:

"SAFETY IS NO ACCIDENT"

Note : Although this article is written for pilots in the USA, almost all of it can be applied to operations in Australia, or any other country for that matter.

FLIGHT SITUATIONS IN WHICH DISORIENTATION MAY OCCUR

When a plane is actually:	*Pilot may experience false sensation of:*	*Because:*
In a level turn	Continued straight flight	Rate of change is not sufficient to stimulate semicircular canal
In a level turn	Ascent	Resultant forces on otoliths are equivalent in each case
In a recovery from a level turn	Descent	Resultant forces on otoliths are equivalent in each case
In a protracted turn	Straight and level flight	Semicircular canals react only to rate of change but not to sustained change
In a left-hand turn and pilot's head is bent forward suddenly Skidding in a flat turn	Falling to right	The active stimulus is the resultant of the combined motions
	Banking in opposite direction	Resultant forces on otoliths are equivalent in each case
Maintained essentially in straight and level flight by application of successive corrections, e.g., by rudder for propeller torque	Gradual turning	Rotary stimuli from the yawing actions are cumulative due to endolymph inertia
In straight and level flight parallel to another but at a different speed	Turning	Of misinterpretation of resultant of the two motions
In straight and level flight at night approaching a row of ground lights at an angle to the direction of flight	Tilting or banking	Of misinterpreting the row of lights as the true horizon dead ahead
In level flight after a slow recovery from sudden roll	Continuing tilt and lean in opposite direction to compensate	The rate of change was not sufficient to stimulate perception of the recovery movement
In an ascent or descent while between two cloud banks	Level flight	Of erroneous use of a tilted cloud layer as the horizon
In gradual ascent or descent	Level flight	Forces on the otoliths are not sufficient to stimulate them
Going into a slow bank	Level flight	Forces on the otoliths are not sufficient to stimulate them
In a bank, being correctly indicated by the gyro-horizon	Tilt in the opposite direction and increase his true angle excessively to correct for the illusion	Reversal of figure-ground relationships may occur resulting in the response to the horizon bar rather than the miniature plane
		Of autokinetic movement
Approaching a fixed external light, e.g., star or beacon	Approaching or following a moving light, e.g., tail light of another aircraft	A misinterpretation of the relative motion
Approaching a fixed external object	The object approaching him	Visual cues arising from angular separation are equivalent in both situations
Approaching the lights of two planes which are separating rapidly	One plane approaching him	Visual cues arising from angular separation are equivalent in both situations
Behind two planes which are in parallel flight	Seeing one plane which will be near or distant depending on amount of separation	
Approaching familiar terrain	Strange terrain	Of temporary dissociation or impairment of memory, fatigue
Approaching strange terrain	Familiar terrain	Of temporary dissociation or impairment of memory, fatigue

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IFR VFR

EITHER WAY DISORIENTATION CAN BE FATAL!

Federal Aviation Administration • Office of Aviation Medicine

Standardization
+
Attitude
+
Familiarity
+
Experience
+
Technique
+
YOU

...make it all add up in your favor!