

**Please Do Not Attempt to contact me about any of the contents of this document or the origin site
"This is simply free information !"**

(NOTE some "links" in this document "download PDF documents" from govt. aviation sites and some are "embedded videos")

This page should also be read with this online document:

<http://windsolarhybridaustralia.x10.mx/light-aircraft-ppl-vh.html>

TITLE: Why die by driver fatigue in a driver-less car ?!

"Road vehicle "is" the wrong way" to travel large distances in Australia for personal and business! (PPL Private pilot license and **STOL** kit light aircraft "VH" registered (<-should) or

"Uncontrolled air space unregistered (requires map and landmark reading skills)")

Set online map to 0ft – 8000ft to clear out airspace shown above 8500ft

Uncontrolled airspace is class G and all below 8500ft

<http://xcaustralia.org/aircheck/aircheck.php>

More also requires to be done to standardise smaller communities and remote AKA-"locations" with having landing take-off strips (that also allow light twins) nearby without serious requirement for public transport to pass them, this all over Australia!

Too, public distance commute strips and parking en mass area for near city size towns! *

** This requires the possibility of philanthropic effort owing to the fact governments do not get moved easily to action and particularly for a location such as small town with public transport (e.g. train station and regular intercity service) on the edge of controlled air space skirting a city to extend usefulness of uncontrolled air space.*

While large companies such as Piper produce super STOL aircraft that can "land and takeoff at 10ft length (3 meters (300cm))", there are many "KIT" made STOL aircraft can takeoff and land over no more than 60 meters (196 ft) with around 100 hp engine.

Zenith 801 4 seat <https://www.youtube.com/watch?v=7fUS1sbnlaQ>

Other <https://www.youtube.com/watch?v=QdNBa9v671I>

Zenith 2 seat <https://www.youtube.com/watch?v=IsQwAcvUAj0>

The ones above are less than 80 - 100K AUD and a kit type, "the following takeoff example so you know it for landing takeoff measurement" is a top line aircraft manufacturer and around 200K AUD.

Piper – "genuinely expensive" stuff (enough is enough) <https://www.youtube.com/watch?v=VQq2oYAwnqY>

- **The benefits for Business and Liesure of "PPL Private Pilot License" and owning a light aircraft**
- Extreme reduction of risk of death by fatigue or accident
 - Only 1/2 to 1/3 of travel time by road (road vehicle is only 120Kmh max speed – 95 Knots with a STOL is 176 Kmh)
 - Increased business productivity and liesure quality and efficiency all round including as unemployed
 - More secure and flexible lifestyle by range of travel scope (less theft, lost property e.g. secure documents and less interference)
 - Less problems and re-flaring with historic personal physical injuries and ;ess development over time of new stress injuries
- **Extra info**
- National rail has a network system for freight all over Australia in various remote places and your car and caravan can be transported to a siding nearby locality to your destination airstrip and back!
- It is possible to have your own runway quite easily and simply on a small land size property (e.g. Hobby farm sized land) *

** Research shows that many "ordinary aerodynamic" light aircraft require around 250 meters take-off and landing roll that roughly equates to 20 acres of land as the "whole home property" to fit the strip into the acreage (not simply the strip and surrounding obstacle clearance requirements). HOWEVER, because Australia has neglected the first world responsibility of sensible transit method of light aircraft, 150m roll for a cheap STOL and heavy duty rough terrain wheels on 10 acres can be used to improve BOTH home strip and public destination landing area compatibility*

although with 4 seat they are often not made in STOL though some Australian light aircraft manufacturers do make STOL variant in 4 seat . (NOTE: 10 or 20 acre rural properties are subject to allowance with housing and building and use zoning requirements granted permits that generally are never changeable!)

[BOM Wind Roses \(General\)](#) [Wind Rose chart map Interpretation](#) (runway direction layout)

- There are types of light aircraft variant can be found that may make it more possible to utilize the activity sensibly such as "STOL" and "Amphibian"
- It is possible to register your own home built kit aircraft as a "VH" registered light aircraft for PPL flight (NOTE: It may be a better scenario to have your factory built aircraft as a pressurized craft to be able to fly above 10,000 feet for VH)
- It is possible to gain **add on accreditation** with a PPL for “**bad weather**” and “**visual night flying**” “**gas turbine with changeable pitch propeller**” “**STOL technique**” “**tail dragger**” “**retractable undercarriage**”
- Fuel costs approximately the same as a car “per destination to destination” (although aircraft fuel costs more).

[Link: CASA recommended syllabus Recreational Pilots License \("How to" control and "operate" an aircraft\) Also \(1st half\) standard part of the PPL](#)

[Link: CASA recommended syllabus \(2nd half\) Private Pilots License \("How to" navigate and manage flights and aircraft equipment "according legislation nationally" internationally recognised\)](#)

[Link: Other CASA Sample syllabuses for download](#)

NOTE: Because some aircraft are fitted for equipment for different conditions there are “four main mention” **aircraft type “flight rules” registered classification for the use of that unique individual specific aircraft** that match equipment fitted and constructed into the aircraft making it suitable for use in various conditions. VFR Visual Flying Rules (ordinary daylight) , NVFR (Night “visual”), (IFR1 or 2 or 3 (Instrument flying control – various levels and licensed equipment e.g. GPS, 2D and 3D) and Bad weather (anti icing , hail , heavy rain). The aircraft itself must be classified on registration for such purpose if approved after inspection.

It may require up to three months to read all the information, the links are all relevantly associate the information on, reasons, logistics, PPL, cost, safety, kit type and acquirement, construction and other possibilities.

Preamble: (taken from the site index page)

This article endeavors to explain that there is a real reason to banter and protest "VH" light aircraft ownership should be acceptable and likely as a normal lower middle class activity and operation in Australia where possible and leaves no good reason for the allocation of near (if not all) total loan capacity to simply a house against prospective life earnings and because of the severity of Australia's environment that there is no good reason for personal/private expensive brand or model cars because of their inherent failure and impossibility of safety whether driven or driver-less at traversing long distances through the Australian environment because of time wasting, suffering and fatigue and the result whether expensive or cheap road vehicle.

Moreover, That the pre allocation of life's earning for many considered stable and

positive by a bank manager (at least after 25yrs age and in a stable marriage and work environment) was not properly examined for how to allocate the major requirements as the granted loan capacity can be dipped because of absolutely no understanding of the existence, use and cost of (PPL) Private Pilot License Training, "new"(probably home built kit) 4 seat light aircraft cost, hanger cost, *suitable real estate and location(size and obstacle congestion for runway e.g. 200m clear path(minimum for STOL)) cost and maintenance and operation cost.

*Of "suitable real estate", *Did you know* , if you buy rural land that has been granted a building permit for a dwelling in a remote area that has electricity supply lines nearby, *the allowance to use off-grid is not granted until* the cost of all the work and charges of connecting the network supply exceed something like 45K dollars (thereabout)! By law it must be network connected and the building permit may not be granted by placement potentially(if you do not put it as close as possible to the supply line then you must spend e.g. 100K or 245K dollars e.t.c. "whatever it costs" to run the supply wires and clear the terrain to put them through - e.g. 100 meters unobstructed costs vaguely around 30K dollars)! NOTE: That of other AKA "hidden costs" as example, if you were to buy and import e.g. a 4 seat CH801 STOL kit , it requires "international transport handling brokers" (if the aircraft manufacturer company does not "export trade deal CIF" (warning never use FOB unless you pay a foreign transport manager broker too – *nb*: ...costs too much!) to Australian port), Your method of pick-up from ACBPS customs area by a dock trucking transport company if you cannot wait around with a truck for the call from ACBPS(NOTE: must be done immediate of call) (suitable truck and suitable lifting equipment) all day for a week yourself, and finally there is either your DIY ACBPS customs "online import declaration over internet VPN with a personal digital certificate issued with ID sighted by Australia Posts' security desk" as "self customs broker" with payment of tariff (around 5%)+ GST(around 11%) (You can read "all you need to know to self import as your own customs broker" in the DIY Wind Solar Hybrid import article at <http://windsolarhybridaustralia.x10.mx/mainindex.html#monpaypers>).

Another vastly un-thought of point about personal loan cap is the fact that with some commodities such as a house (real estate) the extent to which banks grant home loan borrowing is unethical because of repayment factors they do not hold to account with the only method of sensible large unit money handling by thereabout average wage earner persons have because they cannot store vast sums of money safely by savings in a bank as "ready to draw" for security reasons.

Moreover, using more than 2/3rds of the loan cap may be with some banks the loan cap for a thereabout average wage earner if it is not real estate they wish to buy because it will not hold 100% value on default or called default of a loan! When a house or apartment is defaulted the bank repossesses and resells losing nothing and holding onto the paid repayments to that point! For the average stable earning "single" wage earner a home loan is generally 500k to 600k cap but sensibility prescribes because of other requirements and foresight that only 1/2 such a cap as maximum for real estate would ever be sensible for the wage earner to survive gradually gaining the proper tools to live e.g. perhaps a light aircraft , or, simply a year away for self paid retraining to be more employable which may need to occur repeatedly through working life to prevent default on any loans. What is built and

financed by banks as investment in any level of locality where wage earners buy in terms of real estate is often calculated for "him and her loan cap together to the pairs max" as the final sale price of the newly constructed real estate and is as bad as bleeding dry because for most people to AKA finance anything over 5000 dollars is too risky to keep as ready to draw and at risk as it is to lesser criminals that go more cheaply !

It also endeavors to explain the problems of geography, the environment and meteorology of Australia is for most worse than Canada and should be understood vastly Australia's light aircraft limitations though are much the same risk as Canada's, how so-ever it is perceived makes "the requirement for use of light aircraft the correct responsibly ethical action to be promoted to anyone" whom can achieve "VH" and PPL accreditation at the minimum level of accredited use achievement!

Since around 2013 the few Australian light aircraft manufacturers have produced kit and ready made aircraft somewhere around Australian average wage earner level of cost affordability (in the loan capacity context).

After over half a century, the harshest most extreme environment on the planet with as unrivaled "regular recurring" travel distances has not produced a world class light aircraft aviation industry or such a light aircraft suitable to compete the standard Australian family road vehicle, neither does its inhabitants understand the significance of having the tools to survive and operate within it in a first world or second world point of bothering to live in it as an ordinary citizen.

Probably its most perverse vulgarity of display in this genre are the lack of to non existence of take-off landing strips suitable for as much as twin engine light aircraft simply not supplied adjacent to each town nationally!

As any aboriginal has known for thousands of years, light aircraft are an essential tool to move around Australia without suffering and being killed in large numbers with road vehicles.

Oddly, the USA in 2011 had 139,010 GA (AKA "private") "piston" single light aircraft, but Australia may have only 40,000 in entirety of "aircraft" of "any type" and also usage/stipulation type purposes (business, private, heli, fixed or other), Australia should actually match the USA number (1/4 of a million total for GA) because of Australia's vast and harsh environment unlike the USA that is at least half European or Mediterranean by geographical and meteorological comparison.

Australia however, is extremely interesting for the lack of aircraft with its dispersed population areas and dispersed families across the continental land mass, of which is the harshest in the world , rivaling the storm factory north of its continental mass, but more than Mediterranean climate, a unique immense climate that has always claimed lives in any form of extreme weather, whether heat wave, winds and cyclones, freezing and flood and bush-fire (wildfire).

Oddly from this, one of the "most useful" stories of light aircraft incident with weather and terrain involves an oddly positioned section of land mass called Barrington Tops National Park in Eastern Central New South Wales. Barrington Tops weather environment was used to train soldiers in its Northern half

because it stretches from high altitude Alpine that in winter is sub zero at night and snows, all the way to semi desert (in the park) with rugged steep near vertical granite covered and formed hill and mountain terrain incorporating large tracts of dense jungle bush including rain forest and in temperatures of the maximum humanly survivable (as not survivable) on the planet in mid summer!

Barrington tops is nestled in among two major military bases spanning 80Km x 100Km approximately, so when the charter light aircraft VH-MDX was lost in the middle of it (crashed) on August 9th 1981, it is not clear whether it was a military incident (only 9 years after the Vietnam war) of "restricted airspace" for which the government gives no explanation or a civil aviation disaster because of peculiar idiosyncratic weather actions (meteorological) and conditions (e.g. Lee waves and icing) or the failure of parts of the aircraft as the pilot had radioed before disappearing from radar never to be found!

The ATSB reports show a wealth of information on how harsh and immense the Barrington Tops environment is and was that evening VH-MDX disappeared but the subtlety is it is as harsh in many localized geographical areas all over Australia at some time in some season, and any other regions that do not have all of the weather or environment conditions Barrington Tops has, but always have much of the conditions in some way or another at some time of year.

That problem belongs to around no other place on earth except perhaps African countries that are not first world and have not the education or money to build, develop or fly aircraft, so are not a comparison for understanding "the trend" showing of light aircraft use. Neither is the USA a comparison because of this feature of weather and environment, but again too does not have an incentive alike Australia relating its wildlife by point of deadliness (It appears Africa has the only "comparative level" environment).

Australia's education levels are considered throughout time the equal of that of the USA and proves that by 4 Australian to 1 USA Nobel science prize recipients but cannot make a reliable, robust cheap enough world class aircraft to carry 4 to 6 people as a piston single with an industry to match from it developed in this extreme environment (that incidentally to this day, requires STOL and large wide landing wheels for light aircraft to be of use)!

Truthfully in 2018, Australia should be an odd and strange country by having as many if not more "piston single" light aircraft privately owned and flown in Australia as USA has number for number all GA! That's right ! 1/4 of a million aircraft "private GA" piston single aircraft and probably only around 10,000 commercial aircraft (maybe less) and maybe 50,000 private other types such as twin and single turbo prop. Again maybe as many as 1/2 a million to 1 million PPL and other "private" single engine or flight accreditation.

A quick look at "Canada in 1986" (since i cannot find the proper documents) shows 26,000 GA aircraft and around 4000 commercial !

The view of Canada 1986 is alike an identical view of Australia 2018 (30 years the difference), again, Australia should have many more private GA than Canada. period.!!!

This view of Australian environment (not merely this 2009 in the links) however, is much more real than Canada

Roadside Vehicles (1) Roadside Vehicles (2) Roadside Vehicles (3)

It would have done well to understand its Geography and requirements for living in this country as much anyone that needs to traverse it.

Kit home build Helicopter

However, governments do not think in terms of assisting people only how much of a resource they can draw from somewhere to fill their economic requirements for their face values of success, their word is propagation not nurture until between the authorities and people the word to use by natural attrition becomes "help"(subtle). Again too, some creatures evolved in Australia and have been handling its environment for a million years or more

Natural environment of Australia

One of the biggest "jokes" Australia is to its national highway upgrades is the fact the immense money spent on "allocating" tracts of land to truck-Highway travel "fuel station kiosk and rest stop complexes" along major multi lane interstate highways has "no understanding of the significance" (theoretical) of allocating more land only 100 meters away for a solid twin length "one way" landing strip and light aircraft parking beside those types of stops with some rule of use development e.g. weather, parking and non controlled entry-leaving protocol.

Many features to help such areas now exist such as solar and wind off grid to power colored lights and runway lights for good weather NVFR that would be the maximum to use it and generally the maximum for most light aircraft pilots anyhow.

But as you can comprehend, Australia and its politicians understands nothing of the significance and purpose of light aircraft development and "purpose of use to supersede road vehicle", but particularly in the context of road vehicles for travel, the "impossible to be safe" and the context of "responsibility to promote and assist transition and continual use to a safer more useful efficient transit method" of which airliner is not a point finally and in many cases is simply a bloodsucker for many reasons against personal private life and business commitment.

Airlines are fraught with non voluntary cancellation, too small light aircraft airliners doing lesser routes as much require to be viable at finding customers and cost of delivering people, something that subsidy cannot cover for them viably from a government perspective. Weather being airliner's major concern for cancellation , a "personal owned private light aircraft" can often be utilized long before the weather reaches origin, any part of the track and destination by good forward planned and current meteorology and standard flight planning management and in some cases can have plan B at a field short of the destination and other arrangements for continuation over a short distance. With airlines there is no guarantee or flexibility of management or direct time efficient approach, particularly with airlines cancelling flights due to weather.

By good management planning personal light aircraft has massive advantage over airliners that often require the customer to make an "L" shaped journey over the map with their airliners destination exactly alike some road vehicles getting around large land masses 50km x 50Km or more to reach particular towns behind them!

Because of the way wages are locked up in reticulating debt on "house" and "vehicle" loan repayment based on 10 to 20 year credit risk capacity, it is more sensible to understand a light aircraft and PPL and hangar as being part of the whole capacity by down-marketing the vehicle and

house to balance the loan repayment capacity system with the required costs for a PPL and aircraft and its requirements..

Flying is better for the environment and wildlife!

[Note: Interesting "aberration of real world calculation examples show"... "Average wage" in Australia of 2017 is around "\$1100" p/week
oddly too, "bank loan repayment" of "\$600,000 principal" through "15 years" at "4.5% interest" is around "\$1200" approx. p/week]

ARTICLE 1

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These two following articles are about speed and fatigue and the **12,000 total approx. a year hospitalised from road accidents** and the way out into the light !

<https://www.youtube.com/watch?v=eURrjDZgqm8>

Video remind you of your spine and pelvis from potholes in the roads off major highways after hours of driving?

*The Australian governments of past and present are a greedy SHAME to understand at no time historically or present did they promote **PPL Private Pilots License** to as many people as possible to prevent road deaths and to raise efficiency of business and private life in a country that is **NOT rivaled by Siberia , Russia , Africa or USA for distances** business people or families must travel in a single journeys direction each year regularly and often many times and often simply is not catered by airlines ! (Australia is the most dangerous and harshest environment on earth "habituated")*

*..."According to CASA, out of **36,000** Australian pilots, about 400 have colour vision deficiency and of those, 140 flew commercial operations"...*

<http://www.abc.net.au/news/2014-06-18/colour-blind-pilots-licences-reviewed-by-casa/5531906>

*..."Australia now has **1.16m** millionaires, according to Credit Suisse's Global Wealth Report"...*

<http://www.smh.com.au/business/australia-now-has-116m-millionaires-according-to-credit-suisse-global-wealth-report-20171126-gztc7u.html>

There are now 25 million population in Australia, and **around 8-12 million adults of around 6 million at very least are able medically and mentally to become a Private Pilot**, SADLY, only around 10,000 aircraft of "suitable type" exist in Australia for private use, but some are only used recreationally (there should be somewhere near 1/2 a million to 1 million light aircraft !!!!)

Australian designed light aircraft are smaller compared to USA systems (part of the shame -cost for supply and demand of something hidden from view), but a third to a half the time for the same distances by road travel makes them as good an idea as any light aircraft brand.

I drove the Hume Hwy in the 70's and 80's when it was a two way lane system and "violently dangerous" and extremely deadly, i believe i saw a fatal crash being AKA "cleaned" with multiple

ambulances every 100 miles on average.

I have always known since a child that driving a car is more dangerous in Australia than faulty light aircraft will ever be!

On the Hume Hwy on average every 20 seconds a truck tray bed corner would pass within three inches of the driver side cabin structure uprights of the vehicle every 20 seconds at a collective combined collision speed of around 160 Mph (250Kph) for hundreds of miles (unlimited speed), there are scratches on the vehicles used that were the difference between continuing and "instant disintegration" in every direction for hundreds of meters !!!

(Day after day, year after year)!

It was my intention to fly as a private pilot when I left school because I came from a remote inland city, but never did because the government did not support that tax collection scheme scenario and there were few aircraft because of the recession and drought that followed over 15 years to around 2000 !

While major highways finally became better after the mid 90's other roads can never nor will all be multi lane p/direction and shows this feature of danger against light aircraft safety has relevance because of time by ground transport.

In the past few years (since 2013) cheaper light aircraft and aviation systems have become better and more affordable, "almost" down to single average wage earner level (a 'tis to) !

As you would expect, it is not dissimilar to cost of an expensive car (less - not the prestige cars - more around dedicated 4WD - low end "token named" prestige) and a required legal competency level of "PPL(CASA - Private Pilot License) ["NOT" Recreational PL]" to "obtain the benefit edge in life-style from it", and what price your life !!!

https://www.casa.gov.au/sites/g/files/net351/f/_assets/main/lib100191/getting-your-private-licence.pdf

[just a point about PPL capability in Australia for journey or commute -

<http://www.airborne-aviation.com.au/courses/night-vfr-rating.php>]

An interesting foreign ultra-light STOL example:

<https://www.youtube.com/watch?v=8wIe0ROnJVk>

<https://www.youtube.com/watch?v=YKSH2E5INV8>

[junk - Do for a soundtrack with it https://www.youtube.com/watch?v=8Akd_hAEeFE -]

Walk around:

<https://www.youtube.com/watch?v=ZIPrShenak8>

<https://www.facebook.com/zenithair/posts/1796513887030971>

This article is aimed more at "more stable settled down persons" whom simply suffer driving 10 times or more a year more than 200-300Km a stretch at the least, and never thought they could replace their system for what lighter weights of luggage they carry!

<https://www.casa.gov.au/file/139186/download?token=XtXcIPy9>

<https://www.casa.gov.au/standard-page/your-asic-questions-answered>

(Almost ALL the base information you need is in these two articles!

if you ever wanted a shortened way to understand an economically sustainable way to "not be killed on Australian roads" , UNFORTUNATELY (while not actually complicated) IT IS around as short as can be explained with these two articles.

OTHER MAIN CONJUNCT ARTICLE - fatigue speed - light aircraft

https://www.facebook.com/permalink.php?story_fbid=1899689726985461&id=100008333560946

)

https://www.youtube.com/watch?v=3F8-steHs_k

<https://www.youtube.com/watch?v=5E22BzhMmuA>

https://www.youtube.com/watch?v=XWq_piIXgD0

<https://www.youtube.com/watch?v=UH3diaRX5B8>

https://www.youtube.com/watch?v=jKQYRen_MIA

note: *proper light aircraft are around 100hp or more , NOT smaller!!!

(speed and fatigue are the uncancellable factors in road death

- **SUMMARY it isn't done that way - you keep and fly a registered light aircraft (with PPL Private Pilot License for "controlled air space" AND must have "VH-****" civil registration type + X-sponder) to "move distances beyond 3 hours ground road time" (pilot license-less aircraft must fly in uncontrolled airspace and cannot fly over (cross) a public road below - neither a RPL Recreational Pilot License go any more than 50 miles radius from where it took off)**

-
<https://www.youtube.com/watch?v=3Y7TCu0cMEs>

- **DID YOU KNOW (many light aircraft crashes are machines 30 to 50 years old)**
there are only around 9000 piston single light aircraft in Australia (in a population of 9 million adults and 6 -7 million adults eligible (class 2 medical CASA) to be a licensed private pilot)?! - So its no wonder the high road toll , and waste of time Australian businesses are from lost secure information or wallet or purse not being at the meeting but at a police station - if they drive to keep it all in one place they around walk in as though they are drunk from fatigue the next day and under perform , as to being ..."you crumb you asshole godamit i never !!!!!"...)

Too with young people, they are assumed at 17 to step into a car to learn , but Australian environment and risk really means step them into a light aircraft to learn to get their PPL ALSO if you want them alive! :

("CASA - LEGAL LANDING AREAS" Link or google "92_1.pdf" - private e.g. a hobby farm)

<https://www.casa.gov.au/file/105066/download?token=aMdVb6EO>

CASA INFO

https://www.legislation.gov.au/Details/F2016C00540/Html/Volume_3

(note: Although basic small light aircraft fuel is 2 doll AUD a litre, the cost to fly a light aircraft Sydney to Melbourne is similar to car - though it only takes around 3 1/2 hours - with a 4 seater for children that's much nicer!)

The single Australian "AVERAGE WAGE EARNER" can handle cost of a factory built Australian light Aircraft on borrowing capacity "potentially"

(see **ARTICLE 2**)!

The cost of learning to fly "varies" between 14K to 25K but is mostly because of aircraft value in use for hire , landing and takeoff fees for particular airport and the insurance. Best done over a year by budgeting (or ASAP if you travel long distance frequently).

[The following PDF document LINK (although a private company info) has a good breakdown of "Australian Air space" classification (succinct)]

http://www.airservicesaustralia.com/wp-content/uploads/12-058BKT_Guide-to-our-

[operations WEB.pdf](#)

And here's some logistic safety for wind and parking check weather for a few days ahead if tie down is needed (and use a hangar for most!)

https://www.aagsc.org/members/aagsc_adm/UploadFiles/AAGSC%20RIP%20No%204%20Safety%20Considerations%20for%20Strong%20Wind_%20Incl_.pdf

"Australia makes a few light aircraft" two seat generally (and a couple of 4 seat) and are around 0.1 mill aud - 0.2 mill AUD (note: kits are often around just over half price of factory completed fly-away aircraft)

IT REMAINS UNCLEAR BECAUSE OF THE IMMENSE SWATHES OF CASA INFO (CASA - kits and "VH" rego (for PPL use - NOT recreational) and amateur built -

<https://www.casa.gov.au/aircraft/standard-page/amateur-built-and-experimental-aircraft>
<https://www.casa.gov.au/files/021c04pdf>)

A FACTORY BUILT AIRCRAFT IS SUITABLE FOR (PPL) Private Pilot License LONG DISTANCE FLIGHT RANGE(ASK THE VENDOR).

<http://flysafe.raa.asn.au/constructors/buyandsell.htm>

Next link is a "Jabiru kit construction manual (PDF)", it happens to miss two crucial point on "page 20" for "industrial OHS",

A. when cutting "fiber glass" and alike "dangerous dust" you should have a cheap "industrial vacuum cleaner nozzle operating" near the cutting activity to help take away that type of dust (its only mentioned with an angle grinder) apart wearing an "anti-dust ventilator mask".

B. With epoxy, wear a "fluid proof(water proof) synthetic leather industrial workshop apron" over your front whether you have overalls or not! The epoxy can be spilled or drip while you are in some positions.

Of either epoxy or dangerous dust types particularly if dust is from a power tool , eyes can be sensitive to epoxy fumes at close range so proper sealed wrap around eye protection goggles should also be worn not merely safety glasses!

C. Some of the following kits use pop-rivets, they can easily be mis-installed. Always "hold the two surfaces together perfectly" at the rivet hole, and always press the head of the rivet-gun firmly to hold the rivet in the hole "while" squeezing the gun handle. Not doing this altogether at the one moment often causes a loose rivet and loose flapping surfaces and eventually failure of the binding. With a fiberglass surface , the opposite side "should have a metal washer for the other end of the rivet too distribute pressure on the fiberglass without shattering or sinking in it!".

<http://jabiru.net.au/Manuals/Airframe%20Construction/Jabiru%20J160%20Constructors%20Manual.pdf>

http://www.jabiru.net.au/Manuals/Pilot%20Operating%20Handbooks/JP-FM-09_J230-D_POH_Rev5.pdf

LIST of kit manufacturers: ---

(ALWAYS ASK IF IT CAN BE BUILT and" VH-**" + transponder (24 bit) registered for long distance cross country flight with a PPL)**

Jabiru 230-D can be fitted for Visual Night Flying

<http://jabiru.net.au/aircraft/j230-d>

Australian Lightwing Hughes 2 seater SP2000

<http://www.lightwing.com.au/light-sport-aircraft/>

SP-4000 (pdf)

<http://www.lightwing.com.au/pdfs/SP2000SP4000.pdf>

ALW Hughes six seater (kit aircraft) 6000

<https://www.northernstar.com.au/news/ballina-ultralights-not-ultra-expensive/751916/>

Brumby Aircraft

<http://brumbyaircraft.com.au/brumby-610/>

<https://www.youtube.com/watch?v=S1DRPj38gGk>

<https://www.youtube.com/watch?v=WAJ-ofkyfEI>

<https://www.youtube.com/watch?v=Bst5bFSqXkA>

<https://www.youtube.com/watch?v=aReYq1cAPzM>

<https://www.youtube.com/watch?v=bmiFFT--wkI>

<https://www.recreationalflying.com/tutorials/navigation/wind.html>

Foxcon Aviation Terrier 200

<http://www.foxcon.com/>

Morgan aircraft

<http://www.morganaeroworks.com.au/Cougar%20Mk1.html>

Aircraft kits Aust.ralia

<http://aircraftkits.com.au/about/>

<http://www.aeropup.com/>

safety: ATSB info https://www.atsb.gov.au/publications/investigation_reports/2013/air/ar-2013-107/

Other

<http://www.zeniraustralia.com.au/ch-750-stol.html>

<http://cubcrafters.com/carboncub>

<http://www.gap.aero/>

http://www.planeandpilotmag.com/article/2016-light-sport-aircraft-lsa-choices-galore/#.WWbf_et95Hc

<http://www.australianflying.com.au/videos/friday-flying-video-sling-4>

<http://www.aerotrek.aero/>

US light aircraft

This is a four seat Cessna around 0.3 - 0.4 mill AUD

<https://www.aircraftcompare.com/helicopter-airplane/Cessna-172-Skyhawk/142>

Maule air has a four seater <http://mauleairinc.com/>

<http://www.maule.com.au/taildragger>

<http://www.airplanefactory.com/aircraft/sling-4-kit/>

Fatigue Speed – PPL and light aircraft (ARTICLE 2)

=====

This article is about Road speed fatigue fatality (harsh environment - excess distances - overtime), 12,000 hospitalised p/year by road accidents....

https://www.atsb.gov.au/media/625511/AR2007043_1.pdf

note: *proper light aircraft are around 100hp or more , NOT smaller!!!

(with PPL Private Pilot License for "controlled air space" AND must have "VH-*" civil registration type)**

https://www.atsb.gov.au/media/625511/AR2007043_1.pdf

(CASA – kits built light aircraft and "VH" rego (for PPL use - NOT recreational) and amateur built - <https://www.casa.gov.au/aircraft/standard-page/amateur-built-and-experimental-aircraft>

<https://www.casa.gov.au/files/021c04pdf>

)

(pilot license-less aircraft must fly in "uncontrolled airspace" and cannot fly over (cross) a public road below - neither a RPL Recreational Pilot License go any more than 50 miles radius from where it took off)

<https://www.youtube.com/watch?v=3Y7TCu0cMEs>

[This is a long comment article: In summary the only method of beating driver fatigue (and not speeding in one of the only harsh countries on earth (**FACT: "Australia is the most extreme harsh environment" on this planet !!!**) **in extreme conditions** - Only USA-Canada and some countries of Africa and Russia compare for STANDARD vast excessive ground travel distances) is flying a private light aircraft at 110 Knots speed with a PPL Private pilots license (with PPL Private Pilot License for "controlled air space") and a set of post license accreditation for craft-types and flight situations !!! The mentioned economics may be reasonably sensibly handle-able by borrowing capacity for an average wage earner at the bottom end of its market with an Australian four seat kit - but what price your life (It may be safer to DIY than driving on the road)!?]

https://www.aagsc.org/members/aagsc_adm/UploadFiles/AAGSC%20RIP%20No%204%20Safety%20Considerations%20for%20Strong%20Wind%20Incl_.pdf

Having a PPL Private Pilots License and plane eliminates many travel problems.

Govt. budgets or not, in the past 40 years nothing has cared to realize this continent is no different to Canada for expanse and its safe operation IS NOT by roadways, Australian trucking on these new modern upgrades are no different finally to the "Ice road truckers" of Canada.

To not subsidize PPL and aircraft to ordinary people and promote it is murder by a selfish government bent only on thieving tax sums.

The only sensible method for Australian travel distances to beat "DEATH BY DRIVER FATIGUE"(and for easier child handling) is a PPL private pilot license , it allows you to fly aircraft with six people up to **80Knots/h (150Kmh) (100Knots is minimum to seriously beat fatigue** driving over long distance e.g. 5 hour car drive is around vaguely two hour flight) speed and can be extended with training to Visual night flying and aircraft faster than 80 Knots.

The Australian government are immense creeps for not subsidizing and helping all able bodied (class 2 medical CASA) people to obtain a PPL with these extra license credits, because "it is the only way of beating fatigue", truthfully it requires private light aircraft for personal passengers in this country of at least 100Knots/h or more (nominally 110 knots cruise speed specification) to traverse the required business and personal distances in Australia. Driving not flying with your own private license and light plane people will continue to be killed in vast numbers of which half were not responsible for any of the problem !

Moreover, people need to use these things to cause the price to go down in swapping to supply and demand to common offer to make pricing affordable. Its too locked up in snobbery and restrictions and cost.

Of cost, if you are starting a home and getting a home loan and can afford a 600,000 dollar house , you can probably drop your housing aspiration back by 100,000(or 250,000 for a new light aircraft plus its keeping reserves) with a 600,000 dollar loan then after talking to the bank manager use and keep 100,000 to use 20, 000 to visual night flying and over 100knot license , you have 80,000 to but a second hand aircraft for travel and job-business canvas geographically.

But it flogs the whoop from dying various complex ways by road vehicle travel that are often not there to a light aircraft continuously !!!

No dangerous unknown passengers, no crippling cramping, no lost property, no stolen property,

reasonably available on time dependent weather (there is a "bad weather accreditation license add-on").

New light aircraft at the bottom of the range (USA e.g. skyhawk standard , warrior) are around 0.2 mill but many 10 to 20 year old that have passed SIDs can be gained for 0.1 mill

In the past 10 years, ordinary light aircraft at the bottom of the cost range as 2 or 4 seat can cruise at around 110 Knots (200 Kmh) (126 mph)

Meaning, If you left in a car from "Sydney to go to Melbourne" at 8:00am you would be at Yass NSW(faster aircraft - e.g. 120 Knot cruise) 300Km or Gundagai NSW(slower aircraft - e.g. 110 Knot cruise) by 11:30am progress going into the truck stop to get a brunch coffee and stretch your legs, and the light aircraft would be about to call to join the queue to land (11:30am) at Melbourne.

As too from Melbourne at 8:00am by 11:30 is Albury on the NSW VIC border, and the light aircraft would be ready to queue to land at Sydney.

--- This section is a little contentious to add to a post elsewhere....

An Australian "single wage earner loan" BORROWING CAPACITY "EXAMPLE ONLY"

of 400,000 dollars ,

can have

ongoing fee pa. \$400

repayment over 15 years

of \$2900 p/month (\$725 p/week)

THE GOOD NEWS

A modern (produced 2015/16/17) new light aircraft has a very(extremely) high re-sale value within 10 years use (the reason for buying new or the system would not operate well in a finance loan) !!!!

Your bank would not be particularly worried if you had a PPL and/or also the extra accreditation set (bad weather, VNF, over 100 Knots handling).

a hangar, and insurance and costings(craft,tyres,training,service,hangaring,odd-bod-electronics-that help) to 250,000

NOTE – MONEY MENTIONED HERE IS A "TOTALS GUIDE ONLY" (SOME IDEA OF THE TOTAL CRUNCH!)

The bad news (It's massive money juggle and at base variable loan for aircraft hangar house and car and PPL approx 550,000 over 15 years loan),

Your house and car are around the other 150,000, a town outside a city (is that so bad).

In short, mainly you would borrow 150,000 first to buy your home, and keep your loan capacity level , then, after gaining a PPL would then hand the financing deal to the same bank as per - perhaps agreement foreseen with the origin loan.

Final point! Do not allow your insurance policy to lock it up against its usage, THAT IS WHAT THE AIRCRAFT IS FOR - to go long distances up to 3 - 4 hours at/over 110Knots, do not allow either Insurance or bank agreement to prevent shorter hops (particularly mountain terrain hop over to avoid) or practice once every two weeks to a month.

While the population around 1970 had 128 p/100,000 fatality on roads and by year 2000 after the redo into proper 6 lane highways it went to 4.1 (four point one) p/100,000 statistically,

Some 12,000 people or more approximately a year are "hospitalised by road accidents every year" ! Driver-less car or not, it is too far too long in journeys over 300Km and it never hurt anyhow to use

such a device (light aircraft) between 100 - 200 Km to nearest major town or city with some ground transport pre-management.

Roads waste lifetime!

<https://www.youtube.com/watch?v=WAJ-ofkyfEI>

<https://www.finder.com.au/australian-families-transport-costs-soar-higher>

<https://www.brisbanetimes.com.au/national/queensland/brisbane-households-spend-19000-a-year-on-transport-report-20170522-gw9xvi.html>

COMMON AIR CRASH AND PREVENTATIVE SAFETY

The following "news article" has two of the most common reasons for Light aircraft crash in Australia (1) Flight planning management and two (2) fuel.

Home built (piston single) Light aircraft test flight crash, HOWEVER, bad Flight planning management most commonly causes "collision with terrain (in many ways as a broad term)" through bad or insufficiently planned practices of flight path, of one of these being "overhead lines or wire-strike"!

These two ATSB reports typify the 3rd most common method of light plane crash (3) "loss of control" (**stall** - low air speed - low altitude)

a. Loss of control (PDF download page)

b. Loss of control (PDF download page)

ATSB 2016 Australian flight safety information media release

Most of the aircraft that crashed in 2017 (much media release coverage) were far over 20 years old!

In this document (following link) can be seen the "main" or common cause of fatal air crashes is "flight management planning" and second most common is "control handling operation", the last significant statistic in bulk killing is "bothering to or how to respond to emergency" !

Any questions why it is sensible to get training and VH use accreditation with PPL "*not RPL or simple us of uncontrolled airspace*" !

Statistical fatal air crash cause breakdown CASA-ATSB (PDF)

Human factors in Australian aircraft crashes - ATSB (PDF) **Low level flying - ATSB (PDF)**

Collision with terrain anomalies - ATSB (PDF)

Ordinary Visual license pilots in wrong meteorological conditions - ATSB (PDF)

Government issued warning - starved and exhausted

..."Ground-based animal strikes were relatively rare. The most common ground animals struck by aircraft were hares and rabbits, kangaroos, wallabies, dogs and foxes.

Damaging animal strikes mostly involved kangaroos, wallabies and livestock."...

Bird and ground level "wildlife and animal strikes" stats info (flightsafety - article abridged)

Bird and ground level "wildlife and animal strikes" stats info (PDF report ATSB)

This document from

<http://windsolarhybridaustralia.x10.mx/>

<http://windsolarhybridaustralia.x10.mx/light-aircraft-ppl-vh.html>

WARNING about the meaning of the word "kit" and totals "look closely" "examine carefully" !

One other feature is "construction degree of difficulty" , some are almost materials and plans , be sure what your total expenditure and kit "sets of" checksum will finally produce after searching and choosing to buy 4 seat kits (4 seat are usually too heavy to be LSA but 4 seat is what you need for viable useful remote kept "VH" vehicle) !

One more feature to remember to ask the manufacturer, is whether both "anti-ice system" and "carburetor heat system" are supplied as standard systems, "they are actually quite required" in Australia!

Link: Kit twin engine example(kit) (Velocity V-Twin 4 seat)

Link: (Velocity V-Twin 4 seat) News Article (1800ft - 500m ground roll)

Link: Kit (Velocity V-Twin 4 seat) specs (PDF)

Link: AeroCanard kit Single engine example(kit) FG (or RG) 4 seat (nb: too long a take-off roll for Australia)

Just to be aware, kits often (usually) are in two to three "kits" , meaning, main bodywings, and then often another "separate" kit to buy for it called a "finishing kit" (sometimes called "Firewall-Forward kit") - the nose cowling matching the engine and its mounts, control linkages and matching propeller system altogether, initial "complete set of" totals is the bare minimum to build to use it in uncontrolled air space.

Always understand what you require to order and the total will be (USD , AUD or other currency to convert and pay and also shipping cost along with terms such as CIF (shipping insurance is a good idea)) for what you pay to have a "complete" aircraft to finally construct and fly!

Link: (STOL CH-801 4 seat) Here is a perfect example again of how "kits and types" are broken down into "sets" and "options" and those sets sometimes may only be

relevant to some countries (look for the words "NOT INCLUDED"), moreover, it seems there is not much mention of where to get cockpit instrumentation, but can probably be modeled for Australian requirements from a Jabiru "VH" suitable type such as J430 4 seat

Link (PDF): Jabiru J430 kit sets parts list see: "Standard Inclusion"-instrumentation (note: "a" VHF radio is Australian "air band" GA spectrum)

Link: Zenith instrument kits

To be sensible at explaining and help here, normally a STOL kit for 4 seat will be standard around 120 to 150 meters takeoff distance, here's a USA kit with the same types of point of broken down "choices of sets" or "pure plans"(warning, but adhere to materials specification) can be used.

Link: Bearhawk 4 seat kit aircraft

Note: to understand the (shall we say) "final economic cost will be", that any aircraft engine is around 20K dollars "at least" usually (bare price).

The following article has quite some wisdom inside it

Link: Super cub comparison

To assist at where to look, and "what may ever be a good sensible idea" for use in the Australian environment and personal or business life here is link to a general kit listing site

Link: Aircraft kits list

There are many good kit aircraft all over the world that are generally never found on any web site except their own. so deciding price for usability to practicality could take a few months of research itself just to short list! (as a wise man in South Park once said ..."ooh...i'm staying out of this on"...)

But here is another in the genre of 4 seat STOL (the requirement for Australia - 4 seats is not merely use for family but extra unexpected cargo weight)

Link: (USA) Backcountry Boss 4 seat bush aircraft

..."One more feature to remember to ask the manufacturer, is whether both "anti-ice system" and "carburetor heat system" are supplied as standard systems, "they are actually quite required" in Australia!"...

Link: (CANada) Dream Tundra kit STOL

Of this previous point of "country of supplier" and "cockpit instruments", it is a good idea to know the full electrical requirements for the instruments AND the aircraft's "voltage regulator output specifications/parameters".

As you can imagine, an "option or package" of cockpit instrumentation may also need to be in the "correct language" e.g. English.

But there is a point to this mention here. Each instrument will have lighting and (maybe as with VHF two way radio or transponders) other potential components that require "a quantity of electric current" and "a specific operational voltage".

To put it succinctly, both the current (amperes) level and the voltage (V) require control to prevent damage or starvation (blackout or power fade) to the instruments and other electrical accessories.

In every type of vehicle (road air or water) electrical supply circuit

between instruments, consoles, radios or lighting bulbs (powerful or tiny) is a device called a voltage regulator !

THE ONLY TWO CIRCUITS THAT DO NOT USE A VOLTAGE REGULATOR ARE ,

- (a) The spark plug with its electrical timing and transformer
- (b) The starter motor

Everything else must be supplied correct voltage and amperage from an off-shoot circuit from the "voltage regulator(s)" !

Too again, "instruments and consoles e.t.c. that could go into a range of electrical parameter situations of voltage and amperage" that operate from some "remote" (isolated enclosed) power source such as a battery and alternator in a vehicle sometimes have at the back either different socket points for different voltages or a multi step setting switch with so marked voltages.

If you add a component (e.g. lights or instrument or console) to a circuit you must assess the total current draw of all added components and add "a suitable correct current and voltage voltage regulator unit" for the extra current draw.

Adding powerful landing lights are a huge clue, such added equipment are always installed in vehicles with their own separate voltage regulator in a completely isolated circuitry from the battery ! If you need the aircraft to be IFR compatible and add landing lights, you will need to consult an aviation electrician for light aircraft unless the required packages are accounted for to the aircraft kit supplier in total along with the kit !

If you want to understand batteries and current consumption by components, read the "D.I.Y. Wind-Solar "Off Grid" ARTICLE" and also take a look at the "Battery Calculator page"(switch off the background image in the page menu) here: <http://windsolarhybridaustralia.x10.mx/batterycalculatorAH.html>

Another note, is "Australian regulation refueling" for both action (correct ground procedure), equipment (anti-static earth binding), and legislation!

(PDF document) https://www.casa.gov.au/file/146341/download?token=60_W8mWI

(PDF document) <https://www.casa.gov.au/file/78676/download?token=NpIFuSpo>

(link:) <https://www.legislation.gov.au/Details/F2011C00687>

(note: Float plane modification <http://www.zenairfloats.com/>)

other: <https://www.youtube.com/watch?v=9j6ZdxYWViM>

Other useful links:

[Link: VHF use in G class airspace \(PDF\)](#)

[Link: DAH \(Designated Airspace Handbook\) info example \(PDF\)](#)

[Link: Airspace risk management \(PDF\)](#)

[Link: Airspace Infringement \(AI\)](#)

[Link: Airservices documents and charts](#)

...For many in Australia, bus train or airliner is considered more than probably safer for long distance travel than either light aircraft or personal road vehicle,...That's what you think! , By interstate train the injuries and fatalities are generally teeth and bones caused by one of 5 criteria of "blunt instrument", "shotgun", "pistol", "machete" or "hands fist feet", Again, Buses generally alike a car are road accident, and finally airliners are "safe" in Australia from fatality for most, However, everything else of airliners is amiss the goals and reasons of both personal and business travel with a high to extreme risk of serious or irreparable disruption to personal or business plans and or security(personal or business)....

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Bird and ground level "wildlife and animal strikes" stats info (flightsafety - article abridged)

Bird and ground level "wildlife and animal strikes" stats info (PDF report ATSB)

...*"but if i go to hell then i hope i burn well"*... (Source: Australian Transport Safety Bureau)

Link (article below): Anti icing equipment and meteorology crash example information for Australia (You can learn an immense quantity about flying from "this articles' links to reports on the crash")

Note: "Nowhere suitable inside Barrington Tops forest NSW" is any space made in a few places for a light aircraft to land although it is a mildly deadly area because of its terrain and many high peaks coupled with partial alpine weather akin to the north above Australia tropical "Storm Factory" (why you calculate the price of hangar construction or hire to buying a kit aircraft rather than covers and tie-down!), although it is one of the most rugged and difficult terrain in Australia for anyone to search if such an event occurs!

The very problem shows why you should use "STOL with heavy terrain wheels and include anti-ice systems in any aircraft package" you buy whether Kit DIY or factory built!

Its not to look pretty, its to handle how much help the Australian government refuses to be to developing proper transit systems (that being light aircraft because of distance and environment) as standard for completely ordinary citizens, the government only chooses to be a parasite bloodsucker at any level and has known that road vehicles are monstrous problem to use over vast distance but only sees the regular "roll out of tax" in it ignoring the fact that with good roads it only swapped fatality for crippling injury, note too that Barrington tops National Park was a military training area during the Vietnam war and in principal is anything except a military area by proxy all the bases within a 100km any side of it! The accident investigation reports and supplement information will tell you a large quantity about IFR flight and fitness required by machinery for Australian environment conditions.

Q: Why read the above article PDF Article "Fatigue and distance travel in Australia" !?

A: Recognize that "time wasting of life" and "impossible achievement of a travel solution about fatigue and speed and time (particularly where it has to be flexible)" is all road vehicles bring! Until people get a (PPL) Private Pilot license and use VH registered light aircraft to remove long distance road travel, there will always be crashes of massive magnitude!

This head on crash beats getting "Falkholtd" or "Pacific Highwayed" (Although this was "the Princes highway" it is the southern version of terrain and road to "the Pacific highway (Northern)") (called "Bussed" - re the massive bus/coach crashes in history on it)" Wed Jan 17, 2018 ("Although recent" it is "one of the worst multi vehicle head on car crashes in Australian history to date (at least since national highways were made multi-"ROAD" by 1995 - 2000 and particularly because they were only ordinary small road vehicles)" and as YouTube can show "means QUITE SOMETHING to achieve that level of destruction of life by cars only")!

Link: "Picture of Falkholt boxing day accident location scene" shows the debris field (and liquid spillage) only little more than 50 yards long and for most is only impact inertia scatter that like many road accidents" has following cars run over it. Too the head on impact stopped both vehicles "ALMOST INSTANTLY" (as severe as that ever is except for the fact the vehicles struck "offset to center" but head on, center is all it was not) as they remain only a yard or so from each other, they show they were

"offset at impact"(not "absolute center") by their rest position and revolved each other "at point of impact" "possible half a rotation (180°) only to facing opposite direction or a full 360°" depending which vehicle is which in the picture). An immense impact !!! , they only left "the collision impact point" by three yards and five yards from full speed collision in both directions to instant halt as shown by the short sparse debris field in the picture !

No idea how "anything" could survive that impact in either vehicle for a tiny moment (and probably did not), although forensics on Lockerbie disaster found time of death for two passengers of the 747 may have been sufficient to save them if they had been found shortly after alighting, but "to that effect" in the boxing day crash (200kmh to 240kmh collective impact speed to instant halt within one to two yards or less) no such atmospheric assistance was a "chance" to cushion impact.

Anyhow, nothing unusual, just more common other ways in Australia (except between 1960 and 1995 on roads in Australia).

NOTE: Some of the problems of weather (e.g. Heatwave ! there have been 10 heatwaves in Australian history killed more than 100 people!) and other problems found in the following disaster link is a reason to have a PPL and VH registered light aircraft!

What occurred upon the Falkholt family (massive fatality in moments) is what that is as risk to use a road vehicle in Australia for many many more reasons also than simply the bad driver that hit them!

RES IPSA DES, it is the A typical result of the long distance journey on Australian roads.

Link: (very uncomplete) List of disasters in Australia by death toll (re: road, rail, bushfire, Cyclone, flood - note: "Heat Wave" totals, pandemics, shipwreck, prison break, Sea battle, mutiny/massacre and air raids)

Link: ...And only for history sake, "the completely obscure" from the previous link !

Link: ...And only for history sake, "the 101 of completely obscure and unusual" from the previous link (for completeness) !

Link: ...And only for the fact that public transport has long been a disaster, "the 101 of public transport" !

e.g. Australian head on crashes Youtube

YouTube: head on crash Australia

YouTube: head on crash Australia

Other head on crashes (Australia) !

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

YouTube: Road vehicle crash Australia

However it occurs, it's like the old AC/DC song goes, ..." Hells Bells ! " (which sound more like crunch!)

• (speaking of "crunch" (or single dull "thud", "donk" or "whack") as a more realistic sound, don't listen to all of those Hollywood movies with air crashes if you are a bush-walker)

VH-MDX air crash 1981

The answer to this is if you buy a light aircraft, be sure its' kit has or the factory machine incorporates anti ice equipment fitted to your aircraft, (that also means changing to a larger battery and generator as to putting more lights on your aircraft means the same).

URL Picture of VH MDX

Picture of VH MDX (fair use de-enhanced colour)

It is actually a high powered six seat aircraft, and was being flown by IFR rules by that point it disappeared.

(PDF) What IFR roughly involves learning (US training list)

- For those that make a day out of IFR news and blog articles - - For the rest of us, what the hell does that mean?! (CASA) -

...If you can't go to hell for that, then what the hell do you go to hell for...

News Article on VH-MDX

Report on VH-MDX

Operation Wittenoom search (PDF)

VH-MDX Communications (PDF)

VH-MDX Initial-Overview V2 (PDF)

YouTube site video "recording of conversation with towers minutes before vanishing"

<https://www.youtube.com/watch?v=JD2j4-tlmVQ>

140 knots 72.0222222m/s 259.28 kmh

170 knots 87.4555556m/s 314.84 kmh

199 seconds from the last radar point measured to final communication transmission
Altitude decent around 60kmh - 1000ft/minute (mean)

(maximum traversal from final radar point @140 Knots): 14.328 km * given speed by official investigation *(note: possible 110 Knots "under 8500 feet")

(maximum traversal from final radar point @170 Knots): 17.4036555644 km

100 seconds down to 3000ft is more likely the best it ever managed (note: -not 120 seconds-, when things fall with gravity it is an acceleration):

@140 Knots: 7.2 km

@170 Knots: 8.7 km

Meters - feet

1000 - 3280 * "becoming almost impossible" to miss terrain !

1100 - 3608

1200 - 3937

1300 - 4265

1400 - 4593*

1500 - 4921*

*1400 (Radar fade point: at 2 O'clock extent to 3O'clock at "1.5 - 2km" is a peak classifies as this and another 3km at 2 O'clock)

*1500 (Radar fade point: In a semi circle arc from 8 O'clock around to 2 O'clock classifies as 4824ft)

*1400 - 1500 (Radar fade point: Most of what is behind and to (port) left classifies as 4824ft also)

Topographic of Barrington Tops National park 5000ft radar fade point (320°M (330°T) point associated Williamstown Radar receiver - 45 Nm)

Wind was south-west to westerly and around 30 knots (30-50) more likely 30 at or below 5000ft, drift to easterly - north east is around 500m to 1Km a minute mean.

However, listening to the ATC recording the pilot appears to have taken alarm at the altitude, which leads me to believe he possibly had an "elevator" control failure at that time that he was completely unaware of (but maybe found that before the whole incident ceased and finalised) and that he "attempted the turn" after agreement with ATC at the moment thereabout when he said "6000" as his altitude.

When turning a conventional light aircraft, lowering to suitable wing loading speed first, then it requires increased engine power (or propeller pitch with constant speed gas turbine), but it is because of the requirement to maintain altitude in a normal turn with excessive drag for the aircraft angle during that aerodynamic problem of flight. With ice forming, it can jam control surfaces and coupled with wing ice destroying the aerodynamic shape of the aircraft lift surfaces, it then has "almost no flight aerodynamic characteristics" and commits plummeting more than flight, trouble is however, "turn the aircraft" (called "banking") with all that together and there is "NO aerodynamic flight occurring" whatsoever, and "no elevator control" to vector the engine power against "turn slide altitude loss" a standard feature of aerodynamic operation during a turn (akin to a stall, or coffin corner) ! If anything, the wind speed and direction and its effect on the aircraft heading would then decide the final parameters of its resting pint.

One other point to note in the recording is quite subtle! Anyone whom has sat with a truck driver on long haul trips often will find that to "keep awake" (AKA keep "aware") is the "attitude" in the voice of the trucky to attempt to hold conversation to stay awake and aware!

It is not dissimilar to the attitude of the pilot in the ATC recording although the journey is nowhere near as long (pardon the pun) as long haul truck driving. Moreover, there is some evidence of losing potentially "mild physical" (radio button) and "mild coherence" but is extremely blanketed over by the unfolding gravity with which it appears he may have no proper explanation for and could not give to the ATC.

Again too he did say that some of the actual ~~"electric driven" equipment~~ "engine driven" (vacuum) equipment was not operating *[valves and controllers use solenoids! see link].

(NOTE: Oddly electrical or engine driven).

If so then the (APU) air pressurization system may be on the same circuit and shutdown also!?, "hypoxemia" for various reasons may have been setting in, although the last of the recording sounds alike rushing air in the background such to having a door ajar mid flight.

So to summarize, ...up and down like a yo yo.. OR (and quite subtly) ...compass swinging like blazes... could simply be the inability for the "rear elevator control

surfaces" to be used to vector the aircraft causing rudder buffeting by the wind and direction (note: can "saw"(reverse) almost as violently and by speed opposing direction momentarily, and by speed in a storm at angles (wind shear)). He may not have known this with any surety until the last minutes or had any true idea it was "the problem" when he contacted the ATC. It may have been the "compass" was responding but the aircraft was not, but being blown around anywhere, he may have only had "odd" steering from rudder and ailerons not realising the elevators were not operating.

VH-MDX-Meteorological-Conditions-V2 (PDF)

Note: with the topographic map, to read the map you need to "zoom the browser window", after, setting the map to the piece wanted in the window!

Topographic of Barrington Tops National park 5000ft radar fade point (320°M (330°T) point associated Williamstown Radar receiver - 45 Nm)

Now for something useless, all a complete waste of time! (look at Figure 16-3)