

BRISBANE VALLEY FLYER

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UFOs or UAPs, do they really walk among us? - See page 18

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Greetings Members,

Well, a new, New Year is here, and I hope you all had a great Christmas with your family and friends.

It has been a little bit wet of late, but I hope that it is all behind us now and I am hoping this year will be a great year.

Our first meeting for the year will be on Saturday Feb 2 2024. I hope you can all make it along and meet with friends and stay for a BBQ lunch.

Best wishes

Peter Ratcliffe
President BVSAC

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Are You Really as Good as You Think You Are? Is your opinion of your flying skills realistic, or even relevant?

By Rob Knight [M23-138](#)

Obviously, pilots must have confidence in their ability to carry out their duties to fly as a pilot in command. However, as in all things natural, too much of a good thing becomes a bad one. But where is the line? When does an excess of confidence become a liability to a pilot instead of a necessity? An unrealistic and excessive level of confidence is too often ego-driven and becomes exceedingly dangerous. Perhaps it's time to have a look into our inner souls and take a realistic screen-grab of our egos and consider the effect they can have on our opinion of our real ability perform.

First, and to form a basis, let's take a history lesson and view some of the issues that befell some pilots in my own experience. Every one of these held a self-opinion that was vastly inflated over their real ability to perform. Note that these examples presented only represent a small portion of the actual number of pilots I have seen with this affliction.

In 1979 Wayne was an accountant with a pilot's licence, and amongst his friends were syndicate members owning a Cessna 177 Cardinal (ZK-DAK). DAK was on the flight line and operated by the Waitemata Aero Club where I was the deputy CFI, and where a member of the instructing staff was required to authorise every flight in aircraft operated by the Club.

It was a Saturday, and the weather was, at best, a VFR challenge. Around 0830, a call came into the office from a non-member wanting to hire DAK for a flight to Gisborne, to return the following day. I took the call and declined to accept the hire as the conditions were marginal for even local VFR. He pressed me further and advised that he was IFR rated so my opinion didn't count, I then pointed out that I would not authorise such a flight as the aircraft wasn't cleared for IFR ops. The caller became abrupt and asked if I knew who he was. Of course, I didn't, and said so, whereupon he told me that he was a friend of the owners and that they had said that he could hire the aircraft. I pointed out that the aircraft was on contract hire to the Club and that we had the legal and final say as to who could and should fly it, and under what met conditions. He went off-topic and advised me that my parents weren't married and hung up. I was surprised - I didn't know that!

Half an hour later, one of the owners called and asked for me. He instructed me to authorise the flight as the hirer wasn't a Club member and my refusal was in contravention of the agreement the owners had with us. I refused and gave him the phone number of the Club's lawyer.

The lawyer called me back shortly after and told me the owners had pulled the aircraft off our flight line for the weekend and was therefore not our responsibility. I was to release the aircraft to the man who had called and, apart for fuel purchases and recording the man's name and the aircraft meter reading for our own records, to wash my hands of it. In due course, the caller arrived and with a smirk, loaded four people and a truckload of baggage into the back before departing into the misty drizzle and low cloud.

Around 1430, the Tower called and requested the pilot in command's name of DAK, and also the number of passengers, and their names. I gave him what details I had and he told me that the aircraft had crashed onto the Gisborne Park Golf Club's fourth fairway, demolishing a building. Everyone had survived with non-life-threatening injuries, but were in the Gisborne Hospital under observation.

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I mention all this detail so you can judge for yourself the ego-based mental state of the pilot. He was so grossly over-confident that he felt he could take three passengers on a two-hour flight, in conditions that were marginal for the aircraft's instrumentation and nav equipment. But it was actually worse – he wasn't current, either for his pilot license, or to operate in IMC, he took off in excess of the aircraft's MTOW, and the C of G was aft of the aft limit.

However, his final demise was caused by a basic error that even a near-solo student would be capable of avoiding. He arrived out of IMC on approach for the Gisborne runway, too high and too fast, and it's a pretty long runway so the errors were not tiny ones. Forced into a go around, he applied full throttle but the aircraft didn't respond with normal full power. He staggered off the end of the runway at around fifty feet AGL, marginally above the stall, and wobbled for about a mile before the aircraft gave up the ghost and stalled, to crash onto the fairway. Crunch time - the flaps were still full down, AND the carburettor heat was still in the HOT position.

To add insult to injury, the port wing collided with and demolished a fairway long-drop dunny, with a man engaged in exercising his right to use it. He, too, was unharmed, just embarrassed to be left sitting in the open with his pants around his ankles.

In reality, after the long list of transgressions against common sense, the P in C's ego prevented him from both making sensible pilot decisions and operating the aircraft correctly. I was told that the insurer paid out on the claim by the owners and subsequently sued the pilot for the claim and all their accrued costs. Egos can be expensive to maintain!

Then there was Bernie, the retired school teacher and owner of a lovely Grumman AA5B Tiger. Bernie had spent much of his life in the Pacific Islands teaching in Island schools. On his retirement, he returned to New Zealand and followed his dream of learning to fly.

I met Bernie when he booked me for a PPL renewal (old term for a BFR). Then he owned a Beechcraft M23 Musketeer in which he had learned to fly. It was a nice enough aeroplane, not over-abundantly powered, but quite adequate for an older fella who just wanted to potter around with a couple or three mates. His flying skills were basically sound in all areas except for a consistent issue with recovering from the stall too early, before the aircraft had actually stalled. He was difficult to talk to, he'd spent his whole professional life telling others what to do and had now forgotten the boot was on the other foot. I had to get the official flight-test instruction-standard paperwork from NZCAA and show him what he had to demonstrate before he would agree to another flight during which he would demonstrate the exercise to the required standard. We did, he did, and I passed him.

I saw him again a couple of years later when his next proficiency test was due. We had a laugh about the last one and he flew quite OK and I passed him again. However, in the update brief afterwards, when I advised him of the changes in the NZ Metservice weather briefings, he resisted angrily, he said that he'd simply ignore the changes as they didn't improve anything as far as he was concerned. However, I had signed him off so I merely advised him of the changes and left things as they were.

Advance five years. I am now the CFI at the Wellington Aero Club in New Zealand. ATC called me and told me that a Grumman AA5B had missed Wellington airfield in poor (but still VFR) visibility and they had last seen the aircraft from the control tower flying east, across Lyall Bay, and heading for the Southern Wairarapa area. Would I grab the Club's AA5B and head out and try to make radio contact as the intervening hills meant no tower contact was possible? I went around into Palliser Bay

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and found him, completely lost, orbiting Lake Ferry. I led the pilot back to the airport and he followed me in. Until I actually saw him get out of the Aircraft at the Club's hangar, I didn't know that I was dealing, once again, with Bernie, now an even more irascible 82-year-old with attitude.

ATC was pretty P'd off with his failing radio procedures and his gross failure to comply with requirements (no surprise, here for me) and gave him a rather severe dressing down in front of me, in the office under the tower. I was not reassured at his refusal to be lectured and his aggressive defence of his actions when I could see that he was clearly in the wrong. Later, at the club, over a beer (his – I was still on duty), I found that he'd completely mis-read the map and had not realised that he'd flown directly across the final approach for Wellington's runway 34 without a clearance. And even when he did understand the issue, his blatant refusal to accept responsibility for his actions was alarming. It was all someone else's fault.

His plan was to depart for Ardmore the following day for a church seminar involving people from across New Zealand. He had on board three Pacific Island women, one was his wife, and I was told later that the other two were nieces. We had a teleprinter in those days and I used it to call up the forecasts and attempted to show him that a VFR flight to the Auckland area the following day was foolhardy at best. There was simply too much cloud in the way. But Bernie was Bernie, and I made no headway with reason so figured that not being able to see the hills around Wellington the following morning would make a louder and more convincing statement than I could.

The morning was better, weatherwise, than the Metservice had predicted. Bernie saw no reason to delay so, against my warnings, elected to make the decision that any owner can make, he flew off, around the cloud topped hills and headed north, along the West Coast. I had given him a last-minute weather brief and advised him to land at New Plymouth to pick up a new set of weathers before completing the second half of the journey. Flying up the West coast of New Zealand can be treacherous at times. However, he didn't, and around 1500 hours, Wellington Search and Rescue called me to say that he was missing – overdue - and had exceeded his fuel-on-board figures given on his flight plan.

Four days later a pig hunter found the burned-out wreckage of an aeroplane with four bodies scattered around it. The ensuing enquiry found that he had not even communicated with New Plymouth for a clearance when he passed through their Control Zone, and had not requested or been given any further weather updates. The Accident Investigator concluded that he'd run into an extensive bank of cloud bank known to exist from other PIREPS¹ at the time, just north of Raglan, and, instead of returning to New Plymouth, had attempted to head inland and follow the road from Raglan to Hamilton. He must have been forced to enter cloud because the enquiry suggested that the aircraft had spiralled into the side of Mount Pirongia, from at least 2000 feet AGL. All on board had been killed instantly.

Why do pilots paint themselves into corners. The results are both horrifying and inevitable – if not this time, but maybe on the next one.

Jake was a tradesman with a bent to fly. He was employed servicing forklifts when I was bequeathed him as a pre-solo student by my CFI predecessor at the Wellington Aero Club. On our first booking, I checked his logbook as a matter of course and was astonished to read that he had accumulated

¹ PIREP = Pilot report.

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nearly thirty hours dual training, almost all with the same instructor, and in the same Beechcraft Skipper.

Not commenting at that stage, we flew and I noted that he was always seeking my approval to reassure him that what he was doing was what I wanted. Post flight we retired to the briefing room with coffee in hand.

Under my questioning I found that he had been subjected to an overbearing father all his life. Jake could never do anything right and it had affected his self-confidence to the extent that it was habitually non-existent. The brainwashing he had been exposed to absolutely prevented him ever learning to fly and become a competent and confident pilot in command.

We worked together and eventually I sent him off on his first solo. It was his ultimate dream and I thought that he'd begun to stand on his own judgement but that was not to be. Whilst I was on leave, one of my other "C" Category line instructors, against my direct instruction, sent him solo at Paraparaumu in a crosswind. Not a severe crosswind, but we still ended up with a bent propeller and a gibbering, incomprehensible student pilot, and therein ended his flying training.

The ego issue in this anecdote lies with the instructor. Not only did his ego-driven over confidence lead him to ignore my direct instruction but his lack of knowledge of psychology in pilot training led him to destroy the hopes of one of our members. These issues made him a liability so let's just say I didn't offer any encouragement for him to stay instructing with the Club.

Not all pilots that are unable to imagine they can do wrong are completely inexperienced. I was a new crop duster pilot, waiting for my mentor to arrive for work. There was no hurry: a heavy fog covered not only the valleys, but many of the hill-tops around our base at the Kaipara Flats airfield. Then the silence was broken by another Fletcher that flew in from the direction Dargaville. After cruising around on top for about twenty minutes he found a breaking hole and spiralled down and landed. He taxied in and asked where my mentor was because he'd been told his mentor had appendicitis and he had been delegated to us for training and supervision until his mentor was back on his rudder pedals.

We were talking generally until I asked him how far the fog extended from the airfield and he replied that it was a complete sheet, almost all the way to Dargaville, more than 30 miles away. I asked about the risks of an engine failure and he was completely complacent and said that if the engine failed, he'd put the aircraft down in a paddock. When I asked about the fog, he said he'd just keep the stick still and glide down through it, with no visibility, until he could see and flare.

This was impossible. Fog is cloud, and in cloud you must have a minimum of an ASI, an Altimeter, and some means of ascertaining yaw – usually a bat and ball turn and slip indicator or, in more modern aircraft, a turn coordinator. A compass was also helpful. However, without that old fashioned bat and ball indicator, or a turn coordinator, there is no way of seeing yaw until the magnitude of the yaw is substantial and often too great to correct. However, he was convinced in his invincibility and the topic died. He also died, about two months later stalling in a steep turn trying to dodge a power line that he had failed to see along a ridge line. The Fletcher was not as all-powerful as he had convinced himself it was. He was GOD! He was untouchable and didn't have to fly within the same set of physical laws that other, lower class and unintelligent, pilots, did. Here endeth the lesson in his case!

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This last story deals with a personal friend of mine and it pains me greatly to write this. He was a businessman who lived some fifty miles away from his place of work and he used an aircraft to commute daily. When the weather was inclement, he'd either drive to work, or, more usually, leave it to his deputy, as there were several hours driving involved instead of 30 minutes flying.

Over the several years of friendship, I had noted that sometimes he left it very late in the day before heading home, sometimes even when there were Cb anvils visible, and failing light from the cloud build up to the west. However, he claimed to make it home before ECT² and it was his aircraft, so there was little more that I could do physically.

I did mention to him that I had an instrument hood, and maybe he'd like to do a bit of practice under it but he declined. He told me that he detested instrument flying and that he had only ever done the absolute minimum time under a hood. And his training instructor had told him that he was an above average pilot so, based on that, he'd make sure that he never got into a situation that required flight on instruments. Bloody fat chance of that!

About a year after our last discussion, in spite of his self-imposed pilot standing, he was caught in an unfamiliar area after ECT. His navigation lights were observed crossing the airfield when he did finally arrive, but they disappeared soon after his turn onto base leg. He obviously became spatially disoriented and spiralled in, dying tragically and instantly in the resulting crash beside his innocent passenger. Having spent considerable time on instruments, both as pilot flying and instructing, I believe that he either just lost his orientation in the dark, moonless, and near-starless night with the inevitable result, or that he did not know how to turn his instrument panel lights down and the glare from his glass panel stopped his night vision developing and this resulted in his eyes being unable to recognise the faint horizon. A catastrophe all around, but the painting was on the wall long before the event when his over-confidence allowed him to exceed his actual ability.

So why does this affect some pilots and not others? I believe that it affects all pilots. But some are more hesitant to give themselves a mental over-ride on self-belief. To me, knowing myself in my own mind and talking to, literally, thousands of other pilots (including every one that I have listed here) it depends on an individual's ability to exercise their own imagination. If you can imagine facing the potentially fatal issues yourself, you can deliberately tone down your ego and prevent it from taking over control. The ability to see yourself in a seriously fatal situation causes you to realize that maybe, just maybe, you need to back off and ENSURE that you can avoid such threatening situations and influence fate. Maybe, considering that there's a possibility that I'm REALLY not as good as I think I am, could be a life saver. Luckily, pilots that think like this are in the great majority, otherwise insurance premiums, high though they are, would be vastly higher still.

The other type of pilot, the one that doesn't consider that their skills might not be as good as their ego specifies, simply cannot imagine that they are anything less than perfection personified. They continue to fly and encounter situations in which they have no experience or ability to recover should anything go belly-up. But because it has always gone OK before, they cannot imagine any difficulty, ever, in the future. Difficulties are for other pilots, dumber pilots. Pilots obviously too

**IF YOU CAN'T IMAGINE STUFFING
SOMETHING UP, DANGEROUSLY
AND SEVERLY, THEN FLYING
AIRCRAFT IS NOT FOR YOU.**

A quote by ME
- Rob Knight -

² Evening civil twilight – aka CET for Civil Evening Twilight.

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ignorant, too unskilled, and too brain-dead to avoid problems, so they deserve to suffer the consequences.

Stupid thought it is, and although numerically in the minority, there are too many who think like that. And the worst across the board are pilots with under 250 hours who have yet to face a seriously real emergency. Imagination will not keep them safe when the chips are down. But the scary thing is that they lack the ability to imagine it.

To slightly miss-quote Frank Borman: *“A superior pilot uses their superior judgment to avoid situations which will require them to use their superior skills”.*

Superior judgement comes from a realistic impression and understanding of one’s real flying abilities and skills, not an ego driven rush toward unimagined and thus unexpected dangers and hazards.

As an instructor, the most difficult students to teach to fly were, in order: School Teachers, Lawyers, Doctors of Medicine, then Dentists. These professions require their participants to maintain command and provide advice which, to them, is absolutely correct, and to be obeyed for the best results. In flight training, the customer (read student) is very seldom correct so clashes are inevitable.

E.g., George was a Head Teacher at a local school. He had been converting to type in ZK-DGJ, a late model PA28-140 fitted with an ignition key start system that automatically selected the left magneto (for the impulse coupling) when the key was turned to the START position. However, on this day, DGJ was u/s and George had been allocated ZK-CEQ, a very early PA28-140 which required the pilot to turn the left magneto switch ON and press the starter button. After start, the right magneto was then turned to ON so the engine was running on BOTH. In light of this being his first flight in CEQ, I offered to assist with the start but he shut me down saying that he wanted to do it. He set the start process up but turned both the magnetos ON. After he cranked the engine a few compressions, I again started to tell him the correct procedure and he told me to, “SHUT-UP”. He was paying for it so he would do it. When the crank speed dropped as the battery flattened, I got out, telling him that I’d grab a coffee and watch the performance.

The battery flat, he finally turned everything off and came back into the club to seek my assistance. We were now forty minutes into our booking so I declined, telling him that we’d book CEQ next time as I didn’t have time to check him out at that late stage today. To give him credit, he never did that again and later we became good friends.

Gods, bloody Gods, all of them! Don’t become one – get your ego back down to earth. YOU can stuff up, no, let me correct that, YOU WILL STUFF UP and, under Murphy’s, when you least expect it, when it can do the most harm, and in the worst place possible. Believe it.

Happy flying

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It Could Happen Here, Just as Easily, Too

Arizona Accident Pilot Arrested in Utah After Four Years At Large

By Mark Phelps. Published: January 10, 2024 Updated: January 11, 2024

The *St George News* (Utah) reported today (Jan.10) that, as the result of a traffic stop, the Utah State Highway Patrol has arrested a man facing charges related to a four-year-old fatal aircraft accident. Arizonan Christopher Anderson, 47, was wanted on federal charges including involuntary manslaughter related to the crash of a 1958 Piper PA-22 he was flying in January 2019. The passenger, his girlfriend of 3.5 years, was killed.

Among other discrepancies related to the accident investigation, FAA records revealed that Anderson was issued a student pilot certificate in 2014, but despite numerous reports that he regularly flew with passengers, he had never been issued a private pilot's certificate. In addition, Anderson failed to report to the FAA that he has been an insulin-dependent diabetic since 2002 and used an insulin pump for self-treatment. Without a waiver, such a condition is disqualifying for a pilot medical certificate. Heidi Dowland, 38, Anderson's girlfriend, was the non-pilot owner of the aircraft and was Anderson's passenger on the fatal flight. She reportedly bought the TriPacer for Anderson to fly.

According to information from numerous sources cited in Kathryn's Report, the accident flight was the second leg of a trip that began at Meadview, Arizona, where Dowland had a lake house, stopping for fuel at Kingman Municipal Airport (KIGM) and on to Glendale Municipal Airport (KGEU) to meet with Dowland's sister. The couple had flown from their home base, Prescott Municipal Airport (KPRC), the previous afternoon to Pearce Ferry Airport (L25), a dirt airstrip in Meadview, to attend a birthday party for a friend at a local bar.

Based on a text from Dowland to her sister, the trip to Glendale launched from Pearce Ferry Airport at around 10 a.m. the next day. It remains unclear whether Anderson actually refueled the TriPacer at Kingman about a half-hour after leaving L25, but he later told first responders that 10 minutes after takeoff from Kingman, the engine lost power and he tried to return to the airport. It crash-landed in rough terrain, rolled over, and ended up on its back in a ravine. Dowland died at the scene and Anderson was seriously injured. He crawled from the wreckage and walked to a road where a motorist spotted him and called 911. Anderson was transported to a local hospital and later moved to a larger hospital in Las Vegas, Nevada.

The examination of the aircraft showed no evidence of fuel in the tanks or surrounding ground. It also revealed that both fuel caps were missing, drawing investigators to the conclusion that Anderson failed to replace them after fueling—or attempting to fuel—and that whatever fuel was in the tanks quickly siphoned off in flight. As a result, an official cause of the accident is listed as fuel exhaustion.

Though the party reportedly lasted into the early morning hours, Anderson's emergency treatment revealed no evidence of excessive alcohol but did reveal that his blood sugar level was two times normal, suggesting he had used his insulin pump recently. Anderson was uncooperative in the investigation, including refusing to supply documentation of pilot credentials. He was ultimately charged by a federal court in Arizona with one count of involuntary manslaughter within an aircraft jurisdiction and a second count of registration violations involving aircraft, according to the arrest

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warrant quoted by the St George paper. According to the report, he is scheduled to make an initial appearance in St. George (Utah) District Court tomorrow (Jan. 11) and is currently on federal hold in a local jail.

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Stalling in a Turn.

By Rob Knight [M23-133](#)

Throughout my instructing career, I have been amazed at the extraordinarily high number of pilots holding serious fears, even phobias, about stalling. Their dread, in my opinion, is the unfortunate result of flawed input from numerous sources – their training instructors encouraging fear to enhance their own egos and drive their points home, various Civil Aviation Authorities for not recognising this issue and taking steps to remove this factor from training, drunken stories slurred in bars by other pilots also fearful, and the world news media for generalising in promoting stalls as being inevitably fatal.

One candidate in my past, a student doing a formal PPL flight test, burst into tears and was completely unable to continue with the test after I asked her for a wing drop stall in a PA38 Tomahawk. Obviously, she didn't pass that time but had no difficulty later, after re-training, and her desperate fear of stalling had been erased. Later, when I was able to have a congratulatory social drink with her, she let slip that her limited-experience and poor-quality instructor had told her that, if she didn't follow his instructions exactly, she could expect the aircraft to spin and she would be killed. Total and utter CRAP, and pure fantasy on his part. He later returned to cooking Wisconsin Burgers, she continued with a flying career, becoming a senior captain with Air New Zealand. Need I say more?

Such a fundamental fear of the exercise when not corrected early enough renders any trainee pilot's competence in more advanced stalling practises difficult, at best. And when this pathological dread continues, and exists post qualification, it affects the pilot's competence by drastically reducing his/her ability to act rationally, and to retain and apply normal muscular control over fingers, hands, and feet when making a controlled exit from a stall. Worst of all, that very fear will prevent that pilot from an early recognition of an unexpected stall, and making a timely exit from that state difficult, if possible, at all. Note that I call it an "exit" and not a "recovery". Therein lies a serious terminology flaw tacitly endorsed by the establishment in fear creating anxiety amongst trainee pilots that can remain with them forever. To *recover* means that you have lost something. In this case the students/trainees naturally retain that a pilot has lost or relinquished control when that is nowhere near the fact. Control has not been *lost*, per se, so there is nothing to *recover* from. It's an outdated leftover from the 1920s when stalling and spinning was not understood and loss of control of an aeroplane post stall was real, and control WAS lost. We, in this day and age, should know better. Nowadays, there's nothing to "recover" from! Do we "recover" from a turn? Do we "recover" from a glide? What about a climb? Of course not.

In spite of what you were taught (or currently teach), and have subsequently come to believe as gospel, from a stall we simply make an "exit". Be it a basic stall, a power and flap stall, whatever – even a wing drop stall/incipient spin – we don't "recover", we just make a timely exit from the stall condition by returning the correct streamline airflow across the top surface of the wings. We are idiots that frighten ourselves with the very words we use! Instead, to make that return to unstalled, normally controlled flight, just apply gentle and precise control movements to reduce the angle of attack to below the critical angle, and prevent yaw. Applying control movements with care, accuracy, and reasoned judgement works every time and eliminates the stress and fear that can otherwise be generated in the student. "Recover" suggests urgency to avoid disaster; but what's urgent, and where's the disaster? Fear and desperation will only make an exit less accurate and the student more prone to over controlling and creating a potential confidence disaster.

With even basic stalls held in such trepidation, pilots get demonstrably worse with advanced exercises such as stalling with power, or with flap, or – horrors of horrors – a stall with both power AND flap applied. And don't even mention stalling in a turn, here, heart palpitations alone are likely to kill!

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But STOP. Hold it right there, and dwell on it for a moment. If we view the apparently life-threatening and death-provoking “stall-in-a-turn” exercise in the same light as basic stalls, surely we can “exit” from them with the same ease?

Of course, we can - the exit is the same as for the basic version – take the stick³ forward ONLY just enough to reduce the angle of attack to below the stalling angle, whilst using the rudder to stop the nose yawing from where it is as you take the stick forward, and applying full throttle to minimise height loss. Any panic mode needed? Absolutely NOT! If you **exit** from a stall, you’ve nothing to recover from. Just apply control movements with care and precision. There is absolutely no reason for any brain freeze.

I speak from experience. As a PPL, I carried a stalling phobia as strong as anyone’s. And I didn’t begin to come right until a mentor instructor, Lew Day, during my initial CPL training, gave me these same observations I am giving you.

1. There is nothing to fear (THIS IS VITAL). Then.....
2. Holding the stick lightly (preferable in your fingers) check forward ONLY just enough to break the stall buffet to exit the stall.
3. At the same time, prevent any further yaw with rudder (don’t let the nose wander from where it was when you checked forward on the stick).....
4. While smoothly applying full throttle (to minimise height loss), then.....
5. Pause, then
6. Ease gently out of the resulting dive, levelling your wings as necessary, all with gentle and minimal control movements, and establish a climb back to the commencement altitude.

What could be simpler than that? Or less stressful? So why isn’t it always taught that way? That’s a bloody GOOD question!

While some may think that this sounds too good to be true, it’s not. And, if you doubt me then let me put my money where my mouth is (so to speak) and come with me in my Lightwing and I’ll demonstrate. Most issues creating the fear of stalling exist only in the mind. Let me prove it beyond doubt.

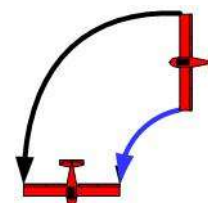
In the meantime, let’s look at this issue of carrying out a stall whilst turning. It’s the same kind of stall - caused by the angle of attack being beyond the critical angle, and the exit will be the same – check forward just sufficient to unstall. After all, over-doing the stick forward bit will just cause a dive which will only aggravate any height loss we experience. We don’t need it! Don’t do it.

A heads-up. Stalls in turns are a little bit less consistent than wings-level stalls. The reason is that the wings in a turn travel at different speeds. The outer wing will follow a slightly longer path than the inner wing. A small discrepancy between their airspeeds will arise, and the outer wing will be slightly faster. This may be sufficient to allow the inner wing to stall slightly earlier than the outer; we could get a bit of a wing sag towards one wing as the stall develops.

Up to this point, we’ve only considered wings level stalls, so let’s continue with how we can get to grips with stalls when the wings aren’t level.

Entry: Carry out HASEL checks. Then....

1. Enter a turn (left maybe).
2. Apply carburettor heat (where fitted).
3. Enter a 45-degree banked turn and maintained that bank angle.
4. Check ball in the middle.
5. Ease the throttle back to about half total movement.



Outer wing (black) travels further than inner wing (blue) in the same time so it must have a higher airspeed.

³ Consider “stick” to be synonymous with “yoke” or “control column”.

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6. Maintain height until the stall occurs. (Carburettor heat to OFF before the stall breaks.)

The Stall Itself:

The stall onset will manifest itself in most light aeroplanes in the same manner as a wings level stall, although the progression from the initial buffet to the deepening stage and the stall sag may be compressed into shorter time span. With the stall break, the life goes out of the aircraft and it sags away, maybe rolling a little into the turn caused by any aileron applied to counter the raised airspeed of the outer wing. Don't react to the roll – level your wings AFTER you have exited the stall.

Exit from the stall (SIMULTANEOUSLY-)

7. Stick forward – with care and control to be just sufficient to remove the buffet (and no more).
8. Apply full throttle (briskly but gently)
9. Use rudder to STOP any further yaw.
10. Gently, with coordinated aileron and rudder, roll back to either wings level or to a reduced angle of bank as you allow the nose to gently rise back to the horizon to the climb attitude for the aeroplane's configuration (flaps down, Undercarriage down etc. as applicable.)
11. When airspeed stabilises at the required climb speed, raise flaps and undercarriage.

When I was taught the stall recovery, my then instructors fired instructions at me faster than an AK47 can fire in full automatic, and I was left the impression that a supersonic response would still not be fast enough to work through their recovery (my exit) process. I was left feeling totally inadequate because I overcontrolled, I shoved the nose down so far to unstall that we left our seats, or I panicked and used a bucket of rudder when a teaspoon full was all that I needed. Or, worse, I got panicked and confused, and used the wrong rudder to stop the yaw and deepened the stall dramatically. Plainly, I was badly scared, and deeply involved in doing something that I did not believe I could do in spite of my very best efforts. If I could meet those bloody instructors now..... .

So, what's my message, I hear you ask? It's short and simple – don't rush a stall exit, take your time and make a careful and considered exit from your stall. It's not deadly. After all, you know it is happening and the aircraft designer has given you all the time you need to make a full and safe departure from the stalled condition without any need to panic.

Aeroplanes are simply not allowed to have the shit-poor stall recovery characteristics the instructors led me to believe were present (by inuendo rather than design). However, my trepidation remained until I learned and accepted that I really could take my time and make specific and carefully controlled corrections. When I did, my stall exits became sweet, quick, easy, non-life-threatening, and polished without any effort at all. And, best of all, stalls no longer scared me!

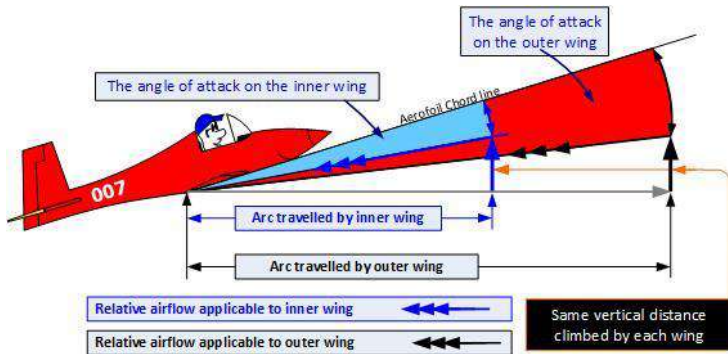
So far, we have only looked at a level flight stall in a turn. What about a stall in a climbing turn? Is it different?

Well, yes and no. It's merely a simulation of a stall in a turn after take-off. The set-up is the same as the level turn except we make the entry from the aeroplane's normal climb speed instead of an altimeter indication. However, to reach the stall, we either reduce power in the climbing turn, or we can use full throttle and simply hold the nose too high to maintain the airspeed. In either case, the airspeed decays as the high drag of the developing climbing-turn stall takes effect.

The symptoms of the approaching stall are the same - falling airspeed (it will likely fall at a quicker rate than in level flight with the same bank angle). Also, additional aileron compared to the level turn will be required to maintain the constant bank angle here, because, not only do we have the same wing airspeed differential, but the angles of attack on each wing differ also.

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That will sound impossible, after all they are both attached to the same fuselage, but I assure you that I am quite correct. Let me explain



The outer wing has both a higher airspeed than the inner wing, and also a higher angle of attack.

The greater angle of attack is on the outer wing and the combined lift imbalance will result in a tendency for the aeroplane to overbank and roll slowly into the turn. If the pilot is maintaining a constant angle of bank for the exercise, he/she will be needing to apply out-of-turn aileron, lowering the aileron on the inboard wing and raising the aileron on the outboard. When the stall develops, the exact position of the ailerons at the stall will encourage either a rolling sag into the turn, or a sagging roll out of the turn. It just depends. But whatever it is, it is seldom savage or fast provided there is no slip or skid. Such roll must be ignored until the stall exit is completed.

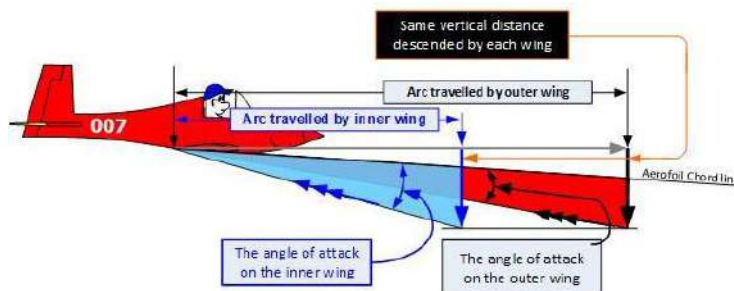
The exit uses the same technique as the level flight stall in a turn. (SIMULTANEOUSLY-)

1. Stick forward – with care and control to be just sufficient to remove the buffet (and no more).
2. Use rudder to STOP any further yaw
3. Apply full throttle (briskly but gently) to minimise height loss.

Then, immediately after recognising the stall has been exited,

4. Gently, with a minimum of coordinated aileron and rudder, roll back to either wings level or to a reduced angle of bank as you allow the nose to gently rise back to the horizon to the climb attitude for the aeroplane's configuration (flaps down, Undercarriage down etc. as applicable.)
5. At a safe airspeed, raise undercarriage and flaps, and re-establish either the appropriate climb speed with a reduced angle of bank or return to wings level, straight flight.

Again, there is no need for rapid or abrupt control movements to make the exit. Measured responses are always better than a poke in the eye. Take your time and it will all work out far better than you ever believed that it would, or even could.



The outer wing has a higher airspeed than the inner wing, but, in a descent, the inner wing has a higher angle of attack. At the stall, this variation can have a profound consequence if the aircraft has slip or skid.

This leaves only the exercise of a stall in a descending turn. Taught as a simulation of a stall in a descending base-leg turn onto finals, the source of the majority of stall/spin fatal accidents, top quality training is vitally important here.

The set-up for training is simple. At the required height, set up a low-powered, trimmed, straight

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descent, in the desired approach configuration with flaps, undercarriage, and propeller pitch (if adjustable pitch is available) set appropriately.

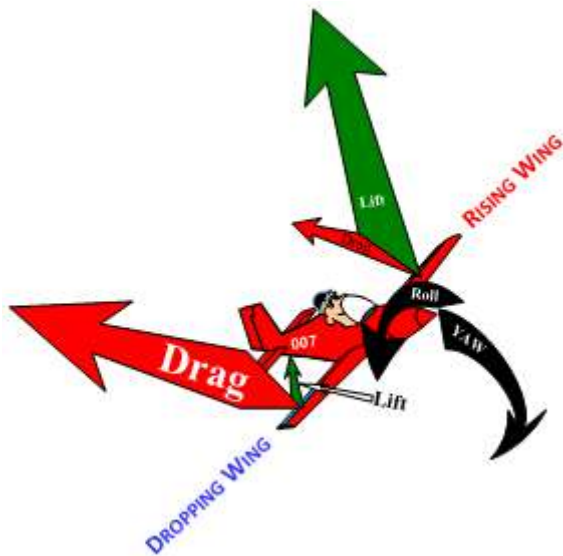
Roll into a turn and, whilst maintaining the initial nose attitude, increasing the bank angle with back-pressure until the stall occurs. Again – the same symptoms of the onset will be present – a deepening buffet until the break. Now things can get exciting.....

However, we are about to fall into one of nature's most nasty and vicious traps. The inner wing's higher angle of attack compensates for the outer wing's higher airspeed so there may be little if any over bank experienced. However, when the stall occurs, in a correctly rigged aeroplane, it WILL be the inner wing that stalls first as it has the higher angle of attack. The aircraft is likely to roll into the turn and the nose drop – seemingly simultaneously. It's a "snap"! Literally, And, it's no wonder it catches unwary pilots by surprise.

However, to an aware pilot, the usual pre-stall buffet will occur and deepen, so the warnings are still there although, once again, the time lapse from onset to full stall airflow breakaway can telescope very quickly.

The correct exit is exactly the same as before; don't panic, just ease the stick forward enough to stop that buffet while stopping the further yaw and adding full throttle. Use no more elevator or rudder control than necessary to achieve this. Without delay, when the aeroplane has exited the stall and is flying again, either roll gently back to wings level, or maintain a reduced bank angle whilst you set up a controlled nose attitude and get the gear and flaps sorted out to what you require. In the event that this exercise is real – DON'T try to land off that approach. Get to hell out of it and start again.

However, to the unwary pilot, this could be a trapdoor to disaster. Any yaw towards the inner wing during the turn pre-stall will aggravate the situation and can produce a very short buffet sequence followed by an instant stall/savage wing drop, at speeds considerably higher than the normally expected stall speed. The aircraft is already banked and the term used is, "tuck under", as the lift and drag imbalance caused by the stalled and the lesser stalled wings rolls the aircraft towards the inner wing, possibly beyond an inverted state. At the same time, the drag generated on the stalled wing will pull the nose to, or close to, the vertical. A surprised pilot will instantly pull the stick back in fright and the deeply stalled aircraft will dive into the ground. And another day is ruined! This classic error is most likely when a pilot overshoots the extended centre-line when turning onto finals.



Lift and drag forces in a stall in a descending turn

Already steeply banked, and reluctant to add more bank angle, he/she applies rudder to yaw the nose

around. The aeroplane instantly stalls, snap-rolls towards the lower wing, and the pilot has an inverted aeroplane at 400 feet AGL. Panicked, he/she pulls that stick back in terror and the aircraft gyrates into the ground and the statistics list grows yet longer.

Had that pilot instantly removed the buffet/break in the stick feel at the instant the stall and snap occurred, by checking forward that tiny bit to unload the wings and reduce that angle of attack, the aeroplane might have been in an unusual attitude, but that can easily be remedied. But what all too often happens is that panicked fright locks the pilot's arms in a full aft position holding full back stick and locking the aeroplane into a deathly stall/spin.

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I'll leave it there. Your stall training should leave you knowing that ANY unexpected buffet should instantly be met with stick forward in case the buffet was caused by the onset to an unexpected stall. Only after executing this, and ensuring that no stall exists, can other control movements be made. If no stall exists, this will quickly become apparent and no harm will be done.

Happy flying

----- ooOOoo -----

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NOTICE

Wishing to make contact

I would like to discuss with anyone that has already installed Liquid Cooled Heads on a Jabiru motor their experiences, and any pros, cons, and advice.

Clive Ryan

Tel: 0403 038 23 or Email: cfryan50@yahoo.com.au

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Do They Really Walk Among Us?

From Future of Flying Newsletter 023-038

Is the U.S. Government Secretly Harboursing UFOs?



C-SPAN2

In what was probably the most exciting congressional hearing ever, retired U.S. Air Force major and former intelligence officer David Grusch told Congress that the Pentagon has been covering up a “multidecade” UFO retrieval and reverse engineering program, misusing congressional funds to do it. Grusch even alleged the government is hiding “nonhuman” spacecraft and biologics.

Grusch said that while serving as an intelligence officer, he was told about the secret program but denied access. At the time, he reported to the All-domain Anomaly Resolution Office (AARO)—a Department of Defense program that studies unidentified aerial phenomena (UAPs)—and served on two Pentagon UAP task forces.

He testified that he interviewed more than 40 witnesses, including some with direct knowledge of the project’s activities. Among other things, he said that the government is experimenting on “nonhuman” UFOs and claimed to know the location of these spacecraft. The Pentagon fiercely denied the allegations.

Last week’s hearing riled up both political parties, with each calling for transparency from the DOD. Two former fighter pilots who testified alongside Grusch said the government’s system for UAP reporting is inadequate and raised concerns of intimidation and silencing of witnesses.

The DOD has a few programs dedicated to studying UAPs, including the AARO and a UAP Task Force. NASA also has a program to study the phenomenon. Most UFOs have been explained as balloons, drones, optical illusions, or other mundane causes. But a significant amount of them remain unexplained, flying and manoeuvring unlike any known technology.

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“I urge us to put aside stigma and address the security and safety issue this topic represents. If [UAPs] are foreign drones, it is an urgent national security problem. If it is something else, it is an issue for science. In either case, unidentified objects are a concern for flight safety. The American people deserve to know what is happening in our skies. It is long overdue,” said ex-Navy pilot Ryan Graves.

2001: *A Space Odyssey* screenwriter Arthur C. Clarke once said, “Two possibilities exist: Either we are alone in the universe or we are not. Both are equally terrifying.” Personally, Grusch’s testimony has made me more of a believer. Either it’s one of the biggest hoaxes of all time, or the government really does know more than it’s letting on.

But whether the mysterious objects come from Earth or beyond, pilots should be somewhat concerned. The FAA told *FLYING* it does not have its own dedicated UAP reporting system, instead deferring reports to the DOD. It has not made any plans to create one. And if Graves’ claim that 95 percent of UAP sightings go unreported is accurate, that’s part of the problem.

The public does not yet know what these unexplained UAP sightings are, and it may never. But we do know there are hundreds of unknown objects permeating U.S. skies, and that’s a concern for airspace safety.

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USAF Reports B-1B Landing Mishap In South Dakota

Reports out of Ellsworth Air Force Base in South Dakota indicate all four members of the crew of a B1-B Lancer bomber are safe after ejecting from the aircraft and landing safely.



B1-B Lancer

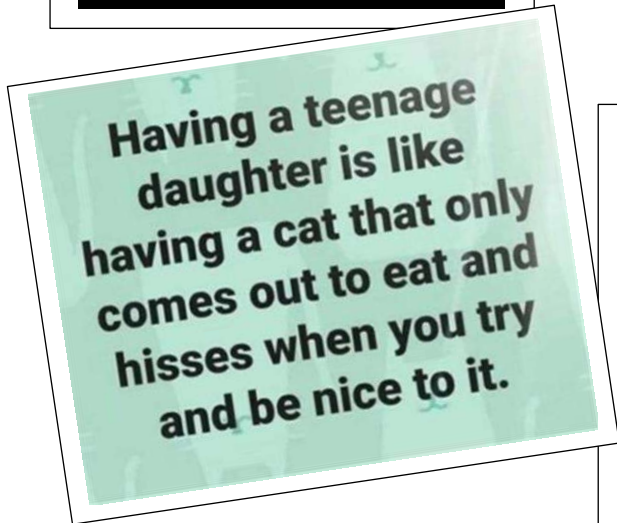
The accident occurred about 5:50 p.m. local time on January 4, 2024, as the aircraft was preparing to land at Ellsworth as part of a routine training mission, according to a statement from the Ellsworth base public affairs office.

According to news reports, Ellsworth is home to the U.S. Air Force 28th Bomb Wing, which includes 27 B-1B Lancers. The base is one of only two worldwide that hosts the B-1B. As of 2021, the Air Force counted its B-1B fleet at 45 of the swept-wing, supersonic aircraft. They are scheduled to be progressively replaced after 2025 by the Northrop Grumman B-21 Raider.

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FLY-IN Invites Looming

WHERE	EVENT	WHEN
Murgon (Angelfield) (YMRG)	Burnett Flyers Breakfast Fly-in	See website for next planned event". Confirm details at: http://www.burnettflyers.org/?p=508
Watts Bridge (YWSG)	Watts for Breakfast	Keep March 03 rd to come an join the Watts for Breakfast group. Starts 0730 'til 0930. Come and EAT. See https://wattsbridge.com.au



Education counts:

When I was a boy I decided I wanted to be a doctor so I took the entrance exam to go to medical school. One of the questions asked to rearrange the letters PNEIS into the name of an important human body part which is most useful when erect. Those who answered "spine" are doctors today. The rest of us are sending jokes via email.

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The Days of Our Lives (Feedback from a Flying Instructor)-

By Rob Knight

I was still doing the paperwork for my previous student when Susan walked up to the flight desk counter to report in for her trial flight (TIF). As my last student walked away, I introduced myself and asked her if she'd like a coffee. No, OK, then let's find a briefing room and talk about what we're going to do.

Susan was the neighbour of another Club member and was at the club as the result of an invitation from the neighbour to take a trial flight and see if she'd like to learn to fly. The neighbour made the booking and now here she was to try out an aeroplane. And here I was, with a friendly, attractive, young woman following my every word as I pattered the pre-flight and told her all about the aeroplane and how it flew. Her questions were good, and she seemed to follow my answers well. All-in-all, a potentially good student.

A few minutes later, the engine was running and I was calling Ardmore tower for a taxi clearance for Charlie Hotel Foxtrot to the training area with 2 POB⁴.

The weather was good, scarcely a cloud anywhere and everything capped with blue. The wind was a light southerly the traffic was a typical busy Saturday, mid-morning, as I opened the throttle and we were accelerating down runway 21.

As we climbed away, she giggled loudly and I looked across at her. She had a wide beaming smile and her eyes showed every sign that she was enjoying the experience immensely. At 700 feet I puffed a touch of aileron and rudder and banked about 10 left to head out into the training area when the day fell apart.

The left wing was slightly down when she screamed and threw herself as far across the cockpit to the right as her 4-point harness allowed. In doing so, her hand smashed my sun glasses into my face, breaking the lens and cutting my face and the bridge of my nose.

I pulled the broken frames off my face and levelled the wings. She fell back into her seat, half naturally and half as the result of a not-to-delicate push from me. With the wings level she behaved as though nothing had happened, and the same joyous smile was again playing across her face. I mopped the blood running down my cheek with my sleeve, turning it dripping red, as she watched, completely abstractly. There was no sign of any one home. More than a little alarmed, I tried a gentle right turn and again she screamed and tried to climb up the left side cockpit wall. This really was scary – I was strapped beside a fruit cake with an overdose of raisins.

By this time I was approaching Drury, one of the common VFR reporting points for re-joining the circuits so I called for a re-join. We were cleared to join downwind for 21, making number 7 to land. I levelled off at 1130 feet, and all I had to do now was turn around. I wanted to go back.

As any back caused a sensational change in her demeanour, I slowly kicked the rudder and roughly yawed the nose around. It was neither easy, nor quick, and it wasn't pretty either. But she ignored it. A nice balanced angle of bank turned her into a raging fury, but being yawed and slopped sideways was apparently fun. When turned around I joined downwind and as quickly as possible we were back with the tires on the ground.

Back in the clubroom I had lots of questions to dodge about my bloodied shirt, face cuts, and broken glasses. I wrote out her receipt and she told me she had enjoyed the flight immensely. She wanted to start training. I told her that it was our busy time of the year and she'd need to call us back in a couple of months and see how the bookings were going. I never heard from her again.

----- ooOOoo -----

⁴ POB – persons on board ten aeroplane.

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Heinkel He 178

By Rob Knight [M23-144](#)

The Heinkel He 178 was the first practical turbojet powered aircraft to fly when its wheels lifted off the runway in Germany on August 27th 1939.

The Heinkel He 178 was an experimental aircraft designed and produced by the German aircraft manufacturer Heinkel. It was the world's first aircraft to fly using the thrust from a turbojet engine.

The He 178 was developed to test the jet propulsion concept devised by the German engineer Hans von Ohain during the mid-1930s. Having secured the industrial support of Ernst

Heinkel, von Ohain was able to demonstrate a working turbojet engine, the Heinkel HeS 1, in September 1937. Heinkel pursued development of the He 178 as a private venture, independent of the German authorities and the Luftwaffe, keeping the aircraft relatively secret for much of its development. Heinkel was keen not only to demonstrate the capabilities of aviation gas turbines, but had a separate emphasis on developing high-speed flight technologies.

On 27 August 1939, the He 178 V1, the first prototype, performed its maiden flight, piloted by Erich Warsitz. This flight, which only lasted for six minutes, had been preceded by a short hop by the same aircraft three days prior. Due to its performance limitations, such as a maximum speed of 598 kilometres per hour (372 mph) and its relatively small endurance, the aircraft failed to impress Nazi officials such as Ernst Udet and Erhard Milch, who attended a demonstration flight. Heinkel subsequently developed a twin-engine jet-powered fighter aircraft, building on the lessons of the He 178, to produce the He 280.

The He 178 provided valuable test data to guide the development of subsequent jet-powered aircraft. The He 178 V1 prototype itself went on static display in Berlin for a time before it was destroyed by an Allied air raid on the city in 1943.

In 1935, Hans von Ohain, a young German engineer, successfully took out a patent on the use of the exhaust from a gas turbine as a means of propulsion. Von Ohain presented his idea to the aeronautical engineer Ernst Heinkel, who was sufficiently impressed that he agreed to help develop the concept. This industrial support would prove highly beneficial to von Ohain's work. According to *New Scientist*, Heinkel had already been interested in the potential of the gas turbine prior to encounter von Ohain and his work.

During September 1937, von Ohain successfully demonstrated his first engine, the Heinkel HeS 1.[2][3] Accordingly, it was promptly decided to begin designing an aircraft for which a similar such engine could be installed and tested in the air. This aircraft, which would be designated He 178, was designed around von Ohain's third engine design, the HeS 3, which burned either diesel fuel or



Heinkel 178 V1, 1938



The He 178 V1 in flight with gear extended.

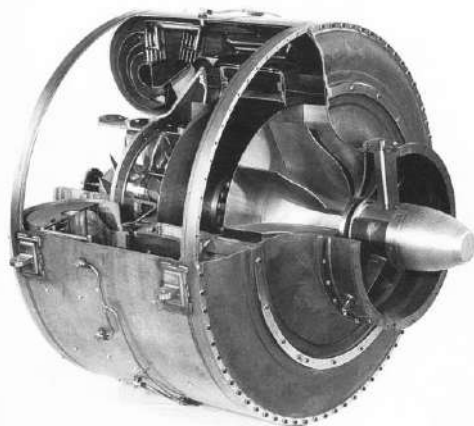
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gasoline. To support the programme, the HeS 3 was test flown in a Heinkel He 118, but only as a supplemental engine to the conventional piston engine that it retained.

The He 178 was a relatively compact aircraft, featuring a primarily metal fuselage and using a largely conventional configuration and construction. The nose accommodated the air intake for the engine, which was housed within the central fuselage. The aircraft was fitted with tailwheel undercarriage. The main landing gear was intended to be retractable, but actually remained fixed in the "down" position throughout the flight trials. It was furnished with high-mounted wooden wings that had the characteristic Günter brother's elliptical trailing edge. Photos showing a "straight wing" (straight-line-taper in the wing planform, for both the leading and trailing edges) were of the second prototype He 178 V2, which never flew under power.

On 27 August 1939, the aircraft performed its maiden flight, only days before Germany invaded Poland. This flight, piloted by Erich Warsitz, lasted only six minutes and almost ended in near-disaster due to a misjudgement during the unpowered landing approach, but was successfully recovered.

Warsitz later described his groundbreaking flight: "I moved the throttle levers gently forward. As the aircraft began to roll, I was initially rather disappointed at the thrust, for she did not shoot forward as



Heinkel Strahltriebwerk HeS 3B engine, cutaway example. (Deutsches Museum)

the 176 had done, but moved off slowly. By the 300-metre mark she was moving very fast. Despite several attempts I could not retract the undercarriage. It was not important, all that mattered was that she flew. The rudder and all flaps worked almost normally; the turbine howled. Now I would have to take my chances with the landing, losing altitude by side-slipping. I restored her to the correct attitude just before touching down, made a wonderful landing and pulled up just short of the Warnow."

Heinkel had developed the turbojet engine and the testbed aircraft, the Heinkel He 178 V1, in great secrecy. Their existence was concealed even from the Luftwaffe.

On 1 November 1939, after the German victory in Poland, Heinkel arranged a demonstration of the aircraft before a group of Nazi officials. While Hermann Göring, the commander in chief of the Luftwaffe, was not in attendance, the demonstration was watched by Ernst Udet and Erhard Milch, Minister of Aircraft Production and Supply, however, they were reportedly not impressed by its performance. While the He 178 had been a success on a technical basis, its speed was restricted to no greater than 598 kilometres per hour (323 knots), even when fitted with the more powerful HeS 6 engines, capable of generating up to 5.8 kN (1,300 lbf) of thrust, while its combat endurance was limited to only ten minutes.

Heinkel was disappointed by the lack of official interest in his private-venture jet. In his autobiography, he attributes that to the failure of the leaders of the Reichsluftfahrtministerium to understand the advantages of jet propulsion and the breakthrough that He 178 represented. Undeterred by a lack of support from external officials, Heinkel decided to embark on the development of a twin-engine jet fighter as a private venture, harnessing what had been learned from flying the He 178 prototype. This would result in the He 280, the first prototype jet-powered fighter aircraft. It was not derived from the He 178, however, partially as some aspects of the design had deemed to be unsuitable for further development, such as mounting the engine within the fuselage which proved to be impractical.

Unknown to Heinkel, the Reich Air Ministry had already been developing its own jet technology. In fact, in September 1939, the development of jet powered single-seat aircraft was ordered to continue despite a general order to cut back on non-core development work as to get certain aircraft

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types operational as soon as possible. However, the jet engines that would be developed by Junkers and BMW would differ considerably from those engines used by the He 178, instead favouring the axial flow approach in place of the earlier centrifugal design. Nevertheless, the He 178 programme was a valuable source of test data that aided subsequent development efforts considerably.

The He 178 V1 airframe was placed on display at the Deutsche Luftfahrtsammlung in Berlin, where it was destroyed in an air raid in 1943.

General characteristics

- **Crew:** 1
- **Length:** 7.48 m (24 ft 6 in)
- **Wingspan:** 7.2 m (23 ft 7 in)
- **Height:** 2.1 m (6 ft 11 in)
- **Empty weight:** 1,620 kg (3,571 lb)
- **Max take-off weight:** 1,998 kg (4,405 lb)
- **Powerplant:** 1 × Heinkel HeS 3 turbojet engine, 4.41 kN (992 lbf) thrust
- **Maximum speed:** 598 km/h (372 mph, 323 kn)
- **Range:** 200 km (120 mi, 110 nm)

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First Officer Says Shooting Threat Was Merely a Joke

Jonathan J. Dunn, a former Delta Air Lines first officer, allegedly threatened to shoot his captain after the captain suggested diverting for a passenger's medical emergency. Dunn called the incident a mere joke.

Dunn, charged with interfering with a flight crew, made his first court appearance in Salt Lake City after being indicted by a grand jury on Oct. 18, 2023.

The altercation between Dunn and the captain, who remains unnamed, occurred back in August 2022 on a flight from Atlanta to Salt Lake City. New details reveal Dunn allegedly became agitated when the captain proposed diverting to Grand Junction, Colorado, if the passenger's condition worsened. Dunn, a member of the Federal Flight Deck Officer program at the time, then threatened to shoot the captain multiple times if he instigated a diversion, according to court documents.

It is now reported that Dunn admitted to threatening the captain, but intended it as a joke. His lawyer argued that he should not be deemed a threat as he has no prior criminal record.

However, Dunn, a former Air Force reserve officer, has a history of legal disputes. In a previous case, he filed an unsuccessful lawsuit against the Pentagon in an attempt to avoid disciplinary actions by the Air Force for refusing the COVID-19 vaccination. He was later relieved of his command for "poor judgment and abuse of authority."

If convicted, Dunn could serve 20 years in prison. His trial is set for March 12

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Keeping up with the Play (Test yourself – how good are you, really?)

1. An aeroplane can stall with its nose below the horizon and with greater airspeed than its published stall speed. How can this happen?
 - A. It can't. An aircraft stall is caused by a lack of airspeed.
 - B. By the pilot retarding the throttle at a critical time.
 - C. By the aircraft being loaded to a point in excess of its maximum take-off weight.
 - D. By the pilot allowing the critical angle of attack to be exceeded.
2. When forced to turn in a confined space, should a pilot slow down (lower airspeed = less lift) or maintain a higher airspeed (and therefore more lift) to turn in the smallest radius?
 - A. Maintain at least the cruise airspeed to ensure the aircraft doesn't stall in the turn.
 - B. To slow down as a smaller radius will be achieved at a reduced airspeed.
 - C. Maintain the maximum speed possible to prevent a spiral dive.
 - D. To slow down to provide more time for decision making.
3. A pilot flying in Australia joins the circuit and reduces power to slow down. If he had been flying due west at the time of the deceleration, what would his magnetic compass do whilst the deceleration was occurring?
 - A. Remain on 270°.
 - B. Swing towards the north.
 - C. Swing towards the south.
 - D. Topple and become unusable until the gyros had re-stabilised.
4. A pilot adjusts an in-flight adjustable trim tab to hold the nose down a little in level flight. Will the adjustable trim tab need to move, and if so, up or down?
 - A. No. Adjustable trim tabs are always fixed.
 - B. No. Adjustable trim tabs hold an airspeed, not an attitude.
 - C. Yes. The adjustable trim tab moves DOWN.
 - D. Yes. The adjustable trim tab moves UP.
5. Whilst in flight, a side gust of wind causes the aeroplane to roll. How can a side force on the aeroplane produce a rolling motion?
 - A. Because the side gust causes yaw about the vertical axis, which, in turn, increases the airspeed on one wing and decreases it on the other. Such a lift imbalance creates roll.
 - B. Because the side gust causes pitch about the normal axis and thus roll.
 - C. Because the wing's dihedral, the side of the aeroplane which suffers the gust then rises and so the aeroplane rolls.
 - D. Because the side of the aeroplane on which the gust acts, experiences a rise in air pressure which increases the lift on that side so producing roll.

See answers and explanations overleaf.

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If you have any problems with these questions, see notes below, or call me (in the evening) and let's discuss them. Rob Knight: 0400 89 3632 (International +61 4 0089 3632), or email me at kni.rob@bigpond.com.

1. D is correct.

A stall occurs when the critical angle of attack is exceeded. This can occur in any nose attitude, upright, or inverted, and has nothing to do with aeroplane attitude or airspeed.

2. B is correct.

The lower the airspeed the smaller will be the radius of turn. Just as one experiences when riding a bicycle, when travelling slowly. The tightest, smallest radius turns can be achieved. For example, doubling the airspeed will result in a radius of turn that is four times greater, while tripling the airspeed would result in a radius that is nine times greater.

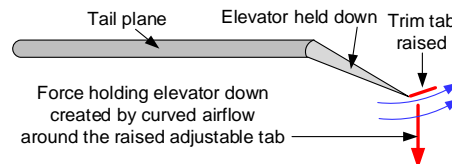
3. B is correct.

The magnetic compass provides an acceleration/deceleration error when changing airspeed, and the error is greatest when flying on a heading of east or west.

A common mnemonic for remembering this fact is **SAND** – the compass needle will swing towards **SOUTH** under **ACCELERATION** on east or west, and towards **NORTH** under **DECELERATION** on the same headings, 090 or 270.

4. D is correct.

To hold the nose down, forward stick is necessary which will force the elevator to angle DOWN, to raise the tail. To hold the elevator DOWN, the adjustable trim tab must be raised.



Schematic, and not to scale.

5. D is correct.

The gust will cause the aircraft to yaw about the vertical axis which will then cause an increase in the local airspeed on the outer wing and a reduction of local airspeed on the inner. Such a lift imbalance will create roll.

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- Brisbane Valley Flyer -



Aircraft Books, Parts, and Tools etc.

Contact Rob on mobile – 0400 89 3632

Tow Bars

Item	Condition	Price
Tailwheel tow bar.	Good condition	\$50.00

Aircraft Magnetic Compass (Selling on behalf)

Item		Price
Wired for the • SOLD • ment, • and replenished.		Open to Offers
Magnetic compass: Top panel mount, needs topping up with baby oil.		\$45.00

Propeller Parts

Item	Condition	Price
Propeller spacers, Assorted depths, all to fit Rotax 912 UL/ULS propeller flanges	Excellent	\$100.00 each
Spinner and propeller backing plate to suit a Kiev, 3 blade propeller, on a Rotax 912 engine flange.	Excellent	100.00

For all items, Contact me - on mobile – 0400 89 3632

Or email me at:

kni.rob@bigpond.com

Brisbane Valley Flyer -

Aircraft for Sale Kitset - Build it Yourself

\$1,780.00 neg

DESCRIPTION

All of the major components needed to build your own aircraft similar to a Thruster, Cricket or MW5.

- Basic plans are included, also
- Hard to obtain 4" x 3" box section, 2 @ 4.5 metres long.
- Wing spar & lift strut material - 6 tubes of 28 dia. x 2 wall.
- 20 fibreglass ribs plus the moulds,
- 16 spar webs plus the moulds,
- 2 fibreglass flat sheets for the leading edges - 4 metres long x 1.1 metres wide.
- All instruments including,
- A Navman flow meter,
- A Powermate rectifier regulator,
- A ballistic parachute,
- A 4-point harness,
- Set fibreglass wheel pants, and
- More.



Box sections and tubes



Flow Meter, Navman, Ballistic Chute, etc

**A very
comprehensive
kit of materials**



Ribs, tubes, spats, etc

Colin Thorpe. Tel: LL (07) 3200 1442,

Or Mob: 0419 758 125

- Brisbane Valley Flyer -

Thruster T85 Single Seater for sale.

\$9,750.00 NEG

Beautiful classic ultralight single seater taildragger Thruster for sale; to good Pilot. Built in 1984, this is a reluctant sale as I inherited Skyraanger V Max and two aeroplanes are too many for me.



The aircraft at Kentville



New Engine Rotax 503 Dual Ignition has only 10



Fuel tank



Instrument panel

Details

Built - 1991	Serial Number - 312
Model - Thruster 85 SG	Rego Number – 10-1312
TTIS Airframe - 638	Original logbooks - YES
Engine - *NEW* Rotax 503 DIUL	Next Annuals due – 05/11/2023
TTIS Engine – 10 hours	Propeller – Sweetapple, Wood, 2 Blades (as new)

Instruments - RPM, IAS, VSI, ALT, Hobbs meter, New Compass, CHTs, EGTs, Voltmeter & fuel pressure gauge

Avionics - Dittel Radio 720C and new David Clark H10-30

Aircraft is fitted with Hydraulic Brakes. Elevator Trim. Landing Light. Strobe Beacon. Auxiliary Electric Fuel Pump. is in excellent mechanical condition and the skins are "as new".

Offers considered. Call Tony on 0412 784 01

Brisbane Valley Flyer -

Sky Dart Single Seat Ultralight for Sale.

\$4,500.00 NEG

A single seat, ultralight, Taildragger. Built in 1987, this aircraft has had a single owner for the past 18 years, and is only now I am regretfully releasing it again for sale. I also have a Teenie II and am building another ultralight so I need the space.



The landed Sky Dart III rolling through at YFRH Forest Hill

TTIS airframe is 311 hours, and the engine, TTIS 312 – is just 1 hour more. Up-to-date logbooks available. 2 X 20 litres tank capacity. To be sold with new annuals completed.

It is easy to fly (for a taildragger), and a great way to accumulate cheap flying hours.

Call me to view, Bob Hyam,
Telephone mobile 0418 786 496 or
Landline – 07 5426 8983, or
Email: bobhyam@gmail.com



Landed at McMaster Field after my flight back from Cooma just West of Canberra. In the cockpit with me is GeeBee, my dog

Single Seat T84 Thruster, disassembled and ready for rebuild.

I have a T84 single seat Thruster project in my hanger at Watts bridge.

The fuselage is on its undercarriage, the wing assemblies are folded up and the skins are with them.

Included is a fully rebuilt Rotax 503 dual ignition engine and propeller.

And, most importantly – the aircraft logbook!

Asking price \$5000.00

Contact John Innes on **0417 643 610**

- Brisbane Valley Flyer -

Slipstream Genesis for Sale

Slipstream Genesis. Built 2001. Two seats side by side, powered by 80 hp 912UL Rotax, driving a Warp Drive 3 bladed prop. Cruise 70-75 knots. Empty weight 304kg, MTOW 544 kg, Payload 240 kg. Fuel tanks hold 78 litres. With fuel burn averaging 16 litres/hr, still air endurance (nil reserve) is theoretically 5 hours, or 350 nm. Aircraft always hangared. It has been set up for stock control or mustering, and is not fitted with doors.

Registered until 13 October 2024, currently flying, and ready to fly away

Total Hours Airframe: 149.7. Current, up-to-date, logbook. Aircraft flying so these figures will change

Total Hours Engine: 1673.9. Annuals/100 hourly inspection due 07/06/2024. Sprag clutch replaced January 2020, gearbox overhauled January 2020. Just undergone ignition system overhaul. One CDI Ignition unit replaced PLUS brand-new spare unit included in sale. Easy aircraft to maintain - everything is in the open. Comes with spare main undercarriage legs, spare main wheel, and nosewheel with other assorted spare parts included. Sale also includes spare engine ready to fit (logbook available).

Fabric good, seats are good, interior is tidy. Fitted with XCOM radio/intercom. Basic VFR panel with appropriate engine instruments, and compass.

An article on this aircraft was published in Sport Pilot, June 2019 issue. See front cover and pilot report within.

Must sell: two aeroplanes are one too many. Quick sale - Fly it away for \$10,000 including spare engine.

Contact **Rob Knight** tel. +61 4 0089 3632, or email kni.rob@bigpond.com for details and POH.



Brisbane Valley Flyer -

Aircraft Engines for Sale

Continental O200 D1B aircraft engine

Currently inhibited but complete with all accessories including,

- Magneto's,
- Carburettor,
- Alternator,
- Starter motor,
- Baffles and Exhaust system, and
- Engine mounting bolts and rubbers.

\$POA

Total time 944.8 hours. Continental log book and engine log are included.

Phone John on **0417 643 610**

ROTAX 582 motor.

Ex flying school, TTIS 600 hours, and running faultlessly when removed from aircraft for compulsory replacement.

No gearbox, but one may be negotiated by separate sale if required.

Interested parties should contact.....

Kev Walters on Tel. **0488540011**

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