AG FLYING

I had been a Flying Instructor at Scone weekends for some time.
One night in the pub Col Pay says to me, ‘How about doing an Ag Rating?’
This was in 1980.

That’s how it started. Well, not quite. Ever since around age ten I had wanted to.

My training for an Agricultural Pilot Rating commenced with an endorsement on the Cessna 185. This type of aircraft requires a little extra skill in the use of brake and rudder during take off and landing because it is fitted with a tail wheel.

I was then dispatched with another pilot in a Fletcher to ride 'shotgun', while I learned a little about spreading superphosphate. After a couple of days I was then allowed to fly, while the other pilot sat in the right hand seat. Those days we had no dual control Fletchers, which meant that once the instructor moved to the right seat he had little control if the one learning got into difficulty. My initiation was spreading super phosphate, SF 45, in the Coolah area some forty minutes flying time west of Scone. We worked out of a slightly sloping, black soil, cultivation paddock. After all those years of flying low powered light aircraft, it was fantastic to move the throttle forward and feel four hundred horsepower at your beck and call. However it was not long before I came to realise that there were many days when even four hundred horsepower was way less than that required to carry the load.

I learned, in agricultural operations, the pilot steers the aircraft when on the ground to follow the same wheel tracks in order to pack down the soil with the tyres and make for a faster surface. One did anything one could to increase acceleration.

During this time must have been the day of the running of the Melbourne Cup. I remember someone bringing us a message that there was a luncheon being held at the nearby homestead and we were requested to cease operations until it was over so not to make too much noise.

Unlike any other flying training there were never any ground briefings before flight. You just got in and went.

As I continued with this training the summer was becoming hotter and the Fletcher was finding the going much harder in the thinner air.

One day we found ourselves working up under the Crawney Range which rises to four thousand seven hundred feet in height, near to the location of the wreckage of the Australian National Airlines DC 3 'Lutana', which crashed in 1948, killing all 13 people on board.

We were working out of a short airstrip on 'Glen Dhu', with the usual power line at the bottom which we had to clear, and the block we were spreading involved climbing over a thousand feet before commencement. We would fly as close as possible to the right side of the valley trying to gain lift off some of the ridges, or wherever we spotted eagles soaring.

As the day became hotter the aircraft's performance diminished. Eventually I found myself in the position that I just could not gain enough height. We had just refuelled, hence were some 300 pounds heavier, and the Fletcher, roaring her heart out on full power, was on the point of crashing into trees. I had been determined to hang onto the load for as long as possible and it was not until the instructor sitting beside me screamed in my ear, 'You had better do something!', that I pulled the dump leaver. Within seconds we had cleared the trees - just.

Over the years in all the times I have had to dump, and there have been many, many, I have never let the complete load go. In fact often a couple of hundredweight was enough to get one out of trouble.

It is an incredible feeling when you dump. At one moment the aircraft is falling out of the air and in grave danger of crashing into some obstacle. The next, once the load is released, the machine is almost uncontrollable and seems to feel to jump out from under you with a newfound lease of life. It feels like you are being propelled upward by a rocket.

Next in training, I did some simulated crop spraying in the Cessna 185, which involved flying runs across paddocks at about eight or ten feet above ground level, between trees, under power lines, etc. Then some actual spraying in a Cessna Ag Wagon, solo - a brand new one at that!

The testing officer from the Department of Aviation paid a visit to Scone and put me through the paces, then signed my licence verifying that I was now an ag pilot. They did their best not to fly with us as they were gutless.

Ag pilots virtually became a law unto themselves, not through sheer arrogance, but simply because there were so few of us relative to the remainder of the pilots in this country. When I did the first flying test for my ag rating NSW had only one Ag Department testing officer. His name was Peter Marmon. I remember him as a dreadful little man hiding behind a beard. I was told he had done his own ag rating and worked about one year in the industry, before getting a Government job testing other pilots. The problem was, the rest of the Department testing officers were totally ignorant of the ag flying industry, or scared of it to the point they just did not want to be a part of even testing pilots.

As luck would have it, Col was to be tested this day also, to see if he was good enough to actually be a testing officer. Here was an official with a bare minimum of experience in this industry testing one of Australia's small number of top ag pilots with decades of experience and absolutely thousands and thousands of hours flying in this industry. Such was the hypocrisy of this world of aviation.

On the day of the official test Marmon turned up at Scone airport. It had taken ages to get him here and due to the seasonal nature of the work I had not done anything for some time. It was also ages since I sat and passed the written exams and most of what I had learned about chemicals was long forgotten, mostly because I worked in the spreading (fertilizer) side of the field.

I flew the Cessna 185 and Col was to test me for the rating, while Marmon sat in the back seat watching us both and supposedly testing Col. I knew right from the start this was going to be a memorable day and probably for all the wrong reasons. Naturally Col was going to put me through a test that was a little more real than the normal simulated thing one would expect from the Department. When I was expected to simulate spraying a paddock with a power line across an end and a side, naturally I had to fly under one of those lines or the job could not be done properly. Marmon later criticized Col for allowing that to happen in real life. Personally I think he was terrified. Maybe he had never flown under a power line before?

God Almighty, there is nearly always 15 feet from ground, to the lowest wires.

The only thing I remember Col having a go at me for was not using full throttle to climb from spray height - about eight feet above ground level - to cruise height, which in our case was about two hundred feet. I argued with him - and again that night at the pub - that there was just not the need, nor the time, to get up to 'full power' in a Cessna 185 in the time it took a three hundred horsepower Cessna to climb so few feet of altitude. And it was a waste of fuel - his fuel, in this case.

Once back on the ground the 'hypocrisy' took on new levels. Instead of Col continuing the test with me of the theory side of ag flying, Marmon took me into the Crew Room at the back of the hangar and started asking all the stuff I did not remember from the exams of some years ago. Theory was about all he would have been good for. A bloody 'academic'.

I don't remember getting even one question right. I rightly explained that it was a long time since I had done all this and there had been no time to brush up on it as it was only yesterday that I had been notified of the test. I don't remember Marmon leaving that day. Who cared? He did not belong in our midst.

I did not care at all, because by the time the sun set that day and the 185 was long ago tied down in her spot on the line I was a qualified, Class 2 ag pilot.

(Col must have also passed his test that day, as he had the task of re testing me, for my Ag 1 rating some time later, after I had worked on the job the required minimum two hundred hours).

That night after my initial test we had a party, which started at the pub and continued on into the night. The next afternoon I arrived at the hangar with a half dozen cartons of beer and we started again.

Col Pay had been extremely fair to me. He charged me not one cent for the training. I now went to work for him for a very short period, free, and after that I was employed in a part time capacity. I was to go on to fly for him for three or four months of the year, usually starting around March and continuing through to July. I would operate the Fletcher out of my own home airstrip each day to the job locations.

To begin with, after gaining my Ag 2 rating, work for me would be spasmodic. Farmers spread super largely to offset tax, hence the work was mostly during autumn and winter as the calendar led up to the end of the financial year. Those days there

were two other regular pilots working for the company who had priority over me. Up to the time when I was first issued the Ag 2 rating I still had not actually spread anything other than with another instructing pilot. The phone rang one night and I was summoned to appear at one of the strips on Glen Rock station east of my area, on the head of the Barnard River. I still had my first Cessna, VH- PSN, those days and I agreed to fly it there first thing next morning, where I would meet the others.

Next morning I was in the air bright and early and headed to where my telephone instructions of the night before indicated. Glen Rock had a number of strips and I landed on the first I saw with a heap of super. Unfortunately on landing the Cessna the propeller picked up a loose piece of fence wire laying on the ground. It scored a shallow but long grove in the front of one blade. It was not a major worry. Just unsightly at close examination. All part of the hazards of bush flying.

Two Fletchers arrived shortly after me - I was quite proud to have gotten there, and found the place, ahead of them both, I might add.

We moved to another strip to start with called 'Pepper Tree'. Then I was strapped into the Fletcher again with one of these pilots who set me going in the right direction. After some runs he got out and finally I spread my first load solo.

Once allowed to do things on my own I really came alive. 'Glen Rock' is a magnificent property. Rough, hilly to mountainous, rocky, bordered by tens of thousands of acres of forest.

The open grazing country was steep but one couldn't help notice the absence of trees. On Glen Rock, where there were trees there were many trees and, where there was open country there were absolutely NO trees. I formed the opinion that when the country was first ring barked years ago re-growth must have been minimal to nil. I remember being fascinated with the landscape. Beautiful rounded steep, near treeless hills, scored by deep rocky gullies. In between flying and spreading super I stared into these gullies and almost felt I was walking, exploring them, even though I was a couple of hundred feet in the air above.

I learned there was more than one way of spreading fertilizer. It was not exactly a science. It was rare to find a farmer who knew exactly how many acres he had in any paddock or block, and ordered the exact amount of fertilizer to cover that same area. But if you did find one he was bound to require 'perfection'. There was no such thing as perfection in aerial spreading.

So, in most cases we resorted to 'trade secrets' to do the best we could. The most common way was to have a good look at the heap of fertilizer on the airstrip dump site and programme ones mind that that amount of super had to be made 'fit' the block that the farmer had showed you. In other words, you made sure you did not run short and you made sure there was none left over.

The farmers had no idea we were doing this and some even marvelled at our seeming expertise. Some even marvelled at their OWN expertise, at judging and ordering the exact amount to cover the block with nothing left over. Otherwise, especially with very large blocks and tonnage, we estimated each spreading run at a chain (22 yards)

and used trees, fence posts, indeed anything that did not move, to work our way across the block.

A tonne of fertilizer spread at a hundredweight to the acre - which was an average spread rate - should cover a flight distance of two and a half miles. The hopper door would be open about the width of a matchbox. So you can see, there was not a lot of 'science' in it, but plenty of simple basics and commonsense, which was what I was coming to like so much.

On 'Glen Rock', being a beginner, I had been instructed to fly by stepping off the runs each at a chain. This I did. I had no worries. As far as spreading was concerned I just did what I was instructed to do without having to think beyond that, which left lots of time to gaze in awe at the landscape below me.

There was another trade secret I did not understand to begin with. It was in sending a 'beginner' into such wild, rough country, and working for a 'big name' client. But because there were such 'big acres' to be covered, if a beginner made a mistake it was less likely to be noticed when the area that would need to be scrutinized to find a mistake, was massive. But at the same time, in the clients favour, any error of a beginner was also likely to be very insignificant on a large holding.

This theory was born out later when the most complaining type people, proved to be the small holdings and mostly near to town.

There was one client who insisted the super should be spread right up to the fence line, with some on top of the posts but not one grain on the other side.

Another thing I learned, now I was flying and monitoring a Fletcher of my own, was the massive oil burn of the motor. With the need to run on full power when climbing with each load, the oil burned during a day was always around one gallon.

I learned to love the isolation of this type of flying. After some years of taking 'joy riders' and then instructing, where one has to be providing an appropriate verbal commentary to those sitting beside you, this was sheer bliss. I could fly, fly, fly and live it all just for myself.

After 'Glen Rock' I flew off an 'Ellerston' (Kerry Packer) strip called 'Branch Creek'. Then also, 'Hunters Vale' strip.

In the pub one night it was agreed I should be paid from then on. I now learned all the most important things were worked out at the pub.

Being paid, for having so much fun. I was very reluctant. I did not feel I should be paid.

I was sent to work in the Warrah Creek area, south east of Willow Tree, spreading a product called 'pasture S'. No one had told me anything about this product. I was left to work it out all by myself. Not only that but I also had to work out how to weigh one client's amount from a heap that included, two clients, total. Pasture S is applied at a very light rate per acre and even with two clients having a share from this one heap it

was still an extremely tiny pile. I still see that heap today. It totalled around five tonne.

I had a loader driver who had only just started driving the loader machines and no one had mentioned to me that aircraft loader units were notoriously inaccurate at weighing. I was inexperienced. So it would be a challenge.

But, where there is a will, there is a way. And we did it.

This was not the only time I found myself at a serious disadvantage simply through lack of support from the administration staff. I must make it clear that I don't blame anyone for this. This was just the way it was done those days.

Another point I had not been briefed upon was 'surcharges'. We had our regular, fixed charges for spreading a product but sometimes a client had a need, or circumstances dictated differing conditions. Our normal dollar rate per tonne spread allowed us to climb the aircraft to 500 feet altitude above the airstrip without extra surcharge being applied. It also allowed us to spread super as thinly as 100 pounds per acre without extra cost. To go lower in spreading rate incurred a surcharge. All this was fair, as each required extra cost for us to comply.

In my case, when my father retired from Rock Dhu at the end of 1976, his policy along those same lines was that we should spread super SF 45 at the rate of a half hundred weight per acre. We should also divide the place into four sections. We would spread each of three sections every third year and we would not spread the fourth section at all, because it was largely all timber, accept in cases of 'taxation' when it could then be spread rather than give the money to the government.

To spread at a half hundred weight (56 lbs) to the acre incurred a surcharge. We often incurred a height surcharge as our country rose to a maximum of 3,610 feet altitude.

True we had a long history of super on the country but I was now bringing other thoughts into it. For one thing, I looked at old photos of the paddocks. Even before super appeared on the scene, over the progress of time pasture could be seen to improve. Why? White man has only been here a very short time relatively speaking. We killed out trees and grass grew. We introduced other grasses and nature saw them spread further. Add a few good years of rainfall and nature worked further.

My belief is that most pasture improvement was brought about by 'Nature' and that super was only a small part of the overall thing and that its importance was very overestimated.

But even if we dismiss all the previous we still have another very insurmountable hurdle. During the seventies and eighties we had such poor incomes from cattle and sheep that fertilizer was no longer a priority but rather a 'luxury'. To illustrate this I worked out back then that to spread super SF 45 at even a hundred weight to the acre, hence avoiding a rate surcharge, it was still going to cost me a total of around twenty dollars per acre. At the same time my 'GROSS income per acre' was only twenty dollars and that is before any expenses.

So I guess I was now working in an industry that I had lost faith in its ability to be financially worth doing - the 'pasture production worth' of aerial spreading fertilizer, versus the cost. It didn't add up any longer.

All too soon, at the end of my first season on the job, the day came when I was informed I would need to return the Fletcher to Scone. My services were no longer required. The work had run out. It was a shock. I was having so much fun I had never stopped to think that one day soon this season's work would come to an end.

Quite soon after, but by chance, both the regular full time ag pilots who had been doing this sort of flying a while, both decided to get out into other areas of general aviation. This opened the door for me. I would have work each season from then on, for as long as I wanted it.

I had found this type of flying to be more satisfying than any other type I had ever done. True, it was a dirty occupation. You would come home tired and filthy covered with super dust down and down the back of your neck at the end of each day but the pay was good and it was great to be able to fly on my own. I seemed to have reached a point where I was tired of carrying passengers around, finding I was expected to talk to them, explaining the way things worked, answering questions. Now I could get into this aircraft, do a couple of hours on the job each run, flying, and not have to converse with anyone apart, from an occasional hand signal to the loader driver if I wished to increase or decrease the weight I was carrying, or an occasional rude sign if he dropped a slightly heavier load into the hopper than was asked for.

A typical day, if there was such a thing, would go like this: Out of bed about three quarters of a hour before daylight. Half an hour to wash, shave, eat, followed by a quarter of an hour to ready the Fletcher for departure. This consisted of starting and warming up the engine, the run up, carrying out the checks and taking off just as there was enough light to see where you were going. I might then have to fly to Scone to pick up a loader driver and fuel up, (we only carried enough fuel for two hours flying with a half hour reserve). Then we might have a half hour flight to the airstrip that we were to work from. You would arrive there and get the boundaries of the jobs to be done from the farmer. The loader driver would warm up the loader truck and uncover the heap of super. Once again we would refuel the Fletcher and the loader would drop the first load of the day into the aircraft hopper. Then I would work for two hours before pulling up for fuel again. This would be the general pattern of events, only broken by smoko and lunch or, if the job was complete, a move to another strip was then required.

It was desirable to spread around ten tonne per hour although many jobs dropped to around six. A full hopper load was one ton four hundredweight but often the airstrips, or weather conditions, could reduce this to only one tonne. We would work until there was only just enough daylight left to see to fly home and land. It was often necessary for me to drop off my loader driver at Scone on the way home and maybe refuel again. Once back home I would have to clean the super off with a good shower, prepare lunch for the next day and then spend time on the phone arranging the jobs to be done next day. Sometimes these phone calls could take in excess of two hours to complete and often more calls were necessary in the morning if the weather conditions changed. On top of this there was the running of my own property.

Although, Scone, in the Upper Hunter Valley, was our base, the area we worked was in all directions. We worked as far North as Nundle and Wallabadah; as far West as Quirindi, Gunnedah, Coonabarabran, Tooraweena and Mendooran; South to Cessnock and Gosford, and East to Tea Gardens, Taree, Gloucester. On some of the furthermost jobs we would occasionally stay overnight at the nearest pub with all expenses paid by the company.

The Fletcher was a marvellously easy aircraft to fly in calm conditions but working with a full load, constant turning, close to the ground in turbulence, was a real battle for the pilot. I found it took me the first two hundred hours of flying the aircraft to really adjust to what was required. It has been referred to as 'Fletcher Muscles,' and can best be described as a conditioning of the pilot's body and muscles to an extent that you no longer felt soreness after a day's flying. In the early stages you would feel so sore that you could barely walk. It effected the knees most of all. I would liken it to playing a full day of tennis when you have never played the game before in your life.

The Fletcher was made in New Zealand initially for military light transport but soon reverted for agricultural work. But its design was never refined to make it beautiful, or a delight to fly in other than calm conditions. They were first produced with a 230 horsepower engine and as the years progressed this was upgraded to 260 and then three hundred horsepower. Even with the three hundred horsepower engine, this aircraft was still underpowered. Many pilots were injured in these planes and some lost their lives. This was usually while turning with a load on board. There is just not enough room for error when operating at low level. Many is the time I can remember turning with a load in turbulent conditions when a gust of wind has pitched the machine even further 'wing down' and the length of time it takes to recover from that attitude, even with the four hundred horsepower, was pretty frightening.

The day soon came for my Ag 1 test. Once again it was at short notice - less than one hour. I arrived back at the Scone hangar after completing a job spreading.

Col, with his new testing approval, had the task of testing me this time. In no time we were heading southeast to an airstrip near Singleton. When we arrived the job was already in progress. I had to liaise with the other pilot and work out what point he was up to and take over from him.

Col rode beside me in the Fletcher while I worked and to put it mildly, he kept up the pressure. The job was made more difficult by a windy day.

Eventually we finished, and then flew back toward Scone. The one thing I will always remember is the stream of sweat that poured from me during that test. My shirt was soaked. I was soaked right through.

Believe me, that was a REAL test! A test that put Peter Marmon and the Department into the basket that they and their hypocrisy belonged in.

Almost all the strips we worked from were usable in one direction only. This often meant that we had to take-off with a downwind. In other words the wind was blowing

in the same direction in which we were taking off. This would mean we had to go just that much faster over the ground in order to obtain the required airspeed to fly. When an airstrip is already short this compounds the situation even further.

I remember one day working off an airstrip near Dungog with a similar situation to this. The strip took off to the northwest and the wind was from the southeast at around fifteen knots. There was a fence at the bottom of the strip and, a few feet further on, a power line. I was working with another Fletcher (two aircraft on the same job) that day and we were both carrying the same weight. The other pilot said he was having no trouble getting off the strip and clearing the power line, but I was so low as I crossed the power line that I could feel absolutely no distance between my aircraft and the wires. My airspeed was below the required minimum. I gave up trying to get over the wire and decided to fly under it. It was fairly low but it had to be safer than going over the top and run a real risk of hitting it. The main difficulty was that I also had to fly over a small dam at the same time as I passed under the wire. The amazing part was that the other aircraft was able to fly over the wire with no problem.

The next day I had a day off and stayed home to work sheep and cattle while my Fletcher went into the hangar for a regular one hundred hourly service. She was found to have no compression on one of her eight cylinders. This explained the problem of the previous day.

We operated four Fletchers with the four hundred horsepower motors and from time to time these situations would happen when one aircraft would appear not to be pulling its weight so to speak, only to find later, some mechanical reason for it. This also highlights the point that we operated these machines to the utmost.

One of the Fletchers eventually had dual controls. The problem was, in rigging it up, they put things back to front. Old habits die hard. We resorted to flying it from the opposite (right side) seat. Having been a flying instructor that was no problem for me. Instructors always fly the right seat.

We also operated one, three hundred horsepower Fletcher which we all hated.

I remember returning from a job down in the Lower Hunter one day in the 300, with a seed spreader device bolted on underneath. This aircraft would only cruise at eighty knots with this attached. I had a loader driver with me. As we approached Lake Liddell there was a sudden movement off to my left side and four Skyhawk jets whipped past. One went each side of us and two passed over the top, all very close. Apparently, they had used us for a little target practice. I was later informed that they had belonged to the Singaporean Air Force. The next day one of them on exercise out of the RAAF Base at Williamtown had an engine failure and the pilot ejected. The jet crashed, believe it or not, right on the dump site of one of the airstrips that we use on the AMP properties near Tea Gardens. Naturally, the impact dug a very large hole in the ground and there are tiny bits of metal and bamboo type matting scattered all over to this day. I was told the pilot was found only a few hundred meters away sitting, awaiting rescue. Beside him was found a thermos flask and a toilet roll.

This airstrip was also memorable to me for another incident that happened. We had stayed at Tea Gardens overnight as we had a large number of tons to do in this area. I

started work off this strip around 7 am next morning. At around 7.3O am I was taking off with another load and, as the Fletcher started to accelerate, a massive shudder went through the whole aircraft. The shudder was so great that I had lost a large measure of control and started to drift to the left towards a high bank. I had no idea what was wrong but I did know that there was not enough room to pull up (stop) so I attempted to dump the load and get airborne at the same time. Just as the left wing was about to impact upon the dirt bank I managed to stagger into the air. Now, clear of the ground, the Fletcher was going OK so I decided to spread the load, or what was left of it.

Having done that, I then returned my thoughts to the problem at hand. All spreading aircraft are equipped with a mirror for checking the flow of fertilizer from the hopper. This mirror told me that the two main undercarriage legs were still in place, but the nose leg was not visible in this way. As it was early morning, I was able to use the rising sun to assist me. I flew past a small hill, as close as I could to the ground, and the sun cast a shadow of the Fletcher upon that ground that confirmed that the nose leg was also in position. This left me confused as to what might be the problem, and as to what I should do about it. We did sometimes have radio contact between aircraft and loader but on this occasion the unit in the truck did not work.

Next, I flew low over the airstrip dumpsite to attract the attention of the loader driver. Up until this time I had no way of knowing if he had been aware that I even had a problem. As I passed over him, I watched intently for a sign from him to indicate if he could see anything wrong. No signal was forthcoming so I then turned around to line up for a landing, in the hope that if there was anything wrong, the loader driver would wave me away. Sure enough, as I approached the threshold of the strip, he came running toward me from the far distance, waving a shovel. This was a sure sign that he could see some reason for me not to land. I applied power and climbed away. Just by good luck, I now heard on my radio one of our other aircraft calling Williamtown advising that he was inbound to this same strip where I was working. A few minutes later he came into view and I asked him if he would call me on our company frequency as soon as he landed. If we had used the frequency we were on, Williamtown would have been alerted that there was a problem and this would have created endless paperwork.

The other pilot landed, was told by the loader driver what the damage was and he then called me to advise that one of my main undercarriage wheels was offset at an angle to the normal. There was no point in landing now that I knew this, so I turned and headed for Scone base to seek repairs. I fortunately had plenty of fuel for the forty-minute flight. I now settled back to plan how best to land with the damaged leg when I got there.

When I was about twenty miles out of Scone I alerted the base by radio that there was a problem. By the time I approached to land, there were more people lining the runway to watch than you would see at an air show. Everybody had their own opinion as to how best to configure the machine for landing that would provide for the least damage but in the end it was up to me as 'pilot in command' to decide.

I approached to land on the grass holding the damaged wing off until there was no airspeed left. Once the offset under carriage touched the ground the vibration shook

the whole aircraft once again. Directional control was no problem this time as the area was free of obstacles.

It turned out that a bolt, holding the wheel fitting straight, had sheered off and almost fallen out, allowing the wheel to free coaster from side to side at a furious pace, which set up the vibration that carried throughout the whole aircraft. This explained the violent shuddering feeling. The wheel was turning from one side to the other through the full extent of its travel at an enormous rate. It was most fortunate that the broken bolt had not fallen out altogether as the whole undercarriage leg would have dropped off. This had happened many times in the past with Fletchers. The nose leg was prone to the same problem but in later years they were wired in to hold them from dropping out completely. It is one thing to land with a missing main undercarriage leg and quite another to land with a missing nose leg.

Over the years I have found great value in just trying to be observant. By this I simply mean, 'seeing what it is that we are looking at'. This can be applied to anything I guess but when it comes to aircraft, it could be someone's life that you might save. The technique works like this: whenever you are within close proximity to an aircraft, let your eyes run over it and try to look through it in an effort to find if there is something wrong. I find it amazing the number of times that one can find something broken or missing. Treat it like it was a challenge to find something wrong. Hopefully, you wont find anything but I never cease to be amazed at the number of times there is something.

An example of this happened near Gloucester one day. On this occasion we had been operating two Fletchers on the same job. As the morning progressed I found it more difficult to turn my aircraft around on the ground. It seemed that I just couldn't push the rudder bar far enough to turn the nose wheel and it was taking a somewhat larger turning radius to turn to line up for each load. Later that day we moved to another airstrip, which was even more narrow, making this problem even more pronounced than before. While we were awaiting the loader unit to arrive we were sitting on the grass at the front of my Fletcher talking to the owner of the strip. While doing so, I had just let my eyes roam all over the underside of the aircraft and suddenly, staring me in the face, there was a nose leg mounting bracket lying at the bottom of the oleo leg. It was no wonder I had had difficulty turning. This bracket was supposed to hold the leg rigid. It had come loose and fallen down the oleo allowing the whole leg to loosen or wobble, which in turn allowed the steering to go sloppy. These brackets cost over six hundred dollars. The point I make is that just by being observant, I was able to save the loss of a part worth hundreds of dollars and maybe saved an accident from happening. You don't have to possess supernatural powers - I certainly don't. Just simply allow your eyes to wander over an aircraft in an attempt to find if there is something out of place. It need not necessarily be an aircraft that you are flying - it might just be one that you are walking past. Imagine how pleased the owner would be if you saved him from some possible mishap.

It all can be summed up as being 'observant'.

The Fletcher is a marvellously strong aircraft and I offer the following incident as proof.

I was dispatched to spread 112 tonnes of super off a very steep airstrip on ‘Giro Station’, situated some forty five nautical miles north west of Taree, on the Barnard River. All the country here is steep and the job was to spread the super on the cleared country within the tight valley. The airstrip was aligned at right angles to the valley, and when standing on the dump site of the strip, with the strip behind one's back, it was necessary to look up at about a forty five degree angle in order to see the top of the range.

There was already a north westerly wind blowing when I commenced the job that morning which made flying difficult, but because the job was within a valley, and the country was all owned by the same person, it was reasonable to continue working without fear of the super being blown over the fence into a next door neighbour's country. As I continued, the wind increased in strength making it a real handful when trying to land back on the airstrip. Each load I spread I told myself would be the last, and I would quit until the wind eased, but then, back on the ground, I would say, 'I'll do just one more, before stopping'.

I have often referred to the power and acceleration of an empty 400 HP Fletcher. In gusty winds and turbulence, when sudden throttle input was required to maintain a straight line of intended flight when near the ground, she was like a 'razor's edge' in response.

Upon returning to land again, after another run, I realized I should have stopped at the last landing. The wind was by now so strong as to make the aircraft almost uncontrollable, even empty in the turbulence generated by the terrain on approach. As I used that throttle input, and fought to line up to land, and when still some fifteen or so meters above the ground, 'wind shear' suddenly pulled the rug out from under me, leaving insufficient airspeed. There was just no time to do anything and nothing one could do. The steep mountain in front of me prevented opening the throttle fully to go around and try again. Even with an empty aircraft and four hundred horsepower at my beckoning to spare, it would have almost certainly proven fatal to try.

The Fletcher fell out of the air landing very heavily amongst rocks and bracken fern just short of the bottom of the strip, missing the bigger rocks, then bounced back into the air, luckily next touching on the strip itself. That was definitely it. I quit!

It is interesting to analysis why we do the things we do. I continued this job because ...

We had cost the company money to get there that day. It was the beginning of the week. I, as pilot, was the one who decided what we did. What the loader driver did. What the man adding the seed to the load did ...

In other words I wanted it to work for every body.

Naturally I was very concerned the aircraft might have suffered damage from the impact but upon inspection we could find none. The impact was such that it left me with a sore 'impact type feeling' at the base of the spine for the rest of that day. It was the same feeling that one gets when one attempts to sit upon a chair only to have some kind person pull it out from under you allowing one to fall flat on the floor. Perhaps

this will give you some idea of the strength built into the Fletcher when it can stand such a heavy landing with absolutely no damage, and the pilot is left with a sore back from the impact.

It is not as though my seat harness was loose. On the contrary, when flying in turbulence I would have the straps so tight that once released at the end of the run it would be impossible to fit back into them again without first loosening the adjustment setting. As is always the case with a north-westerly wind in this part of the world, when they start blowing first thing in the morning, they continue all day. They are usually the forerunner of a front or low pressure.

That night my loader driver and I watched the TV weather report at the pub where we stayed in Gloucester. It was a classic case of the 'wrong forecast for the wrong day'. Strong north-west winds were forecast for the next day. It was early autumn and normally a very stable time of the year for winds. At this time of the year, when they do blow from the north west, they nearly always blow themselves out overnight. This was what happened. The next day was perfect. We returned to the job and I spread over one hundred tons that day in almost calm conditions.

If there was one thing that you could almost always be sure of it would have to be the location of power lines or telephone lines. If there was a line anywhere within the area you could bet it would have to be strung across the threshold of an airstrip. It was almost as if you could not have an airstrip without a wire stretched across the bottom just to make life difficult. Many of the airstrips we used were just too short, as it was, and if they were on level ground as well that meant slow acceleration with a load on take-off. We always filled the hopper to the maximum possible that the airstrip conditions and weather would allow, with just enough room to take-off and clear any obstacles. In other words our clearance from these obstacles was always on the absolute minimum. This may seem like we were pushing things too much but you must bear in mind that we always had a way out of trouble by dumping the load if suddenly we were caught in a difficult situation.

It is strange that, I have just stated that we relied upon the dump as means of getting out of trouble when, if I cast my mind back over the years, I can recall five occasions personally when the hopper linkage has broken when activated. However that is another story.

One occasion while working off an almost level strip in a valley surrounded by sandstone cliffs, I was to learn a lesson on just how keen the human eye could be. Naturally, this strip had to have a wire strung across the bottom in the usual fashion. On this occasion it was a two-wire telephone line made from ten gauge fencing wire. The two posts that supported this span were off to each side, partly concealed by trees. As a result it was very difficult to judge ones height and distance from the wires on each take-off. There was another aircraft working with me this day and during a break to refuel we had a discussion about the wire. We agreed that something needed to be done to mark the wire and the only thing to come to mind was to borrow the toilet roll from the loader truck. All loaders were equipped with toilet rolls, often referred to as date rolls, for obvious reasons. This type of flying, being what it is, often one receives a nasty fright.

While I recommenced work, the other pilot taxied his aircraft to the bottom of the airstrip and hoisted the date roll up over the wires. We now had a ribbon of white paper to enable us to gauge our distance from the wires and it worked perfectly for a time. Eventually the prop wash from the Fletcher's constant roaring overhead on take-off was too much for the paper. It broke and fell to the ground. We resumed the difficult task of trying to judge our distance from the wire as before.

I noticed a join in one of the wires. You must bear in mind that ten-gauge wire is really quite thin, I guess about three millimetres thick, and the join would have been no more than a few inches long. It was nothing more than two ends of wire twisted together. It quite amazed me that I was able to see this join well enough through the perspex of the canopy of the aircraft, while travelling at seventy knots, to be able to use it as a reference to judge my distance. When the job was complete the other pilot told me he had used the same join as a reference, after the toilet roll broke. This was even more amazing that we had both been able to use the same join in the wire as a reference and just goes to show how keen the human eye can be.

Further on eyesight and the ability to focus showed up in an incident spreading on the property 'Halloween' a short distance west of Scone. In my efforts to concentrate on the markers at the start of a new run I missed entirely seeing a Wedged Tailed Eagle. It impacted the leading edge of the wing about a meter in from the wing tip. A Wedge Tail is a big bird. The whole aircraft slewed slightly sideways and a huge mass of feathers erupted from the disintegrating bird. Dead bird!

It left a considerable dint in the wing but nothing to worry about.

Naturally, as you may imagine, it was necessary to pack lunch for each days work. Usually this would consist of sandwiches but on occasions one might take along a tin of salmon or sardines. Any tin of fish became known as 'channel swimmers'. Loader drivers it was said could only afford Woolworth's brand while pilots with their larger pay packets could afford John West.

In the colder winter months it was essential to have a fire to sit in front of while having lunch or smoko. The fire was also handy to toast the sandwiches upon. It was always the loader drivers job to light the fire and it was an accepted standard, if deemed necessary, to use at least a gallon of Avgas to produce the desired sheet of flame.

Aircraft loader units were very versatile pieces of equipment. Not only could they deliver a ton or more of fertilizer into the hopper of an aircraft but they also carried a large tank of Avgas with which to refuel the thirsty Fletcher – 20 gallons per hour – at the end of each two hour run. Oil for the aircraft engine was also carried. She would burn a gallon of oil per day. Plus tools for the odd breakdown that would occur. But the most important item of equipment would have to be the barbecue plate. Barbecues were few and far between but they were a great opportunity to break the monotony of sandwiches. One such barbecue, which was planned in advance, it was my duty to bring along the sauces and pickles. The night before, as I was packing my esky with these items, I decided to go overboard and included every bottle of sauce or topping in the house. It certainly produced a laugh the next day. It looked so comical, sitting

up there in the middle of the paddock, miles from anywhere with the barbecue in action and about twenty bottles of various sauces or the like, all lined up.

All for two people.

Some might say we had a strange sense of humour but I think it helped to keep one sane. There were times when the work and fatigue would wear one down, especially when you worked seven days a week.

On the subject of fires, one day while working on an airstrip in the Hunter Valley, (this airstrip is now partially under water since the filling of the large Lake Sinclair dam), the loader driver had lit the usual fire as I worked. As he was dropping a load into my Fletcher in preparation for another take-off, I glanced behind the loader in astonishment to see the fire had got away into some long, dry grass were we had left our eskies. In a panic I cut the motor, threw open the canopy, pulled off the seat belt and bolted to the scene just as the flames started to devour our lunch boxes.

Eskys were a constant problem. Wherever you put them while you worked they would be in constant threat of danger of one sort or another. Most eskies met their final demise by being run over by the loader units. When on the job the loader unit was driven from a rear cab which posed some problem with visibility. One particular loader unit, which was driven by one particular driver who had a record for having mechanical breakdowns not to mention other incidents, had a series of drawings along the side of the bonnet, just as a fighter or bomber aircraft has, to show the number of enemy destroyed. Each of these drawings, no doubt done by some character with a warped sense of humour among the ground engineers back in the hangar, depicted such items as gear boxes, axles, engines, differentials - even a Mercedes Benz - to show its damage history. At the end of the list was a figure of a man.

Yes, believe it or not, some elderly chap, probably someone's uncle or grandfather, had been helping shovel up the loose super off the ground and while the loader was backing out from the aircraft after dropping in the load, he had backed over this poor fellow, knocking him flat.

Before any job of spreading could take place it was necessary to have the owner of the land, or one of his employees, show the pilot the area to be covered. Often they would provide a rough drawn map but there were occasions when these bore little resemblance to the area simply because many land holders had never seen their own country from above. Some of them were just simply too frightened to get into an aircraft. Others had had the very life frightened out of them on a previous occasion by some other pilot who was thoughtless enough to take advantage of the person's apprehension and turn on a series of manoeuvres guaranteed to ensure that the poor fellow never got in an aircraft again. This was really handy for those of us who came along at a later date. They would thrust a hastily drawn map into our hands then run for their lives leaving us to try to sort out for ourselves just where the boundaries of the block lay.

One occasion I well remember of a grazier reluctantly agreeing to accompany me on a quick flight around his block. Most of these types had the impression that they must have a firm grip to hang on to when airborne. I guess this relates to the fact that they

have been used to horses all their lives and the many occasions when, if you weren't hanging on, the horse would throw you. This particular chap was no sooner seated in the Fletcher beside me than his hands were moving frantically in search of a handhold. Two minutes later we were in the air and panic really set in. His hands were still searching for a decent grip when one of them found my right knee.

I'm sure he had no idea at the time just what it was that he had hold of but his firm grip was restricting somewhat my ability to operate the rudder pedals. Only when I reached down with my right hand, to remove his hand, did he see what he was doing. He lived through the flight, although I couldn't help but wonder at the thought, what would his mates have said if they had seen him with his hand around another mans knee. Bush people are generally very conservative when it comes to that type of activity.

They say truth is stranger than fiction and this is borne out when a few years after this humorous incident, this chap was in a Fletcher once again showing another pilot the very same boundary.
Hardly had he climbed out of the aircraft and the pilot commenced to spread the super than the Fletcher crashed. The pilot was killed. It was also amazing that this particular property was only small by relative standards for the district and not fertilized all that often, however over the complete history since super was first dropped, there were three aircraft crashes either on this holding or while an aircraft was spreading this holding.

Some time after the 'knee incident' another similar one occurred. As before, the nervous passenger was grasping for a handhold when, just as I thought my knee was under threat once again, he locked on to the control column. Just as before, the poor frightened man had no idea what he had a hold of. Above the scream of the engine I drew his attention to what he was doing and shouted, 'OK if you want to fly it, go ahead.' At this, his hand recoiled quicker than a snake's head after striking.

Riding in the hopper was absolutely forbidden and at no time did I carry anyone in this way. However I did witness another Fletcher with a passenger carried in this manner. In spite of the fact there is an element of risk involved I must admit it was an amusing sight. I was flying alongside the other aircraft as we travelled in formation out to the job, when the passenger must have decided he was bored with not being able to see where he was going so he stood up and popped his head out of the top of the hopper. Seeing a head protruding in this way just looked so strange.

Most of the Fletchers had a large baggage door and compartment behind the hopper. We all had our share of rides in there in the course of duty. It was even known for Col Pay himself, to ride in there when, being the boss, he need never have done so. Only one Fletcher had a window to this compartment. The others, once you were in there and the door was shut behind you from the outside, you were completely in the dark with no way to communicate with the pilot whatsoever.

Being dark it was of no use taking a book to read to fill in the time but on one of my stints sitting there en route from one place to another I found a torch in amongst the tools we carried. Once again that warped sense of humour emerged. I used my black felt tipped pen, in the dim light from the torch, to write a warning message on the

inside of the door. The message read, 'Ensure aircraft has landed before exiting from this door'. I must have been the only person that thought that that was funny, as the writing was promptly removed at the next service. Another great trick while filling in the time in the baggage compartment was to play with the control cables. It was possible to wind the trim mechanism until it eventually increased the force on the control column to a point the pilot, sitting up front, would have to re trim again. Once, while riding like this, I was accompanied by another loader driver. We had a few cans of beer in the esky for use after work and as flying was finished for the day we sat up there drinking a cold one. This loader driver decided to play with the trim control and the pilot up front did not see the funny side of this. He pushed the control column forward and back abruptly which, as we were not restrained in any seat harness, launched us into space, floating all around the compartment. Naturally we spilt our beer, so shortly after, when we landed, I pulled the top off another can of beer, climbed up on to the wing before the pilot could get out of the cockpit and poured the contents down the back of his shirt.

In the earlier days, before baggage compartments were fitted to the Fletcher, it was necessary to carry any gear, in the hopper. One such story saw the pilot and loader driver fly off one morning to a job, with a spare axle shaft in the hopper. This part was to be fitted to the loader unit when they got to the strip. It was a cold frosty morning so they decide upon arrival at the strip to spread a few ton while the sun warmed things up before tackling the axle repair. Unfortunately they forgot to remove the axle from the hopper and it was spread with the first load.

It was never seen again.

Having described the extreme fear some of these people went through in the course of showing us the boundary of their property, I now tell of an incident that demonstrates the complete opposite. In fact this shows just how much faith and trust, others did place in us.

I was to do a job off an airstrip, which borders on the Barrington Tops, to the east of Scone. The strip was high up on the side of a mountain, beside the road from Scone to Gloucester. It took off down a steep slope initially, then ran level until you came to the end where it was necessary to hurdle a heap of rocks, then the mountain dropped away for a good thousand feet toward the valley below. I arrived at the airstrip to find the grazier waiting to show me the area of his land upon which we were to spread the super. He had no hesitation in climbing into the right seat of the Fletcher and within a half minute we were strapped in ready to take off. The motor was still hot from having only just arrived from Scone and these particular engines have a considerable tendency towards vaporization within the fuel lines under these conditions. Once the motor was going, it was normal practice to run at around one third power until the vapour was clear of the fuel lines and the engine running smoothly. Having done this I turned to line up for take-off, opening the throttle smoothly to full power. The Fletcher quickly gathered speed down the steep slope and when near to the point of take-off the engine lost all power. Fortunately there was still plenty of room to pull up. I had never seen this happen before but it could only have been vaporization. As I sat in the middle of the strip trying to restart the engine, my first thought was, 'This is where my passenger vacates the aircraft. There is no way he will sit there through another attempt, having already survived one engine failure'. But believe it or not he

never batted an eyelid. Before he could think too much upon the incident I got the motor started and quickly repositioned for another take-off. Even after we had arrived back safely he still didn't say one single word about the incident. That has got to be trust. Or was he just too scared to move or speak?

Little did I know it at the time, but just up the road a short distance from this strip, down a steep embankment below the road, lay the body of a man. He evidently had left Gloucester one night in his car stating he was driving to Scone via the Barrington Tops road, but was never seen again. It is thought he may have gone to sleep at the wheel and run over the edge. The road at this point is very steep and has claimed numerous vehicles. The sight of vehicle wreckage was of little consequence under these conditions, hence we flew back and forth over the remains of the poor fellow until one young man from Scone, who's father was an aircraft engineer working for our company, just happened to go searching for vehicle parts amongst the wreckage. So after laying there for many months the secret of the mans disappearance was finally explained to his family.

The Barrington Tops have claimed their fair share of aircraft over the years. One real mystery was a Cessna 210 with six people on board one very cold night in bad weather. It was en route to Bankstown on a flight from the north coast. Many conflicting stories abound as to what may have happened but my own personal opinion, is that he has simply disappeared amongst the dense undergrowth somewhere on the east fall of the Tops. Once an aircraft flew into that sort of foliage it would just simply close back over the top concealing it from any view unless you just happened to walk onto it. Many searches have failed to find a trace but the chances are that one day a bush walker will stumble upon the remains. Many other such stories exist but there is not sufficient room here to mention them all.

I remember departing from an airstrip at Rawdon Vale near Gloucester at the end of the day to fly home. It was very late in the day as I climbed up over the Barrington Tops. Looking down below I could see a very dark forbidding jungle of undergrowth from my very low altitude. The thought of engine failure in such an inhospitable place as this, at this time of the day, in the middle of winter and snow laying on the ground, made me decide to climb up another couple of thousand feet just for safety. No sooner had I done so than two airforce Machie jets came hurtling towards me at the same height, travelling in the opposite direction. I thought to myself, perhaps it was safer after all down low where I had been, so I rapidly lost height to tree top level once again. Isn't it funny how our priorities can change.

There were times when it was necessary for us to spread fertilizer from government or licensed aerodromes. These airfields always afforded long runways with smooth surfaces, which was a wonderful change from some of the rough strips in the paddocks. However, there was, a 'down side' to them. Because you were working near, and with, other air traffic there was often confliction. One of my worst memories happened at Maitland, known as Rutherford aerodrome. The super had been dumped in the middle of the field where it was almost a swamp. The paddock to be spread was on the southern side of the aerodrome which meant flying through the general aircraft traffic that were carrying out training flights, not to mention commuter airline and private traffic. The way the paddock was aligned made it necessary to turn at the end of each run directly over the top of the headquarters and

hangars of the Royal Newcastle Aero Club. Because the ground was so wet on the aerodrome, it was nearly impossible for the loader driver to scoop up each load without also picking up a load of mud. Not only does mud not spread too well, but it also jams up the hopper. For quite some hours I battled with the training aircraft in the circuit area, always giving way to them. Also dodging the houses lest some foreign object should fall from the hopper hitting some poor fellow upon the head, but, alas, disaster was imminent. As we got lower into the heap of super, the more mud the loader would pick up. Eventually, at the end of one of my spreading runs, while turning to line up again, a huge clod of mud jammed the hopper doors. In the panic, I did my best to hold it between the doors by jamming the lever hard down until I could fly back over the paddock once again. It was very plainly visible in the mirror and must have weighed at least a hundred weight. As luck would have it, just as the Fletcher passed over the Aero Club buildings, the mud let go. There was nothing I could do about it. What had happened, had happened. I hoped with luck the mass had fallen into their garden and done no harm.

I landed and the loader driver dropped in another load but just as I was about to move off he pointed across the field toward the Aero Club. There, speeding toward us, came an old beat up yellow Holden Station Wagon. Here was trouble for sure. At times like this it is very easy for a pilot to just take-off, leaving the loader driver to face the music. We have all done that before. There is no way they can catch up to you then. For some reason I felt it improper to run on this occasion. One must face up to ones own errors. The car came to a stop. Out jumped the Chief Flying Instructor - and another big man who I was later informed was a policeman in plain clothes - who spent the next five minutes roaring fuming and spitting his wrath at us. He said I had demonstrated a complete lack of airmanship and that he would be reporting me to Col Pay. I was never to operate there again. I did try to explain the difficulty of doing such a job as this and that there was really no other way to go about the operation.

He went away but later came back and said for us to carry on.

When he had calmed down a little I think he could see my point because he even agreed to allow me to finish the job.

Later that day when all the super was in the intended paddock where it belonged, the loader packed up and on it's way home, I ventured over to the Aero Club to view the damage. The whole thing really was quite humorous. The heap of mud had hit on the corner of the roof of the Briefing Hut, severely buckling a sheet of roofing iron. In fact if it had fallen just another couple of feet to the west, it would have missed the roof altogether and probably destroyed the rose bushes in the garden instead.

Nothing further was heard of this incident but some time later it was necessary for me to do my Instructor Rating renewal and the testing officer from the department nominated Rutherford as the testing centre. It was then up to me to make arrangements for the use of the Royal Newcastle Aero Club briefing room for the test.

You might imagine my thoughts at this point. Having not long before damaged their building, it seemed unlikely that they would now welcome me with open arms, while I used their facilities free of charge, in the very same building that I had dropped the mud upon.

Strange as it may be, I was welcomed, and by the same chief flying instructor that had berated me only a short time before. Did he just not recognize me or was he a very forgiving man? One thing I did learn while I was there doing the test was that, not only was the mud, now just a dried out clump, still in place up on the roof just where it had fallen, but that the Chief Flying
Instructor had given orders that it was not to be removed. It was to remain in place so that it could be used to give student pilots an example of extreme poor airmanship.

One other brief moment of enjoyment for me the day of my rating renewal was when the departmental testing officer arrived in a Department owned Beechcraft Bonanza, switched off the motor and just as he climbed out an airforce Mirage jet flew very low directly over the aerodrome. The look on his face was really something. Perhaps he hadn't checked his NOTAMs (notice to airmen) for any military traffic? Very poor of him, if so.

Two of us were working from one of the better ag strips, just on the north east side of Gloucester, one morning. It was around 10 am. We had had smoko and the job was progressing smoothly enough that one could relax, while still within complete control.

I had spread this particular load and on my way back to the strip for another, when movement out the right side of the Fletcher caught my eye. In an instant I recognized a twin rotor Chinook helicopter a short distance away and probably a few feet higher in altitude, on a slightly converging course with me.

I was trying to remember whether I had heard that these helicopters had been retired from military service and, if so, what was it doing here? What did it matter? It was there and it was a break in monotony. It was 'nice' to see.

Then, within an instant, all hell broke loose. Suddenly the air seemed to be full of Airforce jets of different types, including Australia's new FA 18 Hornets.

They had come up from behind the Chinook, breaking left, right, and above it. Suddenly the penny dropped. It was an Airforce exercise. The helicopter was the target. The jets were the attackers and amongst all this military might and weaponry, was I. They would have had absolutely no idea I was there, flying at a mere one hundred knots against their three hundred or so knots. There is no communication between ag operations and military, once away from major airports.

I guess, all this took mere seconds to unfold. The midmorning 'relaxed feelings' had gone overboard. 'Self preservation' was now the priority. I 'poled forward', descending so to be slightly below the tree tops and weaving accordingly to dodge same. Ag pilots know this is 'safe ground'. No one apart from us flies this low, especially not the military.

The other Fletcher working with me was back on the strip getting another load when all this happened. The pilot saw all this from his slightly safer vantage point. I could see his grin from ear to ear as we passed closely, travelling in opposite directions, he on take-off and I on landing. By this time all the action had long gone. That is how quick it all happened.

We quite often came into this type of conflict with low level military jet traffic. While most consider it extremely dangerous, we rather enjoyed it. It was a break from the monotony and it was exciting.

One of our pilots, attending some airforce social function, once asked these pilots if they worried about our presence when such conflicts occurred. The answer he got was, 'We never see you!'

Aviation has strict rules stating how close any two aircraft may come to one another when airborne. The distance varies according to other criteria but basically it should not be less than two thousand meters when on the same level. In ag operations, when two or more aircraft were working from the same strip, we frequently flew through the others prop wash. Always, an aircraft taking off had the right of way over one landing, because it was heavier and less manoeuvrable. But that did not mean we could not pass in opposite directions on landing and take-off, with little more than a wingspan separating.

An aircraft on take-off with full power creates a swirling mass of air in a corkscrew around it, perhaps a bit like a giant whirlwind but laying more horizontal. It is called 'wake turbulence' and can be very strong.

Although invisible to the eye, experience taught us how to feel for it when we were the pilot of the other, landing, aircraft. Once the two aircraft had passed abeam, the one landing then tucked in behind the first so to be in the same position the first one had been in only a few seconds before. As the landing aircraft's wing tip first hit that corkscrew airflow the lighter weight machine, with little forward thrust from the propeller, would take on a mind of its own. It never lasted any more than seconds and then you would be through. When there is a breeze blowing, wake turbulence is whisked away by the wind in seconds. In dead calm, such as early morning, it could last some minutes.

Wake turbulence has caused many a fatal crash in airlines.

A wet ton is heavier than a dry ton. If fertilizer got wet, it always weighed more. When we carried a ‘full can’ (hopper full to the top) it was 1 ton 4 hundred weight. If the product was wet, that 'full can' increased in weight dramatically. Wet super sticks like glue ... like thick wet cement.

Yes, that sort of thing did happen. I have landed back on the strip with a large part of a wet load still stuck in the hopper. With the hopper doors locked wide open it is necessary to lay on the ground underneath and dig the mess out with a crowbar or such.

Wind was always our biggest concern. It took little wind to cause difficulty in ag operations. Wind could cause unacceptable drift of fertilizer or spray. Stronger wind could cause difficulty controlling the aircraft and could even make it near, or impossible, to get back onto the airstrip being used. Funny, one could always take-off as it was 'all up and away'. But getting back down on a tight, awkward strip was often a different matter.

The Fletcher had a far too small rudder for the size and length of fuselage and in cross wind it was difficult to straighten up on final approach which meant touching down with sideways drift.

In Autumn the winds were of no worry as a rule. One could work for weeks without being 'blown out' (term for having to knock off work because the wind was too strong), so much as once. But as June, July and August approached westerly winds could be the order of the day.

In an effort to get as much done in a day as possible in such times, when the moon was near full just before daybreak, having no runway lights on my own strip, I would take advantage of 'Natures big take-off / landing light' and get away from home an hour earlier than normal first light'.

One such time, once in the air I immediately turned left, flying down the Warlands Creek valley, heading toward Scone to get fuel and pick up my loader driver as often was the need to do. Almost immediately I was startled to see someone flashing a spotlight up at me from what I guessed was the Warlands Creek Road. It would flash for a second, go out, then flash again. This kept up for a couple of minutes or so. I could only think someone was out 'spotlight shooting'. If so they were very brave advertising it by flashing a brilliant beam up at me. I hadn't got to the stage of connecting the spotlight with the possibility they may also be firing shots upward as well, when it dawned on me, it was not a spotlight at all. It was the moon. Each time I flew over a sweeping bend in the creek the moon reflected back at me. Then when I passed over each headland it went out.

On such flights south at low level at this early hour I learned over time of people who would use the expression 'setting their clocks' to my engine sound and time of morning. These were the workers who had to rise early to get to their jobs. Council workers for example.

I guess it was a part of history that I did, in my own small way. No one flew aircraft out of this neck of the woods as I did, especially at that early hour. There were probably others who hated the noise.

Another small point, when I flew a Fletcher that had a serviceable landing light, I would leave it on as I flew south toward Scone. Even though I was about 25 nm north that light was very bright and could be seen a long way. My loader drivers were used to looking for it as a guide to how close I was.

First thing in the morning the human brain is still waking up and as a result I found I had to be more vigilant of errors. They happened. One morning after a good fall of rain the ground where I was currently tying the Fletcher down overnight on one of my strips was wet. It was also a Monday morning. I would usually ride a motor bike from the house a distance of about two kilometres to the strip, with my Esky perched in front on top of the fuel tank. There was an art to doing this but I loved bikes. They were so cheap to run and, physically, 'a breath of fresh air'.

This morning when I arrived at the strip, with daylight still a few minutes away, I walked around the aircraft untying the ropes, checking oil, fuel, etc and loading my

Esky. When all was in order I climbed in, started the motor, warmed up and some short time later opened the throttle to taxi off toward the strip. The machine tried to pull sideways and I guessed that one of the main wheel breaks was 'grabbing'. This was common with some of the machines, especially in wet times, dependant upon the breaking mechanism installed. More throttle input overcame this and suddenly she was free and moved onward. I lined up on the strip, ran up the motor and carried out all pre take-off checks normally. Then, with first light showing I opened the throttle to full power, accelerating down the slope, pulled back on the control column and she leapt into the air.

Within seconds there was a sudden jerk on the control column, pulling it toward the left. I thought I was imagining it, then it happened again, seconds later. This was no imagination, and it kept happening! My brain was racing. What was happening? I had never known anything like this. A pilot knows facing an engine failure is one thing but something going wrong with the controls to the airframe is quite another, and may be potentially catastrophic.

At this point my 'basic training' was trying to take over, fighting against 'bad habits' and 'early morning Monday-itis'. One voice said, 'Turn back and land again, while another said, 'turning back is where so many accidents happen'. The voice that won the day was the one that said, 'do a gentle turn left, reduce power a bit and fly down Warlands Creek, just as you always do. This will hopefully give you a few minutes to think about the situation and maybe work out what is happening.

That is what I did. During those few minutes thankfully I did not feel that sudden tug again. I was wondering again by now if indeed I had imagined it. I was not prepared to continue to Scone on just a 'feeling'. I did a very gentle left turn at low power and landed on Begg's airstrip beside the Timor Road, at Blandford. I couldn't wait to vacate the Fletcher and discover whatever it was I was sure was going to be visible from the outside.

Sure enough. Pilot error. I had neglected to untie one of the wing tie down points and the ground being wet allowed me to apply power when taxing, dragging the peg out of the ground. What I had thought was a 'dragging brake' was in fact me dragging an iron fence post out of the wet ground and carrying it on to the strip, still attached by the tie down rope and then into the air on take-off. It could be likened to 'dragging a spear behind the wing in full flight'.

After take-off the airflow had caused the tie down rope to swing back behind but with the ebb and flow every few seconds the tie down peg, being a solid iron post, came up abruptly impacting the underside of the left aileron on the out board end of the wing, hence jerking the control column to one side. The underside of the aileron was smashed inward yet the number of blows was kept to a minimum, simply because I reduced power. I wondered what would have been the outcome of this incident had I not acted so.

If wind was our biggest weather worry then fog would have to be our second biggest problem. The Hunter is renown for early morning fogs when high pressure systems sit over NSW. From my isolated and lone vantage point I saw these phenomenon of

weather from a different perspective, both visually and intellectually, to that of the other pilots. They seemed not to notice things
that I did notice. Nor did they seem to care. It was, 'a job' and one they mostly liked doing, but there was another part that showed disinterest. Maybe my interest was enhanced because I lived in the bush and they were townies.

If early morning Hunter Valley fogs had a centre of thickest concentration it would have to be pretty much on top of the Scone area. The southern extent being mostly Muswellbrook and the northern limits being the Great Dividing Range which party circled Murrurundi and through to my own valley some fifteen 7 miles further north east. Air masses associated with fogs may drift and when they do they are more likely to drift from the lower extent of this area, northward toward my valley. Many things may alter the movement of fog and as my area is the first of the Upper Hunter to see a north west airflow, that flow may cause fog to stop any further northward drift. Hence my valley was sometimes free of fog early morning when Scone was down to a hundred meters visibility. This could see me getting as far south as the small town of Parkville before fog to the ground stopped any further flight. I would be
stooging around in circles trying to find a gap to get through that last one minute's flight to the airport.

Fog drifts unpredictably sometimes. One morning while the airport was solid, dripping wet with fog, a tiny gap appeared and not wanting to waste an opportunity I roared through barely above tree top level, landing on the south east end of the runway. As I taxied up to the fuel pump the hangar was barely visible. I opened the office door and walked in to see the rest of the crews enjoying coffee and the interrupted start to the day. They stared at me in disbelief that I could have got through.

This was to happen numerous times, in various ways and locations. Another was at the 'Temi' strip, near Ardglen. The other Fletcher I was to work with had arrived from Scone already, bringing a loader driver with him. By phone and UHF radio I relayed that I could not get out from my strip and the return message was, 'Don't even try. There is too much fog here now around the strip to work even if you could get in'.

Soon after that message relay the fog here, where I was, lifted and I wasted no time getting in the air. A few minutes later, in sight of 'Temi', I could see the fog in very thick patches especially on the top end of the airstrip, but the bottom end was just clear. In no time I was on the ground and then taxied up into the thickest of the fog squinting to see a ghostly stationary Fletcher and four shadowy figures huddled around a fire. Once again, after I shut down and climbed out of the cockpit, it was suggestions like, 'Are you after a medal or something?'

Such flying was bending the rules to a great extent. We all did such at times. But if we hadn't we would not have had a job. It was necessary, to work.

Other times I would land at nearby strips such as the one on top of the range west of Scone on land owned by Hendersons. From there it was line of sight view to the airport and when the fog lifted a little I could take-off again and roar down.

Another strip was on the east side of Scone. One morning I just got in to it, under a

low fog. I had radio contact with the hangar that day so we discussed the situation. Shortly after Col Pay took off in a Cessna Ag Wagon to spray a paddock at 'Ellerston' for Kerry Packer. He landed where I was to ask for my opinion of the fog north east in the direction he was going. I informed him it was all clear after a few miles. The Gundy valley was not often affected by fog to any great extent. Pay told me to head for the aerodrome, as I would get in by now. I did and was soon on the way to my job for the day.

One can never know what a day in this world of aviation holds in store. Col went on to Ellerston and started his spray job. That property has a single wire power line running through it toward Sergeants Gap. Pay did not see it in time. The next time I saw him at the hangar he had a very long rip right across his face. He hit the power line smashing the perspex canopy and a piece of the windscreen cut him. It looked very dramatic but was only skin deep such as a piece of barbed wire might do to ones hand. Someone asked him, 'What happened to you?' He jokingly said, 'Diane (his wife) did it!'.

Another fog related incident very memorable to me happened on one of those rarer mornings when my own strip was fogged in but Scone was clear. After the usual phone calls to ascertain the situation I was forced to cool my heels and wait. I watched the early morning sun just showing faintly through the fog cloud. The problem was Fletchers were not equipped with the right gear for instrument flight, nor were most ag pilots qualified to fly on instruments. Hence we were obliged to stay in visual flight conditions at all times. I had used the sun before to get out of a tight spot that I had created for myself over the Crawney Range, when trying to get through a tiny gap below low cloud the inevitable happened and I zapped right into it. There is often a very fine line between being able to just get through, beneath the fog base and above the tree-tops. Flying into the wispy lowest bits of strata was always a risk. On this occasion, fortunately, I was flying with the sun, barely visible, at the position to be expected around 9 am in mid winter. There was no time for second thoughts. I opened the throttle to full power and hauled back on the control column, climbing at a furious rate, as any Fletcher will do when she is empty, clawing toward that tiny point of sun.

Without a discernible horizon the human brain loses its ability to know which end is up and which end is down. In aviation that feeling is usually fatal. With nothing else available, my use of the sun enabled me to save my self from a very difficult situation.

One day, sitting on my strip awaiting the fog to lift, I kept thinking about that incident over Crawney. Could I now use the same procedure to get off my strip and climb above the fog until visible on top and then track in to Scone? I did not rush into it. I thought it over for a good hour before deciding to give it a go. The last thing I did before take-off was to open the canopy wide. I wanted every bit if visibility I could get. I was slightly at a disadvantage here in that the sun was behind my right shoulder, taking off toward the west, hence less visible to me but even so it still highlighted which way was, 'up'.

In hindsight, it was sheer madness.

With the throttle wide open the Fletcher climbed. Every second I expected to break out on top of the fog cloud. The airflow past the cockpit was trying to tear me from my harness. I had prior to take-off secured all other items that might be sucked overboard. The seconds ticked on. It seemed an eternity. I could not believe cloud that I could see the sun through before take-off could be so thick in vertical extent.

Finally blue sky appeared above me. What a relief! I was trembling all over. In the remaining ten minutes flight to Scone I tried to assess what had happened. Even to this day I can only put it down to the fact that my flight path after take-off took me into rising cloud tops caused by the rising terrain in that direction. One might liken it to the prisoner tunnelling out of his cell but unknowingly digging his tunnel into a rising hillside. The Fletcher having the 400 horsepower it does, when empty its climb profile on full power left little chance I would have hit any terrain, especially when I knew the local geography as well as I did. And lets face it, no one else was going to be out there flying amongst that at that low altitude.

Early morning fogs were one thing but occasionally a change or front would move through the state causing the winds to turn from north west around to south east. In the Hunter we need a southerly component in the airflow to provide the moisture for a fog or stratas cloud to form. Any south easterly was capable of doing this.

One Sunday morning, in my Cessna, I flew two men to Coolabah, a small town between Nyngan and Bourke. We had a counter lunch and socialised in general.

Returning late that afternoon just such a change had moved through the state. I stopped and refuelled the Cessna at Quirindi. There was concern expressed by locals at the airport, with relation to the low cloud clearly visible on the Dividing Range to the east where I was headed to get home, that I should not continue. I assured them I had enough experience to know what the limits were and pressed on. We flew low in an easterly direction and with every passing second my brain was assessing the information passed to it by eyes that by now had quite some experience at such judgement.

When cloud is low on the Dividing Range in this area there are two places that are lowest and afford the best chance of crossing in an aircraft. One is the Murrurundi Gap (where the railway goes through the tunnel, and the N.E Highway crosses). The other is at the northern end of the Warlands Creek valley, which is my valley. My assessment was that the Murrurundi Gap was pretty unlikely to be clear so I steered to fly east along Wallabadah Creek with the hope of getting in through the gap on the southern boundary of 'Redlands', into Warlands Creek. This proved fruitless. I turned toward the Murrurundi Gap, more as a last resort than anything. I was sure it would be closed. But I had to try.

The last light of the day was fading. The Murrurundi Gap was indeed closed. I turned back north, skirting that range. I turned to my two passengers and gave them an ultimatum. After explaining the weather situation to them, I said we have two choices. We can land on the ag strip overlooking Wallabadah and phone for a car to come and collect us, or we can fly back around to 'Redlands' again and if we still can't get through, we can land on their ag strip and walk home to my place. These two never argued for a moment. They were very keen we land at 'Redlands'. So we did.

I tied the Cessna down. No one approached so I guessed the homestead was at least temporarily unoccupied. I left a written note on the seat of the Cessna as to what we were doing here. My thoughts now returned to the locals at Quirindi aerodrome. They were pressing the 'panic button'.

The boys were really looking forward to our walk. We set off with little more than a faint torch light. For me it was a great challenge. I loved it. The first part was uphill and one of these men really battled, being less fit. The last 4 miles was mostly downhill but I doubt he noticed. Some two hours after starting out, we walked in through the backdoor of my house.

There had been no panic at home. Someone had phoned but they were assured that I would be fine and that I knew what I was doing. Well, basically, they were right.

Agricultural aviation was such a different world of flying to what I had previously done. As a Private Pilot one was forever fearful of the law, namely, the Department of Civil Aviation in my early days. Then after I gained my Commercial Pilot License and started instructing I found myself actually teaching the 'right way from the wrong' way of flying. Now, in ag flying, all that world had been turned upside down and the rules mostly went out the window. We had to or we would have hardly ever spread anything. To work as the rules said we should, was mostly impossible.

Fogs and strong winds ... Fogs at destination strips sometimes could be dispersed with continued strafing runs up and down the strip length, just in the top of the fog.

Strong winds encountered during operations, so strong they threatened the safety of the aircraft even on the ground, were countered by dropping a ton of super in the hopper and sitting it out. No wind was going to blow a Fletcher away with a ton of super in it.

On the subject of 'dumping' ... we depended totally on being able to dump our load if we got into trouble. Yet, I experienced 5 occasions over the years when I was unable to dump, even had I the need to do so. They were times when the hopper linkage broke, the doors jammed, or the load was too wet to get it to flow.

There were lots of other incidents and adventures, some now gone to the back of the mind.

There was the fabulous job off the new strip, Yard Creek, on Cooplacurripa Station. (See photo on website). 500 tonne to spread straight off the end of the strip. All day something about the sound of the motor didn't seem right, though none of the gauges showed a problem. I decided to knock off early, go back to base and see if an engineer could take a look. First I had to drop my loader driver off at Gloucester. Half way to Gloucester oil started to spatter the windscreen.

By the time we got on the ground there was oil everywhere, streaming down the sides of the Fletcher.

We removed the cowling and there was the damage. A pushrod out the side.

It was a Saturday and gliders were active at Gloucester. We had quite an audience.

Fletcher fuel caps were notorious for their poor fit. They had an anchor chain if they came adrift in flight, to stop them dropping overboard but that didn't stop fuel being sucked out by the airflow. On one such event we were en route back to base. All we could do was open the canopy and, while I flew, my loader driver removed his harness and leaned over the side into the raging airflow to replace the cap. I held fast to the back of his trousers and belt as security he did not fall out.

Also there was the incident on a strip near Lostock Dam. The person whose super I was spreading was an older man with a raucous voice. Once we are underway with the job we rarely needed to speak with the owner again but this old bloke insisted on approaching me just as the loader had dropped the next load in.

I could see him ambling toward me and started waving him back. Danger. The motor was going and in that state a propeller is invisible.

He was taking no notice of me so I pulled the fuel mixture to cut-off, now frantically waving at him. It takes a surprising number of seconds for an aircraft motor to stop. As it did so, suddenly the prop became visible.

The old fellow nearly fell over backward when he realised he was within inches of being cut to ribbons. So close.

As the years went by, weighing up the flying from all aspects, I formed the belief that ag flying could be described as: There were days when no matter how much one was paid, no amount was worth the battle and risk. There were other days when it was such a delight, we should have been paying for the privilege of doing the job. Such were the extremes of conditions and locations.

There were many mornings I walked out my back door, still dark, knowing the risks and extremes of the particular job I was going to face that day, wondering if I would walk back in that door again that night.

Many times ... but never once did I consider NOT going.

PHN
(FIRST WRITINGS OF THIS WERE DONE LATE 1980's. SOME PARTS UPDATED APRIL, 2014)

THIS CHAPTER COULD BE CONTINUED.....