

SKYFOX – How NOT to Succeed in Business

by Tom Harwood

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Twenty five years after the event, I've found myself in an unusual position. In spite of the fact that I was essentially an observer on the periphery of the 'Calair' and 'Skyfox' story, I was very close to it and probably have more documented information on the story than anybody who was around at that time and willing to talk about it. It also means I was in a rare position of being able to observe and analyse what went wrong – twice – to ruin the future of an inherently good little aeroplane.

Before getting down to business, I should probably clarify a few administrative details.

At times, I refer to ANO 101.55 and at other times, to CAO 101.55. They're the same thing.

The change of prefix is the result of political affectation over the years by ministers who seemed determined to change things just so they could say they'd changed things although the changes were really cosmetic. It probably meant good business for printers producing new cards, letterheads and copies of rules and regulations as old titles were declared obsolete and replaced with new titles and for the Post Office because, in the pre-internet and email era, everything had to be posted to all users.

The administration of aviation has also been through a series of politically-determined changes.

After World War One, the Department of Defence looked after all aviation matters in Australia. Non-military activities were administered by the Civil Aviation Branch. It was seen as something of a breakthrough and a form of official and political recognition when a separate Department of Civil Aviation was created in 1938.

In the wake of Gough Whitlam's 'It's Time' Labor election victory in 1972, DCA was absorbed into the Department of Transport in 1973. Nine years later, aviation was separated again with a Department of Aviation which lasted five years. The Department of Aviation was amalgamated with what were then two separate Departments of Transport and Communications to create the Department of Transport and Communications in 1987.

1988 saw civil aviation being administered by the Civil Aviation Authority, still as part of the Department until the CAA was divided to form the Civil Aviation Safety Authority and Airservices Australia in 1995.

In early 1989, I was appointed as the Sunshine Coast Journalist, based at Maroochydore, for ABC Radio News.

I was born an 'aviation tragic', as my wife puts it, started learning to fly in April 1974, have had a Private Pilot Licence since 1976 and created an Aviation 'round' for the ABC in 1986 so my eyes pricked up when I found an ad in the Sunshine Coast Daily of April 24th, 1989 headlined, 'Who would have thought the Wright Brothers would get off the ground in Caloundra.' (With no question mark!

The primary thrust of the ad was to encourage potential investors to ask for a copy of the prospectus for a company named Calair which was going to build the 'Cadet' aircraft at Caloundra. The other option was to ask for information on the 'Calair Cadet' itself.

It was an interesting year in Australian aviation.

Seventeen or eighteen years after a Sydney yacht builder named Ron Wheeler had created the first modern ultralight, the 'Skycraft Scout', also referred to as the 'Tweety Scout', ultralights had become increasingly sophisticated - more like 'real' aeroplanes and less like a garden chair hanging under a mast with sailcloth wings. Engines were being purpose-built instead of ripped from Victa lawn-mowers, although still mostly two-stroke.

With technology outstripping the rules, the regulatory authorities met the challenge posed by the new machines on January 7th, 1988 when the Commonwealth Department of Transport and Communications promulgated Air Navigation Order Part 101.55 'Aircraft Certification Requirements - Aeroplanes with a maximum weight not exceeding 450 kilograms' which could be registered and operated according to either Ultralight or General Aviation rules.

Products of ANO 101.55 were to be single engine aeroplanes with 'not more than one propellor' and a maximum of two occupants, a stall speed in cruising configuration not exceeding 45 knots and in landing configuration not exceeding 40 knots and a maximum straight and level speed of 100 knots.

Howard Hughes at Ballina in New South Wales was already building the ultralight 'Lightwing' and planning to develop a 101.55 model.

Ballina was also the home of 'Avtex' who were producing the 'Lanceair', a high-performance two-seat fibreglass kit aeroplane.

The Buchanan Aircraft Corporation at Toowoomba was planning to produce the 'Aussie Mossie', Seabird at Hervey Bay was working on the 'Sentinel', Aircorp at Caboolture was developing the 'Bushmaster' and a couple of former tourist operators at Bundaberg, Rod Stiff and Phil Ainsworth, were working on the 'Jabiru'.

Calair also had its sights set on CAO 101.55 and had acquired a licence from Dan Denney in the USA to remodel his kit-built 'Kitfox' into a factory-built machine to be called the 'Calair Cadet'.

Interestingly, although none had yet been produced, the General Information Notes given to potential buyers said, 'The award winning 'Calair Cadet' is designed to provide you with the best short-field, fun-flying, two-place aeroplane in the world.' There was reasonable validity in most of that sentence but no indication of what awards it may have won nor of how an aircraft which didn't yet exist could have won anything. Perhaps that really referred to the 'Kitfox' in the US.

It would be a two-seat side-by-side tailwheel aircraft with welded 4130 chrome-molybdenum tubular steel fuselage and poly-fibre Stits fabric covering. With more in common with the old British 'Auster' than the other entrants in the field, the wing spars were to be 6061-T6 extruded tubular aluminium with plywood ribs and fibreglass drooped wingtips – a little more curvature than those Cessna marketed from 1970 as 'conic camber'.

Controls were conventional with a joystick and rudder pedals for each occupant although only the left seat occupant had toe-operated hydraulic disc brakes on the prototype. Right side brakes were offered as an optional extra although later became standard.

It was to have two large 50 cm low pressure smooth-tread balloon-type tyres on a bungee-cord suspension for off-airport landings and a steerable solid-rubber tail wheel. The elevators and ailerons were controlled by push rods from the twin joysticks while stainless steel wires operated the rudder and steerable tail wheel.

Like Junkers aircraft during World War Two, the 'Cadet' was to have full span aluminium flaperons suspended from the ribs below the trailing edge of each wing. Flight tests actually showed there was no benefit for take-off or landing performance from flaps which had a maximum deflection angle of twenty degrees so they became purely ailerons and the short flap handle between the seats was used for a spring-loaded elevator trim system.

The throttle was mounted immediately below the centre of the panel with a choke and carburettor heat just above it on the lower panel.

In a break away from ultralight tradition, the engine was a four-stroke 2.1 litre Aeropower producing 78 horsepower which a West Australian company had developed from a Volkswagen engine via building engines for speedway cars. It was certified to the European Joint Airworthiness Requirements Part 22 (H) standards with an electric starter and a self-compensating carburettor. That gave the aircraft automatic mixture control as on the Gipsy Major engine on a 'Tiger Moth' or 'Auster' up to twelve thousand feet.

There was dual ignition but only one set of plugs fired from an engine-driven magneto. The other spark plug set was activated by an electrical Capacitor Discharge Ignition (CDI) unit.

Cruise speed was predicted to be 75 knots at 2800 RPM with a fuel consumption of twelve litres an hour. Reality produced a fuel consumption of sixteen to eighteen litres an hour, well under the 'Cessna 152's' twenty three litres an hour.

One convenient aspect was that the Aeropower could operate happily on either 100/130 low lead Avgas or Super motor fuel and if the two mixed in the tanks, the engine kept running, apparently without noticing the difference.

Visibility was excellent. The roof and doors were made of the same lexan as the windscreen and the doors were hinged horizontally at the top so they could be swung up to latch in a clip under the forward wing spar on the ground or in flight or, by slipping out the upper hinge wire, they could be removed altogether before take-off.

The cabin was 1100 mm wide, the same as a 'Cessna 152', with almost two metres of headroom and a cabin heater for cold weather.

It was intended to be a basic pilot's aeroplane.

While other instruments could be fitted, the standard set would be what was necessary for VFR flight – Magnetic Compass, Airspeed Indicator, Altimeter, Tachometer, Balance Ball, Oil Pressure, Oil Temperature, Hobbs meter for counting hours of operation, Cylinder Head Temperature, Intercom and a 720 Channel VHF Radio Transceiver. A 40 Channel UHF CB transceiver was also planned to be standard but dropped in production and a Rate-of-Climb Indicator was added.

There were no fuel gauges on the panel because a 30-litre fibreglass tank was mounted in each wing root with a calibrated clear panel visible from either seat. There was clearly-marked dual calibration for ground and cruise attitudes.

The other aspect which harked back to many early British types was that the wings could be folded back for road transport and storage. It was a simple five-minute process.

Twist five wing-nut cam-locks (one each side and three across the back) to remove the turtle-deck fairing at the back of the roof and the carpeted luggage shelf behind the seats. Undo the safety clip and remove the pin connecting the front tubular spar (which was the leading edge of the wing) to the top forward frame of the cabin and, while holding the strut to control the speed, let gravity pivot the wing around the rear spar attachment until it sat parallel to the fuselage with the wingtip above the tailplane.

A brace with a split pin at each end could then be attached between the upper fuselage frame and strut on each side to prevent the wings swinging out inadvertently or bumping

during transport. A handle attached to the rear upper fuselage frame made wheeling the machine easy.

Replacing the wings simply reversed the process. The aileron actuating rods were designed to accommodate the move without anything needing to be disconnected.

Not that I knew all this yet.

With the ad appearing the day before Anzac Day, I had to wait a couple of days before I could drive to Caloundra Aerodrome to try to track 'Calair' down. I found a sole welder building the fuselage of what was going to be the prototype 'Calair Cadet' in the back section of a hangar.

The welder referred me to Stuart Pryor, a chartered accountant based in Nambour who I subsequently discovered was the Managing Director of 'Calair'.

Not only did he have the Australian rights to the Denney Aircraft 'Kitfox', which was sold as a homebuilt kit in the USA but he also had rights to an American four-seat pusher-type aeroplane, which, if memory and research serve correct, was the 1985 'Prescott Pusher'.

Like the 'Cadet', it also had a welded 4130 chrome-moly frame although the fuselage covering was fibreglass while the wings and T-tail were aluminium-covered. It was certified to the American FAR Part 23 standard with a cruise speed of 165 knots and stall of 50 knots.

Available with either fixed or retractable undercarriage, the 'Prescott Pusher' was to be the next 'Calair' product after the 'Cadet' was certified and settled in production.

Finance for the 'Calair' project was to come through investors on the second board of the Australian Stock Exchange and many of Pryor's accounting clients were persuaded to also become investors. Toowoomba's Southern Cross Corporation, one of the country's biggest windmill companies was a majority shareholder and its Chairman, John Griffiths, was also Chairman of 'Calair'.

On May 1st Pryor told the ABC there'd been 'enormous demand for the product itself, both the aeroplane and also the kit hangar that we produce.' I can say right now that I never saw any sign of or advertising for a kit hangar although it may have existed somewhere.

Southern Cross announced a significant restructure of its operations and sacked 100 staff on the 6th of May but ten days later, Pryor told the ABC there'd be no impact on 'Calair'. At that time, fabric was going on the first aircraft which was expected to make its first flight by the end of the month.

It probably didn't hurt 'Calair' marketing that the April 1989 issue of 'Aeroplane Monthly', which hit Australian newsagents in early June, carried a flattering four-page article on the 'Kitfox' with photos of the machine fitted with both floats and wheels.

There were inevitably delays for 'Calair'.

On June 28th, the ABC reported that Calair Corporation was the fourth company 'since the market crash to raise the minimum subscription requirement' to be listed on the Brisbane Stock Exchange. Pryor was quoted as saying 'eighty per cent of people who received a prospectus wanted to order one of the 'Cadet' aircraft the company will be building under licence from 'Kitfox' in America.' The prototype was expected to make its first flight in about two weeks.

By the time of the first flight on 15th September, the name had been changed to 'Skyfox' to emphasise the association with its progenitor, the 'Kitfox'.

Test pilot Peter Plaisted had spent most of the week doing taxi and ground-handling tests in the white-painted prototype, now registered VH-CAL when he donned a parachute and helmet and lined up on Caloundra's Runway 05, late on Friday afternoon and gently went for full throttle.

'CAL accelerated and flew smoothly off the runway.

Plaisted flew a couple of circuits, staying within gliding distance of the aerodrome then climbed to 3000 feet for basic handling tests which were as uneventful as his 'wheeler' landing half an hour later.

While the Aeropower was a 'flat-four' engine, the fibreglass cowling was round, as though it should have a small radial. I was told this was done to give it a 'nostalgic' look. However, the 'Kitfox' used either the Rotax 503 or 532, both of which are much higher in proportion to width than the Aeropower and for which a round cowling would make sense.

Twenty years later, the 'Kitfox' was approved to use a Rotax radial.

While first flight had happened, production was held up waiting for two things – the hangar which would be the factory to be built and the production jigs to arrive from America.

I volunteered to write the quarterly newsletter which was a tri-fold single A4 sheet. Was there a conflict of interest? That was the question I had to decide and, having determined that any reporting I did would be based on genuine news values, I came to the conclusion that there would be no problem.

The September 1989 newsletter was the first and was addressed to 'those of you who are shareholders, prospective customers, staff and all who are interested in our progress'.

It advised of the name change to 'SKYFOX', that an Official Launch was planned for Sunday, October 29th, the first flight and that two employees, John Blain and Norm Prowse had just returned from four weeks of training at Denney Aerospace at Nampa, Idaho. They had also duplicated the tooling and welding jigs which were expected in Caloundra on about October 11th.

Agreement had been reached with 'a local group of investors who will construct a production hangar at Caloundra Aerodrome for us on a long term lease'. That was to be complete and occupied before Christmas.

Certification work was progressing well with Bundaberg-based consultant aeronautical engineer Alan Kerr doing the 'number-crunching' and credit given to Civil Aviation Authority staff for their assistance to make Civil Aviation Order 101.55 work.

Three department heads had been appointed: Norm Prowse – Welding, Ross Olsen - Fabrication, John Blain – Research and Development. Stock Exchange listing was expected to happen on October 10th.

That took place a day later than anticipated and 'The Courier-Mail' story of Monday, October 9th pointed out that was almost nine months after the Prospectus had been issued and that the 'Calair' float had raised \$500000, a bit more than half of the original plans for \$900000.

Issued capital was 1.62 million fifty cent shares of which Pryor held 500000 while Griffiths held about 320000.

It was also reported that 'Calair' had paid \$US35000 to 'a United States company for the Australian licence to manufacture the 'Calair 21 Cadet' two-seater light aircraft.'

By that time, the prototype had completed about 20 hours of test flying and production was expected early in 1989 with an initial output of five aircraft a month and increasing to ten a month at a later stage.

At the open day on the 29th, Plaisted showed the aircraft off, including landings with a 20 knot crosswind. He told the ABC, 'I once heard somebody say that we've taken a quantum leap backwards of about forty years and really hit the nail on the head for the first time. This aircraft has not come up with anything new in aircraft design. It really goes back to the original, the old 'Taylorcraft' and 'Piper Cubs' and so on. And it just reproves the theory that they were excellent aeroplanes for the light recreational market, training and light recreational, and this is really all this aircraft is.'

It had been five years since the American manufacturers, in the face of ridiculous product liability litigation, had given up producing light training aircraft like the 'Cessna 152' and 'Piper Tomahawk'. 'Calair' saw an opportunity there.

The President of the Redcliffe Aero Club rejected an article I wrote on the 'Skyfox' for the 'Air Chat' magazine because I (somewhat arrogantly, as it transpired) started off by saying, 'This Club has a problem,' in that its basic training aircraft, the 'Cessna 152' was rapidly becoming obsolete and there was little other than the 'Skyfox' on the horizon to replace it.

He was right and I was wrong. Twenty five years later, some of those Cessnas are still at work but the 'Skyfox' has gone out of production - twice.

Early November saw VH-CAL, wearing a yellow cowling and red wingtips with a yellow and red stripe along each side and a red stripe along each wing leading edge, posing for its first publicity photos, primarily for the advertising brochure.

Lester Neideck took the left-side door off the Sunshine Coast Air Charter 'Cessna 172' which he flew from the right seat while a professional photographer sat in the left front. Pryor sat behind Neideck and my camera and I had the left rear.

Plaisted, of course, was the 'Skyfox' pilot and, after the shoot, I had my first fifteen minute flight in 'CAL doing two circuits from the right-hand seat under Plaisted's guidance.

In February 1990, I logged another three hours of dual then fifty five minutes in two flights in early April before I was allowed to fly the 'Skyfox' solo. I found it to be all it had been claimed to be – a terrific little aeroplane for simple fun non-aerobatic flying and, while it demanded attention on the ground like any tailwheel aircraft, it had the forgiving characteristics of a good training plane.

By the time the advertising brochure and video had been produced, the 'Skyfox' was no longer like the images because it had a completely different nose. In the interests of improving pilot visibility and streamlining, the round cowling had gone to be replaced by a shape which better fitted a flat engine.

The December 1989 issue of 'On Q' magazine carried a three-page article on 'Calair' and the 'Skyfox', noting that shares had increased in value from the initial 50 cents to 55 cents but also saying production had been delayed because the container with the jigs and some equipment had literally missed the boat leaving the US and was a few weeks late arriving.

On January 18th, 1990, Pryor wrote to the Stock Exchange, 'The directors are pleased to announce that our product, the 'Calair Skyfox' has passed the physical and flight tests required for certification by the Civil Aviation Authority and formal approval to manufacture and distribute the aircraft is pending.'

The February 1990 newsletter clarified what that statement meant. 'The CAA (Civil Aviation Authority) has issued official approval to manufacture.'

After four days of testing with up to 2400 kilograms of sandbags, the structure was cleared for up to 6G positive and 3G negative.

Flight tests by the CAA's designated test pilot, David Llewellyn had shown the aircraft couldn't be put into a spin from a stall. The stall was so gentle that a spiral dive was the closest he could get to a spin. Top speed, in a vertical power-on dive, was 112 knots.

I remember spending a large part of a Saturday afternoon in the right seat, holding a video camera on a specially-fitted airspeed indicator while Llewellyn did stall after stall to collect evidence of consistency in behaviour and to prove the actual speed which was 24 knots power-on and 28 knots power-off.

For the exercise, a pivoting extended pitot tube was hung from the mid-wing starboard strut support to ensure all readings were taken well clear of any air disturbance related to the aircraft's shape and slipstream. It was also a way of checking how accurate the fitted pitot tube under the outboard left wing strut attachment point was. An indicated cruising speed of 79 knots translated to a true airspeed of 83 knots.

Readers were told, 'When the first customer aircraft rolls out, the CAA will do an audit and test flight to check that it's the same as the one they've tested. Then the 'Skyfox' will get its full type certificate.'

January 8th 1990 saw the move into the new factory with five full-time staff and two part-timers. The first aircraft was due to be ready for delivery to a flying school at Goolwa in South Australia a week before Easter. The school was reported to have already ordered and paid deposits for another six 'Skyfoxes'.

While most parts and materials were initially coming from the US, local substitutes were being sought and the expectation was that a 'Skyfox' would involve 100% local labour and 50% local parts.

There were plans to start a flying school by the end of March and to fly 'CAL' (as it was usually called) to the annual Easter ultralight fly-in at Holbrook, near Albury, in New South Wales. A car and trailer would also be going, 'just in case. So, if the weather closes in, we'll just fold the wings and get there by road. Very few others can guarantee that sort of service.'

The plan then was to show the 'Skyfox' off at as many air shows, rural field days and similar events as possible.

February's issue of 'Aircraft' carried a full-page article including comments from Pryor and Llewellyn who, after 85 hours of flight had completed all but one of the tests and described the 'Skyfox' as 'completely docile. It handles like a pussy cat.'

Along the way, Calair had made about thirty modifications to the original 'Kitfox' design – the Aeropower engine being one of them – and Pryor was saying the CAA was encouraging existing Australian 'Kitfox' owners to incorporate many of them. He also claimed 'Denney Aircraft' was now adopting some of the changes for the 'Kitfox Mk III'.

Late in April, Pryor and I took 'CAL' in a rally organised by the Aircraft Owners and Pilots Association from Coolangatta to Ballina.

It meant a first light departure from Caloundra with Pryor flying and me glad of the cabin heater to make Coolangatta for the start. Then we swapped seats for the trip to Ballina and soon discovered the disadvantage of flying a 75 knot aeroplane in an event planned for machines with cruising speeds upwards of 115 knots, especially when the 15 knot forecast headwinds turned out to be closer to 30.

We were soon left behind the pack and had a none-too-subtle reminder of the dangers mountain waves pose to small aircraft over the border ranges. Without warning, we found we were losing height in spite of having full power and holding climb attitude and speed.

After a quick turnaround to get out of that particular airflow, we decided that the most sensible thing to do was to get away from the 'tiger country' and make direct to Ballina where we arrived at about the same time as the other participants who'd flown the full course.

While other pilots were tying their planes down because of the gusty winds, we simply folded our wings back which made our little aeroplane quite stable and we could hardly have found a better way to draw attention from other pilots.

That was encouraging but it's also when I first became aware that Pryor had a couple of personality flaws which didn't seem particularly important at the time but which played a large part in the eventual failure of 'Calair' and the demise of a wonderful little aeroplane.

At the time, I was merely a bit embarrassed that an integral part of what he saw as selling the 'Skyfox' revolved not around highlighting the positives of his aeroplane but publicly denigrating anything he saw as potential competition. He was quick to expound on what he saw as the faults in the 'Hughes Lightwing' when it was mentioned.

AOPA had arranged a visit to the 'Avtex' factory and Pryor quickly launched into a critique of the 'Lanceair', attacking what he believed was its irrelevance to the average private pilot who would generally be unable to handle the aircraft. Online reviews today suggest he was

correct but it's unlikely anybody who seriously wanted a high-performance machine like a 'Lanceair' would even bother to look at a 'Skyfox'.

Of course, the same applied the other way around. A potential 'Skyfox' owner would never seriously consider a 'Lanceair'.

Neither performance was necessary nor could even be justified but Pryor was apparently unable to recognise the negative expressions on the faces of those hearing him. All he had to do was sell the many positive aspects of the aircraft he had and let others make informed decisions but, as time went on, I was to learn that he had a fixation on 'Lightwing' which was almost paranoid in its intensity.

As preparation for the proposed flying school, Malcolm Fenton arrived from Goolwa in South Australia at the start of May to be the Chief Flying Instructor. His first job was to go with Plaisted to the Roma Show which generated some orders.

On June 29th the ABC reported, 'The first light aeroplane to roll out of an Australian factory in twenty five years will be handed over to its new owner this weekend.'

Mick Hart, a builder from Port Lincoln in South Australia took delivery of 55-601 and he and Fenton took three days to fly it to its new home.

The 'Skyfox' was the first general aviation aircraft to go into production in Australia since 'Victa' stopped making the 'Airtourer' in 1966.

Just before midday on Tuesday, July 3rd, 1990, a fax on CAA letterhead arrived in the 'Calair' office and was great cause for celebration.

'Certificate of Type Approval – No. 154-1 – Holder: Calair Corporation Limited, Private Bag No. 1, P.O. Caloundra, Qld, 4551 – This certifies that approval has been granted in accordance with regulation 22 of the Civil Aviation Regulations for the aeroplane type known as the Calair CA21 Skyfox. This certifies that the CA21 type design conforms with design standards for aeroplanes with a maximum weight not exceeding 450 kilograms, specified in Civil Aviation Order Section 101.55, when operated in accordance with the limitations and conditions specified in Type Data Sheet 154-1. This approval remains in force indefinitely unless suspended or revoked by the Authority.'

It'd be a full week until the hard copy arrived in the mail but 'Calair' now had the first certification issued under CAO101.55 and official approval to make and sell as many 'Skyfox' aeroplanes as its customers wanted.

I soon found myself doing short demonstration flights when I called in at Caloundra because potential customers were also calling. One chap from Switzerland was heading home to talk to that country's certification authority about getting approval for the 'Skyfox' there. He

believed the wing-folding feature would be a huge selling point since it could cost \$400/month for hangar space for a light aircraft. He said one of the reasons gliding was so popular was that pilots could dismantle their aircraft and take them home. The 'Skyfox' would have the same appeal.

Mid-year also saw a visit from Sig Munniger of Aeropower who explained how his company had started in Perth in 1964, doing high-speed conversions for speedway and drag-racing cars while reconditioning Volkswagen engines 'to pay the bills'. Munniger put a modified VW engine in a speedway car in 1973 and it beat cars with slightly higher-powered imported VW motors.

His reputation soon saw aircraft maintenance organisations sending him VW engines from aircraft. He got the impression they felt a VW was lower in status than a Continental or Lycoming and generally not worth their time.

An airworthiness inspector who said he was 'sick of seeing disasters' told Munniger that aviation needed a good VW conversion, handed him three pages of specifications and said 'all I had to do was comply with them.'

Munniger was buying crankcases and heads from VW in Germany then he and his nine staff were building on them to produce the Aeropower engines which were being widely used in amateur-built aircraft being flown under CAO 101.28.

By July, 'Calair' had 16 staff on the payroll, including CFI Mal Fenton who was quoted in the July 1990 newsletter as saying he 'jumped at the chance to join 'Calair' because he feels it's the only company which really knows what's going on in the market and where it's going.'

He, and others, were to review that opinion in fewer than eighteen months but the biggest problem at that time was getting approval for the flying school from the CAA and the Caloundra City Council which owned the aerodrome.

Meeting the CAA requirements was a straightforward process but getting permission from the Council proved to be far more complicated than simply writing a letter to let them know it was about to happen and being rubber-stamped.

Meanwhile, marketing continued and aircraft were rolling out of the factory.

Not that all the marketing efforts went as smoothly as might have been hoped.

My first such trip was to Hervey Bay on a beautiful Sunday when the Aero Club was trying to decide what type of aircraft to buy and had invited 'local' companies to give their members the chance to try and fly.

During the day I did ten 15 to 20 minute demonstration flights with interested members but refuelling was from four-gallon cans and after refuelling, I found water in one tank. Fortunately, 'CAL' was set up with a separate tap for each side so the problem could be isolated. Over lunch, that tank was drained and refilled with clean fuel.

The alternator failed during the day so the battery had to be recharged before I could leave and most of the return flight was done with all electrics, including the CDI 'Off'. The radio was turned 'on' for essential calls only but there were no problems.

The first production 'Skyfox', in a 'starburst' paint scheme was placed on the Australian Ultralight Federation register as 55-601 but the second was on the GA register as VH-EXD for a business executive from Melbourne.

VH-EXD was to be the show-off 'Skyfox' when a crew from Channel 10 came to shoot a story on 'Calair' on Monday, August 9th. The plan was for Peter Plaisted to fly 'EX-ED' while I took Glenn, the cameraman in 'CAL'.

We taxied out and lined up on Runway 12. Plaisted took off in 'EX-ED' and I started rolling in 'CAL'. As we climbed through fifty feet, the engine coughed and hesitated. I didn't.

Training kicked in immediately. I closed the throttle, put the nose down and landed 'CAL' in the remaining runway without any dramas. While I taxied back to the factory, I tried calling Plaisted on both the CTAF frequency and the 'chat' frequency of 123.45 but he didn't respond nor return until he started to wonder where we'd got to.

It transpired that 'CAL' had been flown to Roma and refuelled from cans or drums on the weekend. The inline fuel filter, which was out of sight under the forward floor, was found to be full of grass seed which prevented adequate fuel flow at full power.

Channel 10 came back with their helicopter next morning. Plaisted showed off for them in 'CAL' while I was told to take 'EX-ED' along in case it was wanted too. It wasn't but I found the wheeler landing when I returned a little trickier than anticipated. The joystick was a little shorter than in 'CAL' so getting full forward was quite difficult with my relatively short arms.

When the buyer arrived late one afternoon to collect VH-EXD we had another example of Pryor's poor people skills.

A tinted skylight was offered as an optional extra and VH-EXD's owner had paid for that, expecting tinted Lexan would be used. What he found instead was that a tinting paint had simply been brushed over the standard clear Lexan, leaving uneven forward/aft textured ridges. It looked sloppy and I could fully appreciate the businessman's displeasure when he came in to complain while Fenton and I were having a chat with Pryor before heading home.

Pryor's almost arrogant self-righteous response made both Fenton and me squirm with embarrassment and we both decided it was a good time to leave the Managing Director and his customer to have their discussion in private. Neither of us was subsequently inclined to inquire about the outcome but we were sure it wasn't going to lead to positive word-of-mouth advertising.

Early on a Sunday in September I was heading for Archerfield to take part in an airshow but the voice circuit of the radio was failing intermittently when I was trying to report at the top of the northern lane of entry so, under advice from Flight Service, I diverted to Redcliffe where I'd be able to land and make a phone call or two.

Flight Service realised when I tried to transmit that they were getting a break in the carrier wave. That indicated that my transmitter was working and, since I'd followed their instructions, they knew I could hear them. Instead of landing at Redcliffe, by clicking my microphone switch on the joystick to answer questions as 'yes' or 'no', it was agreed that I'd fly back to Caloundra and cancel SAR watch by phone when I landed. There were no easily portable mobile phones in 1990.

Late in October I took 'CAL' to Redcliffe for a fly-in and a chance to show it off, once again with a very enthusiastic southerly. Redcliffe only has two runway directions so I chose to use 25 which had a vague suggestion of a headwind component but when I landed late that Friday afternoon, the windsock was standing straight out from the pole.

The landing was fairly straightforward, even with a solid crosswind, as it usually was with the 'Skyfox', and the only 'moment' I had was after I'd turned off the runway at mid-point and was trundling along the parallel taxiway. Although I was holding full into-wind aileron, a gust got under the starboard wing and lifted the wheel on that side off the ground. A quick touch of right rudder swung the nose briefly more into wind and the wheel dropped back on to the tarmac.

I learned later that among the ultralight fraternity, in particular, where, as on internet forums, copious false information is transmitted by rumour, the 'Skyfox' had a reputation as an aircraft which couldn't handle a crosswind. The truth is that the 'Skyfox' was quite controllable in a crosswind but was occasionally flown by a pilot who wasn't as capable as s/he thought s/he was in those conditions and ego naturally blamed the aeroplane when it all went wrong.

Since 15 knots was the maximum strength of the wind which blew during certification, the 'maximum demonstrated crosswind' was officially 15 knots. Plaisted had frequently displayed 'CAL' in stronger winds and, while I'm nothing exceptional as a pilot, I can honestly claim to have landed in crosswinds of 25 to 30 knots – on one memorable occasion in Longreach, that was a couple of hours before a 'Piper' returning from Birdsville was blown

off the runway and damaged. The main runway was closed for maintenance and the gravel 09 was the only runway available in spite of the northerly.

There was nothing wrong or inherently dangerous in the ability of the 'Skyfox' to handle a crosswind provided the pilot had been trained to handle an aeroplane properly and treated it and the wind with respect.

Of course, it didn't help that 55-603 had returned to the factory on the back of a truck after a wind-related landing accident in unusual weather conditions.

Of the aircraft produced up to October 1990, 55-601 was in Port Lincoln, VH-EXD was in Melbourne, 55-602 was with a flying school at Kooralbyn, 55-603 was mustering at Quilpie, 55-604 was mustering at Surat and 55-605 was in Innisfail.

When it was completed, 55-606 was to go to the Calair Pilot Centre (the in-house flying school) when the Council gave its approval. 55-607 would go to a flying school in Mildura, 55-608 was to go to Adelaide and 55-609 would go to a flying school in Newcastle.

55-603 had a very short initial mustering career at Quilpie. The pilot was on short final to land when a willy-willy which he said he hadn't noticed coming across the grass crossed his path and the aircraft was flung around too close to the ground to recover.

The fuselage was remarkably intact and proved the overall crash-worthiness of the steel frame but the undercarriage was a mess. Although repairing the aircraft was relatively straightforward, the accident may well have been misinterpreted by those who didn't know the circumstances as a crosswind-related failure.

Staff numbers were up to 22 and activity had extended beyond the new factory to include the smaller hangar where 'CAL' had been built.

The inside of the October newsletter was a reprint of the Type Certificate and the newsletter was sub-titled 'The CERTIFICATION Issue!'

A letter from the Council dated September 10th rejected the plan for a flying school.

'This matter has been discussed at length within Council and the views of the Civil Aviation Authority on the proposal have also been sought and considered.

I am now able to advise that the Council does not favour the establishment of an ultralight flying school at Caloundra Aerodrome, in view of the potential problems associated with noise.

Additionally the Council is of the view that an ultralight training school would generate activities which would not be compatible with existing uses at the aerodrome.'

There was an interesting concept – a flying training school not being compatible with an aerodrome! There was no clarification of the sorts of activities in which councillors thought ultralight trainees might indulge which would be incompatible with the things for which an aerodrome would normally be used.

The Council's real problem was that two other operators were already conducting General Aviation training in conventional light aircraft, two organisations were training helicopter pilots on machines like the Hughes 500 while Chopperline was using Robinson R-22 helicopters to train (mostly Japanese) pilots and they were frequently flying circuits two at a time, with one using the grass on the left of the runway and the other using the grass on the right for a touchdown zone. There'd been some letters of complaint about noise to the Editor of the 'Sunshine Coast Daily'.

Since the other schools were established entities it was clear the only public stand the Council could take – and some councillors were specialist 'media tarts' – was to not allow another flying school to join those already there.

The only solid reason given for the rejection was 'potential problems associated with noise' and those of us who knew the 'Skyfox' knew it was actually the quietest aircraft using the Caloundra Aerodrome.

Fenton and I took a hand-held VU reader to the end of the active runway 12 and spent a large part of an afternoon recording the reading of each aircraft, including the 'Skyfox', as it crossed the departure-end threshold on take-off.

Then I composed a six-page letter, for Pryor to sign, to the Council addressing every aspect about which we could imagine their raising objections.

I was careful not to criticise the Council and began by suggesting that we believed the rejection 'is based on misunderstanding based on a lack of information from Calair.'

The letter clarified that CAO 101.55 aircraft could be operated under ultralight rules and the school planned to train pilots to that standard but the aircraft themselves were closer to general aviation machines so 'Calair' was *not* starting an 'ultralight' flying school. We also arranged for the CAA to write to the Council to clarify this point.

Then we addressed the noise issue with a chart of the readings taken and pointing out that the CAA certification tests had shown an average reading of 65.25 decibels at full power which was similar to the level of a two-person conversation and proved the 'Skyfox' was the quietest aircraft regularly using the aerodrome.

So there could be no confusion, it was stated that other regular aerodrome users had much higher levels – ‘Hughes 500’ helicopter 77 db, ‘Cessna 172’ 72 db and an ‘R-22’ on descent power 66 db.

The existing training schools were responsible for 90% of the aerodrome’s activity so another training organisation which filled an unmet demand could hardly be considered incompatible. ‘Calair’ also had letters of support from the other operators to reinforce the argument.

The meaning of CAO 101.55 certification was emphasised since the ‘Skyfox’ airframe had to be tested up to loads of 6.6g while older aircraft like ‘Cessnas’ were certificated up to CAR-3 standard which, in the normal category, meant stress-testing to only 4.5g.

The engine was a certificated four-stroke with dual ignition, not a two-stroke as fitted to most ultralights at the time.

In case of engine failure, the ‘Skyfox’ had a glide ratio of 12:1 so for each thousand feet of altitude, it could be expected to glide twelve thousand feet horizontally if the engine failed. This was superior to the 10:1 ratio for the most efficient ‘Cessna’.

Maintenance would be to the standard of any other aircraft using the aerodrome and probably better than most since ‘Calair’ had a licensed aircraft maintenance engineer on staff unlike most of the other operators who contracted out the majority of their maintenance.

There was a certain delight in explaining that under the existing rules, any ultralight could fly into and out of Caloundra Aerodrome at any time but if the ‘Calair’ school was training pilots under the provisions of the AUF, the CFI was empowered to inspect and, if necessary, ground any ultralight aircraft he considered unsafe which was something even the Council had no power to do.

Then there was the logic argument that every aircraft manufacturer in the world has a training school to ensure the pilots who are going to use their aircraft have the best training possible, from Jumbo Jets down. ‘Calair’ hadn’t specifically mentioned a plan for a training facility in its initial discussions with Council because it had been seen as a given for such a facility to exist.

What about jobs and local employment? ‘Calair’ employed twenty two people of whom 80% lived in the City area and there were expectations that there’d be forty people on the payroll by June 1991.

On top of that was the Tourism aspect. People were visiting Caloundra because of the ‘Calair’ facility. Trainee pilots would need accommodation, meals and hire cars or taxis

during their training period which would all be money coming into Caloundra if the facility was approved.

The value of 'Calair's' existing contribution to the local economy was also emphasised with wages and an increasing number of parts and supplies, including 1100 rivets per aircraft being purchased locally. Negotiations were ongoing to increase local content so there was great value to the local economy in the company being able to move ahead with its plans.

The letter concluded with 'Our apologies for our tardiness in supplying this information. Unfortunately, the certification process is demanding and time-consuming and leaves little time for other matters which are important, but which seem, at the time, slightly less urgent. We trust Council will reconsider its position and advise accordingly.'

The September newsletter finished with a 'STOP PRESS Council has now given written approval for the school – Ready for takeoff!!!'

In July, I wrote a letter to the Chairman of the Civil Aviation Authority, Dick Smith asking him to clear up a bureaucratic anomaly relating to CAO 101.55 itself.

Under Paragraph 6.5 in Amendment No. 114 of CAO 40.1.0 of February 28th 1990, GA pilots were required to have a specific endorsement to fly a CAO 101.55 aircraft.

I pointed out that, at that time, the 'Skyfox' was the only aircraft which had been certified under CAO 101.55 and that after twenty five hours in the prototype, I'd found it easier and safer to fly than the other taildraggers I'd flown, the 'Super Decathlon' and the 'Piper Cub'.

Under Par. 6.5, neither any of the company staff nor anyone else could fly a GA-registered 'Skyfox' until some authorised person endorsed their licences but who was authorised?

Only eight people had flown the 'Skyfox' – four CAA test pilots for certification, 'Calair's' managing director, two staff pilots and me so were we supposed to find a GA instructor and teach him to fly the aircraft so he could then check us out and make us legal?

The real anomaly was that anybody with an AUF ticket could fly exactly the same machine if it was on the ultralight register so I could be legal to fly the 'Skyfox' if I spent ten hours getting an AUF licence but not on my GA licence and 300 hours of experience.

Smith passed it to the Corporate Secretariat which acknowledged in August and on September 17th I was able to write to a Mr Cooper of the Standards Development Division to thank him 'for your prompt and efficient reply to my query regarding GA endorsements for CAO 101-55 aircraft.'

The basic thrust of the amendment was that the CAA expected most CAO 101.55 aircraft to be more like ultralights with similar handling characteristics than being more like GA aircraft in handling and performance. In light of the reality, the requirement was dropped.

By November 1990 my situation was about to change. I had successfully applied for the ABC Morning programme presenter's job in Longreach. I wanted to check the place out before moving and 'Calair' was keen to show the 'Skyfox' off in the west so I did my longest flight in 'CAL' to date, departing Caloundra at barely first light and heading for Chinchilla, Roma, Charleville, Blackall and Longreach.

During one of the demonstration flights in Longreach, I was asked a question I couldn't answer because nobody I knew had been there to find out. 'What's it do in a stall at 60 degrees of bank?' It may have been a valid question for the mustering pilot who asked but I still don't know because I could never see the point in trying it myself.

It was a very hot (45 degrees in Longreach) November with solid north westerlies all weekend so getting to Longreach was a slow and bumpy fight from Charleville on.

Return was via Alpha and Dysart where I did a couple more demonstrations and then it was time to follow up on a request from the Callide Dawson Flying Group near Biloela who'd invited us to bring the 'Skyfox' to show it off in August.

We'd been unable to do so then but had agreed to include them in this trip.

The wind was blowing very strongly across the strip so nobody else was doing any flying but it was another opportunity to demonstrate the 'Skyfox's' crosswind capability although I 'cheated' on take-off by angling diagonally across the field to reduce the direct crosswind component.

There were more demos back at Caloundra and I started to work on an AUF ticket but ran out of time before I had to drive to Longreach.

Dan Denney, the man behind the 'Kitfox', visited Caloundra in the middle of December and pronounced himself very impressed with the local version. He confirmed that many of the 'Calair' modifications were being used in the 'Kitfox Mark III' and said the cross-fertilisation of ideas would continue because he was working on a four-place aircraft and an improved wing for the 'Kitfox'.

His prediction was that it 'should give us a 15 or 20 mile an hour top speed increase and still retain the slow stall speed we've got now.'

My last 'Calair' flight was on January 9th, 1991. By the time I returned on holidays a year later, 'Calair' was no more although the warning signs had been there before I'd left.

By the end of November 1990, Griffiths had sent a man Fenton described as a 'headkicker' to try to sort out the 'Calair' financial situation. Lawrie Cremin, the 'headkicker' spent days wading through the company books to assess exactly where it was.

At about the same time, Fenton and I were having regular discussions about the way things seemed to be going and the fact that Pryor seemed to have lost focus on what the company was about. We believed "Calair' was probably selling a 'Skyfox' for less than it cost to make because Pryor was convinced he had to hold the price below what 'Hughes' was charging for the 'Lightwing'.

Fenton and I believed the 'Lightwing' couldn't compete with the 'Skyfox' for performance, comfort and cockpit visibility - and 'Lightwing' was an all-around ugly design as well.

As mentioned earlier, Pryor had a fatal fixation on beating the 'Lightwing' and couldn't even use the 'positives of our design' sales talk on himself. One evening, I sat down and tried to have a serious talk with him but I finished up feeling I'd been wasting my breath. He wasn't really hearing anything that wasn't about fear of 'Lightwing'.

As Fenton and I suspected, Cremin was finding a company whose outgoes exceeded its incomes so he was reducing staff and trying to implement ways to cut costs when I moved to Longreach but it was too little too late.

Trading in 'Calair' shares was suspended in February 1991 and trade creditors were asked for a three month moratorium on debts. A letter to creditors said the company had tried unsuccessfully to obtain additional finance through the Queensland Industry Development Corporation.

It emerged in May that directors of the company who'd put in their own money during 1990 were among the unsecured creditors.

Griffiths and Des Martin resigned from the Board on May 22nd leaving Pryor and his wife as the remaining directors of 'Calair' and the company itself was described in 'The Courier-Mail' as 'a virtual shell with a significant excess of liabilities over assets.'

The 'Courier' also said the group placed a large part of the blame for the financial collapse on a shortfall in the initial raising of capital and the costs incurred in getting certification for the 'Skyfox'.

The article also said the secured creditors, in a forced sale, had sold to a company named Hedaro International Ltd whose sole shareholder was an ex-airline pilot named Graham Day.

Day was reported as having left the industry after twenty years during the 1989 pilots' dispute and his acquisition of the assets of 'Calair' for an undisclosed sum was believed to be on a deferred payment basis.

He was reported as saying he planned to resume manufacturing and flight training operations as 'Skyfox Aviation'.

Day claimed 'Skyfox' had no problems with cashflow and 'plenty of orders on its books' and that his only real upfront cost had been paying to transfer the aircraft certification from 'Calair' to 'Hedaro'.

The official title changed from 'Calair CA21 Skyfox' to 'Hedaro CA21 Skyfox'.

'Calair' was delisted from the Stock Exchange on August 28th.

Strangely enough, I had a sort of 'family' connection with the next part of the story.

Day had been a DC-9 and 727 pilot with TAA and my uncle, a TAA porter, had been his closest friend until he died of AIDS in June 1991. One of his sons (my cousin) was given a traineeship with 'Hedaro' at Caloundra.

One of the first changes 'Hedaro' introduced was to replace the Aeropower engine with the Rotax 912 which produced only one more horsepower but turned at 5500 RPM and with far greater torque. The name changed to the 'CA-22 Skyfox' to signify the new version.

When I went up in 'CAL' which was now marked as the 'Skyfox Development Aircraft' with the new engine in January 1992, instructor John McBryde warned me not to use too much throttle in a stall recovery because the torque of the Rotax could turn the aircraft over.

The rear crankcase seal of the Aeropower had proved to be an occasional weakness but I couldn't help feeling the Rotax with its higher operating revs, noise and excessive torque was hardly an improvement.

On August 3rd, 1991 Senator David McGibbon, the owner of a 'de Havilland Chipmunk' and a long-term aviation enthusiast performed the official opening for 'Skyfox Aviation'.

As 'Calair' and 'Hedaro' had discovered, they had a good, in-demand product in the 'Skyfox' in both its Model 21 and Model 22 configurations. All either of them had needed to do was build and sell those machines to consolidate their position by simply working with what they had but neither management seemed able to grasp that simple concept.

In June 1993, 'Hedaro' took another positive step when the 'Skyfox' became the first Australian aircraft to gain certification under JAR/VLA - the European Joint Airworthiness Requirements for Very Light Aircraft - which was a process started by 'Calair' as a result of the previously-mentioned Swiss inquiry.

The aircraft produced after that were known as the 'CA25'.

'Hedaro' decided to sacrifice the most-promising and practical market for the 'Skyfox' and compete in the broader general aviation market by moving to a tricycle undercarriage and aiming to build a far more complex aircraft than the design warranted.

Certainly, there had always been those who'd, somewhat sarcastically, made the comment that, 'It'd be a nice aeroplane if it had a nose wheel'. The truth is that those people were not, and never would really be, potential customers for the 'Skyfox'. They also expected their aeroplanes to be made of metal, go faster and be called 'Cessna' or 'Piper' or 'Beech'.

The tail wheel was one of the attributes that made the 'Skyfox' the aeroplane it was and which made it attractive to many of its real customers.

Moving the third wheel to the front end and going through the entire certification process again for what became the 'CA25N Gazelle' was a ridiculous expense and distraction at a time when the concentration should have been on clearing debts and building reserves to cover future costs.

Instead, Day took 'Hedaro' into further debt chasing a market which would be limited at best and, at the same time, alienating the market that the positive attributes of the original 'Skyfox' had created.

By 1993, an organisation called the Central Western Queensland Remote Area Planning and Development Board, commonly called RAPAD and pronounced 'rapid' had been established in Longreach with a brief to identify and facilitate development opportunities in the western Queensland region.

The first Chief Executive, whose name I've forgotten, was an aviation enthusiast who knew of the 'Skyfox' and was open to the suggestion I made to him (something I haven't made public before) that RAPAD approach 'Hedaro' with a view to using the 1922 Q.A.N.T.A.S. hangar at Longreach as a satellite manufacturing facility.

At the time, the hangar was shared by a maintenance organisation and an air charter company but from 1926 to 1929, Q.A.N.T.A.S. had been one of the few (not the only, as is too often claimed) airlines in the world to build its own aircraft in the building.

One of the reasons the approach to 'Hedaro' hasn't come out before is that this was at about the time the committee wanting to establish what became the Q.A.N.T.A.S. Founders Museum – and I was on that committee – was coming to the conclusion that the hangar was probably the most practical location for Stage One of the museum.

The other is that several people with whom I then had regular contact saw 'Skyfox' and 'Pryor' as very dirty words because they'd been his accounting clients who'd been persuaded to invest in 'Calair' and had lost every cent they'd put in. Admittedly, investing in

the share market is always gambling by another name but this was a case where there was an identified market with a product which had proved to meet it well. All that had been needed for success was sensible steady marketing and management but the whole thing had imploded instead.

The initial 'Hedaro' reaction was positive but it soon became clear that their financial position wasn't healthy by then and there was no capacity for expansion beyond Caloundra. In fact, the company was heading for collapse under the strain – and it did in May 1998.

The Longreach Shire Council's Airport Committee minutes of June 3rd, 1993 show as consecutive items:

'Rec 15 QANTAS – That Council meet with the Qantas Founders Memorial Ltd next week, to further discuss the location of the proposed Museum.

Rec 15 – Manufacture of Aircraft – That Council agree to meet with the Aircraft Manufacturer to discuss the use of the Airport as a site for their Plant.'

Each item was listed separately but given the same number and the outcome was that the 'Aircraft Manufacturer' was unable to proceed and Stage One of the Qantas Founders Outback Museum (as it was then called) opened in the hangar on June 9th, 1996. Stage Two opened in a new building behind the hangar on March 31st, 2002 but the hangar continues to be an integral part of the Museum.

As for the 'Skyfox', the fair question is, what went wrong?

'Calair' had a good aeroplane for its time.

It wasn't going to break any speed records but it was never meant to be a speed machine.

With VH-CAL, flight planning at 65 knots worked well but the production models would cruise happily at 70 with a power-off stall of 40 knots. The stall was more of a gentle wallow with very quick recovery unlike the metal trainers with their definite nose drop and 500 feet loss of height to recover. The 'Skyfox' stall was quite benign like that of a 'Tiger Moth'.

With two on board, the 'Skyfox' could get off the ground in 120 metres, land in 110 and with a fuel burn of eighteen litres an hour, have a range of 210 nautical miles.

Like the 'Tiger Moth', it was a great training aeroplane; demanding enough to insist you paid attention to fly it well but forgiving enough to allow a pilot to make a mistake and, in most cases, get back with both pilot and plane in one healthy piece.

On one of my demo flights in Longreach, I tried to turn around too soon after landing on runway 09 and wound up rolling backwards after the neatest pirouette any plane could do.

The ability of the 'Skyfox' to sideslip was exhilarating and it was quite happy with either a wheeler or three-point landing although a real greaser of a three-point demanded precise control.

While I love having the opportunity to fly a 1966 model 'Cessna 150' – arguably the best version of the 150/152 series – the 'Skyfox' was much more a pilot's plane than anything with a tricycle gear and I still believe it would have been an excellent training machine whether pilots were happy to remain with simple fun flying or planning to move onward and upward.

Whatever the trainee did in the future, anybody learning to fly on a 'Skyfox' was certain to take far better practical pilot skills with them than they could ever pick up in a 'tricycle tinnie'.

And it was much cheaper to run.

The figures we put together in 1990 for cost/hour went like this (the fuel price is a taste of nostalgia):

Super fuel – 18 l/hr @ 80 c/l	\$14.40
Oil – 1 l/8 hrs @ \$3.00/l	.38
50-hourly oil change & inspection @ \$100	2.00
100-hourly maintenance & inspection @ \$300	3.00
Replacement of components/100 hours @ \$200	2.00
Provision for engine overhaul @ 850 hrs	4.12
Direct Costs/hr	25.90
Insurance – Hull @ 5% & 3 rd party (500 000) @ \$300	1950.00 p.a.
Depreciation (average) @ \$2.00/hr	2000.00 p.a.
Which produced these sample costs per hour by utilisation per year:	
100 hrs	65.41
150 hrs	52.24
200 hrs	45.66
300 hrs	39.07
400 hrs	35.78
500 hrs	33.81
1000 hrs	29.85

Even then, those were low and attractive operating costs for an aeroplane. Add the benefits of the folding wing system to reduce demand for hangar space or trundling it home to go in the second carport and there was a lot to recommend it financially.

Probably the biggest handicap (apart from corporate mismanagement) for the 'Skyfox' was that unfounded reputation it somehow acquired for not being able to handle a crosswind.

As mentioned earlier, officially, the maximum demonstrated crosswind component was fifteen knots because that was the strongest which would blow during the certification period but Plaisted, Fenton and I had all put it down safely in twenty knot plus crosswinds – Plaisted and I in VH-CAL and Fenton in 55-606.

Compare that with the 'Cessna 152' at twelve knots, the '172' at fifteen knots but no sideslips with flaps extended, the 'Decathlon' at seventeen knots and the 'Cessna 210' at up

to twenty one knots. The 'Tiger Moth', with the limited ground clearance of the lower wing could only manage seven knots.

The reality is that the 'Skyfox' compared more than favourably with other training aircraft whether fitted with conventional or tricycle gear.

The problem with both 'Calair' and 'Hedaro' didn't lie with the aeroplane which deserved a better deal in both cases.

Pinning down the reason for failure brings us inexorably to the people in charge. Neither was cut out for a career in company management.

Pryor was a generally nice and enthusiastic bloke who appears to have been a very effective accountant with a good number and range of clients who, from what I've heard, were happy with the service he gave them. That's why they trusted him and were persuaded to invest in his new venture.

He was also a big-thinking visionary who saw the opportunities ANO/CAO 101.55 were going to offer and found cost-effective and practical ways to capitalise on those opportunities by utilising existing designs that could be relatively-easily adapted to fit the new category.

Unfortunately, while he'd been very good at helping other people look after their financial affairs, he proved unable to exercise similar care with his company's finances because of a couple of fatal flaws.

He wasn't a salesman and should have largely left customer relations to someone else.

Pryor's main strategy for promoting the 'Skyfox' relied on denigrating what he saw as any competition instead of highlighting and promoting the many positive attributes of his own product and letting them speak for themselves.

Somebody who wanted a fast aircraft like a 'Cessna' or a 'Lanceair' or a 'Jabiru' wasn't the sort of person who'd be likely to want a 'Skyfox'.

Anybody who wanted the type of aircraft the 'Skyfox' was would not bother looking seriously at those others.

Pryor, unfortunately, proved unable to sell a 'Skyfox' because of what a 'Skyfox' had to offer but subscribed to the idea that people should buy a 'Skyfox' because it wasn't one of the others about whose faults, as he saw them, he was more than willing to elucidate.

I've also mentioned the incident with VH-EXD's buyer who had paid an extra \$165 for a tinted skylight and found himself with a cheap paint job instead of the tinted Lexan he'd been expecting. Not even an apology that there'd been a misunderstanding from Pryor. He

was immediately aggressively defensive and even arrogant, being more than ready to argue the point instead of making any attempt to mollify his first VH-registered customer.

In a relatively small business market such as aviation, encouraging negative word-of-mouth advertising for either the aircraft or its manufacturer is simply silly.

Pryor was correct in identifying that the only new aircraft in the pack which came close to being direct competition was the 'Hughes Lightwing' and that brings us to Pryor's final fatal fault. He came to develop a 'set' on 'Lightwing' which affected virtually every decision he made and ruined his company's financial position.

At the time I've been writing this, I've been reading David Beaty's book on the human factor in aircraft accidents, 'The Naked Pilot'. Chapter Six is titled 'Deadly Set' and talks about the way in which a pilot under stress can become fixated on one aspect of the aircraft's behaviour or an instrument to the exclusion of all else, even when those other things are more important for the safety of the flight and the survival of the aircraft's occupants.

He writes of pilots who've developed such a fixation on a burned-out undercarriage light, that they've flown into the ground without ever noticing that the altimeter was steadily unwinding.

Pryor's 'deadly set' became the price of the 'Hughes Lightwing'.

It seemed crazy to me because I thought the 'Lightwing' was such an ugly contraption – I honestly don't think designer Bill Whitney was ever involved in a good-looking flying machine – that I've never been able to understand why anybody would want to be seen in one. It was awkwardly angular with no visibility worth talking about and had a screaming high-revving Rotax to make things worse.

Incidentally, Whitney was involved in creating the 'Southern Cross' replica. As part of my 'Aviation Round', I was at Eagle Farm when the original was rolled out of its big glass case where everybody who was catching a flight to and from Brisbane had to see it and trundled across to the igloo behind Airport Drive where it's now out of sight and largely ignored. The Whitney version was flown in and the two posed together.

When I showed my non-flying brother the home movie I'd shot, his comment was that the original looked as though it was ready to fly but the new one just looked wrong. I couldn't disagree because I'd thought the same but, until then, had thought that might have just been me.

The advertised price for a basic 'Skyfox' to April 1990, before Certification was completed was \$32 950 which included a 720 channel VHF transceiver, altimeter, airspeed indicator,

vertical speed indicator, compass, tachometer, oil pressure, oil temperature, cylinder head temperature, hourmeter and slip/skid ball.

Apart from the tinted skylight, other options included: right hand (passenger) brakes - \$390, intercom module - \$295, cabin heater - \$240, trailer - \$1 960 and wing support braces for towing - \$48.

Post-certification, to September 1990, the price had increased to \$33 900. Prices for most options had also increased by five to ten dollars, although the price of the trailer had gone up by \$420.

In the next three months there were two reluctant price rises. The first was to \$35 900 and the next added another \$1 000 to the basic aircraft which now cost \$36 900.

You'd expect an accountant to be the first to point out that if your selling price for a product is below the cost of production, it's a shortcut to going broke. In this case, the accountant who was also the managing director was so set on keeping the price of the 'Skyfox' below the price of the 'Lightwing', he was blissfully blind to the reality of the numbers in his own company.

Cremin's arrival was responsible for the two rapid price rises, which Pryor vehemently opposed, late in 1990 because Cremin's job was to try to save 'Calair' and the 'Skyfox' and he was able to see more clearly what the numbers meant.

As I said before, it was too little too late.

It seems Pryor simply didn't have the skill-set for management. A year later, he was running an Indoor Skydiving Centre at Currimundi but it didn't last long under his stewardship either.

An ironic aside is that Cremin later wound up in Longreach for several years as Chief Executive of the Remote Area Planning and Development Board (RAPAD) which had by then changed its focus to become a voice for thirteen Councils in Western Queensland.

As for Day, he was an airline pilot and experience in other circumstances has shown that people who are trained to a high level of skill to push heavy pieces of metal around the sky rarely have a great business sense.

Crew Resource Management training is not terribly helpful in running a company at a profit and it seems probable Day had relatively little in the way of firm financial backing when 'Hedaro' took on 'Skyfox Aviation'.

Press reports said he had bought a 'virtual shell' on deferred payment and reported Day had only had to pay to transfer the 'Skyfox' certification from 'Calair' to 'Hedaro'.

Another issue is that 'Boeing' pilots are often not necessarily in touch with the needs and expectations of the average general aviation pilot or assume GA pilots want the things to which airline pilots have become accustomed. That can be a huge mistake.

As of January 1st 1992, the price of the basic 'Skyfox' was up to \$44 900 but by September, the 'CA22' ultralight version was \$46 900 with the promise that the price was increasing on May 1st 1993 to \$49 900. From October 19th 1992, the JAR/VLA 'CA25' version was \$55 000 and the Options list was looking to take the aircraft well away from the basic training and recreational aircraft it had been intended to be.

A directional gyro was available at \$2 400, a gyro horizon also at \$2 400, a turn co-ordinator at \$800, GPS at \$3 400 and a Mode 'C' transponder at \$2 200.

Day claimed the changes were requested by flying schools but the reality is that the machine he was now trying to sell had little, apart from its shape, to do with the original intent of the 'Calair Cadet' cum 'Skyfox' so that market had been abandoned and the serious training market for which the add-ons were supposedly intended, saw little value in an over-equipped but still slow-as-an-ultralight aircraft when other higher-performance machines were readily available.

Consequently, Day was stuck with an increasingly expensive aircraft which no longer had any clearly defined market with no effective cash reserves and 'Skyfox Aviation' naturally went the way of its predecessor.

What killed the 'Skyfox' twice?

Poor management by people with vision and enthusiasm but with more imagination than solid business sense who lacked the patience and skills to focus on the business of selling a worthwhile product and consolidating their market position before jumping to the next big (and expensive beyond their capacity) idea.

The poor little aeroplane deserved better.

Tom Harwood

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