

On-the-Step

Newsletter of the Seaplane Pilots Association of Australia



FROM THE PRESIDENT

Wow It's mid-January already! seems Christmas was just yesterday.

They say time flies when you're having fun, well time flies, Christmas has been and gone and now when we meet people for the first time since Christmas we ask "How was your Christmas" well this year the overwhelming answer has been "Just a quiet one just family".

So it was the same for the SPAA's NSW Xmas party held at

Rathmines Catalina Club, with just 10 members attending and it really was "A quiet one with Family". It was a terrific afternoon with perfect weather, the food was great and the air conditioning was fantastic. We didn't have any planes everyone just drove, now as I reflect back to that afternoon It really felt like a Family Christmas, with all of us sitting around the table talking and laughing, there was not one face that didn't have a smile on it, it was a Christmas



with Family kind a day which truly made it special. Sorry more of our "Family" couldn't attend.

We are already planning the 2024 Xmas party so keep an eye out for the details on next month's calendar.

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Fly Safe & Wheels Up for Water



The Southerner's Christmas gathering



Dear All,

The North QLD party at BBQ Beach was FANTASTIC! We dodge the weather just in time as on Sunday arvo when we had already left home the showers and wind gust arrived!

In the 2 days (Saturday and Sunday, we had coming and going a total of 15 aircraft with all sorts of registrations from powered parachutes, to weight shift microlights, 3 axis, (SAFA aircraft, to RAAUS to GA). All in all we had 4 seaplane pilots but only two with amphibious aircraft

present (myself and Kevin with his VH SeaRey).

We had one female pilot who upon arrival asked..."where are the women?" (noticing that there was only one woman in the whole group) upon which a cheeky Mackay pilot replied..."Don't need them here...Can't you see the Serenity of the place? Its nice and calm"...even she had to laugh replying, "well I don't have any comeback on your comment".

Wish you were all there..





by James Stewart

"By any judgment, a seaplane is a nasty boat. She has a beam (span) greater than her length"

*Franklin T. Kurt
Water Flying*

No type of aircraft in the graveyard of failed or still-born aircraft features more prominently than flying boats.

Positioning the engine to eliminate or minimise exposure to spray from the propeller while being able to control pitch with power changes, abrupt or otherwise, is an illustration of the challenge faced by designers which is absent in the design of conventional aircraft. Another, again peculiar to water aircraft, is the design of a sufficiently strong hull which is both hydrodynamically and aeronautically adequate for the task. Lateral stability on water by wingtip floats or sponsons of sufficient size and positioned so that the wing tips remain clear of the water for all approved manoeuvres is a design goal. To complicate the design considerations even more is the need to place the centre of buoyancy at a range of places determined by the pitch of the aircraft when on the water so that it remains under the centre of gravity and its juxtaposition with the centre of pressure ensures safe operation on the water.

No wonder that there has been such an attrition rate. Some are designed by those well qualified but for various reasons

are found wanting either generally or in specific respects. Others seem to have been devised by people whose breadth of imagination was inversely proportional to their design skills. Lamentably, some went into production, mercifully limited, and are still flying albeit with significant problems.

In recent times the design of small flying boats has greatly improved. A huge boost was given to the popularity of small flying boats when the Searey was launched. With its fibreglass hull, fabric wings and availability in kit form, it initiated a new epoch. The design has evolved into a much more sophisticated aircraft and its growing popularity speaks volumes for its fundamental qualities. I owned an early Searey for a number of years and even that early design was a quantum leap forward in design from any other amphibian available in kit or plans at the time.

Apart from the Searey I have flown the Aventura II, Colyaer Freedom, Lake LA-4-200, Super Petrel 100 and super Petrel LSA. I have not flown the Seamax but have had extensive discussions with an owner and from those discussions, it seems no more or less remarkable than other aircraft in the same category.

There remained the Icon A5.

That aircraft had a prolonged and difficult gestation. The original purchase contract was of about 40 pages and contained some terms most unattractive to a potential purchaser. The current version, pared down to about 10 pages is a much more agreeable proposition for the buyer than the original. Moreover, the development seemed to go on forever and with the significantly escalating anticipated purchase price mounting frustration was suffered by those who had paid a deposit. Nevertheless, throughout, the aviation press was unrestrained in its use of superlatives. Icon's marketing department remained cheerful, positive and upbeat, so much so that the commonly held view was that if the design department was half as skilful as the marketing department, Icon was onto a world-beater.

To see for myself, I visited Icon's Tampa, Florida base in early November where I undertook a conversion course. I found the aircraft to be truly remarkable and significantly superior to any other I have flown in the same category.

The quality of the training offered by Icon matches that of its product. Although the principal market is in the US, I was able to be readily accommodated in the training regime. I was given access on-line to extensive material to prepare for the two day course. Three standard courses are on offer at the Tampa base. A "Flight Experience" which ranges from a one-half day to several days. It is customised to accommodate the goals of the student. The second, the TX-L course is designed enable qualified pilots to transition to the Icon and add the LSA Sea endorsement to their land qualification. The course duration is four days.

Finally, there is the TX-S course for qualified seaplane pilots. It is essentially a conversion course over two days of theory and flight instruction. Incidentally, in the US, there are not separate endorsements for floats and floating hulls. One endorsement covers both.

There are Icon training partners in the US which offer ab initio training for the Sport Pilot and Private Pilot licence as well but the Tampa base focuses on new and potentially new owners, instructor training and transition training.

The Icon Tampa base is ideally located. Most of Florida is not higher than 25 feet a.m.s.l. It teems with lakes and waterways suitable for seaplane operations. Weather is generally ideal and the huge Tampa bay must be several times the size of Sydney harbour. Although the course occupied only two days, I stayed in Tampa for five and on every day the weather and water conditions were ideal with the water surface being ruffled and the occasional hint of a swell, but nothing more.

The area is steeped in aviation and maritime tradition. The world's first air service was operated by a two seat Benoist flying boat from Tampa to nearby St. Petersburg in 1914.

The Peter O'Knight airport where Icon is based is on the fringe of busy shipping lanes and the AWOS, equivalent to our ATIS, exhorts pilots to watch out for and give way to shipping in the shipping channels, one of which lies just off the end of runways 36 and "4" (no zero). I thought it probably unnecessary to advise pilots that no happy outcome was to be expected if the aircraft did not plan to avoid a "Carnival" sized cruise ship on climb-out.

After a comprehensive ground briefing by CFI Sean Stamps, I was assigned to Andy Jackson for the balance of theory and flight training. Although essentially a recreational pilot, I have acquired most of the available "gongs" over many years flying including an ATPPL and multi-engined instrument rating, a grade 2 GA instructor rating and am a recreational aviation CFI. Thus, I and my bank account have had quite a bit of exposure to ground and flying instruction delivered by many flying schools over the years. The quality of ground and flying training offered by Icon was second to none. The atmosphere was utterly professional yet relaxed and genial. The curriculum was superbly structured both as to content and delivery. Andy Jackson has 20 years in the military flying huge tankers as well as instructing. He has around 1000 hours on the Icon.

The initial walk-around suggested that the lengthy development period was justified. The optimal aircraft design was aspired to before a commitment to manufacture, a fact reflected in little change having been made in the aircraft since manufacture commenced. I recall inspecting mock-ups at Oshkosh over the years of design development and seeing proposals for incorporation into the design which were abandoned. A couple of examples were a powered wing-folding mechanism and unusual looking propeller safety guide.

The first impression was of quality and attention to detail in construction. The design is innovative with a simple and quick one-person wing folding mechanism along with the tips of the horizontal stabilizer being easily removed for transport. The advantages of the wing folding mechanism were evident when I looked into the Icon hangar and saw that close to four aircraft can be accommodated in the space taken by one aircraft with its wings spread.

The cockpit design is both ergonomically and functionally ideal, particularly the seats which are probably the most comfortable of any light aircraft I have flown. Despite or perhaps because of the fact that the layout of the instrument panel is said to have been designed to reflect that of a sports car, it works very well with everything where it should be and an annunciator panel with lights which illuminate to indicate any specific engine or fuel problem, incipient or actual. One of the innovations is an angle of attack indicator which I regarded with some scepticism when I read about it but it seems to work well.

It is, in effect, a gauge to indicate how hard the wing is working and how much “energy” is in reserve. The needle range flow is from green to yellow and finally red. The pilot configures the power, pitch and roll so that the indicator needle is placed on the white line located in the middle of the green, safe energy range to achieve best climb rate, best range cruise, best angle of glide or normal approach angle of attack, as the case may be. The glassy water landing technique requires the needle to be just into the yellow. Its position reflects pitch, airspeed and rate of descent for such a landing, substituting for or at least augmenting the airspeed indicator and the VSI. Holding a rate of descent of the typical 100-150 fpm can be a challenge in most aircraft, especially in other than calm conditions. The A.O.A indicator gives a more easily monitored trend indication without the need to carefully watch and collate the indications of two separate instruments.

A criticism of the panel is the altimeter which has only one hand. It works well enough and there is the GPS derived altitude available but its precision is not as great as the two-handed instruments. The undercarriage has a couple of features which could be improved on and for an aircraft of this price, it is unfortunate that they exist. There is no “fail safe” system so that if the gear lever is accidentally raised or the master turned on with the gear lever in the “up” position while the aircraft is on the ground, that is what might happen. There is no emergency gear lowering mechanism with the result that if the battery power falls below a certain level, the undercarriage may not extend or fully extend. The potential for this problem to arise is largely overcome by the indications of the annunciator panel. If the battery warning light illuminates, the protocol is to lower the undercarriage. The useful load of about

430lbs., although somewhat on the light side at first glance, is competitive with some other identically powered lighter amphibious flying boats. The aircraft is not intended as a cross-country machine. With two on board, fuel was limited to around half-tank. However, by LSA amphibian standards, this is fairly typical. Despite the fact that we were near gross, the aircraft performed very well both on and off the water with a respectable climb and cruise performance.

Icon emphasises the benign stall characteristics of the aircraft and the claims are justified. Stall entry is a very gentle transition and the aircraft can be banked up to about 30 degrees when stalled while under full control. A audible stall warning device is fitted.

Controls are light yet the aircraft has the momentum not associated with LSA aircraft which allows for a smooth and seamless transition to land or water. The capacity for steep turns, guided by the AOA indicator is astonishing. On the water, the efficient hull design is apparent. “Steep” water turns on the step are impressive with little difficulty in keeping the wing tips clear. Apart from the lightness of controls, the overall handling characteristics are those of a heavier aircraft. Gross pitch changes with sudden applications of or reduction in power are absent.

Overall, a docile, exciting machine with no vices, at least none which declared themselves in the very extensive workout both on my part and on the part of the machine during my training; one which amply demonstrated the strength of the aircraft and its components. The aircraft is complex and I suspect that will be reflected in maintenance costs. If the very comprehensive and thoughtful design process reflects the maintenance regime, the cost should be no more than of other aircraft of similar sophistication.

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The 6th April 2024 is the 100th anniversary start of the first flight around Australia in a seaplane by the Royal Australian Air Force. Three groups of seaplane enthusiasts are planning to celebrate this milestone with a lap around Australia, departing from Point Cook Victoria, the original expedition's starting point, on the original date.

CLOCKWISE

Includes First Circumnavigation by a Female Seaplane Pilot and Oldest Male Pilot
60 Days
Led by David Geers

ANTI-CLOCKWISE

Replicating the Original Route and Flight
44 Days
Led by Michael Smith

PARTIAL CIRCUMNAVIGATION

North from Point Cook then Anti-Clockwise
Led by Rohan Whittington

Want to know more or participate?

Head to <https://www.100asa.com.au>

or

Phone David Geers on 0418 103 535



EVENT CALANDER

Date	Event	Location
March 2024		
01-03 Mar	Airshows Downunder Shellharbour 2024	Shellharbour Airport, Albion Park Rail, Illawarra, NSW, Australia
9 Mar	Lake Boga Splash Down	Lake Boga, Vic
10 Mar	Tyabb Air Show 2024	Tyabb Airport, Tyabb, VIC, Australia
15-17 Mar	Seaplane Training Session	Postponed until 8th June
23-24 Mar	Warbirds Over Scone	Scone and Upper Hunter Airport, Scone, NSW, Australia
April 2024		
07 Apr	Aldinga Airshow 2024	Aldinga Airfield, Aldinga, SA, Australia
13 Apr	Nhill Air Show 2024	Nhill Airport, Nhill, VIC, Australia
27-28 Apr	Anzac Weekend Airshow	West Sale Airport, Gippsland, VIC, Australia
May 2024		
25-26 May	Central Coast Airshow	Warnervale Airport, Warnervale, NSW, Australia
June 2024		
8 Jun	SPAA AGM & Pilot Skills Camp	Rathmines, NSW

ONLINE SHOP

We are getting closer to launching our online shop which will offer you the opportunity to purchase SPAA merchandise. We are fine tuning the range of products that will be available so if you have any ideas, please let us know.

As always, we welcome any input from our members so if you have anything you would like to share, please email

admin@seaplanes.com.au