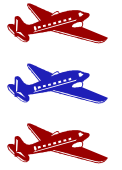


Dayton Pilots Club



October 2006

www.daytonpilotsclub.org

Next Meeting Wednesday, October 18

Dayton Wright Brothers Airport at 7:00 PM

Mike Nolan, Editor

From the Editor

By Mike Nolan

First of all, let me apologies for the delay in getting the news letter out to the membership. However, after a major remodeling project at my house, I had to get the computer back up and running after being shut down for a period of time.

However, we are in luck. Because of my delay, I was able to include as the feature story a report by Dr. Andrew Sarangan, one of our instructor, who has flown the new Zodiac and had some important information to share with the membership. So sit back enjoy and learn.

First Impressions of the Zodiac

By Dr. Andrew Sarangan

Flight characteristics:

The Zodiac handles just like any other airplane, nothing particularly remarkable. It is a stick control with aileron and elevator electric trims. The elevator is very sensitive, and even small movements are likely to give surprising pitch variations. Unlike the Archers, there is no mechanical trim, so if there is an electrical problem you will lose trim control. The flaps are also electric, and it produces a significant nose-down attitude when you deploy them. This airplane is very susceptible to turbulence and gets tossed around quite a bit, which is something to keep in mind if you are taking first-time passengers for sightseeing.

Weight:

With full tanks of fuel, this should really be treated as a one-person airplane. If you are flying with two people, it is very important to review the weight & balance and range. Also due to its light weight, you might notice some aileron trim if there is only one person in the airplane or if the fuel load is not balanced.

Fuel burn:

Beware that the POH has major errors on fuel burn and range. I have averaged about 6.5gal/hr (tach) at 2450 rpm with a properly leaned mixture, but it may be wise to plan at 7.0gal/hr. The total usable fuel is 28 gallons, so the maximum endurance is 4.0 hours. The fuel gauge tops out at 10.5 gallons, and only starts to show a reading when the tank drops below 10.5 gallons on each side. As always, we should visually inspect the fuel level and not rely on the fuel gauge, but I have noticed that the gauges on this airplane seem to be fairly accurate. *(Continued on page 2)*



Visibility from the cockpit of the Zodiac allows for a spectacular view with a 360 degree panoramic.

Pilot Safety

Tim Smith

VFR Flight Into IMC: Never A Good Idea

We hear this over and over again. Maybe he should have listened one more time.

VFR flight into instrument meteorological conditions (IMC) continues to be a leading cause of fatal general aviation accidents. In 2005, nearly 75 percent of all fatal weather-related accidents resulted from this.

On October 13, 2005, after waiting four days for the weather to improve, the pilot of a Cessna 150 departed Deer Run Airpark in New Castle, Kentucky, for a VFR cross-country flight to Berkley, South Carolina. One hour and twenty minutes into the flight, the Cessna hit Pine Mountain near Pineville, Kentucky. The pilot was killed and the airplane was destroyed.

The pilot had called Louisville Flight Service at 1:07 p.m., and requested a weather briefing for the VFR flight with a stop in Hendersonville, North Carolina. The briefer provided current and forecast reports for the flight, and informed the pilot several times that "VFR flight was not recommended due to mountain obscuration."

At 1:45 pm, the pilot contacted the Lexington tower and requested VFR flight following to Hendersonville. At 2:05 p.m., the pilot was advised that he was 41 miles south of the Blue Grass Airport, and radar services were terminated. The flight continued on a southeast heading at an altitude of 2,200 feet. The last radar record was at 2:49 p.m., three miles from the accident site.

The wreckage was found on Pine Mountain at 2,360 feet - just 200 feet from the summit. Ceilings in the area were reported between 1,900 and 2,300 overcast. A police officer, who responded to the accident, said that the "fog remained low in the valley much longer than usual," and that it was "very thick."

The pilot held an airplane transport pilot certificate for airplane multiengine land with

type ratings in the B-727, C-500, DC-9, and Learjet. He also held a commercial certificate for airplane single-engine land. In February of 2005, the pilot reported almost 17,000 hours total time.

The NTSB determined the probable cause of this accident was the pilot's continued VFR flight into IMC, which resulted in controlled flight into terrain.

A quick look at the Cincinnati Sectional shows maximum elevation figures (MEFs) ranging from 2,000 feet to 3,800 feet over the pilot's route of flight. MEFs are found on VFR sectional charts and represent the elevation of the highest obstacle in the quadrangle. When planning a cross-country flight, especially one where low ceilings are involved, pilots should check the MEFs along their route, and fly above them to ensure obstacle clearance. If terrain and cloud clearances can't be maintained, the flight should be cancelled.

Copied from AOPA e-Pilot.

Fly safe, We want you back
Tim Smith
Safety Officer

Speed:

The Zodiac is not a speed demon by any means. Although 110 knots could be achieved at maximum cruise power, 100 knots is a more realistic number.

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Newsletter articles Due by October 30, 2006

Around the Hanger

October Fly-out

Due to popular demand we have chosen Fulton County Airport (KRRCR) at Rochester Indiana as the first choice for the fly out on October 28th. The airport is 126 miles from KMGY and has Karen's Restaurant across the road. The plan is to take off at noon. Karen's Restaurant serves a buffet style lunch (which they claim is pretty good). Contact Dave Roberts for information.

Send your Check Outs, Medicals, and Safety meeting's to Tim Smith, P.O. Box 1144, Waynesville, Ohio 45068-1144 or e-mail: arrowsmith@woh.rr.com

Schedule your check-ride with the new Zodiac as soon as you can get with your instructor.

Noise:

I don't have decibel numbers, but this is one of the noisiest aircraft I have flown in. Therefore it is best to reduce rpm and save your ears and fatigue instead of running at full power all the time. The noise is probably due to the lack of insulation around the cockpit. Even with an ANR headset I was fatigued by noise after a 3 hour flight.

Takeoff & Landing Performance:

I suspect the propeller is configured for climb rather than cruise because it seems to take off and climb very quickly. Climb rates of 700 fpm is realistic even at maximum gross weight. Takeoff and landing distances are impressive, and there is never a reason to roll past the first taxiway exit.

Visibility:

This is one of the biggest attractions of the Zodiac. The clear canopy gives you a panoramic view of everything around you. It is the perfect airplane for sightseeing. Here is a breathtaking photo of the fall foliage I took near western NY.

While the view is great under VMC, it is equally frightening under IMC. It is not an airplane for serious IFR flying. With a single CDI, a VFR-only GPS and the lack of an outside

temperature gauge this airplane should be flown under IFR very conservatively.

Engine gauges:

RPM, fuel pressure, oil pressure and temperatures are shown as color coded bar scales on the Dynon digital display. What is nice is that you get the EGT and CHT for each cylinder. It also keeps track of tach time and flight time. There is a special "Lean" function that makes leaning the mixture easier, and a clock and timer are also included. Reading the digital gauges takes a little bit of getting used to, but it is great once you know which keys to press.

Autopilot:

The autopilot is also very simple to use. Pressing just one key will hold your current altitude and heading. You can then dial in a different heading, or make it track the GPS course. You can also set climb or descent rates. All of these are done from just three buttons on the panel. However, the autopilot does not perform very well under turbulence. Sometimes it 'lost it completely' and started to steer way off course. Also, it tends to chase the altitude resulting in airspeed excursions and overshoots. All in all, the autopilot works well under smooth conditions but it is best to hand-fly it in turbulence.

ATC designation:

Since the Zodiac is not a commonly known aircraft type, ATC will inevitably ask you for the type designation. The designated code for this airplane is CH60.

Avionics:

The airplane has a Garmin 430, and a second nav/com. The Garmin comes with a terrain database. Basically, the terrain feature will flag a warning anytime your projected course comes too close to charted obstacles. It is a nice feature especially

(Continued on page 4)

Minutes of the September 20, 2006 DPC Membership Meeting

Greg Halderman called the meeting to order at 7:02

Larry Scherr read minutes from the September 8, 2006 trustee's meeting

The Zodiac is here. Greg gave a run down on all the features of the N701DP. He said it a really fun airplane to fly. The manuals are available for \$5.00 from Tom Weber. Checkouts will be: CFIs have to check each other out and they must have 5 hours before they can instruct. Members will need a minimum of 1 hour ground instruction and a minimum of one hour flight instruction. Checkout forms are here at the meeting, they will be available at the desk, the hanger, and on the web. The form will need to be filled out and signed by instructor before solo flight. This is the same policy as all the other planes. The club is still not looking for or accepting sport pilots.

Trustee Reports:

Membership – Chester Harris
Chester has made a flyer, please take them out to airports and friends get them to join.
Total membership is 58 full members and 2 associate members.

Newsletter – Mike Nolan
It is out and posted on the Web. If anyone has an article or and idea for an article, please let Mike know.

Treasure – Tom Weber
To save on postage monthly statements and the newsletter and now being sent electronically.

Zodiac manual for zodiac \$5.00
Patches for DPC \$2.00

Maintenance Report
8078X – Left fuel gauge is still an ongoing problem
4506W – Going for annual the end of this month.
759HS – All okay with plane, please find a buyer
738NG – #2 com in for repair, pilots door lock was repaired, please find a buyer

Safety – Tim Smith
Checkout forms for the Zodiac are blue.

Andrew Sarangan gave a presentation of Navigating with the CDI.

Adjourned at 8:48 pm

when you are cruising along at low altitudes enjoying the view. Remember that this GPS is not authorized for IFR use (yet), so you can't file /G.

The instrument panel is lit by a red lamp in the baggage area. One flaw in this design is that the light disables the Garmin 430's automatic brightness control. This will result in an extremely bright display that will impair your night vision. You will have to manually turn down the Garmin's brightness (under the AUX menu).

Airframe:

The airframe may be structurally strong, but the skin is very fragile and easily damaged. One has to be very cautious not to step on the wing except on the marked areas.

Canopy:

It gets very hot under the canopy, even on cool days. Fortunately there are four generous fresh air vents that can keep the cockpit cool. Also, opening and closing the canopy requires some extra care. Avoid using the locking handle to lift the canopy, and try not to leave excessive fingerprints on the canopy. Wiping down the canopy and the wing's leading edges after every flight will go a long way in keeping this airplane in its new condition.

September 2006

F L I G H T O P S	Current Month		Current Year			
	Prior Fiscal Year					
	Aircraft	Hrs	888	YTD Hrs	YTD 888	YTD Total
4506W	14.67	0.16	140.66	0.64	141.30	
	19.55	0.00	152.55	2.23	154.78	
701DP	12.50	0.10	12.50	0.10	12.60	
	0.00	0.00	0.00	0.00	0.00	
738NG	3.30	0.00	67.60	0.50	68.10	
	12.00	0.00	116.50	0.20	116.70	
759HS	0.00	0.20	40.60	0.50	41.10	
	22.80	0.00	118.70	7.50	126.20	
8078X	15.30	0.00	136.10	0.90	137.00	
	14.70	0.20	94.30	1.80	96.10	
Totals:		45.77	0.46	397.46	2.64	
		69.05	0.20	482.05	11.73	