ing pontoon, and I was able to drift onto it without serious impact, and get a couple of lines out. It had taken just forty minutes from weighing anchor. My subsequent journey to Paglesham took nearly four hours. I went up to the office and was allocated a berth close by the slip, as I explained my plan to recover when I could retrieve the trailer.

As it seemed I had missed the only bus from the village, I telephoned for a taxi to Burnham-on-Crouch, which turned up at about 1300. The trip to Burnham made a bit of a dent in my wallet, but worse was to follow. I had hoped to get the ferry to Wallasea, leaving only a three-mile walk by footpath to Paglesham. However, the staff at Burnham Yacht Harbour told me the ferry only ran at weekends and Bank Holidays. It was now raining heavily into the bargain, so I took shelter in the Swallow Tail bar that overlooks the Yacht Harbour and had some lunch. The rain now increased to a torrent, which some wag referred to as 'a clearing up shower'. However, eventually it did ease and I walked up to the station to check the trains inland to Wickford.

I hoped to get another train from there to Rochford, which would get me within 5 miles of my car. Fortunately, Mark Tingley now rang me on the mobile phone. The others were already back at Paglesham and he kindly offered to collect me from Wickford station in his car. Thus the party was reunited at Paglesham at 1645.

Because of the weather and my general fatigue, I decided I would defer collecting the boat until the next day, and rang to inform the marina staff. We were all still on holiday, so John and Jo went back with Mark Tingley to stay at his house in Stevenage, while Mark Smith and I both went home for a much-needed bath and a comfortable bed.

**Friday:** As fate would have it, Friday morning turned out a perfect sunny day with light winds, which at least made recovering my boat easy. The marina staff were kind, and did not charge me for my unplanned overnight stop. I towed the boat home to south London in the afternoon, and then joined John, Jo, and Mark Tinglev at his house in Stevenage where we all had an evening meal that incorporated some of the leftover tins from the cruise larder. It hadn't been one of our greatest summer cruises, but nonetheless, it was still packed with incident and interest. **RF** 

(The early part of this cruise was described in this Bulletin by Len Wingfield on p.40. Richard Farr's article was originally entitled "East Coast Cruise, August 2006, Part 2" but we decided to rename it to indicate its relationship to Len's article. Photo from Richard farr on p.55 - Ed.)

## Paradox

## Duncan Gilchrist

Evaluation of Matt Layden-designed 13'10" (4.2m) Parodox micro-cruiser

Description of the Alastair Law's Paradox micro-cruiser was one of the star attractions on the most interesting stand at the Beale Park Show 2006 – the DCA pontoon. Alastair and I had met before at a DCA rally in Poole but I had no opportunity to examine the Paradox or to sail in it. With those objectives in mind and a wish to discuss queries arising from studying a set of plans for building Paradox, I contacted Alastair. We subsequently spent a day and a half together talking about and sailing Paradox. What follows are my impressions from reading whatever I could find on Paradox, studying the plans and the building instructions, and bothering Alastair, who could not have been more helpful.

## **Scepticism Knockout**

Man has long admired a nicely-rounded bottom. Since he first sat astride a log and tried to stay on top of it to the other side of the river, rounded bottoms have offered excitement and sometimes even satisfaction. So one has to be brave to ignore this long-held love of curves and to present to the world a boat that is square. Worse than that, the designer added protuberances to the outsides of the already sharp chine. He then had the audacity to claim that this box would sail well to windward without the aid of a keel, centreboard or leeboard, on its bare flat bottom! His name is Matt Layden, he is American and he is not just brave, but clever, and seriously into small boat sailing.

Scepticism is good;

it stops us from being 'taken for a ride',

made a fool of,

conned...

Scepticism IS the universal reaction to being exposed to the concept of sailing to windward without a board or keel. Scepticism became a hook to me, a motivation to try the thing for myself. And scepticism was writ large on the faces of my friends at Chew Valley Lake SC as Alastair prepared to launch his boat; so much so that the President of the club insisted that a rescue boat stand close by as we sailed off.

Many claims have been made about Paradox. Alastair claimed that he could put the boat in the water without getting his feet wet. 'No way,' I thought, as I put on my sailing shorts and neoprene sailing shoes. With his road trailer wheels parked five inches from the water's edge Alastair winched the boat gently backwards until it slid off the back of the trailer and floated free. Alastair walked over the trailer top and undid the winch strap. I was, by this time, wading and holding onto the boat. With it side-on to the shore and me on its nearside, the water was scarcely up to my ankles. I swung the boat head to shore; her bows then just touched the shore. Alastair came back from parking the car, pushed her gently off and stepped aboard in one smooth action and with his feet dry.



Everything about Paradox is different. Everything has been thoroughly tested. Everything works.

There is no cockpit. Instead there is a warm insulated cabin. There is a large sliding hatch of exactly the right proportions to allow the helmsman to sit and steer facing forwards with his head just clear of the top of the cabin. Or, if the weather is nasty, to lower the seat, close the hatch, and continue to sail from 'below' still with 360% vision through the polycarbonate windows and still be able to raise or lower the sail, reef, steer, and raise the rudder. And, yes, it is ventilated.

The cabin floor is flat and clear and is 3ft 6 inches wide by 6 feet long, and, of course, dry. There are thirteen compartments for storage of food, water,

anchors, gimballed stove, bedding, etc.

But I digress... My mission was to exorcise my scepticism about her sailing ability.

Without the sail up, Paradox lies 'hove-to' side-on to the wind direction if the rudder is cleated up. The sail is hoisted from inside the cabin; a large 99.75 Sq ft lug sail. It goes up so easily that it looks like sleight of hand. The wind on the day was light and variable in both strength and direction from 0 mph to 4 mph mostly.

Upright, with both chines in the water, and little wind in the sail, she is at her least inspiring, but probably no slower than other short but heavy displacement craft. Stability is high. As the wind picked up a trickle Alastair and I sat down to leeward. Heeling Paradox radically changes the underwater shape, unlike a round-bottomed boat. At about 20% of heel the windward chine clears the water and there is a noticeable increase in speed and willingness to go to windward. The optimum sailing angle is between 20% and 35% of

heel. Paradox has to heel to more than 55% before water laps the top of the cabin windows – plenty of warning to free the sheet, or roll in a reef.

One of the striking characteristics of Paradox is that she readily sails herself. That is, the helmsman points the boat where he wants to go, adjusts the sail to best advantage, and off she goes in a straight line and continues to do so until there is a wind shift. Effectively the sail acts like windvane steering. No constant tiller adjustments here.

Comfort is another characteristic of this boat. Steering line and sheet are readily to hand. The seating position is relaxed. Lounging to windward or leeward is easy and comfortable. The boat fits like a weightless, dry, windproof garment.



Forgive me for repeating myself – the helmsman sits facing forward. No big deal if one is young or supple, but a real boon to anyone with an arthritic neck.

By 1230 the wind was almost non-existent. We went to lunch. Alastair continued throughout the day to answer my endless questions. And it seems that Matt Layden, the designer, has a tried and tested answer to

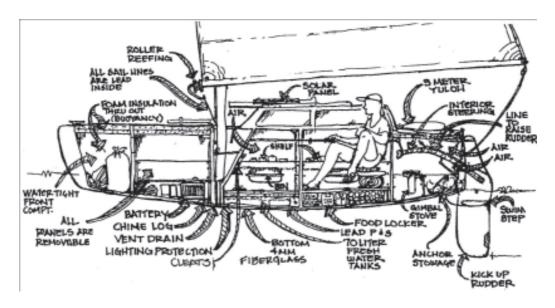
most of the minor and not so minor problems that can occur during a single-handed coastal cruise in shallow water. Paradox is built like a pocket battleship. Running the boat up the beach to park it is part of the package.

Back on the lake, after lunch, we had a short spell of perhaps 8 mph of wind. Just long enough to sheet in, head upwind, observe the speed and lack of wake, check the angle of the intended tack, tack, and off on starboard for about a minute or so. And yes, she does go to windward at 45° to the wind, and at close to her hull displacement speed of 4.5k. She tacks through 90° and picks up speed while the helmsman does very little, other than a gentle adjustment of the steering line. No 'Lee-Ho!' here. No risk of damaged shin bones, no cracked skulls , no risk of capsizing.

On this day she never failed to complete a tack. She goes into tacks quickly but as the wind pressure comes off the sail she drops down level onto her square bottom and quickly slows down. Her weight just about carries her through onto the other tack, but her slow tacking does not inspire confidence for beating up narrow rivers, for example. I have some ideas as to how to overcome this. Can I have another sail in her Alastair? Please.

Debate continues as to why she goes to windward so well, considering her lack of a keel. Certainly the chine runners play a big part. One theory is that the curvature of the bottom rocker helps to create lift also. Whatever it is , it works. Off-wind she is very stable. One happy owner of several years standing describes Paradox as 'the best coastal micro-cruiser in the world'. The concept certainly delivers many desirable coastal cruising features, including a coral head-proof bottom. Matt Layden wins long-distance shallow water races in Florida of up to 1800 miles long (!) in her successor 'Enigma' by just keeping going 24 hours a day; sleeping while she sails herself. At the end of which he sails her 600 miles back home! Now that says many things, but to me it says that this is one very seakindly, undemanding safe cruiser.

Did I tell you that she will self-right if capsized?



Full plans are available for \$40 (under £22) and no designer's royalty if you decide to build. I sent two \$20 bills by airmail and received the plans back two weeks later, in October 2006. Payment cannot be made by credit card. The plans are on 12 sheets of paper slightly longer than A3 size, so not easy to copy in the UK. Building Paradox is staightforward joinery, I am told. Building instructions in the form of a CD-ROM are available separately for \$14. I sent \$15, a 'bill' for \$5 and one for \$10 and the CD was again here within two weeks.

Paradox plans from Dave Bolduc, 1736 Phillips Avenue, Greenboro, N.C. 27405 U.S.A. email: mbolduc@triad.rr.com. See also www.microcruising.com. Web discussion group is at groups.yahoo.com/groups/paradoxbuilders. Building information at www.as4jg.freeuk.com, and also at www.little.jim.free.uk

Building instructions CD from Don Elliott, 711 Wisconsin Ave., Box 202, Tomah., Wisconsin, 54660 U.S.A. This information is on www.smallsailboats.co.uk/paradox/info

The greatest hurdle that flat-bottomed chinerunner boats face is not in going to windward as effectively as boats with keels, but in our own ability to accept that something so different from our previously-held beliefs can actually work. **DG** 

(Duncan's photos of Paradox Little Jim and owner Alastair Law taken at Chew Valley Lake October 2006 (p.46) - Ed.)