Stalls, Short Field landings and Finding Kirkby

We wasted no time getting the plane ready, and we were airborne at 10:30, outbound via Seaforth. John was in the right hand seat, doing the radio and navigation. Heading north, we were cleared overhead Blackpool at 3,500 feet rather than 3,000 feet as on the previous occasion. Once north of Fleetwood, we decided to do some stall practice – over the sea. Well it wouldn't be the first time – I had done some in Liverpool Bay a few years previously with an instructor during a flight test in the Piper Tomahawk.

We started with a clean stall. I didn't note the precise stall speed, because I was concentrating on the aircraft behaviour, but she was still flying at 50 knots. Unlike her baby sister, the C152, the 172's wing drop was resigned rather than bad tempered. Picking up the dropped wing with rudder wasn't wholly effective however, and held in the stall, the aircraft slowly continued to turn left with the wing still partly dropped. Standard recovery had her flying again in seconds though.

With full flap, the behaviour was different in that she didn't drop a wing at all, but just wallowed around in an extreme nose high attitude, with the VSI needle off the bottom of the scale. Once again, standard recovery had her flying again in seconds. Finally we did a couple simulating the low and slow turn onto final – the worst case situation. With 30^{o} of flap, turning, and with the nose way up in the air it was hard to imagine anyone ever putting the plane in that attitude. In this configuration, the aircraft just wallowed about, but the height loss was such that you really wouldn't want to get into that situation near the ground. In the recovery, it was important to lower the nose add power and get her flying again before levelling the wings. Level the wings first, and you risked flicking into a spin – fatal at approach heights.

We had by now descended to around 2000 feet, so we climbed back to 3000 feet and headed towards Heysham Power Station, taking care to go round it, not over it, as it was surrounded by a restricted area up to 2000 feet. We stayed over Morecambe Bay, turning directly towards the little unlicensed airfield of Cark as Heysham passed by on our right. We orbited the field at 2000 feet to check that the runway was clear, then John called blind on their radio frequency that we were joining downwind to land. I did just that, positioning at the published circuit height of 1000 feet.

Short Field Landings

I turned onto base leg quite close in to the field, and lowered flap in stages to the full 40^{o}. John suggested aiming for the large puddle in the undershoot, just before the runway proper, which I had already picked out as my aiming point. He also suggested reducing speed to 60 knots, which, from our stalling exercise, I was sure was well into the flying envelope, and posed no risk of falling out of the sky.

We planned to do a couple of landings, and the natural assumption therefore was that the first landing would be a touch and go, but as I started the final approach, I had thought it would be wiser to make each landing a full stop landing because of the runway length. Seconds later, John suggested that we made a full stop landing. Great minds etc.

With full flap, we seemed to be diving for the runway, which looked perilously short, giving the impression of being higher than we really were. It was short in fact – a mere 400 metres plus some quite clean parts of the original runway at each end which would serve as an overrun area if needed, without risk of damage to the aircraft. They were mentioned in Lockyears Farm Strips Guide as being gravel, but in fact it was tarmac at the 06 end, the bit we might need landing on 24. The runway was also only 15 metres wide. I had flown into Welshpool many times, which was not much wider at 18 metres wide, so that held no real fears. Of course I had read up on the airfield data before flying and I was quite relaxed as the approach was stable and I had a very competent second pilot in the right hand seat if things went a bit awry.

I flared rather too gently and we were still descending quite smartly by the time I had the nose above the horizon, so we bounced. I held the attitude and she landed again, this time quietly. I braked normally, and was surprised to see that we were probably not much more than half way down the "good" runway. We backtracked past the end of the good tarmac onto the undershoot area, to give ourselves as much runway ahead as possible for take off.

I elected to take off with no flap, as recommended by the Pilots Operating Handbook, and lifted off at just 50 knots, flying level to pick up speed, which she did very quickly, reaching 75 knots in seconds. From then on it was a normal climbout to the downwind position. This technique had us airborne before half way down the "proper" runway. The second landing was better with just a little bounce - less than the first time. I wasn't taking enough account of the loss of height during the flare from such a steep approach angle.

Back to the puddles for a third attempt, the take off was straightforward as before. This time I was determined to get it right and kept some power on as I flared, remembering a trick I had learned from an instructor a couple of years previously. He had told me that for a good short field landing, you kept some power on in the flare, and only closed the throttle as the wheels touch. That way, there would be no chance of the aircraft trying to fly any more. So I planned to try this and my flare was much better this time. As the wheels touched, I cut the power. She stayed firmly on the ground.

Finding Kirkby – a Different Way

The run home was uneventful until we passed Blackpool, again flying at 3500 feet, but this time through the overhead rather than on the eastern boundary of the ATZ. As we crossed the south bank of the Ribble Estuary we started to talk about entry into the Liverpool zone at the Kirkby VRP. I mentioned to John the smoke I had seen on the previous flight, and he was sure that that was St Helens, and the glass factory. I said I was sure it was Kirkby. John looked in Pooleys and found that Kirkby was 11 miles from Wallasey VOR on the 63^{o} radial. So he set up the NAV1 radio and the DME, and as we headed towards the chimney, adjusted the OBS to keep the needle centred.

At first it looked as if the chimney was going to be less than 11nm from Wallasey, and we turned slightly eastwards, but as we arrived overhead the smoke, the OBI showed exactly 61^{o} and the DME showed exactly 11.0nm. The smoking chimney *was* at Kirkby.