



Left: On-Track Aviation at Wellesbourne Mountford Aerodrome, Warwickshire.

# SO YOU WANT TO BE A FLIGHT INSTRUCTOR ?

'I found myself on day one at the bottom of a very steep learning curve, not only in terms of learning to teach, but also in flying to a satisfactorily high standard.'

Richard Bullock, Alan Seeds and Christine Bell have all completed their Flight Instructor (Restricted) courses with On-Track Aviation and now share their experiences with you.

**Christine Bell** is a 46 year old mum-at-home, with two kids at school. I am completing the instructor course with On-Track Aviation on the basis of two school length days per week, on average.

For the last 4 years, nearly all of my PPL hours consisted of glider towing, from an unlicensed airfield close to my home. A typical flight would consist of a prolonged period of climbing, followed by glider release when

finally the particular height had been achieved. After that I had to nurse a very hot engine back to the airfield as quickly as possible and landing from a non standard circuit with a high risk of a go around due to the proximity of other gliders. Not exactly your standard club flying.

Moreover, it is 14 years since my

initial PPL training plenty of time for some of the messages to get lost, and for a few bad habits to develop.

So how has On-Track Aviation helped me to overcome this flying baggage? First let me tell you about the course content, and then I will explain how On-Track Aviation helped me.

Briefly, the Flight Instructor (Restricted) or FI (R) course consists of 30 hours of dual flight instruction, of which up to 5 hours maybe mutual flying - student instructors flying together. There is also a ground syllabus consisting of 125 hours. A good proportion of the prescribed ground training is in teaching skills e.g. how to present a successful pre-flight brief, how to give a long briefing or ground lesson, teaching styles, learning styles and so on.

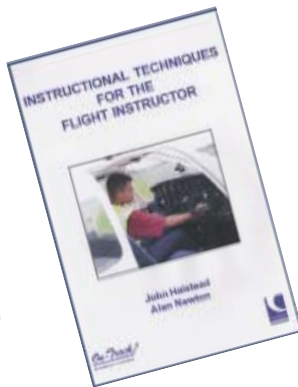
The flying training consists of a series of exercises from the PPL course where by my instructor gives me an exercise on one flight, and then subsequently I give it back on a separate flight.

Right: Christine Bell in the Robin 2160i in which she completed her instructor course.

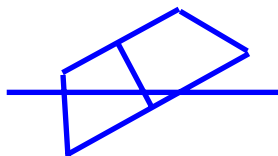


Exercise: 9

TURNING (1)



**Aim:** To turn level using 30° AOB onto specific headings  
**Airmanship:** Lookout, Orientation, Anchor point  
**Exercise:** 1. Revision Straight and level, acceleration/deceleration



Entry

- Lookout
- Select attitude
- Aileron
- Rudder to balance
- Back pressure

Maintenance

- Lookout
- Attitude
- Instruments
- (Alt and Ball)

Exit

- Anticipate
- Select S & L attitude
- Aileron
- Rudder
- Relax back pressure
- Lookout (downgoing wing)
- Refine datums

2. Rolling out onto a feature      3. Rolling out onto a specific heading      4. Turns at low IAS

- Anticipate feature
- Adjust to feature

- Maintenance include DI
- Anticipate 1/3 AOB
- Adjust to heading

- Entry apply power maintain IAS
- Maintenance include ASI
- Exit reduce power
- Adjust to datums

An exercise comprises a 20 minute pre-flight brief, then the actual flying of usually around an hour's duration, and a post flight debrief. There is great emphasis put on the pre-flight brief – a big change from when I trained, when such a thing was almost unheard of.

I found myself on day one at the bottom of a very steep learning curve, not only in terms of learning to teach, but also in flying to a satisfactorily high standard.

All of the On-Track Aviation instructors are ex-military and are extremely well trained and therefore, have high expectations of their eventual graduates.

I have to say, I felt pretty stressed at times, especially during the early part of the course. My flying was under scrutiny, as was my theoretical knowledge from the CPL ground training, passed the previous year. Not only that, but I had to find time to absorb and prepare to re-transmit each exercise. It was a

culture shock to me to stand at a white board, give a pre-flight brief, and then have it picked over by my instructor, no holds barred. Similarly in the air, my flying would be criticised, as I would not be allowed to teach on the basis of "Do as I say, don't do as I do".

There were times when I wondered whether I had made

Left and right: On-Track Aviation instructor training manual 'Instructional Techniques for the Flight Instructor' by John Halstead and Alan Newton.

the right decision, and if it might be easier to sleep nights if I just gave up gracefully. But then again, you make your own luck in life, don't you?

How did my On-Track Aviation instructor, John Halstead, help me through the difficult times? Well firstly, by changing the pace of the course. Secondly, by swapping aircraft to one which suited me better. Thirdly, and unspoken, by modifying how I was given criticism.

All the instructors have been very accommodating of the need to leave on time to pick up my kids from school, oddball sick children days and school holidays. In fact they have a meticulously planned roster of instructors with students which needs to be juggled on a nearly daily basis to

Below: Richard Bullock ...I wanted training that would demand of me the highest standards...



**Exercise: 9****TURNING (1)****AIM:** To turn level using 30° angle of bank onto specific headings**AIRMANSHIP:** Lookout, Orientation, Anchor point**DEVELOPMENT****Revision:**

Allow the student to practise straight and level 90 kts - 70 kts - 90 kts

**Introduction:**

Demonstrate a medium turn to the left at 90 kts. During the turn allow the student to hold the attitude

**Maintaining the turn:**

Enter a 30° angle of bank turn to the left, then teach the maintenance

Allow the student to practise

**NOTE:**

When teaching how to maintain make sure you induce a climb or descent and teach how to correct

**Entry:**

Teach the entry to the turn

Allow the student to practise

**Rolling out:**

Allow the student to enter and maintain the turn. Take control and teach the exit

Set the aircraft back in the turn and allow the student to practise the roll out

Allow the student to practise a complete turn

**NOTE:**

Nominate a reference feature before entering the turn

Teach the attitude in a right hand turn and allow the student to practise a complete turn to the right

**Rolling out on a feature:**

Allow the student to enter and maintain a turn. Take control and teach how to roll out on a feature

Allow the student to practise

**Rolling out on a specific heading:**

Allow the student to enter a turn. Take control and teach how to roll out on a specific heading

Allow the student to practise

**Turns at low IAS:**

Set the aircraft up straight and level at 70 kts and teach a complete turn to the left

Allow the student to practise

Teach the attitude in a right hand turn and allow the student to practise a complete turn to the right

**TEACHING POINTS****RE-EMPHASISE**Lookout Attitude Instruments  
PAAT

Elicit from the student the turn attitude and the back pressure

**EMPHASISE**Lookout Attitude Instruments  
Hold bank constant  
Small attitude changes whilst looking ahead  
No trimming in the turn**NOTE:**

Power is not normally increased as a few knots loss of IAS from cruise speed is acceptable

**EMPHASISE**Lookout  
Select the level turn attitude  
Balance**NOTE:**

Attitude selection is made whilst looking straight ahead

**EMPHASISE**Select straight and level attitude  
Balance  
Lookout (down going wing)  
Scan straight and level**EMPHASISE**Anticipate the roll out  
Adjust to feature**EMPHASISE**During maintenance include the DI in the scan  
Anticipate by 1/3 angle of bank  
Adjust to heading**EMPHASISE**On entry apply power to maintain IAS  
During maintenance include ASI in scan  
On exit reduce power  
Adjust to datums**NOTE:**

IAS must be maintained during turns at low IAS because of the proximity of the stall

suit everyone.

As I write, I am about three of four flying hours off taking my Instructor Skill Test. Give backs' are not an issue now, and I spend a lot of bad weather time asking questions along the lines of: 'If I am going to teach subject X, what is the best way of doing it; or, how do I deal with such and such a question on theory?' In other words, I am looking forward to being qualified and starting to teach.

At the end of the course, what have I got to offer a flying club? The answer is a very thorough grounding from On-Track Aviation, which in itself has given me a lot more confidence. Plus a different perspective from a rapid learning twenty year old, waiting for an airline slot. And, of course, the patience of a parent!

Christine Bell passed her Instructor Skill Test and is now keen to begin plying her trade.

**Richard Bullock** says I originally planned to do my instructor rating at Bournemouth Airport, where I had already completed the Commercial Pilot Licence (CPL) and the instructor pre-entry flight test. However, the school couldn't fit me in within the time frame I required, so I started hunting around for an alternative school.

On-Track Aviation, who I had never heard of before, was recommended to me. However, after checking out their web site, I was keen to ask if they could provide an instructor course for me.

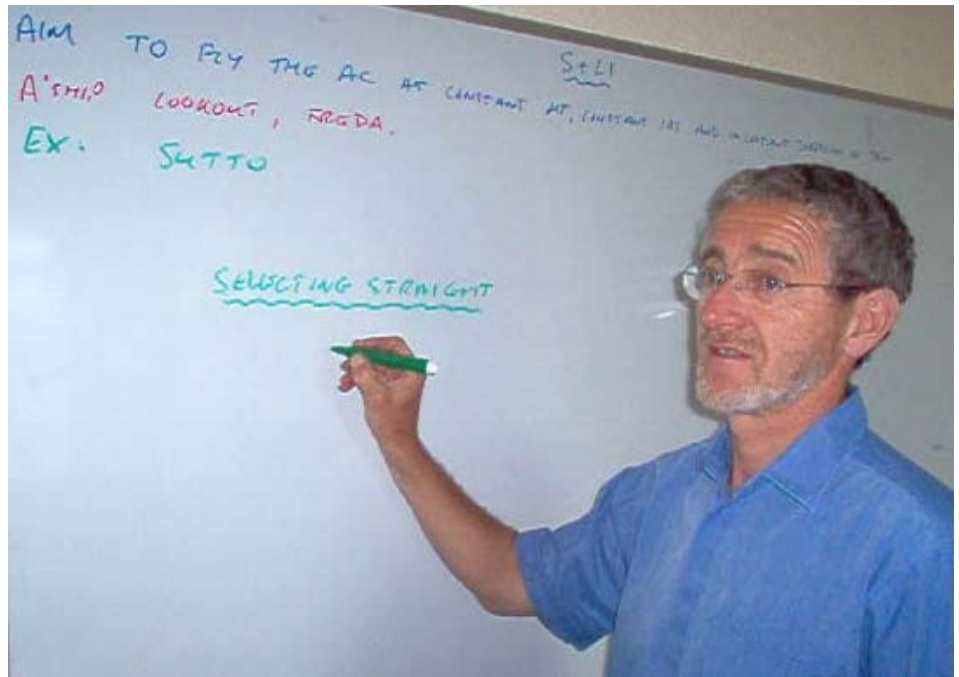
Having flown with a multitude of instructors in my short flying

career to date, I had already made up my mind about what kind of instructor I wanted to become, and wanted to get the best training I could. What I had realised when I made the decision to be an instructor, was that a proportion of my students might one day go on to eventually gain more experience than myself, so the last thing I wanted was an ex-student to look back on the training they had received from me and think it was not up to scratch.

How could I go wrong with ex-Royal Air Force (RAF) instructors, individuals who had been carefully selected for their pilot aptitude and then received the best training in the world. On top of this John Halstead and Alan Newton both have successful commercial careers with top airlines after leaving the RAF.

So my mind was made up, I wanted training that would demand of me the highest standards and this is exactly what On-Track Aviation were offering.

I started in July 2003 with just under 335 hours and not particularly current, having only flown 7 hours in total so far that year. Not a situation I would recommend to anybody else thinking of starting an instructor rating. Due to a lack of research on my part, I also had many preconceptions about what to expect on the course itself, most of which were somewhat wide of the mark. For instance, I had expected a lot of the course to be spent learning how to deal with student inflicted emergencies and mistakes. However I soon found that a large part of the



Above: Alan Seeds ...the instructor course seemed an attractive late career option...

course was centred around the actual art of teaching and how best to transfer knowledge; teaching from the know to the unknown.

A further aspect of the course I hadn't even considered, was making sure that my actions in flight, matched my words. This was trickier than I had ever envisaged, and I have to concede that I really struggled with this at first, as I was using a lot of my concentration ensuring that I was actually using the correct actions in the first place.

I constantly felt that I was having to learn things from scratch, either I hadn't been taught properly in the first place during my Private Pilot Licence (PPL), or more likely I had chosen selective amnesia when it came to anything that I was a little

rusty on. Admittedly I had done my PPL 9 years earlier, with the minimum flying required to keep my licence valid until doing my commercial training in 2001.

What shocked me was the fact that none of my weaknesses had been picked up during my CPL or Multi-Engine Instrument Rating (IR) training. I appreciate that not all the PPL stuff is relevant to the CPL / IR, however the basic flying skills are still very important. I can quite honestly say the instructor training I received at On-Track Aviation is the best value flight training I have had to date, and that I learnt more and found the instructor rating much harder than the CPL and the Multi-Engine IR put together.

On some exercises, I was struggling to teach things correctly because I just wasn't physically using the correct technique, even though I was talking about it! Which brings me to another

point; when it came to talking, it seemed that whilst in the aeroplane I could talk for Britain! John ended up telling me to “shut up!” This was a valuable lesson, especially now that I have quite a few instructional hours under my belt, any babbling needs to be for the student’s benefit, not the instructors!

Although I found the course very demanding, as I was pretty much doing it full time, due to having to be back at work before September and travelling long distances to attend. I was pleased that I had chosen On-Track Aviation, as I felt sure that if I actually made the standard being set I would not just pass the Instructor Skill Test, but actually feel able to begin my first instructing post with some confidence. A good example of this was teaching stalling. Previous to the instructor course, although I enjoyed aerobatics, this was always conducted in an aerobatic aeroplane but when it came to stalling a PA28 I had this absurd notion that something would go wrong and I would

be unable to recover, purely because it was a non-aerobatic aeroplane. I also have to say that I had never really been taught this properly during all of my previous training, it had merely been quickly demonstrated and I or previous instructors had initiated a recovery without really exploring this phase of flight to any depth. John spent a lot of time showing me the stall inside out, and it went from being a subject that I was dreading having to teach, to one that I now really enjoy. It’s one of those exercises where you can really see the student getting something out of it.

I have also found since becoming an instructor, many of the exercises I struggled with during the course are now among my favourites to teach. This is mainly thanks to the patience of John, keeping me at it until I got it right, but also because I can remember how it felt being less than confident, or to not get the results I wanted as a PPL. I hope to ensure that my students don’t have the same experience.

Whilst teaching the air exercises is obviously the sharp end of the business, another major benefit of the course was being taught how to give the ground briefings properly. These are so important and can be just as challenging for the novice instructor. As well as the tuition for the ground briefings the course training manual (Instructional Techniques for the Flight Instructor by John Halstead and Alan Newton) was very good, and I still use it on a daily basis. The diagrams are simple enough for anyone to draw on a white board, yet contain all the key points in a clear concise way. They are great for keeping you focused on the key learning points of each exercise, and preventing you from straying off into non-relevant instructor babble.

Just when I was beginning to really enjoy the course, despite the amount of work I had to put in, things became really interesting, as I got paired up with an ex-Tornado pilot and current airline captain for my 5 hours mutual work. It couldn’t have been more intimidating; me with a little over 300 hours in Cessna 150’s, Piper Cubs and PA28’s trying to teach an ex-fast jet pilot how to fly straight and level or to fly steep turns! As it turned out, it was good fun, he was very encouraging, and undoubtedly very polite about some of my attempts to teach.

I finished the course after five weeks and completed my Instructor Skill Test with Chris Caine at Wolverhampton Airport. I took the attitude as I did on the course, that I didn’t want to pass if I wasn’t up to standard, so at worst it would all just add

**Below: Two of On-Track Aviation’s highly experienced instructor / examiners Alan Newton and John Halstead.**



Below and right: Alan Seeds was able to use his own Cessna 172 for the instructor course where as Richard Bullock favoured the PA28 Warrior II.



to my flying experience. I was a bit nervous initially during my ground lesson as it suddenly felt like I was actually doing it for real, however once I got into the swing of things, I just did what I had been taught, and to be honest actually enjoyed it. Needless to say I passed.

I have been instructing ever since, and really enjoy it. Although it can be hard work at times, for very little financial reward, it is a real privilege to be given the opportunity to teach people how to fly, and seeing students grow in ability and confidence is probably more rewarding than the money could ever be.

**Alan Seeds** took early retirement at 55 and with an almost insatiable appetite for GA flying (450 hours in 8 years), the instructor course seemed an attractive late career option. However, behind the rose-tinted spectacles lurked a doubt about teaching old dogs new tricks. This was reinforced by the 15 months taken to complete the CPL ground training and examinations.

In contrast the choice of instructor training provider was much easier. Although cost was important, it was location and quality that made the selection of On-Track Aviation at Wellesbourne Mountford Aerodrome relatively easy. Wellesbourne is my home airfield where I fly a syndicate Cessna 172 at a very reasonable hourly rate. On-Track Aviation was happy for me to use my aircraft for all but the spinning exercises and they simply charged me for their tuition fees on the course, thereby offering a significant saving.

Judging the quality of tuition beforehand is of course more difficult. However, earlier Instrument Meteorological Conditions (IMC) training with Mike Grierson one of the On-Track Aviation instructors had gone well and I was suitably reassured. My instructor was to be Alan Newton (On-Track Aviation's Head of Training) and with his extensive military and civil flying experience I felt I would have a reasonable chance

of getting through!

From the outset it was apparent that On-Track Aviation was very well organised, with a well-appointed teaching environment and an excellent set of instructor course notes. In fact, the instructor course training manual was so comprehensive that it led me to the first of several rude awakenings. Rather naively, I thought that if I could simply deliver the contents in the classroom and in the air, the whole thing would be easy. How wrong could I be!

To all but a 57-year-old trainee instructor, it is obvious that the task is not just to deliver a well-constructed syllabus but more importantly to teach a student to fly. All the good stuff I had read in the instructor course training manual about focussing on the key issues, setting a good flying example, fault analysis, etc. seemed to evaporate in the air. This was quickly spotted by Alan and we devised ways of trying to deal with this issue. Bringing together all of the teaching aspects in a competent manner was difficult for this old dog; however, Alan's continual good humour, skill and optimism kept things moving forward and the technique improved, albeit slowly.

Of course the endeavour also had many bright spots as well. One memorable glide approach in a very strong and gusty headwind

was nearly vertical and had Alan almost ecstatic. However, best of all was the spinning exercise that started off as a gut-wrenching event and ended up as an almost insatiable desire for more (in the right circumstances of course).

*the text is only available directly from On-Track Aviation.*

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The Instructor Skill Test was with John Halstead, another very experienced member of the team, and when this could be put off no longer, we set off in the Cessna 172. Was I nervous? VERY. Did it all go without a hitch? NO. But John's unruffled manner helped me to get it right. Did I pass? YES. And what a sense of achievement!

Overall the course was very hard work and I learned a lot about myself as well as about instructing and I now have a great deal more respect for instructors who are good at their job. I suspect that it's even harder to "teach the teacher" but the On-Track Aviation team have a very professional approach and I think they did a good job with me.

Was the course it worth it? The answer has to be a resounding YES for a whole host of reasons, and I am now the very proud owner of a shiny new Flight Instructor (Restricted) or FI (R) rating.

*On-Track Aviation is a Flying Training Organisation (FTO) based at Wellesbourne Mountford Aerodrome near Stratford-on-Avon specialising in instructor and examiner training. Additional courses include CPL, formation flying, aerobatics, PPL groundschool and seaplane training.*

*The instructor training manual (Instructional Techniques for the Flight Instructor by John Halstead and Alan Newton) mentioned in*