

OUR FLIGHT SIMULATOR

Wouldn't it be nice if you could learn to fly an aeroplane without having to pay the huge cost of flying the real aeroplane? **Wouldn't it be nice if** you could learn in a fraction of the time it normally takes? **Wouldn't it be nice if** you could learn to fly whatever the weather conditions? **Well, now you CAN!** We have built the FIRST fully effective flight simulator trainer in the UK that's realistic enough to be used as a serious training tool for teaching basic and advanced flying skills.

Our simulator is a big **expensive, sophisticated** and **serious** training tool. It is run by six high-powered computers driving a multi-screen instructor station and a multi-screen collimated* cockpit for the student. The instructor and student sit in tandem and communicate by headset. The heart of the system - the '**Collimator**' - makes it just like flying the real thing so it really does deliver the goods in terms of realism and extremely effective flight training.



A whole range of aircraft types can be 'flown' ranging from relatively simple microlights, right through to the latest big passenger jets providing a powerful and effective environment for both Basic Flight Training and Instrument Flight Training.

The Collimator is a very sophisticated visual system that converts the computer-generated graphics into a full 3 dimensional view. Because of the optical nature of the unit it is virtually impossible to photograph what the 'pilot' is seeing but the perception is that the view is REAL... it's 'OUT-there-and-DOWN-there' rather than simply being a two-dimensional display on a flat screen and it's so realistic that it fools the body into thinking that it's actually MOVING. You get the feeling that you're actually IN an aeroplane rather than simply looking at three television screens. It's quite a weird and powerful sensation and

has to be experienced to be believed.



Communication between instructor and student is by linked headsets so the normal cockpit noise is replicated and this very much adds to the realism. The instructor sits in tandem behind the student with a bank of five monitors. Three standard 22" monitors show the same wide flight view from the cockpit as the student is seeing plus a fourth monitor (on the left) which shows a 90degree left hand view which is useful for doing engine failure practise. There's also a lower front monitor showing the fully operational instrument panel. At present only the instructor station has the left hand 90 degree view and it's envisaged at this stage of development that the student will use the instructor station for doing engine failure practise.

Control of the aircraft is by a very sophisticated dual control system specially engineered for us by Bill Trezise who owns an engineering company in Devon. Bill is a light aircraft pilot with many years of experience in producing superb quality flight simulator controls but this one is a 'first' and what an incredible piece of fine engineering it is too. The construction is superbly robust throughout and the 'feel' of the control column is incredibly realistic as are the throttle control and rudder pedals. Trim control is via a manual control wheel on the side mounted control box. This sophisticated piece of equipment also controls the undercarriage, flaps, radio, nav aids etc and has a row of switches along the top to control various other functions found in your average aeroplane.

The advantages over conventional training methods are enormous. Dangerous and very difficult situations can

easily be set up in a simulator thus enabling the trainee to practise the skills needed to deal with them effectively should they ever arise in real life. Such 'interesting' situations can NEVER be practised during training in the real aircraft for safety reasons.

The cockpit of an aeroplane is probably the last place on earth that is conducive to trying to learn a new skill. There's just too much adrenalin flying around, with the brain very much locked into the 'beta' state and many times it becomes overwhelmed and locked-up at critical moments. It's been well proven that humans learn best when the brain is in a relaxed state. A relaxed state is just NOT possible in an aeroplane cockpit! A simulator is a far more relaxed arena for learning new skills and situations can be PAUSED at critical moments for discussion or a 'dangerous' situation can be allowed to develop right through to a crash in absolute safety.

It's also a well known fact that we all learn by our mistakes and this way, because the student can be allowed to have total control by flying 'solo' in a perfectly safe yet realistic environment, physical and mental skills are achieved in a fraction of the time that would be needed in the real aircraft. Training costs can thus be drastically reduced also.

There isn't an exercise in the syllabus that the simulator can't deal with as effectively – or even more so – as the real aeroplane so our instructors can effectively teach all the basic flight training manoeuvres. The realism is so

good in fact that we could teach you to fly right up to solo standard and then put you into the real aeroplane for your first solo flight!

But even though learning the basics of flying is tremendous fun and a real challenge, because it's a simulator we can do things that would be totally illegal (and dangerous) but even MORE fun! And because these 'illegal' exercises are very challenging, they're a great learning experience too. Things like Flying THROUGH the control tower at Heathrow . Or you might trying to handle a 50kt headwind 20degrees off the runway heading or even more difficult try to hover INSIDE the control tower in a 50kt wind what you can do is limited only by your imagination.

At only a third of the cost per hour you can have almost as much as THREE times the practise for what it would cost in the real aeroplane and the learning is quicker anyway so it is tremendous value for money and a real boon to those who want to progress at the fastest possible rate.

You just HAVE to try it

.....You'll be GOBSMACKED

..... AND THAT'S A PROMISE !

