*For PILOT CLUB, November 2005*

My aerobatics adventure.....

I have always liked aircraft, particularly those used for aerobatics. Whenever I was anywhere near an airport I would get a sore neck from constantly looking up at the sky. But those were just dreams; a plane isn't like a car – it would cost a tidy sum, not to mention the licence. A tourist plane? Not for me, I would soon get bored with that – risks and challenges are what I like. It would have to be an aerobatics plane. I would quickly earn my licence – I'd join the nearest flying club and become a professional in an Extra. All well and good, but I made the mistake of mentioning my plans to my wife, and very soon had to forget my dreams of flying on a knife-edge two metres above the ground.

Anyway, the day finally arrived when I could afford my first plane. I bought it in Austria during a skiing holiday. We were free in the evenings, so we went for walks around the beautiful surrounding villages and the shops. It was in one of these that I saw it, and knew that I had to have it. Of course, I made out that I was buying it for my son.

My first model training aircraft had a wingspan of 185 cm, and was driven by a four-stroke 15cc engine. I starting learning six years ago – a few hours on the simulator of course, and then with a real instructor. Flying a model is not easy, and it is very costly. My attic soon became filled with souvenirs of what had once been the tails of planes. But at the end of the first season I was starting to fly aerobatic models, and the attic began to fill up again. No, flying is not easy, and mistakes are expensive – although the one consolation is that they are not usually repeated.

You get older, your sight deteriorates, so you have to buy bigger and bigger models. I now have a Yak-a 55SP with a wingspan of 3.3 metres, which is 40% the size of a real plane. My wife has started to take care of me, buying me herbal remedies to improve my eyesight. My smaller craft is an Extra 330S with a wingspan of 3 metres. Both have 150cc two-stroke Boxer engines, which gives them the amazing power they need to perform such tricks just above the ground as to make spectators say "no, that's impossible, that's against the laws of gravity."

These planes fly superbly when doing both classical aerobatics or 3D aerobatics – this is a type of acrobatics which real planes will not be doing for a long time. It may involve hovering by the propeller just above the ground, brushing the grass with the rudder from time to time, or the

even more challenging Rolling Harrier performed 1.5 or 2 metres above the ground.

Luckily the spectators' gaze is fixed on the plane and they don't see how frantic the pilot is, how his legs are shaking and his hands sweating so much that he has to give them a wipe on his trousers whenever he gets a chance. It's not surprising that a model like this costs about €7000, and there is no way of getting it comprehensively insured. Fractions of a second separate the model from being taken away in plastic sacks, should the engine choke for even a moment during a hover just above ground level. A display executed in ideal windless conditions or in light wind (up to 3 m/s), by an experienced pilot who knows how to pull it off, makes a fantastic impression – the models are extremely light (mine weigh about 17 or 18 kilos) and they don't like stronger winds.

I remember some of the spectators telling me after the recent displays at the Radom Air Show that they much preferred to watch models in action than real aerobatics. You can take a model right to the brink of destruction, which obviously you can't do with a real plane with a pilot inside. If something goes wrong when a model is flying, all that might get hurt is an unfortunate mole and the pilot's pride, whereas with a real aircraft...

3D flying is a great spectacle: it can even be done to music, and often with smoke too, to make the display more interesting. I have some music prepared for a freestyle programme: an 11-minute programme for free displays and a 5-minute programme with music for competitions, but I haven't yet had the opportunity to present this in Poland.

Traditional aerobatics, on the other hand, is beautiful, but must be executed with perfection. This is a very difficult task for a model aircraft, because it is hard for the pilot on the ground to assess such things as the speed of the plane. The pilot doesn't have any of the equipment which he would have in a real aircraft to show its position. It is exceptionally difficult to perform quick figures, like the snap. Properly executed moves give the pilot unparalleled satisfaction, and a flight consisting of a series of figures is a truly fascinating sight. When the uninitiated see a large model from a distance they think it's a real plane.

To make a figure look genuine you have to practice it a few hundred times, and if you want it to come off looking ideal, you probably won't succeed. Particularly in competitions, when the judges, spectators

and other pilots are sitting right behind. You need to have special skills, competition experience and resistance to stress to make it to the podium.

I practise a great deal, even as much as three or four times a week during the main season (from April to November). Every outing lasts two or three hours, which includes five or six flights plus travel time and assembling the model. Flying for longer doesn't do any good – you get overpractised. The most difficult figures are those executed in a circle or loop, for example four barrel-rolls in a circle, each in a different direction, or one barrel-roll in a loop. A loop must be a loop and a circle must be a circle, starting and ending in the same place – only then does it make an impression. Lately I've been practising a figure-of-eight on a ring, where in each eye you have to do one barrel-roll to the right, and the figure must begin and end straight ahead of the pilot. I can already get a figure of eight, but I guess it's a Chinese one. I am greatly helped by watching tapes of displays by the best pilots in the world. I watch each tape several times, analysing the complete flights, and then try to copy them. It really works.

The most important thing is to want something, to set a goal and to strive for that goal. Then you will surely succeed.

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