

Foxbat STOL being demonstrated by UK importer Ray Everitt

## Foxbat masterclass

Peter Harlow is the Australian Foxbat agent and newsletter editor. We would like to reiterate his assertion that the techniques described below were demonstrated by an expert pilot on an aircraft he designed himself and may not apply to other types - before you try this yourself, get expert advice!

YURIY Yakovlev is the designer of the Aeroprakt A22. He is an award-winning aeronautical designer trained by Antonov Aircraft after he left university with an honours degree in aerodynamics.

Apart from his aeronautics educational credentials, Yuriy is also a superb pilot, with a brace of European microlight titles to his credit, as well as a raft of other piloting awards. He has several thousand hours of flying experience in the A22 and it was with great delight that I accepted an offer to go flying with him at Aeroprakt's own Nalivaykovka airfield near Kiev.

It was a hot sunny day early in July temperature in the low 30s, with hardly a breath of wind. We were flying in one of the Aeroprakt club's yellow A22LS aircraft, fitted with twin yoke controls and centre throttle. Personally, I like the stick control but Yuriy tells me that almost 80% of current factory orders are for the yoke

We took off and flew a long lazy figure of eight over the lush Ukraine countryside - Yuriy is clearly a natural pilot: from take-off roll to straight and level, the slip ball didn't move a millimetre from its central position. He handed over to me and we continued to enjoy the afternoon air, which seemed remarkably smooth after Australian skies, and considering the high-ish temperature.

Then came some take-offs and landings on Nalivaykovka's grass runway 29.

## Short take-offs

This tip is well known to bush pilots: no flap, apply brakes and build power to full. Release the brakes and (on the A22) at about 30kt indicated, smoothly and firmly pull on full flap. The aircraft will leave the ground immediately. Hold a level flying attitude at about 20ft and allow the speed to build to 45-50kt, start climbing and slowly remove the flap until you reach first stage, then continue to climb out at around 55kt. Using this method, with two of us on board, we were airborne in 50-60m. And this was a warm day.

## Landing techniques

Apart from the usual short-field landing techniques, like using power and full flap to keep your approach speed as slow as safely possible, Yuriy demonstrated a couple of other landing 'tricks'.

First, as soon as the mainwheels are on the ground, remove all flap to get rid of lift and therefore put all the weight on the mainwheels. Then you can brake much harder and stop much shorter than when the flap is still down and giving lift.

Second, and this is more of a safety feature for the A22, Yuriy showed me one of his party pieces. We approached to land at a little under 50kt with one stage of flap. As we approached the threshold, he levelled out at about 15ft and applied some power to keep us flying level. He then took his hands off the controls, ensured the aircraft was stable, and pulled the power back to idle. With no yoke control input at all and just a touch of rudder to counteract the power-off swing, the A22 dropped gently on to the runway, landing main wheels first, just as it should! It was a strange feeling... next, my turn.

After four or five attempts, I was beginning to get the hang of this type of landing. In fact, most of the problems I had were down to my overwhelming instinct to pull back on the yoke, and flare in the normal way. It didn't cause anything dangerous, just untidied the landing, which the aircraft seemed to be perfectly capable of completing by itself.

I must stress to all aircraft owners that this technique was demonstrated to me by a very experienced pilot and instructor, flying an aircraft he designed himself, the A22 Foxbat. Whether this works on any other aircraft I have no idea. You try it at your own risk!