

Silverlit V-Jet Full Tilt

John Stennard tries out an unusual tilt-wing model

Even though I'm used to being surprised (and on occasions amazed) by the new models that are produced by Silverlit, this particular one takes some beating. Many of today's modellers have had their interest in R/C aircraft and helicopters aroused through their early contact with models via the types distributed by Flying Toys Ltd. I also know that at an 'adult club level' many of these models are being enjoyed and the original Picoo Z helicopter and Palm Z biplane still appear at our indoor flying sessions.

So what is the Silverlit V-Jet Full Tilt? Start by imagining a Bell-Boeing V-22 Osprey Tilt Rotor aircraft where the wingtip prop drive system can tilt through from horizontal to vertical. In the case of the V-Jet Full Tilt model the same happens except that it is the whole wing that tilts. If you think this sounds quite complex you are right it is!

Clever Or What?

All that is required to get the model ready to fly is to plug in the pre-formed U/C, fit the batteries in the Tx and charge the flight battery. Superficially the V-Jet Full Tilt is a 420 mm (16.5") wingspan, twin engine, T-tail, aircraft weighing 87 g (3.06 oz). The model is made from a self-coloured, rigid, crash resistant EPP type of foam. The twin geared motors drive the 160 mm (6.25") props which have 'helicopter style' individual blades, a fly-bar and hub mechanics. Spare blades are included with the model and a separate instruction sheet shows how to fit them.

The V-Jet Full Tilt uses a single 350 mAh LiPo cell that is charged via the 27 MHz Tx. The Tx uses eight AA dry batteries and has some special features due to the nature of the model. The left-hand stick controls the throttle conventionally while the right-hand stick controls the tilt mechanism and the yaw. This control uses a horizontal 'H' plastic moulding to separate the stick movements for the helicopter and aircraft modes. Two separate trims are provided and these are a rotary control for roll and a press button for the yaw. Basically when flying in the helicopter mode both trims may be required but when in the plane mode only the yaw trim is needed.

The motors are set with down thrust and outwards side thrust on the under cambered, polyhedral wing. The wing itself in the helicopter mode is leaning about 15° forward of the vertical and in the aircraft mode the wing incidence is around 30°. The tailplane is set at around 15° up from the horizontal.

So How Does It Work?

Before flying the flight mode must be set by moving the right-hand



The front of the box allows a glimpse of the securely packaged model



The right-hand stick operates transition and yaw



The V-Jet Full Tilt and its special Tx



The model shown in helicopter mode



In aircraft mode it looks a little more conventional

Product Review – Silverlit V-Jet Full Tilt



The transition linkage



The rotor system

power. The transition performance was smooth and problem free. From helicopter to aircraft was obviously best performed into a light breeze while the aircraft to helicopter worked best with the model up wind. I found that in a constant hovering situation the flight time is around 3 to 4 minutes while combining the modes gives up to 5 minutes.

The performance

certainly exceeded my expectations and the V-Jet Full Tilt is undoubtedly a very, very clever piece of design.

For a RRP of £59.99 you are getting a quite amazing example of sophisticated technology combined with a surprisingly robust airframe. This is an ingenious model that I found absolutely fascinating to test fly. Any R/C flier will love to pilot this one. **Q&EFI**

stick. The change from helicopter to aircraft is quite fast while the change from aircraft to helicopter is slower. In the aircraft mode control is achieved with the left-hand throttle stick and right-hand lever, which operates proportional throttle for steering and the yaw trim if required. In the helicopter mode the throttle and right-hand stick are also used but in this configuration the right-hand stick operates both proportional throttle and moves the individual wings a small amount rather like very large ailerons. This is where the roll trim is used if required. In the helicopter mode the props provide plenty of thrust for take-off and hovering.

The model can be flown indoors or outdoors in calm weather over a 'soft' surface.

In the gym, I could fly the model with a good degree of precision in heli mode but with insufficient room for transition.

Outdoors, I again opted for helicopter mode and the model flew well although with just enough power for forward motion in a light breeze.

Hand-launched in aircraft mode, the model was able to perform smooth turns in either direction and the motors provided ample



LEFT:
Outdoors in helicopter mode...

BELOW:
... and in aircraft mode

