

ASW-28 EPP

Quick to assemble and easy to fly, this 2 metre span EPP electric glider by Jamara is tested by the editor



ABOVE: 1000 mAh 2s LiPo battery and balance charger supplied

In my early days of model flying I was introduced to slope soaring and flat field thermal, gliding where I quickly learned how to work the air; it was do or be done! Unseen, this is a natural force that can give you hours of entertainment and satisfaction, and the F3B and F3J flyers will surely agree to that along with larger scale sailplane enthusiasts.

I have always kept a glider at hand for those rare days in the summer when the conditions are perfect for thermalling, but having an additional power unit to get you up into the air is a bonus that makes launching much easier.

This ASW28 is a semi scale model of a full size single Standard Class sailplane. The full size doesn't have an engine and is either towed by winch or tug aeroplane into the air and released.

Although not scale, this sports type by Jamara has the luxury of electric power to get you into the air and amongst the lift in no time, and therefore does not rely on a second pilot to get you airborne.

Moulded from EPP foam, the elegant lines are very realistic at altitude, and if the test flights are anything to go by then I feel sure this is going to be a popular model.

This ASW-28 has very little to do to ready for flight, and it all comes pre installed and virtually ready to go. It took around 15 minutes to complete the assembly, and charge the battery. Additionally, this model comes complete with its own 35 MHz proportional radio and also has a LiPo power battery and charger; nothing is additionally required apart from eight AA-size batteries for the transmitter, and some fine weather.

Assembly

There is very little to do here; the fuselage is complete with the



radio and motor installed. The brushless bell motor is mounted at the nose on a 1/8" ply former and features a two-blade folding prop.

Beneath the canopy is the 5-channel 35 MHz mini Jamara Rx and two mini servos mounted on their edge into the rear of the cockpit moulding. The ESC is pre wired and sits in a shallow well in the fuselage. The battery is a Jamara 1000 mAh 2s LiPo that comes complete with a 12-15 V balance charger.

The stabiliser is easy to fit and has a moulded hinge elevator with a plastic moulding inset into it for locating and securing to the fin; insert the elevator wire Z-bend through the elevator horn and position in the guide holes on top of the fin. A single screw holds the stabiliser in place. The review model stabiliser was a little crooked when secured, so a small amount of sideways pressure to align centrally soon had it corrected and screwed down tight.

The two wings are quite simple to fit. These come with moulded-in winglets as per full-size and could be very easy to knock off or damage, so care must be taken when handling the assembled model. To be fair, this glider has been designed well, and is as quick and easy to disassemble, as it is to assemble, making transportation easy even in the smallest of cars.

The wing panels slide onto a GRP spar and into the slot in the fuselage, whilst feeding the two aileron servo wires into the cockpit to connect into the aileron Y-lead fitted in the Rx. Small cross-head screws set into the wings are tightened to lock the wings in place.

Each wing has its own mini aileron servo cleverly mounted at the root, where the wire pushrod is fed down the wing to the aileron hinge – no horn is apparent so it is assumed that a bell crank and some sort of sliding mechanism is buried in the moulding – not accessible.

The clear canopy is affixed to the EPP shell and has a moulded lug to the front with a ply insert for stiffness. This slides into the front of the canopy recess and is clipped in at the rear with a

The model captures the Hurricane 'sit' in the air



plastic retainer. There is even a full instrument panel inside the canopy.

The 4-channel 35 MHz radio is typical for this type of production kit; being of basic layout it is simple to operate with no complicated computer settings to worry about. There are a series of servo reversing switches on the front panel, and using standard size 35 MHz crystals you have the added facility of being able to swap frequencies in case of a clash with others at the flying field. The Tx is powered by eight AA cells, 9.6 V (Flying Toys recommend Duracell).

Flying

The ASW-28 is equipped with an small electric motor that provides and adequate rate of climb for this type of model, and it had gained enough height after a couple of minutes of flying around to be able to turn it off and go hunting for thermals.

The handling with the motor running was quite good. The model was stable and it responded well enough to all stick inputs. However, don't expect this glider to be capable of hurried aerobatics. The controls are nowhere near harmonised for anything more than simply pottering in graceful turns, preferably taking a lot of sky to do so.

However, courtesy of the fairly powerful (up) elevators, it loops quite well, but anything else just looks untidy and is a waste of altitude.

With the power off, the model adopts a very different set of characteristics. This is probably because it is now flying very close to its stalling speed. The controls generally become fairly sluggish and the model becomes less responsive, which is typical of a model of this type. Yes, it looks superb when flying straight and level, and it's nice and stable, but at some point we are going to want to turn and this could become an issue for anyone expecting a crisp response from the controls. With the motor stopped it can require a delicate touch on the sticks to prevent a wing from dropping when making a simple, gentle turn.

With normal power models, we expect it to respond to our lightest touch, and we expect it to respond instantly, but that kind of performance is totally alien to this type of glider because of its light weight and slow speed. And because of the unresponsive nature of the glider, it is easy to over-control it, and to stall it, but you will soon become familiar with this and adjust to it.

The key to keeping the ASW-28 looking graceful is to use very little control inputs, and then be patient while the model decides to respond – perhaps up to several seconds later. And then you have to be several seconds 'in front' of the model to get the corrections in before it has turned too far. It is a technique that takes a few goes to master and is likely to catch out the unwary.

A better technique is to cheat a little: By all means let the model



LEFT: This simple 35 MHz 4-channel transmitter comes with servo-reversing switches



BELOW: The bell brushless motor is buried deep in the nose and the radio is pre installed



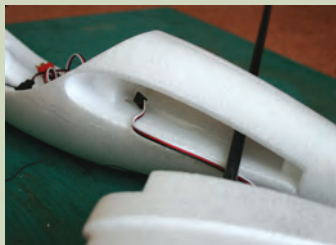
RIGHT: The rudder is pre connected



Elevator and rudder servos mounted to the rear of the cockpit



The stabiliser fits onto the fin with this plastic fitting and is held in place with a screw



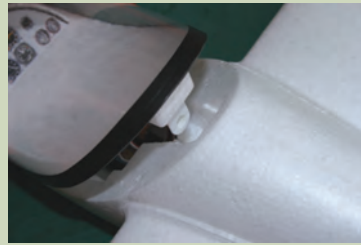
The wing root recess; you will need to feed the two aileron servo leads down through the fuselage to the cockpit



The two servo leads exit into the cockpit through this small hole and connect to a Y-lead



Be sure to tighten the wing retaining screw



The cockpit 'clicks' into the rear catch

glide with the power off when flying straight and level, but introduce about 60% power when making a turn. This helps to keep the model above the stalling speed and the turns become a lot more graceful.

However, when it has found a thermal, it doesn't need the motor at all, and it turns quite nicely without dropping a wing and it is perfectly possible to turn inside the thermal and slowly spiral up to the heavens. Ahhhh... nice!

For landing always keep a bit of reserve in the battery to be able to give a burst of power from the motor, especially when making that final turn into wind.

The model has no spoilers or air brakes, so it comes in long and flat and needs to be lined up accurately to touch down at your chosen point.

Conclusions

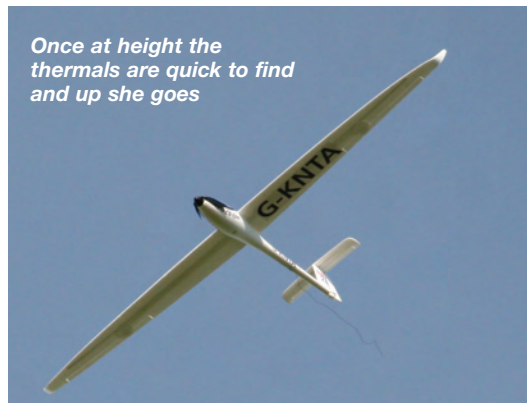
The Jamara ASW-28 EPP is a pleasant model to fly. The slow speed makes it very relaxing and it will be good fun to find thermals if our summer weather ever returns to barmy days of warm, gentle breezes and no rain.

Being quick (and I mean quick) to assemble it can be flown within 15 minutes of taking delivery. With a retail price close to £200 it is not cheap, but it is not expensive either when you think that it comes with all you need to get flying if you have started with nothing.

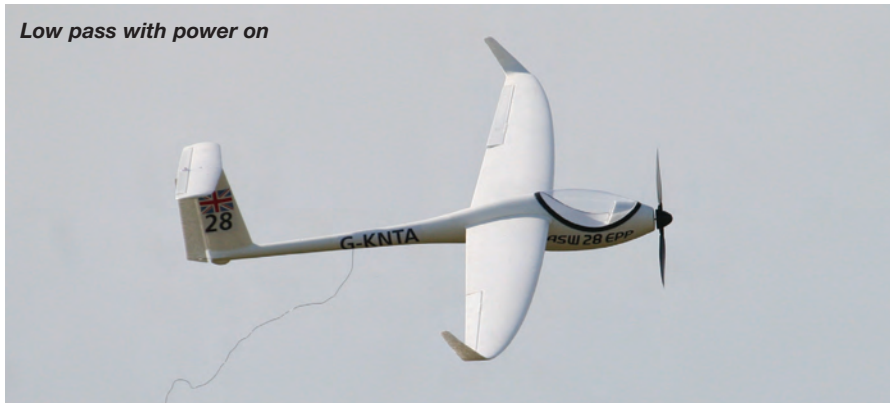
The performance is astonishing and one would assume that a great deal of design research has gone into the right type of wing section as it finds those thermals and uses them to the maximum



Try out the aerobatics – but gain plenty of height first!



Once at height the thermals are quick to find and up she goes



Low pass with power on

to gain height very quickly. Being able to do very basic aerobatics is an advantage for those who like to 'play' with the flight envelope a little more.

Flight times depend upon throttle usage and thermal activity, but 15~30 minutes is suggested by the manufacturer; we got a lot more and I would bet you could too! **RCMW**

SPECIFICATION

INFORMATION

Name:	ASW-28 EPP
Manufacturer:	Jamara-Modelltechnik
Distributor:	Flying Toys Ltd
Price UK:	£199.95
Model Type:	Sport-scale Electric Sailplane
Motor:	Bell brushless
Construction:	All moulded EPP foam

R/C FUNCTIONS

- 1: Ailerons (2 servos)
- 2: Elevator
- 3: Rudder
- 4: Throttle (ESC)

SPECIFICATIONS

Wingspan:	2 m/79"
Wing Area:	67.3 dm ²
Weight:	520 g/1 lb 2 oz
Length:	810 mm/32.5"

TEST

Dislikes	Likes
Misaligned stabiliser fixing to fin	Quick to assemble
	Gentle as a power glider
	Superb in thermals

Contacts

Flying Toys
www.flyingtoys.com
01702 295110

Jamara-Modelltechnik
www.jamara.de



FOREMOST FOR

Flying toys

An Exclusive Collection
of Jamara Models
from Flying Toys!...



FLYING TOYS LTD
www.flyingtoys.com

FLYING TOYS LTD
Units 7-9 The Vanguards
Vanguard Way Shoeburyness
Essex SS3 9QJ England
Tel: 01702 295110 Fax: 01702 294640