Long-range, fast, efficient flight with space for two people and their luggage, was the intent of the Long EZ, and it's known as the next best thing to a military fighter aircraft – but why is it parked with its nose on the ground? Meet Pilot Dan Gay and his aircraft.

RUTAN MODEL G

ilot Dan Gay learnt to fly at Seething and is an active member of the flying club here. Originally from Chicago but now living in Norfolk, his aircraft, the Rutan Model 61 Long EZ (pronounced "Long Easy") is an impressive beast.

And Dan's been looking forward to the air day. "I am very excited to be displaying at Seething as I learnt to fly there seven years ago," he says, adding that this is his very first air display.

The Rutan Model 61 Long-EZ is a homebuilt aircraft, designed by Burt Rutan.

With 52 gallons of fuel, staying in the air for more than 10 hours and travelling up to 1,600 miles is possible. Equipped with a rear seat fuel tank, a Long EZ was once flown 4,800 miles.

Another Long EZ with a stock non-turbocharged engine was flown to an altitude of 35,027 feet.

In addition to civilian use of the Long EZ, the United States Army used the Long EZ for military research.

It was equipped with a forward-looking infrared camera and used as a forward observation test aircraft.

If you can't afford a military fighter, the Long EZ may be considered the next best thing. Its cockpit is equipped with a semi-reclined chair, and side stick controller on the right console, making aerobatics and long range flight very comfortable.

All airplanes can glide, however, the Long EZ is so efficient that with an altitude of five feet over the landing end of a runway, and an airspeed of 120 knots, the engine can be turned off, then the aircraft can climb back to an altitude high enough to fly a 360 degree landing pattern and land on the same runway. As a result of the Long EZ's efficiency, it has an airbrake on the belly, and both wing tip rudders can be deflected outward to increase drag allowing the aircraft to descend at a higher rate. The Long EZ was the first aircraft to fly with the NASA-developed Winglets.

Long EZs have a small wing (called a canard) in the front of the plane. Whenever a Long EZ has its airspeed decreased to a point where the airplane will no longer fly, the front wing will stall and fall just to the point where the aircraft is again flying fast enough to sustain flight. This design feature means the Long EZ is considered one of the safest airplanes ever built.

Whenever a Long EZ is parked, the nose is on the ground. The engine weight is behind the centre of gravity so when the pilot gets out, if unattended the aircraft could tip back – so it's parked nose down to prevent this.

RUTAN'S RECORD

Rutan has come up with 367 individual concepts for aircraft, of which 45 have flown. These include the record-breaking Voyager which flew around the world in nine days and SpaceShipOne – the world's first private spaceship.

The most recent project was the Virgin Galactic in partnership with Richard Branson.

FACTS

Crew: 1 pilot Capacity: 1 passenger Wingspan: 26ft Empty weight: 850lb Max takeoff weight: 1,425lb Fuel capacity: 198ltr Powerplant: Lycoming 0-235, 115hp Max speed: 210mph Cruise speed: 150mph Range: 2,000mi Climb rate: 1,750ft/min