

### Introduction

The Citabria Aurora or, as your log book entry will indicate, the 7ECA-118 meaning Bellanca Citabria Aurora 7ECA, 118 horsepower engine. The Citabria is a performance aeroplane that only needs a take off run of 650 feet and has the added bonus of being aerobatic to +5, -2g's, hence when you spell Citabria backwards it reads airbatic.

It is however, docile, easy to handle and a real pleasure to fly. The purpose of our course is to enable you to utilise with confidence the STOL (short take off and landing) characteristics of the Citabria, in addition to coping with the tailwheel configuration.

### Pre-Flight Checks

The Citabria has a few additional points to consider over and above the conventional pre-flight checks carried out on every aircraft. The aircraft is fabric-covered and has a high performance wing that adds to an easily unbalanced airframe in strong winds (17 kts). In this situation it is best to complete the checks and start-up whilst the aircraft is tied down, relying on a trusty helper to untie you. Perhaps here is an ideal opportunity to inform you that a tailwheel aircraft generates a camaraderie in other aviators that is heart-warming, so helpers are usually available.

Getting into the aircraft mystifies the new-comer, as there is no visible means of entry. However, a trip round the aircraft to the side without a door enables you to slide open the window and reach the inside door handle on the opposite side. Nobody said that flying was going to be easy.

The control lock is removed before the pre-flight - it folds up under the control panel. The rest of the pre-flight check is the same as for any aircraft.

### Starting Up

Once you have climbed aboard (it is quite an athletic performance) the check-list should be consulted for correct start-up procedure. One very welcome feature of the Citabria over many other tailwheel aircraft is its electric start - propeller swinging can be a lengthy process on many old tailwheel types.

## Taxying

Forward vision is somewhat obscured by the cowling so a weaving motion is adopted to allow a better view of the way ahead. It is in fact almost impossible for the novice to taxi in a straight line in a tailwheel aircraft so have this explanation ready for your instructor when he challenges your swerving action. Taxiing is accomplished using a combination of rudder and brakes, which are situated on your cockpit floor and operated with your heels. In wind strengths more than 10kts, care is needed in such a responsive aircraft and you will be taught cross-wind and tail-wind techniques.

Once the holding point of the runway has been reached, the aircraft is turned into the wind by dexterous use of power and brake and the power checks are carried out - another glance at the check list confirms that nothing has been forgotten, and the aircraft is lined up ready for take off.

## Takeoff

The main aim here is to achieve directional control. The rudder is very effective at this point due to the effect of airflow (caused by the use of full power for take off). Very small movements of the rudder pedals are needed, but the tendency of most beginners is to over-correct their initial input mistakes and so worsen the situation. With practice the problem is overcome and the pleasure of mastering this difficulty more than compensates for the initial frustration. As the take off proceeds the stick is pushed forward to raise the tail. Both forward vision and aerodynamic performance is improved by this action, and the position is held until the correct ground speed is reached (58 mph). At this point a pull back on the stick initiates lift-off and the fun of flying begins.

## In The Air

The Citabria in the air is easy to fly in every respect - good rate of climb, ease of turning, docility of stall characteristics - it is a very forgiving tailwheel aircraft to fly. Once the climb has been established using full power, the throttle is eased back to 2300rpm and airspeed of 77 mph maintained. Levelling out into cruise means a power setting of 2300rpm giving a cruise speed of 115 mph, and you will be shown how to trim the Citabria for all these different configurations.

### Approach And Landing

The approach speed is 65mph, slowing to 60mph on short finals. Different stages of flap will be applied to achieve these speeds - a good deal of practice is needed to judge speed and height in relation to the runway. The actual landing technique in a tailwheel is an art in itself - correct speed and position to a height of 2-3 feet above the runway with the aircraft flying level just above the ground, then an easing back of the stick to bring the Citabria to a perfect three-point touch down with the stick firmly back against the stop and a fully controlled ground run and a gentle stop... this is what we are all striving for... alas often in vain!

You will be taught to deal with both the pleasure and the pain of tailwheel flying and we can guarantee that the satisfaction that you will get from learning to fly in our beautiful Citabria will repay all the effort countless times over.

### What Is A Tailwheel Conversion

Devon & Somerset Flight Training can offer you the Tailwheel Conversion. We offer Tailwheel conversions on the Bellanca 7ECA Citabria aircraft as a standard 5 Hour course where you will learn the skills needed to operate and solo a tailwheel aircraft.

In addition to the tailwheel conversion course we can introduce you to The Farmstrip Special course gives you 8 hours flying where you learn the skills needed to operate the aircraft with the added 3 hours for visiting some local short farm strips. This will give you the added advantage of being able to land the Citabria on some of the shortest fields in the West Country area.