Microlights/Gyros – Pylon Racing

WHAT IS MICROLIGHT PYLON RACING?

Microlights are single or two-seater lightweight aeroplanes. Competitors at the FAI World Air Games are flying ‘flexwing’ microlights which are also commonly known as ‘trikes’. Building on the success of the last World Air Games we have an even more exciting competition. The aircraft perform a short takeoff over a 1 meter-high tape then race around an intricate course of inflatable pylons which is about 2km long. The final task is to perform an engine-off spot landing within a 100m landing deck. Unlike at the last WAG, it will be an individual competition. There will be a series of heats and the top 3 times will be aggregated in order to determine a champion. Microlight Gyros will also compete in the same event with the addition of a slow speed leg.

WHAT DO YOU HAVE TO DO TO WIN?

The event combines aircraft performance and pilot skill. The short takeoff requires knowledge of the aircraft and the final spot landing requires great pilot skill. The course itself is relatively short making this a really fast and exciting sprint event. The pilots must make an extremely accurate tight turn at each pylon leaving very little room for error in the management of the trike’s performance. Precise and delicate flying is required from the pilots to obtain the best speed and minimum energy loss from their machines during the turns. The winning crew is the one which can obtain the best performance from their machine with precise flying and using the most efficient flying techniques.

HOW IS IT SCORED?

Microlight Pylon Racing is a race against the clock and the pilots with the fastest time will win. The short takeoff and spot landing will add time to the pylon race according to how short the takeoff is and how accurate the landing is. There are 3 members of the Jury; the President of the FAI CIMA Microlight Commission and two others. They have between them many years experience as jury members at FAI events. Their role is to ensure that the conditions are safe for competitors and that the rules are followed. Competitors can be penalised for flying below a minimum safe altitude or not correctly rounding a pylon; the penalties are in the form of seconds added to the crew’s overall time.

TELL ME MORE!

These flexwing microlights are controlled by the pilot moving the weight of the trike relative to the wing using a control bar; this is known as ‘weightshift’. The wing is attached to the trike via an articulated joint known as a ‘hang point’. The pilot can move a bar which is connected to the wing in order to change the pitch or direction of the trike.

A modern flexwing microlight may cost up to €35,000. Most are powered by aero engines producing around 80BHP and have a top speed of 160kph. The microlights at the World Air Games are designed for speed and have smaller wings which improve responsiveness and are better suited for competitive situations. Fixed-wing microlights have solid wings much like a traditional aeroplane and are not represented at the Games but offer the same level of fun and enjoyment at a similar price level. Microlights are excellent for touring as well as racing and have a range of around 6 hours before needing to refuel.

“A high speed and exciting aerial sprint race”