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Gyros are available in solo, tandem and side-by-side configurations, and as open or fully enclosed machines.

Gyro finally finding place in GA

By Neil Laubach

How long has the gyroplane/gyrocopter been around? A long, long time.

The gyro was originally developed in 1923 and amongst other notable pilots, Amelia Earhart set several records in one. Gyros are the predecessor to the modern-day helicopter and despite being around for 90 years, they have remained on the fringes of general aviation.

Only a small percentage of pilots have seen a gyro up close and even fewer have had a chance to fly in one. But that is likely to change soon.

The reasons for this fringe existence seem to be largely due to a lack of proper training and aircraft choices. For much of history, budding recreational gyro pilots would buy a set of plans, gather materials, build a machine and then teach themselves to fly. Sadly, sometimes this process didn't work well for machine or pilot.

Kits became available later, but they also needed many hours to build and skills to suit. On top of this, the stability and control sensitivity of some early machines made them unsuitable for inexperienced pilots.

Fortunately, the gyro world has recently undergone a significant change with European manufacturers leading the way. Gyros are now available as factory-built machines in solo, tandem and side-by-side configurations, and as open or fully enclosed machines.

New schools are being established, opening the door to the mainstream GA pilot. As a result, the gyro is now being recognized as a safe and exhilarating way to fly, and has become one of the fastest growing areas of recreational aviation.

The gyro has found its niche as a versatile recreational aircraft. They are easy to fly and when comparing a modern factory-built gyro to a modern fixed wing ultralight, the gyro can often do everything that the ultralight can do, but it can also do much more.

Generally, the gyro can fly in higher winds, carry more weight, fly faster, fly slower, fly longer, is more stable in turbulence, is more nimble, is less expensive to operate, is easier to store, has better visibility, will take off and land in a shorter distance, and will not stall or spin.

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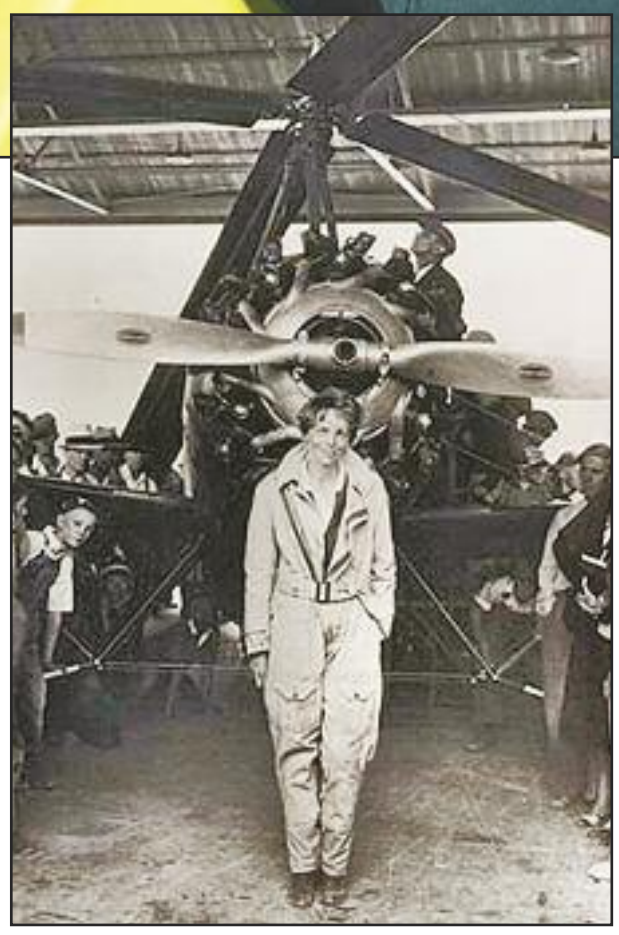

Amelia Earhart set several records in gyro.

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Popularity of gyros increasing

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As long as the machine is suitably equipped, a gyro can fly everywhere that any other GA aircraft can and some are even being fitted with floats and skis.

Instability issues are a thing of the past. Today's gyros are made of modern materials and built to stringent aircraft manufacturing and stability standards. The two leading gyro manufacturers (Magni and Autogyro) have made and delivered nearly 2,500 machines in the past few years.

Autogyro in Germany is now the largest single customer for the Rotax 912 engine. It's no surprise that in Europe, the gyro is now out-selling all other lightweight recreational aircraft. In some jurisdictions, they are proving to be stable and cost effective observation platforms, supplementing existing resources for police, coast guard, border patrol and search and rescue.

They are also used when their ability to fly low and slow is required for agricultural spraying and environmental monitoring.

Canada is following Europe's lead, albeit a few years behind. At the time of writing (November 2013), there were 206 gyros on the Canadian civil aircraft register dating back to 1963, averaging four aircraft registered each year. So far this year, there have been 15 new gyros registered, the vast majority being factory-built machines.

Speaking to the other instructors in Canada, it is likely that this number will increase next year, clearly demonstrating their developing appeal.

In Canada, factory-built gyros fly under Transport Canada's CofA "Limited" which requires an approved maintenance schedule as well as an AME to sign off on all significant work. This helps to ensure continued reliability and also provides pages full of AME stamps in the tech logs to help with resale.

Running costs are very reasonable too. Gyro Ontario's Magni M16 with a Rotax 912 engine has averaged 13L/hr since new. Using premium Mogas at about $1.3/litre, this amounts to $17/hr fuel costs.

Put aside $1,500 for maintenance and insurance, fly 100 hours a year and this would work out to a total of $32/hr. As we all know, there's no such thing as cheap aviation, but it doesn't get much more affordable than this.

For anyone interested in flying a gyro, you can find the school closest to you on Transport Canada's Flight Training Unit search page: (http://wwwapps.tc.gc.ca/Saf-Sec-Sur/2/FTAE-FVEA/Index.aspx?l=E)

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