

## Matt Liknaitzky receives his FAA Pilot Certificate in a Glider-Trike

On May 6, 2003, trike pilot Matt Liknaitzky passed his practical test for private pilot-glider. He took the practical test ("flight check") in an amateur-built experimental Aerotrike Cobra trike at Torrance, California. The Aerotrike is registered as an experimental motorglider.

Matt took all of his training in the trike, and took the flight check in the trike. Yours truly was his instructor, and the pilot examiner was Galen Fisher, from Hemet, California. Galen is known for conducting fair but extremely comprehensive flight checks. Matt's flight check encompassed two days, May 5 and 6. It included an hour of flight and ten hours of oral examination.

The flight check was unusually extensive because Matt was actually being tested on three aspects of flying: glider procedures, trike flying, and airplane procedures. (Since the trike is a motorglider, it can be flown under power like an airplane.)

Matt's pilot certificate reads "Private Pilot—Glider." However, Matt cannot fly a three-axis glider, either a traditional motorglider or a glider pulled into the air by a tow plane. The reason is because there is a notation in Matt's pilot logbook, which limits him to flying a "weight-shift" (trike) motorglider only. Matt may qualify to fly a traditional glider by taking instruction in a three-axis glider and receiving a logbook endorsement from a glider instructor attesting that Matt is qualified to fly a traditional glider. Matt does not have to take another FAA practical test to fly the traditional glider.

At the present time, Matt only has a desire to fly trikes, so he is not concerned about his inability to fly a traditional glider. The terrific feature about the so-called "Glider-Trike" program is that a person who is only interested in flying a trike may take all of his training in a trike, and take his flight check in a trike.

To prepare for his practical test, Matt had to take an FAA knowledge test (formerly called a "written exam") on gliders. He studied for the test by reading the FAA recommended manuals on aerodynamics and gliding, as well as a written exam study guide published by ASA.

Matt also received approximately 100 hours of ground instruction. The knowledge items and flight maneuvers required for the practical test are listed in the FAA Practical Test Standard (PTS) guide. The guide is available on-line at <http://av-info.faa.gov/data/practicalteststandard/faq-s-8081-23.pdf>.

Matt's logged flight instruction time in the trike was 17.5 hours. Matt is highly proficient in the trike because he has several hundred hours of trike experience with his microlight pilot's license from South Africa, his country of origin. He is also an ultralight trike instructor. However, his microlight and ultralight flight time does not count as FAA flight time. His FAA logbook only showed 17.5 hours of FAA flight experience.

The flight check portion of the practical test began early in the morning at Torrance Airport, located about 12 miles south of Los Angeles International Airport (LAX.) Torrance is a Class D airport (radio controlled airport with a control tower). The test consisted of various airborne maneuvers, including a precision "spot" landing, and a simulated engine-failure on takeoff. Matt was also required to shutdown his engine in flight and demonstrate engine-off soaring procedures.

All of these maneuvers were coordinated with the Torrance control tower by radio. The tower controllers at Torrance are exceptionally accommodating to ultralight-type experimental aircraft. There are several experimental aircraft based at Torrance Airport, including a Quicksilver, Hornet, Kolb, Kitfox, and Air Creation trike.

One of the benefits of flying an experimental glider-trike is that the FAA allows an experimental aircraft to fly over "congested areas," which is the FAA terminology for urban areas. FAA regulations preclude ultralights and microlights from flying over urban areas, so all of Matt's previous trike flying was over rural areas only. Matt noted that it is a unique experience to fly overhead houses, high-rise buildings and urban freeways.

Due to the FAA regulations, Matt has previously avoided congested areas even though he recently flew an ultralight trike from San Diego to Washington State, accompanied by Barry Palmatier, who is another FAA licensed glider-trike pilot. After the year 2000 Sun 'n Fun airshow Matt flew his ultralight trike across the country from Florida to California. The journey, which took nearly a month, was documented in the November 2002 issue of Ultralight Flying! magazine (<http://www.ultralightflying.com/>).

One aspect of Matt's training was learning to recognize the places available for an emergency landing when flying over a city. Wide roads, golf courses, football fields, dry rivers, parks, and empty lots are all available landing spots in case of an engine failure. Matt's flight training consisted of extensive precision-landing practice so that he could consistently maneuver the trike to land within a 200-foot distance.

FAA regulations allow aircraft to fly as low as 1000 feet over congested areas. Matt and I have a self-imposed restriction to never fly below 3500 feet over the city, in order to allow for a better opportunity to select a landing spot in case of an engine failure. The only exception to the 3500-foot rule is in the traffic pattern at an airport. The traffic pattern for ultralight-type experimental aircraft at Torrance is 500 foot AGL, which is 500 feet below general aviation aircraft.

Matt, age 25, was born near Cape Town, South Africa. He now lives in Santa Monica, California. He is the North American distributor for Aerotrike, which is based in South Africa (<http://www.aerotrike.co.za/>). The Aerotrike commonly used for training is the "Safari." Matt's experimental trike, N39ML, is the high-performance "Cobra" touring trike. Matt added a back-seat hand-throttle and instructor control bars for his FAA instruction and flight test. The trike is equipped with a 65 hp Rotax two-cycle, two-cylinder engine and a Spirit 15 wing. It is also equipped with a Stratomaster "Ultra" engine digital display and a Garmin GPS.

In addition to his Aerotrike distributorship, Matt is a dealer for Stratomaster. The various Stratomaster electronic flight and engine instruments may be seen at <http://www.SportFlyingShop.com/>.

The day before Matt's flight check he had to take a break from studying to attend Chris Haarhoff's wedding. Chris is a close friend from South Africa and fellow glider-trike pilot. Like Matt, Chris took his flight check in an Aerotrike Cobra a year ago with Galen Fisher. Matt is looking forward to touring the countryside with Chris in their two Aerotrikes.

Matt is also looking forward to continuing his training for a commercial glider-trike certificate and his glider instructor certificate. Matt may be reached at [matt@erotrike.co.za](mailto:matt@erotrike.co.za) or telephone 310-251-7560.