



# GreenLight WorldFlight

in collaboration with Pipistrel Slovenija | January - March 2012

I FEEL  
SLOVENIA

think small - think light - think green

*The world is not what we see  
The world is mostly what we can't see*

- | 1 biologist
- | 1 light aircraft - 290 kg
- | Around the World - westbound
- | 100 000 km
- | 7 continents
- | 120 National Parks
- | 3 Oceans
- | Antarctic
- | Mt. Everest
- | Minimum unleaded fuel
- | New aerial images
- | 6 equator crossings



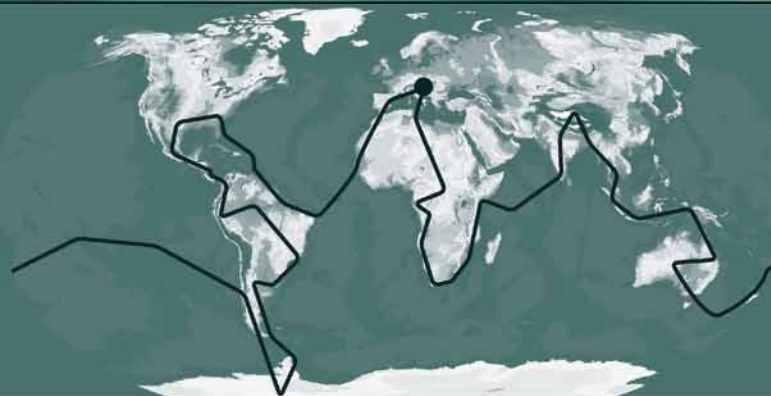
Join the unique aviation adventure  
and show the world  
you care about our common green future.

[www.worldgreenflight.com](http://www.worldgreenflight.com)

**PETROL**



Aerodrom Ljubljana



mt-propeller



## NEW STORY

### On the way around the world

In the early days of 2012, Matevž Lenarčič, a biologist, environmentalists and photographer-pilot will again set course in his small aircraft for a lonely flight around the world, this time in a westerly direction. The tiny ultra light Virus-SW914, made by the worldwide renowned company Pipistrel, weighs only 290kg / 640lb and is the fastest aircraft in the world in its category, using less fuel per distance flown. Its abilities have been proven in two NASA sponsored competitions in the USA, where for two consecutive years the aircraft received prestigious awards for its exceptional flight characteristics. The aircraft is produced under the Pipistrel brand Ecolution <http://www.pipistrel.si/top-quality/ecolution-our-philosophy>, meaning 100% autonomous energy production with optimized, computer-controlled acquisition of green energy (solar, air and geothermal).

## NEW MISSION

### Look at the images - feel the planet

Flying around the world in a small airplane has a profound meaning. Low and slow over the surface, with a notion of the planet revolving beneath the wings, but fast enough to discover its secrets. These secrets will be stored in digital memory cards and then communicated to the people of our planet, so they will also get a feel for their world. Only people with a sense of the world are able to protect it. More than 70% of Earth's surface is covered with water. Due to different physical states, different quality and distribution, almost a third of the human population has limited or even blocked access to safe drinking sources. We can all change that. Images will show places with plenty of clean drinking water and places without a single drop. We are going to show very different faces of water and warn the world that lack of water brings even more tension to the society than oil trade.

## NEW CHALLENGE

### In the eco-friendly light aircraft

GreenLight WorldFlight faces Pipistrel and the pilot with a number of challenges. The aircraft must safely operate when flying at very high or low polar temperatures and extreme altitudes. In addition, the fuel consumption must remain at very low levels, as some stages are over 4000km long, and the amount of fuel on board of such a small aircraft is very limited. Only by an ideal combination of weight, drag and lift the required results can be achieved. The aim is to fly over 80,000km (twice the length of Earth's) around the world in with a minimal use of 95 octane unleaded fuel. Besides high speeds close to 300km/h (160kts), the aircraft must remain stable at very low speeds below 80km/h (43kts). So far, this is the only aircraft with such capabilities, so Pipistrel sets new standards in environmentally-friendly and utility flying.

## NEW RESEARCH

We will demonstrate that a lightweight aircraft can provide valuable information on the black carbon - BC and light absorbing carbonaceous aerosols - LACA concentrations, their regional heterogeneity and vertical profiles with a minor payload and for a fraction of the cost associated with large airborne platforms. We will modify the aircraft to include an aerosol inlet and use an Aethalometer to measure aerosol optical properties at different wavelengths. The wavelength dependence of absorption will enable us to attempt to apportion the BC concentrations to two major sources: biomass and fossil fuel combustion. Measurements will be performed throughout the flight and will include regions, where no or very little measurements have taken place, such as Antarctica, Africa and over the Atlantic and Pacific oceans.

## ATTEMPTS TO:

- Fly the lightest 3-axis aircraft (290kg/640lb) Around the World
- Burn the smallest amount of fuel per distance flown
- Fly world speed records
- Make the nicest book about World Waters

## ROUTE

### Over more than 50 countries

Italy, France, Spain, Morocco, Western Sahara, Mauritania, Senegal, Brazil, French Guiana, Surinam, Guiana, Venezuela, Trinidad and Tobago, Caribbean, Florida, Alabama, Mississippi, Louisiana, Texas, Mexico, Guatemala, Salvador, Nicaragua, Costa Rica, Panama, Colombia, Ecuador, Peru, Paraguay, Uruguay, Argentina, Chile, Antarctic, French Polynesia, New Zealand, Australia, Indonesia, Malaysia, Thailand, Myanmar, Bangladesh, Nepal, India, Seychelles, Tanzania, Mozambique, South Africa, Namibia, Angola, Congo, Cameroon, Central African Republic, Chad, Niger, Libya, Tunisia.

## CONTINENTS HIGHEST MOUNTAINS

- Mt. Blanc – 4810 m (Europa)
- Aconcagua – 6960 m (S.America)
- Mt. Kasciusko - 2230 m (Avstralia)
- Mt. Everest - 8872 m (Asia)
- Kilimanjaro – 5895 m (Africa)

## OCEANS

- South Atlantic 1670nm - 3100 km
- South Pacific 7720nm - 14300 km
- Indian Ocean 2860nm - 5300 km

## PILOT

Matevž Lenarčič (1959, Slovenia) has graduated in biology. An alpinist, paraglider, environmentalists, photographer and a pilot, he has climbed all over the world and among others reached the top of 8051m Broad Peak in Himalaya and climbed extreme routes in Patagonia. He is author of 11 books (nature, photography, climbing and flying), some of them awarded and translated in several languages. He is also founder and director of Aerovizija d.o.o., company for aerial photography.

[www.aerovizija.com](http://www.aerovizija.com)

Matevž Lenarčič is experienced long distance flier.



Besides "normal" flying in Europe, mostly for aerial business purposes (vertical and oblique photography), he has also some extreme flights under his belt:

- | Worldtranssiberia 2002: 28 000km over 8 countries incl. Russia
- | Around The Only World 2004: 38 000km crossing 23 countries
- | Africa - Valley of Life 2005: 17 000km over 13 countries
- | The Alps - A Bird's Eye View 2006 - 2009: 60 000km all over the Alps

He has flown for more than 3000 hours all over the world, mostly with his ultra light motor glider and other single engine aircrafts. He holds PPL - private pilot license with IFR - (instrumental flight rules) rating, night qualification, and ULPL - ultralight pilot license.

### Records:

- | Official national speed record Around the World Eastbound - C1a
- | Anofficial world speed record Around the World Eastbound - C1a
- | 2<sup>nd</sup> place national competition RAL2 2005

### Aviation awards and prices

- Fédération Aéronautique Internationale (FAI):

- | Bronze colibry
- | Silver colibry
- | Diamond colibry
- | Circumnavigator East Diamond

Active member (Supervisory Board) AOPA Slovenija (Aircraft Owner and Pilot Association) | Member AOPA America  
Member EAA America (Experimental Aircraft Association) | Member aeroclub AK Prlek and Društvo Zgornjesavinjskih letalcev

More informations: [www.wingsforever.com](http://www.wingsforever.com) | [www.panalp.net](http://www.panalp.net) | [www.aerovizija.com](http://www.aerovizija.com)

## SUCCESSFULLY ACCOMPLISHED PROJECTS

### WORLDTRANSSIBERIA 2002

28 000 km crossing 8 countries  
[www.worldtranssiberia.com](http://www.worldtranssiberia.com)

### AROUND THE ONLY WORLD 2004

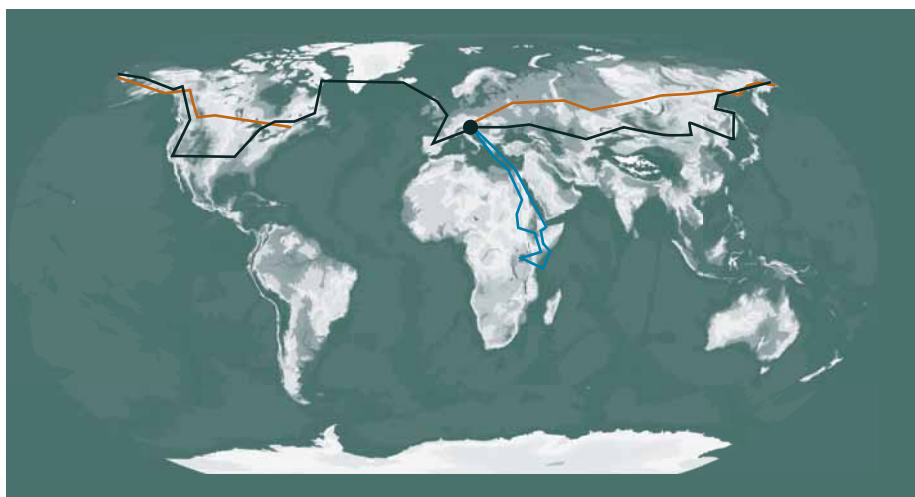
38 000 km crossing 23 countries  
<http://www.rtv slo.si/protisoncu/>

### AFRICA - THE VALLEY OF LIFE 2005

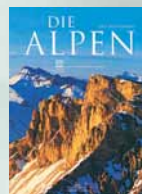
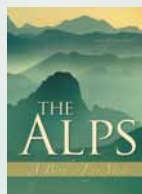
17 000 km crossing 13 countries  
[www.wingsforever.com/afr.php](http://www.wingsforever.com/afr.php)

### THE ALPS - A BIRD'S EYE VIEW 2006 - 2009

60 000 km  
[www.panalp.net](http://www.panalp.net)



## MATEVZ "AERIAL VIEW" BOOKS



## AIRCRAFT

### PIPISTREL VIRUS-SW (standard configuration)



MOTOR ROTAX ROTAX 912 ULS

#### SIZES

wing span	10,71 m
length	6,5 m
height	1,85

#### WEIGHTS

empty weight	290 kg
max take off weight (MTOW)	450/ 600 kg
fuel tanks capacity	2 x 50 l

#### PERFORMANCES

stall with flaps	64 km/h
cruising speed (75% power)	273 km/h
VNE	302 km/h
turbulence penetration speed Vb	250 km/h
service ceiling (450 kg)	6800 m
fuel consum. at cruis. speed	17,8 l/hour



Ivo Boscarol

Matevž's flight around the World is a real statement to the extreme aero-efficiency of Pipistrel aircraft. The Virus SW will once again prove its leading role by flying faster, further and higher than ever before while using less fuel than any other aircraft out there.

Preparing airplane Pipistrel Virus-SW for the project GreenLight WorldFlight involves certain modifications. A turbo charged Rotax 914 engine will be installed, which will reduce overall fuel consumption and enable flying at very high altitudes (up to 9000m / 30,000ft). Wings will get additional fuel tanks. To reduce drag and weight, the aircraft will be a tail-wheel version. All instruments, including those for possible IMS - instrumental meteorological condition - will be electronic, which will also reduce the overall weight.

## GREENLIGHT TEAM:



Vojko Strahovnik  
PR, organization support



Tine Tomažič  
aircraft modifications,  
technical support



Domen Grauf  
flight planning support



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## SPONSORS

GreenLight WorldFlight would not have been possible without the support of our friends, sponsors and many people who are helping us during preparation. I would like to thank all these people and companies for their positive attitude and for believing in this great nature-friendly aviation and human adventure.



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**JOIN THE UNIQUE AVIATION ADVENTURE AND SHOW THE WORLD  
YOU CARE ABOUT OUR COMMON GREEN FUTURE.**



spidertracks

