

## **Descriptions of the videos 2 to 26**

UFO Doctor, Oct 1<sup>st</sup>, 2010

### **Info to video 2: SwissGyro V5\_3 on test bench**

UFO Doctor, Aug. 2<sup>nd</sup>, 2007

This video shows the behavior of the SwissGyro V5\_3 on the test bench. Note the large range of pitch and roll (+/-60 Degrees) and the damping of the precession.

### **Info to video 3: SwissGyro V5\_3 mounted on standard XUFO**

UFO Doctor, Aug. 12<sup>th</sup>, 2007

This video show the first flight of a standard Silverlit XUFO equipped with the SwissGyro V5\_3. Note the stability, also without manual remote control.

No flips, gyro remains stable also after a hard landing.

### **Info to video 4: Indoor with SwissGyro V5\_3**

UFO Doctor, Aug. 17<sup>th</sup>, 2007, rev. Aug. 5<sup>th</sup>, 2008

This video shows the good stability. Indoor flight remains stable also without manual remote control. Note the reaction when the XUFO is touched: it returns to the horizontal position.

The SwissGyro presents 3 application levels:

- Level 1: Auto stable for learning flying indoor or outdoor without wind
- Level 2: Stable outdoor flight also at windy conditions
- Level 3: Full control, inclinations possible up to 45 degrees, similar to a steering with piezo angular velocity sensors.

The SwissGyro V5\_4, produced 2008, is tuned for an angular sensitivity of about 12mV/degree. This allows both auto stable flight and pitch/roll up to 30 degrees

### **Info to video 7, 8 and 9: SwissGyro Serial Nr 12 at the university of Bern**

UFO Doctor, June 20<sup>th</sup>, 2008

Sensor specifications of SwissGyro Serial Nr 12

Pitch: 11mV/degree, Roll: 12.7 mV/degree

The pilot is master student Reto S, the scenery is the University of Applied Sciences (HTI), Bern/Biel, Switzerland

Reto got frustrating experiences with the original Silverlit X-UFO and is happy now to fly with SwissGyro.

### **Info to video 10 and 11: SwissGyro Serial Nr 16 at the university of Bern**

UFO Doctor, June 26<sup>th</sup>, 2008

Sensor specifications of SwissGyro Serial Nr 16

Pitch: 9.3 mV/degree, Roll: 10.2 mV/degree

Master student Markus L. pushes the X-UFO during flight in order to demonstrate the auto stability.

The scenery is the University of Applied Sciences (HTI), Bern/Biel, Switzerland

### **Info to video 17 to 20: SwissGyro Serial Nr 13, windy weather conditions**

UFO Doctor, Aug. 4<sup>th</sup>, 2008

Sensor specifications of SwissGyro Serial Nr 13

Pitch: 12.7mV/degree, Roll: 16.2 mV/degree

The pilot is the experienced Hardy Buob, well known for building large-scale models; the scenery is the residence of the UFO Doctor at a very windy day.

The frame of the X-UFO was removed after flight Nr. 17 in order to reduce the disturbing effects of the heavy side winds.

**Info to video 21: SwissGyro Serial Nr 13, dynamic flight,**

UFO Doctor, Aug. 20<sup>th</sup>, 2008

Sensor specifications of SwissGyro Serial Nr 13

Pitch: 12.7mV/degree, Roll: 16.2 mV/degree

The frame of the X-UFO was removed in order to reduce the disturbing effects of side winds, and the X-UFO was not equipped with any Yaw sensor.

The pilot is the experienced Hardy Buob, well known for building large-scale models. Thank you for this video!

**Info to video 22: VEDA at Technorama**

UFO Doctor, April 3<sup>rd</sup>, 2009.

The pilot is Christoph Widmer, a young professional pilot flying Super puma helicopter for the Swiss army. The scenery is the dining room of Techorama, the science center of Winterthur, Switzerland.

VEDA invites every years the former students of "Akademikergemeinschaft", this time combined with a short lecture on X-UFO with SwissGyro after dinner.

**Info to video 23 and 25: Yaw Sensor on Plottermeier-Mod**

UFO Doctor, July 6<sup>th</sup>, 2009.

Video 23 and 24: Paul from UK is flying an X-UFO, equipped with his own Plottermeier-Mod and the Yaw-Sensor from the UFO Doctor (see "Angebot 4")

UFO Doctor, Sept 8<sup>th</sup>, 2009.

Video 25: Paul from UK is flying an X-UFO, equipped with his self-made SwissGyro from the kit "Angebot 3" and with the Yaw-Sensor "Angebot 4"

**Info to video 26: Brushless P&P BL mod**

UFO Doctor, Oct 1<sup>st</sup>, 2010

This is the first test flight with the brushless P&P mod, a cooperation between Paul (UK) and Peter (UFO-Doctor, CH)

Motors: Turnigy 2204

Propellers: Original Silverlit

ESC's: Roxxy 710 (with Quax software, V2, on my homepage)

Sensors: SwissGyro with Yaw sensor (see homepage)

The reactions on both RC and Gyro are very fast: The (servo) travel adjusts of the RC had to be limited to +/-50 % and the hall-sensors of the SG are bent up by 60 degrees.

This BL-X-UFO with a weight of 322 gram (with 3-Cell Lipo 600 mAh) is clearly over-motorized. At 12 V the current consumption is about 4A for hovering.

It runs with a 2-Cell 800mAh or a 3-Cell 600mAh, but a 3-Cell 900 mAh would be much better.