

Fédération



# FAI Amateur-Built and Experimental Aircraft Commission (CIACA) Report to the 113<sup>th</sup> FAI General Conference Lausanne, 5-6 December 2019

**Reported by** : Alfons Hubmann, President

# 1. Important activities, projects or events since last FAI General Conference:

# Activities:

# World Air Games 2022 in Turkey

CIACA is looking forward to support the World Air Games 2022 in Turkey.

# **Projects:**

New technologies and new power sources are a part of the most important priorities of FAI CIACA. Now the development becomes more and more visibility and over the next Aéronautique few years the improvement will be enormous. Internationale

> Our constant influence has induced our constructing engineers and aircraft builders to develop a high sense for ecology and sustainability.

At the beginning of the year we have started a survey to all of the FAI CIACA Members and Delegates regarding; electric, solar, hydrogen and human powered projects and aircraft. This survey will be repeated every year to track the status.

At the AGM in Friedrichshafen, Germany, we have presented the following projects regarding new technologies and power sources:

#### Smartflyer – Ecology for the Future – Electric Hybrid

Smartflyer will be optimized for a comfortable and most economic cruise. Today's batteries are not sufficient for longer flights, but the capacity is increasing every year. To compensate the insufficient battery capacity, the smartflyer is equipped with a range extender which is a modern, highly efficient engine to which a generator is coupled in order to produce electricity whenever needed during flight. The electric engine with the propeller is installed on the vertical fin.

# Equator P2 – Hybrid Amphibious Aircraft

This nearly decade-long project has reached a happy completion. The Equator P2, born in the mind of a talented industrial designer, seemed like a nice dream when we first saw it in renderings. As one would expect from an accomplished product designer, the aircraft looks wonderful. Fantasy brought amphibian flying to a new level.

# Alpha Electro – Two seated Electric Aircraft

The Alpha Electro is optimized for traffic-pattern operations, where 13% of energy is recuperated on every approach, increasing endurance. It is an optimized trainer specially enabled for short-field landings.

# FCPlane – New Technology with Fuel Cell Drive!

Hydrogene - is the Carburant of the future.

Looking for new power sources - Hydrogene will became very important, because it is available without limits. It can be produced by sunshine only and will replace the expensive, unecological and extremely heavy batteries in future.

Maison du Sport International Av. de Rhodanie 54 CH-1007 Lausanne (Switzerland) Tél. +41 (0)21 345 10 70 Fax +41 (0)21 345 10 77 E-mail: sec@fai.org Web: www.fai.org

A Zenith CH650 Airplane which is now under construction will be equipped with Fuel Cells. It will be capable to hold at least eight kg of Hydrogene on board in special tanks, which will already give an endurance for 350 km of flight.

# Visions:

#### Swiss F-light – Exciting new mobility

This will be a new form of individual mobility that combines the simplicity of a bicycle with the possibilities of propulsion, bionics and ultralight foldable wings.

#### 2. Positive and negative results:

#### Positive:

FAI CIACA is predominantly involved in new strategies and projects regarding ecology and sustainability. Cooperation with FIM for historic events is under discussion..

#### Negative:

FAI counts over 100 NAC's Worldwide; so far only 33 countries have declared to become part of CIACA and Delegate Specialist at the yearly conference. NAC should use its full strength to motivate their aircraft building associations to cooperate with CIACA and send their delegates to our meetings as well.

#### 3. Main problem(s) encountered and solutions adopted :

The reporting quality of CIACA Members regarding the worldwide development of their aircrafts is still rather hesitant.

#### 4. Planned activities and projects for next year :

#### FAI CIACA AGM

The Annual General Meeting will be held at the AERO 20 in Friedrichshafen, Germany on 4<sup>th</sup> of April 2020.

#### Fly-Ins of the national FAI CIACA partners including of EFLEVA:

These Fly-Ins are announced on the websites of all partners. EFLEVA Fly-In is planned for August every year. Details can be found on the FAI CIACA website.

#### smartflyerchallenge

At the beginning of September 2020, the well-executed "smartflyerchallenge" will be relaunched at Grenchen Airport in an adapted edition. Several meetings with the Board of Smartflyer AG and "smartflyerchallenge" are already planned..

#### World Air Games 2022

One of the most important activities of FAI will be the organization and preparation of the World Air Games 2022 which will be held in Turkey. Further national and international meetings / championships are already planned for 2020.

# 5. Proposals (if any) to FAI Executive Board, FAI Head Office or for the next General Conference :

Convince the NAC's to nominate more delegates to join FAI CIACA.

#### 6. Free reporting:

Our cordial thanks to the whole team in the offices of Lausanne for their support and help.

Date: 5. August 2019.....

Signature :

Alfons Hubmann President FAI CIACA

Somm